2022 Annual Groundwater Report
D'Imperio Property Site
Hamilton Township,
Atlantic County, New Jersey

Prepared for

D'Imperio Property Site Group

December 2022

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Project Number: 157948

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List of Abbreviations

BC	Brown and Caldwell
bgs	below ground surface
BOD	Biological Oxygen Demand
CEA	Classification Exception Area
1,1-DCA	1,1-Dichlorethane
1,2-DCA	1,2-Dichloroethane
1,1-DCE	1,1-Dichloroethene
cis-1,2-DCE	cis-1,2-Dichloroethene
1,2-DCP	1,2-Dichloropropane
trans-1,2-DCE	trans-1,2-Dichloroethene
EarthCon	EarthCon Consultants Inc.
ELLE	Eurofins Lancaster Laboratories Environmental
ESD	Explanation of Significant Differences
FS	Feasibility Study
GAC	Granular Activated Carbon
gpm	gallons per minute
Group	D'Imperio Property Site Group
GWTS	Groundwater Treatment System
HP	Horse Power
HTMUA	Hamilton Township Municipal Utility Authority
LCDP	Lower Cohansey Detached Plume
LC Main Plume	Lower Cohansey Main Plume
LTGMP-3A	Long-Term Groundwater Monitoring Plan, Revision 3A
MLV	Mays Landing Village
NJGWQS	New Jersey Groundwater Quality Standards
N.J.S.A.	New Jersey Statutes Annotated
NPL	National Priority List
Order	Administrative Order Index No. II-CERCLA-20117
PCE	Tetrachloroethene
PTFE	Polytetrafluoroethylene
QAPP	Quality Assurance Project Plan
RI	Remedial Investigation
RL	Reporting Limit
ROD	Record of Decision
SIM	Selective Ion Monitoring
Site	D'Imperio Property Site
SOW	Scope of Work
SRRA	Site Remediation Reform Act
SVE	Soil Vapor Extraction

SVOC	Semivolatile Organic Compound
Tbr	Bridgeton Formation
TCE	Trichloroethene
Tco	Cohansey Formation
Tkw	Kirkwood Formation
Tlco	Lower Cohansey Sand
Tmco	Middle Cohansey Clay
Tuco	Upper Cohansey Sand
TVOC	Total Volatile Organic Compound
UAO	Unilateral Administrative Order
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds
WRA	Well Restriction Area

Section 1

Introduction

The 2022 Annual Groundwater Report presents the groundwater quality monitoring and hydraulic monitoring data that were obtained through the implementation of the routine groundwater monitoring program at the D'Imperio Property Site (Site) located in Hamilton Township, Atlantic County, New Jersey. This 2022 Annual Groundwater Report has been prepared by Brown and Caldwell (BC) on behalf of the D'Imperio Property Site Group (Group) in consultation with de maximis, inc., the Group, and discussions with the United States Environmental Protection Agency (USEPA), pursuant to Administrative Order Index No. II-CERCLA-20117 (Order) and associated Statement of Work (SOW).

Periodic groundwater monitoring has been routinely performed at the Site since 1998. The current monitoring program has been performed in accordance with the "Long Term Groundwater Monitoring Plan, D'Imperio Property Site, Revision 3A," (BC, April 2020), hereinafter referred to as the LTGMP-3A. Groundwater quality data presented herein have been collected during the period from October 2021 through September 2022. The primary focus of the report is on the semi-annual groundwater sampling events that were performed in March 2022 and August-September 2022 with emphasis on the comprehensive sampling event of August-September 2022.

1.1 Background

The Site is located in Hamilton Township, Atlantic County, New Jersey. The Site is situated southeast of the intersection of U.S. Route 322 and Cologne Avenue with a street address of 4780A Black Horse Pike, Mays Landing, New Jersey 08330. The Site includes the real property identified as Block 1134, Lot 3.03 in the tax map of Hamilton Township and other areas necessary for the ongoing response action.

An area of approximately one and one-half acres was used as an unauthorized disposal area for drummed wastes in the mid-1970s (the Former Disposal Area). The Site was placed on the National Priority List (NPL) in 1983 and a Remedial Investigation/Feasibility Study (RI/FS) was completed by NUS Corporation for the USEPA in 1984 and 1985, respectively. A Record of Decision (ROD) was issued by USEPA on March 27, 1985 (1985 ROD) that, among other activities, called for targeted excavation and the installation of a groundwater recovery and treatment system with discharge to either surface water or on-Site reinjection. Approximately 3,900 cubic yards of impacted materials were excavated and disposed of by USEPA in 1987.

1.1.1 Site Hydrogeology

The Site is situated on the Atlantic Coastal Plain and the hydrostratigraphic units of primary interest are those that occur near the top of the sequence, consisting primarily of the Tertiary-aged Bridgeton, Cohansey, and Kirkwood Formations. The lithologic characteristics and groundwater conditions of the units are described briefly below.

Bridgeton Formation (Tbr)

The Bridgeton Formation consists of interbedded sands and fine-grained units. The Bridgeton is the uppermost unit and typically extends to a depth of 40 feet below ground surface (bgs). An unconfined water table aquifer exists within the primary sand sub-unit of the Bridgeton Formation.

The Bridgeton Sand Aquifer is the uppermost unit of significance that has been investigated and is monitored at the Site.

Cohansey Formation (Tco)

The Cohansey has been locally divided into three sub-units which have been observed to be laterally continuous throughout the study area. The Cohansey sub-units are identified and described according to a soil classification system after Burmister (1959), as follows:

- **Upper Cohansey Sand (Tuco)** - The Upper Cohansey Sand is the uppermost recognizable sub-unit of the Cohansey Sand. This unit is typically described as "coarse to medium SAND, trace to some medium to fine Gravel, no to trace Silt." The typical depth to the base of the Upper Cohansey Sand is approximately 60 feet bgs. The Upper Cohansey Sand forms a regionally-extensive aquifer that is semi-confined at the Site by the overlying fine-grained subunits of the Bridgeton Formation.
- **Middle Cohansey "Clay" (Tmco)** - The Middle Cohansey "Clay" directly underlies the Upper Cohansey Sand. This unit can be typically described as ranging from "Clayey SILT" to "SILT to SILT & CLAY, little to and fine Sand." The typical depth to the base of the Middle Cohansey Clay is approximately 80 feet bgs. The Middle Cohansey Clay serves as a confining unit between the Upper and Lower Cohansey Sand units.
- **Lower Cohansey Sand (Tlco)** - The Lower Cohansey Sand is the deepest recognizable sub-unit of the Cohansey Formation and directly overlies the Kirkwood Formation. This unit is typically described as "fine to medium SAND, no to trace Silt." The typical depth to the base of the Lower Cohansey Sand is approximately 170 feet bgs. The Lower Cohansey Sand comprises a regionally-extensive aquifer that is confined by the overlying Middle Cohansey "Clay" and the underlying Kirkwood Formation. The Lower Cohansey Sand is the deepest hydrostratigraphic unit that has been investigated and is monitored at the Site.

Kirkwood Formation (Tkw)

The Kirkwood Formation, where it has been encountered, is described as "Gray-black micaceous Silty CLAY." Although the Kirkwood Formation has not been the subject of Site investigations, the top of the unit was previously identified in many Site borings over the years to confirm its presence as an underlying aquitard.

1.1.2 Groundwater Quality

Well-delineated dissolved-phase groundwater plumes are observed within each of the three hydrostratigraphic units described above. The plumes are characterized on the basis of exceedances of the Performance Standard for volatile organic compounds (VOCs) as listed in the Order, excluding chloroform. The plumes include the following:

- **Bridgeton Plume** – A small, low-concentration plume is located in close proximity to the source area represented by the Former Disposal Area within the Bridgeton Sand Aquifer. The concentration and horizontal extents of the Bridgeton Plume have decreased considerably over time. The maximum total volatile organic compound (TVOC) concentration of Performance Standard VOCs in the Bridgeton Plume observed in the August-September 2022 sampling event was 9.95 J micrograms per liter (µg/L) in extraction well BR-3-E.
- **Upper Cohansey Plume** - A narrow plume within the Upper Cohansey Sand Aquifer that, at its maximum size, extended approximately 2,200 feet in a downgradient direction from the Former Disposal Area. The concentration, width, and upgradient extent of the Upper Cohansey Plume have decreased substantially over time. The current length of the Upper Cohansey Plume is approximately 1,600 feet and it is approximately 200 feet wide. The maximum TVOC

concentration of Performance Standard VOCs in the Upper Cohansey Plume observed in the August-September 2022 sampling event was 15.75 J µg/L in monitoring well MW-24-2-R, which is in close proximity to extraction well UC-3-E.

- **Lower Cohansey Main Plume (LC Main Plume)** - A vertically stratified plume that, at its maximum size, extended from the end of the Upper Cohansey Plume to a point approximately 4,600 feet downgradient of the Former Disposal Area within the Lower Cohansey Sand Aquifer. The concentration, width and upgradient extent of the Lower Cohansey Plume have progressively decreased over time to a current length of approximately 1,200 feet and a current width of approximately 400 feet. The maximum TVOC concentration of Performance Standard VOCs in the LC Main Plume observed in the August-September 2022 sampling event was 26.9 µg/L in monitoring well MW-45.
- **Lower Cohansey Detached Plume (LCDP)** - A detached plume segment within the Lower Cohansey Sand Aquifer is located downgradient of and completely separated from the LC Main Plume. The separation distance is observed to increase progressively over time as the trailing edge of the LCDP moves further downgradient. The leading edge of the LCDP is approximately 6,100 feet downgradient of the Former Disposal Area and is within the capture zone of the LCDP extraction well network. The current length of the LCDP is approximately 600 feet with an approximate width of 400 feet. The maximum TVOC concentration of Performance Standard VOCs in the LCDP observed in the August-September 2022 sampling event was 12.43 J µg/L in monitoring well MW-69.
- **Chloroform** – In addition to the Site-related constituents that comprise the TVOC plumes described above, chloroform is present in each of the three aquifers. Given its common occurrence and incongruous distribution and relationship to the VOC plumes, it is BC's opinion that the occurrence and distribution of chloroform is associated with a contribution from a combination of sources, including non-Site-related, off-Site sources and Site-related sources in localized areas. Thus, exclusion of chloroform from the TVOC calculations and plume concentration mapping is appropriate. The occurrence of chloroform in Site groundwater is discussed in greater detail in Section 3.2.2.

1.1.3 Groundwater Remediation System

A groundwater remediation system has been constructed and operated to address the four plumes described above. This system was constructed in multiple phases from 1995 through 2015. The overall groundwater remediation system currently operates at a total average flow rate of 165 – 180 gallons per minute (gpm) and treats approximately 90 million gallons per year.

- **Bridgeton and Upper Cohansey System** - The groundwater remediation system for the Bridgeton Sand Aquifer and the Upper Cohansey Sand Aquifer was originally constructed between 1995-1997, pursuant to the Groundwater Treatment Plant Design and Specifications, (Eckenfelder, 1995) and has been continuously operational since August 1997. The system includes a network of extraction wells to address each of the two plumes, a conveyance system, and a groundwater treatment system (GWTS). The treated effluent is discharged to a network of reinjection wells. Modifications to this system that have been implemented since it was initiated in 1997, have altered its operations such that a single well in each aquifer, BR-3-E in the Bridgeton and UC-6-E in the Upper Cohansey, provide capture of each respective plume. The Bridgeton pumping rate ranges from approximately 5 to 6 gpm and the Upper Cohansey pumping rate ranges from approximately 17 to 27 gpm. Extraction from the Upper Cohansey is supplemented by pulse pumping from UC-3-E and UC-4-E.
- **Groundwater Remediation System Expansion to the Lower Cohansey** - The remediation system was expanded in 1997-1998 to include groundwater extraction and reinjection in the Lower

Cohansey Sand Aquifer. Extraction well LC-1-E and new injection well LC-1R were installed per the initial delineation of the Lower Cohansey Plume. Extraction well LC-1E has not been operated since 2005 as it was superseded at that time with the implementation of the Lower Cohansey Extraction Enhancements. LC-1-E was disconnected in 2015 when the LCDP remediation system was constructed and is no longer sampled.

- **Soil Vapor Extraction (SVE) System** – An SVE system was installed in 2004 within the Former Disposal Area and has operated continuously since that time. The SVE system was installed pursuant to a ROD Amendment and Unilateral Administrative Order (UAO) including an array of eight active vacuum wells, and a granular activated carbon (GAC) treatment system. The SVE system has removed an estimated mass of approximately 48,000 pounds of residual VOCs contained in soils from the Former Disposal Area that was outside of the volume excavated by USEPA in 1987. As residual soil contamination within the Former Disposal Area serves as an ongoing source to dissolved-phase impacts occurring at the Site, remediation of these soils by operation of the SVE system has substantially reduced the plume mass requiring treatment via the groundwater remediation system. Five additional SVE wells, SVE-10F, SV-13F, SV-14F, SV-15F and SV-16F were installed at deeper intervals than the existing SVE wells in October 2022 as part of an approved soils optimization plan. These wells were installed to address impacts remaining above the seasonal low water table. This work was conducted in accordance with the Soils Remedy Optimization Plan (O&M Inc, August 2022).
- **Lower Cohansey Groundwater Extraction Enhancements** - Enhancements to the Lower Cohansey groundwater extraction and injection system were constructed in 2005 in response to new data regarding the horizontal position of the Lower Cohansey Plume. This enhancement to the system included a network of four additional groundwater extraction wells (LC-2-E, LC-3-E, LC-4-E, and LC 5-E) and an additional Lower Cohansey reinjection well (LC-2R). Construction of the enhancements is documented in the "Certification Report, Lower Cohansey Groundwater Extraction System Enhancement", (BC, April 2006). The Lower Cohansey enhancement extraction wells have been continuously operational since February 2006. The LC Main Plume extraction rate ranges from approximately 80 to 87 gpm.
- **LCDP Optimization** - The groundwater extraction system was further optimized during the period from June 2015 to October 2015 to provide hydraulic control of the LCDP. This system included the construction of three (3) additional groundwater extraction wells (LC-7-E, LC-8-E, and LC-9-E) and an associated conveyance system to deliver the extracted LCDP water to the existing GWTS and one (1) additional Lower Cohansey reinjection well (LC-3R). Construction of the LCDP Optimization was documented in the "Construction Certification Report, Lower Cohansey Detached Plume, Extraction and Conveyance System Construction", (BC, November 2016). The LCDP optimization system became operational in November 2015 and is currently operated at a rate of approximately 60-61 gpm.

1.2 Long-Term Groundwater Monitoring Program

The ongoing monitoring program has been described in a series of monitoring plan documents that have been submitted for approval to the USEPA starting in 1995 (Eckenfelder Inc., 1995). As discussed in Section 1, the groundwater monitoring program is currently performed in accordance with the LTGMP-3A.

Monitoring Objective

The LTGMP-3A has been developed pursuant to Section B.1.a. of the SOW to establish the basis for an evaluation of the effectiveness of the groundwater remediation system and includes the following:

- Identification of the wells that will be monitored;
- Identification of the parameters to be analyzed;
- A detailed description of the field sampling collection procedures and analytical methods to be utilized;
- A detailed description of how the data will be evaluated and interpreted;
- Periodic assessment of monitoring data to recommend system modifications which provide more effective or efficient attainment of the Cleanup Goals (if applicable). Such modifications may include increasing or decreasing the extraction rate, and/or initiating a pulsed pumping schedule;
- Provision for submitting LTGMP Reports to USEPA, which will include the monitoring data and a summary of the monitoring results;
- A schedule that identifies the frequency of monitoring of each well and when monitoring activities will commence; and
- A schedule for the submission of the LTGMP Reports to USEPA.

Monitoring Criteria

The Monitoring Objective is met through the establishment of the following criteria:

- **Sentinel Well Monitoring** - An array of "Sentinel" wells are installed downgradient of each of the four groundwater plumes to demonstrate that downgradient migration of each plume is adequately controlled.
- **Plume Monitoring** - To monitor groundwater quality conditions within each of the four groundwater plumes on a basis consistent with plume characteristics.
- **Upgradient Background Monitoring Data** - To characterize background groundwater quality conditions on a relatively infrequent basis.
- **Monitoring for Discontinuation of Groundwater Extraction** - To allow for a determination to discontinue pumping from a particular extraction well or array of extraction wells in a specific plume as a result of having met the clean-up goals for the plume area and/or plume, respectively.
- **Discontinuation of Monitoring for Specific Performance Standards** - To allow for the discontinuation of laboratory testing and/or reporting of certain chemical parameters that no longer exceed the respective Performance Standards, and/or are therefore no longer relevant to the characterization of the plumes.

To address the aforementioned criteria, and those requirements of Section B.1.a. of the SOW, the LTGMP-3A defined specific monitoring requirements that include:

- The wells to be monitored;
- The parameters to be analyzed;
- Analytical methods and procedures;
- Data analysis and interpretation functions;
- Means for evaluating restoration of the aquifers; and
- Monitoring and reporting schedules.

A summary of the current monitoring program under the LTGMP-3A is presented in Table 1-1. In general, the groundwater sampling follows a semi-annual schedule with emphasis on one of those events as a more comprehensive testing program. Table 1-1 shows the comprehensive testing as an Annual Event. In addition, two comprehensive sampling events per 5-year review period will be

expanded to include additional wells. The wells added to these expanded sampling events are denoted on Table 1-1 with a frequency of every 2.5 years and every 5 years.

1.3 Monitoring Methods

The field sampling procedures and laboratory methods during this annual reporting period were performed in accordance with the "Quality Assurance Project Plan for the Long-Term Groundwater Monitoring Program, D'Imperio Property Site" ((QAPP), [BC, April 2020]).

Hydraulic monitoring of the entire well network was performed on a routine quarterly basis during the annual reporting period to demonstrate that the groundwater recovery system develops and maintains hydraulic control of the identified groundwater plumes in accordance with the monitoring objective and monitoring criteria. To this end, synoptic rounds of depth-to-groundwater measurements were collected quarterly from the entire well network.

Groundwater sampling performed during this annual reporting period includes the first-half 2022 (1H22) semi-annual sampling event conducted during the period from March 7 through 11, 2022 and the August-September 2022 comprehensive annual groundwater sampling event performed from August 22 through September 1, 2022. The August-September 2022 event included sampling from 10 extraction wells, 45 monitoring wells (total of 55), plus field QA/QC samples, as listed on Table 1-1. These sampling events were previously summarized in the 1H22 Semi-Annual Groundwater Sampling Report (April 2022) and the 2H22 Semi-Annual Groundwater Sampling Report (October 2022) prepared by de maximis, inc. on behalf of the Group and submitted to USEPA and NJDEP.

Primary monitoring well samples for each sampling event were collected by means of the low-flow purge and sampling method using a non-dedicated Grundfos Redi-Flo2 electric submersible pumps with use of dedicated Polytetrafluoroethylene-lined (PTFE) (e.g., Teflon®) polyethylene tubing. Samples from the groundwater extraction wells were collected from the integral sampling ports following purging with the extraction pumps. Field sampling data sheets are presented in Appendix A. The field data sheets provide details related to the sampling of each monitoring well, purge volumes and results of the field parameter analyses.

Samples were analyzed by Eurofins Lancaster Laboratories Environmental Testing, LLC (ELLE) of Lancaster, Pennsylvania. Each sample was tested for the VOCs identified under the Performance Standards List in the Administrative Order (see Table 1-2). A number of constituents listed under the Performance Standards are no longer tested in monitoring well samples, per LTGMP-3A. The discontinued constituents include:

- VOCs including 2-butanone, chlorobenzene, and methylene chloride;
- Metals including arsenic, total chromium, copper, iron, lead, manganese, mercury, and zinc (previously removed);
- General chemistry/inorganics including chloride, and sulfate (previously removed); and
- Biological oxygen demand (BOD); (previously removed).

The semivolatile organic compound (SVOC) phenol was previously removed per USEPA approval of LTGMP-2B (BC, November 2007).

Each of the above-listed constituents will continue to be tested in the treated effluent from the groundwater treatment plant on a monthly basis. Additionally, the constituent vinyl chloride, a Non-Performance Order compound, will be tested at the request of USEPA given that it is a potential degradation product of trichloroethene (TCE). VOCs will also continue to be analyzed in groundwater influent samples.

Analysis of 1,4-dioxane was performed on each of the well samples that were collected during the comprehensive August-September 2022 semi-annual sampling event. 1,4-Dioxane is not a Performance Standard for the Site but is tested at the request of USEPA.

The laboratory analytical methods for the groundwater sampled described herein followed those from the QAPP and are listed below:

- Performance Standard VOCs were analyzed using EPA Method SW-846 8260C; and
- 1,4-Dioxane was analyzed using EPA Method SW-846 8270D.

Analytical laboratory reports from the March 2022 sampling event and the comprehensive August-September 2022 sampling event are provided in Appendix B and were previously provided in the 1H22 and 2H22 Semi-Annual Groundwater Sampling Reports.

1.4 Well Repair and Redevelopment/Force-main Maintenance

Several pump replacements were conducted during the October 2021 to September 2022 reporting period, including:

- **BR-3-E**: Pump – Grundfos 16S05-5, ½ horse power (HP) pump replaced on October 20, 2021, December 15, 2021, February 17, 2022, June 3, 2022 and September 2, 2022.
- **UC-3-E:** Pump – Grundfos 45S20-5, 2 HP pump replaced on December 15, 2021
- **UC-6-E:** Pump – Grundfos 45S20-5, 2 HP pump replaced on October 21, 2021 and July 21, 2022.
- **LC-3-E:** Yield testing performed on November 10, 2021
- **LC-3-R:** Well redeveloped from December 20, 2021 through December 23, 2021
- **BR/UC Forcemain:** - Forcemain line-jetted on June 27, 2022

Section 2

Hydraulic Monitoring

Hydraulic monitoring is performed at the Site as described in Section 1. Specifically, synoptic rounds of depth-to-groundwater measurements were collected from the entire well network on a quarterly basis in 2022, including the monitoring, extraction, and reinjection wells. Groundwater elevations are calculated from the depth to groundwater data as presented in Table 2-1.

The groundwater elevation data are used to evaluate hydraulic capture of the four groundwater plumes by the groundwater extraction systems operating at the Site. This evaluation has utilized the concepts as described in the document titled, "A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems" (USEPA, 2008). Specifically, the six evaluation steps are utilized including: 1) review of Site data, Site conceptual model, and remedy objectives; 2) definition of Site-specific target capture zone; 3) interpretation of water levels using potentiometric surface contour maps and gradient control points; 4) performing calculations, including use of numerical modeling; 5) evaluation of concentration trends; and 6) integration of the findings from Steps 1-5, including an assessment of uncertainties and/or data gaps.

2.1 Potentiometric Mapping

Potentiometric surface contour maps, under pumping conditions, have been prepared for each set of quarterly groundwater elevation data (Table 2-1), which are presented in the quarterly Operations and Maintenance Reports and/or Semi-Annual Monitoring Reports by de maximis, inc. The potentiometric mapping for August-September 2022, using data obtained on August 26, 2022, are presented herein. Figures 2-1 and 2-2 present the estimated potentiometric surface of the Bridgeton Aquifer and Upper Cohansey Aquifer, respectively. Figures 2-3 and 2-4 present the estimated potentiometric surface of the Lower Cohansey Aquifer (LC Main Plume and LCDP). Groundwater flow direction is principally to the west-southwest in the Bridgeton and Upper Cohansey Aquifers and to the southwest in the Lower Cohansey Aquifer.

2.2 Hydraulic Control of Plumes

The potentiometric surface contour maps provide empirical data that are consistent with the model-predicted aquifer response to groundwater extraction in each of the three aquifers. That is, the potentiometric surface contours generated from the water-level field measurements demonstrate that the groundwater extraction systems provided hydraulic control throughout 2022 for the Bridgeton, the Upper Cohansey, the LC Main Plume and the LCDP.

2.2.1 Bridgeton Plume

Hydraulic capture of the Bridgeton Aquifer Plume is provided by downgradient extraction well BR-3-E. Other Bridgeton extraction wells are available for pumping if deemed necessary by ongoing monitoring and evaluation of groundwater quality.

2.2.2 Upper Cohansey Plume

Hydraulic capture of the Upper Cohansey Plume is provided by downgradient extraction well UC-6-E. Pulse-pumping of other Upper Cohansey wells in the extraction wells located further upgradient within the Upper Cohansey Plume was performed during this reporting period. UC-3-E was pulse-pumped in December 2021 and January 2022, while UC-4-E was pulse-pumped in November 2021 as well as April, June and August 2022. These pulse pumping operations are in conjunction with ongoing pumping from UC-6-E.

2.2.3 LC Main Plume

The ongoing capture zone evaluations, based on quarterly hydraulic monitoring and groundwater quality data, demonstrate that the Lower Cohansey groundwater extraction system provides hydraulic control of the width of the leading edge of the LC Main Plume. Given that groundwater extraction operations were generally continuous throughout this annual reporting period (October 2021 to September 2022); these data indicate that hydraulic capture was likewise continuous for the plumes in each aquifer during the reporting year.

The lack of detections of plume constituents above the Performance Standards between the LC Main Plume extraction wells and the increasingly distal trailing edge of the LCDP provides an additional line of evidence that the existing Lower Cohansey extraction system is achieving capture of the main plume, consistent with the guidance provided in “A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems”, USEPA, 2008.

2.2.4 Lower Cohansey Detached Plume

A detailed evaluation of the LCDP capture zone was performed in May 2016 as part of the LCDP Optimization System startup. This evaluation included the creation of a high-resolution potentiometric surface map which was intended to minimize the uncertainty from conventional capture mapping that was performed prior to that date (BC, November 2016).

The resultant potentiometric contours indicated that hydraulic capture is achieved by pumping the LCDP extraction wells as they were operated on May 18, 2016. Accordingly, full hydraulic capture of the LCDP was achieved by the continuous operation of extraction wells LC-7-E, LC-8-E, and LC-9-E at 21.5, 21.5, and 19 gpm, respectively. This hydraulic capture analysis was described in, “Technical Memorandum: LCDP Optimization Implementation, LCDP Capture Zone Evaluation” (BC, July 2016) and was provided in Appendix F of the 2016 Annual Groundwater Report.

The Lower Cohansey potentiometric surface contour map for August 26, 2022 (see Figure 2-4) demonstrates the three LCDP extraction wells pumping at the above-listed rates continues to provide full hydraulic capture of the LCDP.

Section 3

Groundwater Quality Results

Periodic groundwater quality monitoring data were collected during this annual reporting period as described in Section 1. Specifically, the 1H22 semi-annual sampling event and the 2H22 comprehensive annual event were performed consistent with the LTGMP-3A as presented in the schedule in Table 1-1 (Current Groundwater Quality Monitoring Network).

Analytical data from the reporting period (October 2021 to September 2022) are presented in Table 3-1. The TVOC concentrations from each well in the overall monitoring network is expressed for each individual sample result. Separate TVOC concentrations are provided that exclude and include chloroform concentrations. The spatial distribution of chloroform is dissimilar from the spatial distribution of the TVOC constituents, which can be attributed to a combination of on-Site and off-Site sources contributing to chloroform impacts in Site groundwater. Thus, removal of chloroform concentrations from the TVOC calculation is warranted. Additional discussion associated with the occurrence and distribution of chloroform is provided in Section 3.2.2. Detected values that exceed associated Performance Standards established in the Order are flagged (boxed and bolded) in Table 3-1.

Figures 3-1, 3-2, and 3-3 present a comprehensive summary of groundwater quality data as of August-September 2022 for the Bridgeton, Upper Cohansey, and Lower Cohansey Aquifers, respectively. Specifically, the figures illustrate the areal distribution of the TVOC results. The plume extents have been identified as an outline of the 10 µg/L TVOC isoconcentration contour interval. The TVOC data are expressed, herein, on the aforementioned maps and tables as the sum of the concentration of VOCs from the Order. As indicated above, both off-Site and localized on-Site sources contribute chloroform to Site groundwater and as such, is not included in the TVOC concentrations.

Figures 3-4 through 3-6 identify wells that were found to have concentrations of constituents in excess of one or more Performance Standards during the August-September 2022 sampling event. Figures 3-7 through 3-9 present the distribution of chloroform in the three aquifers for the August-September 2022 sampling event. Figures 3-10 through 3-12 present the distribution of 1,4-dioxane in the three aquifers for the August-September 2022 sampling event.

Time-series plots for the time period of 1983 through September 2022 are presented on Figures 3-13 through 3-23. Figures 3-13 and 3-14 present plots of groundwater quality results for key wells installed in the Bridgeton Aquifer Plume; Figure 3-15 presents a plot of groundwater quality results for key wells installed in the Upper Cohansey Aquifer Plume; and Figures 3-16 through 3-21 present groundwater quality results for key wells installed in the Lower Cohansey Aquifer (LC Main Plume and LCDP).

Figures 3-22 and 3-23 present the quarterly and cumulative mass estimated to have been extracted by the groundwater extraction system since 2007 when voluntary monthly influent testing was implemented and continuing to the present. Based on the monthly testing of influent and effluent, approximately 98.8 kilograms (217.8 pounds) of Performance Standard VOC mass, excluding chloroform, has been removed from groundwater between Fourth Quarter 2007 (4Q07) and Third Quarter 2022 (3Q22).

The above-referenced figures (3-1 through 3-23) are discussed further below in Sections 3.2, 3.3, and 3.4.

3.1 Data Verification Summary

A data verification review was performed for each sampling event during the annual reporting period in accordance with requirements in the QAPP. As discussed in the QAPP, the data verification process does not involve formal data qualification but provides a comprehensive qualitative review of the data. Based on the long-term monitoring program at the Site (1994-2022), there is a substantial analytical database available for comparison of historical results to determine if an analytical bias is present. Furthermore, verification of data is conducted following the receipt of Analytical Reports after each semi-annual monitoring event, and anomalous results are reviewed and corrected immediately, as necessary.

Based on each review and comparison to data quality criteria in the QAPP, the data verification for this annual reporting period revealed a lack of systemic laboratory analytical issues that would bias the reported values. Each review indicated general conformance with laboratory performance criteria established within the QAPP with the exceptions of the minor issues identified in each Data Verification Report. The identified items have not impacted data usability with respect to comparisons to Performance Standards. The Data Verification Review Reports for each of the previous sampling events (i.e., 1H22 and 2H22) are presented in Appendix C and were previously submitted with the Groundwater Sampling Data Reports for those reporting periods.

3.2 Chemical Constituents

The primary groundwater plume constituents include a group of VOCs (i.e., Performance Standards under the Order) and 1,4-dioxane. Additionally, chloroform is present in all three aquifers, yet concentrations of chloroform are representative of a combination of sources from both off-Site and localized on-Site sources. A summary of the detected constituents, including the frequency of detection and the frequency of Performance Standard exceedances, is presented on Table 3-2 for the comprehensive annual sampling event performed in August-September 2022.

3.2.1 Performance Standard VOCs

Of the 16 Performance Standard VOCs under the Order that have been routinely tested since 1994, a group of seven have historically been considered to be the primary plume constituents, as shown in Table 3-2. The primary plume VOCs include TCE, cis-1,2-dichloroethene (cis-1,2-DCE), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethene (1,1-DCE), 1,2-dichloroethane (1,2-DCA), 1,2-dichloropropane (1,2-DCP), and benzene. Chloroform is also detected in numerous samples but is not considered to be a primary plume constituent, as a combination of localized on-Site and off-Site sources contribute chloroform impacts to Site groundwater.

From a historical standpoint, seven other VOCs are infrequently detected and/or are detected at concentrations below their associated Performance Standards, including 1,1,1-trichloroethane, 2-butanone, ethylbenzene, methylene chloride, tetrachloroethene (PCE), toluene, and trans-1,2-dichloroethene (trans-1,2-DCE).

The groundwater quality conditions have long been evaluated in Site characterization documents on the basis of Performance Standard TVOC (not including chloroform). As the plume constituent concentrations have continued to decline as groundwater remediation progresses, it has also become apparent that exceedances of Performance Standards have become relatively few. Accordingly, an evaluation of the August-September 2022 annual groundwater sampling event is presented herein on the basis of exceedances of the Performance Standards as listed in Table 1-2.

The tabulated groundwater quality data in Table 3-1 that exceed the Performance Standards are flagged (boxed and bolded). In addition, wells in which Performance Standard listed VOCs exceed 50 µg/L would typically be flagged, however, no wells were found to exceed this threshold in this reporting period.

Constituent concentrations exceeding the Performance Order Standards for each of the three aquifers are plotted on Figures 3-4 through 3-6. Briefly, the groundwater quality data presented herein indicate that relatively few wells within each plume currently exceed the Performance Standards.

During the August-September 2022 sampling event, only two constituents were found to exceed their respective Performance Standards. These exceedances included:

- Chloroform exceeded its Performance Standard of 5 µg/L in 12 of 55 samples with a maximum concentration of 41 µg/L at MW-28-1; and
- 1,2-DCA exceeded its Performance Standard of 5 µg/L in 3 of 55 samples with a maximum concentration of 13 µg/L at MW-47.

All of the 1,2-DCA exceedances occur in a small area of the Lower Cohansey Plume; there were no exceedances except for chloroform in the Bridgeton and Upper Cohansey Aquifers. There were no exceedances for TCE, which had previously been found to exceed its Performance Standard in the LCDP. No samples from a comprehensive sampling event have been found to have an exceedance of the sum of Performance Standard VOCs concentration above 50 µg/L since August 2019. The Performance Standard exceedances are described below for each of the four plumes.

Bridgeton Aquifer

The Performance Standard exceedances for the Bridgeton Aquifer are plotted on Figure 3-4. Chloroform is the only constituent found to exceed its Performance Standard during the August-September 2022 sampling event. Chloroform currently exceeds the 5 µg/L Performance Standard in five (5) of the seven (7) Bridgeton monitoring wells tested with concentrations ranging from 6.2 µg/L in MW-40 to 41 µg/L in MW-28-1. Given the elevated concentrations and distribution of chloroform in the Bridgeton Aquifer, chloroform is considered to result from a combined source, with both localized on-Site and off-Site sources contributing to the concentrations in the Bridgeton Aquifer. Of note however, is that no chloroform concentrations detected in the Bridgeton Aquifer Plume (or elsewhere at the Site) exceed the current, New Jersey Groundwater Quality Standard (NJGWQS) of 70 µg/L. Chloroform concentrations at the Site are discussed in additional detail in Section 3.2.2 below.

Upper Cohansey Aquifer

Performance Standard concentration data for the Upper Cohansey Aquifer Plume is presented on Figure 3-5. Chloroform is the only constituent found to exceed its Performance Standard during the August-September 2022 sampling event. Chloroform was found to exceed its Performance Standard of 5 µg/L in five (5) of the eleven (11) Upper Cohansey monitoring wells sampled at concentrations ranging from 7.6 in MW-35 to 11 µg/L in UC-4-E. Of the five wells with exceedances of the Performance Standard for chloroform, only UC-4-E has detectable concentrations of any other Performance Standard VOC. This further demonstrates the lack of correlation between the distribution of chloroform and the other VOCs. This is consistent with a separate off-Site source, unrelated to the former Site activities, contributing to the detected chloroform concentrations.

Lower Cohansey Aquifer

Performance Standard concentration data for the LC Main Plume is presented on Figure 3-6. No Lower Cohansey wells were found to exceed the total Performance Standard VOCs (including

chloroform) limit of 50 µg/L. The maximum total Performance Standard VOCs (including chloroform) concentrations during the August-September sampling event were 26.9 µg/L in MW-45 (LC Main Plume well) and 12.43 J µg/L in MW-69 (LCDP well).

Exceedances of the Performance Standards in the Lower Cohansey Aquifer were observed in only four of the 37 wells sampled. Two wells were found to have exceedances of chloroform, including MW-47 at 6.3 µg/L and MW-71 at 5.3 µg/L, whereas 1,2-DCA was found to exceed its Performance Standard of 5 µg/L in three wells, including MW-45 at 10 µg/L, MW-47 at 13 µg/L and LC-3-E at 5.6 µg/L.

3.2.2 Chloroform

Chloroform has been detected in more than two-thirds of the groundwater quality samples collected at and around the Site since 1983, regardless of the well location including upgradient, sidegradient, and sentinel wells (see Figures 3-7 to 3-9, Table 3-3 and Appendix D). As stated previously, given its common occurrence and incongruous distribution and relationship to the VOC plumes, it is BC's opinion that the occurrence and distribution of chloroform is associated with a contribution from a combination of sources, including non-Site-related, off-Site sources and Site-related sources in localized areas. Off-Site sources include potential leakage from chlorinated water supply lines as well as sewerage lines in the vicinity of the plumes.

Chloroform is the principal by-product of water disinfection processes including chlorine additive treatment (World Health Organization, 2004). Additionally, chloroform can be introduced into shallow groundwater via infiltration of stormwater runoff of deicing meltwaters that contain an abundance of chloride ions. Chloroform concentrations as high as 110 µg/L have been detected in shallow groundwater samples adjacent to paved surfaces (Ivahenko and Zogorski, 2006). Noteworthy, is that chlorine concentrations documented in Hamilton Township Municipal Utilities Authority's (HTMUA) 2022 Annual Drinking Water Quality Report ranged from 130 to 950 µg/L and concentrations of trihalomethanes, the group of constituents that chloroform is associated with, ranged from 4.5 to 19.9 µg/L (HTMUA, 2022). These detections and concentrations are similar for prior HTMUA Annual Reports dating back to 2011.

In the Bridgeton Aquifer, chloroform is present in groundwater at low concentrations in the vicinity of the Former Disposal Area and at higher concentrations at downgradient wells, with the highest concentrations located downgradient of the Bridgeton TVOC Plume in sentinel well 28-1, where other Performance Standard VOCs or 1,4-dioxane have not been detected since 1994 with the exception of a minor detection of methylene chloride, a common laboratory contaminant and a trace detection of 2-butanone. In the Upper Cohansey Aquifer, the maximum concentrations of chloroform are detected close to Cologne Avenue, downgradient of the TVOC plume but in the vicinity of water distribution and sewer lines. In the Lower Cohansey Aquifer, chloroform is generally detected at lower concentrations than in the other aquifers, with concentrations typically below the Performance Standard of 5 µg/L.

Groundwater quality mapping performed by EarthCon Consultants Inc. (EarthCon) in its "Plume Stability Analysis and Well Network Sufficiency Evaluation" presentation to USEPA (EarthCon, 2017) revealed a distribution of chloroform in groundwater that is substantially different than the distribution of the Performance Standards TVOC plumes. In this analysis and mapping, chloroform occurrence and distribution in the Upper Cohansey Aquifer was shown to be aligned with Cologne Avenue suggesting potential chlorinated water leakage from water distribution lines and/or sewer lines as a potential source of chloroform in groundwater. Given these conditions, chloroform is excluded from the TVOC summation and text descriptions in the sections that follow. A detailed evaluation of the distribution of chloroform at the Site was presented in the Revised 2007 Annual Groundwater Report (BC, Revised January 2009).

In summary, chloroform levels in the three aquifers are the result of a contribution from a combination of localized on-Site sources from the Former Disposal Area and off-Site sources derived from chlorinated water entering groundwater from leaking drinking water and sewerage utility lines and stormwater runoff of deicing meltwater containing an abundance of chloride ions (Ivahenko and Zogorski, 2006). These overlain sources account for the differing spatial distribution of chloroform from the TVOC constituents. Chloroform is detected in the Bridgeton and Upper Cohansey Aquifers at their maximum concentrations downgradient of the groundwater extraction systems in those units. No chloroform concentrations detected in groundwater at the Site exceed the current NJGWQS of 70 µg/L.

3.2.3 1,4-Dioxane

1,4-Dioxane is analyzed at the Site per USEPA request, although it is not a Performance Standard per the Order. 1,4-Dioxane is an analyte that is particularly difficult to detect and quantify given its high-water solubility and low purging efficiency when tested by conventional methods. As noted in Section 1.3, Method SW-846 8270D with Selective Ion Monitoring (SIM) was used to analyze samples for during the August-September sampling event. During the August-September 2022 sampling event, 1,4-dioxane was detected in 43 of the 55 groundwater samples. The distribution of 1,4-dioxane in Site groundwater is depicted on Figures 3-10 through 3-12 and is discussed further below.

Bridgeton Aquifer

1,4-Dioxane was detected in four (4) of the seven (7) Bridgeton Aquifer wells tested in August-September 2022. It was detected at a maximum concentration of 8.2 µg/L in the extraction well BR-3-E and was not detected in the sentinel well MW-28-1, located downgradient of BR-3-E. The distribution of 1,4-dioxane within the Bridgeton Aquifer is similar to the TVOC distribution, with concentrations centered on a narrow plume between BR-3-E and MW-52. The distribution of 1,4-dioxane in the Bridgeton Aquifer is depicted on Figure 3-10.

Upper Cohansey Aquifer

1,4-Dioxane was detected in 10 of the 11 Upper Cohansey wells tested in August-September 2022. It was detected at a maximum concentration of 27 µg/L in MW-24-2-R and was not detected above its detection limit of 0.3 µg/L in sentinel well MW-49, located immediately downgradient of extraction well UC-6-E. Distribution of 1,4 dioxane in the Upper Cohansey follows the axis of the corresponding TVOC plume, albeit with a somewhat greater width. 1,4-Dioxane was detected downgradient of the Upper Cohansey extraction well UC-6-E in wells MW-34 and MW-29-1 at low concentrations of 0.79 µg/L and 0.45 µg/L, respectively. The distribution of 1,4-dioxane in the Upper Cohansey Aquifer is presented on Figure 3-11.

Lower Cohansey Aquifer

1,4-Dioxane was detected in 29 of the 37 LC Main Plume and LCDP wells tested in August-September 2022. The maximum concentration was detected in MW-51 at a concentration of 34 µg/L. Distribution of 1,4-dioxane in the Lower Cohansey follows the orientation of the TVOC plume, albeit with a somewhat greater width and length in the upgradient direction. Concentrations of 1,4-dioxane are generally about an order of magnitude higher in the Lower Cohansey Main Plume than in the LCDP. Well MW-29-2, located upgradient of the TVOC main plume, was found to have a detection of 1,4 dioxane at a concentration of 12 µg/L. 1,4 Dioxane was not detected in the LCDP sentinel wells MW-79 or MW-80. The distribution of 1,4-dioxane in the Lower Cohansey Aquifer is depicted on Figure 3-12.

3.3 Groundwater Plume Conditions

A summary of the current groundwater quality conditions within each of the three aquifers (see Section 1.1 for a description of the three hydrostratigraphic units monitored at this Site) is presented in the subsections that follow. As stated above, the plumes are characterized on the basis of TVOC concentrations which are expressed as the total of the Performance Standards VOCs, excluding chloroform. Unless otherwise cited, the stated concentrations are for samples collected during the comprehensive groundwater-monitoring event in August-September 2022. The term "non-detect", as used herein, refers to no detection for Performance Standard VOCs, excluding chloroform above the reporting limits (RLs).

3.3.1 Bridgeton Aquifer Plume

The Bridgeton Aquifer Plume is illustrated on Figure 3-1. The Bridgeton Plume had nearly completely attenuated to levels below the Performance Standards since the Third Quarter 2016 (3Q16) sampling event, with a brief slight increase from 2017-2020 in MW-43, as shown on Figure 3-13. No area of the plume currently exceeds the TVOC limit of 50 µg/L and the only individual constituent exceedances in August-September 2022 were for chloroform, as discussed above in Section 3.2.

Ongoing groundwater extraction in the Bridgeton Aquifer Plume is currently performed at extraction well BR-3-E. Sentinel well MW-28-1, located downgradient of BR-3-E was found to be non-detect for all Performance Standard VOCs, except for chloroform at a concentration of 41 µg/L. This is the highest chloroform concentration detected during the August-September 2022 sampling event and is generally representative of off-Site sources, potentially supplemented by low-level localized on-Site sources contributing chloroform to the Bridgeton Aquifer.

All wells within the Bridgeton Aquifer were found to be below 10 µg/L of TVOC, excluding chloroform. The TVOC isoconcentration level of 10 µg/L has historically been utilized at the Site to estimate the size of the Performance Standard Plume. With all wells below this threshold and no exceedances except chloroform detected, restoration of the Bridgeton Aquifer is nearly complete.

Concentrations continued to decrease in MW-43, from 16.42 µg/L (J-qualified) in March 2021 to 1.5 µg/L in August-September 2022. Concentrations in the active extraction well BR-3-E were found to be 9.95 µg/L (J-qualified), a decrease from the concentration of 18.83 µg/L recorded in March 2021.

The observed groundwater quality results are consistent with the continued long-term reduction in concentrations within the Bridgeton Aquifer Plume that are punctuated by occasional transient concentration increases such as in 2010 and to a much lesser extent in 2017-2019. The decreases likely result from the discontinuation of VOC dissolution into groundwater from source soils coupled with the plume attenuation affected both by the groundwater extraction system and also natural attenuation. Substantial reductions in soil contamination concentrations resulting from operation of the SVE system since 2004 are expected to mitigate potential, future groundwater releases to the Bridgeton Aquifer. Despite these soil concentration reductions, recent soil testing beneath the Former Disposal Area indicated the presence of residual soil VOC contamination at a depth below the normal elevation of the water table that may be similarly contacted in the future by seasonally elevated groundwater levels which could result in future, transient increases in VOCs into the Bridgeton Aquifer groundwater, albeit at lower concentrations than has been observed in the past. These deeper soil impacts were addressed by the expansion of the SVE system implemented in October 2022, as described in Section 1.1.3, above.

Historical concentration trends for select Bridgeton Aquifer wells are presented in Figures 3-13 and 3-14. These figures demonstrate the degree to which concentrations have decreased in the Bridgeton Aquifer from their historic highs.

3.3.2 Upper Cohansey Aquifer Plume

The Upper Cohansey Aquifer in August-September 2022 (as illustrated on Figure 3-2) was found to have a similar lateral extent and TVOC concentrations as compared to March 2021. The maximum TVOC concentrations in the aquifer, detected in well MW-24-2-R, decreased from 45.34 µg/L in March 2021 to 15.75 µg/L (J-qualified) in August-September 2022. Several other wells were found to have reductions in TVOC concentration, relative to March 2021, including MW-34, MW-35, MW-37, and UC-6-E.

Sentinel wells MW-34, MW-49 and MW-29-1 were found to be non-detect for Performance Standard VOCs, with the exception of chloroform as discussed in Section 3.2. Chloroform was the sole constituent to exceed its Performance Standard in the Upper Cohansey in August-September 2022 with the greatest concentrations of chloroform detected in the Cologne Avenue vicinity. As previously discussed, the chloroform occurrence and distribution at the Site is the result of a combination of off-Site and localized on-Site sources contributing chloroform to the overlying Bridgeton Aquifer which have subsequently migrated downward into deeper hydrostratigraphic units over time.

Historical concentration trends for select Upper Cohansey Aquifer wells are presented on Figure 3-15. This figure demonstrates the degree to which concentrations have decreased in the Upper Cohansey Aquifer from their historical highs following activation of the Bridgeton/Upper Cohansey groundwater extraction remediation system.

3.3.3 LC Main Plume

The conditions within of the main portion of the Lower Cohansey Aquifer Plume, as shown on Figure 3-3, have remained relatively stable since August 2010, although some minor changes continue to be observed. These observed changes are listed below and are also described in additional detail within the paragraphs that follow.

- Continued downgradient migration of the center of the LC Main Plume mass toward the LC Main Plume extraction well capture zone;
- Reduction in width of the LC Main Plume;
- Continued hydraulic capture of the leading edge of the LC Main Plume; and
- Overall, reduction in mass within the LC Main Plume.

The downgradient migration of the LC Main Plume mass toward the main plume extraction wells has been evident through long-term observations in groundwater quality. This is revealed by TVOC concentration decreases in upgradient plume wells MW-32 and MW-33-2 and TVOC concentration increases in plume wells MW-45, MW-46, and MW-47 that are located closer to the main plume extraction well array (LC-2-E, LC-3-E, LC-4-E, LC-5-E) (see Figures 3-16 through 3-20).

The width of the LC Main Plume continues to progressively decrease since implementation of the LC Main Plume extraction wells in February 2006. The plume width was approximately 850 feet in 2006 and decreased to about 500 feet by 2011 to its current width of 400 feet. Despite a more modest decrease in overall plume width since 2011, decreased concentrations at individual well locations are evident. The reduced plume width observations are primarily manifested by progressive decreases and/or absence in the concentrations of the sidegradient wells MW-53, and MW-58 (see Figure 3-18) which are located on each side of the LC Main Plume. This width reduction is also apparent in the TVOC trends with sidegradient wells MW-50, MW-51 and MW-54 as shown in Figure 3-19.

The historical source for the dissolved-phase impacts within the LC Main Plume was the migration of dissolved-phase impacts from the upgradient and overlying Upper Cohansey Aquifer prior to the installation and operation of the Upper Cohansey groundwater extraction system. Accordingly, plume migration from the Upper Cohansey into the Lower Cohansey was effectively cut-off starting in/or about August 1997 by the operation of Upper Cohansey extraction well UC-6-E.

This cessation of ongoing contaminant transport from the Upper Cohansey to the Lower Cohansey has been demonstrated by continued decreases in TVOC concentrations in MW-29-2, the most upgradient LC Main Plume monitoring well. VOC concentrations at MW-29-2 have continued to be reduced over time since late 1998, with concentrations decreasing from a high of 625.8 µg/L to the point where they were non-detectable during the August 2014, February 2015, and August-September 2022 sampling events (see Figure 3-16). Concentrations have also decreased significantly from historical highs in LC Main Plume well MW-32, as observed in early 2007. MW-32 is located downgradient of MW-29-2 and former extraction well LC-1-E. This well was found to have a TVOC concentration of 0.6 µg/L (J qualified) in August-September 2022. This is a substantial decrease from historical levels in MW-32, where a maximum concentration of 420 µg/L was observed in March 2007 (Figure 3-16).

Hydraulic capture of the LC Main Plume continues to be demonstrated by groundwater quality data from the sentinel monitoring well network and verified by potentiometric mapping. The continued absence of Performance Standard exceedances in sentinel wells MW-56, MW-57, and MW-60 confirms hydraulic capture at the leading edges of the plume (see Figure 3-17). Low levels of Performance Standards constituents in sentinel wells MW-56, and OBW-62 were detected, although at concentrations below the respective Performance Standard levels. These concentrations will continue to be monitored to confirm that the interior of the plume is controlled. Based on the annual groundwater sampling data, the LC Main Plume extraction well system (LC-2-E through LC-5-E) provides capture of the LC Main Plume, consistent with the systematic evaluation process as described in USEPA, 2008 (referenced in Section 2).

It should be noted that samples collected from sentinel well OBW-62 during the annual reporting period contained several Performance Standard VOCs, with a TVOC concentration of 4.38 µg/L (J qualified) during the August-September 2022 event. Fluctuating TVOC concentrations in OBW-62 are apparent but remain below the Performance Standard for each constituent (see Figure 3-20). This occurrence, as with the aforementioned J-qualified detections in MW-56, will continue to be closely monitored for evidence of potential breakthrough in the area between extraction wells LC-3-E and LC-4-E.

3.3.4 Lower Cohansey Detached Plume

The LCDP is a detached plume segment within the Lower Cohansey Aquifer that is located downgradient of and completely separated from the LC Main Plume. The LCDP currently extends in a downgradient (southwesterly) direction from the vicinity of monitoring well MW-69 and is oriented approximately parallel with Babcock Road, which is south of Harding Highway. The current plume delineation is provided by monitoring wells MW-66 through MW-80.

The area of the LCDP is estimated to be approximately 600 feet in length along the plume's axis northeast to southwest and approximately 400 feet wide, transverse to plume migration (as estimated from MW-70, MW-71, and MW-72 and associated borings). The depth of the LCDP ranges from approximately 120 to 140 feet bgs. The LCDP is migrating to the southwest in the direction of LCDP groundwater extraction wells (LC-7-E, LC-8-E, and LC-9-E) installed in 2015 - 2016. The rate of migration of the LCDP has been estimated to be approximately 100-200 feet/yr.

The separation distance between the LC Main Plume and the LCDP currently is approximately 1,000 feet as the trailing edge of the LCDP migrates downgradient from the LC Main Plume toward the LCDP extraction system. This increasing separation is revealed through groundwater quality data collected from wells OBW-63, MW-60, MW-66, and MW-68 after the start-up of the LC Main Plume extraction well system that occurred in 2006 (see Figure 3-21).

Specifically, Figure 3-21 illustrates the progressive decreases in concentration levels to non-detect observed in four monitoring wells (OBW-63, MW-60, MW-66 and MW-68) located downgradient of the LC Main Plume extraction system as the LCDP migrates discretely downgradient toward the LCDP extraction system. Observation well OBW-63, the most upgradient of these four wells, exhibited consistent non-detectable VOCs since February 2009, shortly after the LCDP had reached the next closest downgradient well, MW-60. TVOC concentrations in MW-60 peaked at 202 µg/L in February 2010, steadily declined through 2011 and 2012, before reaching a consistent non-detect status by November 2013. The next downgradient well, MW-66 had a peak TVOC concentration of 87.9 µg/L during its initial sampling in March 2012 and subsequently declined to non-detect since August 2014 with the exception of a trace TVOC detection of 0.4 µg/L (J-qualified) in August 2018. Monitoring well MW-68, which is located further downgradient than MW-66, has exhibited a declining TVOC concentration trend from 81 µg/L recorded in November 2012 to a non-detect status during the February 2017 sampling event. During the August-September 2022 sampling event, a trace TVOC detection of 0.72 µg/L (J-qualified) was detected in MW-68.

Six additional monitoring wells were installed in the Lower Cohansey Aquifer in 2015 as part of the LCDP Pre-Optimization Investigation (BC, September 2015). These wells included four monitoring wells located along the axis of the LCDP extraction alignment, MW-75 through MW-78, as well as the two downgradient sentinel wells MW-79 and MW-80.

Performance Standard VOCs were detected in one monitoring well, MW-76, as well as two extraction wells, LC-7-E and LC-8-E along the LCDP extraction alignment during the August-September 2022 sampling event. The highest TVOC concentration was detected in LC-8-E at 2.8 µg/L. The downgradient sentinel wells (MW-79 and MW-80) were found to be free of Performance Standard VOCs with the exception of chloroform.

The LCDP poses no threat to human health, or the environment given the lack of complete receptor pathways. Irrigation wells at the Mays Landing Village (MLV) condominiums were replaced in 2016 with wells screened in the overlying Bridgeton and Upper Cohansey Aquifers (BC, 2016). The Bridgeton and Upper Cohansey Aquifers are unimpacted by Site constituents in the vicinity of the MLV condominiums. The low concentrations and the plume depth (120 to 140 feet bgs), combined with the overlying unimpacted Bridgeton and Upper Cohansey Aquifers precludes vapor intrusion concerns and/or potential impacts to biota. Finally, the LCDP extraction system prevents downgradient migration of the LCDP beyond the downgradient (southwestern) margin of the MLV condominium complex. In addition to the protections provided by the LCDP extraction system, there are also no drinking water supply wells located immediately downgradient of the LCDP with the exception of the HTMUA Well No. 6, which is located approximately one mile downgradient of the LCDP extraction system.

3.4 Extracted Plume Mass

The performance of the groundwater extraction, treatment, and reinjection system continues to be monitored by the monthly collection of effluent water samples since start-up of the treatment plant in 1997. Monthly influent testing of the force-mains to the treatment plant has been performed since Fourth Quarter 2007 (4Q07) to further evaluate the remediation system progress. The analytical results of these samples combined with the pumping performance data from each well are used to

estimate the mass removal from each aquifer. The quarterly extracted mass is summarized in Table 3-4. A total of 2.2 kilograms of total Performance Standard VOCs (excluding chloroform) were extracted in the monitoring period between October 2021 and September 2022. Plots of the quarterly mass removal and cumulative mass removal for the Site are presented on Figures 3-22 and 3-23. These plume mass removal totals are also presented in the Quarterly O&M Reports.

Section 4

Conclusions

By way of summary, the following conclusions can be drawn from the data collected during the reporting period (October 2021 through September 2022):

4.1 Hydraulic Capture of Plumes

Well-delineated and decreasing groundwater quality plumes are observed within each of the three aquifers that are defined on the basis of exceedances of the Performance Standard VOCs, excluding chloroform. This includes plumes in the Bridgeton, Upper Cohansey, and Lower Cohansey Aquifers. In addition, the discrete LCDP is located downgradient of the LC Main Plume.

Analysis of the capture zones for the each of the four existing groundwater extraction systems that were operational as of August-September 2022, demonstrates that hydraulic control is being provided in accordance with the concepts described in "A Systematic Approach for Evaluation of Capture Zones at Pump and Treat Systems" (USEPA, 2008), as follows.

- Hydraulic capture of the Bridgeton Aquifer Plume is provided by downgradient extraction well BR-3-E;
- Hydraulic capture of the Upper Cohansey Aquifer Plume is provided by extraction well UC-6-E;
- Hydraulic capture of the LC Main Plume continues to be demonstrated by groundwater quality data from the sentinel monitoring well network and verified by potentiometric mapping;
- The LCDP exists as a discrete plume beyond and disconnected from the Lower Cohansey Main Plume. The distance between the downgradient edge of the LC Main Plume and trailing edge of the LCDP is now observed to be approximately 1,000 feet; and
- Hydraulic capture of the LCDP is achieved by pumping extraction wells LC-7-E, LC-8-E, and LC-9-E.

4.2 Groundwater Plume Mass

The plume mass removed by the extraction wells has also been estimated quarterly through the evaluation of periodic influent and effluent water quality data and extracted water volumes during the corresponding time periods, as summarized on Table 3-4. The quarterly and cumulative extracted mass estimates are graphically presented on Figures 3-22 and 3-23, respectively.

4.3 Groundwater Plume Constituents

4.3.1 Performance Standard Exceedances

Although Performance Standard VOCs are detected within each of the four plumes, the concentrations have attenuated to the point where relatively few individual exceedances of the Performance Standards are now observed. Further no wells were found to contain an exceedance of the 50 µg/L Performance Standard for TVOCs in a comprehensive sampling event since August 2019.

- **Bridgeton Aquifer Plume** – Chloroform is the primary Performance Standard plume constituents in the Bridgeton Aquifer. No other constituent was detected above the Performance Standards

during August-September sampling event. As previously indicated, the occurrence and distribution of chloroform in groundwater at the Site is dissimilar from the TVOC occurrence and distribution, thereby owing to a contribution of chloroform from a combination of off-Site and localized on-Site sources, but below the current NJDEP groundwater quality criteria (NJGWQS) of 70 µg/L.

- **Upper Cohansey Aquifer Plume**– Chloroform was the only constituent detected at a concentration above its Performance Standard in the Upper Cohansey Aquifer. The highest concentration was in a well located downgradient and outside the historically defined TVOC plume (excluding chloroform). Chloroform detections in this unit are a result of the downward migration of groundwater through the overlying Bridgeton Aquifer, in which higher levels of chloroform persist, yet are and is considered to be associated with a combination of off-Site and localized on-Site sources. Chloroform detections have all been below the current NJGWQS.
- **LC Main Plume** – Performance Standard exceedances for 1,2-DCA were observed in three LC Main Plume wells (MW-45, MW-47, and LC-3-E). Two exceedances of the Performance Standard for chloroform were detected in monitoring wells MW-47 and MW-71. Like the chloroform exceedances noted above in the Upper Cohansey Aquifer, they are considered to be associated with a combination of off-Site and localized on-Site sources within the Bridgeton Aquifer that have impacted groundwater at deeper intervals. Chloroform detections have all been below the current NJGWQS.
- **Lower Cohansey Detached Plume** – The only exceedance of Performance Standards within the area of the LCDP was a minor exceedance for chloroform in MW-71 at a concentration of 5.3 µg/L, located sidegradient of the center of mass of the LCDP. Similar to the chloroform exceedances noted above in the Upper Cohansey Aquifer, they are considered to be associated with a combination of off-Site and localized on-Site sources within the Bridgeton Aquifer that have impacted groundwater at deeper intervals. Chloroform detections have all been below the current NJGWQS.

4.3.2 Chloroform

Chloroform occurrence and distribution in groundwater is not consistent with the well-delineated Performance Standard VOC groundwater plumes. Given its common occurrence and incongruous distribution and relationship to the VOC plumes, it is BC's opinion that the occurrence and distribution of chloroform is generally representative of non-Site-related, off-Site sources (e.g., leakage of chlorinated water from water and sewer mains in the vicinity of the Site and stormwater runoff of chloride containing deicing meltwater from roadways adjacent to the Site) combined with low-level Site-related sources in localized areas. Moreover, none of the chloroform detections at and around the Site exceed the current NJGWQS of 70 µg/L.

4.3.3 1,4-Dioxane

1,4-Dioxane has been analyzed for at the request of USEPA even though it is not a Performance Standard constituent. 1,4-Dioxane was detected in 43 of the 55 groundwater samples that were tested during the August-September 2022 groundwater sampling event. The lateral extent of 1,4-dioxane is somewhat wider than the Performance Standard VOC plumes in each of the three aquifers.

Section 5

Recommendations and Schedule

5.1 Classification Exception Area (CEA) Updates

An application for an updated New Jersey CEA and Well Restriction Area (WRA) was submitted to the NJDEP in December 2020 to address the current boundaries of the Bridgeton, Upper Cohansey, and LC Main Aquifer Plumes. A separate CEA application for the LCDP was also prepared and submitted at the same time for the LCDP extraction system and following USEPA approval of the LTGMP-3A in 2020. The CEA and WRA are institutional controls for the prevention of impacted groundwater exposures as required by Site Remediation Reform Act (SRRA), New Jersey Statutes Annotated (N.J.S.A.) 58:10C-1 et seq. and as per the Explanation of Significant Differences (ESD) issued by USEPA in 2010 to augment the existing ROD and ROD Amendment for the Site. The extent of the CEAs and WRAs are presented in Appendix E.

5.2 Performance Standard Modification

Consideration may be given to a proposed modification of the Performance Standard for chloroform, as the levels of chloroform occurring at the Site are a result of a combination of off-Site and localized on-Site sources contributing chloroform to Site groundwater. The current Performance Standard for chloroform is 5 µg/L, while the current NJGWQS for chloroform is 70 µg/L. This modification could potentially simplify future decision-making regarding the cessation of groundwater extraction in various wells that have achieved clean-up of all other Performance Standards and move activities to the Post-Remediation Groundwater Monitoring phase of project work.

5.3 Potential Replacement of the Forcemain at the Cologne Avenue Road Crossing

A review of the groundwater remediation infrastructure, as well as pump testing performed on the Lower Cohansey extraction wells in July 2021 determined that additional extraction capacity may be achieved in the Lower Cohansey extraction wells by the replacement of an approximate 100 ft. section of force-main piping that runs through the 10-inch steel sleeve at the Cologne Ave Road Crossing. This would involve replacing the existing 3-inch carrier pipe within a 6-inch containment pipe that currently crosses the roadway with 4-inch x 6-inch dual-contained piping.

5.4 Long-Term Project Schedule

The LTGMP-3A introduced variation in the well sampling list year to year with some wells being sampled at once per 2.5 and once per 5-year intervals. The LTGMP-3A also includes a specification to conduct certain sampling events outside of their typical season to account for potential seasonal variation in the results. A projected long-term schedule for the next two 5-year review periods (2024 and 2029) is outlined below.

2023

- March 2023 – Semi-Annual Sampling Event
- September 2023 – 5-Year Sampling Event; this event also serves as the annual event for 2023 and second 2.5-year sampling for USEPA's 2024 5-year review period.

2024 – USEPA Five-Year Review

- March 2024 – Semi-Annual Sampling Event
- September 2024 – Annual Sampling Event

2025

- March 2025 – Semi-Annual Sampling Event
- September 2025 – Annual Sampling Event

2026

- March 2026 – 2.5-Year Sampling Event; this event also serves as the annual event for 2026 and is shifted to March from September to assess seasonal variation per LTGMP-3A.
- September 2026 – Semi-Annual Sampling Event

2027

- March 2027 – Semi-Annual Sampling Event
- September 2027 – Annual Sampling Event

2028

- March 2028 – Semi-Annual Sampling Event
- September 2028 – 5-Year Sampling Event; this event also serves as the annual event for 2028 and the second 2.5-year sampling event for the USEPA's 2029 5-year review period.

2029 – USEPA Five-Year Review

- March 2029 – Semi-Annual Sampling Event
- September 2029 – Annual Sampling Event

Section 6

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Tables

TABLE 1-1
GROUNDWATER QUALITY NETWORK SAMPLING SCHEDULE
D'IMPERIO PROPERTY SITE

Well ID	Well Type	Monitoring Frequency	Methods/Constituents [1.]
Bridgeton Sand (Tbr)			
MW-20-1R	Former Plume	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with Isotope Dilution (I.D.)
MW-24-1	Side-Gradient	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-25-1-R	Side-Gradient	Once per 5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-28-1	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-29-A	Sentinel	Once per 5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-40	Side-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-41	Side-Gradient	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-42	Side-Gradient	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-43	Plume	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-44-1	Background	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-52	Former Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
BR-1-E	Extraction	Once per 5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
BR-2-E	Extraction	Every 2.5 Years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
BR-3-E	Extraction	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
BR-4-E	Extraction	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
Upper Cohansey Sand (Tuco)			
MW-20-3-R	Former Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-23-2	Former Plume	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-24-2-R	Plume	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-28-2	Plume	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-29-1	Sentinel	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-34	Sentinel	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-35	Sentinel	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-37	Side-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-38	Side-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-44-2	Background	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-48	Side-Gradient	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-49	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
UC-1-E	Extraction	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
UC-2-E	Extraction	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
UC-3-E	Extraction	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
UC-4-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
UC-6-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
Lower Cohansey Main Plume (Tlco)			
MW-29-2	Former Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-31-2	Side-Gradient	Once per 5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-32	Former Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-33-2	Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-45	Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-46	Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-47	Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-50	Side-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-51	Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.

TABLE 1-1
GROUNDWATER QUALITY NETWORK SAMPLING SCHEDULE
D'IMPERIO PROPERTY SITE

Well ID	Well Type	Monitoring Frequency	Methods/Constituents (1.)
MW-53	Side-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-54	Plume	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-55	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-56	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-57	Sentinel	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-58	Side-Gradient	Every 2.5 years	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-59	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-60	Sentinel	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
OBW-62	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
OBW-63	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
LC-2-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
LC-3-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
LC-4-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
LC-5-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
Lower Cohansey Detached Plume (LCDP)			
MW-66	Former Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-68	Former Plume	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-69	Plume	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-70	Plume	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-71	Side-Gradient	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-72	Side-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-73	Plume	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-74	Side-Gradient	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-75	Down-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-76	Down-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-77	Down-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-78	Down-Gradient	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-79	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
MW-80	Sentinel	Semi-Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
LC-7-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
LC-8-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.
LC-9-E	Extraction	Annual	VOCs by 8260C, 1,4-Dioxane by 8270D SIM Modified with I.D.

Notes:
(1.) 1,4-Dioxane will be analyzed for only during the annual, 2.5 year-frequency, and 5 year-frequency sampling events.
Abbreviations:
SIM - Selective Ion Monitoring
I.D. - Isotope Dilution

TABLE 1-2
GROUNDWATER PERFORMANCE STANDARDS (ESTABLISHED BY ADMINISTRATIVE ORDER)
D'IMPERIO PROPERTY SITE

Parameter[a]	Chemical Abstract Service Number	Performance Standard [b]
Conventionals (mg/L) [(c)]		
Biological Oxygen Demand (BOD)	SRP 29	8-10
Volatile Organic Compounds (µg/L)		
Benzene	71-43-2	5 (d)
2-Butanone[(c)(e)]	78-93-3	100
Chlorobenzene[(c)(e)]	108-90-7	(d)
Chloroform	67-66-3	5 (d)
1,1-Dichloroethane	75-34-3	(d)
1,2-Dichloroethane	107-06-2	5 (d)
1,1-Dichloroethene	75-35-4	5 (d)
1,2-Dichloroethene (total)	540-59-0	(d)
1,2-Dichloropropane	78-87-5	(d)
Ethylbenzene	100-41-4	(d)
Methylene chloride[(c)(e)]	75-09-2	5 (d)
Tetrachloroethene	127-18-4	5 (d)
Toluene	108-88-3	(d)
1,1,1-Trichloroethane	71-55-6	200
Trichloroethene	79-01-6	5 (d)
Metals (µg/L) [(c)]		
Arsenic	7440-38-2	50
Chromium (total)	7440-47-3	Background
Copper	7440-50-8	1,000
Iron	7439-89-6	300
Lead	7439-92-1	50
Manganese	7439-96-5	50
Mercury	7439-97-6	2
Zinc	7440-66-6	5,000
Semi-Volatile Organics (µg/L)		
Phenol [(f)]	108-95-2	300
Inorganics (µg/L) [(c)]		
Chloride	16887-00-6	10,000
Sulfate	14808-79-8	15,000

Notes:
(a) Only constituents with Performance Standard limits in the Administrative Order, Attachment IV are listed.
(b) Based on Administrative Order, Attachment IV limits.
(c) Certain additional Performance Standard parameters were discontinued from routine groudwater monitoring including metals, inorganics, BOD, 2-butanone, chlorobenzene, and methylene chloride per USEPA approval of the LTGMP-3A. The monthly treatment plant effluent and biennial influent samples will continue to be tested for the full Performance Standard parameter list.
(d) The sum of the listed VOCs may not exceed 50 µg/L. No compound-specific limit unless otherwise noted.
(e) Monthly influent samples will continue to be tested for each of the Performance Standard VOCs including 2-butanone, chlorobenzene, and methylene chloride.
(f) Phenol was discontinued from routine groundwater quality monitoring in 2007, per USEPA approval of the LTGMP-2B.

TABLE 2-1
2021-2022 GROUNDWATER ELEVATION DATA
D'IMPERIO PROPERTY SITE

			12/17/2021		03/08/2022		06/07/2022		08/26/2022	
Well	Unit	Reference Elev. (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)
20-2	Tbr	64.66	17.09	47.57	16.99	47.67	15.79	48.87	17.89	46.77
23-1	Tbr	65.30	18.35	46.95	18.35	46.95	17.14	48.16	19.08	46.22
23-2	Tuco	65.67	20.11	45.56	20.02	45.65	19.44	46.23	20.99	44.68
24-1	Tbr	69.63	23.49	46.14	23.78	45.85	22.66	46.97	24.25	45.38
25-2	Tuco	64.61	19.18	45.43	19.09	45.52	18.49	46.12	20.10	44.51
26-2	Tuco	74.09	28.58	45.51	28.55	45.54	27.90	46.19	29.41	44.68
BR-1-E	Tbr	62.58	15.69	46.89	15.46	47.12	14.52	48.06	16.46	46.12
BR-1-R	Tbr	67.04	16.87	50.17	16.89	50.15	15.54	51.50	17.59	49.45
BR-2-E	Tbr	63.03	15.38	47.65	15.70	47.33	14.57	48.46	16.30	46.73
BR-2-R	Tbr	65.65	17.12	48.53	17.12	48.53	15.62	50.03	17.80	47.85
BR-3-E	Tbr	72.24	38.36	33.88	38.71	33.53	38.40	33.84	36.37	35.87
BR-3-R	Tbr	65.55	17.11	48.44	17.07	48.48	15.65	49.90	17.82	47.73
BR-4-E	Tbr	62.70	14.48	48.22	14.35	48.35	13.12	49.58	15.29	47.41
LC-1-E	Tlco	49.36	12.14	37.22	12.17	37.19	11.42	37.94	13.29	36.07
LC-1-R	Tlco	63.45	0.00	65.19	0.00	65.19	0.00	65.19	0.00	65.19
LC-2-E	Tlco	52.20	17.71	34.49	18.23	33.97	17.78	34.42	19.51	32.69
LC-2-R	Tlco	61.09	0.00	91.08	0.00	91.08	0.00	92.23	0.00	92.23
LC-3-E	Tlco	51.23	19.60	31.63	19.59	31.64	19.03	32.20	20.86	30.37
LC-3-R	Tlco	66.10	0.00	68.41	9.58	56.52	8.92	57.18	11.03	55.07
LC-4-E	Tlco	51.71	20.59	31.12	20.61	31.10	19.93	31.78	21.77	29.94
LC-5-E	Tlco	49.97	17.07	32.90	16.98	32.99	16.38	33.59	18.26	31.71
LC-7-E	Tlco	42.10	12.77	29.33	12.74	29.36	12.26	29.84	14.14	27.96
LC-8-E	Tlco	45.50	17.37	28.13	17.33	28.17	16.81	28.69	18.73	26.77
LC-9-E	Tlco	48.92	20.96	27.96	20.92	28.00	20.46	28.46	22.47	26.45
MW-20-1-R	Tbr	64.84	18.56	46.28	18.55	46.29	17.95	46.89	19.48	45.36
MW-20-3-R	Tuco	64.92	17.07	47.85	16.98	47.94	15.78	49.14	17.95	46.97
MW-24-2-R	Tuco	70.36	25.64	44.72	25.56	44.80	24.86	45.50	26.44	43.92
MW-25-1-R	Tbr	64.06	17.29	46.77	17.11	46.95	16.12	47.94	18.08	45.98
MW-28-1	Tbr	73.45	29.02	44.43	29.40	44.05	28.24	45.21	29.67	43.78
MW-28-2	Tuco	72.98	29.43	43.55	29.49	43.49	28.72	44.26	30.41	42.57
MW-29-A	Tbr	58.52	18.01	40.51	18.06	40.46	17.32	41.20	19.08	39.44
MW-29-1	Tuco	60.80	19.10	41.70	19.12	41.68	18.38	42.42	20.18	40.62
MW-29-2	Tlco	59.26	19.02	40.24	19.02	40.24	18.34	40.92	20.10	39.16
MW-31-A	Tbr	57.61	16.24	41.37	16.22	41.39	15.17	42.44	17.32	40.29
MW-31-1	Tuco	58.95	18.42	40.53	18.48	40.47	17.78	41.17	19.57	39.38
MW-31-2	Tlco	57.78	18.51	39.27	18.59	39.19	17.87	39.91	19.68	38.10
MW-32	Tlco	53.57	14.28	39.29	14.31	39.26	13.63	39.94	15.41	38.16
MW-33-1	Tuco	53.74	13.70	40.04	13.68	40.06	13.00	40.74	14.88	38.86
MW-33-2	Tlco	51.86	13.56	38.30	13.62	38.24	12.93	38.93	14.73	37.13
MW-34	Tuco	61.66	19.85	41.81	19.86	41.80	19.15	42.51	20.91	40.75
MW-35	Tuco	62.18	20.32	41.86	20.32	41.86	19.58	42.60	21.32	40.86
MW-36	Tuco	65.76	23.42	42.34	23.46	42.30	22.76	43.00	24.49	41.27
MW-37	Tuco	67.92	25.56	42.36	25.61	42.31	24.82	43.10	26.59	41.33
MW-38	Tuco	68.51	26.07	42.44	26.10	42.41	25.35	43.16	27.06	41.45
MW-39	Tuco	67.00	24.63	42.37	24.66	42.34	23.90	43.10	25.60	41.40

TABLE 2-1
2021-2022 GROUNDWATER ELEVATION DATA
D'IMPERIO PROPERTY SITE

			12/17/2021		03/08/2022		06/07/2022		08/26/2022	
Well	Unit	Reference Elev. (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)
MW-40	Tbr	68.18	21.51	46.67	21.63	46.55	20.26	47.92	22.09	46.09
MW-41	Tbr	78.13	32.35	45.78	32.60	45.53	31.34	46.79	32.98	45.15
MW-42	Tbr	74.80	29.34	45.46	29.62	45.18	28.39	46.41	29.98	44.82
MW-43	Tbr	71.03	24.30	46.73	24.46	46.57	23.16	47.87	24.95	46.08
MW-44-1	Tbr	58.77	10.81	47.96	9.99	48.78	9.56	49.21	11.77	47.00
MW-44-2	Tuco	58.89	12.54	46.35	12.32	46.57	11.79	47.10	13.51	45.38
MW-45	Tlco	51.18	14.07	37.11	14.13	37.05	13.46	37.72	15.32	35.86
MW-46	Tlco	52.04	14.58	37.46	14.62	37.42	13.97	38.07	15.81	36.23
MW-47	Tlco	52.56	15.35	37.21	15.45	37.11	14.77	37.79	16.64	35.92
MW-48	Tuco	79.63	36.47	43.16	36.53	43.10	35.76	43.87	37.46	42.17
MW-49	Tuco	64.17	22.17	42.00	22.18	41.99	21.46	42.71	23.26	40.91
MW-50	Tlco	50.32	12.65	37.67	12.68	37.64	12.04	38.28	13.86	36.46
MW-51	Tlco	54.65	16.96	37.69	17.06	37.59	16.39	38.26	18.18	36.47
MW-52	Tbr	66.56	18.87	47.69	18.78	47.78	17.51	49.05	19.63	46.93
MW-53	Tlco	54.13	16.53	37.60	16.66	37.47	15.96	38.17	17.80	36.33
MW-54	Tlco	49.48	11.71	37.77	11.78	37.70	11.10	38.38	12.91	36.57
MW-55	Tlco	51.79	14.96	36.83	15.09	36.70	14.39	37.40	16.32	35.47
MW-56	Tlco	52.58	16.18	36.40	16.24	36.34	15.61	36.97	17.47	35.11
MW-57	Tlco	50.69	14.39	36.30	14.44	36.25	13.81	36.88	15.68	35.01
MW-58	Tlco	52.97	15.14	37.83	15.16	37.81	14.54	38.43	16.22	36.75
MW-59	Tlco	48.93	12.46	36.47	12.49	36.44	11.88	37.05	13.70	35.23
MW-60	Tlco	49.26	13.12	36.14	13.13	36.13	12.53	36.73	14.47	34.79
OBW-61	Tlco	49.70	13.33	36.37	13.35	36.35	12.73	36.97	14.58	35.12
OBW-62	Tlco	52.26	15.91	36.35	15.96	36.30	15.41	36.85	17.16	35.10
OBW-63	Tlco	50.04	13.71	36.33	13.73	36.31	13.06	36.98	14.96	35.08
MW-64	Tlco	54.22	19.44	34.78	19.50	34.72	18.87	35.35	20.80	33.42
MW-65	Tlco	56.30	22.42	33.88	22.52	33.78	21.89	34.41	23.80	32.50
MW-66	Tlco	47.79	11.92	35.87	11.98	35.81	11.36	36.43	13.25	34.54
MW-67	Tlco	56.99	21.12	35.87	21.20	35.79	20.61	36.38	22.43	34.56
MW-68	Tlco	45.61	10.44	35.17	10.49	35.12	9.85	35.76	11.70	33.91
MW-69	Tlco	43.44	8.96	34.48	9.03	34.41	8.44	35.00	10.35	33.09
MW-70	Tlco	48.35	14.84	33.51	14.86	33.49	14.35	34.00	16.24	32.11
MW-71	Tlco	55.55	21.99	33.56	21.96	33.59	21.32	34.23	23.28	32.27
MW-72	Tlco	55.21	21.61	33.60	21.88	33.33	21.23	33.98	22.90	32.31
MW-73	Tlco	53.56	20.83	32.73	21.02	32.54	20.38	33.18	22.20	31.36
MW-74	Tlco	55.15	22.14	33.01	22.10	33.05	21.64	33.51	23.45	31.70
MW-75	Tlco	46.29	14.54	31.75	14.50	31.79	14.16	32.13	15.91	30.38
MW-76	Tlco	46.33	14.86	31.47	14.85	31.48	14.35	31.98	16.20	30.13
MW-77	Tlco	49.51	18.01	31.50	18.01	31.50	17.49	32.02	19.46	30.05
MW-78	Tlco	50.98	19.27	31.71	19.28	31.70	18.74	32.24	20.80	30.18
MW-79	Tlco	48.80	17.43	31.37	17.42	31.38	16.91	31.89	18.75	30.05
MW-80	Tlco	44.61	13.19	31.42	13.16	31.45	12.71	31.90	14.58	30.03
OBW-LC-2-E	Tlco	50.24	13.42	36.82	13.55	36.69	12.86	37.38	14.71	35.53
OBW-LC-2-R	Tlco	60.05	14.33	45.72	14.32	45.73	13.52	46.53	15.18	44.87
OBW-LC-3-E	Tlco	50.51	14.04	36.47	14.12	36.39	13.46	37.05	15.23	35.28

TABLE 2-1
2021-2022 GROUNDWATER ELEVATION DATA
D'IMPERIO PROPERTY SITE

			12/17/2021		03/08/2022		06/07/2022		08/26/2022	
Well	Unit	Reference Elev. (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)	Depth to Water (ft.)	Water Elevation (ft., ngvd)
OBW-LC-4-E	Tlco	49.78	13.56	36.22	13.61	36.17	12.93	36.85	14.80	34.98
OBW-LC-5-E	Tlco	48.52	12.51	36.01	12.51	36.01	11.90	36.62	13.75	34.77
OBW-LC-6-E	Tlco	58.69	23.41	35.28	23.48	35.21	22.86	35.83	24.73	33.96
OBW-LC-7-E	Tlco	43.55	12.27	31.28	12.26	31.29	11.80	31.75	13.69	29.86
OBW-LC-8-E	Tlco	47.35	16.35	31.00	16.31	31.04	15.80	31.55	17.73	29.62
OBW-LC-9-E	Tlco	50.55	19.44	31.11	19.25	31.30	18.91	31.64	20.87	29.68
PZ-45	Tuco	68.23	21.42	46.81	21.35	46.88	20.78	47.45	22.36	45.87
PZ-46	Tuco	68.23	20.03	48.20	19.97	48.26	19.36	48.87	20.94	47.29
UC-1-E	Tuco	62.66	16.08	46.58	16.08	46.58	15.43	47.23	17.16	45.50
UC-1-R	Tuco	59.31	0.00	77.76	0.00	81.22	0.00	80.07	0.00	76.61
UC-2-E	Tuco	63.69	18.13	45.56	18.08	45.61	17.46	46.23	19.04	44.65
UC-2-R	Tuco	61.54	0.00	77.69	0.00	78.84	0.00	82.30	0.00	77.69
UC-3-E	Tuco	72.99	32.18	40.81	28.21	44.78	27.43	45.56	29.17	43.82
UC-3-R	Tuco	59.98	0.00	78.43	0.00	79.59	0.00	76.13	0.00	74.97
UC-4-E	Tuco	75.63	31.79	43.84	37.22	38.41	34.09	41.54	39.56	36.07
UC-4-R	Tuco	62.67	0.00	82.28	0.00	81.12	0.00	79.97	0.00	81.12
UC-5-R	Tuco	62.95	0.00	76.79	0.00	76.79	0.00	79.10	0.00	76.79
UC-6-E	Tuco	61.24	40.45	20.79	35.71	25.53	35.73	25.51	55.91	5.33
UC-6-R	Tuco	62.14	0.00	85.21	0.00	84.05	0.00	89.82	0.00	87.51

Notes:
(1) Reference elevation is the inner casing for monitoring wells, and for extraction/re-injections wells it is either the top of the outer casing, or the internal access port.
(2) Depths to water are expressed from the reference elevation.
(3) -- - indicates that a measurement was not collected
(4) Depth to water for some re-injection wells are expressed as "0", in these cases the groundwater is at the reference point, and is under pressure. In these cases the groundwater elevation is calculated from the pressure.
Abbreviations:
ft. - feet
ngvd - National Geodetic Vertical Datum

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	24-1	24-1	MW-28-1	MW-28-1	MW-40	MW-41	MW-41	MW-43
	Position	Side-Gradient	Side-Gradient	Sentinel	Sentinel	Side-Gradient	Side-Gradient	Side-Gradient	Plume
	Date	3/8/2022	8/31/2022	3/9/2022	8/31/2022	8/30/2022	3/8/2022	9/1/2022	3/9/2022
	Zone	Tbr	Tbr	Tbr	Tbr	Tbr	Tbr	Tbr	Tbr
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.6
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.69 J
1,2-Dichloroethane	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	**34**	**20**	**32**	**41**	**6.2**	**5.2**	**10**	1 U
cis-1,2-Dichloroethene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	1 U	2 U	1 U	2 U	2 U	1 U	2 U	1 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	--	--	1 U	--	1 UF1	1 U	--	1 U	--
1,4-Dioxane	--	--	0.31 U	--	0.3 U	0.4	--	0.31 U	--
Total Plume 106 Order VOCs minus Chloroform[2]		ND	ND	ND	ND	ND	ND	ND	4.29 J
Total 106 Order VOCs[3]		34	20	32	41	6.2	5.2	10	4.29 J

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	MW-43	MW-43 (Dup)	MW-52	BR-3-E	BR-3-E	MW-20-3-R	MW-24-2-R	MW-24-2-R
	Position	Plume	Plume	Former Plume	Extraction	Extraction	Former Plume	Plume	Plume
	Date	9/1/2022	9/1/2022	9/1/2022	3/11/2022	8/24/2022	9/1/2022	3/10/2022	8/31/2022
	Zone	Tbr	Tbr	Tbr	Tbr	Tbr	Tuco	Tuco	Tuco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1.5	1.5	1 U	0.96 J	1.1	1 U	1.1	1.2
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	1 U	1 U	1 U	2.5	2	1 U	0.66 J	1 U
1,2-Dichloropropane	50 *	1 U	1 U	1 U	1.4	0.72 J	1 U	1 U	1 U
Benzene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1.2	1.4
Chloroform	5 *	1 U	1 U	3.6	**16**	**14**	1 U	1 U	1 U
cis-1,2-Dichloroethene	50 *	1 U	1 U	1 U	1.4	1.6	1 U	4.2	4.8
Ethylbenzene	50 *	1 U	1 U	1 U	5	4	1 U	8.5	7.4
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	0.82 J	0.95 J
trans-1,2-Dichloroethene	50 *	2 U	2 U	2 U	1 U	2 U	2 U	1 U	2 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	0.35 J	0.53 J	1 U	1 U	1 U
Vinyl chloride	--	1 U	1 U	1 U	1 U	1 U	1 U	--	--
1,4-Dioxane	--	0.15 J	0.14 J	1.4	5.8	8.2	2.2	--	27
Total Plume 106 Order VOCs minus Chloroform[2]		1.5	1.5	ND	11.61 J	9.95 J	ND	16.48 J	15.75 J
Total 106 Order VOCs[3]		1.5	1.5	3.6	27.61 J	23.95 J	ND	16.48 J	15.75 J

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	MW-28-2	MW-28-2	MW-29-1	MW-34	MW-35	MW-37	MW-38	MW-38 (Dup)
	Position	Plume	Plume	Sentinel	Sentinel	Sentinel	Side-Gradient	Side-Gradient	Side-Gradient
	Date	3/9/2022	8/31/2022	8/29/2022	8/29/2022	9/1/2022	8/30/2022	8/30/2022	8/30/2022
	Zone	Tuco	Tuco	Tuco	Tuco	Tuco	Tuco	Tuco	Tuco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	0.43 J	0.57 J	1 U	1 U	1 U	1 U	0.85 J	0.75 J
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	1.7	2	1 U	1 U	1 U	1 U	0.55 J	1 U
1,2-Dichloropropane	50 *	1.4	2.3	1 U	1 U	1 U	1 U	9.3	10
Benzene	5 *	0.42 J	0.38 J	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	1 U	1 U	**8.1**	**9.7**	**7.6**	**7.7**	1.1	1
cis-1,2-Dichloroethene	50 *	3.5	5.1	1 U	1 U	1 U	1 U	0.61 J	0.66 J
Ethylbenzene	50 *	1 U	1.9	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	1 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	--	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	--	--	10	0.45	0.79	4.1	3.8	8.5	11
Total Plume 106 Order VOCs minus Chloroform[2]		7.45 J	12.25 J	ND	ND	ND	ND	11.31 J	11.41 J
Total 106 Order VOCs[3]		7.45 J	12.25 J	8.1	9.7	7.6	7.7	12.41 J	12.41 J

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	UC-4-E	UC-6-E	MW-29-2	MW-32	MW-33-2	MW-45	MW-46	MW-47
	Position	Extraction	Extraction	Former Plume	Former Plume	Plume	Plume	Plume	Plume
	Date	8/24/2022	8/24/2022	8/31/2022	8/30/2022	8/30/2022	8/26/2022	8/26/2022	8/26/2022
	Zone	Tuco	Tuco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1 U	0.84 J	1 U	1 U	1.2	1.4	1.2	1.2
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	0.34 J	1 U	1 U	1 U
1,2-Dichloroethane	5 *	1 U	1 U	1 U	0.6 J	4.8	**10**	1.2	**13**
1,2-Dichloropropane	50 *	1 U	5	1 U	1 U	9.1	4.3	7.3	2.2
Benzene	5 *	1 U	1 U	1 U	1 U	0.66 J	1.2	1 U	0.48 J
Chloroform	5 *	**11**	3.1	1 U	1 U	1 U	0.31 J	3.4	**6.3**
cis-1,2-Dichloroethene	50 *	1.2	1.6	1 U	1 U	6.8	10	1.6	6
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	1 U	0.48 J	1 U	1 U	1 U
Vinyl chloride	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	--	6.5	9.4	12	18	33	33	19	25
Total Plume 106 Order VOCs minus Chloroform[2]		1.2	7.44 J	ND	0.6 J	23.38 J	26.9	11.3	22.88 J
Total 106 Order VOCs[3]		12.2	10.54 J	ND	0.6 J	23.38 J	27.21 J	14.7	29.18 J

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	MW-49	MW-49	MW-50	MW-51	MW-53	MW-55	MW-55	MW-56
	Position	Sentinel	Sentinel	Side-Gradient	Plume	Side-Gradient	Sentinel	Sentinel	Sentinel
	Date	3/8/2022	8/29/2022	8/29/2022	8/25/2022	8/26/2022	3/9/2022	8/26/2022	3/8/2022
	Zone	Tuco	Tuco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	1 U	1 U	1.2	3.4	0.76 J	1 U	0.61 J	1 U
1,2-Dichloropropane	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.79 J
Benzene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	**6.1**	4.8	1.1	1.1	1.9	1.1	1	2
cis-1,2-Dichloroethene	50 *	1 U	1 U	1 U	0.55 J	1 U	1 U	1 U	1 U
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	1 U	2 U	2 U	2 U	2 U	1 U	2 U	1 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	--	--	1 U	1 U	1 U	1 U	--	1 U	--
1,4-Dioxane	--	--	0.3 U	27	34	15	--	15	--
Total Plume 106 Order VOCs minus Chloroform[2]		ND	ND	1.2	3.95 J	0.76 J	ND	0.61 J	0.79 J
Total 106 Order VOCs[3]		6.1	4.8	2.3	5.05 J	2.66 J	1.1	1.61 J	2.79 J

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	MW-56	MW-57	MW-59	MW-59	MW-60	MW-66	MW-68	MW-69
	Position	Sentinel	Sentinel	Sentinel	Sentinel	Sentinel	Former Plume	Former Plume	Plume
	Date	8/25/2022	8/25/2022	3/9/2022	8/29/2022	8/25/2022	8/24/2022	8/24/2022	3/10/2022
	Zone	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.73 J
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.7
1,2-Dichloropropane	50 *	0.52 J	1 U	1 U	1 U	1 U	1 U	0.72 J	6.1
Benzene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	2.4	2.2	2.9	4	1.6	3.1	4.9	3.2
cis-1,2-Dichloroethene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3.4
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	2 U	2 U	1 U	2 U	2 U	2 U	2 U	1 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2.7
Vinyl chloride	--	1 U	1 U	--	1 U	1 U	1 U	1 U	--
1,4-Dioxane	--	1.3	0.23 J	--	0.3 U	0.15 J	0.32 U	0.57	--
Total Plume 106 Order VOCs minus Chloroform[2]		0.52 J	ND	ND	ND	ND	ND	0.72 J	16.63 J
Total 106 Order VOCs[3]		2.92 J	2.2	2.9	4	1.6	3.1	5.62 J	19.83 J

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	MW-69 (Dup)	MW-69	MW-70	MW-70	MW-71	MW-71	MW-72	MW-72 (Dup)
	Position	Plume	Plume	Plume	Plume	Side-Gradient	Side-Gradient	Side-Gradient	Side-Gradient
	Date	3/10/2022	8/24/2022	3/10/2022	8/24/2022	3/10/2022	8/23/2022	8/24/2022	8/24/2022
	Zone	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	0.69 J	0.63 J	0.5 J	0.39 J	0.46 J	1 U	1 U	1 U
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	3.9	2	2.9	1.5	1.5	1.2	1 U	1 U
1,2-Dichloropropane	50 *	6.4	5.2	3.2	2.3	5.3	4.9	1 U	1 U
Benzene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	3.3	4.1	2.6	2.2	4.3	**5.3**	3.4	3.3
cis-1,2-Dichloroethene	50 *	3.7	3.1	1.5	1.3	2	2.4	1 U	1 U
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	1 U	2 U	1 U	2 U	1 U	2 U	2 U	2 U
Trichloroethene (TCE)	5 *	2.7	1.5	2.8	2.1	0.89 J	0.54 J	0.42 J	1 U
Vinyl chloride	--	--	1 U	--	1 U	--	1 U	1 U	1 U
1,4-Dioxane	--	--	3.9	--	2.3	--	4.5	0.88	0.86
Total Plume 106 Order VOCs minus Chloroform[2]		17.39 J	12.43 J	10.9 J	7.59 J	10.15 J	9.04 J	0.42 J	ND
Total 106 Order VOCs[3]		20.69 J	16.53 J	13.5 J	9.79 J	14.45 J	14.34 J	3.82 J	3.3

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	MW-73	MW-73	MW-74	MW-74	MW-75	MW-76	MW-77	MW-78
	Position	Plume	Plume	Side-Gradient	Side-Gradient	Down-Gradient	Down-Gradient	Down-Gradient	Down-Gradient
	Date	3/10/2022	8/23/2022	3/7/2022	8/23/2022	8/23/2022	8/22/2022	8/23/2022	8/23/2022
	Zone	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Benzene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	0.39 J	1 U	0.86 J	0.86 J	0.9 J	1.2	4.9	0.74 J
cis-1,2-Dichloroethene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	1 U	2 U	1 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	1 U	1 U	0.38 J	1 U	1 U
Vinyl chloride	--	--	1 U	--	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	--	--	0.11 J	--	0.31 U	0.32 U	0.38	0.31 U	0.59
Total Plume 106 Order VOCs minus Chloroform[2]		ND	ND	ND	ND	ND	0.38 J	ND	ND
Total 106 Order VOCs[3]		0.39 J	ND	0.86 J	0.86 J	0.9 J	1.58 J	4.9	0.74 J

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	MW-79	MW-79	MW-80	MW-80	OBW-62	OBW-62	OBW-63	OBW-63
	Position	Sentinel	Sentinel	Sentinel	Sentinel	Sentinel	Sentinel	Sentinel	Sentinel
	Date	3/7/2022	8/22/2022	3/7/2022	8/22/2022	3/8/2022	8/25/2022	3/8/2022	8/25/2022
	Zone	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco
Constituent	106 Order Standard								
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1 U	1 U	1 U	1 U	1 U	0.38 J	1 U	1 U
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	50 *	1 U	1 U	1 U	1 U	2.3	3.2	1 U	1 U
Benzene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	0.65 J	1.6	0.91 J	1	2.3	2.9	1.2	1.3
cis-1,2-Dichloroethene	50 *	1 U	1 U	1 U	1 U	0.61 J	0.8 J	1 U	1 U
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	1 U	2 U	1 U	2 U	1 U	2 U	1 U	2 U
Trichloroethene (TCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl chloride	--	--	1 U	--	1 U	--	1 U	--	1 U
1,4-Dioxane	--	--	0.32 U	--	0.3 U	--	3.7	--	0.31 U
Total Plume 106 Order VOCs minus Chloroform[2]		ND	ND	ND	ND	2.91 J	4.38 J	ND	ND
Total 106 Order VOCs[3]		0.65 J	1.6	0.91 J	1	5.21 J	7.28 J	1.2	1.3

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-1
SUMMARY OF GROUNDWATER QUALITY RESULTS FOR MARCH 2022 THROUGH SEPTEMBER 2022: VOLATILE ORGANIC COMPOUNDS
D'IMPERIO PROPERTY SITE

	Monitoring Well	LC-2-E	LC-3-E	LC-4-E	LC-5-E	LC-7-E	LC-8-E	LC-9-E
	Position	Extraction	Extraction	Extraction	Extraction	Extraction	Extraction	Extraction
	Date	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022	8/24/2022
	Zone	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco	Tlco
Constituent	106 Order Standard							
1,1,1-Trichloroethane	200	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	50 *	1 U	0.72 J	0.72 J	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	5 *	0.72 J	**5.6**	2.6	0.53 J	1 U	1 U	1 U
1,2-Dichloropropane	50 *	0.7 J	3.7	6.3	2	1 U	1 U	1 U
Benzene	5 *	1 U	0.34 J	1 U	1 U	1 U	1 U	1 U
Chloroform	5 *	2.8	4.9	1.8	3.9	2	2.6	2.8
cis-1,2-Dichloroethene	50 *	1 U	4.5	3.8	0.7 J	1 U	1 U	1 U
Ethylbenzene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene (PCE)	5 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	50 *	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	50 *	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Trichloroethene (TCE)	5 *	1 U	0.91 J	0.79 J	1 U	1.6	2.8	1 U
Vinyl chloride	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dioxane	--	8.6	10	4.5	5.4	0.64	1	0.19 J
Total Plume 106 Order VOCs minus Chloroform[2]		1.42 J	15.77 J	14.21 J	3.23 J	1.6	2.8	ND
Total 106 Order VOCs[3]		4.22 J	20.67 J	16.01 J	7.13 J	3.6	5.4	2.8

Notes and Abbreviations:
1. Concentrations presented in **bold** and outlined are elevated above the associated 106 Order performance standard.
2. Sum of the 106 Order VOCs, excluding chloroform.
3. Sum of the 106 Order VOCs including chloroform.
* - Indicates the 106 Order VOCs in which concentration sum must not exceed 50 µg/L.
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.
-- - Indicates that sample was not analyzed for the associated constituent, or that there is not an applicable 106 Order standard for the associated constituent.
ND - Indicates that the none of the constituents included in the sum were detected.

TABLE 3-2
GROUNDWATER SUMMARY STATISTICS: AUGUST-SEPTEMBER 2022
D'IMPERIO PROPERTY SITE

Constituent	Performance Standard [a.]	Number of Samples[b.]	Number of Detections	Number of Exceedances [c.]	Maximum Concentration	Mean Concentration [d.]
Performance Standard Volatile Organic Compounds (µg/L)						
1,1,1-Trichloroethane	200	55	0	0	0.5[f]	0.5[f]
1,1-Dichloroethane	50 [e.]	55	15	0	1.5	0.62
1,1-Dichloroethene	5 [e.]	55	1	0	0.5	0.5
1,2-Dichloroethane	5 [e.]	55	19	3	13	1.3
1,2-Dichloropropane	50	55	18	0	9.3	1.6
Benzene	5 [e.]	55	6	0	1.4	0.53
Chloroform	5 [e.]	55	47	12	41	4.3
cis-1,2-Dichloroethene	50 [e.]	55	18	0	10	1.4
Ethylbenzene	50 [e.]	55	3	0	7.4	0.71
Tetrachloroethene (PCE)	5 [e.]	55	0	0	0.5[f]	0.5[f]
Toluene	50	55	1	0	0.95	0.51
trans-1,2-Dichloroethene	50 [e.]	55	0	0	1.0[f]	1.0[f]
Trichloroethene (TCE)	5 [e.]	55	11	0	2.8	0.62
Other Constituents (µg/L)						
Vinyl chloride	NA	55	0	0	0.5[f]	0.5[f]
1,4-Dioxane	NA	55	43	0	34	6.6

Notes:
(a) Based on Administrative Order, Attachment IV limits
(b) Excludes QA/QC samples
(c) Assumes numeric standard exists for each constituent and ignores the VOC sum exceeding 50 µg/L
(d) Non-detectable results set to 1/2 the detection limit for the purpose of calculating the mean.
(e) The sum of the listed VOCs may not exceed 50 µg/L. No compound-specific limit unless otherwise noted
(f) Value is the maximum unaltered detection limit
(g) Value is the maximum detected. The maximum unaltered detection limit is 1 µg/L
NA - Not Applicable
µg/L - micrograms per liter

TABLE 3-3
CHLOROFORM STATISTICS IN GROUNDWATER
D'IMPERIO PROPERTY SITE

Unit	Number of Samples	Number of Chloroform Detects	Detection Frequency	Maximum Concentration (µg/L)	Mean Value[1] (µg/L)
Tbr	606	380	63%	110	11
Tuco	567	314	55%	31	4.9
Tlco	1533	1326	86%	13	3.1
All	2706	2020	75%	110	5.3

Notes:
Includes samples collected from December 1983 through September 2022
(1) Non-detect samples treated as 1/2 Method Detection Limit for Mean Calculation
µg/L - micrograms per liter

TABLE 3-4
SUMMARY OF PLUME MASS REMOVED BY EXTRACTION WELLS
D'IMPERIO PROPERTY SITE [1.]

	Quarterly Extracted Mass [2.]			Cummulative Extracted Mass [2.]		
Quarter	Bridgeton and Upper Cohansey (kg)	Lower Cohansey [3.] (kg)	Quarterly Totals (kg)	Bridgeton and Upper Cohansey (kg)	Lower Cohansey [3.] (kg)	Cumulative Total (kg)
Q4 2007	0.5	1.1	1.7	0.5	1.1	1.7
Q1 2008	0.6	1.0	1.6	1.1	2.1	3.2
Q2 2008	0.4	0.9	1.4	1.6	3.1	4.6
Q3 2008	0.3	1.0	1.3	1.8	4.1	5.9
Q4 2008	0.8	1.1	1.9	2.7	5.2	7.8
Q1 2009	1.9	1.1	3.0	4.6	6.2	10.8
Q2 2009	1.4	1.1	2.4	6.0	7.3	13.2
Q3 2009	0.6	1.0	1.7	6.6	8.3	14.9
Q4 2009	0.9	1.0	1.9	7.5	9.3	16.8
Q1 2010	0.4	1.0	1.4	7.9	10.3	18.2
Q2 2010	0.3	1.0	1.3	8.2	11.3	19.5
Q3 2010	1.4	1.0	2.4	9.6	12.3	21.8
Q4 2010	6.9	1.0	7.9	16.5	13.2	29.7
Q1 2011	5.0	1.0	6.0	21.5	14.2	35.7
Q2 2011	5.6	0.7	6.3	27.1	14.9	42.0
Q3 2011	3.3	0.9	4.2	30.4	15.8	46.3
Q4 2011	1.8	1.1	2.9	32.3	16.9	49.1
Q1 2012	2.1	1.1	3.1	34.3	17.9	52.2
Q2 2012	1.6	1.1	2.7	35.9	19.0	54.9
Q3 2012	0.5	2.4	2.9	36.4	21.4	57.8
Q4 2012	0.7	1.8	2.5	37.1	23.2	60.3
Q1 2013	0.5	1.3	1.8	37.6	24.5	62.1
Q2 2013	0.4	1.4	1.7	37.9	25.9	63.8
Q3 2013	0.4	1.3	1.7	38.3	27.2	65.5
Q4 2013	0.7	1.3	1.9	38.9	28.5	67.4
Q1 2014	0.5	1.2	1.6	39.4	29.6	69.0
Q2 2014	0.4	1.1	1.5	39.8	30.8	70.6
Q3 2014	0.2	1.0	1.2	40.0	31.8	71.7
Q4 2014	0.2	0.9	1.1	40.1	32.7	72.8
Q1 2015	0.1	0.9	1.0	40.2	33.6	73.9
Q2 2015	0.3	1.0	1.2	40.5	34.6	75.1
Q3 2015	0.5	0.7	1.2	41.0	35.3	76.3
Q4 2015	0.3	0.8	1.0	41.2	36.1	77.3
Q1 2016	0.2	0.7	0.8	41.4	36.7	78.1
Q2 2016	0.2	0.7	0.9	41.6	37.4	79.0
Q3 2016	0.2	0.7	0.9	41.8	38.1	79.9
Q4 2016	0.2	0.7	0.9	42.0	38.8	80.8
Q1 2017	0.2	0.6	0.8	42.2	39.4	81.6
Q2 2017	0.2	0.7	0.9	42.4	40.1	82.5

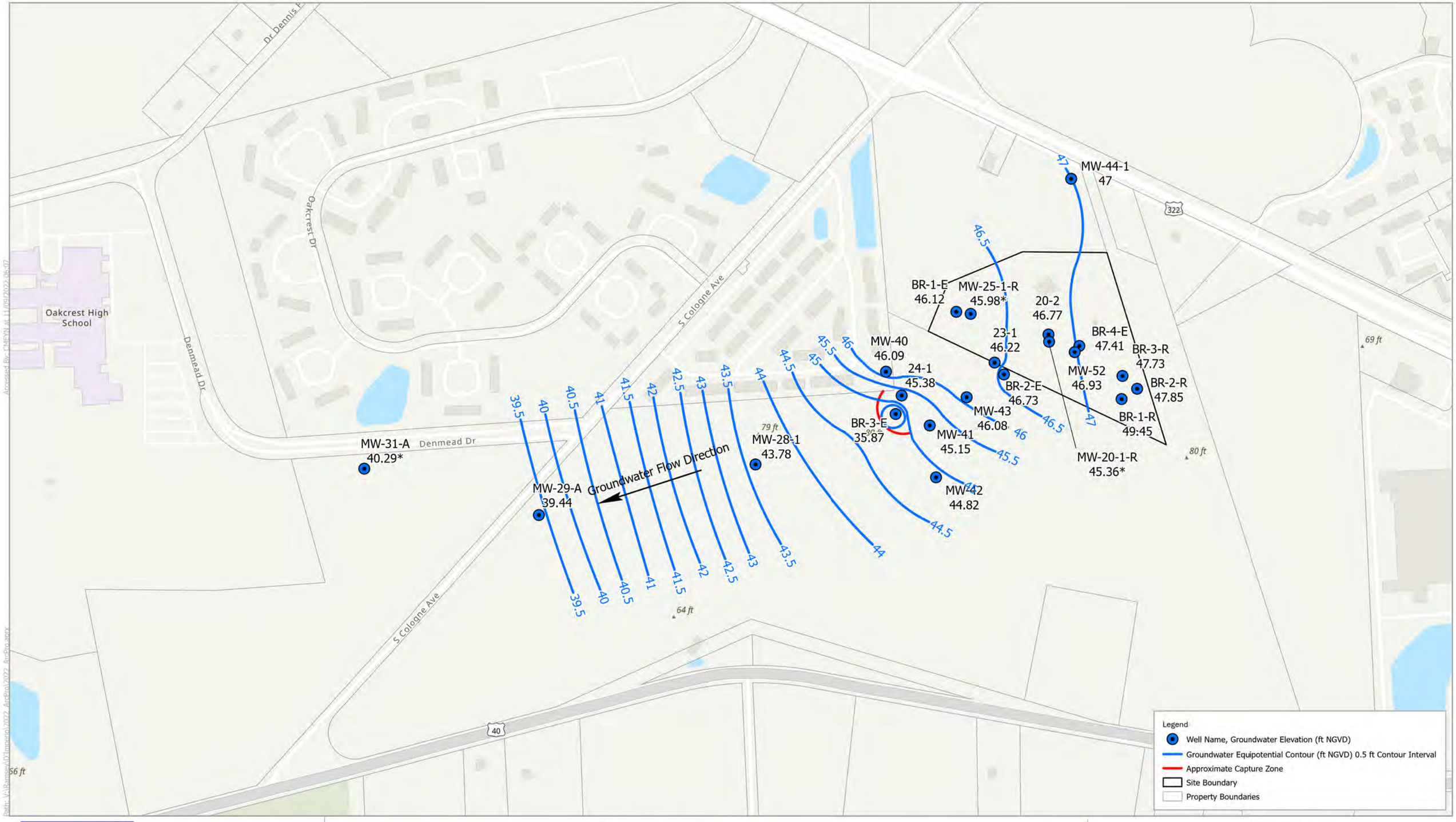
TABLE 3-4
SUMMARY OF PLUME MASS REMOVED BY EXTRACTION WELLS
D'IMPERIO PROPERTY SITE [1.]

	Quarterly Extracted Mass [2.]			Cummulative Extracted Mass [2.]		
Quarter	Bridgeton and Upper Cohansey (kg)	Lower Cohansey [3.] (kg)	Quarterly Totals (kg)	Bridgeton and Upper Cohansey (kg)	Lower Cohansey [3.] (kg)	Cumulative Total (kg)
Q3 2017	0.2	0.7	0.9	42.6	40.8	83.4
Q4 2017	0.2	0.7	0.8	42.8	41.5	84.2
Q1 2018	0.3	0.9	1.2	43.0	42.4	85.4
Q2 2018	0.3	0.9	1.1	43.3	43.2	86.5
Q3 2018	0.2	0.6	0.8	43.4	43.8	87.3
Q4 2018	0.2	0.7	0.9	43.6	44.6	88.2
Q1 2019	0.2	0.7	0.8	43.8	45.2	89.0
Q2 2019	0.2	0.7	0.9	44.0	45.9	90.0
Q3 2019	0.2	0.6	0.8	44.2	46.6	90.8
Q4 2019	0.2	0.6	0.7	44.4	47.2	91.5
Q1 2020	0.2	0.6	0.8	44.5	47.8	92.3
Q2 2020	0.2	0.6	0.8	44.7	48.4	93.1
Q3 2020	0.1	0.5	0.7	44.8	48.9	93.7
Q4 2020	0.2	0.6	0.8	45.0	49.5	94.5
Q1 2021	0.2	0.6	0.7	45.2	50.1	95.3
Q2 2021	0.1	0.5	0.7	45.3	50.6	95.9
Q3 2021	0.1	0.5	0.6	45.4	51.1	96.5
Q4 2021	0.1	0.5	0.6	45.6	51.6	97.1
Q1 2022	0.1	0.4	0.6	45.7	52.0	97.7
Q2 2022	0.1	0.4	0.5	45.8	52.4	98.2
Q3 2022	0.1	0.4	0.6	45.9	52.8	98.8

Notes:
1. Plume constituents as defined by total of Administrative Order Performance Standard VOCs, not including chloroform.
2. Extracted plume mass estimates based on an evaluation of the monthly influent and effluent water quality concentrations and extraction water volumes.
3. Lower Cohansey extraction wells include both the Main plumes wells and the Lower Cohansey Detached Plume (LCDP) wells.

Abbreviations:
kg - kilogram

Figures



Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 10/24/2022 7:50 AM

Notes: * indicates a value that is considered anomalous. Value not used for contouring

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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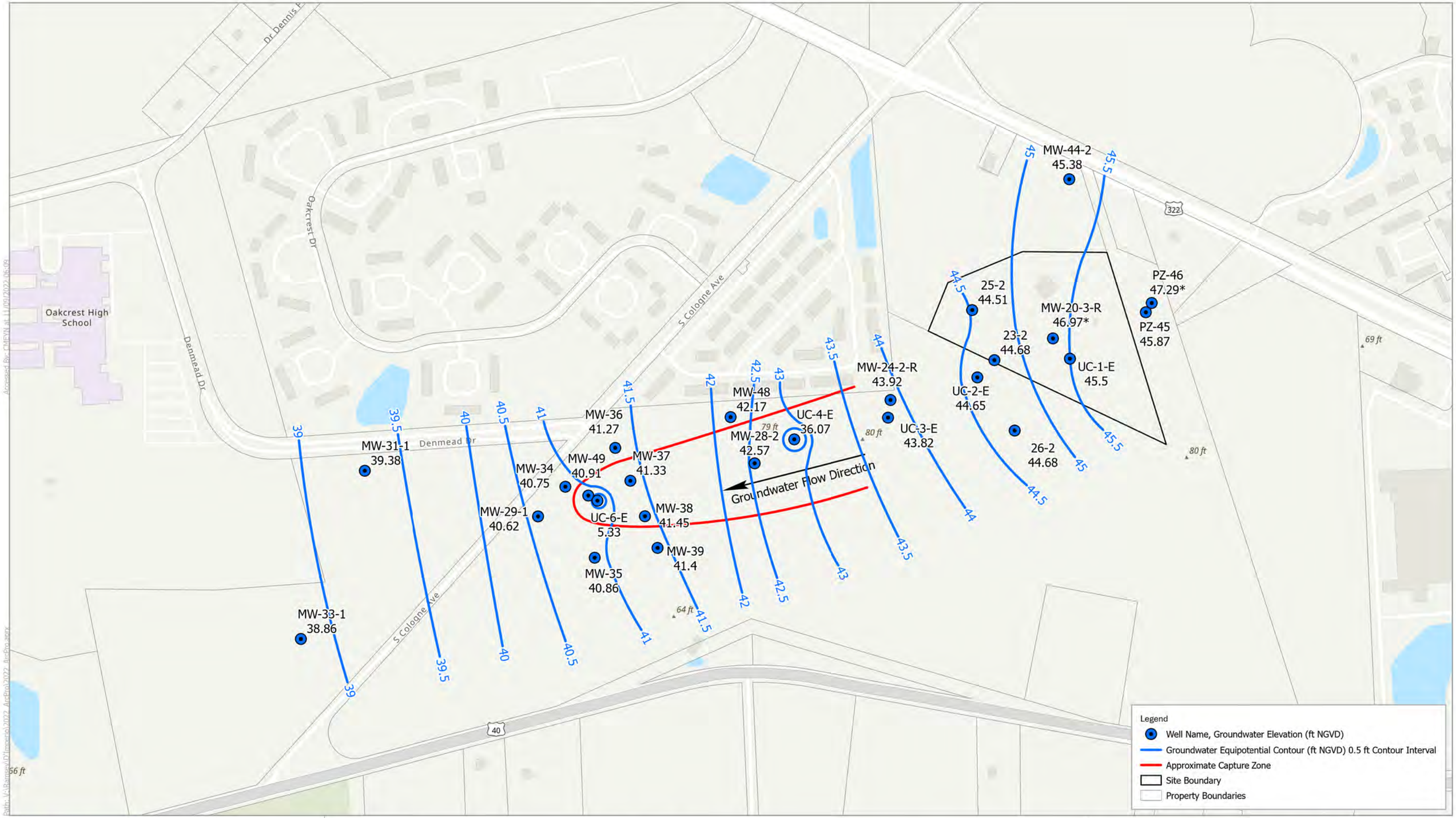
Drawn By: Charles Meyn
Checked By: James Marotta

N

0 200 400 800 Feet

FIGURE 2-1
BRIDGETON AQUIFER
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022



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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 10/24/2022 7:50 AM

Notes: * indicates a value that is considered anomalous. Value not used for contouring

Spatial Reference:
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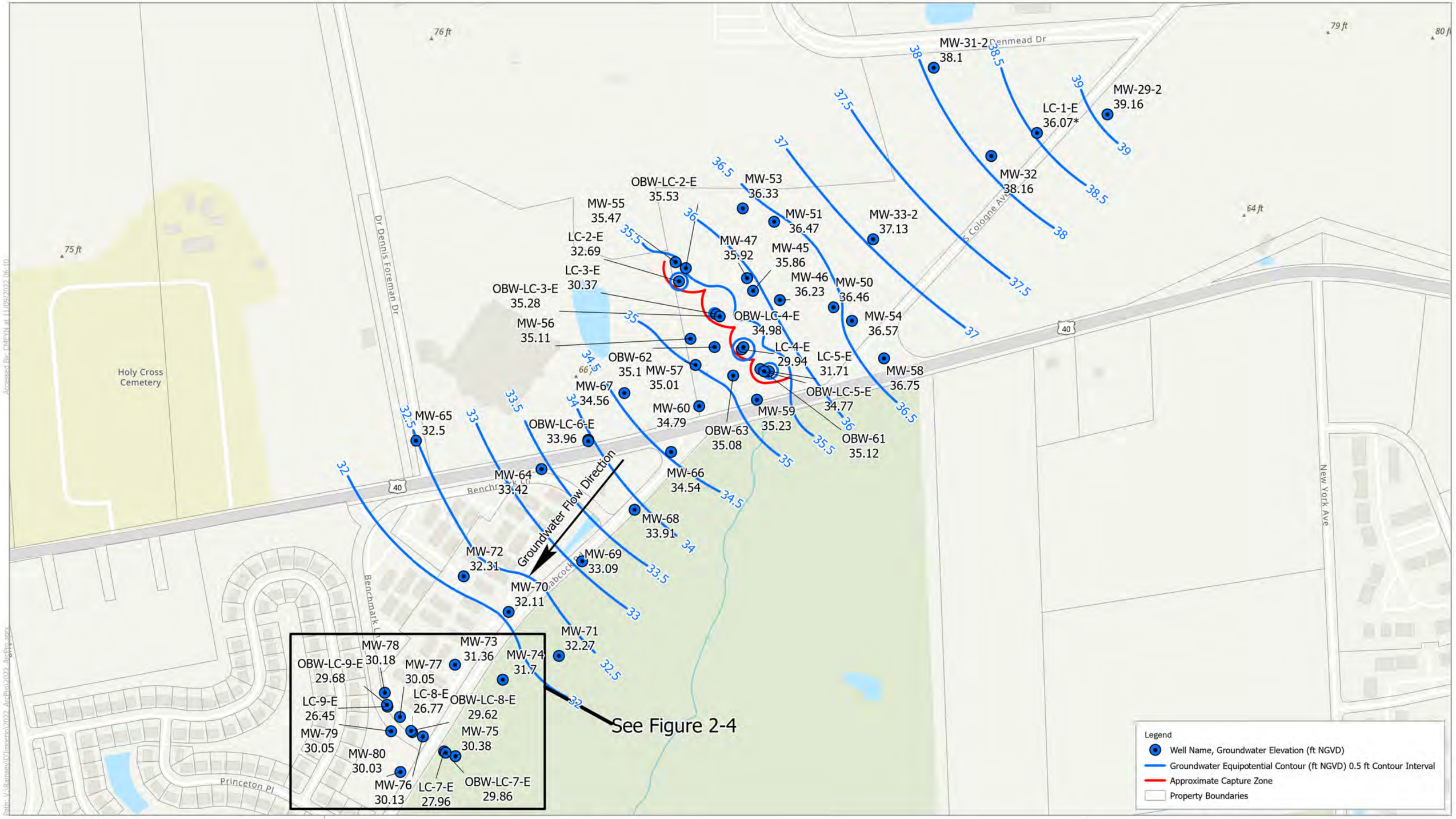
Drawn By: Charles Meyn
Checked By: James Marolda

N

0 200 400 800 Feet

FIGURE 2-2
UPPER COHANSEY AQUIFER
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022



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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 10/24/2022 7:50 AM

Notes: * indicates a value that is considered anomalous. Value not used for contouring

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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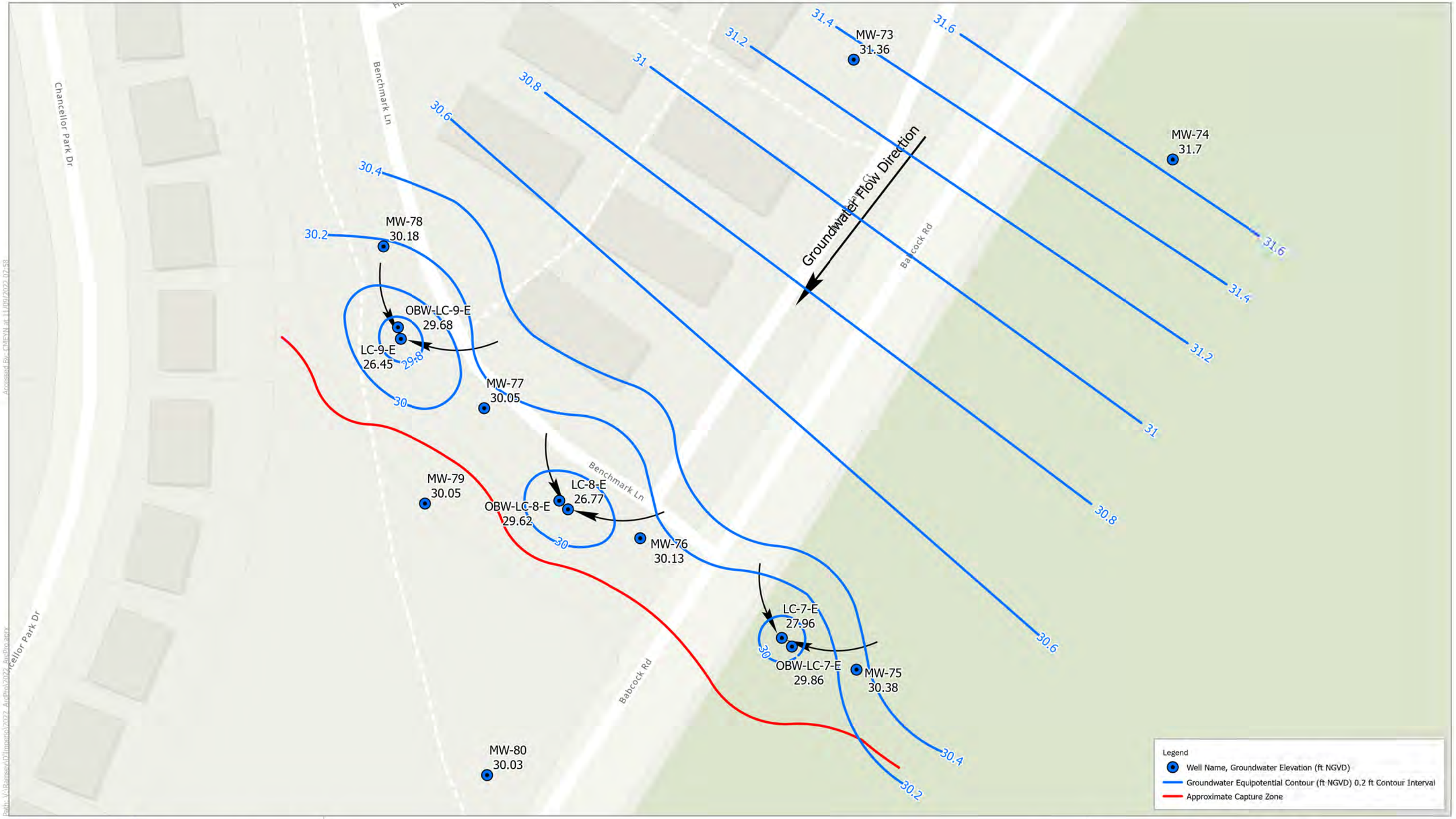
Drawn By: Charles Meyn
Checked By: James Marolda

N

0 200 400 800 Feet

FIGURE 2-3
LOWER COHANSEY AQUIFER
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022



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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

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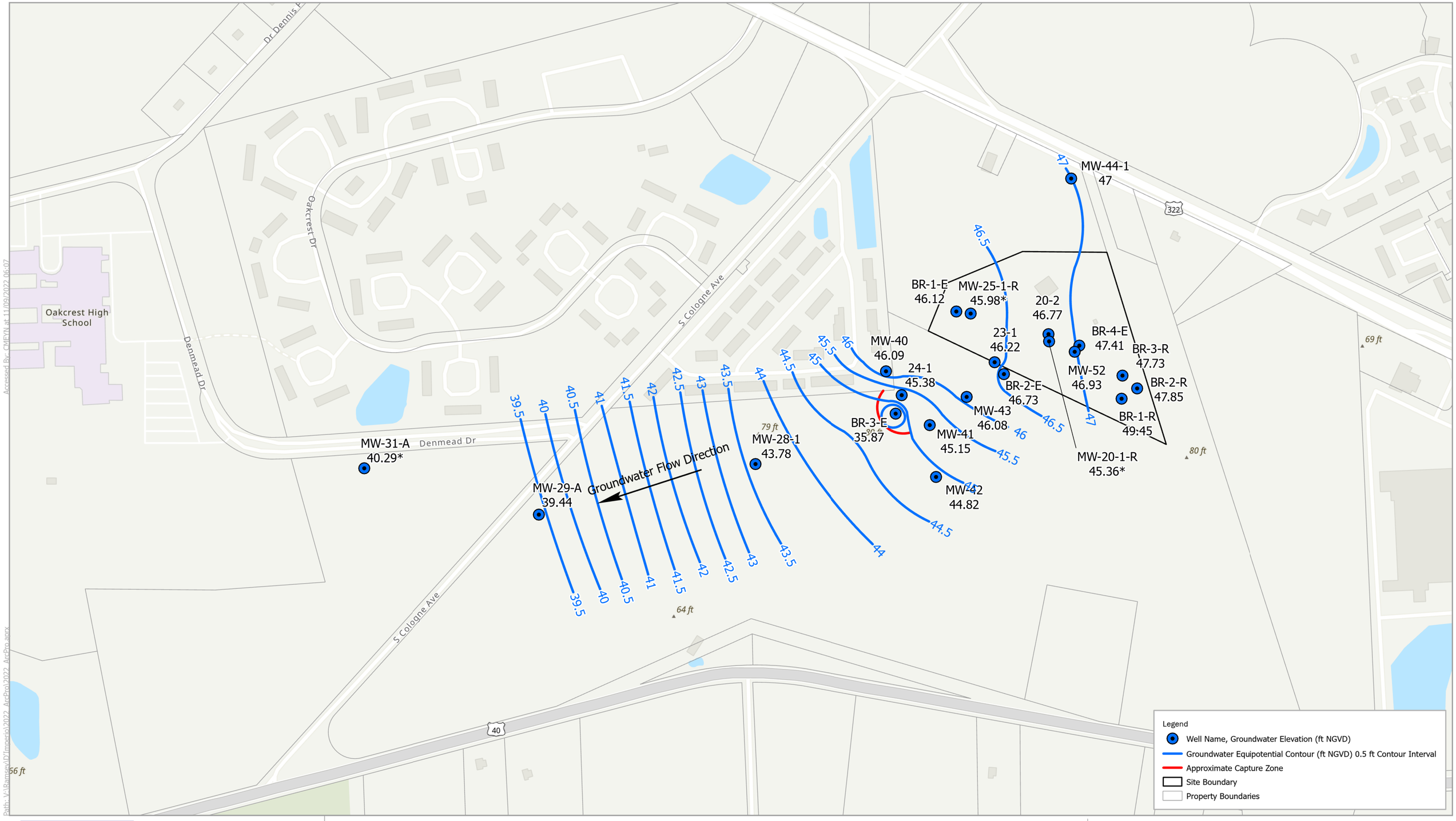
Checked By: James Maroldo

N

0 30 60 120 Feet

FIGURE 2-4
LOWER COHANSEY AQUIFER, DETACHED PLUME
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022



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D'IMPERIO PROPERTY SITE,
HAMILTON TWP,
ATLANTIC CO. NEW JERSEY

Date: 10/24/2022 7:50 AM

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Checked By: James Marolda

N

0 200 400 800 Feet

FIGURE 2-1
BRIDGETON AQUIFER
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022

Accessed By: CMEYN at 11/09/2022 06:07

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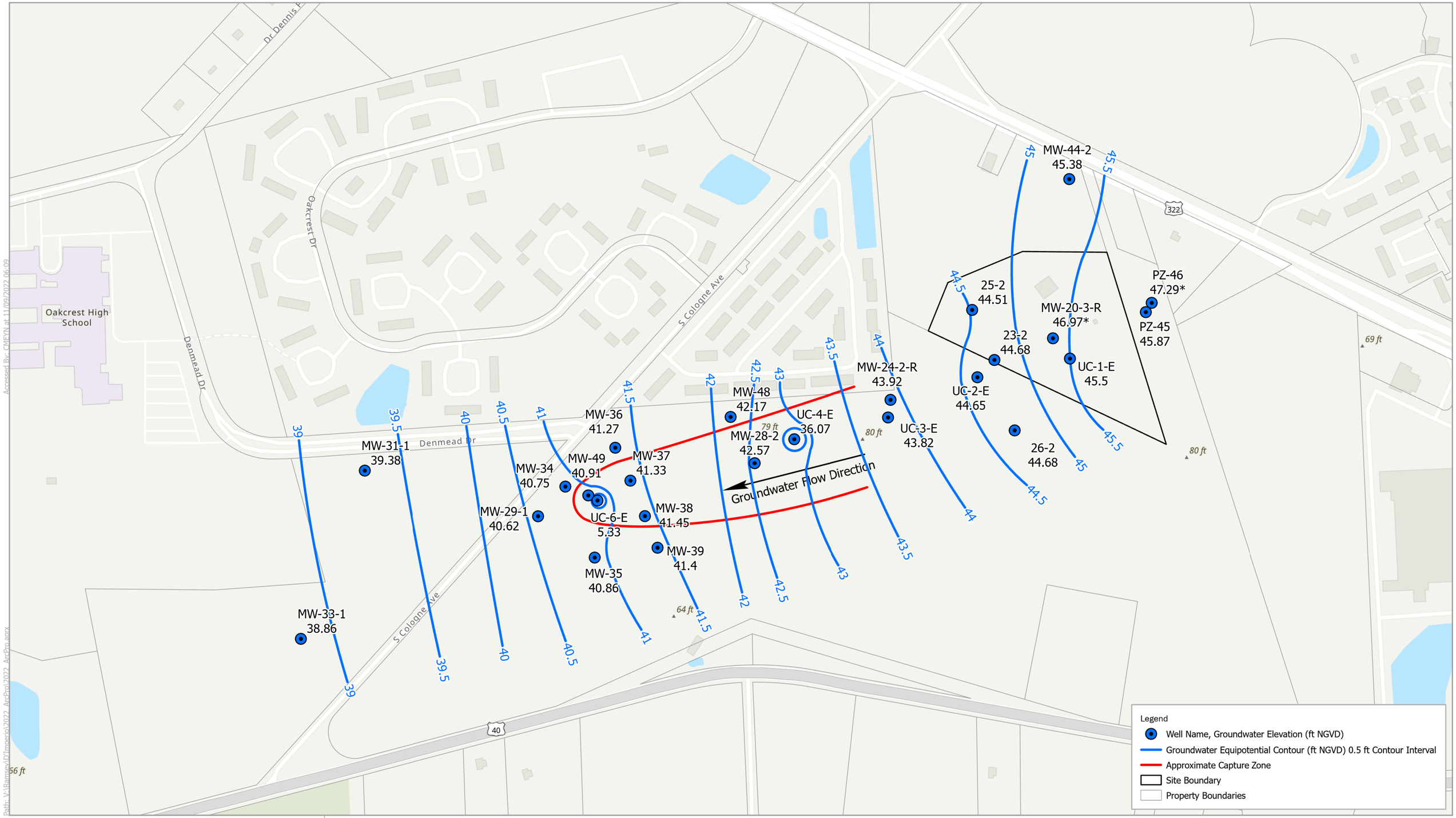

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Drawn By: Charles Meyn
Checked By: James Marolda

N

0 200 400 800 Feet

FIGURE 2-2
UPPER COHANSEY AQUIFER
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022

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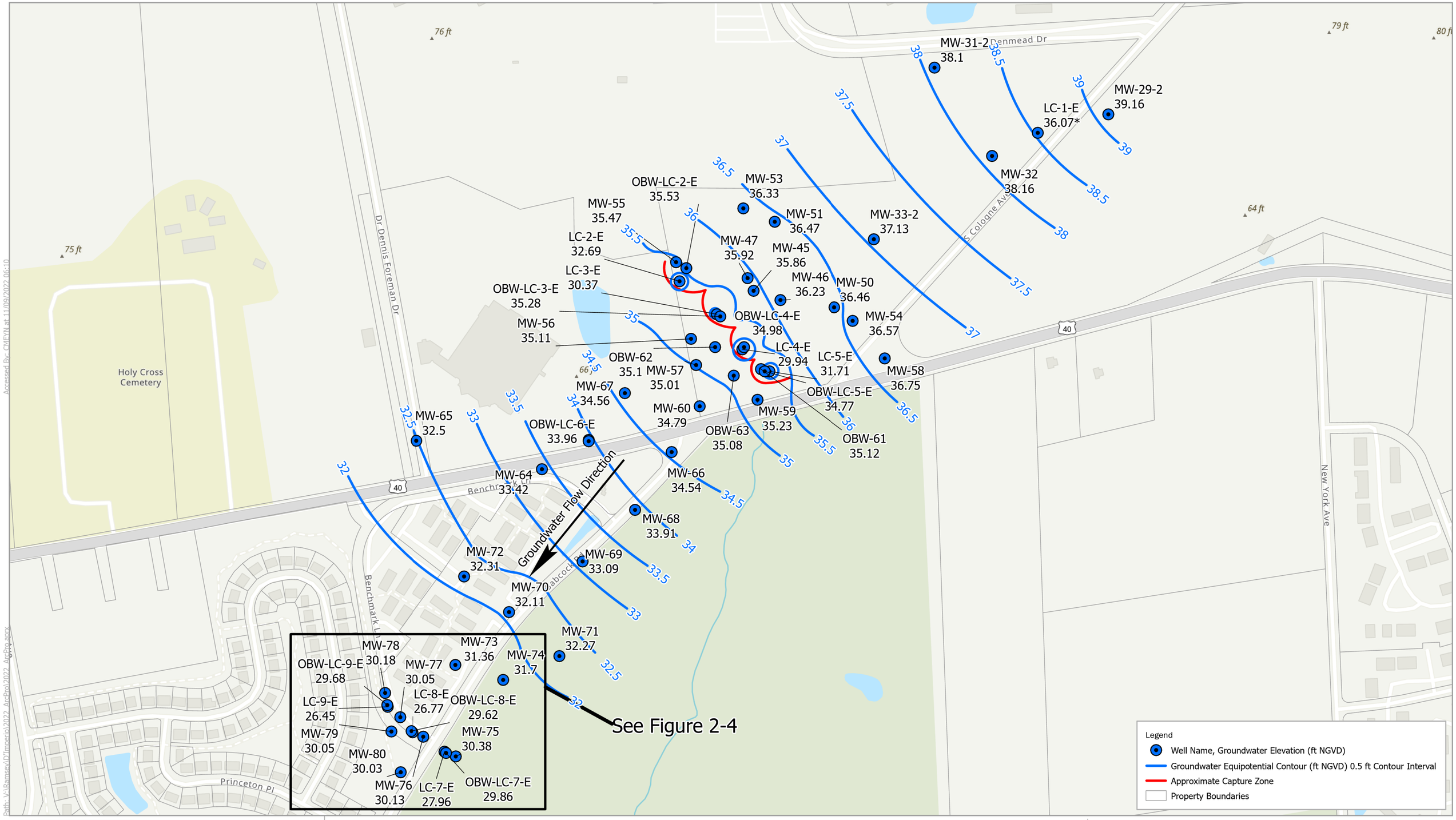

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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 10/24/2022 7:50 AM

Notes: * indicates a value that is considered anomalous. Value not used for contouring

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By: James Marolda

N

0 200 400 800 Feet

FIGURE 2-3
LOWER COHANSEY AQUIFER
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022

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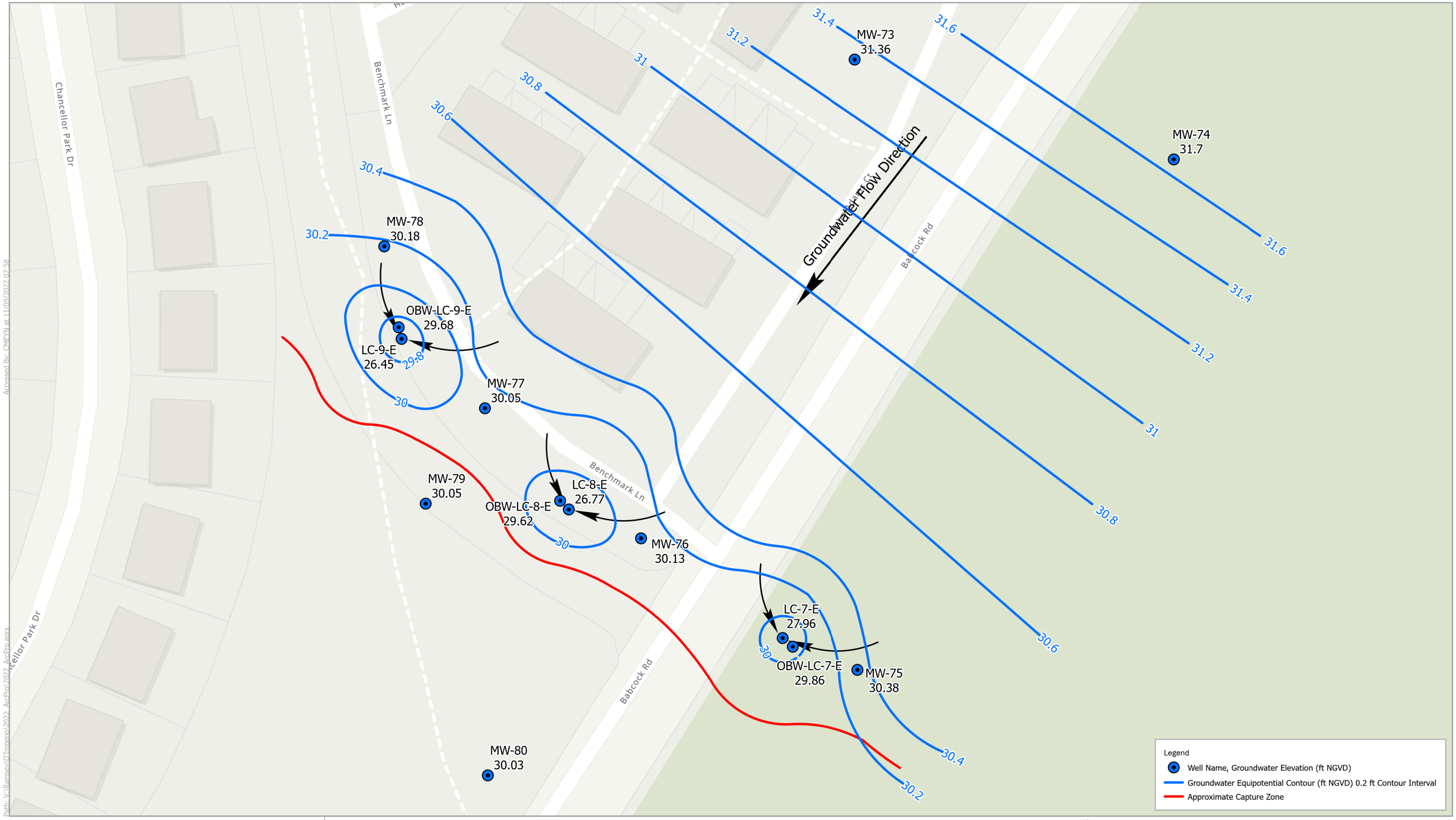

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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 6:49 AM

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Checked By: James Marolda

N

0 30 60 120 Feet

FIGURE 2-4
LOWER COHANSEY AQUIFER, DETACHED PLUME
GROUNDWATER EQUIPOTENTIAL CONTOURS
AUGUST 26, 2022

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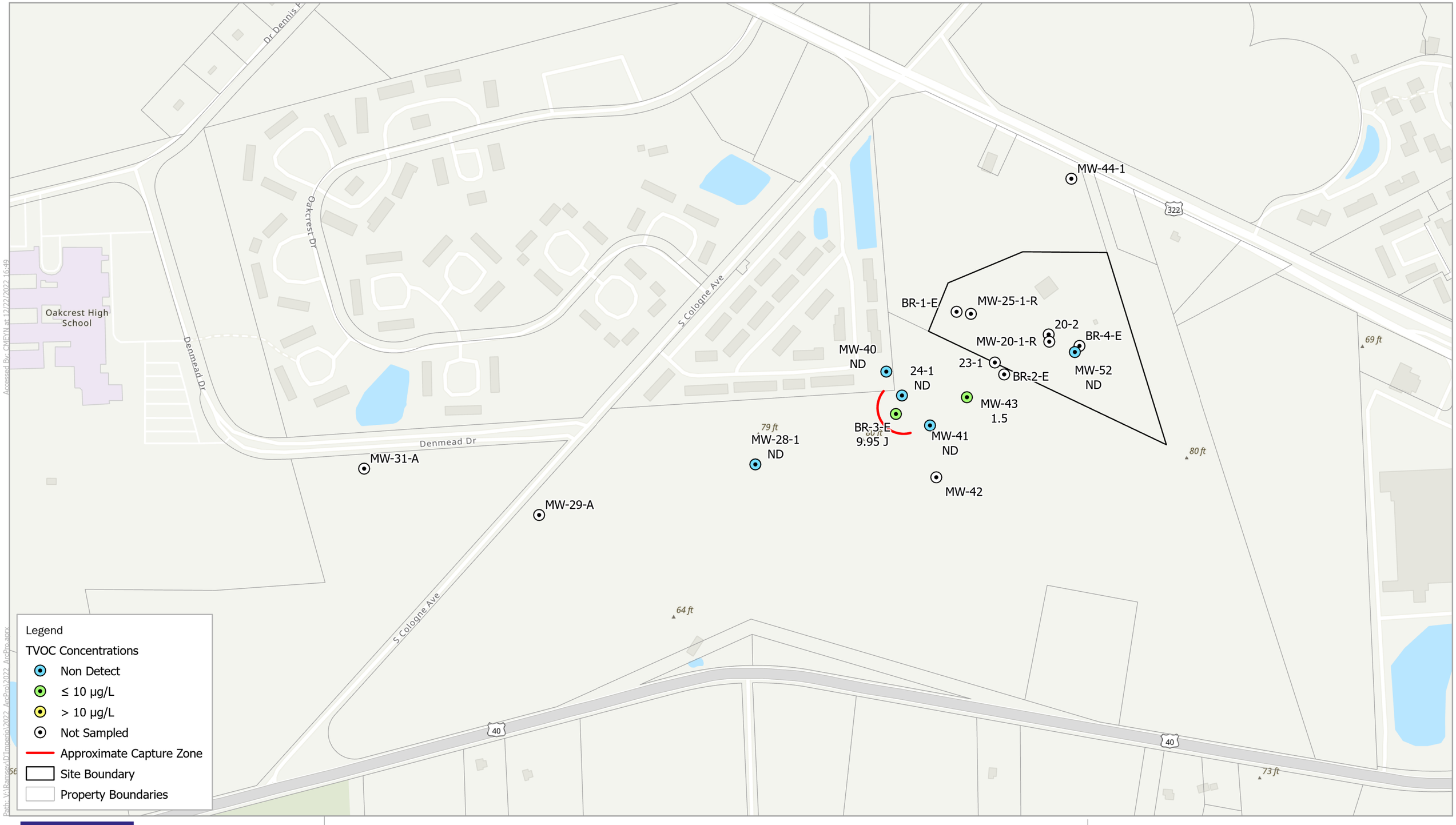

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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: ND - Not Detected, J - Estimated Concentration, µg/L - micrograms per liter, TVOC - Total Volatile Organic Compounds, i.e. the total concentration of Performance Standard VOCs, excluding chloroform.
Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-1
TVO CONCENTRATIONS IN THE BRIDGETON AQUIFER, AUGUST-SEPTEMBER 2022

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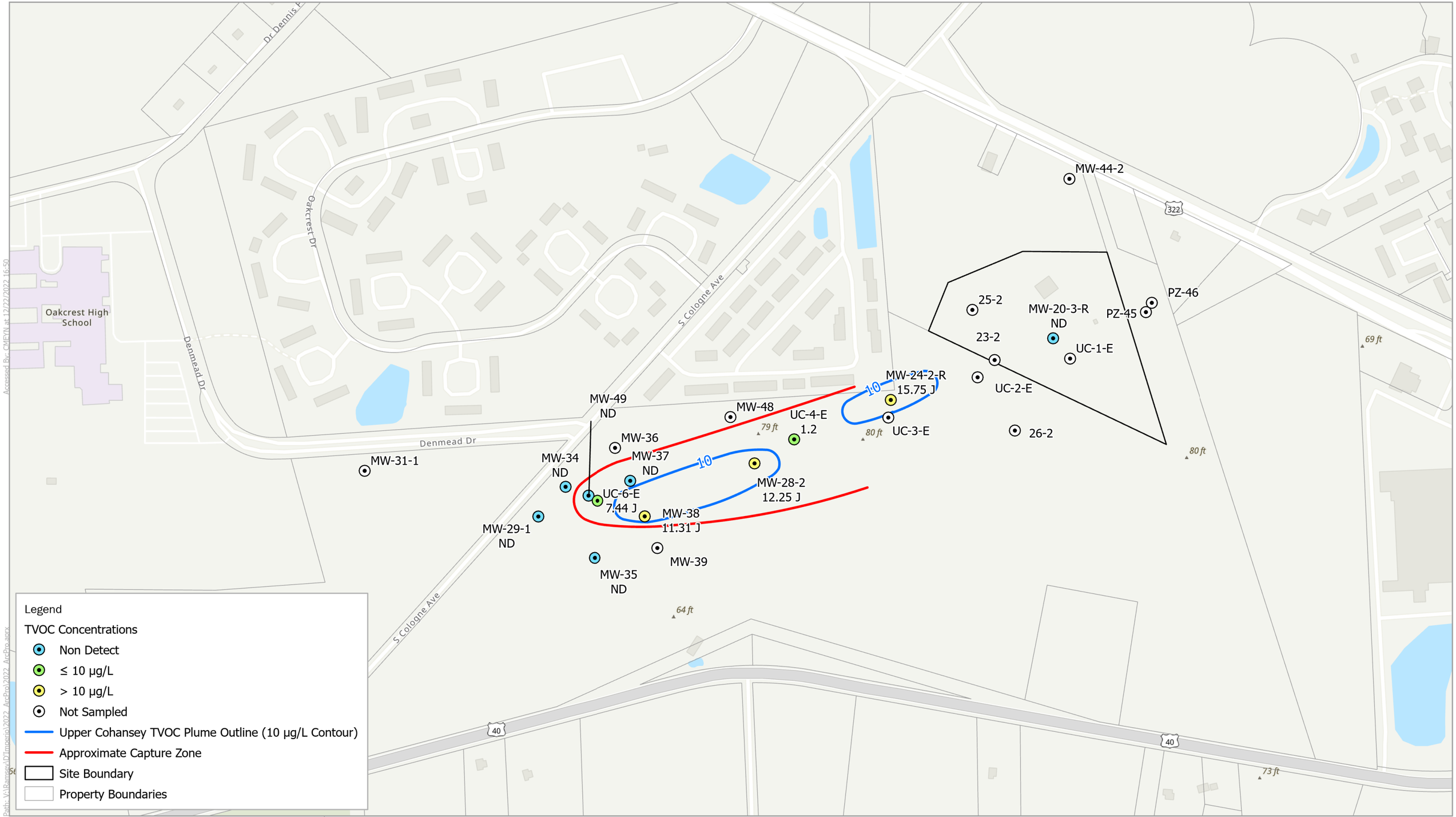

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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: ND - Not Detected, J - Estimated Concentration, µg/L - micrograms per liter, TVOC - Total Volatile Organic Compounds, i.e. the total concentration of Performance Standard VOCs, excluding chloroform.
Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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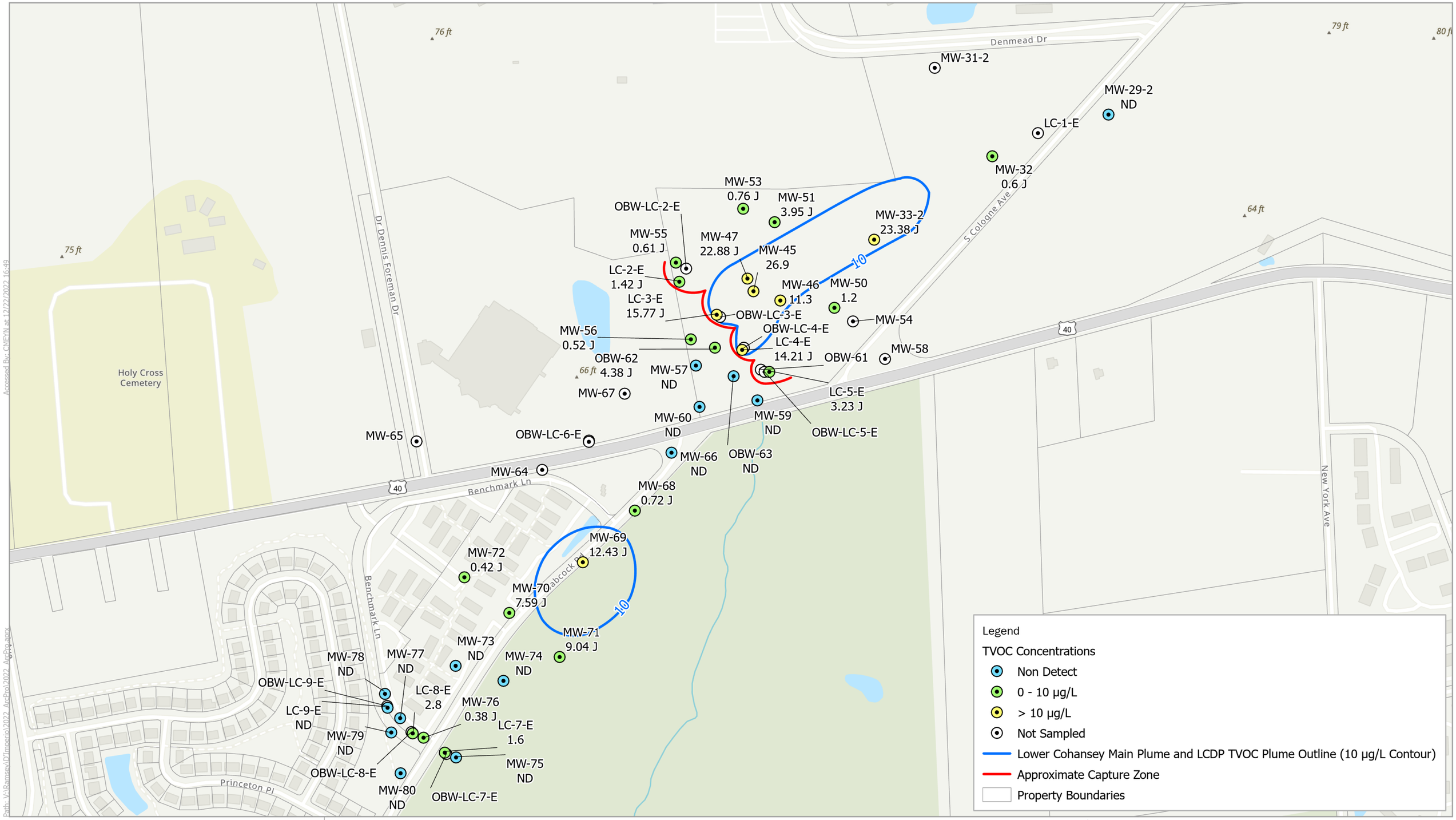
Checked By:

N

0 200 400 800 Feet

FIGURE 3-2
TVO CONCENTRATIONS IN THE UPPER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022



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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: ND - Not Detected, J - Estimated Concentration, µg/L - micrograms per liter, TVOC - Total Volatile Organic Compounds, i.e. the total concentration of Performance Standard VOCs, excluding chloroform.
Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-3
TVO CONCENTRATIONS IN THE LOWER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022

Accessed By: CMEYN at 12/22/2022 16:49
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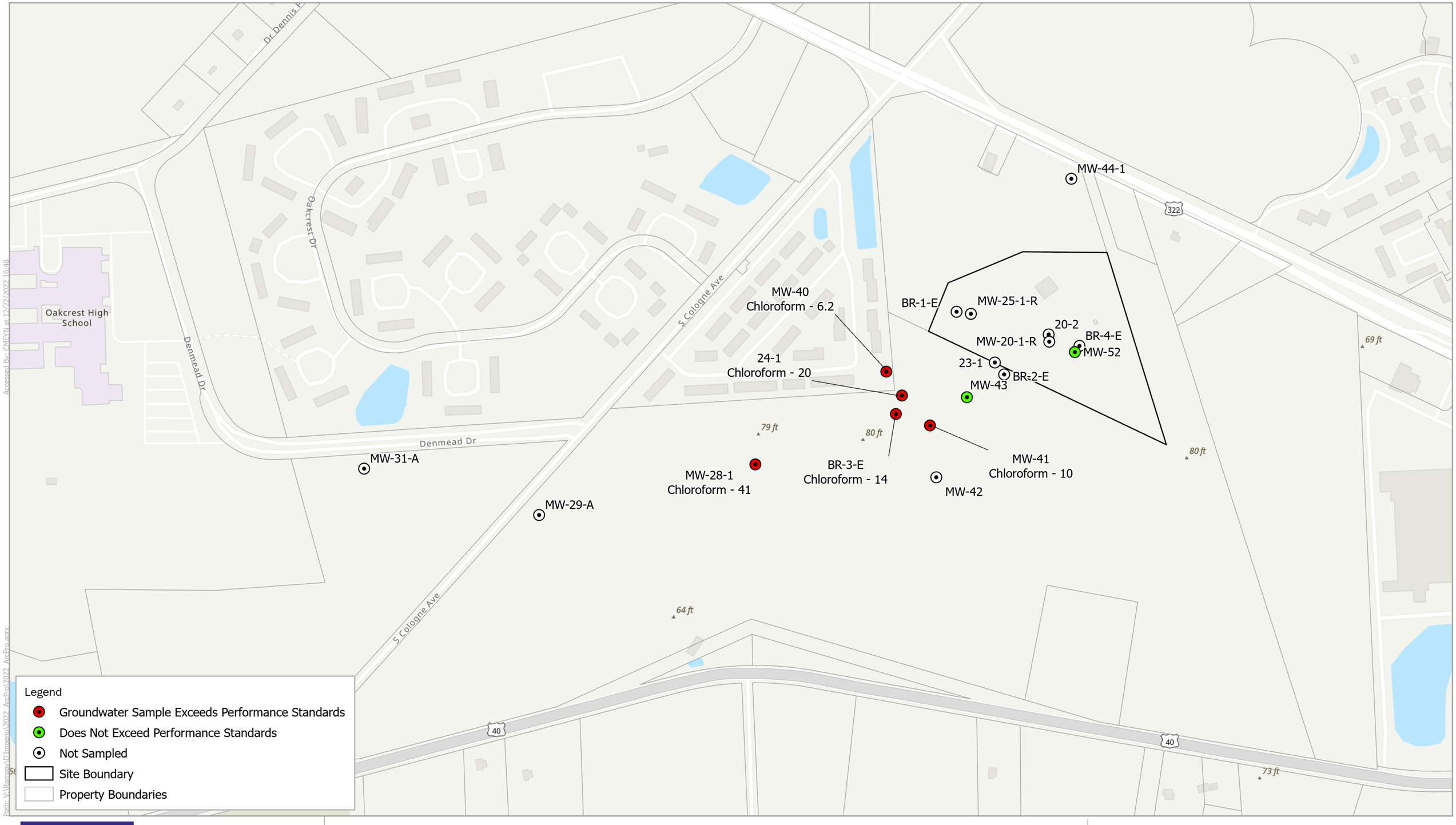

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D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: Posted sample concentrations in µg/L - micrograms per liter
Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-4
EXCEEDANCES OF PERFORMANCE STANDARDS IN THE BRIDGETON AQUIFER, AUGUST-SEPTEMBER 2022

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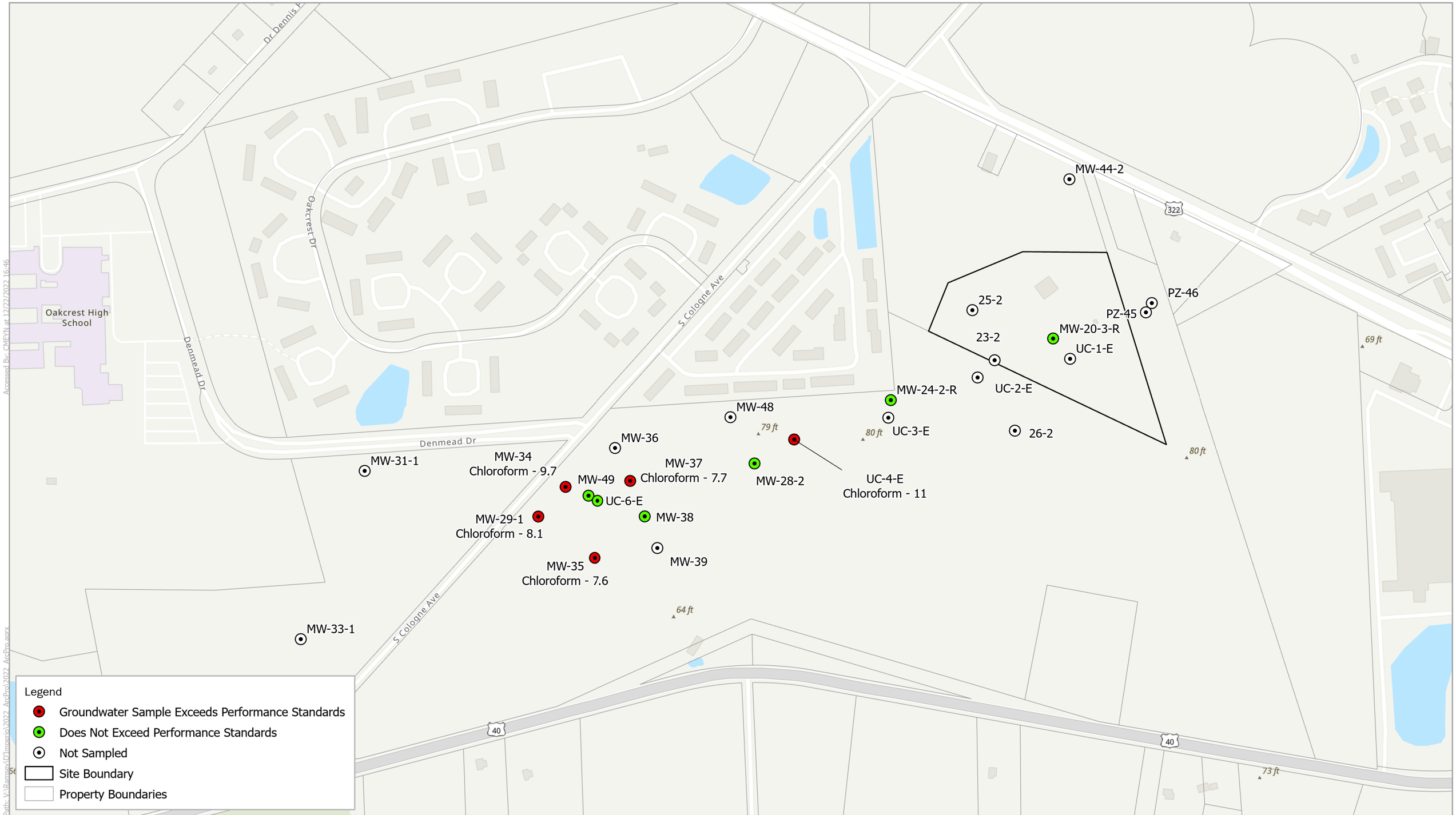

Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: Posted sample concentrations in µg/L - micrograms per liter
Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-5
EXCEEDANCES OF PERFORMANCE STANDARDS IN THE UPPER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022

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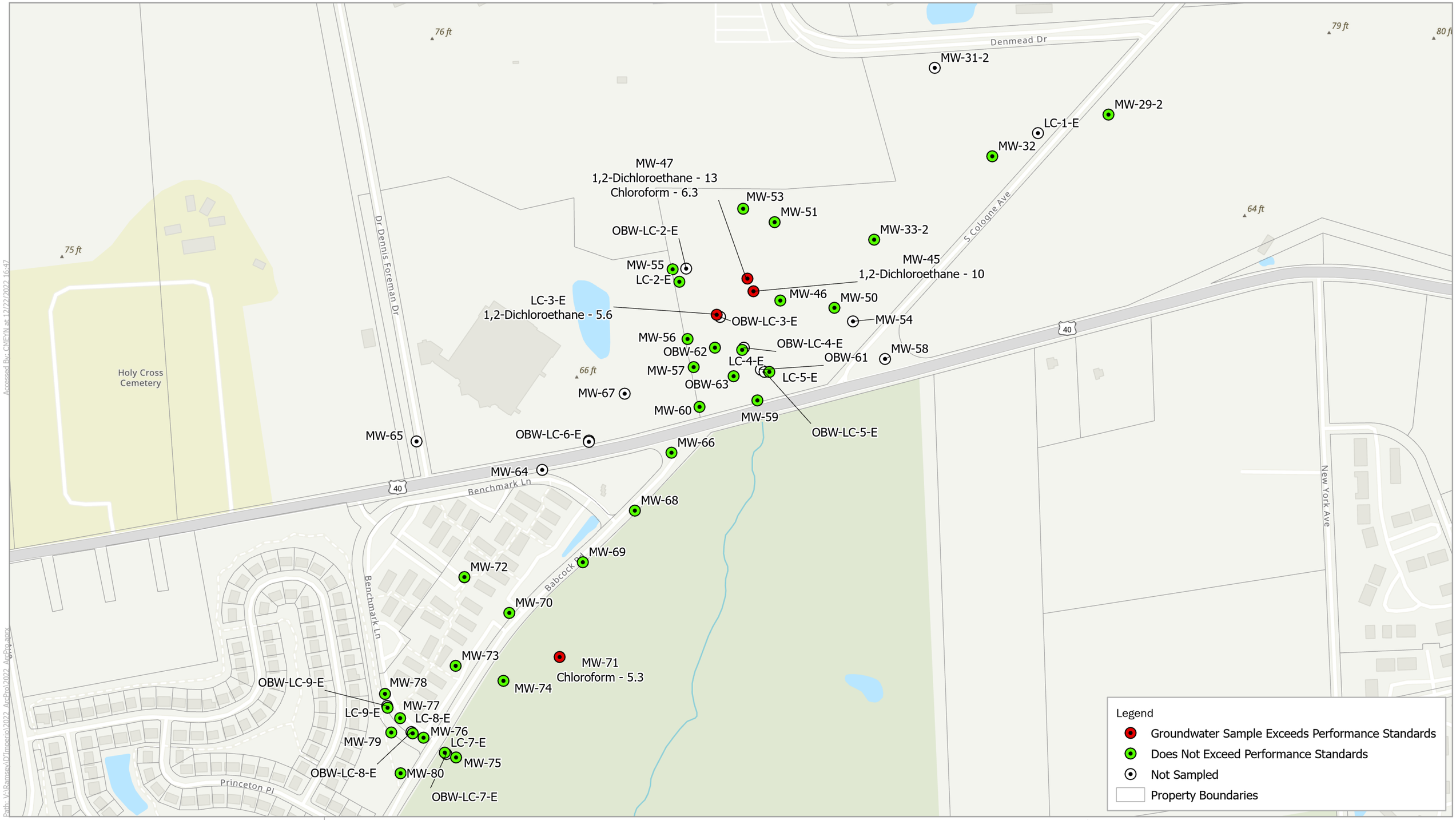

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de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: Posted sample concentrations in µg/L - micrograms per liter
Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-6
EXCEEDANCES OF PERFORMANCE STANDARDS IN THE LOWER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022

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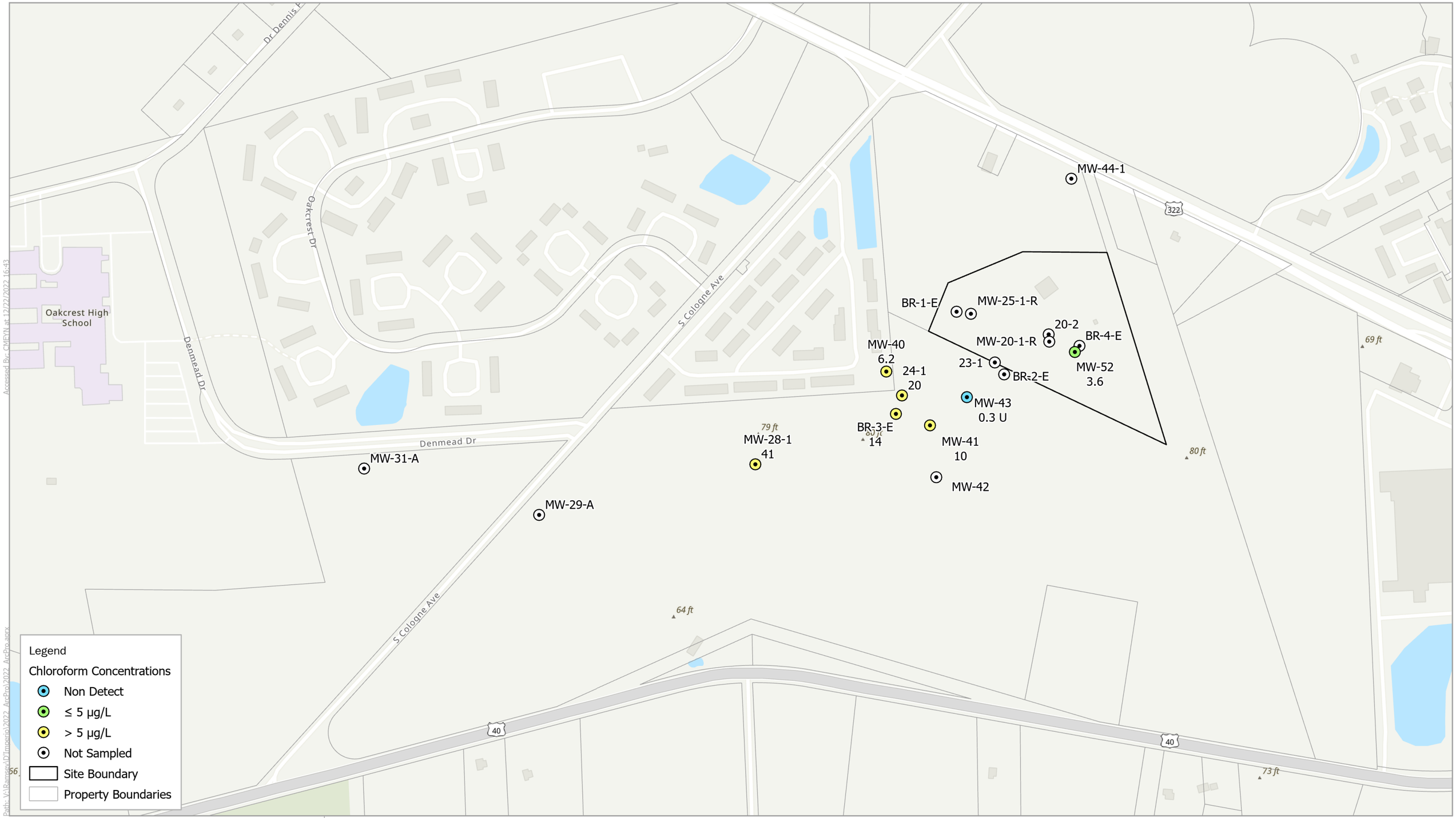
Accessed By: CMEYN at 12/22/2022 16:47



Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: U - Not Detected, µg/L - micrograms per liter

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-7
CHLOROFORM CONCENTRATION IN THE BRIDGETON AQUIFER, AUGUST-SEPTEMBER 2022

Accessed By: CMEYN at 12/22/2022 16:43
Path: V:\Ramsey\D'Imperio\2022_ArcPro\2022_ArcPro.aprx

Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: U - Not Detected, J - Estimated Concentration, µg/L - micrograms per liter.

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

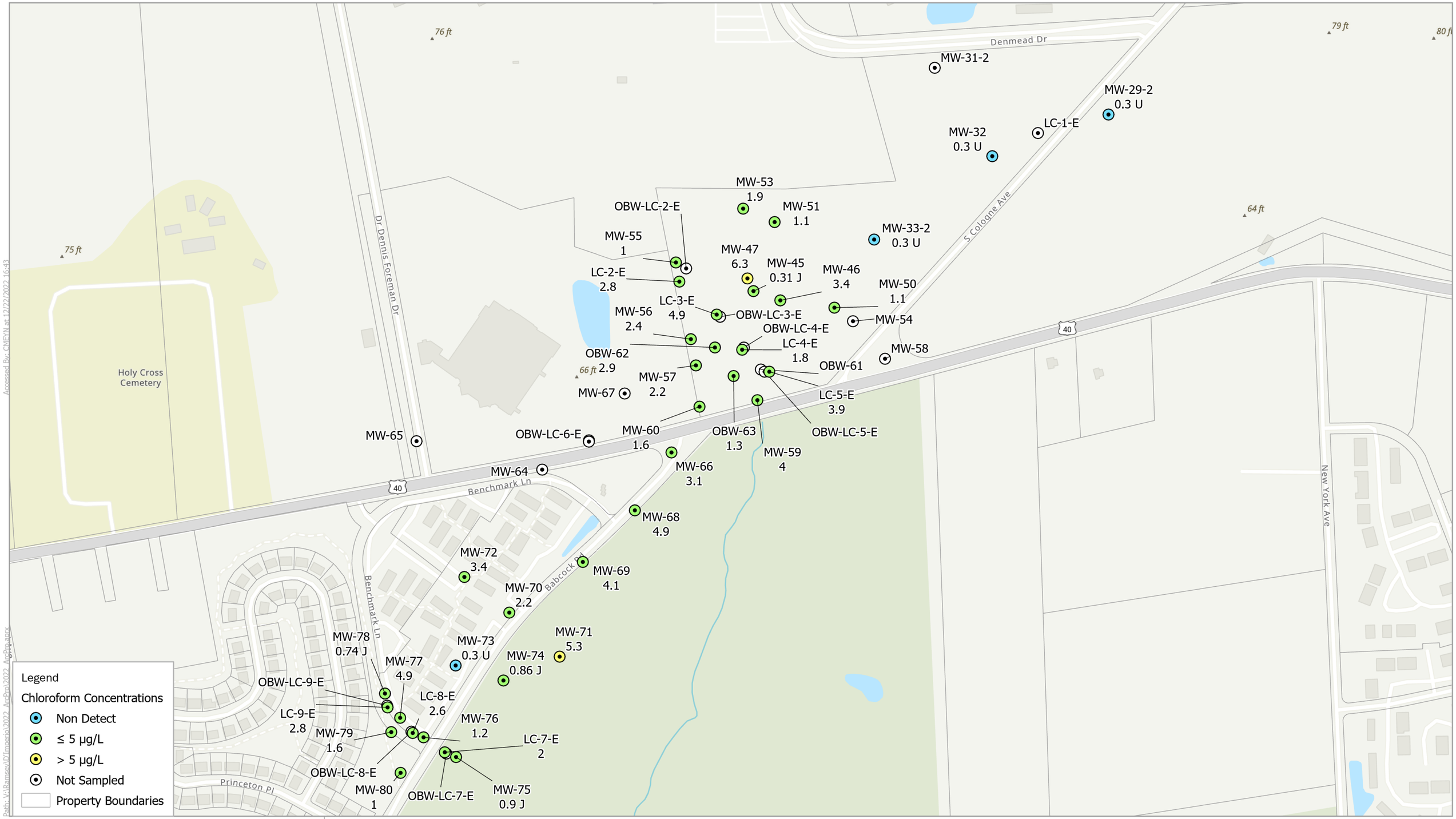
Esri Community Maps Contributors, New Jersey Office of GIS, © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA

Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-8
CHLOROFORM CONCENTRATIONS IN THE UPPER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022



Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: U - Not Detected, J - Estimated Concentration, µg/L - microgram per liter.

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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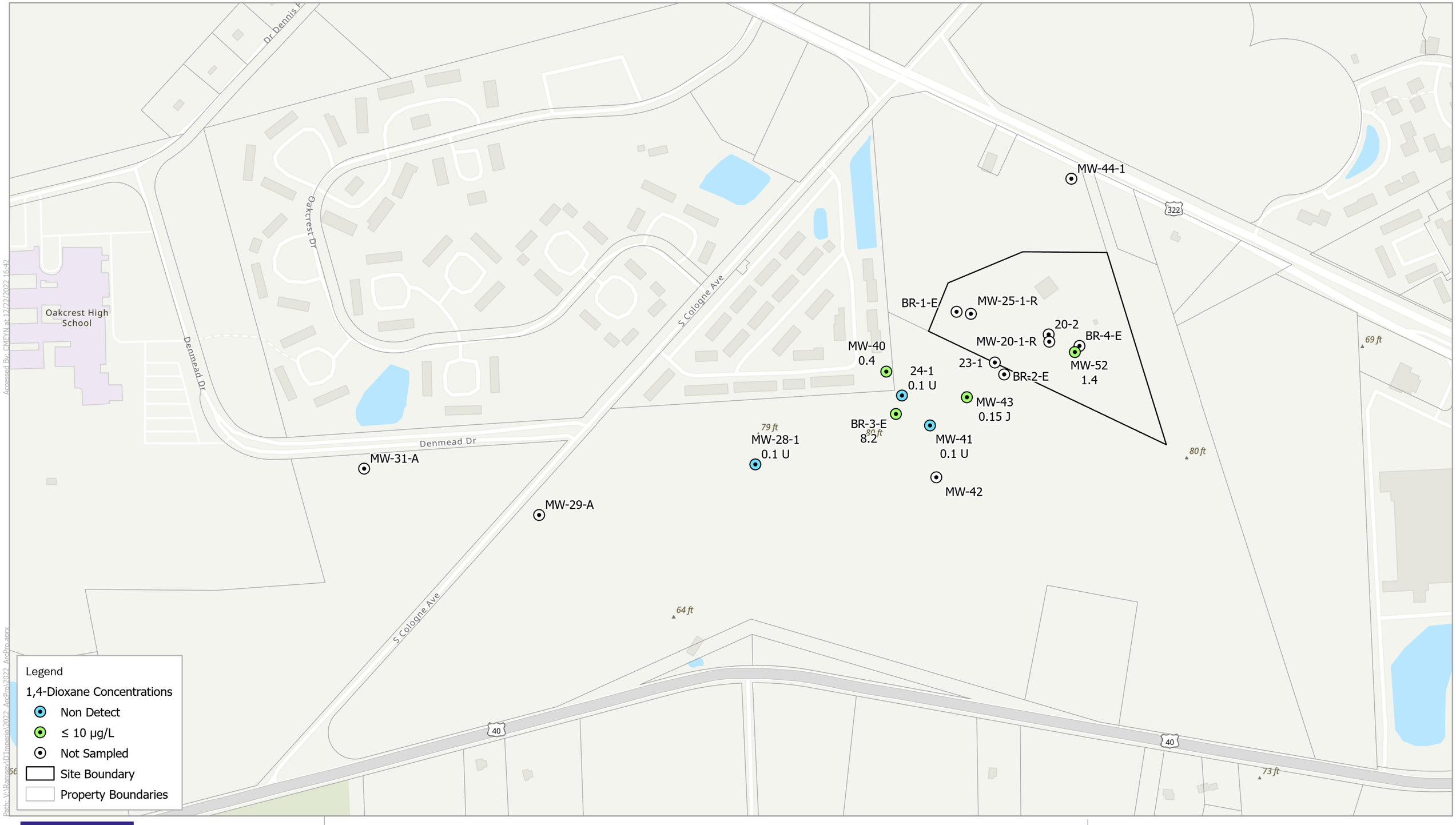
Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-9
CHLOROFORM CONCENTRATIONS IN THE LOWER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022

Path: V:\Ramsey\D'Imperio\2022_ArcPro\2022_ArcPro.aprx
Accessed By: CMEYN at 12/22/2022 16:43



Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: U - Not Detected, J - Estimated Concentration, µg/L - micrograms per liter

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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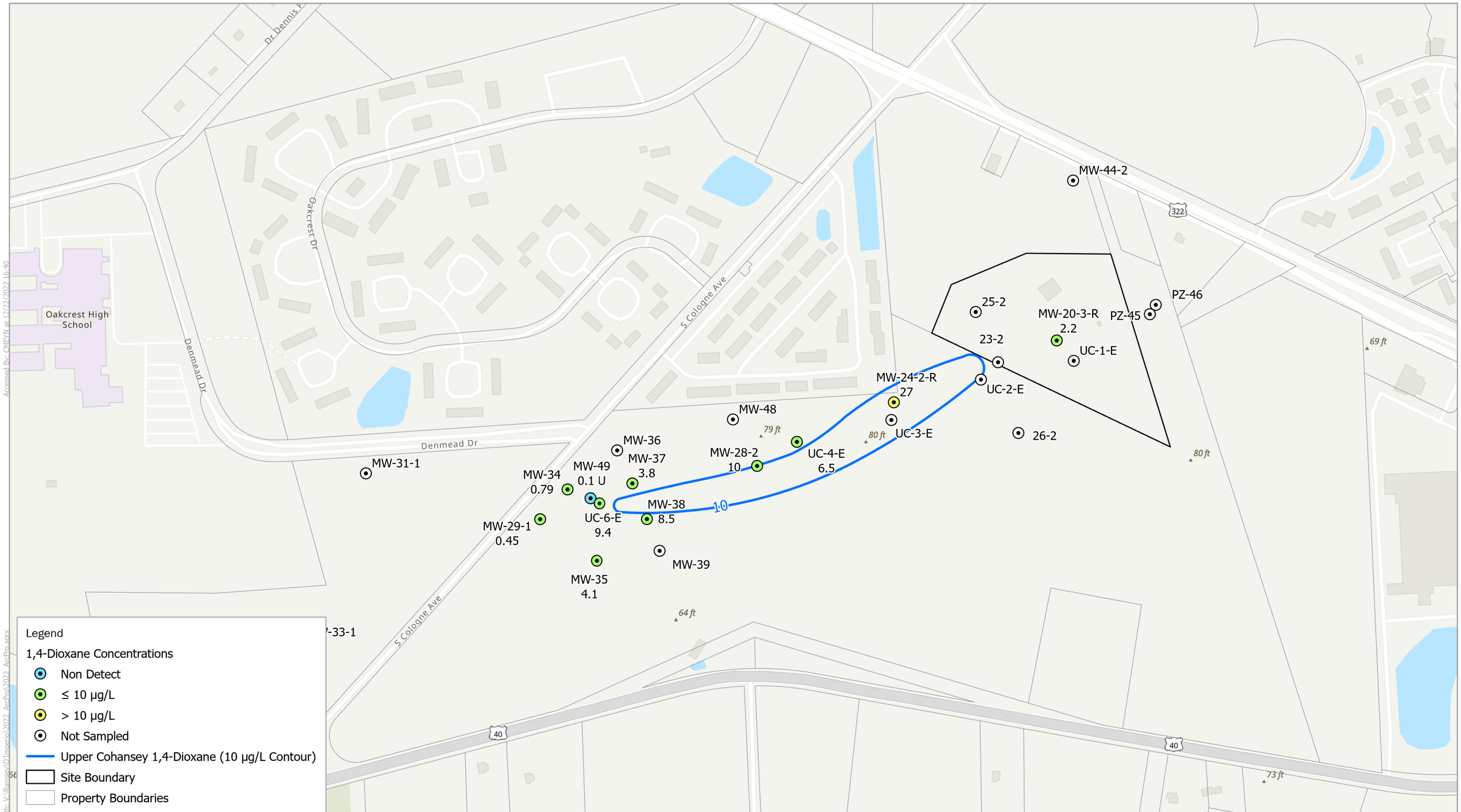
Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-10
1,4-DIOXANE CONCENTRATION IN THE BRIDGETON AQUIFER, AUGUST-SEPTEMBER 2022

Accessed By: CMEYN at 12/22/2022 16:42
Path: V:\Barnsley\D'Imperio\2022_ArcPro\2022_ArcPro.aprx



Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: U - Not Detected, µg/L - micrograms per liter.

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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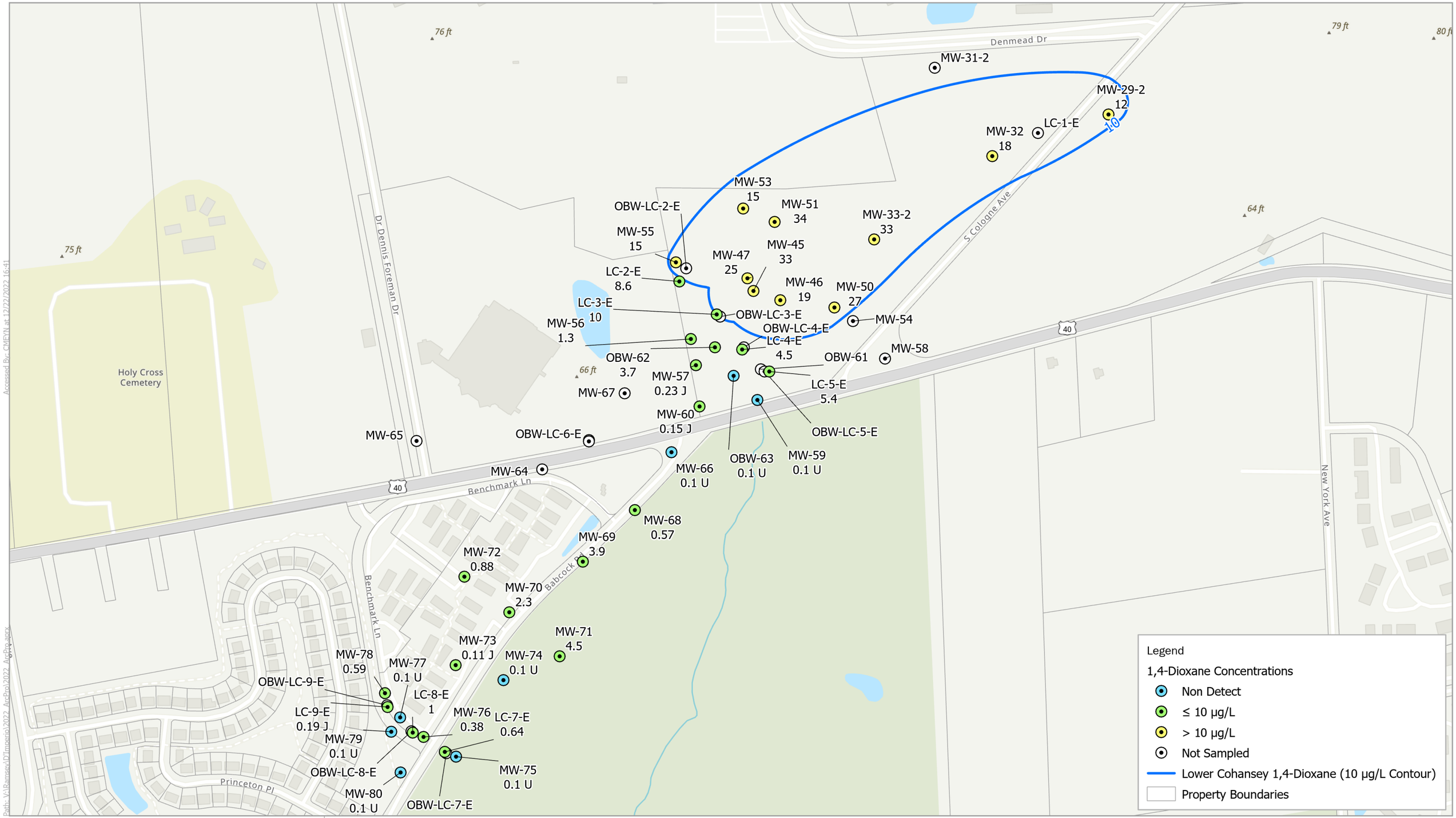
Drawn By: Charles Meyn
Checked By:

N

0 200 400 800 Feet

FIGURE 3-11
1,4-DIOXANE CONCENTRATIONS IN THE UPPER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022

Accessed By: CMEYN at 12/22/2022 16:40
Path: V:\Ramsey\D'Imperio\2022_ArcPro\2022_ArcPro.aprx



Brown AND Caldwell

de maximis, inc. 157948

D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

Date: 11/9/2022 8:31 AM

Notes: U - Not Detected, J - Estimated Concentration, µg/L - microgram per liter.

Spatial Reference:
Name: NAD 1983 StatePlane New Jersey FIPS 2900 Feet

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Drawn By: Charles Meyn
Checked By:

N

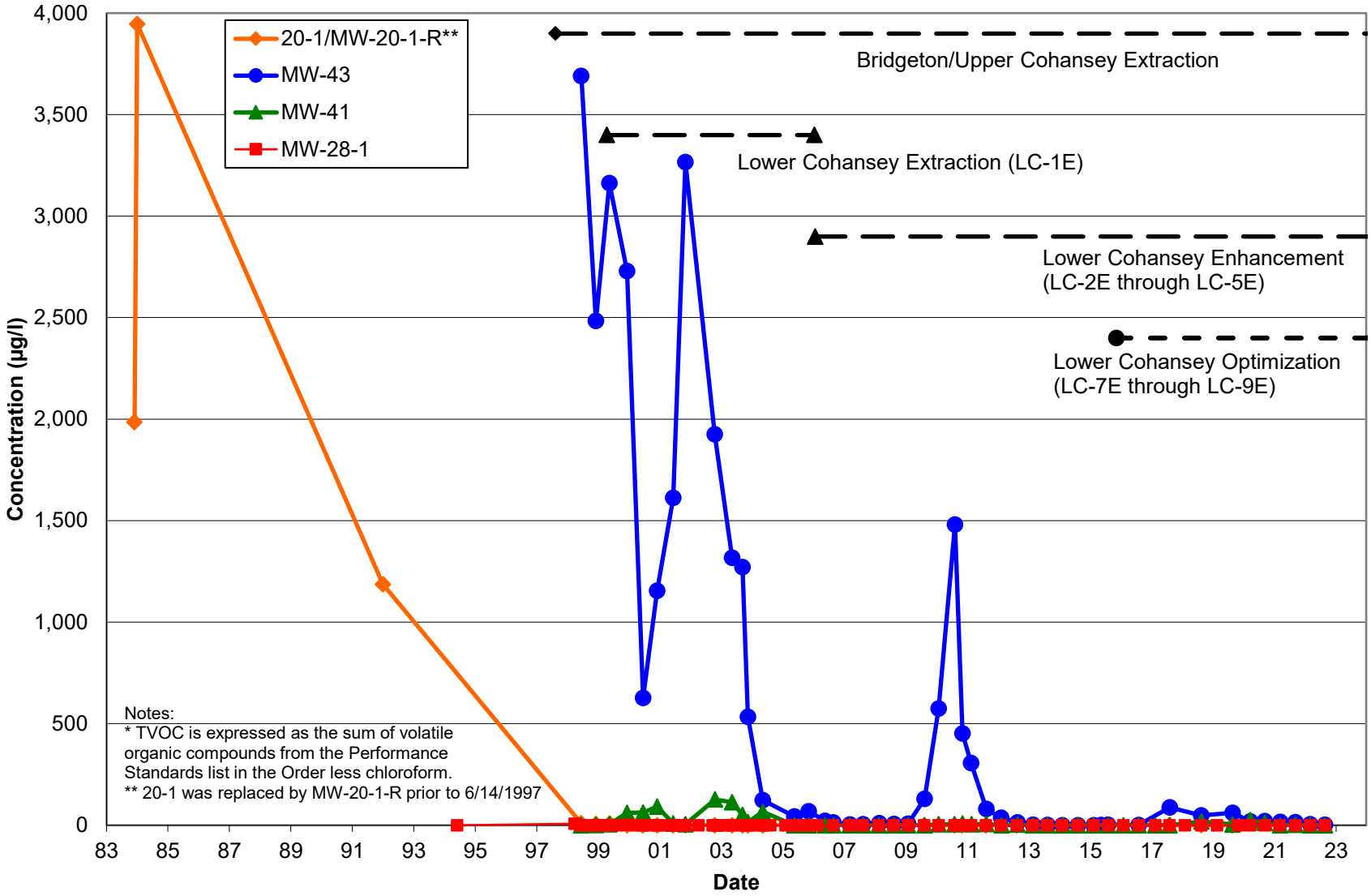
0 200 400 800 Feet

FIGURE 3-12
1,4-DIOXANE CONCENTRATIONS IN THE LOWER COHANSEY AQUIFER, AUGUST-SEPTEMBER 2022

Accessed By: CMEYN at 12/22/2022 16:41

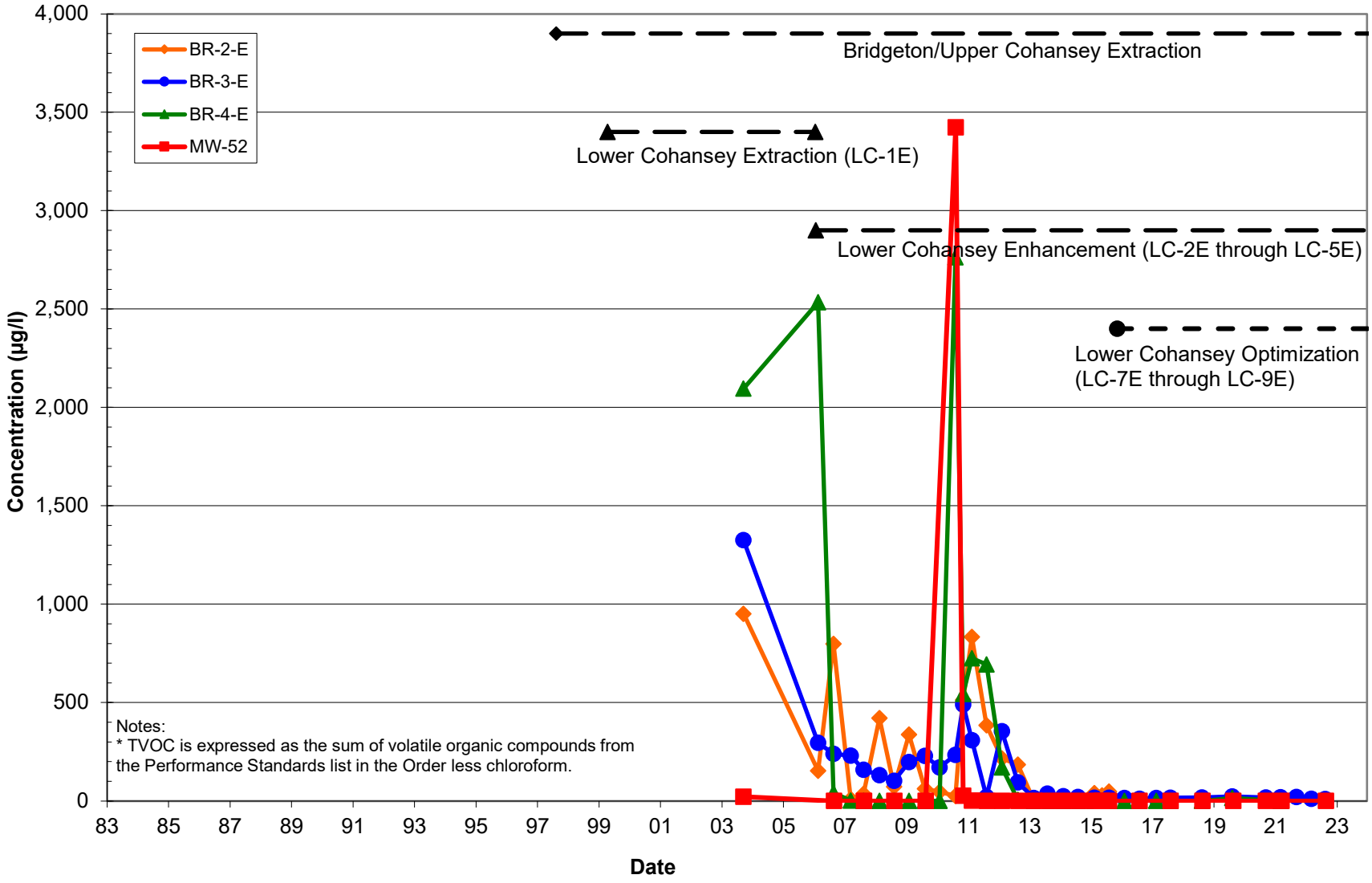
Path: V:\Ramsey\D'Imperio\2022_ArcPro\2022_ArcPro.aprx

FIGURE 3-13
TVOC* TRENDS IN SELECT WELLS (1 of 2)
D'Imperio Property Site
Bridgeton Aquifer Plume



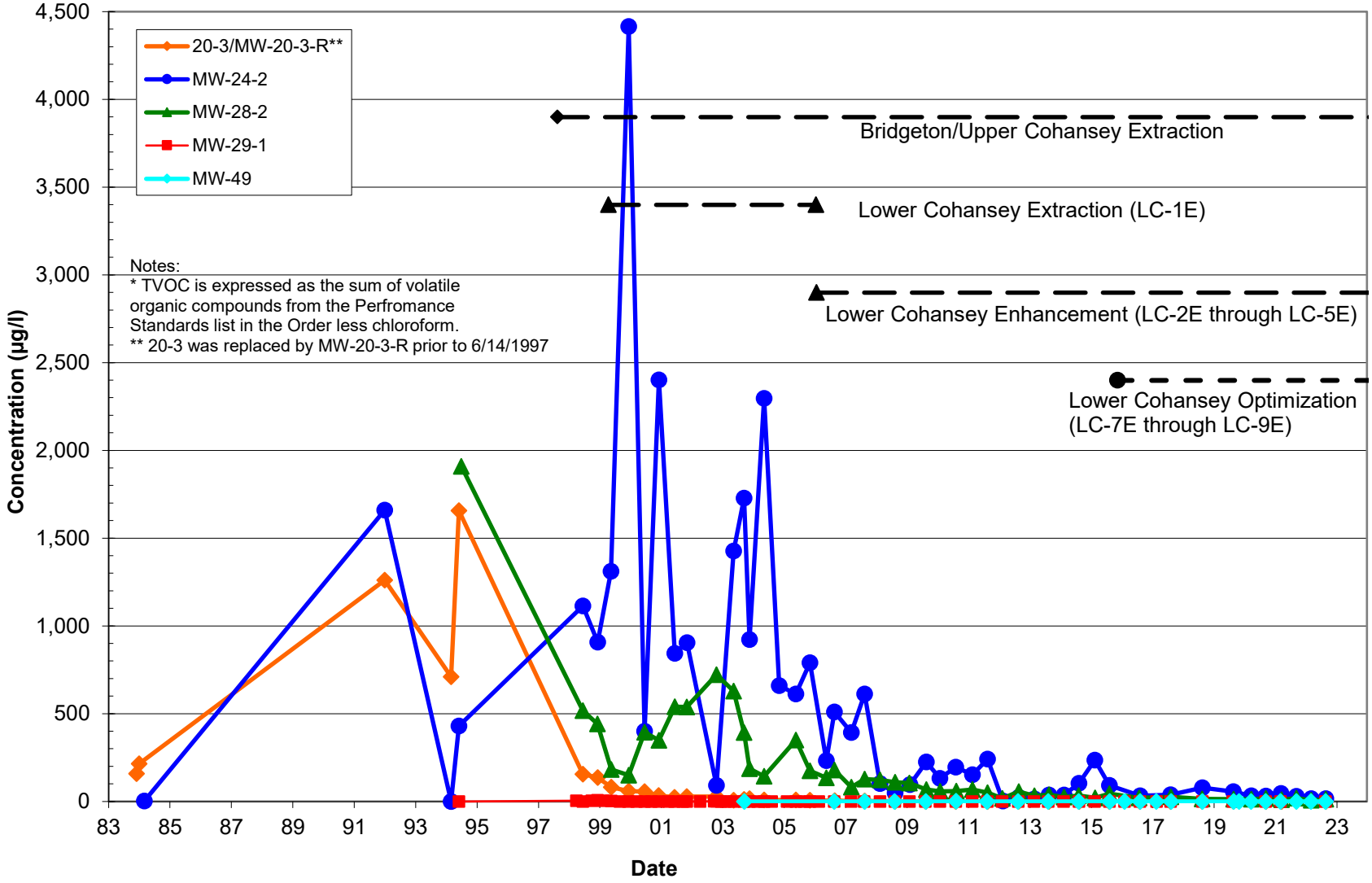
c:\users\cmeyn\bcpw\d2863091\TVO_Graphs_2021\Figure_3-13_Tbr_Graph 11/9/2022

FIGURE 3-14
TVOC* TRENDS IN SELECT WELLS (2 of 2)
D'Imperio Property Site
Bridgeton Aquifer Plume



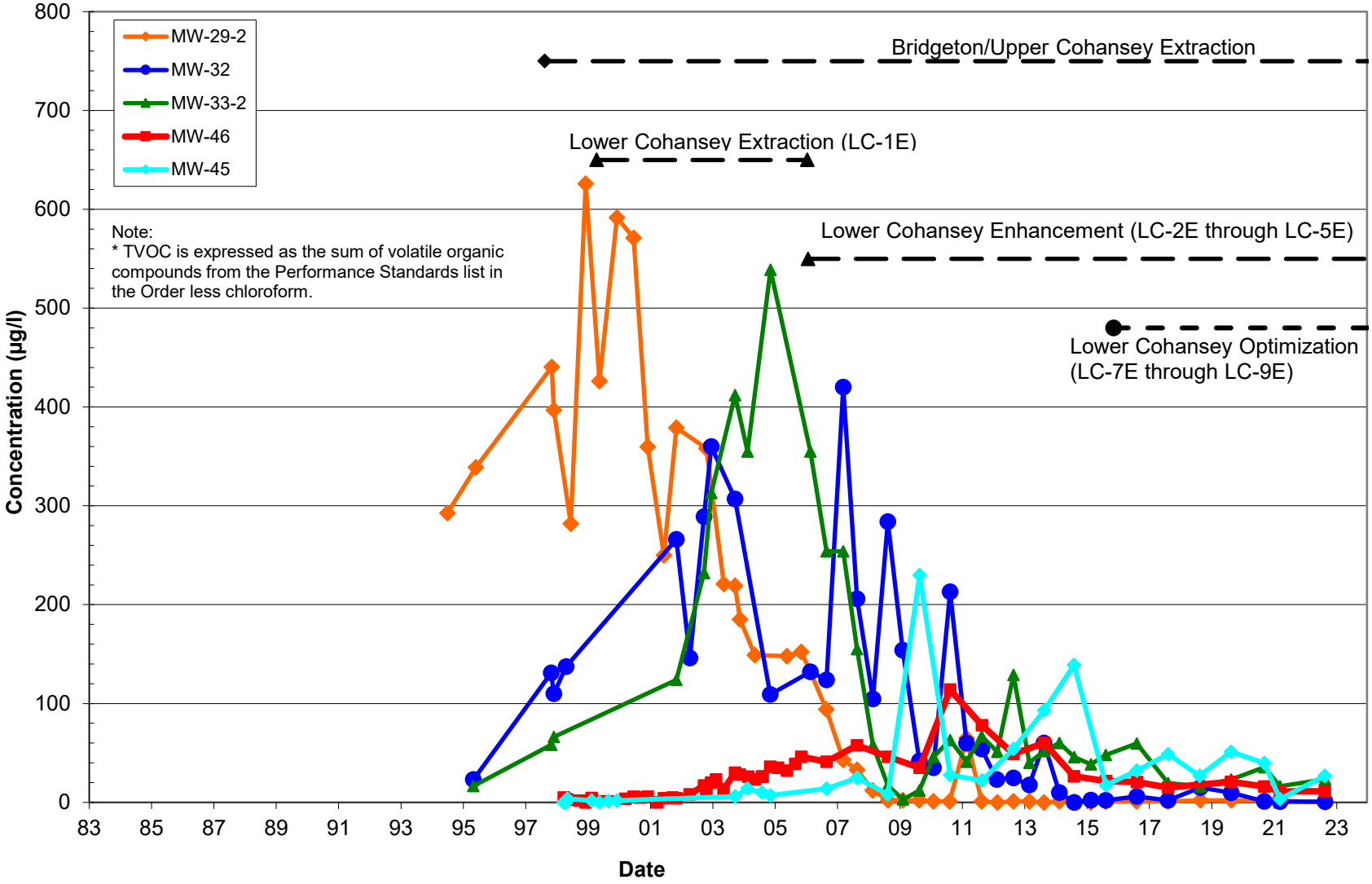
c:\users\cmeyn\bcpw\d2863091\TVO_Graphs_2021\Figure_3-14_Tbr_Graph 11/9/2022

FIGURE 3-15
TVOC* TRENDS IN SELECT WELLS
D'Imperio Property Site
Upper Cohansey Aquifer Plume



c:\users\cmeyn\bcpw\d2863091\TVO_Graphs_2021\Figure_3-15_Tuco_Graph 11/9/2022

FIGURE 3-16
TVOC* TRENDS IN SELECT WELLS
D'Imperio Property Site
Lower Cohansey Aquifer Main Plume



c:\users\cmeyn\bcpw\d2863091\TVO_Graphs_2021\Figure_3-16_Tlco_Graph 11/9/2022

Figure 3-17
TVOC* Trends in Sentinel Wells
D'Imperio Property Site
Lower Cohansey Aquifer Main Plume

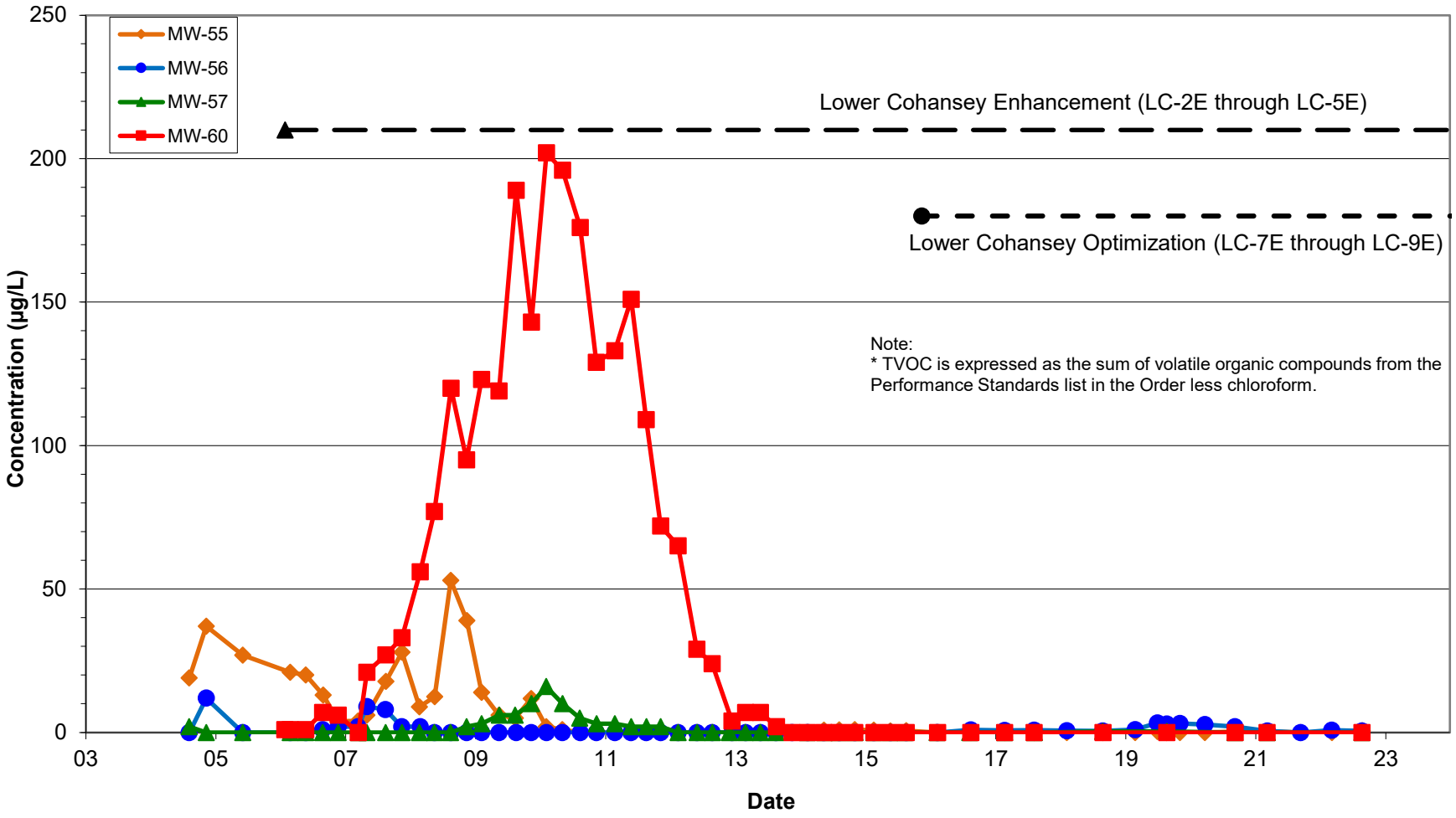


Figure 3-18
TVOC* Trends in Side-Gradient Wells
D'Imperio Property Site
Lower Cohansey Aquifer Main Plume

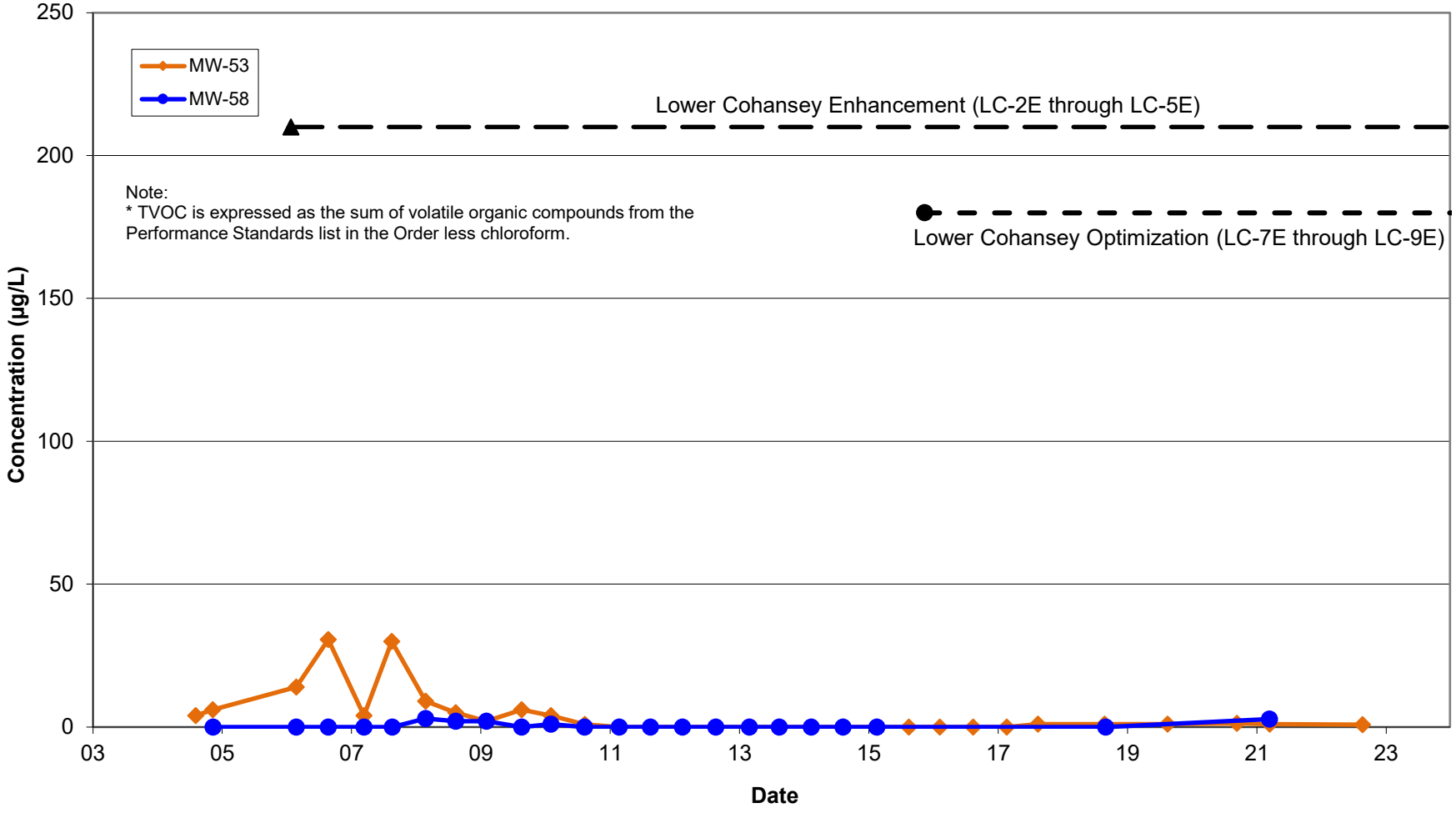


Figure 3-19
TVOC* Trends in Plume Wells
D'Imperio Property Site
Lower Cohansey Aquifer Main Plume

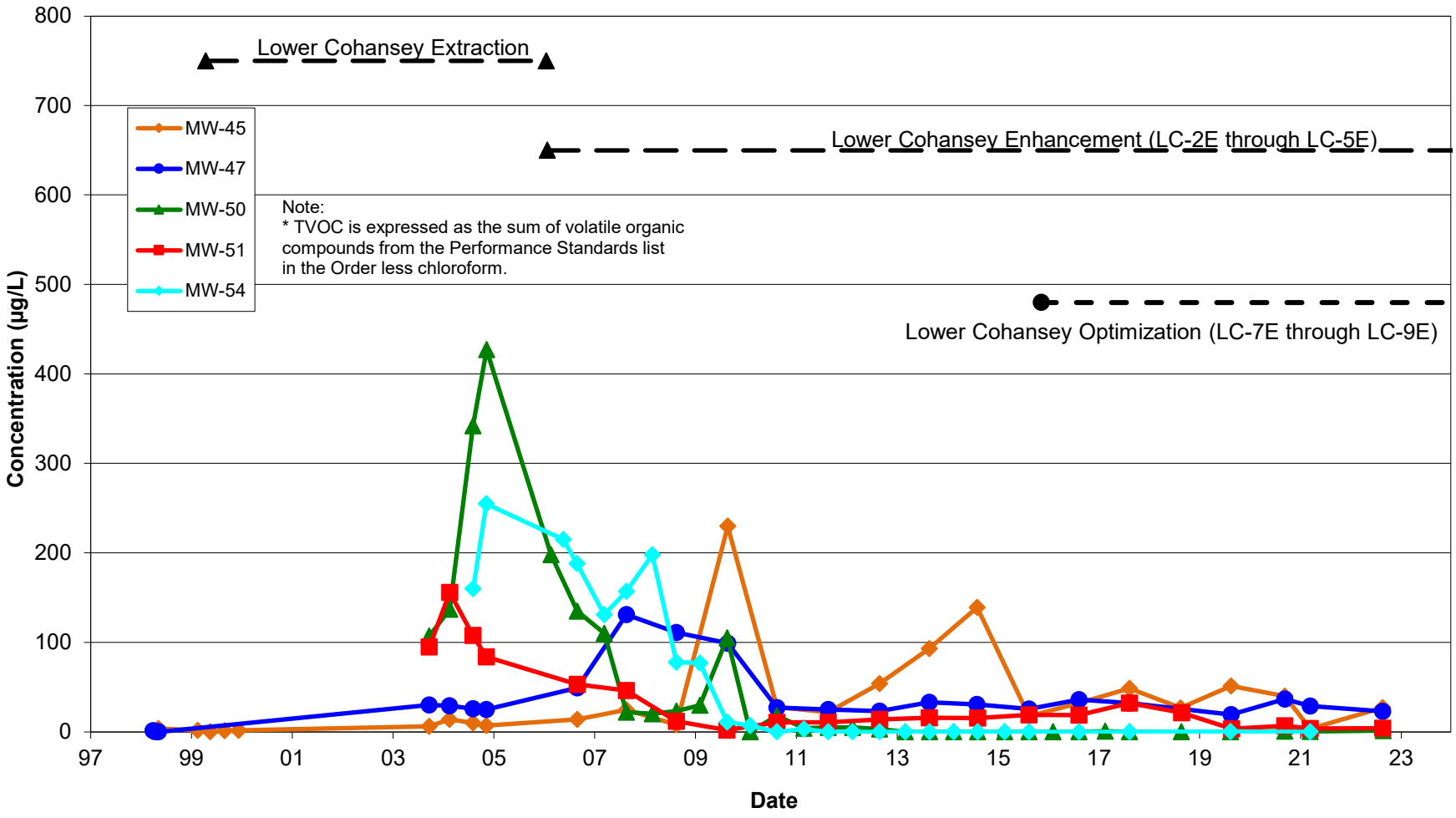


Figure 3-20
TVOC* Trends in Observation Wells
D'Imperio Property Site
Lower Cohansey Aquifer Main Plume

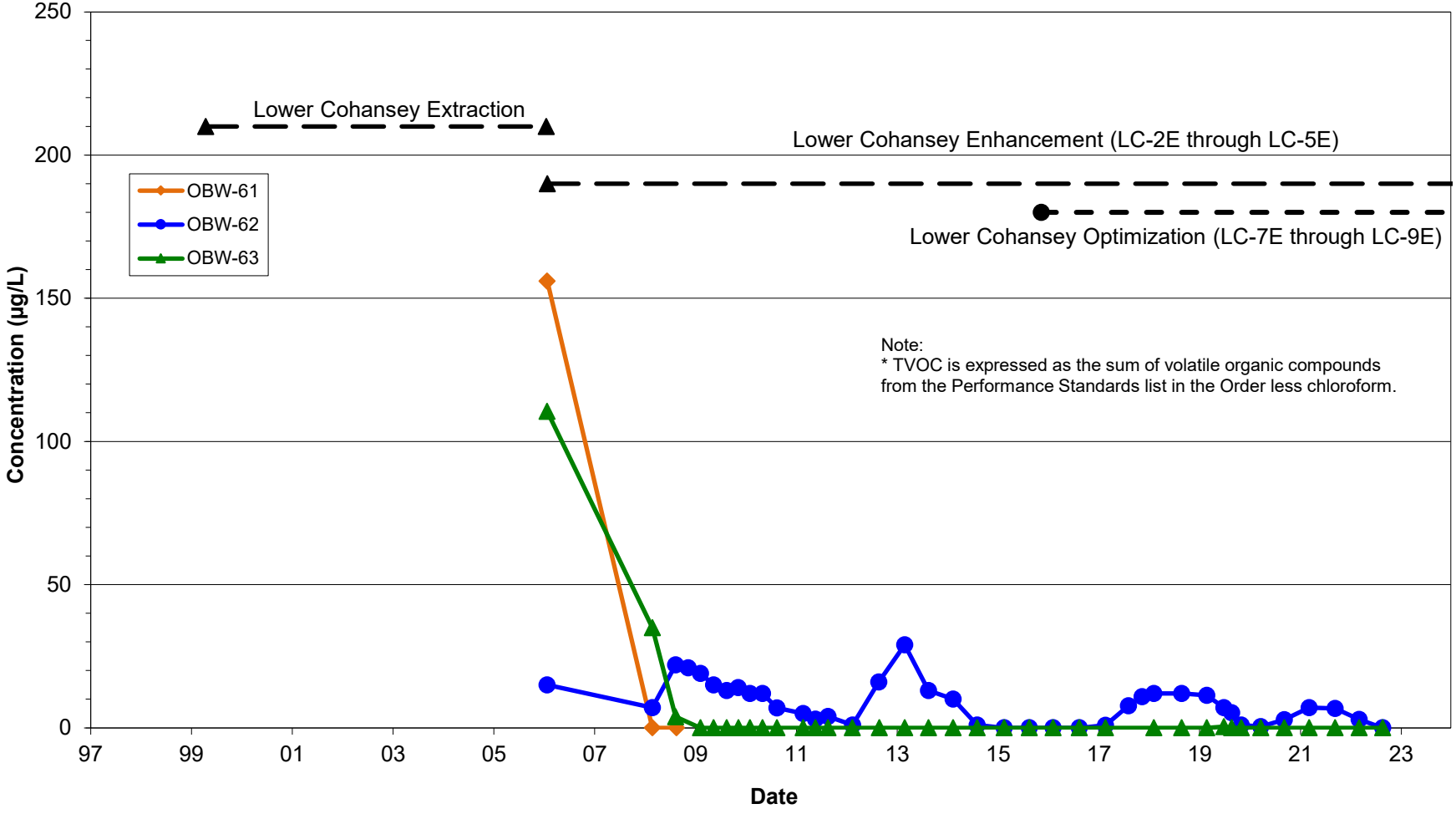
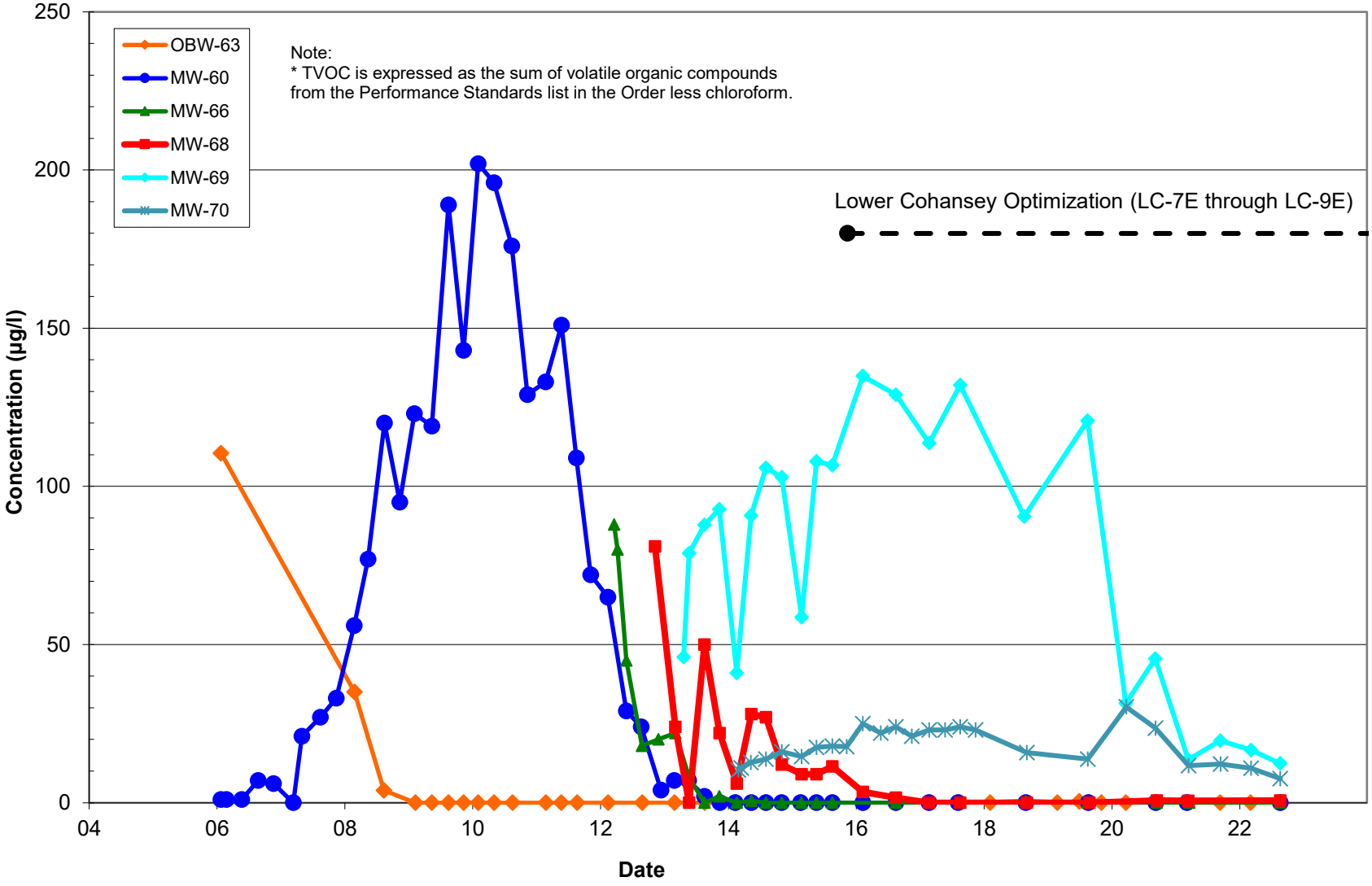
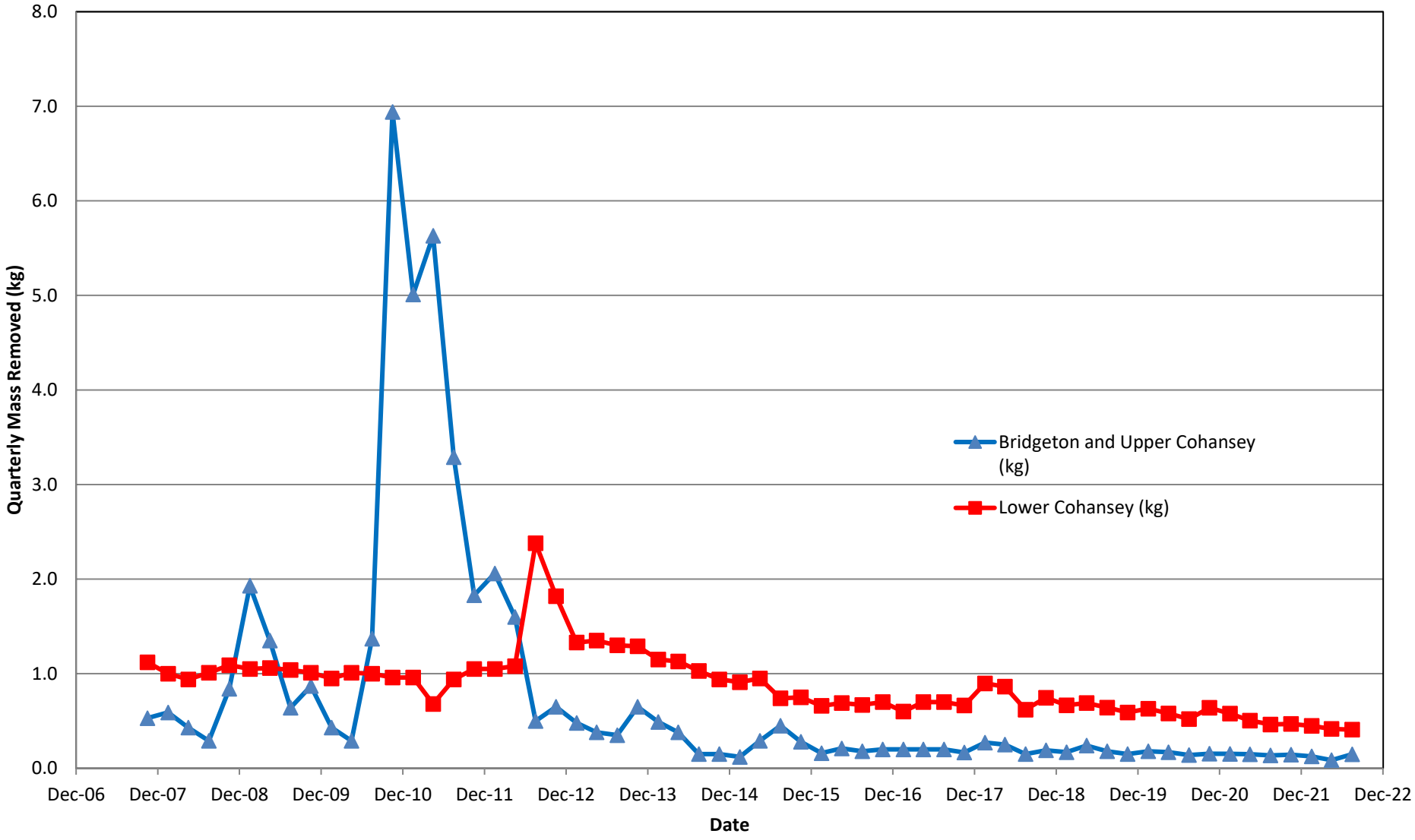


FIGURE 3-21
TVOC* Trends in Select LCDP Wells
D'Imperio Property Site
Lower Cohansey Aquifer Detached Plume

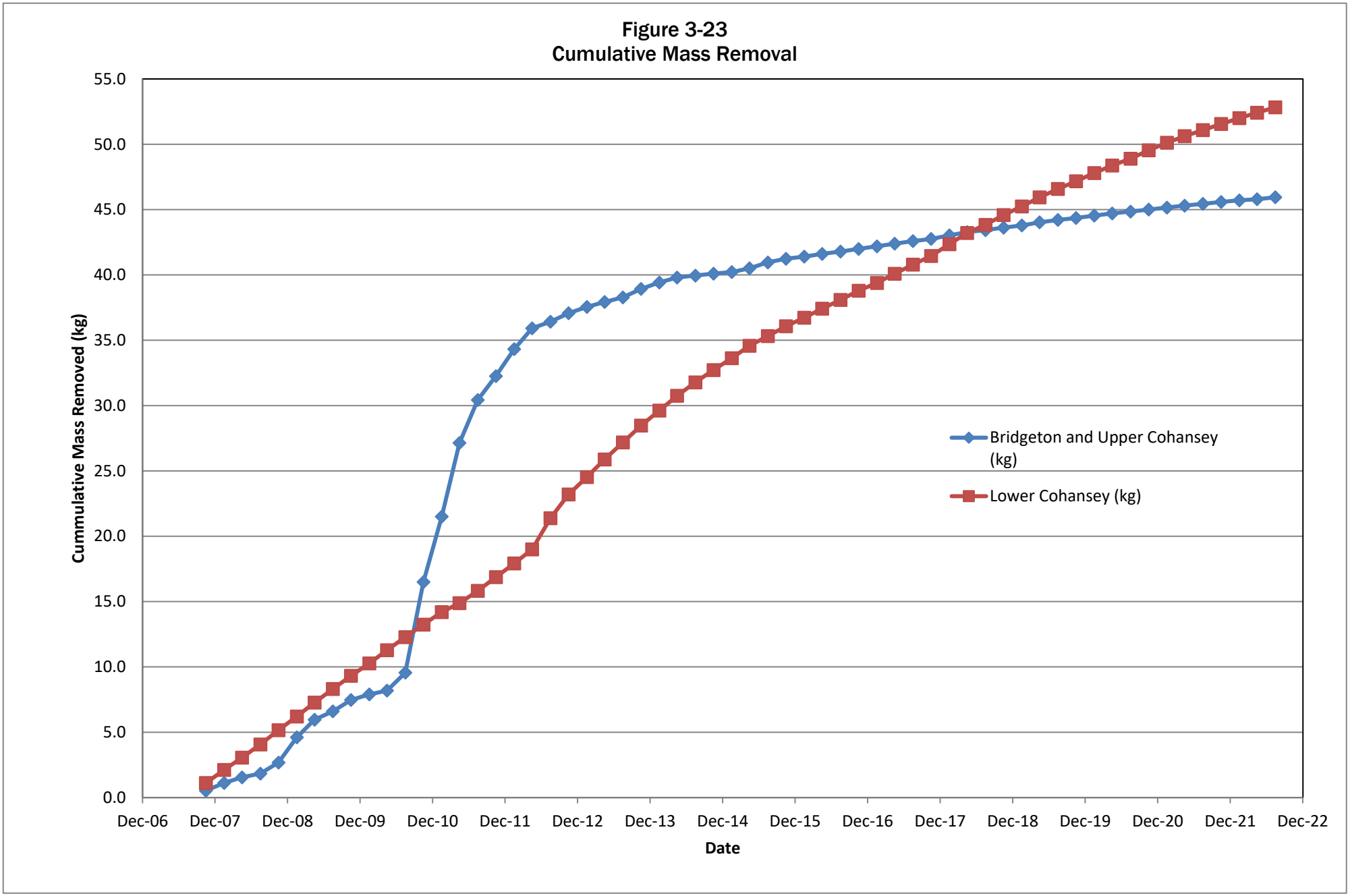


c:\users\cmeyn\bcpw\d2863091\TVO_Graphs_2021\Figure_3-21 11/9/2022



Brown AND Caldwell

2022_Tables_1-2_3-5\Fig_3-22_Quarterly_Mass_Removal



Brown AND Caldwell

2022_Tables_1-2_3-5\Fig_3-23_Cummulative_Mass_Rem

Appendix A: Field Sampling Data Sheets

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM / NK
Purge/Sample Depth:

Project Number:
Date: 03/07/22
Well ID: MW-79
Sample ID: MW-79-20220307

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1108	7.16	17.99	0.230	9.89	15.3	216	17.40	350	
1111	5.20	17.25	0.229	4.73	32.4	280	17.42		
1114	4.66	16.84	0.232	4.39	242	295	17.44		
1117	4.41	16.66	0.235	4.31	249	311	17.42		
1120	4.33	16.56	0.233	4.20	214	311	17.45		
1123	4.33	16.47	0.231	6.29	179	326	17.48		
1126	4.38	16.49	0.231	5.95	145	333	17.48		
1129	4.37	16.51	0.231	5.80	98.4	340	17.49		
1132	4.39	16.45	0.233	5.59	50.1	351	17.50		
1135	4.34	16.43	0.234	5.45	21.0	366	17.45		
1138	4.26	16.99	0.233	5.26	14.2	371	17.48		
1141	4.30	17.06	0.232	5.25	13.2	370	17.43		
1144	4.34	17.03	0.232	5.26	12.9	369	17.40		
1147	4.37	16.95	0.233	5.27	16.2	367	17.38		
1150			Collect MW-79-20220307 + MS/MSD						

Certified Sample Information:
Time of Sample: 1150

Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGY45K
Calibration Date/Time: 03/07/22 1015

Serial No. Handheld: SWSH5D00

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-79
Sample I.D.: MW-79-20220307

Project: D'Imperio
Personnel: MHM / NK

Date: 03/07/22 Time: 1108
Weather: Sunny Air Temp.: 45°

WELL DATA:

Casing Diameter: 6" ❑ Stainless Steel ☑ Steel ❑ PVC ❑ Teflon® ❑ Other: ____
Intake Diameter: 2" ❑ Stainless Steel ❑ Galv. Steel ☑ PVC ❑ Teflon® ❑ Open rock
DEPTH TO : Static Water Level: 17.37 ft Bottom of Well: ____ ft
DATUM: ❑ Top of Protective Casing ☑ Top of Well Casing ❑ Other:
CONDITION: Is Well clearly labeled? ❑ Yes ☑ No Is well clean to bottom? ☑ Yes ❑ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ❑ No
Does Weep Hole adequately drain well head? ☑ Yes ❑ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ❑ No
Is Padlock Functional? ❑ Yes ❑ No ☑ NA Is Inner Casing Intact? ☑ Yes ❑ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ❑ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Centrifugal Pump ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: ____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel ❑ PVC ❑ Other: ____ Tubing/Rope: ❑ Teflon® ☑ Polyethylene ❑ Polypropylene ❑ Other: ____

Pumping Rate: 350 mL/min Elapsed Time: 39 min Volume Pumped: 4.8 gal
Was well Evacuated? ❑ Yes ☑ No Number of Well Volumes Removed: —
PURGING EQUIPMENT: ❑ Dedicated ☑ Prepared Off-Site ❑ Field Cleaned

SAMPLING DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Syringe Sampler ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: ____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel Tubing/Rope: ❑ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ❑ Dedicated ☑ Prepared Off-Site ❑ Field Cleaned
Metals samples field filtered? ❑ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ❑ Turbid ❑ Color: ____ ❑ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ❑ Yes Name: ____
MS/MSD : ❑ No ☑ Yes Name: MW-79-20220307

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/07/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	~~D'Imports~~ D'Imperio	Project Number:	
Client:	Br	Date:	03/07/22
Personnel:	MHM / [illegible]	Well ID:	MW-80
Purge/Sample Depth:		Sample ID:	MW-80-20220307

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
12:22	5.31	12.15	0.090	4.97	14.7	260	13.13	350	
12:25	5.16	16.10	0.084	3.49	99.8	258	13.13		
12:28	5.06	15.87	0.081	3.27	225	236	13.4		
12:31	5.06	15.79	0.081	3.22	202	234	13.16		
12:34	5.08	15.83	0.080	3.17	213	232	13.16		
12:37	5.08	15.81	0.079	3.18	207	236	13.17		
12:40	5.08	15.84	0.078	3.22	193	243	13.16		
12:43	5.08	15.85	0.076	3.26	161	249	13.18		
12:46	5.06	15.83	0.073	3.41	128	259	13.18		
12:49	5.05	15.82	0.071	3.45	118	260	13.17		
12:52	5.01	15.82	0.070	3.70	93.3	272	13.18		
12:55	4.98	15.88	0.069	3.69	89.3	275	13.17		
12:58	4.94	15.79	0.070	3.68	69.0	282	13.17		
13:01	4.93	15.81	0.070	3.67	64.4	284	13.14		
13:04	4.95	15.77	0.072	3.62	53.3	289	13.15		
13:07	4.92	15.82	0.073	3.59	47.0	290	13.14		
13:10	4.94	15.83	0.074	3.57	43.5	290	13.15		
13:13	Collect MW-80-20220307								

Certified Sample Information:

Time of Sample: 13:13

Analyst Signature: [signature]

Instrument Data:

Manufacturer/Model: Horiba-U52

Serial No. Unit: 20UGYU5k

Serial No. Handheld: SW5HSD00

Calibration Date/Time: 03/07/22 13:13

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-80
Sample I.D.: MW-80-20220307

Project: ~~D'Imports~~ D'Imperio
Personnel: MHm/WK

Date: 03/07/22 Time: 1222
Weather: Sunny Air Temp.: 74

WELL DATA:

Casing Diameter: 6" ❑ Stainless Steel ☑ Steel ❑ PVC ❑ Teflon® ❑ Other: ____
Intake Diameter: 2" ❑ Stainless Steel ❑ Galv. Steel ☑ PVC ❑ Teflon® ❑ Open rock
DEPTH TO : Static Water Level: 13.11 ft Bottom of Well: ____ ft
DATUM: ❑ Top of Protective Casing ☑ Top of Well Casing ❑ Other:
CONDITION: Is Well clearly labeled? ❑ Yes ☑ No Is well clean to bottom? ☑ Yes ❑ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ❑ No
Does Weep Hole adequately drain well head? ☑ Yes ❑ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ❑ No
Is Padlock Functional? ❑ Yes ❑ No ☑ NA Is Inner Casing Intact? ❑ Yes ❑ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ❑ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Centrifugal Pump ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: ____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel ❑ PVC ❑ Other: ____ Tubing/Rope: ❑ Teflon® ☑ Polyethylene ❑ Polypropylene ❑ Other: ____

Pumping Rate: 350 Elapsed Time: 48 min Volume Pumped: 5.0 gal
Was well Evacuated? ❑ Yes ☑ No Number of Well Volumes Removed: —
PURGING EQUIPMENT: ❑ Dedicated ☑ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Syringe Sampler ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: ____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel Tubing/Rope: ❑ Teflon® ❑ Polyethylene

SAMPLING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ❑ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ❑ Turbid ❑ Color: ____ ❑ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ❑ Yes Name: ____
MS/MSD : ☑ No ❑ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: ____ Date: 03/07/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imports	Project Number:	
Client:	BC	Date:	03/07/22
Personnel:	MHM / NK	Well ID:	MW-74
Purge/Sample Depth:		Sample ID:	MW-74-20220307

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
~~1442~~	~~16.44~~								NK
1442	5.52	16.88	0.060	6.55	18.8	277	22.06	200	
1445	5.52	18.52	0.060	5.80	13.4	298	22.06		
1448	5.28	18.74	0.059	5.61	7.2	247	22.04		
1451	5.32	18.85	0.059	5.14	8.3	144	22.04		
1454	5.71	18.89	0.062	4.72	19.5	41	22.07		
1457	6.30	19.01	0.070	4.75	24.5	34	22.07		
1500	6.20	19.15	0.111	5.23	44.6	48	22.08		
1503	7.68	15.61	0.121	5.50	172	82	22.06		
1506	6.99	15.40	0.103	5.42	98.3	108	22.05		
1509	6.57	15.47	0.092	5.72	81.5	125	22.08		
1512	6.14	15.50	0.084	5.48	65.7	146	22.08		
1515	5.81	15.57	0.078	5.49	53.3	164	22.07		
1518	5.62	15.60	0.075	5.50	40.8	180	22.08		
1521	5.46	15.64	0.071	5.53	25.5	202	22.07		
1524	5.43	15.65	0.070	5.51	20.1	213	22.07		
1527	5.35	15.70	0.069	5.49	14.7	223	22.07		
1530	5.34	15.67	0.069	5.44	13.0	226	22.07		
1533	Collect MW-74-20220307								

Certified Sample Information:
Time of Sample: 1533
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU5K
Serial No. Handheld: SWSHSD00
Calibration Date/Time: 03/07/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-74
Sample I.D.: MW-74-20220307

Project: D'Imparts
Personnel: MHm / WK

Date: 03/07/22 Time: 1442
Weather: Sunny Air Temp.: 74

WELL DATA:

Casing Diameter: 6" ❑ Stainless Steel ☑ Steel ❑ PVC ❑ Teflon® ❑ Other: ____
Intake Diameter: 2" ❑ Stainless Steel ❑ Galv. Steel ☑ PVC ❑ Teflon® ❑ Open rock
DEPTH TO : Static Water Level: 22.02 ft Bottom of Well: ____ ft
DATUM: ❑ Top of Protective Casing ☑ Top of Well Casing ❑ Other:
CONDITION: Is Well clearly labeled? ❑ Yes ☑ No Is well clean to bottom? ☑ Yes ❑ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ❑ No
Does Weep Hole adequately drain well head? ☑ Yes ❑ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ❑ No
Is Padlock Functional? ❑ Yes ❑ No ☑ NA Is Inner Casing Intact? ❑ Yes ❑ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ❑ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Centrifugal Pump ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: ____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel ❑ PVC ❑ Other: ____
Tubing/Rope: ❑ Teflon® ☑ Polyethylene ❑ Polypropylene ❑ Other: ____

Pumping Rate: 200 mL/min Elapsed Time: 118 min Volume Pumped: 3.2 gal
Was well Evacuated? ❑ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Syringe Sampler ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: ____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel
Tubing/Rope: ❑ Teflon® ❑ Polyethylene

SAMPLING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ❑ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ❑ Turbid ❑ Color: ____ ❑ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ❑ Yes Name: ____
MS/MSD : ☑ No ❑ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: ____ Date: 03/07/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D' Imperia	Project Number:	
Client:	BC	Date:	03/08/22
Personnel:	MHM / NK	Well ID:	MW-41
Purge/Sample Depth:		Sample ID:	MW-41-20220308

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
919	8.09	12.94	0.049	5.14	28.4	269	32.62	200	
922	5.23	13.12	0.057	3.49	18.6	335	32.60		
925	4.83	12.86	0.060	2.68	14.5	345	32.60		
928	4.75	12.77	0.058	2.09	10.6	340	32.60		
931	4.64	12.65	0.058	2.32	7.1	330	32.61		
934	4.32	18.01	0.051	3.22	15.8	363	32.63		Fixed flow rate
937	4.33	17.24	0.053	2.55	15.0	377	32.63		
940	4.17	17.21	0.045	8.89	26.5	363	32.62		
943	4.37	16.30	0.046	9.59	26.1	356	32.62		
946	4.18	17.84	0.049	8.63	10.4	382	32.62		
949	4.15	16.82	0.049	8.71	7.6	387	32.61		
952	4.21	16.83	0.049	8.62	7.5	382	32.62		
955	4.26	16.84	0.049	8.60	7.2	379	32.62		
958	4.33	16.96	0.049	8.49	6.2	374	32.62		
1001		Collected		MW	-41-	20220308			

NK

Certified Sample Information:
Time of Sample: 1001 Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 29uGYC15k Serial No. Handheld: SWJHSD00
Calibration Date/Time: 03/08/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-41
Sample I.D.: MW-41-20220328

Project: ~~D'Imperio~~ D'Imperio
Personnel: MH.M/.VR

Date: 03/08/22 Time: 0919
Weather: Cloudy Air Temp.: 43

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 32.65 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☐ Yes ☐ No

VOLUME OF WATER: Standing in well: ——— To be purged: ———

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: (Pump/Bailer): ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
(Tubing/Rope): ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200 mL/min Elapsed Time: 39 min Volume Pumped: 2.6 gal
Was well Evacuated? ☐ Yes ☐ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ~~☑ Prepared Off-Site~~ ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: (Pump/Bailer): ☐ Teflon® ☑ Stainless Steel
(Tubing/Rope): ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☑ Prepared Off-Site ☐ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/08/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/RK
Purge/Sample Depth:

Project Number:
Date: 03/08/22
Well ID: MW-24-1
Sample ID: MW-24-1-20220308

Actual Time	Certified Parameters: pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1019	~~13~~ 5.26	13.65	0.062	5.02	113	237	24.00	225	
1022	5.24	14.18	0.058	3.56	81.3	241	23.82		
1025	5.11	14.96	0.056	3.17	46.7	254	23.82		
1028	5.13	14.95	0.056	2.75	44.4	255	23.82		
1031	5.05	14.64	0.056	2.71	42.0	255	23.80		
1034	4.93	15.60	0.053	2.40	44.6	266	23.85		
1037	5.13	17.22	0.054	2.67	26.7	267	23.85		
1040	5.12	17.11	0.054	2.75	23.4	269	23.23		
1043	5.13	16.98	0.053	2.60	19.3	270	23.85		
1046	5.02	15.70	0.051	3.43	11.3	291	23.85		
1049	5.11	18.78	0.049	3.67	21.2	285	23.34		Fixed flow rate
1052	5.12	17.78	0.050	3.47	19.3	288	23.87		
1055		Collected MW-24-1-20220308							

Certified Sample Information:
Time of Sample: 1055
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU5K
Serial No. Handheld: SWSHS1D00
Calibration Date/Time: 03/08/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-21-1-~~20220302~~
Sample I.D.: MW-21-1-20220302

Project: D'Imperio
Personnel: MHM/NK

Date: 03/08/22 Time: 1019
Weather: Cloudy Air Temp.: 42

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 23.18 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 225 Elapsed Time: 33 min Volume Pumped: 2.4 gal
Was well Evacuated? ☐ Yes ☑ No Number of ~~Well Volumes~~ Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ~~☑ Prepared Off-Site~~ ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ~~☑ Prepared Off-Site~~ ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/08/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHMINK
Purge/Sample Depth:

Project Number:
Date: 03/08/22
Well ID: MW-49
Sample ID: MW-49-20220308

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1221	5.50	12.54	0.209	4.96	33.6	289	22.21	350	
1229	5.22	12.53	0.540	3.41	241	307	22.20		
1227	5.25	12.70	0.637	3.36	220	289	22.20		
1230	5.30	13.05	0.672	3.29	149	281	22.20		
1233	5.32	13.33	0.624	3.20	125	281	22.20		
1236	5.34	13.54	0.680	3.14	98.3	282	22.20		
1239	5.33	13.65	0.665	3.00	78.7	285	22.20		
1242	5.33	13.72	0.640	2.97	61.6	287	22.20		
1245	5.33	13.77	0.621	2.91	52.1	290	22.19		
1248	5.32	13.87	0.599	2.89	42.9	295	22.19		
1251	5.32	13.92	0.570	2.94	35.6	297	22.19		
1254	Collect sample MW-49-20220308								

Certified Sample Information:
Time of Sample: 1254
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU5K
Serial No. Handheld: SWSHSDQD
Calibration Date/Time: 03/08/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-49
Sample I.D.: MW-49-20220308

Project: D'Imperio
Personnel: MHM/KE

Date: 03/22/22 Time: 1221
Weather: Cloudy Air Temp.: 50

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 22.18 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ——— To be purged: ———

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 350 Elapsed Time: 30 min Volume Pumped: 3.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☑ Prepared Off-Site ☐ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☑ Prepared Off-Site ☐ Field Cleaned
Metals samples field filtered? ☐ Yes ☐ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/22/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	
Client:	BC	Date:	03/08/22
Personnel:	MHM/[illegible]	Well ID:	MW-56
Purge/Sample Depth:		Sample ID:	MW-56-20220308

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1318	6.29	12.76	0.142	8.80	6.5	256	16.39	200	
1321	6.28	12.83	0.150	3.65	7.2	257	16.37		
1324	6.30	12.84	0.149	3.56	5.8	257	16.35		
1327	6.32	12.85	0.150	3.56	5.2	255	16.35		
1330	6.34	12.87	0.150	3.39	5.7	247	16.35		
1333	6.35	12.88	0.151	3.22	7.7	242	16.35		
1336	6.36	12.90	0.150	3.24	13.0	237	16.35		
1339	6.36	12.97	0.146	3.14	32.0	226	16.35		
1342	6.36	12.97	0.139	3.15	42.1	221	16.35		
1345	6.32	12.97	0.136	3.10	43.5	218	16.35		
1348	6.28	12.99	0.132	3.03	32.2	211	16.35		
1351	Collect sample MW-56-20220308								

Certified Sample Information:
Time of Sample: 1351
Analyst Signature: [illegible]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU5K
Serial No. Handheld: 5WSHSDQO
Calibration Date/Time: 03/08/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-56
Sample I.D.: MW-56-20220308

Project: D'Imperio
Personnel:

Date: 03/08/22 Time: _____
Weather: sunny Air Temp.: 54

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 16.26 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200 Elapsed Time: 30 min Volume Pumped: 2.25 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/08/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/MK
Purge/Sample Depth:

Project Number:
Date: 03/08/22
Well ID: ~~MW~~ OBW-62
Sample ID: OBW-62-20220308

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1408	6.22	12.44	0.059	4.79	6.8	240	15.98	200	
1411	5.46	12.67	0.059	3.95	6.6	286	15.98		
1414	5.29	12.57	0.057	3.07	76.5	311	15.98		
1417	5.02	12.43	0.059	2.91	179	326	15.99		
1420	4.88	12.31	0.060	2.92	181	332	15.99		
1423	4.79	12.32	0.062	3.00	171	334	15.99		
1426	4.76	12.32	0.063	2.95	117	331	15.98		
1429	4.75	12.33	0.063	2.95	93.2	330	15.99		
1432	4.75	12.33	0.063	3.03	60.1	330	15.98		
1435	4.74	12.34	0.063	2.94	63.4	331	15.98		
1438	4.73	12.34	0.063	2.87	54.5	331	15.98		
1441	4.75	12.36	0.064	3.02	47.5	330	15.98		
1444	4.69	12.56	0.063	2.91	31.4	335	15.98		
1448	4.69	12.64	0.063	2.85	25.1	337	15.98		
1451	4.62	12.66	0.062	2.23	22.3	339	15.98		
1454	4.62	12.70	0.062	2.80	18.3	343	15.98		
1457		Collect OBW-62-20220308							

Certified Sample Information:
Time of Sample: 1457
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba - U52
Serial No. Unit: 20UGYU5K
Serial No. Handheld: SWSHSDOO
Calibration Date/Time: 03/08/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: OBW-62
Sample I.D.: OBW-62-20220308

Project: D'Imperio
Personnel:

Date: 03/08/22 Time: 1400
Weather: Sunny Air Temp.: 53

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 15.95 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 200 mL/min Elapsed Time: 45 min Volume Pumped: 300 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/08/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	
Client:	BC	Date:	03/08/22
Personnel:	MHM/VK	Well ID:	OBW-63
Purge/Sample Depth:		Sample ID:	OBW-63-20220308

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1513	5.41	12.63	0.089	10.62	25.2	307	13.73	350	
1516	5.37	12.72	0.086	7.61	62.9	312	13.73		
1519	5.34	12.81	0.089	5.74	204	309	13.75		
1522	5.14	12.61	0.079	7.15	"(0.0)"	300	13.80		
1525		Empty Horiba							
1528	4.79	13.44	0.077	5.62	"0.0"	281	13.80		
1531	4.70	13.16	0.077	5.75	"1000"	289	13.88		
1534		Empty Horiba							
1537	4.76	13.13	0.079	6.00	176	303	13.83		
1540	4.71	13.31	0.078	5.86	260	302	13.81		
1543	4.69	13.31	0.079	5.78	209	307	13.78		
1546	4.62	13.33	0.080	5.63	146	311	13.76		
1549	4.69	13.32	0.080	5.00	121	312	13.76		
1552	4.69	13.30	0.080	4.66	111	314	13.76		
1555	4.70	13.26	0.080	4.36	107	315	13.76		
1558	4.71	13.04	0.079	4.66	112	315	13.76		
1601	4.71	12.78	0.079	4.90	107	317			
1604		Empty Horiba							
1607	4.60	13.61	0.079	6.59	22.2	320	13.82		
1610	4.60	13.53	0.079	6.60	33.0	330	13.82		
1613	4.57	13.42	0.080	6.62	22.6	333	13.82		
1616		Collect Sample OBW-63-20220308							

Certified Sample Information:

Time of Sample: 1616 Analyst Signature: [signature]

Instrument Data:

Manufacturer/Model: Horiba-u52

Serial No. Unit: 20UGYu5k Serial No. Handheld: SWSHSD00

Calibration Date/Time: 03/08/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: OBW-63
Sample I.D.: OBW-63-20220308

Project: D'Imperio
Personnel:

Date: 03/08/22 Time: 1513
Weather: Sunny Air Temp.: 51

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 13.65 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____ Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 350 Elapsed Time: 1hr Volume Pumped: 3.75 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel Tubing/Rope: ☐ Teflon® ☑ Polyethylene
SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: ____ Date: 03/08/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/NK
Purge/Sample Depth:

Project Number:
Date: 03/09/22
Well ID: MW-55
Sample ID: MW-55-20220309

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
837	9.07	11.65	0.137	2.37	17.7	192	15.04	250	
840	8.50	11.23	0.137	2.10	14.3	201	14.66		
843	8.21	11.24	0.136	1.79	19.9	204	14.66		
846	7.78	11.44	0.133	1.60	19.8	201	14.66		
849	7.53	11.69	0.131	1.55	15.7	196	14.67		
852	7.46	11.67	0.131	1.58	14.4	192	14.67		
855	7.33	11.78	0.126	1.58	15.1	188	14.67		
858	7.24	11.58	0.123	1.61	15.8	187	14.67		
901	6.98	11.98	0.111	1.77	12.5	188	14.67		
904	6.75	11.97	0.103	1.93	10.4	192	14.67		
907	6.56	12.06	0.097	2.14	8.4	197	14.67		
910		Collect sample			MW-55-20220309				

Certified Sample Information:
Time of Sample: 910
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 204GYU5k
Serial No. Handheld: SWSHSD00
Calibration Date/Time: 03/09/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-55
Sample I.D.: MW-55-20220309

Project: D'Imperio
Personnel:

Date: 03/09/22 Time: 837
Weather: Cloudy/Rain Air Temp.: 38

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 14.54 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 250 Elapsed Time: 30min Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/09/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	
Client:	BC	Date:	03/09/22
Personnel:	MHM/NK	Well ID:	MW-59
Purge/Sample Depth:		Sample ID:	MW-59-20220309

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
930	6.59	11.97	0.098	7.07	9.3	230	11.76	250	
933	5.88	12.08	0.097	5.97	8.0	256	11.75		
936	5.64	11.97	0.094	6.22	14.3	266	11.76		
939	5.61	12.14	0.093	6.13	12.9	266	11.76		
942	5.50	12.32	0.090	6.05	10.9	269	11.75		
945	5.42	12.44	0.087	6.21	8.6	273	11.75		
948	5.35	12.56	0.082	6.25	7.7	278	11.75		
951	5.32	12.60	0.078	6.35	7.4	284	11.75		
954	5.28	12.70	0.074	6.43	7.3	290	11.75		
957	5.24	12.66	0.071	6.47	7.5	295	11.75		
1000	5.22	12.66	0.069	6.57	7.1	297	11.75		
1003		Collect sample MW-59-20220309							

Certified Sample Information:

Time of Sample: 1003

Analyst Signature: [signature]

Instrument Data:

Manufacturer/Model: Horiba - U52

Serial No. Unit: 20UGYU5K

Serial No. Handheld: SWSH5D00

Calibration Date/Time: 03/09/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-59
Sample I.D.: MW-59-20220309

Project: D'Imperio
Personnel:

Date: 03/09/22 Time: 930
Weather: Cloudy/Rain Air Temp.: 38

WELL DATA:

Casing Diameter: 6" ❑ Stainless Steel ☑ Steel ❑ PVC ❑ Teflon® ❑ Other: _____
Intake Diameter: 2" ❑ Stainless Steel ❑ Galv. Steel ☑ PVC ❑ Teflon® ❑ Open rock
DEPTH TO : Static Water Level: 11.72 ft Bottom of Well: _____ ft
DATUM: ❑ Top of Protective Casing ☑ Top of Well Casing ❑ Other:
CONDITION: Is Well clearly labeled? ❑ Yes ☑ No Is well clean to bottom? ☑ Yes ❑ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ❑ No
Does Weep Hole adequately drain well head? ☑ Yes ❑ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ❑ No
Is Padlock Functional? ❑ Yes ❑ No ☑ NA Is Inner Casing Intact? ❑ Yes ❑ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ❑ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Centrifugal Pump ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: _____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel ❑ PVC ❑ Other: _____
Tubing/Rope: ❑ Teflon® ☑ Polyethylene ❑ Polypropylene ❑ Other: _____

Pumping Rate: 250 Elapsed Time: 30min Volume Pumped: 2.5gal
Was well Evacuated? ❑ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Syringe Sampler ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: _____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel
Tubing/Rope: ❑ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ❑ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ❑ Turbid ❑ Color: _____ ❑ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ❑ Yes Name: _____
MS/MSD : ☑ No ❑ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/09/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/NK
Purge/Sample Depth:

Project Number:
Date: 03/09/22
Well ID: MW-28-1
Sample ID: MW-28-1-20220309

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1104	5.05	11.89	0.040	7.90	30.4	309	29.19	300	
1107	4.62	12.44	0.039	6.95	41.9	344	29.20		
1110	4.60	13.82	0.038	6.92	40.3	334	29.20		
1113	4.60	14.80	0.036	6.97	33.0	339	29.20		
1116	4.59	15.00	0.036	6.92	28.8	342	29.20		
1119	4.59	15.18	0.035	6.59	17.0	353	29.20		
1122	4.60	15.19	0.035	6.60	10.8	354	29.20		
1125	4.59	15.27	0.035	6.50	8.7	355	29.20		
1128	4.58	15.40	0.034	6.63	6.6	357	29.20		
1131	4.60	15.51	0.034	6.57	5.7	358	29.20		
1134	4.59	15.56	0.035	6.65	3.7	361	29.20		
1137	4.59	15.55	0.035	6.66	4.0	362	29.20		
1140		collect sample			MW-28-1-20220309				

Certified Sample Information:
Time of Sample: 1140
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU5K
Serial No. Handheld: SWSHSD00
Calibration Date/Time: 03/09/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-28-1
Sample I.D.: MW-28-12022 0309

Project: D'Imperio
Personnel:

Date: 03/09/22 Time: 1104
Weather: Cloudy Air Temp.: 40

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 29.16 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 300 Elapsed Time: 33 min Volume Pumped: 3.3 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/09/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/AK
Purge/Sample Depth:

Project Number:
Date: 03/09/22
Well ID: MW-28-2
Sample ID: MW-28-2-20220309

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1150	5.35	11.89	0.111	6.16	17.8	46	29.49	250	
1153	6.06	12.34	0.125	1.20	22.6	-13	29.48		
1156	6.28	12.18	0.135	0.48	17.8	-19	29.48		
1159	6.32	12.42	0.138	0.13	22.5	-40	29.48		
1202	6.43	12.74	0.141	0.00	8.0	-50	29.48		
1205	6.52	13.06	0.142	0.00	5.9	-57	29.48		
1208	6.53	13.48	0.143	0.00	4.3	-65	29.48		
1211	6.59	13.67	0.144	0.00	2.9	-72	29.48		
1214	6.62	13.66	0.145	0.00	2.0	-76	29.48		
1217	6.63	13.71	0.146	0.00	1.6	-79	29.48		
1220	6.66	13.79	0.145	0.00	1.4	-82	29.48		
1223		collect sample			MW-28-2-20220309				

Certified Sample Information:
Time of Sample: 1223
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU5K
Serial No. Handheld: SWSHSD00
Calibration Date/Time: 03/09/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-28-2
Sample I.D.: MW-28-2

Project: D'Imperio
Personnel:

Date: 03/09/22 Time: 1150
Weather: Cloudy Air Temp.: 40

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 29.48 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____ Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 250 mL/min Elapsed Time: 30 min Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/09/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	
Client:	BC	Date:	03/09/22
Personnel:	MHM/NK	Well ID:	MW-43
Purge/Sample Depth:		Sample ID:	MW-43-20220309

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1245	6.24	12.30	0.099	0.15	193	-7	25.84	250	
1248	6.13	12.70	0.104	0.00	159	-14	25.83		
1251	6.12	13.14	0.105	0.00	115	-18	25.83		
1254	6.13	14.01	0.105	0.00	94.1	-21	25.83		
1257	6.17	14.58	0.105	0.00	72.0	-27	25.83		
1300	6.19	14.87	0.106	0.00	55.0	-32	25.83		
1303	6.22	15.10	0.106	0.00	44.4	-36	25.83		
1306	6.22	15.23	0.106	0.00	32.1	-39	25.83		
1309	6.23	15.24	0.106	0.00	29.2	-40	25.83		
1312	6.24	15.35	0.106	0.00	26.7	-43	25.83		
1315	6.26	15.38	0.106	0.00	20.6	-45	25.83		
1318			collect sample MW-43-20220309						

Certified Sample Information:

Time of Sample: 1318

Analyst Signature: [signature]

Instrument Data:

Manufacturer/Model: Horiba - U52

Serial No. Unit: 20UGYU5K

Serial No. Handheld: SWSH5D00

Calibration Date/Time: 03/09/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-43
Sample I.D.: MW-43-20220309

Project: D'Imperio
Personnel:

Date: 03/09/22 Time: 1245
Weather: Cloudy Air Temp.: 41

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 24.37 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: (Pump)/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
(Tubing)/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 250 mL/min Elapsed Time: 39 min Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: (Pump)/Bailer: ☐ Teflon® ☑ Stainless Steel
(Tubing)/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/09/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	~~D'Imperio~~ D'Imperio	Project Number:	
Client:	Br	Date:	03/10/22
Personnel:	MHM/NK	Well ID:	MW-73
Purge/Sample Depth:		Sample ID:	MW-73-20220310

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0850	12.02	13.60	0.763	2.94	24.5	-26	21.61	200	
0853	12.24	13.49	0.893	1.64	137	-57	21.50		
0856	12.53	13.66	2.87	1.23	101	-94	21.42		
0859	12.67	13.77	2.89	1.25	80.0	-94	21.24		
0902	12.65	13.93	2.78	1.24	57.2	-92	21.22		
0905	12.61	13.99	2.52	1.25	46.9	-89	21.22		
0908	12.55	14.16	2.16	1.21	39.5	-84	21.23		
0911	12.50	14.19	1.91	1.29	31.3	-79	21.22		
0914	12.47	14.22	1.74	1.56	23.2	-76	21.24		
0917	12.43	14.31	1.60	1.62	15.3	-75	21.22		
0920	12.39	14.36	1.47	1.70	10.0	-72	21.23		
0923	12.37	14.50	1.37	1.83	6.8	-70	21.22		
0926		Collect sample MW-73-20220310							

Certified Sample Information:

Time of Sample: 0926

Analyst Signature: [signature]

Instrument Data:

Manufacturer/Model: Horiba - U52

Serial No. Unit: 20UGYU5K

Serial No. Handheld: 5WSH5D00

Calibration Date/Time: 03/10/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-73
Sample I.D.: MW-73-20220310

Project: ~~D'Imperio~~ D'Imperio
Personnel: MHM/LK

Date: 03/10/22 Time: 0850
Weather: Fog Air Temp.: 37

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 20.90 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 200 mL/min Elapsed Time: 33 min Volume Pumped: 2.2 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: —
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/10/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: ~~D'Imperis~~ D'Imperio
Client: BC
Personnel: MHM/NK
Purge/Sample Depth:

Project Number:
Date: 03/10/22
Well ID: MW-70
Sample ID: MW-70-20220310

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0945	9.08	13.69	0.149	4.26	79.4	145	14.91	250	
0948	8.42	14.01	0.123	4.00	"0.0"	33	14.93		
0951	7.72	14.37	0.105	3.41	"0.0"	67	14.93		
0954	7.47	14.40	0.093	4.23	"0.0"	103	14.93		
0957	7.19	14.38	0.083	4.16	1000	118	14.93		
1000	6.86	14.41	0.076	4.54	646	129	14.93		
1003	6.65	14.44	0.076	4.47	602	131	14.93		
1006	6.64	14.46	0.070	4.33	560	130	14.91		
1009	6.28	14.57	0.066	3.87	288	142	14.91		
1012	6.17	14.59	0.064	4.16	192	152	14.91		
1015	6.12	14.64	0.061	4.27	155	159	14.91		
1018	6.14	14.50	0.058	3.78	286	160	14.91		
1021	6.05	14.48	0.054	4.03	89.5	176	14.91		
1024	6.02	14.53	0.054	4.44	86.2	182	14.91		
1027	5.98	14.58	0.054	4.30	71.2	184	14.91		
1030	5.93	14.55	0.054	4.18	69.4	189	14.90		
1033	5.92	14.58	0.054	4.05	63.1	194	14.90		
1036	5.89	14.55	0.055	4.14	54.3	199	14.91		
1039	5.86	14.53	0.056	3.80	57.3	202	14.91		
1042	5.81	14.62	0.052	4.32	45.9	204	14.91		
1045		Collect sample			MW-70-20220310				

Certified Sample Information:
Time of Sample: 1045
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU56
Serial No. Handheld: SWSHSD00
Calibration Date/Time: 03/10/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-70
Sample I.D.: MW-70-20220310

Project: ~~D'Imperio~~ D'Imperio
Personnel: MHA/LK

Date: 03/10/22 Time: 0945
Weather: Fog Air Temp.: 41

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 14.26 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 ml/min Elapsed Time: 57 min Volume Pumped: 4.0 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/10/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: ~~D'Imparts~~ D'Imperio
Client: Br
Personnel: MHM/MK
Purge/Sample Depth:

Project Number:
Date: 03/10/22
Well ID: MW-71
Sample ID: MW-71-20220310

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1110	11.29	12.46	0.555	8.11	59.7	53	22.49	250	
1113	11.48	12.28	0.460	2.11	43.6	31	22.35		
1116	11.40	12.25	0.435	1.77	33.0	25	22.30		
1119	11.47	12.17	0.423	2.11	27.6	17	22.30		
1122	11.47	12.18	0.422	2.06	24.0	14	22.30		
1125	11.40	12.23	0.408	1.98	15.0	10	22.30		
1128	11.28	12.27	0.376	2.02	9.4	10	22.30		
1131	11.07	12.35	0.330	2.29	5.8	14	22.30		
1134	10.91	12.43	0.298	2.49	4.3	17	22.30		
1137	10.70	12.44	0.264	2.59	2.9	24	22.30		
1140	10.50	12.55	0.238	4.03	1.4	31	22.30		
1143		Collect Sample MW-71-20220310							

Certified Sample Information:
Time of Sample: 1143
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20U6Y456
Serial No. Handheld: SWSHSD00
Calibration Date/Time: 03/10/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-71
Sample I.D.: MW-71-20220310

Project: ~~D'Imperio~~ D'Imperio
Personnel: MHM/CK

Date: 03/10/22 Time: 1110
Weather: Partly Cloudy Air Temp.: 44

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 21.91 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☐ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 mL/min Elapsed Time: 30min Volume Pumped: 2.6
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☐ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/10/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: ~~D'Imports~~ D'Imperio
Client: Br
Personnel: MHM / NK
Purge/Sample Depth:

Project Number:
Date: 03/10/22
Well ID: MW-69
Sample ID: MW-69-20220310

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1310	9.88	13.35	0.127	7.42	31.4	114	9.09	300	
1313	8.77	13.63	0.219	4.95	8.5	182	9.10		
1316	8.06	13.69	0.232	3.08	284	170	9.10		
1319	7.37	13.81	0.239	3.29	228	165	9.14		
1322	7.17	13.86	0.232	3.24	189	164	9.14		
1325	6.87	13.94	0.236	3.78	144	164	9.14		
1328	6.56	14.04	0.230	3.73	63.1	175	9.14		
1331	6.36	14.13	0.219	3.71	26.2	184	9.14		
1334	6.28	14.20	0.214	3.70	19.3	187	9.14		
1337	6.12	14.23	0.199	3.70	12.4	190	9.14		
1340	6.01	14.29	0.186	3.69	10.1	194	9.14		
1343	5.91	14.33	0.173	3.51	9.5	194	9.14		
1346	Collect		MW-69-20220310 +Dup						

MHM

Certified Sample Information:
Time of Sample: 1346

Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU56
Calibration Date/Time: 03/10/22

Serial No. Handheld: SWSH5D00

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-69
Sample I.D.: MW-69-20220310

Project: ~~D'Imparts~~ D'Imperio
Personnel: MHM/NK

Date: 03/10/22 Time: 1310
Weather: sunny Air Temp.: 46

WELL DATA:

Casing Diameter: 6" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 9.00 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: (Pump)/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
(Tubing)/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 300 ml/min Elapsed Time: 33 min Volume Pumped: 3.3 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: (Pump)/Bailer: ☐ Teflon® ☑ Stainless Steel
(Tubing)/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☐ No ☑ Yes Name: DUP-20220310
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/10/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D' Imperio
Client: Br
Personnel: MHM/MK
Purge/Sample Depth:

Project Number:
Date: 03/10/22
Well ID: MW-24-2-R-20220310
Sample ID:

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1412	6.42	13.18	0.163	1.16	16.3	-47	25.57	250	
1415	6.54	13.26	0.288	0.00	12.9	-117	25.57		
1418	6.69	14.11	0.285	0.00	12.4	-127	25.55		
1421	6.73	14.55	0.288	0.00	3.7	-142	25.55		
1424	6.85	14.09	0.288	0.00	2.4	-146	25.55		
1427	6.86	13.84	0.288	0.00	1.8	-144	25.55		
1430	6.87	13.79	0.288	0.00	2.5	-141	25.55		
1433	6.87	13.85	0.286	0.00	3.3	-140	25.55		
1436	6.86	14.05	0.285	0.00	3.5	-137	25.55		
1439	6.86	14.23	0.285	0.00	3.4	-136	25.55		
1442	6.90	14.32	0.286	0.00	2.2	-136	25.55		
1445		collect sample			MW-24-2-R-20220310				

Certified Sample Information:
Time of Sample: 1445
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: 20UGYU56
Serial No. Handheld: SWSHSD00
Calibration Date/Time: 03/10/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-24-2-R
Sample I.D.: MW-24-2-R-20220310

Project: D'Imperio
Personnel: MHM/MK

Date: 03/10/22 Time: 1412
Weather: Sunny Air Temp.: 47

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 25.53 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☐ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 mL/min Elapsed Time: 30 min Volume Pumped: 2.5
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 03/10/22

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-80
Sample I.D.: MW-80-20220822

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/22/22 Time: 1110
Weather: Rainy Air Temp.: 74°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: SCS
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 14.55 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 225ml/min Elapsed Time: ~58min Volume Pumped: 4.25 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☑ Prepared Off-Site ☐ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☑ Prepared Off-Site ☐ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/22/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023

LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/22/22
Well ID: MW-80
Sample ID: MW-80-20220822

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1110	4.79	19.15	0.123	11.18	21.2	294	14.57	225mL/min	
1113	4.68	18.87	0.101	9.08	13.5	319	14.57		
1116	4.53	18.93	0.100	8.36	20.9	306	14.57		
1119	4.41	18.15	0.094	8.01	166	289	14.57		
1122	4.30	17.48	0.059	7.64	150	299	14.57		
1125	4.30	17.53	0.091	7.54	147	301	14.56		
1128	4.25	17.35	0.090	7.28	112	312	14.56		
1131	Empty Horiba						14.56		
1134	4.06	17.46	0.083	3.08	384	328	14.55		
1137	4.08	17.77	0.082	3.05	188	335	14.55		
1140	4.12	18.03	0.082	3.20	110	336	14.55		
1143	4.13	18.07	0.080	3.24	79.3	338	14.55		
1146	4.11	18.11	0.078	3.29	72.5	341	14.55		
1149	4.10	18.18	0.076	3.35	60.9	345	14.55		
1152	4.09	18.18	0.076	3.34	53.8	349	14.55		
1155	4.09	18.29	0.075	3.31	52.5	354	14.55		
1158	4.08	18.29	0.075	3.31	51.9	355	14.55		
1201	4.08	18.45	0.075	3.29	45.9	358	14.55		
1204	4.09	18.50	0.075	3.28	45.5	359	14.55		
1207	COLLECT MW-80-20220822								
1210									
1213									

MHM 08/22

Certified Sample Information:
Time of Sample: 1207

Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1F4HW7G
Serial No. Handheld: KU6JK484
Calibration Date/Time: 8/22/22 1010

Are low-flow parameters subject to field lab certification? ☐ **Yes** ☑ **No (not required for CERCLA sites or sites outside of NJ)**

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-79
Sample I.D.: MW-79-20220822

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/22/22 Time: 1232
Weather: Cloudy Air Temp.: 81°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 18.73 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☐ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 300ml/min Elapsed Time: 1hr 6min Volume Pumped: 7.25 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/22/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Impirio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/22/22
Well ID: MW-79
Sample ID: MW-79-20220822

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1232	3.61	19.83	0.217	8.05	86.1	401	18.82	560 mL/min	
1235	3.35	19.37	0.216	7.29	72.2	403	18.81		
1238	3.51	18.43	0.222	3.82	423	393	18.80		
1241	3.50	18.12	0.222	3.79	418	392	18.79		
1244	3.50	18.18	0.222	3.70	247	391	18.78		
1247	3.51	18.25	0.222	3.69	192	395	18.78		
1250	3.51	18.30	0.222	3.68	172	396	18.79		
1253	3.52	18.35	0.222	3.64	171	398	18.80		
1256	Empty Horiba						18.80		
1259	3.49	18.52	0.222	3.65	199	404	18.80		
1302	3.50	18.55	0.222	4.06	157	405	18.80		
1305	3.50	18.47	0.222	3.61	138	411	18.80		
1308	3.49	18.44	0.222	3.63	128	415	18.80		
1311	3.48	18.37	0.222	3.58	117	421	18.80		
1314	3.48	18.41	0.222	3.48	101	427	18.80		
1317	3.48	18.42	0.222	3.56	90.1	428	18.80		
1320	3.48	18.51	0.222	3.54	74.7	430	18.80		
1323	3.49	18.52	0.221	3.55	77.2	432	18.80		
1326	3.47	18.53	0.221	3.52	60.7	435	18.80		
1329	3.47	18.58	0.221	3.49	58.7	436	18.80		
1332	3.47	18.70	0.221	3.47	48.4	437	18.80		
1335	3.47	18.47	0.221	3.34	44.9	438	18.80		
1338	COLLECT MW-79-20220822								

Certified Sample Information:
Time of Sample: 1338
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/22/22 1010

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-76
Sample I.D.: MW-76-20220822L

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/22/22 Time: 1439
Weather: Partly Cloudy Air Temp.: 84°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 16.16 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 300 mL/min Elapsed Time: 48 min Volume Pumped: 4.6 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD: ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/22/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/22/22
Well ID: MW-76
Sample ID: MW-76-20220822

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1439	4.81	19.52	0.049	9.15	278	295	16.25	300	
1442	4.67	18.07	0.041	7.20	"1000"	271	16.25		
1445	4.28	17.41	0.046	6.97	363	310	16.26		
1448	4.15	17.48	0.044	6.70	306	340	16.27		
1451	4.14	18.90	0.043	6.33	188	344	16.20		
1454	4.12	19.26	0.043	6.30	132	355	16.20		
1457	4.12	19.27	0.043	6.16	115	352	16.20		
1500	4.11	19.25	0.042	6.14	104	353	16.20		
1503	4.09	19.19	0.042	6.17	101	358	16.20		
1506	4.08	19.17	0.041	6.14	96.7	363	16.20		
1509	4.05	19.03	0.041	6.09	80.2	366	16.20		
1512	4.04	18.90	0.041	6.08	74.3	368	16.20		
1515	4.02	18.83	0.040	6.04	62.8	372	16.20		
1518	3.98	18.71	0.040	6.02	56.8	376	16.20		
1521	3.95	18.62	0.040	5.97	49.8	380	16.20		
1524	3.92	18.52	0.040	5.93	43.9	384	16.20		
1527	3.90	18.47	0.040	5.91	41.2	387	16.20		
1530	Collect MW-76-20220822								

Certified Sample Information:
Time of Sample: 1530
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/22/22 1010

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-77
Sample I.D.: MW-77-20220823

Project: D'Imperio
Personnel: MHM / SFJ

Date: 8/23/22 Time: 0850
Weather: Sunny Air Temp.: 73°F

WELL DATA:

Casing Diameter: 6.2 ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 4" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 14.43 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 250 mL/min Elapsed Time: 30 min Volume Pumped: 2.5 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/23/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/23/22
Well ID: MW-77
Sample ID: MW-77-20220823

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0850	5.05	19.16	0.341	5.95	84.8	320	19.45	250 mL/min	
0853	4.44	17.69	0.282	3.97	25.9	329	19.45		
0856	4.41	18.05	0.282	3.91	23.9	323	19.44		
0859	4.37	18.71	0.281	3.83	21.0	318	19.44		
0902	4.36	18.83	0.281	3.78	20.7	323	19.44		
0905	4.37	18.90	0.280	3.69	20.1	329	19.44		
0908	4.37	18.97	0.280	3.66	19.0	340	19.43		
0911	4.42	19.07	0.279	3.58	17.2	347	19.43		
0914	4.46	20.22	0.276	3.30	17.9	354	19.43		
0917	4.46	20.28	0.277	3.30	17.8	355	19.42		
0920	4.49	20.59	0.276	3.30	18.5	356	19.42		
0923		Collect MW-77-20220823							

Certified Sample Information:
Time of Sample: 0923
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/23/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-7B
Sample I.D.: MW-7B-20220823

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/23/22 Time: 0946
Weather: Sunny Air Temp.: 77°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 20.68 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 265ml/min Elapsed Time: 245min Volume Pumped: 4 gallon
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☑ Yes Name: MW-7B-20220823 (MS/MSD)

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 8/23/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM KSF
Purge/Sample Depth:

Project Number: 157948
Date: 8/23/22
Well ID: MW-78
Sample ID: MW-78-20220823

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0946	4.86	20.72	0.039	4.42	21.8	355	20.75	265mL/min	
0949	4.25	18.91	0.034	3.54	185	350	20.74		
0952	4.22	18.57	0.034	3.48	223	347	20.74		
0955	4.21	18.64	0.034	3.42	274	345	20.73		
0958	4.18	20.01	0.033	3.35	266	349	20.73		
1001	4.14	19.34	0.033	3.40	208	357	20.74		
1004	4.09	18.11	0.033	3.34	175	362	20.74		
1007	4.04	17.73	0.033	3.29	130	367	20.75		
1010	3.99	17.82	0.033	3.24	95.4	375	20.74		
1013	3.99	17.99	0.032	3.24	80.8	379	20.73		
1016	3.95	17.89	0.033	3.27	63.8	386	20.72		
1019	3.92	17.76	0.033	3.28	56.5	390	20.71		
1022	3.89	17.62	0.033	3.32	42.7	394	20.71		
1025	3.88	17.73	0.033	3.25	36.3	397	20.71		
1028	3.87	17.87	0.034	3.28	29.4	402	20.71		
1031	3.86	17.88	0.034	3.28	28.3	408	20.71		
1034	COLLECT MW-78-20220823								

Certified Sample Information:
Time of Sample: 1034
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FMHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/23/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-75
Sample I.D.: MW-75-20220823

Project: Imperio
Personnel: MHM/SFJ

Date: 08/23/22 Time: 1055
Weather: Sunny Air Temp.: 82°F

WELL DATA:

Casing Diameter: 4in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 15.88 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200ml/min Elapsed Time: 45min Volume Pumped: 2.5 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/23/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/BFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/23/22
Well ID: MW-75
Sample ID: MW-75-20220823

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1055	4.61	20.71	0.073	4.68	69.8	377	15.91	200mL/min	
1058	4.53	21.37	0.073	3.98	62.6	386	15.91		
1101	4.37	21.96	0.071	3.93	13.3	396	15.90		
1104	4.26	22.70	0.070	3.85	24.9	381	15.90		
1107	4.33	23.02	0.067	3.64	25.1	383	15.90		
1110	4.38	21.77	0.064	3.69	113	366	15.92		
1113	4.35	18.83	0.062	3.79	289	349	15.94		
1116	4.35	18.73	0.061	3.70	256	345	15.95		
1119	Empty		Horiba				15.97		
1122	4.29	17.25	0.062	3.96	205	350	15.95		
1125	4.29	18.10	0.062	3.95	102	354	15.94		
1128	4.29	18.69	0.062	3.86	121	358	15.93		
1131	4.30	19.73	0.061	3.65	112	358	15.93		
1134	4.28	20.42	0.061	3.66	94.1	357	15.93		
1137	4.31	21.29	0.061	3.59	77.8	356	15.92		
1140	4.37	21.84	0.061	3.45	78.4	353	15.92		
1143	COLLECT MW-75-20220823								

Certified Sample Information:
Time of Sample: 1143
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/23/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-74
Sample I.D.: MW-74-20220823

Project: Olympic
Personnel: MRM/SFJ

Date: 8/23/22 Time: 1257
Weather: Partly Cloudy Air Temp.: 80°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 23.43 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____ Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 300mL/min Elapsed Time: 233 min Volume Pumped: 3 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/23/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/23/22
Well ID: MW-74
Sample ID: MW-74-20220823

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1257	5.81	22.93	0.064	8.85	57.6	323	23.50	300mL/min	
1300	5.24	20.07	0.071	7.83	154	307	23.44		
1303	5.54	20.54	0.115	7.61	"0.0"	340	23.41		
1306	10.54	16.23	0.238	2.06	"1000"	357	23.38		
1309	Empty	Horiba					23.35		
1312	8.06	17.86	0.132	3.56	594	165	23.32		
1315	6.10	17.87	0.106	3.70	1106	200	23.37		
1318	5.97	17.87	0.103	3.74	163	207	23.43		
1321	5.52	17.93	0.096	3.90	108	231	23.48		
1324	5.31	17.88	0.089	3.99	72.2	249	23.56		
1327	5.08	18.06	0.084	4.03	47.8	269	23.51		
1330	5.00	18.07	0.081	4.09	35.5	278	23.54		
1333	COLLECT MW-74-20220823								

Certified Sample Information:
Time of Sample: 1333
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/23/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-71
Sample I.D.: MW-71-20220823

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/23/22 Time: _____
Weather: Partly Cloudy Air Temp.: 86°F

WELL DATA:

Casing Diameter: 4in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 23.26 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 375mL/min Elapsed Time: 30min Volume Pumped: 3.75 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☐ No ☑ Yes Name: MW-71-20220823 (MS/MSD)

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/23/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'imperio
Client: BC
Personnel: MHM/SEJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/23/22
Well ID: MW-71
Sample ID: MW-71-20220823

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1403	11.08	19.18	0.462	9.69	132	107	23.91	375 mL/min	
1406	11.03	17.15	0.480	9.12	77.9	107	23.89		
1409	10.71	15.63	0.394	8.02	24.2	94	23.86		
1412	10.59	15.64	0.375	7.61	14.7	83	23.85		
1415	10.30	15.77	0.317	7.17	7.8	90	23.85		
1418	9.97	15.79	0.267	6.99	6.0	101	23.86		
1421	9.50	15.77	0.217	6.72	4.4	120	23.86		
1424	9.29	15.73	0.199	6.59	3.7	132	23.87		
1427	9.05	16.05	0.184	6.39	3.2	141	23.81		
1430	8.84	16.07	0.174	6.34	3.6	150	23.76		
1433	8.67	16.09	0.168	6.24	2.8	157	23.71		
1436	COLLECT MW-71-20220823								

Certified Sample Information:
Time of Sample: 1436
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW76
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/23/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-7B
Sample I.D.: MW-7B-20220823

Project: Pimpcio
Personnel: MHM/SFJ

Date: 8/23/22 Time: 1511
Weather: Partly Cloudy Air Temp.: 86°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 22.16 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 350 Elapsed Time: 30min Volume Pumped: 375 mL/min
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/23/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'imperio
Client: BC
Personnel: MHM/SEJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/23/22
Well ID: MW-73
Sample ID: MW-73-20220823

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1511	11.93	22.43	0.788	3.09	52.7	74	22.95	350mL/min	
1514	12.28	19.55	1.86	1.43	31.0	26	22.91		
1517	12.33	19.20	2.67	1.46	45.9	18	22.88		
1520	12.18	18.85	2.70	1.67	15.8	17	22.88		
1523	12.02	18.84	1.99	1.63	13.0	21	22.87		
1526	11.90	18.86	1.58	1.61	8.5	23	22.87		
1529	11.84	18.91	1.38	1.90	3.7	24	22.87		
1532	11.82	18.92	1.26	2.22	1.3	24	22.88		
1535	11.81	18.88	1.19	2.41	0.5	25	22.88		
1538	11.80	18.83	1.09	2.69	0.0	27	22.88		
1541	11.79	18.74	1.04	2.81	0.0	28	22.88		
1544	COLLECT MW-73-20220823								

Certified Sample Information:
Time of Sample: 1544
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/23/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-70
Sample I.D.: MW-70-20220824

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/24/22 Time: 0843
Weather: Sunny Air Temp.: 66°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 16.23 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 350ml/min Elapsed Time: ~1hr 3min Volume Pumped: 7 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☐ Clear ☑ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/24/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFS
Purge/Sample Depth:

Project Number: 157948
Date: 8/24/22
Well ID: MW-70
Sample ID: MW-70-20220824

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0843	6.14	19.37	0.162	3.89	30.1	301	16.32	350	
0846	6.03	18.43	0.145	1.43	"1000"	142	16.27		
0849	5.96	19.40	0.000	7.14	222	155	16.24		
0852	6.05	20.33	0.000	6.99	220	169			
0855	Pump stopped			Working					
0858	6.49						16.29		
0901									
0904									
0907									
0910									
0913	6.39	14.63	0.139	3.63	886	147	16.35		
0916	Pump	stopped	& working	again					
0919		Replace	pump						
0935	6.50	24.01	0.148	5.54	"0.0"	159	16.32		
0938	6.27	20.85	0.127	4.20	847	186	16.32		
0941	5.72	20.59	0.080	3.57	648	216	16.32		
0944	5.49	19.87	0.071	4.05	765	226	16.32		
0947	5.45	20.32	0.071	4.06	594	235	16.32		
0950	5.44	20.68	0.069	3.86	311	244	16.32		
0953	5.42	19.94	0.070	4.02	259	256	16.32		
0956	5.40	19.77	0.067	4.04	204	257	16.32		
0959	5.37	19.87	0.066	3.98	198	263	16.32		
1002	5.36	19.81	0.063	4.00	171	269	16.32		
1005	5.35	19.93	0.062	3.97	168	272	16.32		
1008	5.33	20.14	0.059	4.03	187	277	16.33		
1011	5.32	20.19	0.058	4.04	176	279	16.33		
1014	5.32	19.97	0.057	4.03	171	279	16.33		
1017	5.30	20.15	0.054	4.04	168	282	16.33		
1020	5.29	20.15	0.054	4.05	162	284	16.33		
1023	5.29	20.65	0.051	4.01	160	285	16.33		
1026	5.28	20.23	0.051	4.02	157	286	16.33		
1029	COLLECT MW-70-20220824								

Certified Sample Information:
Time of Sample: 1029

Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Calibration Date/Time: 8/24/22 0815

Serial No. Handheld: KVGJK484

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-72
Sample I.D.: MW-72-20220824

Project: D'Imperio
Personnel: MHM/KFJ

Date: 8/24/22 Time: 1051
Weather: Sunny Air Temp.: 82°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 22.87 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 356 mL/min Elapsed Time: 30 min Volume Pumped: 3.5 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☐ No ☑ Yes Name: DUP-20220824
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/24/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/24/22
Well ID: MW-72
Sample ID: MW-72-20220824

Actual Time	Certified Parameters: pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1051	11.44	21.94	~~5.71~~	6.65	346	37	23.87	250	COND = 0.430
1054	11.30	22.42	~~5.28~~	5.28	80.2	86	23.73		COND = 6.419
1057	11.28	21.99	0.420	5.05	75.4	84	23.65		
1100	11.16	21.22	0.386	4.66	150	81	23.67		
1103	11.13	20.36	0.382	4.59	158	78	23.69		
1106	11.05	19.54	0.376	4.33	176	80	23.72		
1109	10.92	19.52	0.343	4.07	156	82	23.75		
1112	10.77	19.36	0.315	3.88	142	86	23.75		
1115	10.62	19.08	0.295	3.77	123	88	23.74		
1118	10.47	19.16	0.275	3.61	100	92	23.74		
1121	10.30	19.06	0.256	3.43	76.3	97	23.74		
1124	10.13	18.92	0.240	3.32	70.1	101	23.74		
1127	9.99	18.85	0.230	3.21	55.8	105	23.75		
1130	9.84	18.89	0.219	3.13	49.6	108	23.75		
1133	COLLECT MW-72-20220824								

Certified Sample Information:
Time of Sample: 1133
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1F4HW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/24/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-C9
Sample I.D.: MW-C9-20220824

Project: D'Imperio
Personnel: MHM / SFJ

Date: 8/24/22 Time: 1238
Weather: Sunny Air Temp.: 89°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 10.33 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200 ml/min Elapsed Time: 30 min Volume Pumped: 2 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/24/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/24/22
Well ID: MW-69
Sample ID: MW-69-20220824

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1238	6.23	22.38	0.113	5.11	98.4	259	10.38	200mL/min	
1241	5.62	21.62	0.110	3.35	41.4	291	10.38		
1244	5.45	21.29	0.098	3.14	25.5	300	10.39		
1247	5.32	20.97	0.089	3.12	21.3	300	10.40		
1250	5.16	20.44	0.072	2.95	49.0	291	10.38		
1253	5.11	20.24	0.068	2.87	47.4	294	10.36		
1256	5.02	19.94	0.065	2.77	45.4	297	10.36		
1259	4.99	19.75	0.062	2.77	39.2	301	10.37		
1302	4.90	19.53	0.059	2.72	35.4	306	10.38		
1305	4.87	19.60	0.057	2.68	32.1	309	10.39		
1308	4.82	19.35	0.054	2.71	30.6	311	10.40		
1311	COLLECT MW-69-20220824								

Certified Sample Information:
Time of Sample: 1311
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW76
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/24/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-68
Sample I.D.: MW-68-20220824

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/24/22 Time: 1333
Weather: Sunny Air Temp.: 90°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 11.68 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____ Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 250ml/min Elapsed Time: ~36min Volume Pumped: 2.5 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/24/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SEJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/24/22
Well ID: MW-68
Sample ID: MW-68-20220824

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1333	4.82	19.35	0.054	2.71	180.6	311	11.80	250mL/min	
1336	4.82	19.85	0.069	2.01	230.8	310	11.80		
1339	4.88	18.68	0.084	1.69	241	338	11.80		
1342	4.92	18.27	0.079	1.73	279	337	11.80		
1345	4.84	17.58	0.067	1.83	283	336	11.80		
1348	4.79	17.43	0.064	1.89	267	335	11.80		
1351	4.75	16.89	0.063	2.04	243	333	11.80		
1354	4.68	17.05	0.060	2.23	185	334	11.80		
1357	4.62	17.07	0.057	2.43	142	334	11.80		
1400	4.56	17.30	0.055	2.56	91.5	337	11.80		
1403	4.53	17.36	0.054	2.61	74.1	338	11.80		
1406	4.52	16.78	0.054	2.77	60.7	338	11.80		
1409	4.49	16.38	0.052	2.91	48.6	339	11.80		
1412	COLLECT MW-68-20220824								

Certified Sample Information:
Time of Sample: 1412
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1F4HW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/24/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-C6
Sample I.D.: MW-C6-20220824

Project: D'Imperio
Personnel: MHM/SEJ

Date: 8/24/22 Time: 1429
Weather: Sunny Air Temp.: 93F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 13.22 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200ml/min Elapsed Time: 30min Volume Pumped: 2 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☐ Clear ☑ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/24/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SKJ
Purge/Sample Depth:

Project Number: 137948
Date: 8/24/22
Well ID: MW-66
Sample ID: MW-66-20220824

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1429	5.03	20.79	0.073	6.23	99.3	351	13.17	200mL/min	
1432	4.84	21.26	0.073	3.60	73.4	371	13.17		
1435	4.85	21.33	0.073	3.70	76.5	378	13.17		
1438	4.77	21.42	0.073	3.91	74.1	378	13.17		
1441	4.78	21.55	0.073	4.02	63.4	365	13.17		
1444	4.74	21.70	0.071	3.62	32.1	351	13.17		
1447	4.69	21.79	0.071	3.95	29.0	345	13.17		
1450	4.66	22.13	0.070	3.74	17.3	339	13.17		
1453	4.66	22.36	0.070	3.70	17.8	333	13.17		
1456	4.70	22.55	0.069	3.78	20.4	336	13.17		
1459	4.62	22.62	0.065	3.28	53.6	332	13.17		
1502	COLLECT MW-66-20220824								

Certified Sample Information:
Time of Sample: 1502
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVCJK484
Calibration Date/Time: 8/24/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-C60
Sample I.D.: MW-C60-20220825

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/25/22 Time: 0840
Weather: Sunny Air Temp.: 61°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 14.45 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200ml/min Elapsed Time: 30min Volume Pumped: 2gallon
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/25/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/25/22
Well ID: MW-60
Sample ID: MW-60-20220825

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
0840	4.70	18.19	0.113	7.03	0.0	358	14.47	200	
0843	4.68	16.71	0.085	5.01	0.0	384	14.47		
0846	4.55	16.50	0.068	3.87	0.0	395	14.47		
0849	4.56	16.48	0.066	3.83	0.0	395	14.47		
0852	4.47	16.34	0.064	3.83	0.0	395	14.47		
0855	4.41	15.76	0.066	3.59	0.0	394	14.47		
0858	4.44	15.28	0.056	3.68	0.0	395	14.47		
0901	4.42	15.57	0.055	3.58	0.0	396	14.47		
0904	4.41	16.54	0.055	3.66	0.6	400	14.47		
0907	4.42	16.73	0.055	3.59	0.0	403	14.47		
0910	4.40	16.62	0.056	3.26	0.0	408	14.47		
0913	COLLECT MW-60-20220825								

Certified Sample Information:
Time of Sample: 0913
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVC0JK4B4
Calibration Date/Time: 8/25/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ ~~No~~ (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-57
Sample I.D.: MW-57-20220825

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/25/22 Time: 0932
Weather: Sunny Air Temp.: 76°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 15.67 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 300 mL/min Elapsed Time: 30 min Volume Pumped: 3 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/25/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/25/22
Well ID: MW-57
Sample ID: MW-57-20220825

Actual Time	Certified Parameters: pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0932	8.17	15.32	0.162	3.60	0.0	330	16.17	300mL/min	
0935	6.29	14.53	0.161	2.02	146	332	16.14		
0938	5.87	14.56	0.150	1.70	155	275	16.09		
0941	5.72	14.58	0.144	1.54	87.8	267	16.07		
0944	5.59	14.63	0.135	1.58	48.9	273	16.05		
0947	5.59	14.68	0.131	1.59	46.5	274	16.01		
0950	5.51	14.99	0.127	1.62	16.3	280	15.99		
0953	5.44	15.04	0.124	1.47	10.1	286	15.97		
0956	5.37	15.00	0.120	1.54	1.1	290	15.99		
0959	5.31	15.02	0.118	1.63	0.0	295	16.02		
1002	5.28	15.07	0.115	1.49	0.0	299	16.04		
1005	MW-57-20220825								

Certified Sample Information:
Time of Sample: 1005
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1F4HW7G
Serial No. Handheld: KVCJK484
Calibration Date/Time: 08/25/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-56
Sample I.D.: MW-56-20220825

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/25/22 Time: 1028
Weather: Sunny Air Temp.: 83°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 17.45 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 200 ml/min Elapsed Time: 30 min Volume Pumped: 2 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/25/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/25/22
Well ID: MW-56
Sample ID: MW-56-20220825

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1028	6.12	19.69	0.138	4.82	0.0	325	17.52	200 mL/min	
1031	6.11	18.62	0.142	2.91	0.0	327	17.52		
1034	6.10	18.08	0.144	2.59	0.0	323	17.53		
1037	6.09	17.75	0.145	2.42	0.0	314	17.53		
1040	6.08	17.63	0.147	2.29	0.0	301	17.54		
1043	6.03	16.79	0.150	2.34	0.0	276	17.54		
1046	6.05	16.71	0.150	2.28	0.0	268	17.54		
1049	6.03	16.56	0.150	2.22	0.0	263	17.53		
1052	6.01	16.40	0.151	2.12	0.0	263	17.53		
1055	5.98	16.31	0.150	1.98	0.0	262	17.53		
1058	5.96	16.29	0.150	1.86	0.0	264	17.53		
1101	COLLECT MW-56-20220825								

Certified Sample Information:
Time of Sample: 1101
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/25/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: OW-62
Sample I.D.: OW-62-20220825

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/25/22 Time: 1206
Weather: Sunny Air Temp.: 88°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 17.13 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 275 ml/min Elapsed Time: 42 min Volume Pumped: 4 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/25/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM / SEJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/25/22
Well ID: MW-62
Sample ID: MW-62-20220825

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1206	5.08	21.76	0.060	10.10	0.0	372	17.15	275	
1209	4.89	20.60	0.063	3.09	0.0	379	17.15		
1212	4.77	20.67	0.064	2.53	0.0	386	17.15		
1215	4.74	20.74	0.064	2.57	0.0	389	17.15		
1218	4.65	21.10	0.064	2.71	0.0	400	17.15		
1221	4.59	20.88	0.060	2.56	6.7	408	17.17		
1224	4.54	20.75	0.058	2.46	60.0	409	17.19		
1227	4.51	20.65	0.057	2.36	78.2	408	17.21		
1230	4.45	16.87	0.057	2.55	61.5	386	17.22		
1233	4.31	15.42	0.055	1.71	35.5	379	17.21		
1236	4.25	15.41	0.055	1.36	18.4	384	17.21		
1239	4.19	15.54	0.056	1.17	12.3	395	17.20		
1242	4.17	15.52	0.055	1.12	6.5	401	17.20		
1245	4.14	15.41	0.055	1.03	2.8	406	17.20		
1248	COLLECT MW-62-20220825								

Certified Sample Information:
Time of Sample: 1248
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: NFLHW7G
Serial No. Handheld: KVC6JK484
Calibration Date/Time: 8/25/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: OBW-C3
Sample I.D.: OBW-C3-20220825

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/25/22 Time: 1328
Weather: Sunny Air Temp.: 92°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 14.95 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250mL/min Elapsed Time: 360min Volume Pumped: 2.75 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/25/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BCI
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/25/22
Well ID: ~~OBW-63~~ OBW-63
Sample ID: ~~OBW~~-63-20220825

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1328	4.87	15.81	0.068	4.79	122	404	14.97	250 mL/min	
1331	4.52	15.22	0.069	3.98	273	377	14.97		
1334	4.40	15.26	0.070	3.74	167	378	14.97		
1337	4.36	15.17	0.071	3.54	118	383	14.98		
1340	4.30	15.28	0.071	3.46	84.1	386	14.98		
1343	4.30	16.32	0.070	3.22	52.6	392	14.98		
1346	4.29	16.83	0.070	3.25	46.2	391	14.98		
1349	4.33	17.42	0.070	3.13	35.1	391	14.98		
1352	4.33	17.81	0.070	3.11	31.4	391	14.98		
1355	4.31	18.39	0.070	2.95	26.1	393	14.98		
1358	4.34	19.19	0.070	3.03	23.8	394	14.98		
1401	4.37	20.18	0.070	3.00	18.1	391	14.98		
1404	4.37	20.35	0.070	3.03	17.1	389	14.98		
1407	COLLECT OBW-63-20220825								

Certified Sample Information:
Time of Sample: 1407
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FU4HW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/25/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-51
Sample I.D.: MW-51-20220825

Project: D'Imperio
Personnel: MHM / SEJ

Date: 8/25/22 Time: 1435
Weather: Sunny Air Temp.: 94°F

WELL DATA:

Casing Diameter: 6in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 18.17 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 2 L/min Elapsed Time: 42 min Volume Pumped: 4 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/25/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/JEJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/25/22
Well ID: MW-51
Sample ID: MW-51-20220825

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1435	5.50	17.82	0.047	3.78	"0.0"	370	18.18	270.	
1438	4.79	16.03	0.046	0.00	622	319	18.18		
1441	4.51	15.87	0.047	0.00	569	314	18.18		
1444	4.36	15.69	0.048	0.00	393	304	18.18		
1447	4.34	15.76	0.048	0.00	266	295	18.18		
1450	4.31	15.65	0.048	0.00	196	290	18.18		
1453	4.25	15.69	0.048	0.00	131	288	18.18		
1456	4.16	15.08	0.048	0.00	85.5	289	18.18		
1459	4.12	15.05	0.048	0.00	63.5	292	18.18		
1502	4.07	15.23	0.049	0.00	35.9	301	18.18		
1505	3.96	18.47	0.034	0.00	70.1	359	18.18		
1508	4.37	18.90	0.048	0.00	60.2	357	18.18		
1511	4.33	18.09	0.049	0.00	47.8	356	18.18		
1514	4.27	16.42	0.049	0.00	29.3	359	18.18		
1517	4.17	15.78	0.049	0.00	24.7	360	18.18		
1520	COLLECT MW-51-20220825								

Certified Sample Information:
Time of Sample: 1520
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/25/22 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW - 47
Sample I.D.: MW - 47 - 20220826

Project: D'Imperio
Personnel: MHM/SFJ

Date: 8/26/22 Time: 0856
Weather: Sunny Air Temp.: 75°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 16.64 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200 mL/min Elapsed Time: 30 min Volume Pumped: 2 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/26/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/26/22
Well ID: MW-47
Sample ID: MW-47-20220826

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
0856	4.68	20.21	0.091	6.53	11.4	359	16.64	200mL/min	
0859	4.95	20.17	0.082	4.97	5.3	357	16.64		
0902	5.08	19.39	0.068	3.14	0.0	374	16.64		
0905	4.68	19.09	0.068	2.09	0.0	302	16.64		
0908	4.31	18.85	0.066	1.64	0.0	337	16.64		
0911	4.15	18.58	0.064	1.29	0.0	361	16.64		
0914	3.99	17.63	0.069	0.40	0.0	380	16.63		
0917	3.94	16.25	0.075	0.00	0.0	382	16.59		
0920	3.89	15.60	0.087	0.00	0.0	385	16.56		
0923	3.86	15.70	0.106	0.16	0.0	390	16.52		
0926	3.85	15.88	0.121	0.37	0.0	396	16.50		
0929	COLLECT	MW-47-20220826							

Certified Sample Information:
Time of Sample: 0929
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: XIFUHW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/26/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-53
Sample I.D.: MW-53-20220826

Project: D'Imperio
Personnel: MHM/SPJ

Date: 8/26/22 Time: 0949
Weather: Sunny Air Temp.: 78°F

WELL DATA:

Casing Diameter: 6.n ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2.n ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 17.80 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250mL/min Elapsed Time: 30min Volume Pumped: 2.5 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/26/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/26/22
Well ID: MW-53
Sample ID: MW-53-20220826

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0949	4.43	17.22	0.047	5.41	0.0	408	17.86	250	
0952	4.25	16.14	0.045	4.74	0.0	413	17.85		
0955	4.06	14.77	0.044	3.57	0.0	414	17.84		
0958	4.06	15.74	0.042	2.90	0.0	420	17.83		
1001	4.02	15.88	0.042	3.07	0.0	420	17.82		
1004	4.04	16.32	0.043	2.82	0.0	421	17.81		
1007	4.04	16.60	0.043	2.73	0.0	422	17.81		
1010	4.07	16.88	0.042	2.88	0.0	420	17.81		
1013	4.08	16.96	0.042	2.95	0.0	414	17.80		
1016	4.09	16.92	0.042	2.87	0.0	410	17.80		
1019	4.10	16.83	0.042	2.86	0.0	406	17.80		
1022	COLLECT MW-53-20220826								

Certified Sample Information:
Time of Sample: 1022
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1F4HW7G
Serial No. Handheld: KVGJK484
Calibration Date/Time: 8/26/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: ACW-55
Sample I.D.: MW-55-20220826

Project: D'Imperio
Personnel: MHM/SEJ

Date: 8/26/22 Time: 1043
Weather: Sunny Air Temp.: 86°F

WELL DATA:

Casing Diameter: 6 in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 16.32 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 300mL/min Elapsed Time: 30 min Volume Pumped: 3 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: Samantha Jones Date: 8/26/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/26/22
Well ID: MW-55
Sample ID: MW-55-20220826

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1043	10.76	19.61	0.177	2.19	0.0	176	16.32	300	
1046	10.96	18.30	0.175	1.71	0.0	163	16.33		
1049	10.95	17.02	0.174	1.46	0.0	151	16.36		
1052	10.92	16.73	0.166	1.37	0.0	147	16.38		
1055	9.83	16.64	0.119	1.12	0.0	179	16.38		
1058	8.70	16.59	0.115	1.15	0.0	206	16.38		
1101	8.04	16.56	0.112	1.19	0.0	218	16.38		
1104	7.00	16.45	0.108	1.49	0.0	249	16.38		
1107	6.14	16.54	0.099	1.76	0.0	284	16.38		
1110	5.91	16.57	0.096	1.64	0.0	293	16.38		
1113	5.78	16.45	0.092	1.80	0.0	299	16.38		
1116	COLLECT MW-55-20220826								

Certified Sample Information:
Time of Sample: 1116
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/26/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-46
Sample I.D.: MW-46 - 20220826

Project: D'Imperio
Personnel: MMM/SFJ

Date: 8/26/22 Time: 1234
Weather: Sunny Air Temp.: 90°F

WELL DATA:

Casing Diameter: 6.in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2.in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 15.85 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: (Pump)/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
(Tubing)/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 300 mL/min Elapsed Time: 30 min Volume Pumped: 3 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☑ Bladder Pump ☐ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
(Tubing)/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☐ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/26/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/SFJ
Purge/Sample Depth:

Project Number: 157948
Date: 8/26/22
Well ID: MW-46
Sample ID: MW-46-20220826

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1234	6.10	20.37	0.075	1.00	0.5	269	15.80		
1237	5.53	18.82	0.075	0.03	3.9	293	15.80		
1240	5.46	18.30	0.075	0.00	4.2	288	15.81		
1243	5.43	17.91	0.075	0.00	5.5	280	15.82		
1246	5.36	17.80	0.072	0.00	4.6	280	15.82		
1249	5.22	17.72	0.067	0.21	1.6	293	15.83		
1252	5.14	17.70	0.064	0.22	0.0	302	15.83		
1255	5.05	17.79	0.062	0.66	0.0	313	15.82		
1258	5.02	18.18	0.061	0.58	0.0	322	15.82		
1301	5.02	18.01	0.060	0.59	0.0	325	15.82		
1304	4.93	18.71	0.060	0.72	0.0	333	15.82		
1307	MW-46-20220826								

Certified Sample Information:
Time of Sample: 1307
Analyst Signature: Brandon Jones

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/26/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-45
Sample I.D.: MW-45-20220826

Project: D'Imperio
Personnel: MMM/SFJ

Date: 8/26/22 Time: 1135
Weather: Sunny Air Temp.: 88

WELL DATA:

Casing Diameter: 2in ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2in ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 15.32 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☐ Yes ☑ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 300mL/min Elapsed Time: 36 minutes Volume Pumped: 3.25 gallons
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/26/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MrM/SFJ
Purge/Sample Depth:

Project Number: B57948
Date: 8/26/22
Well ID: MW-45
Sample ID: MW-45-202208

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1135	11.70	21.05	0.623	8.27	15.0	114	15.78	300 mL/min	
1138	11.86	19.78	0.768	4.16	10.6	100	15.43		
1141	12.05	18.50	0.966	0.35	16.0	79	15.08		
1144	12.05	18.13	0.993	0.00	8.2	71	14.80		
1147	12.04	18.09	0.997	0.00	6.2	65	14.77		
1150	11.96	17.92	0.826	0.00	4.9	61	14.48		
1153	Pump stopped working								
1156									
1159	11.70	16.42	0.382	0.00	39.1	68	16.13		
1202	11.10	15.53	0.224	0.00	18.7	79	16.17		
1205	9.95	15.37	0.183	0.00	13.4	111	16.21		
1208	9.50	15.38	0.185	0.00	8.5	121	16.26		
1211	8.63	15.44	0.191	0.00	7.0	135	16.30		
1214	COLLECT MW-45-202208								

Certified Sample Information:
Time of Sample: 1214
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1F4HW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/26/22

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-50
Sample I.D.: MW-50-202L0829

Project: D'Imetrolo
Personnel: MLM/DFP

Date: 08/29/23 Time: 1104
Weather: 3 ann / Air Temp.: 80

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 1381 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☑ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 225 ml/min Elapsed Time: 30 min Volume Pumped: 2.25 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/29/23

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/29/22
Personnel:	MHM/DFP	Well ID:	ML-50
Purge/Sample Depth:		Sample ID:	MW-50-20220829

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1104	7.87	21.87	0.104	1.67	13.1	254	14.32	225	
1107	7.52	21.57	0.104	1.52	19.2	202	14.22		
1110	7.17	20.24	0.104	1.40	29.0	137	14.12		
1113	7.02	19.95	0.104	1.37	28.7	133	14.08		
1116	6.87	19.83	0.104	1.34	28.8	130	14.06		
1119	6.65	19.72	0.104	1.38	28.8	127	14.02		
1122	6.54	20.04	0.107	1.25	22.6	129	13.98		
1125	6.50	20.06	0.105	1.25	17.2	130	13.95		
1128	6.41	20.05	0.105	1.23	11.4	136	13.94		
1131	6.34	20.08	0.102	1.23	5.9	140	13.93		
1134	6.28	20.17	0.101	1.23	4.3	146	13.93		
1137		Collect MW-50-2022 0829							

Certified Sample Information:
Time of Sample: 1137
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KV6JK404
Calibration Date/Time: 08/29/22 @10:15

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-59
Sample I.D.: MW-59-20220829

Project: D'Imperio
Personnel: MLM/PRC

Date: 08/29/22 Time: 1203
Weather: Sn Air Temp.: 86°

WELL DATA:

Casing Diameter: 4" ❑ Stainless Steel ❑ Steel ❑ PVC ❑ Teflon® ❑ Other: _____
Intake Diameter: 2" ❑ Stainless Steel ❑ Galv. Steel ❑ PVC ❑ Teflon® ❑ Open rock
DEPTH TO : Static Water Level: 13.03 ft Bottom of Well: _____ ft
DATUM: ❑ Top of Protective Casing ☑ Top of Well Casing ❑ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ❑ No Is well clean to bottom? ☑ Yes ❑ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ❑ No
Does Weep Hole adequately drain well head? ☑ Yes ❑ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ❑ No
Is Padlock Functional? ☑ Yes ❑ No ❑ NA Is Inner Casing Intact? ☑ Yes ❑ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ❑ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Centrifugal Pump ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: _____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel ❑ PVC ❑ Other: _____
Tubing/Rope: ☑ Teflon® ☑ Polyethylene ❑ Polypropylene ❑ Other: _____

Pumping Rate: 200 ml/min Elapsed Time: 30 mins Volume Pumped: 2 gal
Was well Evacuated? ❑ Yes ❑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ❑ Field Cleaned

SAMPLING DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Syringe Sampler ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: _____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel
Tubing/Rope: ☑ Teflon® ❑ Polyethylene

SAMPLING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ❑ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ❑ Turbid ❑ Color: _____ ❑ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ❑ Yes Name: _____
MS/MSD : ☑ No ❑ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 8/29/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/29/22
Personnel:	MHM / PFD	Well ID:	MW-59-~~20220829~~
Purge/Sample Depth:		Sample ID:	MW-59-20220829

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1203	4.91	22.77	0.078	8.34	132	325	13.63	200	
1206	5.04	23.54	0.077	8.21	133	328	13.63		
1209	5.07	23.70	0.077	8.19	133	330	13.63		Adjust flow rate
1212	4.78	18.91	0.077	6.78	"0"	358	13.63		-Too Low
1215	4.69	18.65	0.076	6.70	0	363	13.63		
1218	4.53	18.46	0.074	6.52	0	376	13.63		
1221	4.47	18.13	0.072	6.61	0	384	13.63		
1224	4.45	18.10	0.070	6.71	0	389	13.63		
1227	4.40	18.13	0.068	6.65	0	394	13.63		
1230	4.39	18.11	0.066	6.74	0	396	13.63		
1233	collect MW-59-20220829								

Certified Sample Information:

Time of Sample: 1233

Analyst Signature: [signature]

Instrument Data:

Manufacturer/Model: Horiba U-52

Serial No. Unit: X1FuHWXG

Serial No. Handheld: KU6JK484

Calibration Date/Time: 8/29/22 1015

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-49
Sample I.D.: MW-49-20220829 (if different from well no.)

Project: D'Emperio
Personnel: MHM / PEP

Date: 08/29/22 Time: 1259
Weather: Sunny Air Temp.: 92

WELL DATA:

Casing Diameter: 4" ❑ Stainless Steel ❑ Steel ❑ PVC ❑ Teflon® ❑ Other: _____
Intake Diameter: 2" ❑ Stainless Steel ❑ Galv. Steel ❑ PVC ❑ Teflon® ❑ Open rock
DEPTH TO : Static Water Level: 21.38 ft Bottom of Well: _____ ft
DATUM: ❑ Top of Protective Casing ☑ Top of Well Casing ❑ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ❑ No Is well clean to bottom? ☑ Yes ❑ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ❑ No
Does Weep Hole adequately drain well head? ☑ Yes ❑ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ❑ No
Is Padlock Functional? ☑ Yes ❑ No ❑ NA Is Inner Casing Intact? ☑ Yes ❑ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ❑ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Centrifugal Pump ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: _____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel ❑ PVC ❑ Other: _____
Tubing/Rope: ❑ Teflon® ☑ Polyethylene ❑ Polypropylene ❑ Other: _____

Pumping Rate: 225 mL/min Elapsed Time: 30 min Volume Pumped: 2.25 gal
Was well Evacuated? ❑ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ❑ Bailer, Size: ____ ❑ Bladder Pump ☑ 2" Submersible Pump ❑ 4" Submersible Pump
❑ Syringe Sampler ❑ Peristaltic Pump ❑ Inertial Lift Pump ❑ Other: _____

MATERIALS: Pump/Bailer: ❑ Teflon® ☑ Stainless Steel
Tubing/Rope: ❑ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ❑ Dedicated ❑ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ❑ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ❑ Turbid ❑ Color: _____ ❑ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ❑ Yes Name: _____
MS/MSD : ☑ No ❑ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/29/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/29/22
Personnel:	MHMI PFP	Well ID:	MW-49
Purge/Sample Depth:		Sample ID:	MW-49-20220829

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1259	5.80	23.51	0.224	5.40	"0.0"	336	23.20	225	
1302	5.12	23.69	0.309	4.16	29.0	379	23.20		
1305	5.05	22.21	0.421	3.86	53.2	362	23.21		
1308	4.99	21.13	0.501	3.18	77.9	356	23.21		
1311	4.97	20.03	0.527	3.12	52.9	348	23.21		
1314	4.96	19.24	0.546	3.08	29.3	334	23.21		
1317	4.95	19.30	0.548	3.04	21.2	333	23.21		
1320	4.95	19.33	0.550	3.00	14.0	332	23.20		
1323	4.95	19.52	0.548	2.93	10.2	332	23.20		
1326	4.94	19.74	0.546	2.89	5.5	332	23.20		
1329	4.94	20.05	0.540	2.78	0.0	332	23.20		
1332		Collect MW-49-20220829							

Certified Sample Information:
Time of Sample: 1232 Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1BUHW7G Serial No. Handheld: KV65K484
Calibration Date/Time: 08/29/22 @ 1015

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-34
Sample I.D.: MW-34-202208279 (if different from well no.)

Project: D'Imperio
Personnel: MLM/PFP

Date: 08/29/22 Time: 1355
Weather: Sunny Air Temp.: 92

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 20.84 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: _____ Elapsed Time: _____ Volume Pumped: _____
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene
SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/29/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/PFB
Purge/Sample Depth:

Project Number: 157948
Date: 08/29/22
Well ID: MW-34
Sample ID: MW-34-20220829

Actual Time	Certified Parameters: pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1355	4.33	18.48	0.058	6.90	0	396	20.84	300	
1358	4.29	18.50	0.058	5.64	0	399	20.84		
1401	4.20	18.34	0.059	3.64	0	406	20.84		
1404	4.14	17.97	0.059	3.08	0	410	20.84		
1407	4.10	17.78	0.058	4.09	0	417	20.84		
1410	4.08	17.75	0.058	4.09	0	418	20.84		
1413	4.06	17.69	0.058	2.84	0	423	20.84	300	
1416	4.09	18.63	0.057	2.39	0	424	20.84	200	Reduced rate flow
1419	4.09	19.85	0.058	2.91	0	424	20.84		
1422	4.09	19.95	0.058	2.94	0	425	20.84		
1425	4.14	20.03	0.057	2.92	0	423	20.84		
1428	collect MW-34-20220829							200	

Certified Sample Information:
Time of Sample: 1428
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FUHWTG
Serial No. Handheld: KV6JK484
Calibration Date/Time: 08/29/22 @1015

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-29-1
Sample I.D.: MW-29-1 - 20220829 (if different from well no.)

Project: D'Imperio
Personnel: MHM / PFP

Date: 08/29/22 Time: 1448
Weather: Sunny Air Temp.: 92

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 20.92 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 100/250ml/min Elapsed Time: 30 min Volume Pumped: 2.0 gal
Was well Evacuated? ☐ Yes ☐ No Number of Well Volumes Removed: —
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☑ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/29/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/29/22
Personnel:	MHM IPEP	Well ID:	MW-29-1
Purge/Sample Depth:		Sample ID:	MW-29-1-2022 0829

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1448	5.90	20.52	0.090	6.68	0.0	369	20.10	100	
1451	5.30	20.27	0.151	4.28	0.0	403	20.10		
1454	4.52	20.73	0.185	3.54	21.1	381	20.11		
1457	4.53	20.81	0.187	3.27	37.0	371	20.11		
1500	5.02	20.95	0.184	3.04	34.2	372	20.11		
1503	4.15	19.67	0.183	3.47	150	354	20.11	250	
1506	4.21	17.46	0.196	2.80	20.1	344	20.12		
1509	4.15	17.37	0.196	2.79	17.2	346	20.12		
1512	4.09	17.31	0.196	2.78	11.0	349	20.12		
1515	4.07	17.31	0.199	2.74	8.4	351	20.13		
1518	4.12	17.19	0.205	2.71	2.4	357	20.13		
1521	4.15	17.12	0.209	2.73	0.0	364	20.13		
1524		Collect MW-29-1-2022 0829							

Certified Sample Information:
Time of Sample: 1524 Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: XIFWHW7G Serial No. Handheld: KV6JK484
Calibration Date/Time: 08/29/22 @ 1015

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-37
Sample I.D.: MW-37-20220830

Project: D'Imperio
Personnel: MLM/DPP

Date: 08/30/22 Time: 0847
Weather: Sunny Air Temp.: 77

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 26.51 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 mL/min Elapsed Time: 30 min Volume Pumped: 25 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/30/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	
Client:	BC	Date:	08/30/22
Personnel:	MHM / PFP	Well ID:	MW-37
Purge/Sample Depth:		Sample ID:	MW-37-20220830

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
0847	5.29	18.90	0.051	6.92	0.0	338	26.57	250	
0850	4.92	16.72	0.051	4.52	0.0	345	26.53		
0853	4.58	16.67	0.045	2.37	0.0	351	26.53		
0856	4.32	16.44	0.043	2.14	0.0	356	26.53		
0859	4.08	16.69	0.042	2.07	0.0	380	26.53		
0902	3.93	16.80	0.042	1.79	0.0	405	26.53		
0905	3.90	16.83	0.043	1.69	0.0	420	26.53		
0908	3.87	16.65	0.043	1.58	0.0	431	26.53		
0911	3.88	16.79	0.043	1.59	0.0	422	26.53		
0914	3.87	16.82	0.043	1.60	0.0	412	26.57		
0917	3.88	16.93	0.043	1.61	0.0	409	26.57		
0920		Collect	MW-37-20220830						

Certified Sample Information:
Time of Sample: 0920
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-452
Serial No. Unit: X1FWHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 08/30/22 @ 0810

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-38
Sample I.D.: MW-38-20220830

Project: DIMARIO
Personnel: MH/MI/DFP

Date: 08/30/22 Time: 0937
Weather: SUNNY Air Temp.: 77

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 26.97 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 275 mL/m Elapsed Time: 30 min Volume Pumped: 2.75 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☑ Teflon® ☐ Polyethylene

SAMPLING EQUIPMENT: ☑ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☐ No ☑ Yes Name: DUP-20220830
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/30/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: D'Imperio
Client: BC
Personnel: MHM/DFP
Purge/Sample Depth:

Project Number: 157948
Date: 08/30/22
Well ID: MW-38
Sample ID: MW-38 20220830

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0937	5.15	18.77	0.039	7.10	0.0	349	26.95	275	
0940	4.25	18.01	0.050	2.11	10.2	413	26.96		
0943	4.23	19.04	0.051	1.82	13.2	413	26.96		
0946	4.24	19.09	0.051	1.83	12.9	407	26.97		
0949	4.26	19.11	0.051	1.78	12.4	394	26.98		
0952	4.27	19.34	0.051	1.70	8.0	381	26.98		
0955	4.27	19.32	0.051	1.66	4.8	374	26.99		
0958	4.28	19.41	0.051	1.56	0.0	361	26.99		
1001	4.29	19.16	0.051	1.70	0.0	358	26.99		
1004	4.29	19.22	0.051	1.72	0.0	352	26.99		
1007	4.30	19.25	0.051	1.75	0.0	350	26.99		
1010		Collect MW-38-20220830 + DUP							

Certified Sample Information:
Time of Sample: 1010
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1EYHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 08/30/22 @ 0810

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-32
Sample I.D.: MW-32-20220830 (if different from well no.)

Project: D'Emanuele
Personnel: MHM/PFP

Date: 08/30/22 Time: 1130
Weather: Sunny Air Temp.: 90

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 15.32 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250ml/min Elapsed Time: 30 mins Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☐ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/30/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	[illegible]	Date:	8/30/22
Personnel:	PFP, MHM	Well ID:	MW-32
Purge/Sample Depth:		Sample ID:	MW-32-20220830

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1130	4.58	18.22	0.043	0.90	38.9	396	14.32	250	
1133	4.64	18.00	0.042	0.35	105	378	14.32		
1136	4.70	17.35	0.040	0	76.3	326	14.32		
1139	4.62	16.99	0.041	0	13.6	317	14.32		
1142	4.60	16.96	0.041	0	8.6	317	14.32		
1145	4.60	16.93	0.041	0	5.1	316	14.32		
1148	4.57	16.88	0.042	0	0	314	14.32		
1151	4.55	16.85	0.042	0	0	311	14.32		
1154	4.54	16.80	0.042	0	0	310	14.32		
1157	4.53	16.77	0.042	0	0	310	14.32		
1200	4.52	16.69	0.042	0	0	310	14.32		
1203	Collect MW-32-20220830								

Certified Sample Information:
Time of Sample: 1203
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FnHW7G
Serial No. Handheld: KV6JK4841
Calibration Date/Time: 08/30/22 @ 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-33-2
Sample I.D.: MW-33-2-20210830

Project: D'Imperio
Personnel: MHM / PFP

Date: 08/30/21 Time: 1222
Weather: Sunny Air Temp.: 90

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 14.63 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 ml/min Elapsed Time: 30 min Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/30/21

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/30/22
Personnel:	MHM/DFP	Well ID:	MW-33-2
Purge/Sample Depth:		Sample ID:	MW-33-2-20220830

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1227	5.23	18.92	0.056	5.19	0.0	341	14.63	250	
1230	4.96	19.08	0.055	0.84	0.0	363	14.63		
1233	4.52	18.71	0.055	0.00	20.8	309	14.64		
1236	4.48	18.66	0.056	0.00	18.2	307	14.64		
1239	4.41	18.52	0.057	0.00	11.9	305	14.64		
1242	4.37	18.39	0.057	0.00	1.5	302	14.65		
1245	4.37	18.25	0.057	0.00	0.0	297	14.65		
1248	4.37	18.33	0.057	0.00	0.0	294	14.65		
1251	4.37	18.34	0.057	0.00	0.0	292	14.65		
1254	4.38	18.24	0.057	0.00	0.0	290	14.65		
1257	4.38	18.29	0.057	0.00	0.0	289	14.65		
1255		Collect		MW-33-2-20220830					

Certified Sample Information:
Time of Sample: 1255
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: XIFWHW7G
Serial No. Handheld: KV6JK481
Calibration Date/Time: 08/30/22 @ 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-40
Sample I.D.: MW-40-20220830

Project: D'Emperio
Personnel: MHM/PFP

Date: 08/30/22 Time: 1527
Weather: Sunny Air Temp.: 90

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 22.25 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200 ml/min Elapsed Time: 30 mins Volume Pumped: 2.99 L
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: —
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/30/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/30/22
Personnel:	MLM / PFP	Well ID:	MW-40
Purge/Sample Depth:		Sample ID:	MW-40-20220830

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1327	4.37	19.46	0.049	0.46	41.6	379	22.70	200	
1330	4.36	19.44	0.049	0.43	28.3	380	22.70		
1333	4.32	20.54	0.050	0.30	10.4	370	22.70		
1336	4.31	20.97	0.051	0.07	1.0	356	22.68		
1339	4.32	21.10	0.051	0.05	0	345	22.67		
1342	4.33	21.01	0.051	0.01	0	341	22.64		
1345	4.35	21.32	0.052	0	0	337	22.64		
1348	4.35	21.39	0.053	0	0	335	22.60		
1351	4.35	21.51	0.055	0	0	330	22.57		
1354	4.37	21.67	0.056	0	0	323	22.57		
1357	4.40	21.79	0.059	0	0	313	21.79		
1400	collect MW-40-20220830								

Certified Sample Information:
Time of Sample: 1400
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FUHW2G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 08/30/22 @ 0815

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-24-1
Sample I.D.: MW-24-1-20220831

Project: DiIorio
Personnel: AP, MH

Date: 8/31/22 Time: 0846
Weather: Sun Air Temp.: 72°

WELL DATA:

Casing Diameter: 6 ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 24.28 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 150 ml/min Elapsed Time: 33 mins Volume Pumped: 1.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☑ Teflon® ☐ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 8/31/2022

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	8/31/22
Personnel:	PFP, MH	Well ID:	MW-24-1
Purge/Sample Depth:		Sample ID:	MW-24-1-20220831

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0846	4.72	19.73	0.080	7.45	21.1	326	24.34	150	
0849	4.75	19.75	0.084	7.84	20.9	332	24.34		
0852	4.60	19.58	0	7.12	144	343	24.34		
0855	4.69	20.24	0	7.06	145	342	24.34		
0858	4.66	20.39	0	7.05	145	343	24.34		
0901	4.59	20.72	0	7.00	145	353	24.34		
0904	4.75	20.48	0.064	3.07	22.3	341	24.34		
0907	4.77	20.62	0.067	2.77	21.6	339	24.34		
0910	4.80	20.72	0.066	2.94	19.1	335	24.34		
0913	4.75	20.25	0.062	2.68	3.1	337	24.34		
0916	4.74	20.35	0.061	2.67	2.4	339	24.34		
0919	4.74	20.26	0.062	2.70	2.2	338	24.34		
0921	collect MW-24-1-20220831								
~~0924~~									
~~0927~~									
~~0930~~									

Certified Sample Information:
Time of Sample: 0921
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: X1FUHW26
Serial No. Handheld: KV6JK484
Calibration Date/Time: 8/31/22 0820

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Ramsey, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-24-2-R
Sample I.D.: MW-24-2-R-20220831 (if different from well no.)

Project: ~~BASF Toms River~~ D'Imperio
Personnel: AH, MHM

Date: 8/31/22 Time: 0935
Weather: sun Air Temp.: 72°

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☐ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☐ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 24.68 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☐ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☑ Teflon® ☐ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 mL/min Elapsed Time: 30 mins Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☑ Teflon® ☐ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 8/31/22

Brown AND Caldwell

500 North Franklin Tpk, Ramsey, NJ 07446
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: ~~BASF - Toms River~~ D'IMPENS
Client: ~~BASF~~ BC
Personnel: MHM/PFP
Purge/Sample Depth:

Project Number: ~~156416~~ 157948
Date: 08/31/22
Well ID: MW-24-2-R
Sample ID: MW-24-2-R20220831

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0935	5.89	17.10	0.229	0	11.7	51	24.66	250	
0938	5.92	16.92	0.236	0	10.3	43	24.67		
0941	6.07	17.04	0.255	0	1	1	24.67		
0944	6.08	17.07	0.255	0	0	-1	24.67		
0947	6.15	17.18	0.259	0	0.3	-12	24.67		
0950	6.17	17.24	0.261	0	0.5	-17	24.67		
0953	6.30	16.93	0.268	0	0	-30	24.67		
0956	6.39	16.64	0.277	0	0	-45	24.67		
0959	6.41	16.52	0.280	0	0	-49	24.67		
1002	6.42	16.40	0.282	0	0	-56	24.67		
1005	6.44	16.35	0.284	0	0	-61	24.67		
1008	collect MW-24-2-R-20220831								

Certified Sample Information:
Time of Sample: 1008
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba U-52
Serial No. Unit: XLEUHW7G
Serial No. Handheld: KV6JK484
Calibration Date/Time: 08/31/22 0820

Are low-flow parameters subject to field lab certification? ☐ Yes ☒ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-28-1
Sample I.D.: MW-28-1-20220831

Project: D'Imperio
Personnel: MHM/PFP

Date: 08/31/22 Time: 1039
Weather: Sunny Air Temp.: 72

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 29.73 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 200 mL/min Elapsed Time: 30 min Volume Pumped: 2.0 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: —
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump ☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☐ No ☑ Yes Name: MW-28-1-20220831 (MS/MSD)

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 08/31/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: N Imperio
Client: BC
Personnel: MHM / PFP
Purge/Sample Depth:

Project Number: 157948
Date: 08/31/22
Well ID: MW-28-1
Sample ID: MW-28-1

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1034	4.64	20.23	0.040	6.38	10.6	230	29.73	200	
1042	4.40	21.52	0.043	5.21	5.3	314	29.74		
1045	4.50	22.07	0.043	5.03	4.0	327	29.74		
1048	4.52	22.69	0.044	5.20	2.1	345	29.74		
1051	4.47	23.33	0.039	5.41	1.4	350	29.74		
1054	4.49	23.65	0.038	5.19	1.8	354	29.75		
1057	4.48	23.69	0.039	5.31	0.2	358	29.75		
1100	4.41	23.75	0.039	4.99	11.0	364	29.75		
1103	4.39	23.39	0.041	5.45	0.0	369	29.75		
1106	4.40	23.42	0.041	5.22	0.0	373	29.75		
1109	4.41	23.47	0.040	5.06	0.0	385	29.75		
1112		Collect	MW-28-1-20220831						

Certified Sample Information:
Time of Sample: 1112
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FUHW7G
Serial No. Handheld: KU6JK484
Calibration Date/Time: 08/31/22 0820

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-28-2
Sample I.D.: MW-28-2-20220831 (if different from well no.)

Project: D'Imperio
Personnel: MHM/PFD

Date: 08/31/22 Time: 1128
Weather: Sunny Air Temp.: 72

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 30.33 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: — To be purged: —

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 ml/min Elapsed Time: 30 min Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/31/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/31/22
Personnel:	MHM / PFF	Well ID:	MW-28-2
Purge/Sample Depth:		Sample ID:	MW-28-2-20220831

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1128	6.28	24.43	0.120	0.55	0.0	87	30.37	250	
1131	6.49	25.61	0.131	0.00	12.4	-30	30.33		
1134	6.55	25.52	0.131	0.00	13.7	-43	30.33		
1137	6.57	25.02	0.132	0.00	6.1	-52	30.33		
1140	6.60	24.73	0.132	0.00	2.2	-60	30.33		
1143	6.61	24.32	0.133	0.00	1.2	-63	30.33		
1146	6.62	23.95	0.133	0.00	0.0	-69	30.33		
1149	6.61	23.82	0.135	0.00	0.0	-71	30.33		
1152	6.61	23.73	0.137	0.00	0.0	-72	30.33		
1155	6.61	23.65	0.138	0.00	0.0	-74	30.33		
1158	6.60	23.72	0.136	0.00	0.0	-74	30.33		
1201		Collect MW-28-2-20220831							

Certified Sample Information:
Time of Sample: 1201 Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FUHW7G Serial No. Handheld: KV6JK484
Calibration Date/Time: 08/31/22 0820

Are low-flow parameters subject to field lab certification? ☐ **Yes** ☑ **No (not required for CERCLA sites or sites outside of NJ)**

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-29-2
Sample I.D.: MW-29-2-20220831 (if different from well no.)

Project: D'Imperio
Personnel: MHM/PPP

Date: 08/31/22 Time: 1304
Weather: Sunny Air Temp.: 86

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 29.96 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____ Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 225 mL/min Elapsed Time: 30 min Volume Pumped: 2.25 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump ☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 08/31/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	08/31/22
Personnel:	MHM/PFP	Well ID:	MW-29-2
Purge/Sample Depth:		Sample ID:	MW-29-2-20220831

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1304	5.53	18.83	0.037	1.92	0.0	236	19.98	225	
1307	5.24	17.95	0.037	1.72	0.0	271	19.98		
1310	4.91	17.43	0.036	2.69	54.1	308	19.99		
1313	4.83	17.15	0.036	2.90	58.4	317	19.99		
1316	4.79	17.03	0.036	2.95	41.2	325	20.00		
1319	4.71	16.97	0.036	2.99	26.9	332	20.00		
1322	4.69	16.94	0.036	2.97	21.7	334	20.00		
1325	4.67	16.90	0.036	2.91	18.7	337	20.00		
1328	4.64	16.84	0.036	2.83	14.3	334	20.00		
1331	4.62	16.85	0.036	2.69	10.2	341	20.00		
1334	4.61	16.93	0.036	2.62	8.5	341	20.00		
1337		Collect MW-29-2-20220831							

Certified Sample Information:

Time of Sample: 1337 Analyst Signature:

Instrument Data:

Manufacturer/Model: Horiba-452

Serial No. Unit: X1FNW7G Serial No. Handheld: KVGJK484

Calibration Date/Time: 08/31/22 0820

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-35
Sample I.D.: MW-35-20220801 (if different from well no.)

Project: D'Imperio
Personnel: PFP, MHM

Date: 9/1/22 Time: 0855
Weather: Sun Air Temp.: 73

WELL DATA:

Casing Diameter: 6 ☐ Stainless Steel ☐ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2 ☐ Stainless Steel ☐ Galv. Steel ☐ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 21.32 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☑ Teflon® ☐ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 250 mL/min Elapsed Time: 30 min Volume Pumped: 2.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☑ Teflon® ☐ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☑ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 9/1/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D Imperio	Project Number:	157948
Client:	BL	Date:	8/01/22
Personnel:	PH, MHM	Well ID:	MW-35
Purge/Sample Depth:		Sample ID:	MW-35-20220901

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0855	4.00	14.95	0.035	6.47	11	392	21.34	250	
0858	4.69	14.88	0.035	6.24	6.2	395	21.34		
0901	4.58	15.67	0.035	6.03	0	402	21.34		
0904	4.56	15.72	0.035	6.01	0	403	21.34		
0907	4.55	15.74	0.035	6.00	0	404	21.34		
0910	4.54	15.77	0.035	5.96	0	405	21.34		
0913	4.52	15.86	0.035	5.93	0	406	21.34		
0916	4.40	15.24	0.035	6.06	0	420	21.34		
0919	4.41	15.18	0.035	6.04	0	428	21.34		
0922	4.37	15.14	0.035	5.94	0	427	21.34		
0925	4.36	15.14	0.035	5.94	0	428	21.34		
0928	collect MW-35-20220901								

Certified Sample Information:
Time of Sample: 0928
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Aeridon U-52
Serial No. Unit: X1FU HW76
Serial No. Handheld: KV6SK484
Calibration Date/Time: 9/1/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☐ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-41
Sample I.D.: MW-41-20220901

Project: D'Ambrosio
Personnel: MHM/PFB

Date: 09/01/22 Time: 0946
Weather: Sunny Air Temp.: 73

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 33.04 ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 300 ml/min Elapsed Time: 30 min Volume Pumped: 3.0 gal
Was well Evacuated? ☐ Yes ☐ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☑ No ☐ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: _____ Date: 09/01/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	09/01/22
Personnel:	~~BC~~ MHM / PFF	Well ID:	MW-41
Purge/Sample Depth:		Sample ID:	MW-41-20220901

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
0946	4.14	16.84	0.050	3.08	0.0	434	33.04	300	
0949	4.10	17.28	0.050	6.76	0.0	439	33.05		
0952	4.05	18.02	0.051	3.16	0.0	443	33.05		
0955	4.13	16.92	0.049	3.52	0.0	446	33.05		
0958	4.12	17.42	0.050	3.79	0.0	448	33.05		
1001	4.14	16.89	0.048	3.94	0.0	450	33.06		
1004	4.11	17.38	0.050	3.40	0.0	448	33.06		
1007	4.12	17.21	0.056	3.32	0.0	450	33.06		
1010	4.13	17.10	0.049	3.25	0.0	452	33.06		
1013	4.12	17.05	0.049	3.57	0.0	451	33.06		
1016	4.13	17.02	0.050	3.62	0.0	445	33.06		
1019		Collect MW-41-20220901							

Certified Sample Information:
Time of Sample: 1019
Analyst Signature: [signature]

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FUW7G
Serial No. Handheld: KV65K484
Calibration Date/Time: 09/01/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-2/3
Sample I.D.: MW-43-20220901

Project: D'Imperio
Personnel: MHM/PFP

Date: 09/01/22 Time: 1034
Weather: SUNNY Air Temp.: 73

WELL DATA:

Casing Diameter: 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 25.66 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump ☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____ Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 300 mL/min Elapsed Time: 30 min Volume Pumped: 3.0 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump ☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☐ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☐ No ☑ Yes Name: DUP-20220901
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 09/01/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name: DImperio
Client: BC
Personnel: MHM/DEP
Purge/Sample Depth:

Project Number: 157948
Date: 09/01/22
Well ID: MW-43
Sample ID: MW-43-20220901

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1034	5.80	16.62	0.110	0.42	273	170	26.33	300	
1037	6.07	17.19	0.117	0.00	299	170	26.25		
1040	6.62	17.19	0.116	0.00	288	28	26.19		
1043	6.17	16.74	0.117	0.00	195	17	26.16		
1046	6.10	17.33	0.115	0.00	117	10	26.13		
1049	6.12	17.54	0.117	0.00	112	5	26.11		
1052	6.13	17.77	0.118	0.00	96.2	1	26.16		
1055	6.17	17.89	0.118	0.00	76.3	-1	26.70		
1058	6.13	17.87	0.118	0.00	51.3	-4	26.70		
1101	6.13	17.91	0.118	0.00	46.0	-5	26.70		
1104	6.13	17.85	0.117	0.00	37.5	-7	26.70		
1107		collect		MW-43-20220					

Certified Sample Information:
Time of Sample: 1107
Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-452
Serial No. Unit: XIFNW7G
Serial No. Handheld: KVGJK2184
Calibration Date/Time: 09/01/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-52
Sample I.D.: MW-52-20220901

Project: PIMPUTS
Personnel: PFP, MBM

Date: 9/1/22 Time: 1203
Weather: Sun Air Temp.: 73

WELL DATA:

Casing Diameter: 6 ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: _____
Intake Diameter: 2 ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: _____ ft Bottom of Well: _____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: _____ To be purged: _____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: _____
Tubing/Rope: ☑ Teflon® ☐ Polyethylene ☐ Polypropylene ☐ Other: _____

Pumping Rate: 250 ml/min Elapsed Time: 30 mins Volume Pumped: 2 Gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: _____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: _____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☑ Teflon® ☐ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: _____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: _____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: _____
MS/MSD : ☐ No ☑ Yes Name: _____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: [signature] Date: 9/1/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Imperio	Project Number:	157948
Client:	BC	Date:	9/1/22
Personnel:	PFP, MHM	Well ID:	MW-52
Purge/Sample Depth:		Sample ID:	MW-52-20220901

Actual Time	Certified Parameters pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)	ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
1203	5.04	19.75	0.159	1.25	378	268	19.70	250	
1206	5.00	20.48	0.161	1.38	367	272	19.72		
1209	4.97	17.70	0.169	1.67	323	283	19.72		
1212	4.93	17.19	0.169	0.95	423	281	19.73		
1215	4.93	17.24	0.169	0.92	453	281	19.73		
1218	4.86	18.00	0.167	0.74	253	274	19.73		
1221	4.86	18.06	0.167	0.73	213	275	19.73		
1224	4.85	18.13	0.167	0.65	275	276	19.73		
1227	4.85	18.33	0.169	0.58	133	277	19.73		
1230	4.84	18.35	0.169	0.55	115	278	19.73		
1233	4.85	18.49	0.170	0.45	95	279	19.73		
1236	4.84	18.55	0.170	0.38	80.3	281	19.73		
1239	4.84	18.62	0.170	0.36	78.0	281	19.73		
1242	collect MW-52-20220901								

Certified Sample Information:

Time of Sample: 1242

Analyst Signature: [signature]

Instrument Data:

Manufacturer/Model: Horiba U-52

Serial No. Unit: X1FU HW76

Serial No. Handheld: KVJ K484

Calibration Date/Time: 9/1/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Brown AND Caldwell

Upper Saddle River, NJ Office

LOW-FLOW GROUNDWATER SAMPLING FIELD DATA

Well Number: MW-20-3-R
Sample I.D.: MW-20-3-R-20220901

Project: D'Emmeno
Personnel: MHM/PFP

Date: 09/6/22 Time: 1300
Weather: Sunny Air Temp.: 73

WELL DATA:

Casing Diameter: ~~4"~~ 4" ☐ Stainless Steel ☑ Steel ☐ PVC ☐ Teflon® ☐ Other: ____
Intake Diameter: 2" ☐ Stainless Steel ☐ Galv. Steel ☑ PVC ☐ Teflon® ☐ Open rock
DEPTH TO : Static Water Level: 17.93 ft Bottom of Well: ____ ft
DATUM: ☐ Top of Protective Casing ☑ Top of Well Casing ☐ Other:
CONDITION: Is Well clearly labeled? ☑ Yes ☐ No Is well clean to bottom? ☑ Yes ☐ No
Is Prot. Casing/Surface Mount in Good Cond.? (not bent or corroded) ☑ Yes ☐ No
Does Weep Hole adequately drain well head? ☑ Yes ☐ No
Is Concrete Pad Intact? (not cracked or frost heaved) ☑ Yes ☐ No
Is Padlock Functional? ☑ Yes ☐ No ☐ NA Is Inner Casing Intact? ☑ Yes ☐ No
Is Inner Casing Properly Capped and Vented? ☑ Yes ☐ No
VOLUME OF WATER: Standing in well: ____ To be purged: ____

PURGE DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Centrifugal Pump ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel ☐ PVC ☐ Other: ____
Tubing/Rope: ☐ Teflon® ☑ Polyethylene ☐ Polypropylene ☐ Other: ____

Pumping Rate: 250 ml/min Elapsed Time: 30 mins Volume Pumped: 7.5 gal
Was well Evacuated? ☐ Yes ☑ No Number of Well Volumes Removed: ____
PURGING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned

SAMPLING DATA:

METHOD: ☐ Bailer, Size: ____ ☐ Bladder Pump ☑ 2" Submersible Pump ☐ 4" Submersible Pump
☐ Syringe Sampler ☐ Peristaltic Pump ☐ Inertial Lift Pump ☐ Other: ____

MATERIALS: Pump/Bailer: ☐ Teflon® ☑ Stainless Steel
Tubing/Rope: ☐ Teflon® ☑ Polyethylene

SAMPLING EQUIPMENT: ☐ Dedicated ☐ Prepared Off-Site ☑ Field Cleaned
Metals samples field filtered? ☐ Yes ☑ No Method: ____
APPEARANCE: ☑ Clear ☐ Turbid ☐ Color: ____ ☐ Contains Immiscible Liquid
FIELD DETERMINATIONS: See attached form for field parameter data.

DUP : ☑ No ☐ Yes Name: ____
MS/MSD : ☑ No ☐ Yes Name: ____

I certify that this sample was collected and handled in accordance with applicable regulatory and project protocols.

Signature: ____ Date: 09/6/22

Brown AND Caldwell

2 Park Way, Upper Saddle River, NJ 07458
Phone: (201) 574-4700 Fax: (201) 236-1607

NJ FIELD LAB ID# 02023
LOW-FLOW GROUNDWATER FIELD DATA SHEET

Project Name:	D'Emporio	Project Number:	157948
Client:	BC	Date:	09/01/22
Personnel:	MHM/PFP	Well ID:	MW-20-3-R
Purge/Sample Depth:		Sample ID:	MW-20-3-R-20220901

Actual Time	Certified Parameters					ORP (mV)	DTW (ft)	Pumping Rate (mL/min)	Comments
	pH	Temp (°C)	Cond (mS/cm)	DO (mg/L)	Turbidity (NTU)				
1300	5.38	20.16	0.161	0	216	185	17.95	250	
1303	5.40	20.25	0.161	0	209	181	17.95		
1306	5.45	20.36	0.161	0	124	149	17.97		
1309	5.47	20.24	0.166	0	78	146	17.97		
1312	5.46	20.44	0.172	0	66.5	142	17.97		
1315	5.48	20.35	0.190	0	39.1	119	17.97		
1318	5.50	20.50	0.194	0	35.4	113	17.97		
1321	5.50	20.53	0.197	0	34.3	111	17.97		
1324	5.53	20.55	0.204	0	27.3	101	17.97		
1327	5.54	20.60	0.215	0	19.4	98	17.97		
1330	5.54	20.59	0.214	0	18.3	96	17.97		
1333	Collect MW-20-3-R-20220901								

Certified Sample Information:
Time of Sample: 1333 Analyst Signature:

Instrument Data:
Manufacturer/Model: Horiba-U52
Serial No. Unit: X1FNWXG Serial No. Handheld: KV6JK484
Calibration Date/Time: 09/01/22 0830

Are low-flow parameters subject to field lab certification? ☐ Yes ☑ No (not required for CERCLA sites or sites outside of NJ)

If yes, low-flow data must be accompanied by a completed "Field Calibration Record, Horiba U-52" form or equivalent.

Appendix B: Laboratory Analysis Reports

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-75512-1
Client Project/Site: D'Imperio Property Site

For:
O & M Inc.
450 Montbrook Lane
Knoxville, Tennessee 37919-2705

Attn: Mr. Tom Thomas

Barb Weyandt

Authorized for release by:
3/11/2022 9:28:21 AM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

This report shall not be reproduced except in full, without the written approval of the laboratory.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied, except as otherwise agreed. We disclaim any other warranties, expressed or implied, including a warranty of fitness for particular purpose and warranty of merchantability. In no event shall Eurofins Lancaster Laboratories Environmental, LLC be liable for indirect, special, consequential, or incidental damages including, but not limited to, damages for loss of profit or goodwill regardless of (A) the negligence (either sole or concurrent) of Eurofins Lancaster Laboratories Environmental and (B) whether Eurofins Lancaster Laboratories Environmental has been informed of the possibility of such damages. We accept no legal responsibility for the purposes for which the client uses the test results. Except as otherwise agreed, no purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

Barb Weyandt

Barbara Weyandt
Project Manager
3/11/2022 9:28:21 AM

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Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-75512-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-75512-1

Receipt
The samples were received on 3/9/2022 5:36 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.0°C

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-79-20220307 — Lab Sample ID: 410-75512-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.65	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-80-20220307 — Lab Sample ID: 410-75512-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.91	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-74-20220307 — Lab Sample ID: 410-75512-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.86	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: FB-20220307 — Lab Sample ID: 410-75512-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.5		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-41-20220308 — Lab Sample ID: 410-75512-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	5.2		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-24-1-20220308 — Lab Sample ID: 410-75512-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	34		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-49-20220308 — Lab Sample ID: 410-75512-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	6.1		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-56-20220308 — Lab Sample ID: 410-75512-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloropropane	0.79	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	2.0		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: OBW-62-20220308 — Lab Sample ID: 410-75512-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloropropane	2.3		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	2.3		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.61	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: OBW-63-20220308 — Lab Sample ID: 410-75512-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: FB-20220308 — Lab Sample ID: 410-75512-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.4		1.0	0.30	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-55-20220309 — Lab Sample ID: 410-75512-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.1		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-59-20220309 — Lab Sample ID: 410-75512-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.9		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-28-1-20220309 — Lab Sample ID: 410-75512-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	32		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-28-2-20220309 — Lab Sample ID: 410-75512-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.43	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	1.7		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	1.4		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.42	J	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.5		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-43-20220309 — Lab Sample ID: 410-75512-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	3.6		1.0	0.30	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.69	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: FB-20220309 — Lab Sample ID: 410-75512-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.6		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: TB-20220309 — Lab Sample ID: 410-75512-18

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-79-20220307

Lab Sample ID: 410-75512-1

Date Collected: 03/07/22 11:50
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 01:01	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 01:01	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 01:01	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 01:01	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 01:01	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 01:01	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 01:01	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 01:01	1
Chloroform	**0.65**	**J**	1.0	0.30	ug/L			03/11/22 01:01	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 01:01	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 01:01	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 01:01	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 01:01	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 01:01	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 01:01	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 01:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*03/11/22 01:01*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/11/22 01:01*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/11/22 01:01*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/11/22 01:01*	*1*

Client Sample ID: MW-80-20220307

Lab Sample ID: 410-75512-2

Date Collected: 03/07/22 13:13
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:11	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:11	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:11	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:11	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 02:11	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 02:11	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 02:11	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 02:11	1
Chloroform	**0.91**	**J**	1.0	0.30	ug/L			03/11/22 02:11	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:11	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 02:11	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 02:11	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 02:11	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:11	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:11	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 120*		*03/11/22 02:11*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/11/22 02:11*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 120*		*03/11/22 02:11*	*1*

Client Sample ID: MW-80-20220307

Lab Sample ID: 410-75512-2

Date Collected: 03/07/22 13:13
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/11/22 02:11*	*1*

Client Sample ID: MW-74-20220307

Lab Sample ID: 410-75512-3

Date Collected: 03/07/22 15:33
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:34	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:34	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:34	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:34	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 02:34	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 02:34	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 02:34	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 02:34	1
Chloroform	**0.86**	**J**	1.0	0.30	ug/L			03/11/22 02:34	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:34	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 02:34	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 02:34	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 02:34	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:34	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:34	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 02:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 120*		*03/11/22 02:34*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/11/22 02:34*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 120*		*03/11/22 02:34*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/11/22 02:34*	*1*

Client Sample ID: FB-20220307

Lab Sample ID: 410-75512-4

Date Collected: 03/07/22 16:10
Matrix: Water
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:28	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:28	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:28	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:28	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/10/22 23:28	1
2-Butanone	ND		10	0.50	ug/L			03/10/22 23:28	1
Benzene	ND		1.0	0.30	ug/L			03/10/22 23:28	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/10/22 23:28	1
Chloroform	**2.5**		1.0	0.30	ug/L			03/10/22 23:28	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:28	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/10/22 23:28	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/10/22 23:28	1
Toluene	ND		1.0	0.20	ug/L			03/10/22 23:28	1

Client Sample ID: FB-20220307

Lab Sample ID: 410-75512-4

Date Collected: 03/07/22 16:10

Matrix: Water

Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:28	1
Trichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:28	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/10/22 23:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 120*		*03/10/22 23:28*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/10/22 23:28*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 120*		*03/10/22 23:28*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/10/22 23:28*	*1*

Client Sample ID: MW-41-20220308

Lab Sample ID: 410-75512-5

Date Collected: 03/08/22 10:01

Matrix: Groundwater

Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:57	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:57	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:57	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 02:57	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 02:57	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 02:57	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 02:57	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 02:57	1
Chloroform	**5.2**		1.0	0.30	ug/L			03/11/22 02:57	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:57	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 02:57	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 02:57	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 02:57	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:57	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 02:57	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 02:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 120*		*03/11/22 02:57*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*03/11/22 02:57*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/11/22 02:57*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/11/22 02:57*	*1*

Client Sample ID: MW-24-1-20220308

Lab Sample ID: 410-75512-6

Date Collected: 03/08/22 10:55

Matrix: Groundwater

Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 03:20	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 03:20	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:20	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 03:20	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 03:20	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 03:20	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-24-1-20220308

Lab Sample ID: 410-75512-6

Date Collected: 03/08/22 10:55
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			03/11/22 03:20	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 03:20	1
Chloroform	**34**		1.0	0.30	ug/L			03/11/22 03:20	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:20	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 03:20	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 03:20	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 03:20	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:20	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:20	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 03:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*03/11/22 03:20*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/11/22 03:20*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/11/22 03:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/11/22 03:20*	*1*

Client Sample ID: MW-49-20220308

Lab Sample ID: 410-75512-7

Date Collected: 03/08/22 12:54
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 03:43	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 03:43	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:43	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 03:43	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 03:43	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 03:43	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 03:43	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 03:43	1
Chloroform	**6.1**		1.0	0.30	ug/L			03/11/22 03:43	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:43	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 03:43	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 03:43	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 03:43	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:43	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 03:43	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 03:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 120*		*03/11/22 03:43*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/11/22 03:43*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/11/22 03:43*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/11/22 03:43*	*1*

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-56-20220308

Lab Sample ID: 410-75512-8

Date Collected: 03/08/22 13:51
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:07	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:07	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:07	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:07	1
1,2-Dichloropropane	**0.79**	**J**	1.0	0.30	ug/L			03/11/22 04:07	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 04:07	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 04:07	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 04:07	1
Chloroform	**2.0**		1.0	0.30	ug/L			03/11/22 04:07	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:07	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 04:07	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 04:07	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 04:07	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:07	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:07	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*03/11/22 04:07*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/11/22 04:07*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/11/22 04:07*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/11/22 04:07*	*1*

Client Sample ID: OBW-62-20220308

Lab Sample ID: 410-75512-9

Date Collected: 03/08/22 14:57
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:30	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:30	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:30	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:30	1
1,2-Dichloropropane	**2.3**		1.0	0.30	ug/L			03/11/22 04:30	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 04:30	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 04:30	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 04:30	1
Chloroform	**2.3**		1.0	0.30	ug/L			03/11/22 04:30	1
cis-1,2-Dichloroethene	**0.61**	**J**	1.0	0.30	ug/L			03/11/22 04:30	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 04:30	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 04:30	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 04:30	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:30	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:30	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 04:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 120*		*03/11/22 04:30*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/11/22 04:30*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 120*		*03/11/22 04:30*	*1*

Client Sample ID: OBW-62-20220308

Lab Sample ID: 410-75512-9

Date Collected: 03/08/22 14:57
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/11/22 04:30*	*1*

Client Sample ID: OBW-63-20220308

Lab Sample ID: 410-75512-10

Date Collected: 03/08/22 16:16
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:53	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:53	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:53	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 04:53	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 04:53	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 04:53	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 04:53	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 04:53	1
Chloroform	**1.2**		1.0	0.30	ug/L			03/11/22 04:53	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:53	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 04:53	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 04:53	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 04:53	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:53	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 04:53	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 04:53	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 120*		*03/11/22 04:53*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/11/22 04:53*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/11/22 04:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/11/22 04:53*	*1*

Client Sample ID: FB-20220308

Lab Sample ID: 410-75512-11

Date Collected: 03/08/22 16:35
Matrix: Water
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:52	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:52	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:52	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:52	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/10/22 23:52	1
2-Butanone	ND		10	0.50	ug/L			03/10/22 23:52	1
Benzene	ND		1.0	0.30	ug/L			03/10/22 23:52	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/10/22 23:52	1
Chloroform	**2.4**		1.0	0.30	ug/L			03/10/22 23:52	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:52	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/10/22 23:52	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/10/22 23:52	1
Toluene	ND		1.0	0.20	ug/L			03/10/22 23:52	1

Client Sample ID: FB-20220308

Lab Sample ID: 410-75512-11

Date Collected: 03/08/22 16:35
Matrix: Water
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:52	1
Trichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:52	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/10/22 23:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*03/10/22 23:52*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*03/10/22 23:52*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/10/22 23:52*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/10/22 23:52*	*1*

Client Sample ID: MW-55-20220309

Lab Sample ID: 410-75512-12

Date Collected: 03/09/22 09:10
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 05:16	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 05:16	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:16	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 05:16	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 05:16	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 05:16	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 05:16	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 05:16	1
Chloroform	**1.1**		1.0	0.30	ug/L			03/11/22 05:16	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:16	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 05:16	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 05:16	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 05:16	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:16	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:16	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 05:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*03/11/22 05:16*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/11/22 05:16*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/11/22 05:16*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/11/22 05:16*	*1*

Client Sample ID: MW-59-20220309

Lab Sample ID: 410-75512-13

Date Collected: 03/09/22 10:03
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 05:39	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 05:39	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:39	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 05:39	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 05:39	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 05:39	1

Client Sample ID: MW-59-20220309

Lab Sample ID: 410-75512-13

Date Collected: 03/09/22 10:03

Matrix: Groundwater

Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.30	ug/L			03/11/22 05:39	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 05:39	1
Chloroform	**2.9**		1.0	0.30	ug/L			03/11/22 05:39	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:39	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 05:39	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 05:39	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 05:39	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:39	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 05:39	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 05:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*03/11/22 05:39*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*03/11/22 05:39*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/11/22 05:39*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/11/22 05:39*	*1*

Client Sample ID: MW-28-1-20220309

Lab Sample ID: 410-75512-14

Date Collected: 03/09/22 11:40

Matrix: Groundwater

Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 06:02	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 06:02	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:02	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 06:02	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 06:02	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 06:02	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 06:02	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 06:02	1
Chloroform	**32**		1.0	0.30	ug/L			03/11/22 06:02	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:02	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 06:02	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 06:02	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 06:02	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:02	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:02	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 06:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*03/11/22 06:02*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/11/22 06:02*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/11/22 06:02*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/11/22 06:02*	*1*

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-28-2-20220309

Lab Sample ID: 410-75512-15

Date Collected: 03/09/22 12:23
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 06:25	1
1,1-Dichloroethane	**0.43**	**J**	1.0	0.30	ug/L			03/11/22 06:25	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:25	1
1,2-Dichloroethane	**1.7**		1.0	0.30	ug/L			03/11/22 06:25	1
1,2-Dichloropropane	**1.4**		1.0	0.30	ug/L			03/11/22 06:25	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 06:25	1
Benzene	**0.42**	**J**	1.0	0.30	ug/L			03/11/22 06:25	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 06:25	1
Chloroform	ND		1.0	0.30	ug/L			03/11/22 06:25	1
cis-1,2-Dichloroethene	**3.5**		1.0	0.30	ug/L			03/11/22 06:25	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 06:25	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 06:25	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 06:25	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:25	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:25	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 06:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*03/11/22 06:25*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/11/22 06:25*	*1*
Dibromofluoromethane (Surr)	*90*		*80 - 120*		*03/11/22 06:25*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/11/22 06:25*	*1*

Client Sample ID: MW-43-20220309

Lab Sample ID: 410-75512-16

Date Collected: 03/09/22 13:18
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 06:49	1
1,1-Dichloroethane	**3.6**		1.0	0.30	ug/L			03/11/22 06:49	1
1,1-Dichloroethene	**0.69**	**J**	1.0	0.30	ug/L			03/11/22 06:49	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 06:49	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 06:49	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 06:49	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 06:49	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 06:49	1
Chloroform	ND		1.0	0.30	ug/L			03/11/22 06:49	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:49	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 06:49	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 06:49	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 06:49	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:49	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 06:49	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 06:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*03/11/22 06:49*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/11/22 06:49*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/11/22 06:49*	*1*

Client Sample ID: MW-43-20220309

Lab Sample ID: 410-75512-16

Date Collected: 03/09/22 13:18
Matrix: Groundwater
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/11/22 06:49*	*1*

Client Sample ID: FB-20220309

Lab Sample ID: 410-75512-17

Date Collected: 03/09/22 13:40
Matrix: Water
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 00:15	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 00:15	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:15	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 00:15	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 00:15	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 00:15	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 00:15	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 00:15	1
Chloroform	**2.6**		1.0	0.30	ug/L			03/11/22 00:15	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:15	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 00:15	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 00:15	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 00:15	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:15	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:15	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 00:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 120*		*03/11/22 00:15*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*03/11/22 00:15*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/11/22 00:15*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/11/22 00:15*	*1*

Client Sample ID: TB-20220309

Lab Sample ID: 410-75512-18

Date Collected: 03/09/22 00:01
Matrix: Water
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/11/22 00:38	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 00:38	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:38	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/11/22 00:38	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/11/22 00:38	1
2-Butanone	ND		10	0.50	ug/L			03/11/22 00:38	1
Benzene	ND		1.0	0.30	ug/L			03/11/22 00:38	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/11/22 00:38	1
Chloroform	ND		1.0	0.30	ug/L			03/11/22 00:38	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:38	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/11/22 00:38	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/11/22 00:38	1
Toluene	ND		1.0	0.20	ug/L			03/11/22 00:38	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: TB-20220309

Lab Sample ID: 410-75512-18

Date Collected: 03/09/22 00:01
Matrix: Water
Date Received: 03/09/22 17:36

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:38	1
Trichloroethene	ND		1.0	0.30	ug/L			03/11/22 00:38	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/11/22 00:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 120*		*03/11/22 00:38*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*03/11/22 00:38*	*1*
Dibromofluoromethane (Surr)	*92*		*80 - 120*		*03/11/22 00:38*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*03/11/22 00:38*	*1*

Surrogate Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-75512-1	MW-79-20220307	93	92	92	101
410-75512-1 MS	MW-79-20220307 MS	91	93	93	99
410-75512-1 MSD	MW-79-20220307 MSD	93	93	91	100
410-75512-2	MW-80-20220307	91	93	90	99
410-75512-3	MW-74-20220307	92	94	89	101
410-75512-5	MW-41-20220308	92	95	92	100
410-75512-6	MW-24-1-20220308	95	93	92	100
410-75512-7	MW-49-20220308	91	94	91	100
410-75512-8	MW-56-20220308	95	92	91	99
410-75512-9	OBW-62-20220308	94	94	90	102
410-75512-10	OBW-63-20220308	92	94	91	100
410-75512-12	MW-55-20220309	93	92	91	100
410-75512-13	MW-59-20220309	93	91	92	99
410-75512-14	MW-28-1-20220309	93	92	92	99
410-75512-15	MW-28-2-20220309	93	92	90	99
410-75512-16	MW-43-20220309	96	92	91	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-75512-4	FB-20220307	92	93	90	100
410-75512-11	FB-20220308	95	95	91	101
410-75512-17	FB-20220309	94	94	91	100
410-75512-18	TB-20220309	92	92	92	101
LCS 410-232382/4	Lab Control Sample	92	92	93	100
MB 410-232382/6	Method Blank	94	93	91	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

QC Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-232382/6
Matrix: Water
Analysis Batch: 232382

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:05	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:05	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:05	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/10/22 23:05	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/10/22 23:05	1
2-Butanone	ND		10	0.50	ug/L			03/10/22 23:05	1
Benzene	ND		1.0	0.30	ug/L			03/10/22 23:05	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/10/22 23:05	1
Chloroform	ND		1.0	0.30	ug/L			03/10/22 23:05	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:05	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/10/22 23:05	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/10/22 23:05	1
Toluene	ND		1.0	0.20	ug/L			03/10/22 23:05	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:05	1
Trichloroethene	ND		1.0	0.30	ug/L			03/10/22 23:05	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/10/22 23:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 120*		*03/10/22 23:05*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*03/10/22 23:05*	*1*
Dibromofluoromethane (Surr)	*91*		*80 - 120*		*03/10/22 23:05*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/10/22 23:05*	*1*

Lab Sample ID: LCS 410-232382/4
Matrix: Water
Analysis Batch: 232382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	16.0		ug/L		80	67 - 126
1,1-Dichloroethane	20.0	16.1		ug/L		80	80 - 120
1,1-Dichloroethene	20.0	17.1		ug/L		85	80 - 131
1,2-Dichloroethane	20.0	17.1		ug/L		86	73 - 124
1,2-Dichloropropane	20.0	16.6		ug/L		83	80 - 120
2-Butanone	250	212		ug/L		85	59 - 135
Benzene	20.0	16.4		ug/L		82	80 - 120
Chlorobenzene	20.0	17.7		ug/L		88	80 - 120
Chloroform	20.0	17.0		ug/L		85	80 - 120
cis-1,2-Dichloroethene	20.0	17.0		ug/L		85	80 - 125
Ethylbenzene	20.0	17.3		ug/L		87	80 - 120
Methylene Chloride	20.0	17.7		ug/L		88	80 - 120
Toluene	20.0	17.1		ug/L		86	80 - 120
trans-1,2-Dichloroethene	20.0	16.6		ug/L		83	80 - 126
Trichloroethene	20.0	16.2		ug/L		81	80 - 120
Tetrachloroethene	20.0	17.4		ug/L		87	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*92*		*80 - 120*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-232382/4
Matrix: Water
Analysis Batch: 232382

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Dibromofluoromethane (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: 410-75512-1 MS
Matrix: Groundwater
Analysis Batch: 232382

Client Sample ID: MW-79-20220307 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		20.0	19.1		ug/L		95	67 - 126
1,1-Dichloroethane	ND		20.0	17.9		ug/L		90	80 - 120
1,1-Dichloroethene	ND		20.0	20.6		ug/L		103	80 - 131
1,2-Dichloroethane	ND		20.0	17.5		ug/L		87	73 - 124
1,2-Dichloropropane	ND		20.0	18.3		ug/L		92	80 - 120
2-Butanone	ND		250	199		ug/L		80	59 - 135
Benzene	ND		20.0	18.2		ug/L		91	80 - 120
Chlorobenzene	ND		20.0	18.9		ug/L		95	80 - 120
Chloroform	0.65	J	20.0	19.0		ug/L		92	80 - 120
cis-1,2-Dichloroethene	ND		20.0	18.7		ug/L		93	80 - 125
Ethylbenzene	ND		20.0	19.5		ug/L		97	80 - 120
Methylene Chloride	ND		20.0	19.0		ug/L		95	80 - 120
Toluene	ND		20.0	18.8		ug/L		94	80 - 120
trans-1,2-Dichloroethene	ND		20.0	19.0		ug/L		95	80 - 126
Trichloroethene	ND		20.0	17.9		ug/L		89	80 - 120
Tetrachloroethene	ND		20.0	20.3		ug/L		101	80 - 120

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*91*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: 410-75512-1 MSD
Matrix: Groundwater
Analysis Batch: 232382

Client Sample ID: MW-79-20220307 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		20.0	18.7		ug/L		94	67 - 126	2	30
1,1-Dichloroethane	ND		20.0	18.0		ug/L		90	80 - 120	1	30
1,1-Dichloroethene	ND		20.0	20.2		ug/L		101	80 - 131	2	30
1,2-Dichloroethane	ND		20.0	18.1		ug/L		90	73 - 124	3	30
1,2-Dichloropropane	ND		20.0	18.8		ug/L		94	80 - 120	3	30
2-Butanone	ND		250	204		ug/L		82	59 - 135	3	30
Benzene	ND		20.0	18.6		ug/L		93	80 - 120	3	30
Chlorobenzene	ND		20.0	19.5		ug/L		98	80 - 120	3	30
Chloroform	0.65	J	20.0	19.4		ug/L		94	80 - 120	2	30
cis-1,2-Dichloroethene	ND		20.0	19.1		ug/L		95	80 - 125	2	30
Ethylbenzene	ND		20.0	20.0		ug/L		100	80 - 120	3	30
Methylene Chloride	ND		20.0	18.6		ug/L		93	80 - 120	2	30

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-75512-1 MSD
Matrix: Groundwater
Analysis Batch: 232382

Client Sample ID: MW-79-20220307 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Toluene	ND		20.0	19.6		ug/L		98	80 - 120	4	30
trans-1,2-Dichloroethene	ND		20.0	19.1		ug/L		96	80 - 126	0	30
Trichloroethene	ND		20.0	18.8		ug/L		94	80 - 120	5	30
Tetrachloroethene	ND		20.0	20.8		ug/L		104	80 - 120	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*91*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

QC Association Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

GC/MS VOA

Analysis Batch: 232382

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-75512-1	MW-79-20220307	Total/NA	Groundwater	8260D	
410-75512-2	MW-80-20220307	Total/NA	Groundwater	8260D	
410-75512-3	MW-74-20220307	Total/NA	Groundwater	8260D	
410-75512-4	FB-20220307	Total/NA	Water	8260D	
410-75512-5	MW-41-20220308	Total/NA	Groundwater	8260D	
410-75512-6	MW-24-1-20220308	Total/NA	Groundwater	8260D	
410-75512-7	MW-49-20220308	Total/NA	Groundwater	8260D	
410-75512-8	MW-56-20220308	Total/NA	Groundwater	8260D	
410-75512-9	OBW-62-20220308	Total/NA	Groundwater	8260D	
410-75512-10	OBW-63-20220308	Total/NA	Groundwater	8260D	
410-75512-11	FB-20220308	Total/NA	Water	8260D	
410-75512-12	MW-55-20220309	Total/NA	Groundwater	8260D	
410-75512-13	MW-59-20220309	Total/NA	Groundwater	8260D	
410-75512-14	MW-28-1-20220309	Total/NA	Groundwater	8260D	
410-75512-15	MW-28-2-20220309	Total/NA	Groundwater	8260D	
410-75512-16	MW-43-20220309	Total/NA	Groundwater	8260D	
410-75512-17	FB-20220309	Total/NA	Water	8260D	
410-75512-18	TB-20220309	Total/NA	Water	8260D	
MB 410-232382/6	Method Blank	Total/NA	Water	8260D	
LCS 410-232382/4	Lab Control Sample	Total/NA	Water	8260D	
410-75512-1 MS	MW-79-20220307 MS	Total/NA	Groundwater	8260D	
410-75512-1 MSD	MW-79-20220307 MSD	Total/NA	Groundwater	8260D	

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-79-20220307 — Lab Sample ID: 410-75512-1

Date Collected: 03/07/22 11:50 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 01:01	K4WN	ELLE

Client Sample ID: MW-80-20220307 — Lab Sample ID: 410-75512-2

Date Collected: 03/07/22 13:13 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 02:11	K4WN	ELLE

Client Sample ID: MW-74-20220307 — Lab Sample ID: 410-75512-3

Date Collected: 03/07/22 15:33 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 02:34	K4WN	ELLE

Client Sample ID: FB-20220307 — Lab Sample ID: 410-75512-4

Date Collected: 03/07/22 16:10 — **Matrix: Water**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/10/22 23:28	K4WN	ELLE

Client Sample ID: MW-41-20220308 — Lab Sample ID: 410-75512-5

Date Collected: 03/08/22 10:01 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 02:57	K4WN	ELLE

Client Sample ID: MW-24-1-20220308 — Lab Sample ID: 410-75512-6

Date Collected: 03/08/22 10:55 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 03:20	K4WN	ELLE

Client Sample ID: MW-49-20220308 — Lab Sample ID: 410-75512-7

Date Collected: 03/08/22 12:54 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 03:43	K4WN	ELLE

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-56-20220308 — Lab Sample ID: 410-75512-8

Date Collected: 03/08/22 13:51 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 04:07	K4WN	ELLE

Client Sample ID: OBW-62-20220308 — Lab Sample ID: 410-75512-9

Date Collected: 03/08/22 14:57 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 04:30	K4WN	ELLE

Client Sample ID: OBW-63-20220308 — Lab Sample ID: 410-75512-10

Date Collected: 03/08/22 16:16 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 04:53	K4WN	ELLE

Client Sample ID: FB-20220308 — Lab Sample ID: 410-75512-11

Date Collected: 03/08/22 16:35 — **Matrix: Water**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/10/22 23:52	K4WN	ELLE

Client Sample ID: MW-55-20220309 — Lab Sample ID: 410-75512-12

Date Collected: 03/09/22 09:10 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 05:16	K4WN	ELLE

Client Sample ID: MW-59-20220309 — Lab Sample ID: 410-75512-13

Date Collected: 03/09/22 10:03 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 05:39	K4WN	ELLE

Client Sample ID: MW-28-1-20220309 — Lab Sample ID: 410-75512-14

Date Collected: 03/09/22 11:40 — **Matrix: Groundwater**
Date Received: 03/09/22 17:36

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 06:02	K4WN	ELLE

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Client Sample ID: MW-28-2-20220309 — Lab Sample ID: 410-75512-15

Date Collected: 03/09/22 12:23
Date Received: 03/09/22 17:36
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 06:25	K4WN	ELLE

Client Sample ID: MW-43-20220309 — Lab Sample ID: 410-75512-16

Date Collected: 03/09/22 13:18
Date Received: 03/09/22 17:36
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 06:49	K4WN	ELLE

Client Sample ID: FB-20220309 — Lab Sample ID: 410-75512-17

Date Collected: 03/09/22 13:40
Date Received: 03/09/22 17:36
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 00:15	K4WN	ELLE

Client Sample ID: TB-20220309 — Lab Sample ID: 410-75512-18

Date Collected: 03/09/22 00:01
Date Received: 03/09/22 17:36
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	232382	03/11/22 00:38	K4WN	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	06-30-22

Method Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75512-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-75512-1	MW-79-20220307	Groundwater	03/07/22 11:50	03/09/22 17:36
410-75512-2	MW-80-20220307	Groundwater	03/07/22 13:13	03/09/22 17:36
410-75512-3	MW-74-20220307	Groundwater	03/07/22 15:33	03/09/22 17:36
410-75512-4	FB-20220307	Water	03/07/22 16:10	03/09/22 17:36
410-75512-5	MW-41-20220308	Groundwater	03/08/22 10:01	03/09/22 17:36
410-75512-6	MW-24-1-20220308	Groundwater	03/08/22 10:55	03/09/22 17:36
410-75512-7	MW-49-20220308	Groundwater	03/08/22 12:54	03/09/22 17:36
410-75512-8	MW-56-20220308	Groundwater	03/08/22 13:51	03/09/22 17:36
410-75512-9	OBW-62-20220308	Groundwater	03/08/22 14:57	03/09/22 17:36
410-75512-10	OBW-63-20220308	Groundwater	03/08/22 16:16	03/09/22 17:36
410-75512-11	FB-20220308	Water	03/08/22 16:35	03/09/22 17:36
410-75512-12	MW-55-20220309	Groundwater	03/09/22 09:10	03/09/22 17:36
410-75512-13	MW-59-20220309	Groundwater	03/09/22 10:03	03/09/22 17:36
410-75512-14	MW-28-1-20220309	Groundwater	03/09/22 11:40	03/09/22 17:36
410-75512-15	MW-28-2-20220309	Groundwater	03/09/22 12:23	03/09/22 17:36
410-75512-16	MW-43-20220309	Groundwater	03/09/22 13:18	03/09/22 17:36
410-75512-17	FB-20220309	Water	03/09/22 13:40	03/09/22 17:36
410-75512-18	TB-20220309	Water	03/09/22 00:01	03/09/22 17:36

410-75512 Chain of Custody

:nv, LLC

Chain of Custody Record

eurofins Environment Testing America

	Sampler: MHM / RK	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-50845-10389.1
Client Contact: Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@eurofinset.com	State of Origin:	Page: Page 1 of 3
Company: O & M Inc	PWSID:			Job #:
Address: 450 Montbrook Lane	Due Date Requested:			
City: Knoxville	TAT Requested (days):			
State, Zip: TN, 37919-2705	Compliance Project: Δ Yes Δ No			
Phone: 609-868-0447(Tel)	PO #: 382A220112			
Email: cmeyn@brwncald.com	WO #:			
Project Name: D'Imperio Property Site	Project #: 41002088			
Site: New Jersey	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - (MOD) Monthly VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
MW-79-20220307 (MS/MSD)	03/07/22	1150	G	GW	N	Y	X	9	Perform (MS/MSD)
MW-80-20220307	↓	1313	G	GW	N	N	X	3	
MW-74-20220307	↓	1533	G	GW	N	N	X	3	
FB-20220307	↓	1610	G	DI	N	N	X	3	
MW-41-20220308	03/08/22	1001	G	GW	N	N	X	3	
MW-24-1-20220308	↓	1055	G	GW	N	N	X	3	
MW-49-20220308	↓	1254	G	GW	N	N	X	3	
MW-56-20220308	↓	1351	G	GW	N	N	X	3	
OBW-62-20220308	↓	1457	G	GW	N	N	X	3	
OBW-63-20220308	↓	1616	G	GW	N	N	X	3	
FB-20220308	↓	1635	G	DI	W	N	X	3	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify): BC Equis

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
MAD MAroney / [signature]	03/09/22 1430		[signature]	3/9/22 1428	
[signature]	3.9.22 1236				
			[signature]	3/9/22 1736	ELLET

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: not present

Cooler Temperature(s) °C and Other Remarks: 1.0°C

Ver 06/08/2021

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: MHM / RK	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-50845-10389.3
Client Contact: Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@eurofinset.com	State of Origin:	Page: Page 3 of 3
Company: O & M Inc.	PWSID:			Job #:
Address: 450 Montbrook Lane	Due Date Requested:			
City: Knoxville	TAT Requested (days): Standard			
State, Zip: TN, 37919-2705	Compliance Project: Δ Yes Δ No			
Phone: 609-868-0447(Tel)	PO #: 382A220112			
Email: cmeyn@brwncald.com	WO #:			
Project Name: D'Imperio Property Site	Project #: 41002088			
Site: New Jersey	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Y or N)	8260D - (MOD) Monthly VOCs	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	A	X	
MW-55-20220309	03/09/22	0910	G	GW	N	N	X	3	
MW-59-20220309	03/09/22	1003	G	GW	N	N	X	3	
MW-28-1-20220309	03/09/22	1140	G	GW	N	N	X	3	
MW-28-2-20220309	03/09/22	1223	G	GW	N	N	X	3	
MW-43-20220309	03/09/22	1318	G	GW	N	N	X	3	
FB-20220309	03/09/22	1340	G	DI	N	N	X	3	
TB-20220309	03/09/22	0001	G	DI	N	N	X	2	

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC EQuIS

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
MAX (Morone)	03/09/22 1430		[illegible]	3/9/22 1422	
[illegible]	3/9/22 1736				
			[illegible]	3/9/22 1736	ECLET

Custody Seals Intact: Δ Yes Δ No
Custody Seal No.: not present
Cooler Temperature(s) °C and Other Remarks: 1.0°C

Ver. 06/08/2021

3/11/2022

Login Sample Receipt Checklist

Client: O & M Inc.

Job Number: 410-75512-1

Login Number: 75512
List Number: 1
Creator: Renner, Melissa

List Source: Eurofins Lancaster Laboratories Env, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present.
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-75949-1
Client Project/Site: D'Imperio Property Site

For:
O & M Inc.
450 Montbrook Lane
Knoxville, Tennessee 37919-2705

Attn: Mr. Tom Thomas

Barb Weyandt

Authorized for release by:
3/16/2022 1:12:56 PM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@eurofinset.com

LINKS

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Barb Weyandt

Barbara Weyandt
Project Manager
3/16/2022 1:12:57 PM

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Definitions/Glossary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-75949-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

Narrative

Job Narrative
410-75949-1

Receipt
The samples were received on 3/11/2022 6:59 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.7°C

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 410-233939 recovered outside acceptance criteria, low biased, for 1,1-Dichloroethene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Client Sample ID: MW-73-20220310 — Lab Sample ID: 410-75949-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.39	J cn	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-70-20220310 — Lab Sample ID: 410-75949-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.50	J cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	2.9	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	3.2	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	2.6	cn	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.5	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	2.8	cn	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-71-20220310 — Lab Sample ID: 410-75949-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.46	J cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	1.5	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	5.3	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	4.3	cn	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.0	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	0.89	J cn	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-69-20220310 — Lab Sample ID: 410-75949-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.73	J cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	3.7	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	6.1	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	3.2	cn	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.4	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	2.7	cn	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-24-2-R-20220310 — Lab Sample ID: 410-75949-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.1	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	0.66	J cn	1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	1.2	cn	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	4.2	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Ethylbenzene	8.5	cn	1.0	0.40	ug/L	1		8260D	Total/NA
Toluene	0.82	J cn	1.0	0.20	ug/L	1		8260D	Total/NA

Client Sample ID: FB-20220310 — Lab Sample ID: 410-75949-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.3	cn	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: TB-20220310 — Lab Sample ID: 410-75949-7

No Detections.

Client Sample ID: DUP-20220310 — Lab Sample ID: 410-75949-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.69	J cn	1.0	0.30	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Client Sample ID: DUP-20220310 (Continued)

Lab Sample ID: 410-75949-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	3.9	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	6.4	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	3.3	cn	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.7	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	2.7	cn	1.0	0.30	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Client Sample ID: MW-73-20220310

Lab Sample ID: 410-75949-1

Date Collected: 03/10/22 09:26
Date Received: 03/11/22 18:59

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
1,1-Dichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
1,2-Dichloropropane	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
2-Butanone	ND	cn	10	0.50	ug/L			03/16/22 01:41	1
Benzene	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
Chloroform	**0.39**	**J cn**	1.0	0.30	ug/L			03/16/22 01:41	1
cis-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
Ethylbenzene	ND	cn	1.0	0.40	ug/L			03/16/22 01:41	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
Toluene	ND	cn	1.0	0.20	ug/L			03/16/22 01:41	1
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
Trichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 01:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*	*cn*	*80 - 120*		*03/16/22 01:41*	*1*
4-Bromofluorobenzene (Surr)	*95*	*cn*	*80 - 120*		*03/16/22 01:41*	*1*
Dibromofluoromethane (Surr)	*103*	*cn*	*80 - 120*		*03/16/22 01:41*	*1*
Toluene-d8 (Surr)	*99*	*cn*	*80 - 120*		*03/16/22 01:41*	*1*

Client Sample ID: MW-70-20220310

Lab Sample ID: 410-75949-2

Date Collected: 03/10/22 10:45
Date Received: 03/11/22 18:59

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 02:03	1
1,1-Dichloroethane	**0.50**	**J cn**	1.0	0.30	ug/L			03/16/22 02:03	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:03	1
1,2-Dichloroethane	**2.9**	**cn**	1.0	0.30	ug/L			03/16/22 02:03	1
1,2-Dichloropropane	**3.2**	**cn**	1.0	0.30	ug/L			03/16/22 02:03	1
2-Butanone	ND	cn	10	0.50	ug/L			03/16/22 02:03	1
Benzene	ND	cn	1.0	0.30	ug/L			03/16/22 02:03	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/16/22 02:03	1
Chloroform	**2.6**	**cn**	1.0	0.30	ug/L			03/16/22 02:03	1
cis-1,2-Dichloroethene	**1.5**	**cn**	1.0	0.30	ug/L			03/16/22 02:03	1
Ethylbenzene	ND	cn	1.0	0.40	ug/L			03/16/22 02:03	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/16/22 02:03	1
Toluene	ND	cn	1.0	0.20	ug/L			03/16/22 02:03	1
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:03	1
Trichloroethene	**2.8**	**cn**	1.0	0.30	ug/L			03/16/22 02:03	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*	*cn*	*80 - 120*		*03/16/22 02:03*	*1*
4-Bromofluorobenzene (Surr)	*95*	*cn*	*80 - 120*		*03/16/22 02:03*	*1*
Dibromofluoromethane (Surr)	*103*	*cn*	*80 - 120*		*03/16/22 02:03*	*1*

Client Sample ID: MW-70-20220310

Lab Sample ID: 410-75949-2

Date Collected: 03/10/22 10:45
Matrix: Ground Water
Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*100*	*cn*	*80 - 120*		*03/16/22 02:03*	*1*

Client Sample ID: MW-71-20220310

Lab Sample ID: 410-75949-3

Date Collected: 03/10/22 11:43
Matrix: Ground Water
Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 02:25	1
1,1-Dichloroethane	**0.46**	**J cn**	1.0	0.30	ug/L			03/16/22 02:25	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:25	1
1,2-Dichloroethane	**1.5**	**cn**	1.0	0.30	ug/L			03/16/22 02:25	1
1,2-Dichloropropane	**5.3**	**cn**	1.0	0.30	ug/L			03/16/22 02:25	1
2-Butanone	ND	cn	10	0.50	ug/L			03/16/22 02:25	1
Benzene	ND	cn	1.0	0.30	ug/L			03/16/22 02:25	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/16/22 02:25	1
Chloroform	**4.3**	**cn**	1.0	0.30	ug/L			03/16/22 02:25	1
cis-1,2-Dichloroethene	**2.0**	**cn**	1.0	0.30	ug/L			03/16/22 02:25	1
Ethylbenzene	ND	cn	1.0	0.40	ug/L			03/16/22 02:25	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/16/22 02:25	1
Toluene	ND	cn	1.0	0.20	ug/L			03/16/22 02:25	1
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:25	1
Trichloroethene	**0.89**	**J cn**	1.0	0.30	ug/L			03/16/22 02:25	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*108*	*cn*	*80 - 120*		*03/16/22 02:25*	*1*
4-Bromofluorobenzene (Surr)	*96*	*cn*	*80 - 120*		*03/16/22 02:25*	*1*
Dibromofluoromethane (Surr)	*104*	*cn*	*80 - 120*		*03/16/22 02:25*	*1*
Toluene-d8 (Surr)	*99*	*cn*	*80 - 120*		*03/16/22 02:25*	*1*

Client Sample ID: MW-69-20220310

Lab Sample ID: 410-75949-4

Date Collected: 03/10/22 13:46
Matrix: Ground Water
Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 02:47	1
1,1-Dichloroethane	**0.73**	**J cn**	1.0	0.30	ug/L			03/16/22 02:47	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:47	1
1,2-Dichloroethane	**3.7**	**cn**	1.0	0.30	ug/L			03/16/22 02:47	1
1,2-Dichloropropane	**6.1**	**cn**	1.0	0.30	ug/L			03/16/22 02:47	1
2-Butanone	ND	cn	10	0.50	ug/L			03/16/22 02:47	1
Benzene	ND	cn	1.0	0.30	ug/L			03/16/22 02:47	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/16/22 02:47	1
Chloroform	**3.2**	**cn**	1.0	0.30	ug/L			03/16/22 02:47	1
cis-1,2-Dichloroethene	**3.4**	**cn**	1.0	0.30	ug/L			03/16/22 02:47	1
Ethylbenzene	ND	cn	1.0	0.40	ug/L			03/16/22 02:47	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/16/22 02:47	1
Toluene	ND	cn	1.0	0.20	ug/L			03/16/22 02:47	1

Client Sample ID: MW-69-20220310

Lab Sample ID: 410-75949-4

Date Collected: 03/10/22 13:46

Matrix: Ground Water

Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:47	1
Trichloroethene	**2.7**	**cn**	1.0	0.30	ug/L			03/16/22 02:47	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*	*cn*	*80 - 120*		*03/16/22 02:47*	*1*
4-Bromofluorobenzene (Surr)	*96*	*cn*	*80 - 120*		*03/16/22 02:47*	*1*
Dibromofluoromethane (Surr)	*102*	*cn*	*80 - 120*		*03/16/22 02:47*	*1*
Toluene-d8 (Surr)	*100*	*cn*	*80 - 120*		*03/16/22 02:47*	*1*

Client Sample ID: MW-24-2-R-20220310

Lab Sample ID: 410-75949-5

Date Collected: 03/10/22 14:45

Matrix: Ground Water

Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
1,1-Dichloroethane	**1.1**	**cn**	1.0	0.30	ug/L			03/16/22 03:09	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
1,2-Dichloroethane	**0.66**	**J cn**	1.0	0.30	ug/L			03/16/22 03:09	1
1,2-Dichloropropane	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
2-Butanone	ND	cn	10	0.50	ug/L			03/16/22 03:09	1
Benzene	**1.2**	**cn**	1.0	0.30	ug/L			03/16/22 03:09	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
Chloroform	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
cis-1,2-Dichloroethene	**4.2**	**cn**	1.0	0.30	ug/L			03/16/22 03:09	1
Ethylbenzene	**8.5**	**cn**	1.0	0.40	ug/L			03/16/22 03:09	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
Toluene	**0.82**	**J cn**	1.0	0.20	ug/L			03/16/22 03:09	1
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
Trichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*	*cn*	*80 - 120*		*03/16/22 03:09*	*1*
4-Bromofluorobenzene (Surr)	*99*	*cn*	*80 - 120*		*03/16/22 03:09*	*1*
Dibromofluoromethane (Surr)	*101*	*cn*	*80 - 120*		*03/16/22 03:09*	*1*
Toluene-d8 (Surr)	*99*	*cn*	*80 - 120*		*03/16/22 03:09*	*1*

Client Sample ID: FB-20220310

Lab Sample ID: 410-75949-6

Date Collected: 03/10/22 15:00

Matrix: Water

Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
1,1-Dichloroethane	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
1,2-Dichloropropane	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
2-Butanone	ND	cn	10	0.50	ug/L			03/15/22 21:38	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Client Sample ID: FB-20220310

Lab Sample ID: 410-75949-6

Date Collected: 03/10/22 15:00
Matrix: Water
Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
Chloroform	**2.3**	**cn**	1.0	0.30	ug/L			03/15/22 21:38	1
cis-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
Ethylbenzene	ND	cn	1.0	0.40	ug/L			03/15/22 21:38	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
Toluene	ND	cn	1.0	0.20	ug/L			03/15/22 21:38	1
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
Trichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 21:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*	*cn*	*80 - 120*		*03/15/22 21:38*	*1*
4-Bromofluorobenzene (Surr)	*96*	*cn*	*80 - 120*		*03/15/22 21:38*	*1*
Dibromofluoromethane (Surr)	*103*	*cn*	*80 - 120*		*03/15/22 21:38*	*1*
Toluene-d8 (Surr)	*100*	*cn*	*80 - 120*		*03/15/22 21:38*	*1*

Client Sample ID: TB-20220310

Lab Sample ID: 410-75949-7

Date Collected: 03/04/22 00:01
Matrix: Water
Date Received: 03/11/22 18:59

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
1,1-Dichloroethane	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
1,2-Dichloropropane	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
2-Butanone	ND	cn	10	0.50	ug/L			03/15/22 22:00	1
Benzene	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
Chloroform	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
cis-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
Ethylbenzene	ND	cn	1.0	0.40	ug/L			03/15/22 22:00	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
Toluene	ND	cn	1.0	0.20	ug/L			03/15/22 22:00	1
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
Trichloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/15/22 22:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*	*cn*	*80 - 120*		*03/15/22 22:00*	*1*
4-Bromofluorobenzene (Surr)	*98*	*cn*	*80 - 120*		*03/15/22 22:00*	*1*
Dibromofluoromethane (Surr)	*102*	*cn*	*80 - 120*		*03/15/22 22:00*	*1*
Toluene-d8 (Surr)	*100*	*cn*	*80 - 120*		*03/15/22 22:00*	*1*

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Client Sample ID: DUP-20220310

Date Collected: 03/10/22 00:00
Date Received: 03/11/22 18:59

Lab Sample ID: 410-75949-8

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	cn	1.0	0.30	ug/L			03/16/22 03:31	1
1,1-Dichloroethane	**0.69**	**J cn**	1.0	0.30	ug/L			03/16/22 03:31	1
1,1-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 03:31	1
1,2-Dichloroethane	**3.9**	**cn**	1.0	0.30	ug/L			03/16/22 03:31	1
1,2-Dichloropropane	**6.4**	**cn**	1.0	0.30	ug/L			03/16/22 03:31	1
2-Butanone	ND	cn	10	0.50	ug/L			03/16/22 03:31	1
Benzene	ND	cn	1.0	0.30	ug/L			03/16/22 03:31	1
Chlorobenzene	ND	cn	1.0	0.30	ug/L			03/16/22 03:31	1
Chloroform	**3.3**	**cn**	1.0	0.30	ug/L			03/16/22 03:31	1
cis-1,2-Dichloroethene	**3.7**	**cn**	1.0	0.30	ug/L			03/16/22 03:31	1
Ethylbenzene	ND	cn	1.0	0.40	ug/L			03/16/22 03:31	1
Methylene Chloride	ND	cn	1.0	0.30	ug/L			03/16/22 03:31	1
Toluene	ND	cn	1.0	0.20	ug/L			03/16/22 03:31	1
trans-1,2-Dichloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 03:31	1
Trichloroethene	**2.7**	**cn**	1.0	0.30	ug/L			03/16/22 03:31	1
Tetrachloroethene	ND	cn	1.0	0.30	ug/L			03/16/22 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*	*cn*	*80 - 120*		*03/16/22 03:31*	*1*
4-Bromofluorobenzene (Surr)	*96*	*cn*	*80 - 120*		*03/16/22 03:31*	*1*
Dibromofluoromethane (Surr)	*104*	*cn*	*80 - 120*		*03/16/22 03:31*	*1*
Toluene-d8 (Surr)	*100*	*cn*	*80 - 120*		*03/16/22 03:31*	*1*

Surrogate Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-75949-1	MW-73-20220310	106 cn	95 cn	103 cn	99 cn
410-75949-2	MW-70-20220310	107 cn	95 cn	103 cn	100 cn
410-75949-3	MW-71-20220310	108 cn	96 cn	104 cn	99 cn
410-75949-4	MW-69-20220310	106 cn	96 cn	102 cn	100 cn
410-75949-5	MW-24-2-R-20220310	106 cn	99 cn	101 cn	99 cn
410-75949-8	DUP-20220310	108 cn	96 cn	104 cn	100 cn

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-75949-6	FB-20220310	106 cn	96 cn	103 cn	100 cn
410-75949-7	TB-20220310	107 cn	98 cn	102 cn	100 cn
LCS 410-233939/4	Lab Control Sample	105	99	102	101
LCSD 410-233939/5	Lab Control Sample Dup	106	99	102	101
MB 410-233939/7	Method Blank	107	97	103	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-233939/7
Matrix: Water
Analysis Batch: 233939

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			03/15/22 20:32	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			03/15/22 20:32	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			03/15/22 20:32	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			03/15/22 20:32	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			03/15/22 20:32	1
2-Butanone	ND		10	0.50	ug/L			03/15/22 20:32	1
Benzene	ND		1.0	0.30	ug/L			03/15/22 20:32	1
Chlorobenzene	ND		1.0	0.30	ug/L			03/15/22 20:32	1
Chloroform	ND		1.0	0.30	ug/L			03/15/22 20:32	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/15/22 20:32	1
Ethylbenzene	ND		1.0	0.40	ug/L			03/15/22 20:32	1
Methylene Chloride	ND		1.0	0.30	ug/L			03/15/22 20:32	1
Toluene	ND		1.0	0.20	ug/L			03/15/22 20:32	1
trans-1,2-Dichloroethene	ND		1.0	0.30	ug/L			03/15/22 20:32	1
Trichloroethene	ND		1.0	0.30	ug/L			03/15/22 20:32	1
Tetrachloroethene	ND		1.0	0.30	ug/L			03/15/22 20:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*03/15/22 20:32*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*03/15/22 20:32*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*03/15/22 20:32*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*03/15/22 20:32*	*1*

Lab Sample ID: LCS 410-233939/4
Matrix: Water
Analysis Batch: 233939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	16.1		ug/L		80	67 - 126
1,1-Dichloroethane	20.0	17.6		ug/L		88	80 - 120
1,1-Dichloroethene	20.0	16.8		ug/L		84	80 - 131
1,2-Dichloroethane	20.0	18.0		ug/L		90	73 - 124
1,2-Dichloropropane	20.0	18.6		ug/L		93	80 - 120
2-Butanone	250	290		ug/L		116	59 - 135
Benzene	20.0	17.6		ug/L		88	80 - 120
Chlorobenzene	20.0	17.2		ug/L		86	80 - 120
Chloroform	20.0	17.1		ug/L		86	80 - 120
cis-1,2-Dichloroethene	20.0	17.6		ug/L		88	80 - 125
Ethylbenzene	20.0	16.7		ug/L		84	80 - 120
Methylene Chloride	20.0	17.8		ug/L		89	80 - 120
Toluene	20.0	16.7		ug/L		84	80 - 120
trans-1,2-Dichloroethene	20.0	16.5		ug/L		83	80 - 126
Trichloroethene	20.0	17.2		ug/L		86	80 - 120
Tetrachloroethene	20.0	17.2		ug/L		86	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-233939/4
Matrix: Water
Analysis Batch: 233939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: LCSD 410-233939/5
Matrix: Water
Analysis Batch: 233939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	16.8		ug/L		84	67 - 126	4	30
1,1-Dichloroethane			20.0	18.0		ug/L		90	80 - 120	2	30
1,1-Dichloroethene			20.0	17.3		ug/L		87	80 - 131	3	30
1,2-Dichloroethane			20.0	18.5		ug/L		92	73 - 124	3	30
1,2-Dichloropropane			20.0	18.7		ug/L		94	80 - 120	1	30
2-Butanone			250	293		ug/L		117	59 - 135	1	30
Benzene			20.0	17.8		ug/L		89	80 - 120	1	30
Chlorobenzene			20.0	17.4		ug/L		87	80 - 120	1	30
Chloroform			20.0	17.4		ug/L		87	80 - 120	2	30
cis-1,2-Dichloroethene			20.0	17.7		ug/L		89	80 - 125	1	30
Ethylbenzene			20.0	16.9		ug/L		84	80 - 120	1	30
Methylene Chloride			20.0	17.7		ug/L		88	80 - 120	1	30
Toluene			20.0	16.8		ug/L		84	80 - 120	0	30
trans-1,2-Dichloroethene			20.0	16.9		ug/L		84	80 - 126	2	30
Trichloroethene			20.0	17.0		ug/L		85	80 - 120	1	30
Tetrachloroethene			20.0	17.7		ug/L		88	80 - 120	3	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*102*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

QC Association Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

GC/MS VOA

Analysis Batch: 233939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-75949-1	MW-73-20220310	Total/NA	Ground Water	8260D	
410-75949-2	MW-70-20220310	Total/NA	Ground Water	8260D	
410-75949-3	MW-71-20220310	Total/NA	Ground Water	8260D	
410-75949-4	MW-69-20220310	Total/NA	Ground Water	8260D	
410-75949-5	MW-24-2-R-20220310	Total/NA	Ground Water	8260D	
410-75949-6	FB-20220310	Total/NA	Water	8260D	
410-75949-7	TB-20220310	Total/NA	Water	8260D	
410-75949-8	DUP-20220310	Total/NA	Ground Water	8260D	
MB 410-233939/7	Method Blank	Total/NA	Water	8260D	
LCS 410-233939/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-233939/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Client Sample ID: MW-73-20220310 — Lab Sample ID: 410-75949-1

Date Collected: 03/10/22 09:26 — **Matrix: Ground Water**
Date Received: 03/11/22 18:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/16/22 01:41	K4WN	ELLE

Client Sample ID: MW-70-20220310 — Lab Sample ID: 410-75949-2

Date Collected: 03/10/22 10:45 — **Matrix: Ground Water**
Date Received: 03/11/22 18:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/16/22 02:03	K4WN	ELLE

Client Sample ID: MW-71-20220310 — Lab Sample ID: 410-75949-3

Date Collected: 03/10/22 11:43 — **Matrix: Ground Water**
Date Received: 03/11/22 18:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/16/22 02:25	K4WN	ELLE

Client Sample ID: MW-69-20220310 — Lab Sample ID: 410-75949-4

Date Collected: 03/10/22 13:46 — **Matrix: Ground Water**
Date Received: 03/11/22 18:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/16/22 02:47	K4WN	ELLE

Client Sample ID: MW-24-2-R-20220310 — Lab Sample ID: 410-75949-5

Date Collected: 03/10/22 14:45 — **Matrix: Ground Water**
Date Received: 03/11/22 18:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/16/22 03:09	K4WN	ELLE

Client Sample ID: FB-20220310 — Lab Sample ID: 410-75949-6

Date Collected: 03/10/22 15:00 — **Matrix: Water**
Date Received: 03/11/22 18:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/15/22 21:38	K4WN	ELLE

Client Sample ID: TB-20220310 — Lab Sample ID: 410-75949-7

Date Collected: 03/04/22 00:01 — **Matrix: Water**
Date Received: 03/11/22 18:59

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/15/22 22:00	K4WN	ELLE

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Client Sample ID: DUP-20220310

Date Collected: 03/10/22 00:00
Date Received: 03/11/22 18:59

Lab Sample ID: 410-75949-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260D		1	233939	03/16/22 03:31	K4WN	ELLE

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Laboratory: Eurofins Lancaster Laboratories Env, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	06-30-22

Method Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Env, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-75949-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-75949-1	MW-73-20220310	Ground Water	03/10/22 09:26	03/11/22 18:59
410-75949-2	MW-70-20220310	Ground Water	03/10/22 10:45	03/11/22 18:59
410-75949-3	MW-71-20220310	Ground Water	03/10/22 11:43	03/11/22 18:59
410-75949-4	MW-69-20220310	Ground Water	03/10/22 13:46	03/11/22 18:59
410-75949-5	MW-24-2-R-20220310	Ground Water	03/10/22 14:45	03/11/22 18:59
410-75949-6	FB-20220310	Water	03/10/22 15:00	03/11/22 18:59
410-75949-7	TB-20220310	Water	03/04/22 00:01	03/11/22 18:59
410-75949-8	DUP-20220310	Ground Water	03/10/22 00:00	03/11/22 18:59

Eurofins Lancaster Laboratories Env, LLC
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

eurofins Environment Testing America

410-75949 Chain of Custody

Client Information	Sampler:	Lab PM: Weyandt, Barbara A	C No:)-50845-10389 2
Client Contact: Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@eurofinset.com	State of Origin:	Page: Page 2 of 3
Company: O & M Inc.	PWSID:		Job #:
Address: 450 Montbrook Lane	Due Date Requested:		
City: Knoxville	TAT Requested (days): Standard		
State, Zip: TN, 37919-2705	Compliance Project: Δ Yes Δ No		
Phone: 609-868-0447(Tel)	PO #: 382A220112		
Email: cmeyn@brwncald.com	WO #:		
Project Name: D'Imperio Property Site	Project #: 41002088		
Site: New Jersey	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform	8260D - (MOD) Monthly VOCs	Total Number of Containers	Special Instructions/Note:
			Preservation Code:				A		
MW-73-20220310	03/10/22	0926	G	GW	N	N	X	3	
MW-70-20220310	03/10/22	1045	G	GW	N	N	X	3	
MW-71-20220310	03/10/22	1143	G	GW	N	N	X	3	
MW-69-20220310	03/10/22	1346	G	GW	N	N	X	3	
MW-24-2-R-20220310	03/10/22	1445	G	GW	N	N	X	3	
FB-20220310	03/10/22	1500	G	DI	N	N	X	3	
TB-20220310	03/04/22	0001	G	DI	N	N	X	2	
DUP-20220310	03/10/22	9999	G	GW	N	N	X	3	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC EQWS

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
MAX MA[illegible]	3/11/22 16:25		[signature]	3/11/22 16:25	ELLE
[signature]	3/11/22 19:00	ELLE			
			[signature]	3-11-22 1859	ELLE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.7

Ver 06/08/2021

MR

3/16/2022 MR

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-95557-1
Client Project/Site: D'Imperio Property

For:
Brown and Caldwell
500 N. Franklin Turnpike
Suite 306
Ramsey, New Jersey 07446

Attn: Mr. Charles Meyn

Barb Weyandt

Authorized for release by:
9/7/2022 3:09:25 PM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@et.eurofinsus.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Barb Weyandt

Barbara Weyandt
Project Manager
9/7/2022 3:09:25 PM

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Definitions/Glossary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Job ID: 410-95557-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-95557-1

Receipt
The samples were received on 8/24/2022 7:22 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.2°C and 4.7°C

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Client Sample ID: MW-70-20220824 — Lab Sample ID: 410-95557-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.39	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	1.5		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	2.3		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	2.2		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.3		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	2.1		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	2.3		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-72-20220824 — Lab Sample ID: 410-95557-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.4		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	0.42	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.88		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-69-20220824 — Lab Sample ID: 410-95557-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.63	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	2.0		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	5.2		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	4.1		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.1		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	1.5		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	3.9		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-68-20220824 — Lab Sample ID: 410-95557-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloropropane	0.72	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	4.9		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.57		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-66-20220824 — Lab Sample ID: 410-95557-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.1		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: DUP-20220824 — Lab Sample ID: 410-95557-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.3		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.86		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: FB-20220824 — Lab Sample ID: 410-95557-7

No Detections.

Client Sample ID: TB-20220824 — Lab Sample ID: 410-95557-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Client Sample ID: MW-70-20220824

Lab Sample ID: 410-95557-1

Date Collected: 08/24/22 10:29
Date Received: 08/24/22 19:22

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/01/22 22:43	1
1,1-Dichloroethane	**0.39**	**J**	1.0	0.30	ug/L			09/01/22 22:43	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 22:43	1
1,2-Dichloroethane	**1.5**		1.0	0.30	ug/L			09/01/22 22:43	1
1,2-Dichloropropane	**2.3**		1.0	0.30	ug/L			09/01/22 22:43	1
Benzene	ND		1.0	0.30	ug/L			09/01/22 22:43	1
Chloroform	**2.2**		1.0	0.30	ug/L			09/01/22 22:43	1
cis-1,2-Dichloroethene	**1.3**		1.0	0.30	ug/L			09/01/22 22:43	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/01/22 22:43	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/01/22 22:43	1
Toluene	ND		1.0	0.20	ug/L			09/01/22 22:43	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/01/22 22:43	1
Trichloroethene	**2.1**		1.0	0.30	ug/L			09/01/22 22:43	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/01/22 22:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*09/01/22 22:43*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/01/22 22:43*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/01/22 22:43*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/01/22 22:43*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.3**		0.31	0.10	ug/L		08/30/22 15:50	08/31/22 10:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*66*		*10 - 110*	*08/30/22 15:50*	*08/31/22 10:02*	*1*
Fluoranthene-d10 (Surr)	*81*		*47 - 128*	*08/30/22 15:50*	*08/31/22 10:02*	*1*
1-Methylnaphthalene-d10 (Surr)	*70*		*36 - 111*	*08/30/22 15:50*	*08/31/22 10:02*	*1*

Client Sample ID: MW-72-20220824

Lab Sample ID: 410-95557-2

Date Collected: 08/24/22 11:33
Date Received: 08/24/22 19:22

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/01/22 23:03	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 23:03	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 23:03	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 23:03	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/01/22 23:03	1
Benzene	ND		1.0	0.30	ug/L			09/01/22 23:03	1
Chloroform	**3.4**		1.0	0.30	ug/L			09/01/22 23:03	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 23:03	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/01/22 23:03	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/01/22 23:03	1
Toluene	ND		1.0	0.20	ug/L			09/01/22 23:03	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/01/22 23:03	1
Trichloroethene	**0.42**	**J**	1.0	0.30	ug/L			09/01/22 23:03	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/01/22 23:03	1

Client Sample ID: MW-72-20220824

Lab Sample ID: 410-95557-2
Date Collected: 08/24/22 11:33
Matrix: Groundwater
Date Received: 08/24/22 19:22

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		09/01/22 23:03	1
4-Bromofluorobenzene (Surr)	93		80 - 120		09/01/22 23:03	1
Dibromofluoromethane (Surr)	97		80 - 120		09/01/22 23:03	1
Toluene-d8 (Surr)	92		80 - 120		09/01/22 23:03	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.88**		0.30	0.10	ug/L		08/30/22 15:50	08/31/22 10:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	82		10 - 110	08/30/22 15:50	08/31/22 10:24	1
Fluoranthene-d10 (Surr)	85		47 - 128	08/30/22 15:50	08/31/22 10:24	1
1-Methylnaphthalene-d10 (Surr)	74		36 - 111	08/30/22 15:50	08/31/22 10:24	1

Client Sample ID: MW-69-20220824

Lab Sample ID: 410-95557-3
Date Collected: 08/24/22 13:11
Matrix: Groundwater
Date Received: 08/24/22 19:22

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/01/22 23:22	1
1,1-Dichloroethane	**0.63**	**J**	1.0	0.30	ug/L			09/01/22 23:22	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 23:22	1
1,2-Dichloroethane	**2.0**		1.0	0.30	ug/L			09/01/22 23:22	1
1,2-Dichloropropane	**5.2**		1.0	0.30	ug/L			09/01/22 23:22	1
Benzene	ND		1.0	0.30	ug/L			09/01/22 23:22	1
Chloroform	**4.1**		1.0	0.30	ug/L			09/01/22 23:22	1
cis-1,2-Dichloroethene	**3.1**		1.0	0.30	ug/L			09/01/22 23:22	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/01/22 23:22	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/01/22 23:22	1
Toluene	ND		1.0	0.20	ug/L			09/01/22 23:22	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/01/22 23:22	1
Trichloroethene	**1.5**		1.0	0.30	ug/L			09/01/22 23:22	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/01/22 23:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/01/22 23:22	1
4-Bromofluorobenzene (Surr)	92		80 - 120		09/01/22 23:22	1
Dibromofluoromethane (Surr)	97		80 - 120		09/01/22 23:22	1
Toluene-d8 (Surr)	95		80 - 120		09/01/22 23:22	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.9**		0.31	0.10	ug/L		08/30/22 15:50	08/31/22 10:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	86		10 - 110	08/30/22 15:50	08/31/22 10:46	1
Fluoranthene-d10 (Surr)	83		47 - 128	08/30/22 15:50	08/31/22 10:46	1
1-Methylnaphthalene-d10 (Surr)	75		36 - 111	08/30/22 15:50	08/31/22 10:46	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Client Sample ID: MW-68-20220824

Lab Sample ID: 410-95557-4

Date Collected: 08/24/22 14:12
Date Received: 08/24/22 19:22

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/01/22 23:42	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 23:42	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 23:42	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 23:42	1
1,2-Dichloropropane	**0.72**	**J**	1.0	0.30	ug/L			09/01/22 23:42	1
Benzene	ND		1.0	0.30	ug/L			09/01/22 23:42	1
Chloroform	**4.9**		1.0	0.30	ug/L			09/01/22 23:42	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 23:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/01/22 23:42	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/01/22 23:42	1
Toluene	ND		1.0	0.20	ug/L			09/01/22 23:42	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/01/22 23:42	1
Trichloroethene	ND		1.0	0.30	ug/L			09/01/22 23:42	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/01/22 23:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*09/01/22 23:42*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*09/01/22 23:42*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*09/01/22 23:42*	*1*
Toluene-d8 (Surr)	*91*		*80 - 120*		*09/01/22 23:42*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.57**		0.31	0.10	ug/L		08/30/22 15:50	08/31/22 11:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*81*		*10 - 110*	*08/30/22 15:50*	*08/31/22 11:07*	*1*
Fluoranthene-d10 (Surr)	*78*		*47 - 128*	*08/30/22 15:50*	*08/31/22 11:07*	*1*
1-Methylnaphthalene-d10 (Surr)	*77*		*36 - 111*	*08/30/22 15:50*	*08/31/22 11:07*	*1*

Client Sample ID: MW-66-20220824

Lab Sample ID: 410-95557-5

Date Collected: 08/24/22 15:02
Date Received: 08/24/22 19:22

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 00:01	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 00:01	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 00:01	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 00:01	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 00:01	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 00:01	1
Chloroform	**3.1**		1.0	0.30	ug/L			09/02/22 00:01	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 00:01	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 00:01	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 00:01	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 00:01	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 00:01	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 00:01	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 00:01	1

Client Sample ID: MW-66-20220824

Lab Sample ID: 410-95557-5

Date Collected: 08/24/22 15:02
Date Received: 08/24/22 19:22

Matrix: Groundwater

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*09/02/22 00:01*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/02/22 00:01*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/02/22 00:01*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/02/22 00:01*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.32	0.11	ug/L		08/30/22 15:50	08/31/22 11:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*71*		*10 - 110*	*08/30/22 15:50*	*08/31/22 11:29*	*1*
Fluoranthene-d10 (Surr)	*77*		*47 - 128*	*08/30/22 15:50*	*08/31/22 11:29*	*1*
1-Methylnaphthalene-d10 (Surr)	*52*		*36 - 111*	*08/30/22 15:50*	*08/31/22 11:29*	*1*

Client Sample ID: DUP-20220824

Lab Sample ID: 410-95557-6

Date Collected: 08/24/22 00:00
Date Received: 08/24/22 19:22

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 00:21	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 00:21	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 00:21	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 00:21	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 00:21	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 00:21	1
Chloroform	**3.3**		1.0	0.30	ug/L			09/02/22 00:21	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 00:21	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 00:21	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 00:21	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 00:21	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 00:21	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 00:21	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 00:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*09/02/22 00:21*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/02/22 00:21*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 120*		*09/02/22 00:21*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/02/22 00:21*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.86**		0.31	0.10	ug/L		08/30/22 15:50	08/31/22 11:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*86*		*10 - 110*	*08/30/22 15:50*	*08/31/22 11:50*	*1*
Fluoranthene-d10 (Surr)	*83*		*47 - 128*	*08/30/22 15:50*	*08/31/22 11:50*	*1*
1-Methylnaphthalene-d10 (Surr)	*67*		*36 - 111*	*08/30/22 15:50*	*08/31/22 11:50*	*1*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Client Sample ID: FB-20220824

Lab Sample ID: 410-95557-7

Date Collected: 08/24/22 15:30
Matrix: Water
Date Received: 08/24/22 19:22

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/01/22 21:04	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 21:04	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 21:04	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 21:04	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/01/22 21:04	1
Benzene	ND		1.0	0.30	ug/L			09/01/22 21:04	1
Chloroform	ND		1.0	0.30	ug/L			09/01/22 21:04	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 21:04	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/01/22 21:04	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/01/22 21:04	1
Toluene	ND		1.0	0.20	ug/L			09/01/22 21:04	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/01/22 21:04	1
Trichloroethene	ND		1.0	0.30	ug/L			09/01/22 21:04	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/01/22 21:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*09/01/22 21:04*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/01/22 21:04*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*09/01/22 21:04*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/01/22 21:04*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		08/30/22 15:50	08/31/22 12:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*80*		*10 - 110*	*08/30/22 15:50*	*08/31/22 12:12*	*1*
Fluoranthene-d10 (Surr)	*78*		*47 - 128*	*08/30/22 15:50*	*08/31/22 12:12*	*1*
1-Methylnaphthalene-d10 (Surr)	*62*		*36 - 111*	*08/30/22 15:50*	*08/31/22 12:12*	*1*

Client Sample ID: TB-20220824

Lab Sample ID: 410-95557-8

Date Collected: 08/24/22 00:00
Matrix: Water
Date Received: 08/24/22 19:22

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/01/22 21:24	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 21:24	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 21:24	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 21:24	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/01/22 21:24	1
Benzene	ND		1.0	0.30	ug/L			09/01/22 21:24	1
Chloroform	ND		1.0	0.30	ug/L			09/01/22 21:24	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 21:24	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/01/22 21:24	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/01/22 21:24	1
Toluene	ND		1.0	0.20	ug/L			09/01/22 21:24	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/01/22 21:24	1
Trichloroethene	ND		1.0	0.30	ug/L			09/01/22 21:24	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/01/22 21:24	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Client Sample ID: TB-20220824

Date Collected: 08/24/22 00:00
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95557-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		09/01/22 21:24	1
4-Bromofluorobenzene (Surr)	92		80 - 120		09/01/22 21:24	1
Dibromofluoromethane (Surr)	99		80 - 120		09/01/22 21:24	1
Toluene-d8 (Surr)	93		80 - 120		09/01/22 21:24	1

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-95557-1	MW-70-20220824	98	91	96	92
410-95557-2	MW-72-20220824	97	93	97	92
410-95557-3	MW-69-20220824	102	92	97	95
410-95557-4	MW-68-20220824	99	93	101	91
410-95557-5	MW-66-20220824	97	90	96	92
410-95557-6	DUP-20220824	103	91	93	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-95557-7	FB-20220824	95	92	95	92
410-95557-8	TB-20220824	99	92	99	93
LCS 410-292176/4	Lab Control Sample	99	93	93	97
MB 410-292176/6	Method Blank	103	92	96	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BAPd12	FLN10	MNPd10
Lab Sample ID	Client Sample ID	(10-110)	(47-128)	(36-111)
410-95557-1	MW-70-20220824	66	81	70
410-95557-2	MW-72-20220824	82	85	74
410-95557-3	MW-69-20220824	86	83	75
410-95557-4	MW-68-20220824	81	78	77
410-95557-5	MW-66-20220824	71	77	52
410-95557-6	DUP-20220824	86	83	67

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	**Client Sample ID**	**BAPd12 (10-110)**	**FLN10 (47-128)**	**MNPd10 (36-111)**
410-95557-7	FB-20220824	80	78	62
LCS 410-291198/2-A	Lab Control Sample	92	81	73
MB 410-291198/1-A	Method Blank	88	78	76

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

QC Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-292176/6
Matrix: Water
Analysis Batch: 292176

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/01/22 20:45	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 20:45	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 20:45	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/01/22 20:45	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/01/22 20:45	1
Benzene	ND		1.0	0.30	ug/L			09/01/22 20:45	1
Chloroform	ND		1.0	0.30	ug/L			09/01/22 20:45	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/01/22 20:45	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/01/22 20:45	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/01/22 20:45	1
Toluene	ND		1.0	0.20	ug/L			09/01/22 20:45	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/01/22 20:45	1
Trichloroethene	ND		1.0	0.30	ug/L			09/01/22 20:45	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/01/22 20:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*09/01/22 20:45*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/01/22 20:45*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/01/22 20:45*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/01/22 20:45*	*1*

Lab Sample ID: LCS 410-292176/4
Matrix: Water
Analysis Batch: 292176

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	17.9		ug/L		90	67 - 126
1,1-Dichloroethane	20.0	18.8		ug/L		94	80 - 120
1,1-Dichloroethene	20.0	19.6		ug/L		98	80 - 131
1,2-Dichloroethane	20.0	16.4		ug/L		82	73 - 124
1,2-Dichloropropane	20.0	19.1		ug/L		95	80 - 120
Benzene	20.0	19.5		ug/L		98	80 - 120
Chloroform	20.0	18.1		ug/L		91	80 - 120
cis-1,2-Dichloroethene	20.0	19.7		ug/L		99	80 - 125
Ethylbenzene	20.0	18.9		ug/L		95	80 - 120
Tetrachloroethene	20.0	19.4		ug/L		97	80 - 120
Toluene	20.0	19.0		ug/L		95	80 - 120
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	80 - 126
Trichloroethene	20.0	18.6		ug/L		93	80 - 120
Vinyl chloride	20.0	20.7		ug/L		104	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*93*		*80 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

QC Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-291198/1-A
Matrix: Water
Analysis Batch: 291329

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 291198

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		08/30/22 15:50	08/31/22 03:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*88*		*10 - 110*	*08/30/22 15:50*	*08/31/22 03:53*	*1*
Fluoranthene-d10 (Surr)	*78*		*47 - 128*	*08/30/22 15:50*	*08/31/22 03:53*	*1*
1-Methylnaphthalene-d10 (Surr)	*76*		*36 - 111*	*08/30/22 15:50*	*08/31/22 03:53*	*1*

Lab Sample ID: LCS 410-291198/2-A
Matrix: Water
Analysis Batch: 291329

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 291198

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			1.00	0.412		ug/L		41	23 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*92*		*10 - 110*
Fluoranthene-d10 (Surr)	*81*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*73*		*36 - 111*

QC Association Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

GC/MS VOA

Analysis Batch: 292176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95557-1	MW-70-20220824	Total/NA	Groundwater	8260D	
410-95557-2	MW-72-20220824	Total/NA	Groundwater	8260D	
410-95557-3	MW-69-20220824	Total/NA	Groundwater	8260D	
410-95557-4	MW-68-20220824	Total/NA	Groundwater	8260D	
410-95557-5	MW-66-20220824	Total/NA	Groundwater	8260D	
410-95557-6	DUP-20220824	Total/NA	Groundwater	8260D	
410-95557-7	FB-20220824	Total/NA	Water	8260D	
410-95557-8	TB-20220824	Total/NA	Water	8260D	
MB 410-292176/6	Method Blank	Total/NA	Water	8260D	
LCS 410-292176/4	Lab Control Sample	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 291198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95557-1	MW-70-20220824	Total/NA	Groundwater	3510C	
410-95557-2	MW-72-20220824	Total/NA	Groundwater	3510C	
410-95557-3	MW-69-20220824	Total/NA	Groundwater	3510C	
410-95557-4	MW-68-20220824	Total/NA	Groundwater	3510C	
410-95557-5	MW-66-20220824	Total/NA	Groundwater	3510C	
410-95557-6	DUP-20220824	Total/NA	Groundwater	3510C	
410-95557-7	FB-20220824	Total/NA	Water	3510C	
MB 410-291198/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-291198/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 291329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95557-1	MW-70-20220824	Total/NA	Groundwater	8270E SIM	291198
410-95557-2	MW-72-20220824	Total/NA	Groundwater	8270E SIM	291198
410-95557-3	MW-69-20220824	Total/NA	Groundwater	8270E SIM	291198
410-95557-4	MW-68-20220824	Total/NA	Groundwater	8270E SIM	291198
410-95557-5	MW-66-20220824	Total/NA	Groundwater	8270E SIM	291198
410-95557-6	DUP-20220824	Total/NA	Groundwater	8270E SIM	291198
410-95557-7	FB-20220824	Total/NA	Water	8270E SIM	291198
MB 410-291198/1-A	Method Blank	Total/NA	Water	8270E SIM	291198
LCS 410-291198/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	291198

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Client Sample ID: MW-70-20220824
Date Collected: 08/24/22 10:29
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95557-1
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/01/22 22:43
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 10:02

Client Sample ID: MW-72-20220824
Date Collected: 08/24/22 11:33
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95557-2
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/01/22 23:03
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 10:24

Client Sample ID: MW-69-20220824
Date Collected: 08/24/22 13:11
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95557-3
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/01/22 23:22
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 10:46

Client Sample ID: MW-68-20220824
Date Collected: 08/24/22 14:12
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95557-4
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/01/22 23:42
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 11:07

Client Sample ID: MW-66-20220824
Date Collected: 08/24/22 15:02
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95557-5
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/02/22 00:01
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 11:29

Client Sample ID: DUP-20220824
Date Collected: 08/24/22 00:00
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95557-6
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/02/22 00:21

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Client Sample ID: DUP-20220824

Lab Sample ID: 410-95557-6
Date Collected: 08/24/22 00:00
Matrix: Groundwater
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 11:50

Client Sample ID: FB-20220824

Lab Sample ID: 410-95557-7
Date Collected: 08/24/22 15:30
Matrix: Water
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/01/22 21:04
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 12:12

Client Sample ID: TB-20220824

Lab Sample ID: 410-95557-8
Date Collected: 08/24/22 00:00
Matrix: Water
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292176	K4WN	ELLE	09/01/22 21:24

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	06-30-23

Method Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95557-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-95557-1	MW-70-20220824	Groundwater	08/24/22 10:29	08/24/22 19:22
410-95557-2	MW-72-20220824	Groundwater	08/24/22 11:33	08/24/22 19:22
410-95557-3	MW-69-20220824	Groundwater	08/24/22 13:11	08/24/22 19:22
410-95557-4	MW-68-20220824	Groundwater	08/24/22 14:12	08/24/22 19:22
410-95557-5	MW-66-20220824	Groundwater	08/24/22 15:02	08/24/22 19:22
410-95557-6	DUP-20220824	Groundwater	08/24/22 00:00	08/24/22 19:22
410-95557-7	FB-20220824	Water	08/24/22 15:30	08/24/22 19:22
410-95557-8	TB-20220824	Water	08/24/22 00:00	08/24/22 19:22

410-95557 Chain of Custody

vironme

Chain of Custody Record

eurofins Environment Testing America

	Sampler:	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-33363-10388.2
Client Contact: Mr. Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@et.eurofinsus.com	State of Origin:	Page: Page 2 of 7
Company: Brown and Caldwell	PWSID:			Job #:
Address: 500 N. Franklin Turnpike Suite 306	Due Date Requested:			
City: Ramsey	TAT Requested (days): Stunard			
State, Zip: NJ, 07446	Compliance Project: Δ Yes Δ No			
Phone: 201-574-4706(Tel)	PO #: Purchase Order Requested			
Email: cmeyn@brwncald.com	WO #:			
Project Name: D'Imperio Property	Project #: 41000706			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	8260D - VOCs	8270E_SIM - 1,4-Dioxane	Special Instructions/Note:
			Preservation Code:		A	N	
MW-70-20220824	08/24/22	1029	G	GW	X	X	
MW-72-20220824		1133			X	X	
MW-69-20220824		1311			X	X	
MW-68-20220824		1412			X	X	
MW-66-20220824		1502			X	X	
DUP-20220824		9999			X	X	
FB-20220824		1530		DI	X	X	
TB-20220824	08/24/22	LAB		DI	X	/	ok No 1,4-Dioxane

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC Equis

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Max Maroney [signature]	08/24/22 1540	BC	Pierre	8/24/22 1540	
Pierre	8/24/22 1838				
			[signature]	8/24/22 1922	[signature]

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.7, 4.2

Ver: 06/08/2021

9/7/2022

Login Sample Receipt Checklist

Client: Brown and Caldwell

Job Number: 410-95557-1

Login Number: 95557
List Number: 1
Creator: Leakway, Christian

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-95559-1
Client Project/Site: D'Imperio Property

For:
Brown and Caldwell
500 N. Franklin Turnpike
Suite 306
Ramsey, New Jersey 07446

Attn: Mr. Charles Meyn

Barb Weyandt

Authorized for release by:
8/31/2022 5:19:01 PM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Barb Weyandt

Barbara Weyandt
Project Manager
8/31/2022 5:19:01 PM

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Definitions/Glossary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Job ID: 410-95559-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-95559-1

Receipt
The samples were received on 8/24/2022 7:12 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.2º C and 4.7º C.

Receipt Exceptions
A trip blank was received in the cooler/package, but not entered with this job. The Trip blank logged in and reported with job number 410-95557-1.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 410-290918 recovered outside acceptance criteria, low biased, for Vinyl chloride. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: MW-80-20220822 — Lab Sample ID: 410-95559-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.0		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-79-20220822 — Lab Sample ID: 410-95559-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.6		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-76-20220822 — Lab Sample ID: 410-95559-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	0.38	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.38		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: FB-20220822 — Lab Sample ID: 410-95559-4

No Detections.

Client Sample ID: MW-77-20220823 — Lab Sample ID: 410-95559-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	4.9		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-78-20220823 — Lab Sample ID: 410-95559-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.74	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.59		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-75-20220823 — Lab Sample ID: 410-95559-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.90	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-74-20220823 — Lab Sample ID: 410-95559-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.86	J	1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-71-20220823 — Lab Sample ID: 410-95559-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	4.9		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	5.3		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	0.54	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	4.5		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-73-20220823 — Lab Sample ID: 410-95559-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	0.11	J	0.31	0.10	ug/L	1		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: FB-20220823

Lab Sample ID: 410-95559-11

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: MW-80-20220822

Lab Sample ID: 410-95559-1

Date Collected: 08/22/22 12:07
Date Received: 08/24/22 19:12

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 16:50	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 16:50	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 16:50	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 16:50	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 16:50	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 16:50	1
Chloroform	**1.0**		1.0	0.30	ug/L			08/30/22 16:50	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 16:50	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 16:50	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 16:50	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 16:50	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 16:50	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 16:50	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 16:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*08/30/22 16:50*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*08/30/22 16:50*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*08/30/22 16:50*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/30/22 16:50*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		08/26/22 15:38	08/30/22 03:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*72*		*10 - 110*	*08/26/22 15:38*	*08/30/22 03:44*	*1*
Fluoranthene-d10 (Surr)	*83*		*47 - 128*	*08/26/22 15:38*	*08/30/22 03:44*	*1*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*08/26/22 15:38*	*08/30/22 03:44*	*1*

Client Sample ID: MW-79-20220822

Lab Sample ID: 410-95559-2

Date Collected: 08/22/22 13:38
Date Received: 08/24/22 19:12

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:10	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:10	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:10	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:10	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 17:10	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 17:10	1
Chloroform	**1.6**		1.0	0.30	ug/L			08/30/22 17:10	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:10	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 17:10	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 17:10	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 17:10	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 17:10	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:10	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 17:10	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: MW-79-20220822

Lab Sample ID: 410-95559-2

Date Collected: 08/22/22 13:38
Date Received: 08/24/22 19:12

Matrix: Ground Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*08/30/22 17:10*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*08/30/22 17:10*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*08/30/22 17:10*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/30/22 17:10*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.32	0.11	ug/L		08/26/22 15:38	08/30/22 07:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*69*		*10 - 110*	*08/26/22 15:38*	*08/30/22 07:59*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*08/26/22 15:38*	*08/30/22 07:59*	*1*
1-Methylnaphthalene-d10 (Surr)	*80*		*36 - 111*	*08/26/22 15:38*	*08/30/22 07:59*	*1*

Client Sample ID: MW-76-20220822

Lab Sample ID: 410-95559-3

Date Collected: 08/22/22 15:30
Date Received: 08/24/22 19:12

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:30	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:30	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:30	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:30	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 17:30	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 17:30	1
Chloroform	**1.2**		1.0	0.30	ug/L			08/30/22 17:30	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:30	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 17:30	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 17:30	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 17:30	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 17:30	1
Trichloroethene	**0.38**	**J**	1.0	0.30	ug/L			08/30/22 17:30	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*08/30/22 17:30*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*08/30/22 17:30*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/30/22 17:30*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/30/22 17:30*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.38**		0.31	0.10	ug/L		08/26/22 15:38	08/30/22 08:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*75*		*10 - 110*	*08/26/22 15:38*	*08/30/22 08:21*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*08/26/22 15:38*	*08/30/22 08:21*	*1*
1-Methylnaphthalene-d10 (Surr)	*78*		*36 - 111*	*08/26/22 15:38*	*08/30/22 08:21*	*1*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: FB-20220822

Lab Sample ID: 410-95559-4

Date Collected: 08/22/22 16:15
Date Received: 08/24/22 19:12

Matrix: Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:50	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:50	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:50	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 17:50	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 17:50	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 17:50	1
Chloroform	ND		1.0	0.30	ug/L			08/30/22 17:50	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:50	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 17:50	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 17:50	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 17:50	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 17:50	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 17:50	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*08/30/22 17:50*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/30/22 17:50*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 120*		*08/30/22 17:50*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/30/22 17:50*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		08/26/22 15:38	08/30/22 08:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*86*		*10 - 110*	*08/26/22 15:38*	*08/30/22 08:43*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*08/26/22 15:38*	*08/30/22 08:43*	*1*
1-Methylnaphthalene-d10 (Surr)	*75*		*36 - 111*	*08/26/22 15:38*	*08/30/22 08:43*	*1*

Client Sample ID: MW-77-20220823

Lab Sample ID: 410-95559-5

Date Collected: 08/23/22 09:23
Date Received: 08/24/22 19:12

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:09	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:09	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:09	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:09	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 18:09	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 18:09	1
Chloroform	**4.9**		1.0	0.30	ug/L			08/30/22 18:09	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:09	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 18:09	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 18:09	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 18:09	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 18:09	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:09	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 18:09	1

Client Sample ID: MW-77-20220823

Lab Sample ID: 410-95559-5

Date Collected: 08/23/22 09:23
Matrix: Ground Water
Date Received: 08/24/22 19:12

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		08/30/22 18:09	1
4-Bromofluorobenzene (Surr)	97		80 - 120		08/30/22 18:09	1
Dibromofluoromethane (Surr)	99		80 - 120		08/30/22 18:09	1
Toluene-d8 (Surr)	94		80 - 120		08/30/22 18:09	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		08/30/22 09:11	08/30/22 18:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	67		10 - 110	08/30/22 09:11	08/30/22 18:13	1
Fluoranthene-d10 (Surr)	83		47 - 128	08/30/22 09:11	08/30/22 18:13	1
1-Methylnaphthalene-d10 (Surr)	72		36 - 111	08/30/22 09:11	08/30/22 18:13	1

Client Sample ID: MW-78-20220823

Lab Sample ID: 410-95559-6

Date Collected: 08/23/22 10:34
Matrix: Ground Water
Date Received: 08/24/22 19:12

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:29	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:29	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:29	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:29	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 18:29	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 18:29	1
Chloroform	**0.74**	**J**	1.0	0.30	ug/L			08/30/22 18:29	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:29	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 18:29	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 18:29	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 18:29	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 18:29	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:29	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		08/30/22 18:29	1
4-Bromofluorobenzene (Surr)	94		80 - 120		08/30/22 18:29	1
Dibromofluoromethane (Surr)	95		80 - 120		08/30/22 18:29	1
Toluene-d8 (Surr)	94		80 - 120		08/30/22 18:29	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.59**		0.30	0.10	ug/L		08/30/22 09:11	08/30/22 19:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	76		10 - 110	08/30/22 09:11	08/30/22 19:39	1
Fluoranthene-d10 (Surr)	83		47 - 128	08/30/22 09:11	08/30/22 19:39	1
1-Methylnaphthalene-d10 (Surr)	71		36 - 111	08/30/22 09:11	08/30/22 19:39	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: MW-75-20220823

Lab Sample ID: 410-95559-7

Date Collected: 08/23/22 11:43
Matrix: Ground Water
Date Received: 08/24/22 19:12

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:49	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:49	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:49	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 18:49	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 18:49	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 18:49	1
Chloroform	**0.90**	**J**	1.0	0.30	ug/L			08/30/22 18:49	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:49	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 18:49	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 18:49	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 18:49	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 18:49	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 18:49	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 18:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*08/30/22 18:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/30/22 18:49*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*08/30/22 18:49*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*08/30/22 18:49*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.32	0.11	ug/L		08/30/22 09:11	08/30/22 20:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*77*		*10 - 110*	*08/30/22 09:11*	*08/30/22 20:01*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*08/30/22 09:11*	*08/30/22 20:01*	*1*
1-Methylnaphthalene-d10 (Surr)	*70*		*36 - 111*	*08/30/22 09:11*	*08/30/22 20:01*	*1*

Client Sample ID: MW-74-20220823

Lab Sample ID: 410-95559-8

Date Collected: 08/23/22 13:33
Matrix: Ground Water
Date Received: 08/24/22 19:12

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:09	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:09	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:09	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:09	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 19:09	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 19:09	1
Chloroform	**0.86**	**J**	1.0	0.30	ug/L			08/30/22 19:09	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:09	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 19:09	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 19:09	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 19:09	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 19:09	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:09	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 19:09	1

Client Sample ID: MW-74-20220823

Lab Sample ID: 410-95559-8
Date Collected: 08/23/22 13:33
Matrix: Ground Water
Date Received: 08/24/22 19:12

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*08/30/22 19:09*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*08/30/22 19:09*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*08/30/22 19:09*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/30/22 19:09*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		08/30/22 09:11	08/30/22 20:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*80*		*10 - 110*	*08/30/22 09:11*	*08/30/22 20:22*	*1*
Fluoranthene-d10 (Surr)	*81*		*47 - 128*	*08/30/22 09:11*	*08/30/22 20:22*	*1*
1-Methylnaphthalene-d10 (Surr)	*67*		*36 - 111*	*08/30/22 09:11*	*08/30/22 20:22*	*1*

Client Sample ID: MW-71-20220823

Lab Sample ID: 410-95559-9
Date Collected: 08/23/22 14:36
Matrix: Ground Water
Date Received: 08/24/22 19:12

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 15:51	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 15:51	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 15:51	1
1,2-Dichloroethane	**1.2**		1.0	0.30	ug/L			08/30/22 15:51	1
1,2-Dichloropropane	**4.9**		1.0	0.30	ug/L			08/30/22 15:51	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 15:51	1
Chloroform	**5.3**		1.0	0.30	ug/L			08/30/22 15:51	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.30	ug/L			08/30/22 15:51	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 15:51	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 15:51	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 15:51	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 15:51	1
Trichloroethene	**0.54**	**J**	1.0	0.30	ug/L			08/30/22 15:51	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 15:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*08/30/22 15:51*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*08/30/22 15:51*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*08/30/22 15:51*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/30/22 15:51*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.5**		0.31	0.10	ug/L		08/30/22 09:11	08/30/22 20:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*89*		*10 - 110*	*08/30/22 09:11*	*08/30/22 20:44*	*1*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*	*08/30/22 09:11*	*08/30/22 20:44*	*1*
1-Methylnaphthalene-d10 (Surr)	*77*		*36 - 111*	*08/30/22 09:11*	*08/30/22 20:44*	*1*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: MW-73-20220823

Lab Sample ID: 410-95559-10

Date Collected: 08/23/22 15:44
Date Received: 08/24/22 19:12

Matrix: Ground Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:28	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:28	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:28	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:28	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 19:28	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 19:28	1
Chloroform	ND		1.0	0.30	ug/L			08/30/22 19:28	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:28	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 19:28	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 19:28	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 19:28	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 19:28	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:28	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*08/30/22 19:28*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*08/30/22 19:28*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/30/22 19:28*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/30/22 19:28*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.11**	**J**	0.31	0.10	ug/L		08/30/22 09:11	08/30/22 21:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*88*		*10 - 110*	*08/30/22 09:11*	*08/30/22 21:48*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*08/30/22 09:11*	*08/30/22 21:48*	*1*
1-Methylnaphthalene-d10 (Surr)	*72*		*36 - 111*	*08/30/22 09:11*	*08/30/22 21:48*	*1*

Client Sample ID: FB-20220823

Lab Sample ID: 410-95559-11

Date Collected: 08/23/22 16:15
Date Received: 08/24/22 19:12

Matrix: Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:48	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:48	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:48	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 19:48	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 19:48	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 19:48	1
Chloroform	ND		1.0	0.30	ug/L			08/30/22 19:48	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:48	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 19:48	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 19:48	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 19:48	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 19:48	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 19:48	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			08/30/22 19:48	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: FB-20220823

Date Collected: 08/23/22 16:15
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-11

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*80 - 120*		*08/30/22 19:48*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*08/30/22 19:48*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/30/22 19:48*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/30/22 19:48*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		08/30/22 09:11	08/30/22 22:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*85*		*10 - 110*	*08/30/22 09:11*	*08/30/22 22:09*	*1*
Fluoranthene-d10 (Surr)	*84*		*47 - 128*	*08/30/22 09:11*	*08/30/22 22:09*	*1*
1-Methylnaphthalene-d10 (Surr)	*68*		*36 - 111*	*08/30/22 09:11*	*08/30/22 22:09*	*1*

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-95559-1	MW-80-20220822	95	95	94	95
410-95559-2	MW-79-20220822	101	95	94	94
410-95559-3	MW-76-20220822	100	97	97	93
410-95559-5	MW-77-20220823	97	97	99	94
410-95559-6	MW-78-20220823	100	94	95	94
410-95559-7	MW-75-20220823	100	96	100	92
410-95559-8	MW-74-20220823	97	93	96	94
410-95559-9	MW-71-20220823	96	97	97	94
410-95559-9 MS	MW-71-20220823 MS	95	96	94	95
410-95559-9 MSD	MW-71-20220823 MSD	101	96	96	95
410-95559-10	MW-73-20220823	96	95	98	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-95559-4	FB-20220822	93	96	95	95
410-95559-11	FB-20220823	93	94	98	93
LCS 410-290918/4	Lab Control Sample	96	98	97	98
LCSD 410-290918/5	Lab Control Sample Dup	102	94	97	98
MB 410-290918/7	Method Blank	95	96	98	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BAPd12	FLN10	MNPd10
Lab Sample ID	Client Sample ID	(10-110)	(47-128)	(36-111)
410-95559-1	MW-80-20220822	72	83	79
410-95559-2	MW-79-20220822	69	85	80
410-95559-3	MW-76-20220822	75	85	78
410-95559-5	MW-77-20220823	67	83	72
410-95559-6	MW-78-20220823	76	83	71
410-95559-7	MW-75-20220823	77	85	70
410-95559-8	MW-74-20220823	80	81	67
410-95559-9	MW-71-20220823	89	87	77
410-95559-9 MS	MW-71-20220823 MS	91	85	68

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BAPd12 (10-110)	FLN10 (47-128)	MNPd10 (36-111)
410-95559-9 MSD	MW-71-20220823 MSD	91	87	69
410-95559-10	MW-73-20220823	88	85	72

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BAPd12 (10-110)	FLN10 (47-128)	MNPd10 (36-111)
410-95559-4	FB-20220822	86	85	75
410-95559-11	FB-20220823	85	84	68
LCS 410-290149/2-A	Lab Control Sample	97	86	69
LCS 410-290896/2-A	Lab Control Sample	95	87	71
LCSD 410-290149/3-A	Lab Control Sample Dup	97	86	72
MB 410-290149/1-A	Method Blank	109	100	85
MB 410-290896/1-A	Method Blank	85	82	68

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

QC Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-290918/7
Matrix: Water
Analysis Batch: 290918

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			08/30/22 11:15	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 11:15	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 11:15	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			08/30/22 11:15	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			08/30/22 11:15	1
Benzene	ND		1.0	0.30	ug/L			08/30/22 11:15	1
Chloroform	ND		1.0	0.30	ug/L			08/30/22 11:15	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			08/30/22 11:15	1
Ethylbenzene	ND		1.0	0.40	ug/L			08/30/22 11:15	1
Tetrachloroethene	ND		1.0	0.30	ug/L			08/30/22 11:15	1
Toluene	ND		1.0	0.20	ug/L			08/30/22 11:15	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			08/30/22 11:15	1
Trichloroethene	ND		1.0	0.30	ug/L			08/30/22 11:15	1
Vinyl chloride	ND		1.0	0.20	ug/L			08/30/22 11:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*08/30/22 11:15*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*08/30/22 11:15*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*08/30/22 11:15*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*08/30/22 11:15*	*1*

Lab Sample ID: LCS 410-290918/4
Matrix: Water
Analysis Batch: 290918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	17.9		ug/L		89	67 - 126
1,1-Dichloroethane	20.0	18.4		ug/L		92	80 - 120
1,1-Dichloroethene	20.0	19.8		ug/L		99	80 - 131
1,2-Dichloroethane	20.0	16.4		ug/L		82	73 - 124
1,2-Dichloropropane	20.0	19.6		ug/L		98	80 - 120
Benzene	20.0	19.6		ug/L		98	80 - 120
Chloroform	20.0	17.9		ug/L		90	80 - 120
cis-1,2-Dichloroethene	20.0	19.7		ug/L		98	80 - 125
Ethylbenzene	20.0	18.0		ug/L		90	80 - 120
Tetrachloroethene	20.0	19.4		ug/L		97	80 - 120
Toluene	20.0	18.8		ug/L		94	80 - 120
trans-1,2-Dichloroethene	20.0	19.1		ug/L		96	80 - 126
Trichloroethene	20.0	18.4		ug/L		92	80 - 120
Vinyl chloride	20.0	19.9		ug/L		100	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-290918/5
Matrix: Water
Analysis Batch: 290918

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	16.9		ug/L		85	67 - 126	5	30
1,1-Dichloroethane			20.0	18.3		ug/L		92	80 - 120	1	30
1,1-Dichloroethene			20.0	19.8		ug/L		99	80 - 131	0	30
1,2-Dichloroethane			20.0	15.3		ug/L		77	73 - 124	7	30
1,2-Dichloropropane			20.0	19.3		ug/L		97	80 - 120	1	30
Benzene			20.0	18.8		ug/L		94	80 - 120	4	30
Chloroform			20.0	17.9		ug/L		89	80 - 120	0	30
cis-1,2-Dichloroethene			20.0	19.3		ug/L		96	80 - 125	2	30
Ethylbenzene			20.0	17.9		ug/L		89	80 - 120	1	30
Tetrachloroethene			20.0	19.5		ug/L		98	80 - 120	1	30
Toluene			20.0	18.7		ug/L		93	80 - 120	1	30
trans-1,2-Dichloroethene			20.0	18.6		ug/L		93	80 - 126	3	30
Trichloroethene			20.0	17.0		ug/L		85	80 - 120	8	30
Vinyl chloride			20.0	19.0		ug/L		95	56 - 120	5	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*97*		*80 - 120*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 410-95559-9 MS
Matrix: Ground Water
Analysis Batch: 290918

Client Sample ID: MW-71-20220823 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,1,1-Trichloroethane	ND		20.0	18.8		ug/L		94	67 - 126		
1,1-Dichloroethane	ND		20.0	20.5		ug/L		102	80 - 120		
1,1-Dichloroethene	ND		20.0	21.5		ug/L		107	80 - 131		
1,2-Dichloroethane	1.2		20.0	17.3		ug/L		81	73 - 124		
1,2-Dichloropropane	4.9		20.0	25.2		ug/L		102	80 - 120		
Benzene	ND		20.0	20.8		ug/L		104	80 - 120		
Chloroform	5.3		20.0	24.0		ug/L		93	80 - 120		
cis-1,2-Dichloroethene	2.4		20.0	22.2		ug/L		99	80 - 125		
Ethylbenzene	ND		20.0	19.0		ug/L		95	80 - 120		
Tetrachloroethene	ND		20.0	20.1		ug/L		101	80 - 120		
Toluene	ND		20.0	19.6		ug/L		98	80 - 120		
trans-1,2-Dichloroethene	ND		20.0	20.4		ug/L		102	80 - 126		
Trichloroethene	0.54	J	20.0	19.5		ug/L		95	80 - 120		
Vinyl chloride	ND	cn	20.0	21.8		ug/L		109	56 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*94*		*80 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-95559-9 MSD
Matrix: Ground Water
Analysis Batch: 290918

Client Sample ID: MW-71-20220823 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		20.0	19.2		ug/L		96	67 - 126	2	30
1,1-Dichloroethane	ND		20.0	20.0		ug/L		100	80 - 120	2	30
1,1-Dichloroethene	ND		20.0	21.6		ug/L		108	80 - 131	1	30
1,2-Dichloroethane	1.2		20.0	17.8		ug/L		83	73 - 124	2	30
1,2-Dichloropropane	4.9		20.0	25.0		ug/L		101	80 - 120	1	30
Benzene	ND		20.0	20.3		ug/L		101	80 - 120	2	30
Chloroform	5.3		20.0	24.0		ug/L		93	80 - 120	0	30
cis-1,2-Dichloroethene	2.4		20.0	23.1		ug/L		103	80 - 125	4	30
Ethylbenzene	ND		20.0	19.3		ug/L		96	80 - 120	1	30
Tetrachloroethene	ND		20.0	20.5		ug/L		102	80 - 120	2	30
Toluene	ND		20.0	20.0		ug/L		100	80 - 120	2	30
trans-1,2-Dichloroethene	ND		20.0	20.3		ug/L		102	80 - 126	0	30
Trichloroethene	0.54	J	20.0	19.8		ug/L		96	80 - 120	2	30
Vinyl chloride	ND	cn	20.0	20.9		ug/L		104	56 - 120	4	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-290149/1-A
Matrix: Water
Analysis Batch: 290708

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 290149

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		08/26/22 15:38	08/29/22 17:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*109*		*10 - 110*	*08/26/22 15:38*	*08/29/22 17:36*	*1*
Fluoranthene-d10 (Surr)	*100*		*47 - 128*	*08/26/22 15:38*	*08/29/22 17:36*	*1*
1-Methylnaphthalene-d10 (Surr)	*85*		*36 - 111*	*08/26/22 15:38*	*08/29/22 17:36*	*1*

Lab Sample ID: LCS 410-290149/2-A
Matrix: Water
Analysis Batch: 290708

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 290149

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			1.00	0.514		ug/L		51	23 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*97*		*10 - 110*
Fluoranthene-d10 (Surr)	*86*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*69*		*36 - 111*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 410-290149/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 290708 — **Prep Batch: 290149**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane			1.00	0.502		ug/L		50	23 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*97*		*10 - 110*
Fluoranthene-d10 (Surr)	*86*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*72*		*36 - 111*

Lab Sample ID: MB 410-290896/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291201 — **Prep Batch: 290896**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		08/30/22 09:11	08/30/22 17:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*85*		*10 - 110*	*08/30/22 09:11*	*08/30/22 17:09*	*1*
Fluoranthene-d10 (Surr)	*82*		*47 - 128*	*08/30/22 09:11*	*08/30/22 17:09*	*1*
1-Methylnaphthalene-d10 (Surr)	*68*		*36 - 111*	*08/30/22 09:11*	*08/30/22 17:09*	*1*

Lab Sample ID: LCS 410-290896/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291201 — **Prep Batch: 290896**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			1.00	0.652		ug/L		65	23 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*95*		*10 - 110*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*71*		*36 - 111*

Lab Sample ID: 410-95559-9 MS — **Client Sample ID: MW-71-20220823 MS**
Matrix: Ground Water — **Prep Type: Total/NA**
Analysis Batch: 291201 — **Prep Batch: 290896**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane	4.5		1.02	4.77	4	ug/L		31	23 - 120		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*91*		*10 - 110*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*68*		*36 - 111*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 410-95559-9 MSD
Matrix: Ground Water
Analysis Batch: 291201

Client Sample ID: MW-71-20220823 MSD
Prep Type: Total/NA
Prep Batch: 290896

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	4.5		1.01	4.82	4	ug/L		36	23 - 120	1	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*91*		*10 - 110*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*69*		*36 - 111*

QC Association Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

GC/MS VOA

Analysis Batch: 290918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95559-1	MW-80-20220822	Total/NA	Ground Water	8260D	
410-95559-2	MW-79-20220822	Total/NA	Ground Water	8260D	
410-95559-3	MW-76-20220822	Total/NA	Ground Water	8260D	
410-95559-4	FB-20220822	Total/NA	Water	8260D	
410-95559-5	MW-77-20220823	Total/NA	Ground Water	8260D	
410-95559-6	MW-78-20220823	Total/NA	Ground Water	8260D	
410-95559-7	MW-75-20220823	Total/NA	Ground Water	8260D	
410-95559-8	MW-74-20220823	Total/NA	Ground Water	8260D	
410-95559-9	MW-71-20220823	Total/NA	Ground Water	8260D	
410-95559-10	MW-73-20220823	Total/NA	Ground Water	8260D	
410-95559-11	FB-20220823	Total/NA	Water	8260D	
MB 410-290918/7	Method Blank	Total/NA	Water	8260D	
LCS 410-290918/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-290918/5	Lab Control Sample Dup	Total/NA	Water	8260D	
410-95559-9 MS	MW-71-20220823 MS	Total/NA	Ground Water	8260D	
410-95559-9 MSD	MW-71-20220823 MSD	Total/NA	Ground Water	8260D	

GC/MS Semi VOA

Prep Batch: 290149

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95559-1	MW-80-20220822	Total/NA	Ground Water	3510C	
410-95559-2	MW-79-20220822	Total/NA	Ground Water	3510C	
410-95559-3	MW-76-20220822	Total/NA	Ground Water	3510C	
410-95559-4	FB-20220822	Total/NA	Water	3510C	
MB 410-290149/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-290149/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-290149/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 290708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95559-1	MW-80-20220822	Total/NA	Ground Water	8270E SIM	290149
MB 410-290149/1-A	Method Blank	Total/NA	Water	8270E SIM	290149
LCS 410-290149/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	290149
LCSD 410-290149/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	290149

Analysis Batch: 290860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95559-2	MW-79-20220822	Total/NA	Ground Water	8270E SIM	290149
410-95559-3	MW-76-20220822	Total/NA	Ground Water	8270E SIM	290149
410-95559-4	FB-20220822	Total/NA	Water	8270E SIM	290149

Prep Batch: 290896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95559-5	MW-77-20220823	Total/NA	Ground Water	3510C	
410-95559-6	MW-78-20220823	Total/NA	Ground Water	3510C	
410-95559-7	MW-75-20220823	Total/NA	Ground Water	3510C	
410-95559-8	MW-74-20220823	Total/NA	Ground Water	3510C	
410-95559-9	MW-71-20220823	Total/NA	Ground Water	3510C	
410-95559-10	MW-73-20220823	Total/NA	Ground Water	3510C	
410-95559-11	FB-20220823	Total/NA	Water	3510C	

GC/MS Semi VOA (Continued)

Prep Batch: 290896 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 410-290896/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-290896/2-A	Lab Control Sample	Total/NA	Water	3510C	
410-95559-9 MS	MW-71-20220823 MS	Total/NA	Ground Water	3510C	
410-95559-9 MSD	MW-71-20220823 MSD	Total/NA	Ground Water	3510C	

Analysis Batch: 291201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95559-5	MW-77-20220823	Total/NA	Ground Water	8270E SIM	290896
410-95559-6	MW-78-20220823	Total/NA	Ground Water	8270E SIM	290896
410-95559-7	MW-75-20220823	Total/NA	Ground Water	8270E SIM	290896
410-95559-8	MW-74-20220823	Total/NA	Ground Water	8270E SIM	290896
410-95559-9	MW-71-20220823	Total/NA	Ground Water	8270E SIM	290896
410-95559-10	MW-73-20220823	Total/NA	Ground Water	8270E SIM	290896
410-95559-11	FB-20220823	Total/NA	Water	8270E SIM	290896
MB 410-290896/1-A	Method Blank	Total/NA	Water	8270E SIM	290896
LCS 410-290896/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	290896
410-95559-9 MS	MW-71-20220823 MS	Total/NA	Ground Water	8270E SIM	290896
410-95559-9 MSD	MW-71-20220823 MSD	Total/NA	Ground Water	8270E SIM	290896

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: MW-80-20220822
Date Collected: 08/22/22 12:07
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 16:50
Total/NA	Prep	3510C			290149	QJZ6	ELLE	08/26/22 15:38
Total/NA	Analysis	8270E SIM		1	290708	UJM0	ELLE	08/30/22 03:44

Client Sample ID: MW-79-20220822
Date Collected: 08/22/22 13:38
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 17:10
Total/NA	Prep	3510C			290149	QJZ6	ELLE	08/26/22 15:38
Total/NA	Analysis	8270E SIM		1	290860	SJ89	ELLE	08/30/22 07:59

Client Sample ID: MW-76-20220822
Date Collected: 08/22/22 15:30
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 17:30
Total/NA	Prep	3510C			290149	QJZ6	ELLE	08/26/22 15:38
Total/NA	Analysis	8270E SIM		1	290860	SJ89	ELLE	08/30/22 08:21

Client Sample ID: FB-20220822
Date Collected: 08/22/22 16:15
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 17:50
Total/NA	Prep	3510C			290149	QJZ6	ELLE	08/26/22 15:38
Total/NA	Analysis	8270E SIM		1	290860	SJ89	ELLE	08/30/22 08:43

Client Sample ID: MW-77-20220823
Date Collected: 08/23/22 09:23
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-5
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 18:09
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 18:13

Client Sample ID: MW-78-20220823
Date Collected: 08/23/22 10:34
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-6
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 18:29

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: MW-78-20220823
Lab Sample ID: 410-95559-6
Date Collected: 08/23/22 10:34
Matrix: Ground Water
Date Received: 08/24/22 19:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 19:39

Client Sample ID: MW-75-20220823
Lab Sample ID: 410-95559-7
Date Collected: 08/23/22 11:43
Matrix: Ground Water
Date Received: 08/24/22 19:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 18:49
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 20:01

Client Sample ID: MW-74-20220823
Lab Sample ID: 410-95559-8
Date Collected: 08/23/22 13:33
Matrix: Ground Water
Date Received: 08/24/22 19:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 19:09
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 20:22

Client Sample ID: MW-71-20220823
Lab Sample ID: 410-95559-9
Date Collected: 08/23/22 14:36
Matrix: Ground Water
Date Received: 08/24/22 19:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 15:51
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 20:44

Client Sample ID: MW-73-20220823
Lab Sample ID: 410-95559-10
Date Collected: 08/23/22 15:44
Matrix: Ground Water
Date Received: 08/24/22 19:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 19:28
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 21:48

Client Sample ID: FB-20220823
Lab Sample ID: 410-95559-11
Date Collected: 08/23/22 16:15
Matrix: Water
Date Received: 08/24/22 19:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	290918	TQ4J	ELLE	08/30/22 19:48

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Client Sample ID: FB-20220823

Date Collected: 08/23/22 16:15
Date Received: 08/24/22 19:12

Lab Sample ID: 410-95559-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 22:09

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	06-30-23

Method Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95559-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-95559-1	MW-80-20220822	Ground Water	08/22/22 12:07	08/24/22 19:12
410-95559-2	MW-79-20220822	Ground Water	08/22/22 13:38	08/24/22 19:12
410-95559-3	MW-76-20220822	Ground Water	08/22/22 15:30	08/24/22 19:12
410-95559-4	FB-20220822	Water	08/22/22 16:15	08/24/22 19:12
410-95559-5	MW-77-20220823	Ground Water	08/23/22 09:23	08/24/22 19:12
410-95559-6	MW-78-20220823	Ground Water	08/23/22 10:34	08/24/22 19:12
410-95559-7	MW-75-20220823	Ground Water	08/23/22 11:43	08/24/22 19:12
410-95559-8	MW-74-20220823	Ground Water	08/23/22 13:33	08/24/22 19:12
410-95559-9	MW-71-20220823	Ground Water	08/23/22 14:36	08/24/22 19:12
410-95559-10	MW-73-20220823	Ground Water	08/23/22 15:44	08/24/22 19:12
410-95559-11	FB-20220823	Water	08/23/22 16:15	08/24/22 19:12

410-95559 Chain of Custody

'ironme

Chain of Custody Record

eurofins Environment Testing America

Client Contact: Mr. Charles Meyn	Sampler:	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-33363-10388.1
	Phone:	E-Mail: Barbara.Weyandt@et.eurofinsus.com	State of Origin:	Page: Page 1 of 7
Company: Brown and Caldwell	PWSID:			Job #:
Address: 500 N. Franklin Turnpike Suite 306	Due Date Requested:			
City: Ramsey	TAT Requested (days):			
State, Zip: NJ, 07446	Compliance Project: Δ Yes Δ No			
Phone: 201-574-4706(Tel)	PO #: Purchase Order Requested			
Email: cmeyn@brwncald.com	WO #:			
Project Name: D'Imperio Property	Project #: 41000706			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - VOCs	8270E_SIM - 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
MW-80-20220822	08/22/22	1207	G	GW			X	X		
MW-79-20220822		1338					X	X		
MW-76-20220822		1530					X	X		
FB-20220822		1615		DI			X	X		
MW-77-20220823	08/23/22	0923	G	GW			X	X		
MW-78-20220823		1034					X	X		
MW-75-20220823		1143					X	X		
MW-74-20220823 (~~MS/MS~~ MSD)		1333					X	X		
MW-71-20220823 (MS/MSD)		1436				X	X	X		(MS/MSD)
MW-73-20220823		1544					X	X		
FB-20220823		1615		DI			X	X		

Possible Hazard Identification: ☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC EQuIS

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Max Maroney	08/24/22 1540	BC	Pierre	8/24/22 1540	
Pierre	8/24/22 1838				
				8/24/22 1922	Eurofins

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.7, 4.2

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Brown and Caldwell

Job Number: 410-95559-1

Login Number: 95559
List Number: 1
Creator: Leakway, Christian

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-95584-1
Client Project/Site: D'Imperio Property Site
Revision: 1

For:
O & M Inc.
450 Montbrook Lane
Knoxville, Tennessee 37919-2705

Attn: Mr. Tom Thomas

Barb Weyandt

Authorized for release by:
10/11/2022 11:00:56 AM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@et.eurofinsus.com

LINKS

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The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Barb Weyandt

Barbara Weyandt
Project Manager
10/11/2022 11:00:56 AM

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Definitions/Glossary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-95584-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-95584-1

Revision
The report being provided is a revision of the original report sent on 9/6/2022. The report (revision 1) is being revised due to: remove 2-Butanone, Chlorobenzene and Methylene Chloride.

Receipt
The samples were received on 8/24/2022 7:22 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.5º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with batch 410-292296 recovered outside acceptance criteria, low biased, for 1,2-Dichloroethane. A reporting limit (RL) standard was analyzed, and the target analytes are detected. Since the associated samples were non-detect for the analyte(s), the data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: BR3E/220824 — Lab Sample ID: 410-95584-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.1		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	2.0	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.72	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	14		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.30	ug/L	1		8260D	Total/NA
Ethylbenzene	4.0		1.0	0.40	ug/L	1		8260D	Total/NA
Trichloroethene	0.53	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	8.2		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: UC4E/220824 — Lab Sample ID: 410-95584-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	11		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	6.5		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: UC6E/220824 — Lab Sample ID: 410-95584-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.84	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	5.0		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	3.1		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	9.4		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: LC2E/220824 — Lab Sample ID: 410-95584-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.72	J cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	0.70	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	2.8		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	8.6		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: LC3E/220824 — Lab Sample ID: 410-95584-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.72	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	5.6	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	3.7		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.34	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	4.9		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	4.5		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	0.91	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	10		1.5	0.51	ug/L	5		8270E SIM	Total/NA

Client Sample ID: LC4E/220824 — Lab Sample ID: 410-95584-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.72	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	2.6	cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	6.3		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	1.8		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	3.8		1.0	0.30	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: LC4E/220824 (Continued) — Lab Sample ID: 410-95584-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	0.79	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	4.5		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: LC5E/220824 — Lab Sample ID: 410-95584-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.53	J cn	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	2.0		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	3.9		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.70	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	5.4		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: LC7E/220824 — Lab Sample ID: 410-95584-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.0		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	1.6		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.64		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: LC8E/220824 — Lab Sample ID: 410-95584-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.6		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	2.8		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	1.0		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: LC9E/220824 — Lab Sample ID: 410-95584-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.8		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.19	J	0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: TB/220824 — Lab Sample ID: 410-95584-11

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: BR3E/220824

Lab Sample ID: 410-95584-1
Date Collected: 08/24/22 11:07
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 14:23	1
1,1-Dichloroethane	**1.1**		1.0	0.30	ug/L			09/02/22 14:23	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 14:23	1
1,2-Dichloroethane	**2.0**	**cn**	1.0	0.30	ug/L			09/02/22 14:23	1
1,2-Dichloropropane	**0.72**	**J**	1.0	0.30	ug/L			09/02/22 14:23	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 14:23	1
Chloroform	**14**		1.0	0.30	ug/L			09/02/22 14:23	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.30	ug/L			09/02/22 14:23	1
Ethylbenzene	**4.0**		1.0	0.40	ug/L			09/02/22 14:23	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 14:23	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 14:23	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 14:23	1
Trichloroethene	**0.53**	**J**	1.0	0.30	ug/L			09/02/22 14:23	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 14:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*80 - 120*		*09/02/22 14:23*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/02/22 14:23*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*09/02/22 14:23*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/02/22 14:23*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.2**		0.30	0.10	ug/L		08/30/22 09:11	08/30/22 22:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*79*		*10 - 110*	*08/30/22 09:11*	*08/30/22 22:31*	*1*
Fluoranthene-d10 (Surr)	*81*		*47 - 128*	*08/30/22 09:11*	*08/30/22 22:31*	*1*
1-Methylnaphthalene-d10 (Surr)	*65*		*36 - 111*	*08/30/22 09:11*	*08/30/22 22:31*	*1*

Client Sample ID: UC4E/220824

Lab Sample ID: 410-95584-2
Date Collected: 08/24/22 11:16
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 15:22	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 15:22	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 15:22	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/02/22 15:22	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 15:22	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 15:22	1
Chloroform	**11**		1.0	0.30	ug/L			09/02/22 15:22	1
cis-1,2-Dichloroethene	**1.2**		1.0	0.30	ug/L			09/02/22 15:22	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 15:22	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 15:22	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 15:22	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 15:22	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 15:22	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 15:22	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: UC4E/220824

Lab Sample ID: 410-95584-2
Date Collected: 08/24/22 11:16
Matrix: Water
Date Received: 08/24/22 19:22

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		09/02/22 15:22	1
4-Bromofluorobenzene (Surr)	90		80 - 120		09/02/22 15:22	1
Dibromofluoromethane (Surr)	98		80 - 120		09/02/22 15:22	1
Toluene-d8 (Surr)	94		80 - 120		09/02/22 15:22	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**6.5**		0.30	0.10	ug/L		08/30/22 09:11	08/30/22 22:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	76		10 - 110	08/30/22 09:11	08/30/22 22:52	1
Fluoranthene-d10 (Surr)	83		47 - 128	08/30/22 09:11	08/30/22 22:52	1
1-Methylnaphthalene-d10 (Surr)	73		36 - 111	08/30/22 09:11	08/30/22 22:52	1

Client Sample ID: UC6E/220824

Lab Sample ID: 410-95584-3
Date Collected: 08/24/22 11:23
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 15:42	1
1,1-Dichloroethane	**0.84**	**J**	1.0	0.30	ug/L			09/02/22 15:42	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 15:42	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/02/22 15:42	1
1,2-Dichloropropane	**5.0**		1.0	0.30	ug/L			09/02/22 15:42	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 15:42	1
Chloroform	**3.1**		1.0	0.30	ug/L			09/02/22 15:42	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.30	ug/L			09/02/22 15:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 15:42	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 15:42	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 15:42	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 15:42	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 15:42	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 15:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		80 - 120		09/02/22 15:42	1
4-Bromofluorobenzene (Surr)	92		80 - 120		09/02/22 15:42	1
Dibromofluoromethane (Surr)	97		80 - 120		09/02/22 15:42	1
Toluene-d8 (Surr)	92		80 - 120		09/02/22 15:42	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**9.4**		0.30	0.10	ug/L		08/30/22 09:11	08/30/22 23:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	88		10 - 110	08/30/22 09:11	08/30/22 23:14	1
Fluoranthene-d10 (Surr)	86		47 - 128	08/30/22 09:11	08/30/22 23:14	1
1-Methylnaphthalene-d10 (Surr)	72		36 - 111	08/30/22 09:11	08/30/22 23:14	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: LC2E/220824

Lab Sample ID: 410-95584-4
Date Collected: 08/24/22 11:33
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 16:02	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 16:02	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 16:02	1
1,2-Dichloroethane	**0.72**	**J cn**	1.0	0.30	ug/L			09/02/22 16:02	1
1,2-Dichloropropane	**0.70**	**J**	1.0	0.30	ug/L			09/02/22 16:02	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 16:02	1
Chloroform	**2.8**		1.0	0.30	ug/L			09/02/22 16:02	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 16:02	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 16:02	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 16:02	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 16:02	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 16:02	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 16:02	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 16:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*09/02/22 16:02*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*09/02/22 16:02*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/02/22 16:02*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/02/22 16:02*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.6**		0.30	0.10	ug/L		08/30/22 09:11	08/30/22 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*83*		*10 - 110*	*08/30/22 09:11*	*08/30/22 23:35*	*1*
Fluoranthene-d10 (Surr)	*81*		*47 - 128*	*08/30/22 09:11*	*08/30/22 23:35*	*1*
1-Methylnaphthalene-d10 (Surr)	*72*		*36 - 111*	*08/30/22 09:11*	*08/30/22 23:35*	*1*

Client Sample ID: LC3E/220824

Lab Sample ID: 410-95584-5
Date Collected: 08/24/22 11:38
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 16:22	1
1,1-Dichloroethane	**0.72**	**J**	1.0	0.30	ug/L			09/02/22 16:22	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 16:22	1
1,2-Dichloroethane	**5.6**	**cn**	1.0	0.30	ug/L			09/02/22 16:22	1
1,2-Dichloropropane	**3.7**		1.0	0.30	ug/L			09/02/22 16:22	1
Benzene	**0.34**	**J**	1.0	0.30	ug/L			09/02/22 16:22	1
Chloroform	**4.9**		1.0	0.30	ug/L			09/02/22 16:22	1
cis-1,2-Dichloroethene	**4.5**		1.0	0.30	ug/L			09/02/22 16:22	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 16:22	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 16:22	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 16:22	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 16:22	1
Trichloroethene	**0.91**	**J**	1.0	0.30	ug/L			09/02/22 16:22	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 16:22	1

Client Sample ID: LC3E/220824

Lab Sample ID: 410-95584-5

Date Collected: 08/24/22 11:38

Matrix: Water

Date Received: 08/24/22 19:22

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		09/02/22 16:22	1
4-Bromofluorobenzene (Surr)	93		80 - 120		09/02/22 16:22	1
Dibromofluoromethane (Surr)	96		80 - 120		09/02/22 16:22	1
Toluene-d8 (Surr)	93		80 - 120		09/02/22 16:22	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**10**		1.5	0.51	ug/L		08/30/22 09:11	08/31/22 06:03	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	70		10 - 110	08/30/22 09:11	08/31/22 06:03	5
Fluoranthene-d10 (Surr)	67		47 - 128	08/30/22 09:11	08/31/22 06:03	5
1-Methylnaphthalene-d10 (Surr)	57		36 - 111	08/30/22 09:11	08/31/22 06:03	5

Client Sample ID: LC4E/220824

Lab Sample ID: 410-95584-6

Date Collected: 08/24/22 11:42

Matrix: Water

Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 16:42	1
1,1-Dichloroethane	**0.72**	**J**	1.0	0.30	ug/L			09/02/22 16:42	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 16:42	1
1,2-Dichloroethane	**2.6**	**cn**	1.0	0.30	ug/L			09/02/22 16:42	1
1,2-Dichloropropane	**6.3**		1.0	0.30	ug/L			09/02/22 16:42	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 16:42	1
Chloroform	**1.8**		1.0	0.30	ug/L			09/02/22 16:42	1
cis-1,2-Dichloroethene	**3.8**		1.0	0.30	ug/L			09/02/22 16:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 16:42	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 16:42	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 16:42	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 16:42	1
Trichloroethene	**0.79**	**J**	1.0	0.30	ug/L			09/02/22 16:42	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 16:42	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/02/22 16:42	1
4-Bromofluorobenzene (Surr)	90		80 - 120		09/02/22 16:42	1
Dibromofluoromethane (Surr)	95		80 - 120		09/02/22 16:42	1
Toluene-d8 (Surr)	91		80 - 120		09/02/22 16:42	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.5**		0.30	0.10	ug/L		08/30/22 15:50	08/31/22 12:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	64		10 - 110	08/30/22 15:50	08/31/22 12:34	1
Fluoranthene-d10 (Surr)	77		47 - 128	08/30/22 15:50	08/31/22 12:34	1
1-Methylnaphthalene-d10 (Surr)	50		36 - 111	08/30/22 15:50	08/31/22 12:34	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: LC5E/220824

Lab Sample ID: 410-95584-7

Date Collected: 08/24/22 11:47
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 17:02	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 17:02	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 17:02	1
1,2-Dichloroethane	**0.53**	**J cn**	1.0	0.30	ug/L			09/02/22 17:02	1
1,2-Dichloropropane	**2.0**		1.0	0.30	ug/L			09/02/22 17:02	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 17:02	1
Chloroform	**3.9**		1.0	0.30	ug/L			09/02/22 17:02	1
cis-1,2-Dichloroethene	**0.70**	**J**	1.0	0.30	ug/L			09/02/22 17:02	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 17:02	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 17:02	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 17:02	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 17:02	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 17:02	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*09/02/22 17:02*	*1*
4-Bromofluorobenzene (Surr)	*90*		*80 - 120*		*09/02/22 17:02*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*09/02/22 17:02*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/02/22 17:02*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**5.4**		0.30	0.10	ug/L		08/30/22 15:50	08/31/22 12:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*74*		*10 - 110*	*08/30/22 15:50*	*08/31/22 12:56*	*1*
Fluoranthene-d10 (Surr)	*74*		*47 - 128*	*08/30/22 15:50*	*08/31/22 12:56*	*1*
1-Methylnaphthalene-d10 (Surr)	*69*		*36 - 111*	*08/30/22 15:50*	*08/31/22 12:56*	*1*

Client Sample ID: LC7E/220824

Lab Sample ID: 410-95584-8

Date Collected: 08/24/22 11:58
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 17:22	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 17:22	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 17:22	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/02/22 17:22	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 17:22	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 17:22	1
Chloroform	**2.0**		1.0	0.30	ug/L			09/02/22 17:22	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 17:22	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 17:22	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 17:22	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 17:22	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 17:22	1
Trichloroethene	**1.6**		1.0	0.30	ug/L			09/02/22 17:22	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 17:22	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: LC7E/220824

Lab Sample ID: 410-95584-8

Date Collected: 08/24/22 11:58
Date Received: 08/24/22 19:22

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		80 - 120		09/02/22 17:22	1
4-Bromofluorobenzene (Surr)	92		80 - 120		09/02/22 17:22	1
Dibromofluoromethane (Surr)	98		80 - 120		09/02/22 17:22	1
Toluene-d8 (Surr)	93		80 - 120		09/02/22 17:22	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.64**		0.30	0.10	ug/L		08/30/22 15:50	08/31/22 13:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	66		10 - 110	08/30/22 15:50	08/31/22 13:17	1
Fluoranthene-d10 (Surr)	74		47 - 128	08/30/22 15:50	08/31/22 13:17	1
1-Methylnaphthalene-d10 (Surr)	75		36 - 111	08/30/22 15:50	08/31/22 13:17	1

Client Sample ID: LC8E/220824

Lab Sample ID: 410-95584-9

Date Collected: 08/24/22 12:04
Date Received: 08/24/22 19:22

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 17:41	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 17:41	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 17:41	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/02/22 17:41	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 17:41	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 17:41	1
Chloroform	**2.6**		1.0	0.30	ug/L			09/02/22 17:41	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 17:41	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 17:41	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 17:41	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 17:41	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 17:41	1
Trichloroethene	**2.8**		1.0	0.30	ug/L			09/02/22 17:41	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 17:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		09/02/22 17:41	1
4-Bromofluorobenzene (Surr)	90		80 - 120		09/02/22 17:41	1
Dibromofluoromethane (Surr)	96		80 - 120		09/02/22 17:41	1
Toluene-d8 (Surr)	91		80 - 120		09/02/22 17:41	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.0**		0.30	0.10	ug/L		08/30/22 15:50	08/31/22 13:39	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	77		10 - 110	08/30/22 15:50	08/31/22 13:39	1
Fluoranthene-d10 (Surr)	75		47 - 128	08/30/22 15:50	08/31/22 13:39	1
1-Methylnaphthalene-d10 (Surr)	65		36 - 111	08/30/22 15:50	08/31/22 13:39	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: LC9E/220824

Lab Sample ID: 410-95584-10
Date Collected: 08/24/22 12:10
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 18:01	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 18:01	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 18:01	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/02/22 18:01	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 18:01	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 18:01	1
Chloroform	**2.8**		1.0	0.30	ug/L			09/02/22 18:01	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 18:01	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 18:01	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 18:01	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 18:01	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 18:01	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 18:01	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/02/22 18:01*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*09/02/22 18:01*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*09/02/22 18:01*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/02/22 18:01*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.19**	**J**	0.30	0.10	ug/L		08/30/22 15:50	08/31/22 14:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*68*		*10 - 110*	*08/30/22 15:50*	*08/31/22 14:01*	*1*
Fluoranthene-d10 (Surr)	*76*		*47 - 128*	*08/30/22 15:50*	*08/31/22 14:01*	*1*
1-Methylnaphthalene-d10 (Surr)	*56*		*36 - 111*	*08/30/22 15:50*	*08/31/22 14:01*	*1*

Client Sample ID: TB/220824

Lab Sample ID: 410-95584-11
Date Collected: 08/24/22 12:19
Matrix: Water
Date Received: 08/24/22 19:22

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 12:44	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 12:44	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 12:44	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/02/22 12:44	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 12:44	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 12:44	1
Chloroform	ND		1.0	0.30	ug/L			09/02/22 12:44	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 12:44	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 12:44	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 12:44	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 12:44	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 12:44	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 12:44	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 12:44	1

Client Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: TB/220824

Date Collected: 08/24/22 12:19
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95584-11

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		80 - 120		09/02/22 12:44	1
4-Bromofluorobenzene (Surr)	94		80 - 120		09/02/22 12:44	1
Dibromofluoromethane (Surr)	99		80 - 120		09/02/22 12:44	1
Toluene-d8 (Surr)	91		80 - 120		09/02/22 12:44	1

Surrogate Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-95584-1	BR3E/220824	96	91	98	93
410-95584-1 MS	BR3E/220824	98	97	98	96
410-95584-1 MSD	BR3E/220824	100	95	99	95
410-95584-2	UC4E/220824	96	90	98	94
410-95584-3	UC6E/220824	92	92	97	92
410-95584-4	LC2E/220824	95	89	96	94
410-95584-5	LC3E/220824	99	93	96	93
410-95584-6	LC4E/220824	101	90	95	91
410-95584-7	LC5E/220824	101	90	97	92
410-95584-8	LC7E/220824	94	92	98	93
410-95584-9	LC8E/220824	100	90	96	91
410-95584-10	LC9E/220824	102	94	100	92
410-95584-11	TB/220824	97	94	99	91
LCS 410-292296/4	Lab Control Sample	100	95	96	96
MB 410-292296/6	Method Blank	101	89	98	94

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BAPd12	FLN10	MNPd10
Lab Sample ID	Client Sample ID	(10-110)	(47-128)	(36-111)
410-95584-1	BR3E/220824	79	81	65
410-95584-2	UC4E/220824	76	83	73
410-95584-3	UC6E/220824	88	86	72
410-95584-4	LC2E/220824	83	81	72
410-95584-5	LC3E/220824	70	67	57
410-95584-6	LC4E/220824	64	77	50
410-95584-7	LC5E/220824	74	74	69
410-95584-8	LC7E/220824	66	74	75
410-95584-9	LC8E/220824	77	75	65
410-95584-10	LC9E/220824	68	76	56
LCS 410-290896/2-A	Lab Control Sample	95	87	71
LCS 410-291198/2-A	Lab Control Sample	92	81	73
MB 410-290896/1-A	Method Blank	85	82	68
MB 410-291198/1-A	Method Blank	88	78	76

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

QC Sample Results

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-292296/6
Matrix: Water
Analysis Batch: 292296

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 10:42	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 10:42	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 10:42	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 10:42	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 10:42	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 10:42	1
Chloroform	ND		1.0	0.30	ug/L			09/02/22 10:42	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 10:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 10:42	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 10:42	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 10:42	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 10:42	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 10:42	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 10:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*09/02/22 10:42*	*1*
4-Bromofluorobenzene (Surr)	*89*		*80 - 120*		*09/02/22 10:42*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*09/02/22 10:42*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/02/22 10:42*	*1*

Lab Sample ID: LCS 410-292296/4
Matrix: Water
Analysis Batch: 292296

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	17.1		ug/L		85	67 - 126
1,1-Dichloroethane	20.0	17.6		ug/L		88	80 - 120
1,1-Dichloroethene	20.0	17.5		ug/L		88	80 - 131
1,2-Dichloroethane	20.0	14.7		ug/L		73	73 - 124
1,2-Dichloropropane	20.0	18.4		ug/L		92	80 - 120
Benzene	20.0	18.3		ug/L		92	80 - 120
Chloroform	20.0	16.4		ug/L		82	80 - 120
cis-1,2-Dichloroethene	20.0	18.3		ug/L		92	80 - 125
Ethylbenzene	20.0	17.1		ug/L		85	80 - 120
Tetrachloroethene	20.0	17.5		ug/L		88	80 - 120
Toluene	20.0	17.8		ug/L		89	80 - 120
trans-1,2-Dichloroethene	20.0	17.5		ug/L		88	80 - 126
Trichloroethene	20.0	17.5		ug/L		87	80 - 120
Vinyl chloride	20.0	19.8		ug/L		99	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-95584-1 MS
Matrix: Water
Analysis Batch: 292296

Client Sample ID: BR3E/220824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		20.0	20.4		ug/L		102	67 - 126
1,1-Dichloroethane	1.1		20.0	21.2		ug/L		100	80 - 120
1,1-Dichloroethene	ND		20.0	23.1		ug/L		115	80 - 131
1,2-Dichloroethane	2.0	cn	20.0	19.0		ug/L		85	73 - 124
1,2-Dichloropropane	0.72	J	20.0	22.4		ug/L		108	80 - 120
Benzene	ND		20.0	21.4		ug/L		107	80 - 120
Chloroform	14		20.0	35.6		ug/L		110	80 - 120
cis-1,2-Dichloroethene	1.6		20.0	23.5		ug/L		110	80 - 125
Ethylbenzene	4.0		20.0	24.0		ug/L		100	80 - 120
Tetrachloroethene	ND		20.0	22.3		ug/L		111	80 - 120
Toluene	ND		20.0	20.7		ug/L		104	80 - 120
trans-1,2-Dichloroethene	ND		20.0	21.3		ug/L		106	80 - 126
Trichloroethene	0.53	J	20.0	21.3		ug/L		104	80 - 120
Vinyl chloride	ND		20.0	23.6		ug/L		118	56 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*98*		*80 - 120*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: 410-95584-1 MSD
Matrix: Water
Analysis Batch: 292296

Client Sample ID: BR3E/220824
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		20.0	19.5		ug/L		97	67 - 126	5	30
1,1-Dichloroethane	1.1		20.0	21.1		ug/L		100	80 - 120	0	30
1,1-Dichloroethene	ND		20.0	22.3		ug/L		111	80 - 131	4	30
1,2-Dichloroethane	2.0	cn	20.0	19.4		ug/L		87	73 - 124	2	30
1,2-Dichloropropane	0.72	J	20.0	21.0		ug/L		101	80 - 120	6	30
Benzene	ND		20.0	20.9		ug/L		104	80 - 120	3	30
Chloroform	14		20.0	33.4		ug/L		99	80 - 120	6	30
cis-1,2-Dichloroethene	1.6		20.0	23.3		ug/L		109	80 - 125	1	30
Ethylbenzene	4.0		20.0	23.6		ug/L		98	80 - 120	1	30
Tetrachloroethene	ND		20.0	20.5		ug/L		102	80 - 120	9	30
Toluene	ND		20.0	19.9		ug/L		99	80 - 120	4	30
trans-1,2-Dichloroethene	ND		20.0	22.3		ug/L		111	80 - 126	5	30
Trichloroethene	0.53	J	20.0	19.8		ug/L		96	80 - 120	7	30
Vinyl chloride	ND		20.0	22.2		ug/L		111	56 - 120	6	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*95*		*80 - 120*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-290896/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291201 — **Prep Batch: 290896**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		08/30/22 09:11	08/30/22 17:09	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*85*		*10 - 110*	*08/30/22 09:11*	*08/30/22 17:09*	*1*
Fluoranthene-d10 (Surr)	*82*		*47 - 128*	*08/30/22 09:11*	*08/30/22 17:09*	*1*
1-Methylnaphthalene-d10 (Surr)	*68*		*36 - 111*	*08/30/22 09:11*	*08/30/22 17:09*	*1*

Lab Sample ID: LCS 410-290896/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291201 — **Prep Batch: 290896**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.00	0.652		ug/L		65	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*95*		*10 - 110*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*71*		*36 - 111*

Lab Sample ID: MB 410-291198/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291329 — **Prep Batch: 291198**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		08/30/22 15:50	08/31/22 03:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*88*		*10 - 110*	*08/30/22 15:50*	*08/31/22 03:53*	*1*
Fluoranthene-d10 (Surr)	*78*		*47 - 128*	*08/30/22 15:50*	*08/31/22 03:53*	*1*
1-Methylnaphthalene-d10 (Surr)	*76*		*36 - 111*	*08/30/22 15:50*	*08/31/22 03:53*	*1*

Lab Sample ID: LCS 410-291198/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 291329 — **Prep Batch: 291198**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.00	0.412		ug/L		41	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*92*		*10 - 110*
Fluoranthene-d10 (Surr)	*81*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*73*		*36 - 111*

QC Association Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

GC/MS VOA

Analysis Batch: 292296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95584-1	BR3E/220824	Total/NA	Water	8260D	
410-95584-2	UC4E/220824	Total/NA	Water	8260D	
410-95584-3	UC6E/220824	Total/NA	Water	8260D	
410-95584-4	LC2E/220824	Total/NA	Water	8260D	
410-95584-5	LC3E/220824	Total/NA	Water	8260D	
410-95584-6	LC4E/220824	Total/NA	Water	8260D	
410-95584-7	LC5E/220824	Total/NA	Water	8260D	
410-95584-8	LC7E/220824	Total/NA	Water	8260D	
410-95584-9	LC8E/220824	Total/NA	Water	8260D	
410-95584-10	LC9E/220824	Total/NA	Water	8260D	
410-95584-11	TB/220824	Total/NA	Water	8260D	
MB 410-292296/6	Method Blank	Total/NA	Water	8260D	
LCS 410-292296/4	Lab Control Sample	Total/NA	Water	8260D	
410-95584-1 MS	BR3E/220824	Total/NA	Water	8260D	
410-95584-1 MSD	BR3E/220824	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 290896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95584-1	BR3E/220824	Total/NA	Water	3510C	
410-95584-2	UC4E/220824	Total/NA	Water	3510C	
410-95584-3	UC6E/220824	Total/NA	Water	3510C	
410-95584-4	LC2E/220824	Total/NA	Water	3510C	
410-95584-5	LC3E/220824	Total/NA	Water	3510C	
MB 410-290896/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-290896/2-A	Lab Control Sample	Total/NA	Water	3510C	

Prep Batch: 291198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95584-6	LC4E/220824	Total/NA	Water	3510C	
410-95584-7	LC5E/220824	Total/NA	Water	3510C	
410-95584-8	LC7E/220824	Total/NA	Water	3510C	
410-95584-9	LC8E/220824	Total/NA	Water	3510C	
410-95584-10	LC9E/220824	Total/NA	Water	3510C	
MB 410-291198/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-291198/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 291201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95584-1	BR3E/220824	Total/NA	Water	8270E SIM	290896
410-95584-2	UC4E/220824	Total/NA	Water	8270E SIM	290896
410-95584-3	UC6E/220824	Total/NA	Water	8270E SIM	290896
410-95584-4	LC2E/220824	Total/NA	Water	8270E SIM	290896
MB 410-290896/1-A	Method Blank	Total/NA	Water	8270E SIM	290896
LCS 410-290896/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	290896

Analysis Batch: 291329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95584-5	LC3E/220824	Total/NA	Water	8270E SIM	290896
410-95584-6	LC4E/220824	Total/NA	Water	8270E SIM	291198

QC Association Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

GC/MS Semi VOA (Continued)

Analysis Batch: 291329 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95584-7	LC5E/220824	Total/NA	Water	8270E SIM	291198
410-95584-8	LC7E/220824	Total/NA	Water	8270E SIM	291198
410-95584-9	LC8E/220824	Total/NA	Water	8270E SIM	291198
410-95584-10	LC9E/220824	Total/NA	Water	8270E SIM	291198
MB 410-291198/1-A	Method Blank	Total/NA	Water	8270E SIM	291198
LCS 410-291198/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	291198

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: BR3E/220824 — Lab Sample ID: 410-95584-1

Date Collected: 08/24/22 11:07 — **Matrix: Water**
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 14:23
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 22:31

Client Sample ID: UC4E/220824 — Lab Sample ID: 410-95584-2

Date Collected: 08/24/22 11:16 — **Matrix: Water**
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 15:22
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 22:52

Client Sample ID: UC6E/220824 — Lab Sample ID: 410-95584-3

Date Collected: 08/24/22 11:23 — **Matrix: Water**
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 15:42
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 23:14

Client Sample ID: LC2E/220824 — Lab Sample ID: 410-95584-4

Date Collected: 08/24/22 11:33 — **Matrix: Water**
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 16:02
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		1	291201	UJM0	ELLE	08/30/22 23:35

Client Sample ID: LC3E/220824 — Lab Sample ID: 410-95584-5

Date Collected: 08/24/22 11:38 — **Matrix: Water**
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 16:22
Total/NA	Prep	3510C			290896	XPN5	ELLE	08/30/22 09:11
Total/NA	Analysis	8270E SIM		5	291329	SJ89	ELLE	08/31/22 06:03

Client Sample ID: LC4E/220824 — Lab Sample ID: 410-95584-6

Date Collected: 08/24/22 11:42 — **Matrix: Water**
Date Received: 08/24/22 19:22

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 16:42

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Client Sample ID: LC4E/220824
Date Collected: 08/24/22 11:42
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95584-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 12:34

Client Sample ID: LC5E/220824
Date Collected: 08/24/22 11:47
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95584-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 17:02
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 12:56

Client Sample ID: LC7E/220824
Date Collected: 08/24/22 11:58
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95584-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 17:22
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 13:17

Client Sample ID: LC8E/220824
Date Collected: 08/24/22 12:04
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95584-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 17:41
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 13:39

Client Sample ID: LC9E/220824
Date Collected: 08/24/22 12:10
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95584-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 18:01
Total/NA	Prep	3510C			291198	QJZ6	ELLE	08/30/22 15:50
Total/NA	Analysis	8270E SIM		1	291329	SJ89	ELLE	08/31/22 14:01

Client Sample ID: TB/220824
Date Collected: 08/24/22 12:19
Date Received: 08/24/22 19:22

Lab Sample ID: 410-95584-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292296	TQ4J	ELLE	09/02/22 12:44

Lab Chronicle

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	09-20-22

Method Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: O & M Inc.
Project/Site: D'Imperio Property Site

Job ID: 410-95584-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-95584-1	BR3E/220824	Water	08/24/22 11:07	08/24/22 19:22
410-95584-2	UC4E/220824	Water	08/24/22 11:16	08/24/22 19:22
410-95584-3	UC6E/220824	Water	08/24/22 11:23	08/24/22 19:22
410-95584-4	LC2E/220824	Water	08/24/22 11:33	08/24/22 19:22
410-95584-5	LC3E/220824	Water	08/24/22 11:38	08/24/22 19:22
410-95584-6	LC4E/220824	Water	08/24/22 11:42	08/24/22 19:22
410-95584-7	LC5E/220824	Water	08/24/22 11:47	08/24/22 19:22
410-95584-8	LC7E/220824	Water	08/24/22 11:58	08/24/22 19:22
410-95584-9	LC8E/220824	Water	08/24/22 12:04	08/24/22 19:22
410-95584-10	LC9E/220824	Water	08/24/22 12:10	08/24/22 19:22
410-95584-11	TB/220824	Water	08/24/22 12:19	08/24/22 19:22

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

eurofins Environment Testing America

410-95584 Chain of Custody

Client Information	Sampler: S. Borton	Lab PM: Weyandt, Barbara A	Chain of Custody No: -63784-5662.1
Client Contact: Steve Borton	Phone: 609 909 0624	E-Mail: Barbara.Weyandt@et.eurofinsus.com	Page 1 of 1
Company: O & M Inc.	PWSID:		Job #:
Address: 450 Montbrook Lane	Due Date Requested: 14 DAYS STANDARD		
City: Knoxville	TAT Requested (days): 14 DAYS		
State, Zip: TN, 37919-2705	Compliance Project: ☒ Yes Δ No		
Phone: 609-868-0447(Tel)	PO #: ~~382E220721~~ 382A220824		
Email: sborton@oandm-inc.com	WO #:		
Project Name: D'Imperio Property Site	Project #: 41002088		
Site: New Jersey	SSOW#:		

Analysis Requested

Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270E_SIM - 1,4-Dioxane	8260D - Monthly VOCs + VC (SIM) CHLORIDE	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	A		
BR3E/220824	8-24-22	1107	G	W			X	X		
UC4E/220824		1116					X	X		
UC6E/220824		1123					X	X		
LC2E/220824		1133					X	X		
LC3E/220824		1138					X	X		
LC4E/220824		1142					X	X		
LC5E/220824		1147					X	X		
LC7E/220824		1158					X	X		
LC8E/220824		1204					X	X		
LC9E/220824		1210					X	X		
TB/220824	8-24-22	1219	G	W			X	X		

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8-24-22 1530	OM	Pierre	8/24/22 15:30	
Pierre	8/24/22 [illegible]		[signature]		
	1838		[signature]	8/24/22 1922	Eurofins

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: not present

Cooler Temperature(s) °C and Other Remarks: 2.5°C

Ver: 06/08/2021

10/11/2022 (Rev. 1)

Login Sample Receipt Checklist

Client: O & M Inc.

Job Number: 410-95584-1

Login Number: 95584
List Number: 1
Creator: Renner, Melissa

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-95874-1
Client Project/Site: D'Imperio Property
Revision: 1

For:
Brown and Caldwell
500 N. Franklin Turnpike
Suite 306
Ramsey, New Jersey 07446

Attn: Mr. Charles Meyn

Barb Weyandt

Authorized for release by:
10/11/2022 11:01:36 AM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Barb Weyandt

Barbara Weyandt
Project Manager
10/11/2022 11:01:36 AM

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Definitions/Glossary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Job ID: 410-95874-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-95874-1

Revision
The report being provided is a revision of the original report sent on 9/9/2022. The report (revision 1) is being revised due to: add VC, remove 2-Butanone, Chlorobenzene and Methylene Chloride.

Receipt
The samples were received on 8/26/2022 5:05 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 4.4º C and 5.5º C.

GC/MS VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-60-20220825 — Lab Sample ID: 410-95874-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.6		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.15	J	0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-57-20220825 — Lab Sample ID: 410-95874-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	2.2		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.23	J	0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-56-20220825 — Lab Sample ID: 410-95874-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloropropane	0.52	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	2.4		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	1.3		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: OBW-62-20220825 — Lab Sample ID: 410-95874-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.38	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	3.2		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	2.9		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.80	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	3.7		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: OBW-63-20220825 — Lab Sample ID: 410-95874-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	1.3		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-51-20220825 — Lab Sample ID: 410-95874-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	3.4		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	1.1		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.55	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	34		3.1	1.0	ug/L	10		8270E SIM	Total/NA

Client Sample ID: FB-20220825 — Lab Sample ID: 410-95874-7

No Detections.

Client Sample ID: MW-47-20220826 — Lab Sample ID: 410-95874-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	13		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	2.2		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.48	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	6.3		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	6.0		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	25		3.1	1.0	ug/L	10		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-53-20220826 — Lab Sample ID: 410-95874-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.76	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	1.9		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	15		3.1	1.0	ug/L	10		8270E SIM	Total/NA

Client Sample ID: MW-55-20220826 — Lab Sample ID: 410-95874-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.61	J	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	1.0		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	15		3.1	1.0	ug/L	10		8270E SIM	Total/NA

Client Sample ID: MW-45-20220826 — Lab Sample ID: 410-95874-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.4		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	10		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	4.3		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	0.31	J	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	10		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	33		6.1	2.0	ug/L	20		8270E SIM	Total/NA

Client Sample ID: MW-46-20220826 — Lab Sample ID: 410-95874-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	7.3		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	3.4		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	1.6		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	19		3.1	1.0	ug/L	10		8270E SIM	Total/NA

Client Sample ID: FB-20220826 — Lab Sample ID: 410-95874-13

No Detections.

Client Sample ID: TB-20220826 — Lab Sample ID: 410-95874-14

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-60-20220825

Lab Sample ID: 410-95874-1

Date Collected: 08/25/22 09:13
Matrix: Groundwater
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 01:17	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 01:17	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 01:17	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 01:17	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 01:17	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 01:17	1
Chloroform	**1.6**		1.0	0.30	ug/L			09/03/22 01:17	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 01:17	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 01:17	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 01:17	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 01:17	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 01:17	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 01:17	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 01:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*09/03/22 01:17*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/03/22 01:17*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*09/03/22 01:17*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/03/22 01:17*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.15**	**J**	0.31	0.10	ug/L		09/01/22 08:29	09/01/22 22:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*88*		*10 - 110*	*09/01/22 08:29*	*09/01/22 22:22*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*09/01/22 08:29*	*09/01/22 22:22*	*1*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*09/01/22 08:29*	*09/01/22 22:22*	*1*

Client Sample ID: MW-57-20220825

Lab Sample ID: 410-95874-2

Date Collected: 08/25/22 10:05
Matrix: Groundwater
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 01:40	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 01:40	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 01:40	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 01:40	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 01:40	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 01:40	1
Chloroform	**2.2**		1.0	0.30	ug/L			09/03/22 01:40	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 01:40	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 01:40	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 01:40	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 01:40	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 01:40	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 01:40	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 01:40	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-57-20220825

Lab Sample ID: 410-95874-2
Date Collected: 08/25/22 10:05
Matrix: Groundwater
Date Received: 08/26/22 17:05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*09/03/22 01:40*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/03/22 01:40*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*09/03/22 01:40*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/03/22 01:40*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.23**	**J**	0.31	0.10	ug/L		09/01/22 08:29	09/01/22 22:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*69*		*10 - 110*	*09/01/22 08:29*	*09/01/22 22:43*	*1*
Fluoranthene-d10 (Surr)	*84*		*47 - 128*	*09/01/22 08:29*	*09/01/22 22:43*	*1*
1-Methylnaphthalene-d10 (Surr)	*78*		*36 - 111*	*09/01/22 08:29*	*09/01/22 22:43*	*1*

Client Sample ID: MW-56-20220825

Lab Sample ID: 410-95874-3
Date Collected: 08/25/22 11:01
Matrix: Groundwater
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:02	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:02	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:02	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:02	1
1,2-Dichloropropane	**0.52**	**J**	1.0	0.30	ug/L			09/03/22 02:02	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 02:02	1
Chloroform	**2.4**		1.0	0.30	ug/L			09/03/22 02:02	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:02	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 02:02	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 02:02	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 02:02	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 02:02	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:02	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 02:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*80 - 120*		*09/03/22 02:02*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/03/22 02:02*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 120*		*09/03/22 02:02*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/03/22 02:02*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.3**		0.31	0.10	ug/L		09/01/22 08:29	09/01/22 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*76*		*10 - 110*	*09/01/22 08:29*	*09/01/22 23:04*	*1*
Fluoranthene-d10 (Surr)	*89*		*47 - 128*	*09/01/22 08:29*	*09/01/22 23:04*	*1*
1-Methylnaphthalene-d10 (Surr)	*80*		*36 - 111*	*09/01/22 08:29*	*09/01/22 23:04*	*1*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: OBW-62-20220825

Lab Sample ID: 410-95874-4

Date Collected: 08/25/22 12:48
Date Received: 08/26/22 17:05

Matrix: Groundwater

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:24	1
1,1-Dichloroethane	**0.38**	**J**	1.0	0.30	ug/L			09/03/22 02:24	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:24	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:24	1
1,2-Dichloropropane	**3.2**		1.0	0.30	ug/L			09/03/22 02:24	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 02:24	1
Chloroform	**2.9**		1.0	0.30	ug/L			09/03/22 02:24	1
cis-1,2-Dichloroethene	**0.80**	**J**	1.0	0.30	ug/L			09/03/22 02:24	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 02:24	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 02:24	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 02:24	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 02:24	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:24	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 02:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*09/03/22 02:24*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*09/03/22 02:24*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*09/03/22 02:24*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/03/22 02:24*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.7**		0.31	0.10	ug/L		09/01/22 08:29	09/01/22 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*66*		*10 - 110*	*09/01/22 08:29*	*09/01/22 23:26*	*1*
Fluoranthene-d10 (Surr)	*84*		*47 - 128*	*09/01/22 08:29*	*09/01/22 23:26*	*1*
1-Methylnaphthalene-d10 (Surr)	*77*		*36 - 111*	*09/01/22 08:29*	*09/01/22 23:26*	*1*

Client Sample ID: OBW-63-20220825

Lab Sample ID: 410-95874-5

Date Collected: 08/25/22 14:07
Date Received: 08/26/22 17:05

Matrix: Groundwater

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:47	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:47	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:47	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 02:47	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 02:47	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 02:47	1
Chloroform	**1.3**		1.0	0.30	ug/L			09/03/22 02:47	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:47	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 02:47	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 02:47	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 02:47	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 02:47	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 02:47	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 02:47	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: OBW-63-20220825

Lab Sample ID: 410-95874-5

Date Collected: 08/25/22 14:07
Date Received: 08/26/22 17:05

Matrix: Groundwater

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*09/03/22 02:47*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/03/22 02:47*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*09/03/22 02:47*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/03/22 02:47*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		09/01/22 08:29	09/01/22 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*58*		*10 - 110*	*09/01/22 08:29*	*09/01/22 23:47*	*1*
Fluoranthene-d10 (Surr)	*82*		*47 - 128*	*09/01/22 08:29*	*09/01/22 23:47*	*1*
1-Methylnaphthalene-d10 (Surr)	*76*		*36 - 111*	*09/01/22 08:29*	*09/01/22 23:47*	*1*

Client Sample ID: MW-51-20220825

Lab Sample ID: 410-95874-6

Date Collected: 08/25/22 15:20
Date Received: 08/26/22 17:05

Matrix: Groundwater

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 03:09	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 03:09	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 03:09	1
1,2-Dichloroethane	**3.4**		1.0	0.30	ug/L			09/03/22 03:09	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 03:09	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 03:09	1
Chloroform	**1.1**		1.0	0.30	ug/L			09/03/22 03:09	1
cis-1,2-Dichloroethene	**0.55**	**J**	1.0	0.30	ug/L			09/03/22 03:09	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 03:09	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 03:09	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 03:09	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 03:09	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 03:09	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 03:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*80 - 120*		*09/03/22 03:09*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/03/22 03:09*	*1*
Dibromofluoromethane (Surr)	*112*		*80 - 120*		*09/03/22 03:09*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/03/22 03:09*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**34**		3.1	1.0	ug/L		09/01/22 08:29	09/02/22 10:33	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*79*		*10 - 110*	*09/01/22 08:29*	*09/02/22 10:33*	*10*
Fluoranthene-d10 (Surr)	*79*		*47 - 128*	*09/01/22 08:29*	*09/02/22 10:33*	*10*
1-Methylnaphthalene-d10 (Surr)	*76*		*36 - 111*	*09/01/22 08:29*	*09/02/22 10:33*	*10*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: FB-20220825

Lab Sample ID: 410-95874-7

Date Collected: 08/25/22 15:50
Matrix: Water
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 23:47	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 23:47	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 23:47	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 23:47	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 23:47	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 23:47	1
Chloroform	ND		1.0	0.30	ug/L			09/02/22 23:47	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 23:47	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 23:47	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 23:47	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 23:47	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 23:47	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 23:47	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 23:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/02/22 23:47*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*		*09/02/22 23:47*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*09/02/22 23:47*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/02/22 23:47*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		09/01/22 08:29	09/02/22 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*86*		*10 - 110*	*09/01/22 08:29*	*09/02/22 00:30*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*09/01/22 08:29*	*09/02/22 00:30*	*1*
1-Methylnaphthalene-d10 (Surr)	*75*		*36 - 111*	*09/01/22 08:29*	*09/02/22 00:30*	*1*

Client Sample ID: MW-47-20220826

Lab Sample ID: 410-95874-8

Date Collected: 08/26/22 09:29
Matrix: Groundwater
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 03:32	1
1,1-Dichloroethane	**1.2**		1.0	0.30	ug/L			09/03/22 03:32	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 03:32	1
1,2-Dichloroethane	**13**		1.0	0.30	ug/L			09/03/22 03:32	1
1,2-Dichloropropane	**2.2**		1.0	0.30	ug/L			09/03/22 03:32	1
Benzene	**0.48**	**J**	1.0	0.30	ug/L			09/03/22 03:32	1
Chloroform	**6.3**		1.0	0.30	ug/L			09/03/22 03:32	1
cis-1,2-Dichloroethene	**6.0**		1.0	0.30	ug/L			09/03/22 03:32	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 03:32	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 03:32	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 03:32	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 03:32	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 03:32	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 03:32	1

Client Sample ID: MW-47-20220826

Lab Sample ID: 410-95874-8
Matrix: Groundwater
Date Collected: 08/26/22 09:29
Date Received: 08/26/22 17:05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/03/22 03:32*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*09/03/22 03:32*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*09/03/22 03:32*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/03/22 03:32*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**25**		3.1	1.0	ug/L		09/01/22 15:22	09/06/22 09:25	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*71*		*10 - 110*	*09/01/22 15:22*	*09/06/22 09:25*	*10*
Fluoranthene-d10 (Surr)	*79*		*47 - 128*	*09/01/22 15:22*	*09/06/22 09:25*	*10*
1-Methylnaphthalene-d10 (Surr)	*78*		*36 - 111*	*09/01/22 15:22*	*09/06/22 09:25*	*10*

Client Sample ID: MW-53-20220826

Lab Sample ID: 410-95874-9
Matrix: Groundwater
Date Collected: 08/26/22 10:22
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 03:54	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 03:54	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 03:54	1
1,2-Dichloroethane	**0.76**	**J**	1.0	0.30	ug/L			09/03/22 03:54	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 03:54	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 03:54	1
Chloroform	**1.9**		1.0	0.30	ug/L			09/03/22 03:54	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 03:54	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 03:54	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 03:54	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 03:54	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 03:54	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 03:54	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 03:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*09/03/22 03:54*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/03/22 03:54*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 120*		*09/03/22 03:54*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/03/22 03:54*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**15**		3.1	1.0	ug/L		09/01/22 15:22	09/06/22 09:46	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*70*		*10 - 110*	*09/01/22 15:22*	*09/06/22 09:46*	*10*
Fluoranthene-d10 (Surr)	*78*		*47 - 128*	*09/01/22 15:22*	*09/06/22 09:46*	*10*
1-Methylnaphthalene-d10 (Surr)	*78*		*36 - 111*	*09/01/22 15:22*	*09/06/22 09:46*	*10*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-55-20220826

Lab Sample ID: 410-95874-10

Date Collected: 08/26/22 11:16
Matrix: Groundwater
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 04:16	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 04:16	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 04:16	1
1,2-Dichloroethane	**0.61**	**J**	1.0	0.30	ug/L			09/03/22 04:16	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 04:16	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 04:16	1
Chloroform	**1.0**		1.0	0.30	ug/L			09/03/22 04:16	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 04:16	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 04:16	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 04:16	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 04:16	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 04:16	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 04:16	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 04:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*09/03/22 04:16*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*09/03/22 04:16*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*09/03/22 04:16*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/03/22 04:16*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**15**		3.1	1.0	ug/L		09/01/22 15:22	09/06/22 10:07	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*72*		*10 - 110*	*09/01/22 15:22*	*09/06/22 10:07*	*10*
Fluoranthene-d10 (Surr)	*77*		*47 - 128*	*09/01/22 15:22*	*09/06/22 10:07*	*10*
1-Methylnaphthalene-d10 (Surr)	*74*		*36 - 111*	*09/01/22 15:22*	*09/06/22 10:07*	*10*

Client Sample ID: MW-45-20220826

Lab Sample ID: 410-95874-11

Date Collected: 08/26/22 12:14
Matrix: Groundwater
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 04:39	1
1,1-Dichloroethane	**1.4**		1.0	0.30	ug/L			09/03/22 04:39	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 04:39	1
1,2-Dichloroethane	**10**		1.0	0.30	ug/L			09/03/22 04:39	1
1,2-Dichloropropane	**4.3**		1.0	0.30	ug/L			09/03/22 04:39	1
Benzene	**1.2**		1.0	0.30	ug/L			09/03/22 04:39	1
Chloroform	**0.31**	**J**	1.0	0.30	ug/L			09/03/22 04:39	1
cis-1,2-Dichloroethene	**10**		1.0	0.30	ug/L			09/03/22 04:39	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 04:39	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 04:39	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 04:39	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 04:39	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 04:39	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 04:39	1

Client Sample ID: MW-45-20220826

Lab Sample ID: 410-95874-11
Matrix: Groundwater

Date Collected: 08/26/22 12:14
Date Received: 08/26/22 17:05

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*09/03/22 04:39*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/03/22 04:39*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*09/03/22 04:39*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*09/03/22 04:39*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**33**		6.1	2.0	ug/L		09/01/22 15:22	09/06/22 10:29	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*74*		*10 - 110*	*09/01/22 15:22*	*09/06/22 10:29*	*20*
Fluoranthene-d10 (Surr)	*72*		*47 - 128*	*09/01/22 15:22*	*09/06/22 10:29*	*20*
1-Methylnaphthalene-d10 (Surr)	*75*		*36 - 111*	*09/01/22 15:22*	*09/06/22 10:29*	*20*

Client Sample ID: MW-46-20220826

Lab Sample ID: 410-95874-12
Matrix: Groundwater

Date Collected: 08/26/22 13:07
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 05:01	1
1,1-Dichloroethane	**1.2**		1.0	0.30	ug/L			09/03/22 05:01	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 05:01	1
1,2-Dichloroethane	**1.2**		1.0	0.30	ug/L			09/03/22 05:01	1
1,2-Dichloropropane	**7.3**		1.0	0.30	ug/L			09/03/22 05:01	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 05:01	1
Chloroform	**3.4**		1.0	0.30	ug/L			09/03/22 05:01	1
cis-1,2-Dichloroethene	**1.6**		1.0	0.30	ug/L			09/03/22 05:01	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 05:01	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 05:01	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 05:01	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 05:01	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 05:01	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 05:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*80 - 120*		*09/03/22 05:01*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/03/22 05:01*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 120*		*09/03/22 05:01*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/03/22 05:01*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**19**		3.1	1.0	ug/L		09/01/22 15:22	09/06/22 10:50	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*72*		*10 - 110*	*09/01/22 15:22*	*09/06/22 10:50*	*10*
Fluoranthene-d10 (Surr)	*79*		*47 - 128*	*09/01/22 15:22*	*09/06/22 10:50*	*10*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*09/01/22 15:22*	*09/06/22 10:50*	*10*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: FB-20220826

Lab Sample ID: 410-95874-13
Date Collected: 08/26/22 13:40
Matrix: Water
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 00:10	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 00:10	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 00:10	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 00:10	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 00:10	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 00:10	1
Chloroform	ND		1.0	0.30	ug/L			09/03/22 00:10	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 00:10	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 00:10	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 00:10	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 00:10	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 00:10	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 00:10	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 00:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/03/22 00:10*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/03/22 00:10*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 120*		*09/03/22 00:10*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/03/22 00:10*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.32	0.11	ug/L		09/01/22 15:22	09/02/22 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*90*		*10 - 110*	*09/01/22 15:22*	*09/02/22 15:55*	*1*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*	*09/01/22 15:22*	*09/02/22 15:55*	*1*
1-Methylnaphthalene-d10 (Surr)	*80*		*36 - 111*	*09/01/22 15:22*	*09/02/22 15:55*	*1*

Client Sample ID: TB-20220826

Lab Sample ID: 410-95874-14
Date Collected: 08/26/22 00:00
Matrix: Water
Date Received: 08/26/22 17:05

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/03/22 00:32	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 00:32	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 00:32	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/03/22 00:32	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/03/22 00:32	1
Benzene	ND		1.0	0.30	ug/L			09/03/22 00:32	1
Chloroform	ND		1.0	0.30	ug/L			09/03/22 00:32	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/03/22 00:32	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/03/22 00:32	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/03/22 00:32	1
Toluene	ND		1.0	0.20	ug/L			09/03/22 00:32	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/03/22 00:32	1
Trichloroethene	ND		1.0	0.30	ug/L			09/03/22 00:32	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/03/22 00:32	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: TB-20220826

Date Collected: 08/26/22 00:00
Date Received: 08/26/22 17:05

Lab Sample ID: 410-95874-14

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		80 - 120		09/03/22 00:32	1
4-Bromofluorobenzene (Surr)	96		80 - 120		09/03/22 00:32	1
Dibromofluoromethane (Surr)	109		80 - 120		09/03/22 00:32	1
Toluene-d8 (Surr)	101		80 - 120		09/03/22 00:32	1

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-95874-1	MW-60-20220825	105	95	109	103
410-95874-2	MW-57-20220825	107	96	110	101
410-95874-3	MW-56-20220825	108	96	111	101
410-95874-4	OBW-62-20220825	101	93	108	101
410-95874-5	OBW-63-20220825	105	96	108	102
410-95874-6	MW-51-20220825	107	95	112	101
410-95874-8	MW-47-20220826	102	94	110	102
410-95874-9	MW-53-20220826	104	95	110	101
410-95874-10	MW-55-20220826	100	94	109	102
410-95874-11	MW-45-20220826	103	95	108	100
410-95874-12	MW-46-20220826	103	95	109	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-95874-7	FB-20220825	102	97	109	102
410-95874-13	FB-20220826	102	96	108	102
410-95874-14	TB-20220826	104	96	109	101
LCS 410-292576/4	Lab Control Sample	105	98	108	102
LCSD 410-292576/5	Lab Control Sample Dup	101	97	106	104
MB 410-292576/7	Method Blank	102	96	107	103

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BAPd12	FLN10	MNPd10
Lab Sample ID	Client Sample ID	(10-110)	(47-128)	(36-111)
410-95874-1	MW-60-20220825	88	85	79
410-95874-2	MW-57-20220825	69	84	78
410-95874-3	MW-56-20220825	76	89	80
410-95874-4	OBW-62-20220825	66	84	77
410-95874-5	OBW-63-20220825	58	82	76
410-95874-6	MW-51-20220825	79	79	76
410-95874-8	MW-47-20220826	71	79	78
410-95874-9	MW-53-20220826	70	78	78

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BAPd12 (10-110)	FLN10 (47-128)	MNPd10 (36-111)
410-95874-10	MW-55-20220826	72	77	74
410-95874-11	MW-45-20220826	74	72	75
410-95874-12	MW-46-20220826	72	79	79

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BAPd12 (10-110)	FLN10 (47-128)	MNPd10 (36-111)
410-95874-7	FB-20220825	86	85	75
410-95874-13	FB-20220826	90	87	80
LCS 410-291816/2-A	Lab Control Sample	91	84	69
LCS 410-292088/2-A	Lab Control Sample	87	82	68
LCSD 410-291816/3-A	Lab Control Sample Dup	90	82	71
LCSD 410-292088/3-A	Lab Control Sample Dup	94	86	76
MB 410-291816/1-A	Method Blank	90	87	77
MB 410-292088/1-A	Method Blank	102	97	88

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

QC Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-292576/7
Matrix: Water
Analysis Batch: 292576

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/02/22 22:40	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 22:40	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 22:40	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/02/22 22:40	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/02/22 22:40	1
Benzene	ND		1.0	0.30	ug/L			09/02/22 22:40	1
Chloroform	ND		1.0	0.30	ug/L			09/02/22 22:40	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/02/22 22:40	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/02/22 22:40	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/02/22 22:40	1
Toluene	ND		1.0	0.20	ug/L			09/02/22 22:40	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/02/22 22:40	1
Trichloroethene	ND		1.0	0.30	ug/L			09/02/22 22:40	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/02/22 22:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/02/22 22:40*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/02/22 22:40*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 120*		*09/02/22 22:40*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/02/22 22:40*	*1*

Lab Sample ID: LCS 410-292576/4
Matrix: Water
Analysis Batch: 292576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	19.7		ug/L		98	67 - 126
1,1-Dichloroethane	20.0	19.7		ug/L		99	80 - 120
1,1-Dichloroethene	20.0	20.1		ug/L		101	80 - 131
1,2-Dichloroethane	20.0	19.2		ug/L		96	73 - 124
1,2-Dichloropropane	20.0	18.4		ug/L		92	80 - 120
Benzene	20.0	19.1		ug/L		95	80 - 120
Chloroform	20.0	20.3		ug/L		101	80 - 120
cis-1,2-Dichloroethene	20.0	20.6		ug/L		103	80 - 125
Ethylbenzene	20.0	18.5		ug/L		92	80 - 120
Tetrachloroethene	20.0	18.2		ug/L		91	80 - 120
Toluene	20.0	18.5		ug/L		93	80 - 120
trans-1,2-Dichloroethene	20.0	20.0		ug/L		100	80 - 126
Trichloroethene	20.0	18.6		ug/L		93	80 - 120
Vinyl chloride	20.0	19.5		ug/L		97	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*108*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-292576/5
Matrix: Water
Analysis Batch: 292576

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	19.7		ug/L		99	67 - 126	0	30
1,1-Dichloroethane			20.0	19.8		ug/L		99	80 - 120	0	30
1,1-Dichloroethene			20.0	20.9		ug/L		104	80 - 131	4	30
1,2-Dichloroethane			20.0	19.9		ug/L		99	73 - 124	3	30
1,2-Dichloropropane			20.0	18.7		ug/L		94	80 - 120	1	30
Benzene			20.0	18.9		ug/L		94	80 - 120	1	30
Chloroform			20.0	20.3		ug/L		102	80 - 120	0	30
cis-1,2-Dichloroethene			20.0	20.0		ug/L		100	80 - 125	3	30
Ethylbenzene			20.0	18.7		ug/L		93	80 - 120	1	30
Tetrachloroethene			20.0	18.6		ug/L		93	80 - 120	2	30
Toluene			20.0	18.9		ug/L		95	80 - 120	2	30
trans-1,2-Dichloroethene			20.0	19.8		ug/L		99	80 - 126	1	30
Trichloroethene			20.0	18.6		ug/L		93	80 - 120	0	30
Vinyl chloride			20.0	19.7		ug/L		99	56 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*
Dibromofluoromethane (Surr)	*106*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-291816/1-A
Matrix: Water
Analysis Batch: 292126

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 291816

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/01/22 08:29	09/01/22 17:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*90*		*10 - 110*	*09/01/22 08:29*	*09/01/22 17:43*	*1*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*	*09/01/22 08:29*	*09/01/22 17:43*	*1*
1-Methylnaphthalene-d10 (Surr)	*77*		*36 - 111*	*09/01/22 08:29*	*09/01/22 17:43*	*1*

Lab Sample ID: LCS 410-291816/2-A
Matrix: Water
Analysis Batch: 292126

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 291816

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			1.00	0.464		ug/L		46	23 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*91*		*10 - 110*
Fluoranthene-d10 (Surr)	*84*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*69*		*36 - 111*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: LCSD 410-291816/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 292126 — **Prep Batch: 291816**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane			1.00	0.445		ug/L		44	23 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*90*		*10 - 110*
Fluoranthene-d10 (Surr)	*82*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*71*		*36 - 111*

Lab Sample ID: MB 410-292088/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 292275 — **Prep Batch: 292088**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/01/22 15:22	09/02/22 08:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*102*		*10 - 110*	*09/01/22 15:22*	*09/02/22 08:24*	*1*
Fluoranthene-d10 (Surr)	*97*		*47 - 128*	*09/01/22 15:22*	*09/02/22 08:24*	*1*
1-Methylnaphthalene-d10 (Surr)	*88*		*36 - 111*	*09/01/22 15:22*	*09/02/22 08:24*	*1*

Lab Sample ID: LCS 410-292088/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 292275 — **Prep Batch: 292088**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			1.00	0.386		ug/L		39	23 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*87*		*10 - 110*
Fluoranthene-d10 (Surr)	*82*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*68*		*36 - 111*

Lab Sample ID: LCSD 410-292088/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 292275 — **Prep Batch: 292088**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane			1.00	0.422		ug/L		42	23 - 120	9	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*94*		*10 - 110*
Fluoranthene-d10 (Surr)	*86*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*76*		*36 - 111*

QC Association Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

GC/MS VOA

Analysis Batch: 292576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95874-1	MW-60-20220825	Total/NA	Groundwater	8260D	
410-95874-2	MW-57-20220825	Total/NA	Groundwater	8260D	
410-95874-3	MW-56-20220825	Total/NA	Groundwater	8260D	
410-95874-4	OBW-62-20220825	Total/NA	Groundwater	8260D	
410-95874-5	OBW-63-20220825	Total/NA	Groundwater	8260D	
410-95874-6	MW-51-20220825	Total/NA	Groundwater	8260D	
410-95874-7	FB-20220825	Total/NA	Water	8260D	
410-95874-8	MW-47-20220826	Total/NA	Groundwater	8260D	
410-95874-9	MW-53-20220826	Total/NA	Groundwater	8260D	
410-95874-10	MW-55-20220826	Total/NA	Groundwater	8260D	
410-95874-11	MW-45-20220826	Total/NA	Groundwater	8260D	
410-95874-12	MW-46-20220826	Total/NA	Groundwater	8260D	
410-95874-13	FB-20220826	Total/NA	Water	8260D	
410-95874-14	TB-20220826	Total/NA	Water	8260D	
MB 410-292576/7	Method Blank	Total/NA	Water	8260D	
LCS 410-292576/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-292576/5	Lab Control Sample Dup	Total/NA	Water	8260D	

GC/MS Semi VOA

Prep Batch: 291816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95874-1	MW-60-20220825	Total/NA	Groundwater	3510C	
410-95874-2	MW-57-20220825	Total/NA	Groundwater	3510C	
410-95874-3	MW-56-20220825	Total/NA	Groundwater	3510C	
410-95874-4	OBW-62-20220825	Total/NA	Groundwater	3510C	
410-95874-5	OBW-63-20220825	Total/NA	Groundwater	3510C	
410-95874-6	MW-51-20220825	Total/NA	Groundwater	3510C	
410-95874-7	FB-20220825	Total/NA	Water	3510C	
MB 410-291816/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-291816/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-291816/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Prep Batch: 292088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95874-8	MW-47-20220826	Total/NA	Groundwater	3510C	
410-95874-9	MW-53-20220826	Total/NA	Groundwater	3510C	
410-95874-10	MW-55-20220826	Total/NA	Groundwater	3510C	
410-95874-11	MW-45-20220826	Total/NA	Groundwater	3510C	
410-95874-12	MW-46-20220826	Total/NA	Groundwater	3510C	
410-95874-13	FB-20220826	Total/NA	Water	3510C	
MB 410-292088/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-292088/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 410-292088/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 292126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95874-1	MW-60-20220825	Total/NA	Groundwater	8270E SIM	291816
410-95874-2	MW-57-20220825	Total/NA	Groundwater	8270E SIM	291816
410-95874-3	MW-56-20220825	Total/NA	Groundwater	8270E SIM	291816
410-95874-4	OBW-62-20220825	Total/NA	Groundwater	8270E SIM	291816

GC/MS Semi VOA (Continued)

Analysis Batch: 292126 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95874-5	OBW-63-20220825	Total/NA	Groundwater	8270E SIM	291816
410-95874-7	FB-20220825	Total/NA	Water	8270E SIM	291816
MB 410-291816/1-A	Method Blank	Total/NA	Water	8270E SIM	291816
LCS 410-291816/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	291816
LCSD 410-291816/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	291816

Analysis Batch: 292275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95874-6	MW-51-20220825	Total/NA	Groundwater	8270E SIM	291816
410-95874-13	FB-20220826	Total/NA	Water	8270E SIM	292088
MB 410-292088/1-A	Method Blank	Total/NA	Water	8270E SIM	292088
LCS 410-292088/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	292088
LCSD 410-292088/3-A	Lab Control Sample Dup	Total/NA	Water	8270E SIM	292088

Analysis Batch: 292803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-95874-8	MW-47-20220826	Total/NA	Groundwater	8270E SIM	292088
410-95874-9	MW-53-20220826	Total/NA	Groundwater	8270E SIM	292088
410-95874-10	MW-55-20220826	Total/NA	Groundwater	8270E SIM	292088
410-95874-11	MW-45-20220826	Total/NA	Groundwater	8270E SIM	292088
410-95874-12	MW-46-20220826	Total/NA	Groundwater	8270E SIM	292088

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-60-20220825 — Lab Sample ID: 410-95874-1

Date Collected: 08/25/22 09:13 — **Matrix: Groundwater**
Date Received: 08/26/22 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 01:17
Total/NA	Prep	3510C			291816	YDF5	ELLE	09/01/22 08:29
Total/NA	Analysis	8270E SIM		1	292126	UJM0	ELLE	09/01/22 22:22

Client Sample ID: MW-57-20220825 — Lab Sample ID: 410-95874-2

Date Collected: 08/25/22 10:05 — **Matrix: Groundwater**
Date Received: 08/26/22 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 01:40
Total/NA	Prep	3510C			291816	YDF5	ELLE	09/01/22 08:29
Total/NA	Analysis	8270E SIM		1	292126	UJM0	ELLE	09/01/22 22:43

Client Sample ID: MW-56-20220825 — Lab Sample ID: 410-95874-3

Date Collected: 08/25/22 11:01 — **Matrix: Groundwater**
Date Received: 08/26/22 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 02:02
Total/NA	Prep	3510C			291816	YDF5	ELLE	09/01/22 08:29
Total/NA	Analysis	8270E SIM		1	292126	UJM0	ELLE	09/01/22 23:04

Client Sample ID: OBW-62-20220825 — Lab Sample ID: 410-95874-4

Date Collected: 08/25/22 12:48 — **Matrix: Groundwater**
Date Received: 08/26/22 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 02:24
Total/NA	Prep	3510C			291816	YDF5	ELLE	09/01/22 08:29
Total/NA	Analysis	8270E SIM		1	292126	UJM0	ELLE	09/01/22 23:26

Client Sample ID: OBW-63-20220825 — Lab Sample ID: 410-95874-5

Date Collected: 08/25/22 14:07 — **Matrix: Groundwater**
Date Received: 08/26/22 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 02:47
Total/NA	Prep	3510C			291816	YDF5	ELLE	09/01/22 08:29
Total/NA	Analysis	8270E SIM		1	292126	UJM0	ELLE	09/01/22 23:47

Client Sample ID: MW-51-20220825 — Lab Sample ID: 410-95874-6

Date Collected: 08/25/22 15:20 — **Matrix: Groundwater**
Date Received: 08/26/22 17:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 03:09

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-51-20220825
Date Collected: 08/25/22 15:20
Date Received: 08/26/22 17:05

Lab Sample ID: 410-95874-6
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			291816	YDF5	ELLE	09/01/22 08:29
Total/NA	Analysis	8270E SIM		10	292275	SJ89	ELLE	09/02/22 10:33

Client Sample ID: FB-20220825
Date Collected: 08/25/22 15:50
Date Received: 08/26/22 17:05

Lab Sample ID: 410-95874-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/02/22 23:47
Total/NA	Prep	3510C			291816	YDF5	ELLE	09/01/22 08:29
Total/NA	Analysis	8270E SIM		1	292126	UJM0	ELLE	09/02/22 00:30

Client Sample ID: MW-47-20220826
Date Collected: 08/26/22 09:29
Date Received: 08/26/22 17:05

Lab Sample ID: 410-95874-8
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 03:32
Total/NA	Prep	3510C			292088	QJZ6	ELLE	09/01/22 15:22
Total/NA	Analysis	8270E SIM		10	292803	SJ89	ELLE	09/06/22 09:25

Client Sample ID: MW-53-20220826
Date Collected: 08/26/22 10:22
Date Received: 08/26/22 17:05

Lab Sample ID: 410-95874-9
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 03:54
Total/NA	Prep	3510C			292088	QJZ6	ELLE	09/01/22 15:22
Total/NA	Analysis	8270E SIM		10	292803	SJ89	ELLE	09/06/22 09:46

Client Sample ID: MW-55-20220826
Date Collected: 08/26/22 11:16
Date Received: 08/26/22 17:05

Lab Sample ID: 410-95874-10
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 04:16
Total/NA	Prep	3510C			292088	QJZ6	ELLE	09/01/22 15:22
Total/NA	Analysis	8270E SIM		10	292803	SJ89	ELLE	09/06/22 10:07

Client Sample ID: MW-45-20220826
Date Collected: 08/26/22 12:14
Date Received: 08/26/22 17:05

Lab Sample ID: 410-95874-11
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 04:39

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Client Sample ID: MW-45-20220826 — Lab Sample ID: 410-95874-11

Date Collected: 08/26/22 12:14
Date Received: 08/26/22 17:05
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			292088	QJZ6	ELLE	09/01/22 15:22
Total/NA	Analysis	8270E SIM		20	292803	SJ89	ELLE	09/06/22 10:29

Client Sample ID: MW-46-20220826 — Lab Sample ID: 410-95874-12

Date Collected: 08/26/22 13:07
Date Received: 08/26/22 17:05
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 05:01
Total/NA	Prep	3510C			292088	QJZ6	ELLE	09/01/22 15:22
Total/NA	Analysis	8270E SIM		10	292803	SJ89	ELLE	09/06/22 10:50

Client Sample ID: FB-20220826 — Lab Sample ID: 410-95874-13

Date Collected: 08/26/22 13:40
Date Received: 08/26/22 17:05
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 00:10
Total/NA	Prep	3510C			292088	QJZ6	ELLE	09/01/22 15:22
Total/NA	Analysis	8270E SIM		1	292275	SJ89	ELLE	09/02/22 15:55

Client Sample ID: TB-20220826 — Lab Sample ID: 410-95874-14

Date Collected: 08/26/22 00:00
Date Received: 08/26/22 17:05
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	292576	K4WN	ELLE	09/03/22 00:32

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	09-20-22

Method Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-95874-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-95874-1	MW-60-20220825	Groundwater	08/25/22 09:13	08/26/22 17:05
410-95874-2	MW-57-20220825	Groundwater	08/25/22 10:05	08/26/22 17:05
410-95874-3	MW-56-20220825	Groundwater	08/25/22 11:01	08/26/22 17:05
410-95874-4	OBW-62-20220825	Groundwater	08/25/22 12:48	08/26/22 17:05
410-95874-5	OBW-63-20220825	Groundwater	08/25/22 14:07	08/26/22 17:05
410-95874-6	MW-51-20220825	Groundwater	08/25/22 15:20	08/26/22 17:05
410-95874-7	FB-20220825	Water	08/25/22 15:50	08/26/22 17:05
410-95874-8	MW-47-20220826	Groundwater	08/26/22 09:29	08/26/22 17:05
410-95874-9	MW-53-20220826	Groundwater	08/26/22 10:22	08/26/22 17:05
410-95874-10	MW-55-20220826	Groundwater	08/26/22 11:16	08/26/22 17:05
410-95874-11	MW-45-20220826	Groundwater	08/26/22 12:14	08/26/22 17:05
410-95874-12	MW-46-20220826	Groundwater	08/26/22 13:07	08/26/22 17:05
410-95874-13	FB-20220826	Water	08/26/22 13:40	08/26/22 17:05
410-95874-14	TB-20220826	Water	08/26/22 00:00	08/26/22 17:05

ironme

Chain of Custody Record

eurofins Environment Testing America

410-95874 Chain of Custody

Sampler: MHM / SFJ	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-33363-10388.3
Client Contact: Mr. Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@et.eurofinsus.com	State of Origin:	Page: Page 3 of 7
Company: Brown and Caldwell	PWSID:		Job #:
Address: 500 N. Franklin Turnpike Suite 306	Due Date Requested:		
City: Ramsey	TAT Requested (days): STandard		
State, Zip: NJ, 07446	Compliance Project: Δ Yes Δ No		
Phone: 201-574-4706(Tel)	PO #: Purchase Order Requested		
Email: cmeyn@brwncald.com	WO #:		
Project Name: D'Imperio Property	Project #: 41000706		
Site:	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260D - VOCs	8270E_SIM - 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-60-20220825	08/25/22	0913	G	GW			X	X		
MW-57-20220825		1005					X	X		
MW-56-20220825		1101					X	X		
OBW-62-20220825		1248					X	X		
OBW-63-20220825		1407					X	X		
MW-51-20220825		1520					X	X		
FB-20220825		1550		DI			X	X		
MW-47-20220826	08/26/22	0929	G	GW			X	X		
MW-53-20220826		1027					X	X		
MW-55-20220826		1116					X	X		
MW-45-20220826		1214					X	X		

OBW-62 →

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC EQuis

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Matt Mahoney	Date/Time: 08/26/22 1404	Company: BC	Received by: Pierre	Date/Time: 8/26/22 1407	Company
Relinquished by: Pierre	Date/Time: 8/26/22 1702	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 8/26/22 1705	Company: ELLET

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.: not present

Cooler Temperature(s) °C and Other Remarks: 4.4 - 5.5°C

Ver: 06/08/2021

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler: MHM / SEJ	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-33363-10388.4
Client Contact: Mr. Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@et.eurofinsus.com	State of Origin:	Page: Page 4 of 7
Company: Brown and Caldwell	PWSID:			Job #:
Address: 500 N. Franklin Turnpike Suite 306	Due Date Requested:			
City: Ramsey	TAT Requested (days): Standard			
State, Zip: NJ, 07446	Compliance Project: Δ Yes Δ No			
Phone: 201-574-4706(Tel)	PO #: Purchase Order Requested			
Email: cmeyn@brwncald.com	WO #:			
Project Name: D'Imperio Property	Project #: 41000706			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	From Laboratory (Yes or No)	8260D - VOCs	8270E_SIM - 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	N		
MW-46-20220826	08/26/22	1307	G	GW			X	X		
FB-20220826	↓	1340	↓	DI			X	X		
TB-20220826	↓	LAB	↓	↓			X			

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC Equis

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Max Moore	Date/Time: 08/26/22 1404	Company: BC	Received by: [illegible]	Date/Time: 8/26/22 1404	Company
Relinquished by: [illegible]	Date/Time: 8/26/22 1702	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by: [illegible]	Date/Time: 8/26/22 1705	Company: ELLET

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: not present

Cooler Temperature(s) °C and Other Remarks: 4.4-5.5°C

Ver: 06/08/2021

10/11/2022 (Rev. 1)

Login Sample Receipt Checklist

Client: Brown and Caldwell

Job Number: 410-95874-1

Login Number: 95874
List Number: 1
Creator: Renner, Melissa

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-96362-1
Client Project/Site: D'Imperio Property
Revision: 1

For:
Brown and Caldwell
500 N. Franklin Turnpike
Suite 306
Ramsey, New Jersey 07446

Attn: Mr. Charles Meyn

Barb Weyandt

Authorized for release by:
10/11/2022 11:02:16 AM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@et.eurofinsus.com

LINKS

Review your project results through my EOL

Have a Question? Ask The Expert

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Barb Weyandt

Barbara Weyandt
Project Manager
10/11/2022 11:02:16 AM

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Definitions/Glossary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
cn	Refer to Case Narrative for further detail
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 410-96362-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-96362-1

Revision
The report being provided is a revision of the original report sent on 9/14/2022. The report (revision 1) is being revised due to: add VC and remove 2-Butanone, Chlorobenzene and Methylene Chloride.

Receipt
The samples were received on 8/31/2022 7:09 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 2.6º C and 4.5º C.

Receipt Exceptions
The Field Sampler was not listed on the Chain of Custody.

GC/MS VOA
Methods 8260C, 8260D: The continuing calibration verification (CCV) associated with batch 410-294464 recovered outside acceptance criteria, low biased, for 1,2-Dichloroethane and 2-Butanone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-294464 recovered outside acceptance criteria, low biased, for 1,2-Dichloroethane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Non-detections of the affected analytes are reported. Any detections are considered estimated.

Method 8260D: The continuing calibration verification (CCV) associated with batch 410-294732 recovered above the upper control limit for Vinyl chloride. Non-detections of the affected analytes are reported. Any detections are considered estimated.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

VOA Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-50-20220829 — Lab Sample ID: 410-96362-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	1.2	cn	1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	1.1		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	27		3.1	1.0	ug/L	10		8270E SIM	Total/NA

Client Sample ID: MW-59-20220829 — Lab Sample ID: 410-96362-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	4.0		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-49-20220829 — Lab Sample ID: 410-96362-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	4.8		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-34-20220829 — Lab Sample ID: 410-96362-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	9.7		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.79		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-29-1-20220829 — Lab Sample ID: 410-96362-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	8.1		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.45		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: FB-20220829 — Lab Sample ID: 410-96362-6

No Detections.

Client Sample ID: MW-37-20220830 — Lab Sample ID: 410-96362-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	7.7		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	3.8		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-38-20220830 — Lab Sample ID: 410-96362-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.85	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	0.55	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	9.3		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	1.1		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.61	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	8.5		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-32-20220830 — Lab Sample ID: 410-96362-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.60	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	18		1.6	0.52	ug/L	5		8270E SIM	Total/NA

Client Sample ID: MW-33-2-20220830 — Lab Sample ID: 410-96362-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.2		1.0	0.30	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-33-2-20220830 (Continued) — Lab Sample ID: 410-96362-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.34	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	4.8		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	9.1		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.66	J	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	6.8		1.0	0.30	ug/L	1		8260D	Total/NA
Trichloroethene	0.48	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	33		3.1	1.0	ug/L	10		8270E SIM	Total/NA

Client Sample ID: MW-40-20220830 — Lab Sample ID: 410-96362-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	6.2		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.40		0.32	0.11	ug/L	1		8270E SIM	Total/NA

Client Sample ID: FB-20220830 — Lab Sample ID: 410-96362-12

No Detections.

Client Sample ID: MW-24-1-20220831 — Lab Sample ID: 410-96362-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	20		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-24-2-20220831 — Lab Sample ID: 410-96362-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.2		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	1.4		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	4.8		1.0	0.30	ug/L	1		8260D	Total/NA
Ethylbenzene	7.4		1.0	0.40	ug/L	1		8260D	Total/NA
Toluene	0.95	J	1.0	0.20	ug/L	1		8260D	Total/NA
1,4-Dioxane	27		3.0	1.0	ug/L	10		8270E SIM	Total/NA

Client Sample ID: MW-28-1-20220831 — Lab Sample ID: 410-96362-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	41		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-28-2-20220831 — Lab Sample ID: 410-96362-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.57	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloroethane	2.0		1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	2.3		1.0	0.30	ug/L	1		8260D	Total/NA
Benzene	0.38	J	1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	5.1		1.0	0.30	ug/L	1		8260D	Total/NA
Ethylbenzene	1.9		1.0	0.40	ug/L	1		8260D	Total/NA
1,4-Dioxane	10		1.5	0.51	ug/L	5		8270E SIM	Total/NA

Client Sample ID: MW-29-2-20220831 — Lab Sample ID: 410-96362-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	12		1.6	0.52	ug/L	5		8270E SIM	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: DUP-20220830 — Lab Sample ID: 410-96362-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.75	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,2-Dichloropropane	10		1.0	0.30	ug/L	1		8260D	Total/NA
Chloroform	1.0		1.0	0.30	ug/L	1		8260D	Total/NA
cis-1,2-Dichloroethene	0.66	J	1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	11		1.5	0.50	ug/L	5		8270E SIM	Total/NA

Client Sample ID: FB-20220831 — Lab Sample ID: 410-96362-19

No Detections.

Client Sample ID: TB-20220831 — Lab Sample ID: 410-96362-20

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-50-20220829

Lab Sample ID: 410-96362-1

Date Collected: 08/29/22 11:37
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/10/22 01:22	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/10/22 01:22	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 01:22	1
1,2-Dichloroethane	**1.2**	**cn**	1.0	0.30	ug/L			09/10/22 01:22	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/10/22 01:22	1
Benzene	ND		1.0	0.30	ug/L			09/10/22 01:22	1
Chloroform	**1.1**		1.0	0.30	ug/L			09/10/22 01:22	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 01:22	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/10/22 01:22	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/10/22 01:22	1
Toluene	ND		1.0	0.20	ug/L			09/10/22 01:22	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/10/22 01:22	1
Trichloroethene	ND		1.0	0.30	ug/L			09/10/22 01:22	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/10/22 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*09/10/22 01:22*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*09/10/22 01:22*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/10/22 01:22*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/10/22 01:22*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**27**		3.1	1.0	ug/L		09/04/22 10:59	09/08/22 06:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*85*		*10 - 110*	*09/04/22 10:59*	*09/08/22 06:04*	*10*
Fluoranthene-d10 (Surr)	*90*		*47 - 128*	*09/04/22 10:59*	*09/08/22 06:04*	*10*
1-Methylnaphthalene-d10 (Surr)	*70*		*36 - 111*	*09/04/22 10:59*	*09/08/22 06:04*	*10*

Client Sample ID: MW-59-20220829

Lab Sample ID: 410-96362-2

Date Collected: 08/29/22 12:33
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/10/22 01:42	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/10/22 01:42	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 01:42	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/10/22 01:42	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/10/22 01:42	1
Benzene	ND		1.0	0.30	ug/L			09/10/22 01:42	1
Chloroform	**4.0**		1.0	0.30	ug/L			09/10/22 01:42	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 01:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/10/22 01:42	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/10/22 01:42	1
Toluene	ND		1.0	0.20	ug/L			09/10/22 01:42	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/10/22 01:42	1
Trichloroethene	ND		1.0	0.30	ug/L			09/10/22 01:42	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/10/22 01:42	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-59-20220829

Lab Sample ID: 410-96362-2

Date Collected: 08/29/22 12:33
Date Received: 08/31/22 19:09

Matrix: Ground Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*80 - 120*		*09/10/22 01:42*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/10/22 01:42*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*09/10/22 01:42*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/10/22 01:42*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/04/22 10:59	09/07/22 16:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*52*		*10 - 110*	*09/04/22 10:59*	*09/07/22 16:14*	*1*
Fluoranthene-d10 (Surr)	*58*		*47 - 128*	*09/04/22 10:59*	*09/07/22 16:14*	*1*
1-Methylnaphthalene-d10 (Surr)	*46*		*36 - 111*	*09/04/22 10:59*	*09/07/22 16:14*	*1*

Client Sample ID: MW-49-20220829

Lab Sample ID: 410-96362-3

Date Collected: 08/29/22 13:32
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/10/22 02:01	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/10/22 02:01	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:01	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/10/22 02:01	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/10/22 02:01	1
Benzene	ND		1.0	0.30	ug/L			09/10/22 02:01	1
Chloroform	**4.8**		1.0	0.30	ug/L			09/10/22 02:01	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:01	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/10/22 02:01	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/10/22 02:01	1
Toluene	ND		1.0	0.20	ug/L			09/10/22 02:01	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/10/22 02:01	1
Trichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:01	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/10/22 02:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*		*09/10/22 02:01*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/10/22 02:01*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*09/10/22 02:01*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*09/10/22 02:01*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/04/22 10:59	09/07/22 16:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*67*		*10 - 110*	*09/04/22 10:59*	*09/07/22 16:35*	*1*
Fluoranthene-d10 (Surr)	*100*		*47 - 128*	*09/04/22 10:59*	*09/07/22 16:35*	*1*
1-Methylnaphthalene-d10 (Surr)	*81*		*36 - 111*	*09/04/22 10:59*	*09/07/22 16:35*	*1*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-34-20220829

Lab Sample ID: 410-96362-4

Date Collected: 08/29/22 14:28
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/10/22 02:21	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/10/22 02:21	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:21	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/10/22 02:21	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/10/22 02:21	1
Benzene	ND		1.0	0.30	ug/L			09/10/22 02:21	1
Chloroform	**9.7**		1.0	0.30	ug/L			09/10/22 02:21	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:21	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/10/22 02:21	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/10/22 02:21	1
Toluene	ND		1.0	0.20	ug/L			09/10/22 02:21	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/10/22 02:21	1
Trichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:21	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/10/22 02:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*09/10/22 02:21*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*09/10/22 02:21*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*09/10/22 02:21*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/10/22 02:21*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.79**		0.31	0.10	ug/L		09/04/22 10:59	09/07/22 16:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*92*		*10 - 110*	*09/04/22 10:59*	*09/07/22 16:57*	*1*
Fluoranthene-d10 (Surr)	*97*		*47 - 128*	*09/04/22 10:59*	*09/07/22 16:57*	*1*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*09/04/22 10:59*	*09/07/22 16:57*	*1*

Client Sample ID: MW-29-1-20220829

Lab Sample ID: 410-96362-5

Date Collected: 08/29/22 15:24
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/10/22 02:41	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/10/22 02:41	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:41	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/10/22 02:41	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/10/22 02:41	1
Benzene	ND		1.0	0.30	ug/L			09/10/22 02:41	1
Chloroform	**8.1**		1.0	0.30	ug/L			09/10/22 02:41	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:41	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/10/22 02:41	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/10/22 02:41	1
Toluene	ND		1.0	0.20	ug/L			09/10/22 02:41	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/10/22 02:41	1
Trichloroethene	ND		1.0	0.30	ug/L			09/10/22 02:41	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/10/22 02:41	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-29-1-20220829

Lab Sample ID: 410-96362-5
Date Collected: 08/29/22 15:24
Matrix: Ground Water
Date Received: 08/31/22 19:09

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*80 - 120*		*09/10/22 02:41*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*09/10/22 02:41*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*09/10/22 02:41*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/10/22 02:41*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.45**		0.30	0.10	ug/L		09/04/22 10:59	09/07/22 17:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*87*		*10 - 110*	*09/04/22 10:59*	*09/07/22 17:19*	*1*
Fluoranthene-d10 (Surr)	*101*		*47 - 128*	*09/04/22 10:59*	*09/07/22 17:19*	*1*
1-Methylnaphthalene-d10 (Surr)	*82*		*36 - 111*	*09/04/22 10:59*	*09/07/22 17:19*	*1*

Client Sample ID: FB-20220829

Lab Sample ID: 410-96362-6
Date Collected: 08/29/22 15:50
Matrix: Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/09/22 22:05	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/09/22 22:05	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/09/22 22:05	1
1,2-Dichloroethane	ND	cn	1.0	0.30	ug/L			09/09/22 22:05	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/09/22 22:05	1
Benzene	ND		1.0	0.30	ug/L			09/09/22 22:05	1
Chloroform	ND		1.0	0.30	ug/L			09/09/22 22:05	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/09/22 22:05	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/09/22 22:05	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/09/22 22:05	1
Toluene	ND		1.0	0.20	ug/L			09/09/22 22:05	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/09/22 22:05	1
Trichloroethene	ND		1.0	0.30	ug/L			09/09/22 22:05	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/09/22 22:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/09/22 22:05*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/09/22 22:05*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 120*		*09/09/22 22:05*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/09/22 22:05*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/04/22 10:59	09/07/22 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*97*		*10 - 110*	*09/04/22 10:59*	*09/07/22 17:40*	*1*
Fluoranthene-d10 (Surr)	*101*		*47 - 128*	*09/04/22 10:59*	*09/07/22 17:40*	*1*
1-Methylnaphthalene-d10 (Surr)	*81*		*36 - 111*	*09/04/22 10:59*	*09/07/22 17:40*	*1*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-37-20220830

Lab Sample ID: 410-96362-7

Date Collected: 08/30/22 09:20
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/11/22 17:51	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 17:51	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 17:51	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 17:51	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/11/22 17:51	1
Benzene	ND		1.0	0.30	ug/L			09/11/22 17:51	1
Chloroform	**7.7**		1.0	0.30	ug/L			09/11/22 17:51	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 17:51	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/11/22 17:51	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/11/22 17:51	1
Toluene	ND		1.0	0.20	ug/L			09/11/22 17:51	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/11/22 17:51	1
Trichloroethene	ND		1.0	0.30	ug/L			09/11/22 17:51	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/11/22 17:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/11/22 17:51*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/11/22 17:51*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*09/11/22 17:51*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/11/22 17:51*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**3.8**		0.30	0.10	ug/L		09/03/22 10:17	09/06/22 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*88*		*10 - 110*	*09/03/22 10:17*	*09/06/22 15:00*	*1*
Fluoranthene-d10 (Surr)	*84*		*47 - 128*	*09/03/22 10:17*	*09/06/22 15:00*	*1*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*09/03/22 10:17*	*09/06/22 15:00*	*1*

Client Sample ID: MW-38-20220830

Lab Sample ID: 410-96362-8

Date Collected: 08/30/22 10:10
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/11/22 18:13	1
1,1-Dichloroethane	**0.85**	**J**	1.0	0.30	ug/L			09/11/22 18:13	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 18:13	1
1,2-Dichloroethane	**0.55**	**J**	1.0	0.30	ug/L			09/11/22 18:13	1
1,2-Dichloropropane	**9.3**		1.0	0.30	ug/L			09/11/22 18:13	1
Benzene	ND		1.0	0.30	ug/L			09/11/22 18:13	1
Chloroform	**1.1**		1.0	0.30	ug/L			09/11/22 18:13	1
cis-1,2-Dichloroethene	**0.61**	**J**	1.0	0.30	ug/L			09/11/22 18:13	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/11/22 18:13	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/11/22 18:13	1
Toluene	ND		1.0	0.20	ug/L			09/11/22 18:13	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/11/22 18:13	1
Trichloroethene	ND		1.0	0.30	ug/L			09/11/22 18:13	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/11/22 18:13	1

Client Sample ID: MW-38-20220830

Lab Sample ID: 410-96362-8

Date Collected: 08/30/22 10:10
Matrix: Ground Water
Date Received: 08/31/22 19:09

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		80 - 120		09/11/22 18:13	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/11/22 18:13	1
Dibromofluoromethane (Surr)	100		80 - 120		09/11/22 18:13	1
Toluene-d8 (Surr)	103		80 - 120		09/11/22 18:13	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**8.5**		0.30	0.10	ug/L		09/03/22 10:17	09/06/22 15:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	84		10 - 110	09/03/22 10:17	09/06/22 15:22	1
Fluoranthene-d10 (Surr)	84		47 - 128	09/03/22 10:17	09/06/22 15:22	1
1-Methylnaphthalene-d10 (Surr)	79		36 - 111	09/03/22 10:17	09/06/22 15:22	1

Client Sample ID: MW-32-20220830

Lab Sample ID: 410-96362-9

Date Collected: 08/30/22 12:03
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/11/22 18:35	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 18:35	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 18:35	1
1,2-Dichloroethane	**0.60**	**J**	1.0	0.30	ug/L			09/11/22 18:35	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/11/22 18:35	1
Benzene	ND		1.0	0.30	ug/L			09/11/22 18:35	1
Chloroform	ND		1.0	0.30	ug/L			09/11/22 18:35	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 18:35	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/11/22 18:35	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/11/22 18:35	1
Toluene	ND		1.0	0.20	ug/L			09/11/22 18:35	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/11/22 18:35	1
Trichloroethene	ND		1.0	0.30	ug/L			09/11/22 18:35	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/11/22 18:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		80 - 120		09/11/22 18:35	1
4-Bromofluorobenzene (Surr)	98		80 - 120		09/11/22 18:35	1
Dibromofluoromethane (Surr)	100		80 - 120		09/11/22 18:35	1
Toluene-d8 (Surr)	103		80 - 120		09/11/22 18:35	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**18**		1.6	0.52	ug/L		09/03/22 10:17	09/07/22 08:00	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	77		10 - 110	09/03/22 10:17	09/07/22 08:00	5
Fluoranthene-d10 (Surr)	88		47 - 128	09/03/22 10:17	09/07/22 08:00	5
1-Methylnaphthalene-d10 (Surr)	82		36 - 111	09/03/22 10:17	09/07/22 08:00	5

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-33-2-20220830

Lab Sample ID: 410-96362-10

Date Collected: 08/30/22 12:55
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/11/22 18:57	1
1,1-Dichloroethane	1.2		1.0	0.30	ug/L			09/11/22 18:57	1
1,1-Dichloroethene	0.34	J	1.0	0.30	ug/L			09/11/22 18:57	1
1,2-Dichloroethane	4.8		1.0	0.30	ug/L			09/11/22 18:57	1
1,2-Dichloropropane	9.1		1.0	0.30	ug/L			09/11/22 18:57	1
Benzene	0.66	J	1.0	0.30	ug/L			09/11/22 18:57	1
Chloroform	ND		1.0	0.30	ug/L			09/11/22 18:57	1
cis-1,2-Dichloroethene	6.8		1.0	0.30	ug/L			09/11/22 18:57	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/11/22 18:57	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/11/22 18:57	1
Toluene	ND		1.0	0.20	ug/L			09/11/22 18:57	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/11/22 18:57	1
Trichloroethene	0.48	J	1.0	0.30	ug/L			09/11/22 18:57	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/11/22 18:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*09/11/22 18:57*	*1*
4-Bromofluorobenzene (Surr)	*98*		*80 - 120*		*09/11/22 18:57*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*09/11/22 18:57*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*09/11/22 18:57*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	33		3.1	1.0	ug/L		09/03/22 10:17	09/07/22 08:22	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*72*		*10 - 110*	*09/03/22 10:17*	*09/07/22 08:22*	*10*
Fluoranthene-d10 (Surr)	*78*		*47 - 128*	*09/03/22 10:17*	*09/07/22 08:22*	*10*
1-Methylnaphthalene-d10 (Surr)	*77*		*36 - 111*	*09/03/22 10:17*	*09/07/22 08:22*	*10*

Client Sample ID: MW-40-20220830

Lab Sample ID: 410-96362-11

Date Collected: 08/30/22 14:00
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/11/22 19:19	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 19:19	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 19:19	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 19:19	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/11/22 19:19	1
Benzene	ND		1.0	0.30	ug/L			09/11/22 19:19	1
Chloroform	6.2		1.0	0.30	ug/L			09/11/22 19:19	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 19:19	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/11/22 19:19	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/11/22 19:19	1
Toluene	ND		1.0	0.20	ug/L			09/11/22 19:19	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/11/22 19:19	1
Trichloroethene	ND		1.0	0.30	ug/L			09/11/22 19:19	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/11/22 19:19	1

Client Sample ID: MW-40-20220830

Lab Sample ID: 410-96362-11

Date Collected: 08/30/22 14:00
Matrix: Ground Water
Date Received: 08/31/22 19:09

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/11/22 19:19	1
4-Bromofluorobenzene (Surr)	98		80 - 120		09/11/22 19:19	1
Dibromofluoromethane (Surr)	102		80 - 120		09/11/22 19:19	1
Toluene-d8 (Surr)	103		80 - 120		09/11/22 19:19	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.40**		0.32	0.11	ug/L		09/03/22 10:17	09/06/22 21:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	80		10 - 110	09/03/22 10:17	09/06/22 21:35	1
Fluoranthene-d10 (Surr)	83		47 - 128	09/03/22 10:17	09/06/22 21:35	1
1-Methylnaphthalene-d10 (Surr)	75		36 - 111	09/03/22 10:17	09/06/22 21:35	1

Client Sample ID: FB-20220830

Lab Sample ID: 410-96362-12

Date Collected: 08/30/22 14:30
Matrix: Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/11/22 13:04	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 13:04	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 13:04	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 13:04	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/11/22 13:04	1
Benzene	ND		1.0	0.30	ug/L			09/11/22 13:04	1
Chloroform	ND		1.0	0.30	ug/L			09/11/22 13:04	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 13:04	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/11/22 13:04	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/11/22 13:04	1
Toluene	ND		1.0	0.20	ug/L			09/11/22 13:04	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/11/22 13:04	1
Trichloroethene	ND		1.0	0.30	ug/L			09/11/22 13:04	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/11/22 13:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/11/22 13:04	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/11/22 13:04	1
Dibromofluoromethane (Surr)	101		80 - 120		09/11/22 13:04	1
Toluene-d8 (Surr)	103		80 - 120		09/11/22 13:04	1

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.32	0.11	ug/L		09/03/22 10:17	09/06/22 21:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	89		10 - 110	09/03/22 10:17	09/06/22 21:57	1
Fluoranthene-d10 (Surr)	87		47 - 128	09/03/22 10:17	09/06/22 21:57	1
1-Methylnaphthalene-d10 (Surr)	82		36 - 111	09/03/22 10:17	09/06/22 21:57	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-24-1-20220831

Lab Sample ID: 410-96362-13

Date Collected: 08/31/22 09:21
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 13:05	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 13:05	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 13:05	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 13:05	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/12/22 13:05	1
Benzene	ND		1.0	0.30	ug/L			09/12/22 13:05	1
Chloroform	**20**		1.0	0.30	ug/L			09/12/22 13:05	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 13:05	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/12/22 13:05	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 13:05	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 13:05	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 13:05	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 13:05	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			09/12/22 13:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*09/12/22 13:05*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*		*09/12/22 13:05*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*09/12/22 13:05*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*09/12/22 13:05*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		09/06/22 15:33	09/07/22 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*92*		*10 - 110*	*09/06/22 15:33*	*09/07/22 16:09*	*1*
Fluoranthene-d10 (Surr)	*89*		*47 - 128*	*09/06/22 15:33*	*09/07/22 16:09*	*1*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*09/06/22 15:33*	*09/07/22 16:09*	*1*

Client Sample ID: MW-24-2-20220831

Lab Sample ID: 410-96362-14

Date Collected: 08/31/22 10:08
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 13:25	1
1,1-Dichloroethane	**1.2**		1.0	0.30	ug/L			09/12/22 13:25	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 13:25	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 13:25	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/12/22 13:25	1
Benzene	**1.4**		1.0	0.30	ug/L			09/12/22 13:25	1
Chloroform	ND		1.0	0.30	ug/L			09/12/22 13:25	1
cis-1,2-Dichloroethene	**4.8**		1.0	0.30	ug/L			09/12/22 13:25	1
Ethylbenzene	**7.4**		1.0	0.40	ug/L			09/12/22 13:25	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 13:25	1
Toluene	**0.95**	**J**	1.0	0.20	ug/L			09/12/22 13:25	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 13:25	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 13:25	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			09/12/22 13:25	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-24-2-20220831

Lab Sample ID: 410-96362-14

Date Collected: 08/31/22 10:08
Date Received: 08/31/22 19:09

Matrix: Ground Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*		*09/12/22 13:25*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/12/22 13:25*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 120*		*09/12/22 13:25*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*09/12/22 13:25*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**27**		3.0	1.0	ug/L		09/06/22 15:33	09/08/22 06:41	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*73*		*10 - 110*	*09/06/22 15:33*	*09/08/22 06:41*	*10*
Fluoranthene-d10 (Surr)	*84*		*47 - 128*	*09/06/22 15:33*	*09/08/22 06:41*	*10*
1-Methylnaphthalene-d10 (Surr)	*72*		*36 - 111*	*09/06/22 15:33*	*09/08/22 06:41*	*10*

Client Sample ID: MW-28-1-20220831

Lab Sample ID: 410-96362-15

Date Collected: 08/31/22 11:12
Date Received: 08/31/22 19:09

Matrix: Ground Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 12:06	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 12:06	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 12:06	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 12:06	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/12/22 12:06	1
Benzene	ND		1.0	0.30	ug/L			09/12/22 12:06	1
Chloroform	**41**		1.0	0.30	ug/L			09/12/22 12:06	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 12:06	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/12/22 12:06	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 12:06	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 12:06	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 12:06	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 12:06	1
Vinyl chloride	ND	F1 cn	1.0	0.20	ug/L			09/12/22 12:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*		*09/12/22 12:06*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*09/12/22 12:06*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*09/12/22 12:06*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/12/22 12:06*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/06/22 15:33	09/07/22 14:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*89*		*10 - 110*	*09/06/22 15:33*	*09/07/22 14:21*	*1*
Fluoranthene-d10 (Surr)	*81*		*47 - 128*	*09/06/22 15:33*	*09/07/22 14:21*	*1*
1-Methylnaphthalene-d10 (Surr)	*73*		*36 - 111*	*09/06/22 15:33*	*09/07/22 14:21*	*1*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-28-2-20220831

Lab Sample ID: 410-96362-16
Date Collected: 08/31/22 12:01
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 13:45	1
1,1-Dichloroethane	**0.57**	**J**	1.0	0.30	ug/L			09/12/22 13:45	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 13:45	1
1,2-Dichloroethane	**2.0**		1.0	0.30	ug/L			09/12/22 13:45	1
1,2-Dichloropropane	**2.3**		1.0	0.30	ug/L			09/12/22 13:45	1
Benzene	**0.38**	**J**	1.0	0.30	ug/L			09/12/22 13:45	1
Chloroform	ND		1.0	0.30	ug/L			09/12/22 13:45	1
cis-1,2-Dichloroethene	**5.1**		1.0	0.30	ug/L			09/12/22 13:45	1
Ethylbenzene	**1.9**		1.0	0.40	ug/L			09/12/22 13:45	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 13:45	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 13:45	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 13:45	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 13:45	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			09/12/22 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*09/12/22 13:45*	*1*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*		*09/12/22 13:45*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*09/12/22 13:45*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/12/22 13:45*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**10**		1.5	0.51	ug/L		09/06/22 15:33	09/08/22 07:03	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*69*		*10 - 110*	*09/06/22 15:33*	*09/08/22 07:03*	*5*
Fluoranthene-d10 (Surr)	*83*		*47 - 128*	*09/06/22 15:33*	*09/08/22 07:03*	*5*
1-Methylnaphthalene-d10 (Surr)	*73*		*36 - 111*	*09/06/22 15:33*	*09/08/22 07:03*	*5*

Client Sample ID: MW-29-2-20220831

Lab Sample ID: 410-96362-17
Date Collected: 08/31/22 13:37
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 14:04	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 14:04	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 14:04	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 14:04	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/12/22 14:04	1
Benzene	ND		1.0	0.30	ug/L			09/12/22 14:04	1
Chloroform	ND		1.0	0.30	ug/L			09/12/22 14:04	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 14:04	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/12/22 14:04	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 14:04	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 14:04	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 14:04	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 14:04	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			09/12/22 14:04	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-29-2-20220831

Lab Sample ID: 410-96362-17

Date Collected: 08/31/22 13:37
Matrix: Ground Water
Date Received: 08/31/22 19:09

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*		*09/12/22 14:04*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/12/22 14:04*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*09/12/22 14:04*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/12/22 14:04*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**12**		1.6	0.52	ug/L		09/06/22 15:33	09/08/22 07:24	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*73*		*10 - 110*	*09/06/22 15:33*	*09/08/22 07:24*	*5*
Fluoranthene-d10 (Surr)	*79*		*47 - 128*	*09/06/22 15:33*	*09/08/22 07:24*	*5*
1-Methylnaphthalene-d10 (Surr)	*73*		*36 - 111*	*09/06/22 15:33*	*09/08/22 07:24*	*5*

Client Sample ID: DUP-20220830

Lab Sample ID: 410-96362-18

Date Collected: 08/30/22 00:00
Matrix: Ground Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 14:24	1
1,1-Dichloroethane	**0.75**	**J**	1.0	0.30	ug/L			09/12/22 14:24	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 14:24	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 14:24	1
1,2-Dichloropropane	**10**		1.0	0.30	ug/L			09/12/22 14:24	1
Benzene	ND		1.0	0.30	ug/L			09/12/22 14:24	1
Chloroform	**1.0**		1.0	0.30	ug/L			09/12/22 14:24	1
cis-1,2-Dichloroethene	**0.66**	**J**	1.0	0.30	ug/L			09/12/22 14:24	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/12/22 14:24	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 14:24	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 14:24	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 14:24	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 14:24	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			09/12/22 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*09/12/22 14:24*	*1*
4-Bromofluorobenzene (Surr)	*91*		*80 - 120*		*09/12/22 14:24*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*09/12/22 14:24*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*09/12/22 14:24*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**11**		1.5	0.50	ug/L		09/03/22 10:17	09/07/22 08:43	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*73*		*10 - 110*	*09/03/22 10:17*	*09/07/22 08:43*	*5*
Fluoranthene-d10 (Surr)	*76*		*47 - 128*	*09/03/22 10:17*	*09/07/22 08:43*	*5*
1-Methylnaphthalene-d10 (Surr)	*75*		*36 - 111*	*09/03/22 10:17*	*09/07/22 08:43*	*5*

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: FB-20220831

Lab Sample ID: 410-96362-19

Date Collected: 08/31/22 14:10
Matrix: Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:27	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:27	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:27	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:27	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/12/22 10:27	1
Benzene	ND		1.0	0.30	ug/L			09/12/22 10:27	1
Chloroform	ND		1.0	0.30	ug/L			09/12/22 10:27	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:27	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/12/22 10:27	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 10:27	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 10:27	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 10:27	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:27	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			09/12/22 10:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*09/12/22 10:27*	*1*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*		*09/12/22 10:27*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*09/12/22 10:27*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/12/22 10:27*	*1*

Method: SW846 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		09/06/22 15:33	09/07/22 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*92*		*10 - 110*	*09/06/22 15:33*	*09/07/22 17:36*	*1*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*	*09/06/22 15:33*	*09/07/22 17:36*	*1*
1-Methylnaphthalene-d10 (Surr)	*77*		*36 - 111*	*09/06/22 15:33*	*09/07/22 17:36*	*1*

Client Sample ID: TB-20220831

Lab Sample ID: 410-96362-20

Date Collected: 08/31/22 00:00
Matrix: Water
Date Received: 08/31/22 19:09

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:47	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:47	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:47	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:47	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/12/22 10:47	1
Benzene	ND		1.0	0.30	ug/L			09/12/22 10:47	1
Chloroform	ND		1.0	0.30	ug/L			09/12/22 10:47	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:47	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/12/22 10:47	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 10:47	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 10:47	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 10:47	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:47	1
Vinyl chloride	ND	cn	1.0	0.20	ug/L			09/12/22 10:47	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: TB-20220831

Date Collected: 08/31/22 00:00
Date Received: 08/31/22 19:09

Lab Sample ID: 410-96362-20

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		80 - 120		09/12/22 10:47	1
4-Bromofluorobenzene (Surr)	91		80 - 120		09/12/22 10:47	1
Dibromofluoromethane (Surr)	99		80 - 120		09/12/22 10:47	1
Toluene-d8 (Surr)	90		80 - 120		09/12/22 10:47	1

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-96362-1	MW-50-20220829	100	94	96	93
410-96362-2	MW-59-20220829	105	95	101	94
410-96362-3	MW-49-20220829	104	91	97	90
410-96362-4	MW-34-20220829	100	98	98	93
410-96362-5	MW-29-1-20220829	94	94	102	93
410-96362-7	MW-37-20220830	102	100	102	102
410-96362-8	MW-38-20220830	101	99	100	103
410-96362-9	MW-32-20220830	96	98	100	103
410-96362-10	MW-33-2-20220830	101	98	101	103
410-96362-11	MW-40-20220830	102	98	102	103
410-96362-13	MW-24-1-20220831	98	96	101	94
410-96362-14	MW-24-2-20220831	99	95	97	89
410-96362-15	MW-28-1-20220831	97	93	98	92
410-96362-15 MS	MW-28-1-20220831	104	94	99	93
410-96362-15 MSD	MW-28-1-20220831	100	95	100	93
410-96362-16	MW-28-2-20220831	95	95	98	92
410-96362-17	MW-29-2-20220831	100	92	99	92
410-96362-18	DUP-20220830	101	91	101	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-96362-6	FB-20220829	102	92	96	93
410-96362-12	FB-20220830	102	99	101	103
410-96362-19	FB-20220831	95	93	101	92
410-96362-20	TB-20220831	98	91	99	90
LCS 410-294464/4	Lab Control Sample	98	93	99	94
LCS 410-294613/4	Lab Control Sample	99	100	100	104
LCS 410-294732/4	Lab Control Sample	101	95	99	92
LCSD 410-294613/5	Lab Control Sample Dup	97	100	100	104
MB 410-294464/6	Method Blank	95	92	94	93
MB 410-294613/7	Method Blank	98	100	99	104
MB 410-294732/6	Method Blank	98	94	98	92

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BAPd12 (10-110)	FLN10 (47-128)	MNPd10 (36-111)
410-96362-1	MW-50-20220829	85	90	70
410-96362-2	MW-59-20220829	52	58	46
410-96362-3	MW-49-20220829	67	100	81
410-96362-4	MW-34-20220829	92	97	79
410-96362-5	MW-29-1-20220829	87	101	82
410-96362-7	MW-37-20220830	88	84	79
410-96362-8	MW-38-20220830	84	84	79
410-96362-9	MW-32-20220830	77	88	82
410-96362-10	MW-33-2-20220830	72	78	77
410-96362-11	MW-40-20220830	80	83	75
410-96362-13	MW-24-1-20220831	92	89	79
410-96362-14	MW-24-2-20220831	73	84	72
410-96362-15	MW-28-1-20220831	89	81	73
410-96362-15 MS	MW-28-1-20220831	95	88	85
410-96362-15 MSD	MW-28-1-20220831	96	87	85
410-96362-16	MW-28-2-20220831	69	83	73
410-96362-17	MW-29-2-20220831	73	79	73
410-96362-18	DUP-20220830	73	76	75

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	Client Sample ID	BAPd12 (10-110)	FLN10 (47-128)	MNPd10 (36-111)
410-96362-6	FB-20220829	97	101	81
410-96362-12	FB-20220830	89	87	82
410-96362-19	FB-20220831	92	87	77
LCS 410-292631/2-A	Lab Control Sample	98	84	82
LCS 410-292679/2-A	Lab Control Sample	98	90	72
LCS 410-293067/2-A	Lab Control Sample	97	89	83
MB 410-292631/1-A	Method Blank	97	88	79
MB 410-292679/1-A	Method Blank	97	93	86
MB 410-293067/1-A	Method Blank	90	82	75

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

QC Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-294464/6
Matrix: Water
Analysis Batch: 294464

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/09/22 21:05	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/09/22 21:05	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/09/22 21:05	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/09/22 21:05	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/09/22 21:05	1
Benzene	ND		1.0	0.30	ug/L			09/09/22 21:05	1
Chloroform	ND		1.0	0.30	ug/L			09/09/22 21:05	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/09/22 21:05	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/09/22 21:05	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/09/22 21:05	1
Toluene	ND		1.0	0.20	ug/L			09/09/22 21:05	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/09/22 21:05	1
Trichloroethene	ND		1.0	0.30	ug/L			09/09/22 21:05	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/09/22 21:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*80 - 120*		*09/09/22 21:05*	*1*
4-Bromofluorobenzene (Surr)	*92*		*80 - 120*		*09/09/22 21:05*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 120*		*09/09/22 21:05*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*09/09/22 21:05*	*1*

Lab Sample ID: LCS 410-294464/4
Matrix: Water
Analysis Batch: 294464

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	16.5		ug/L		83	67 - 126
1,1-Dichloroethane	20.0	17.2		ug/L		86	80 - 120
1,1-Dichloroethene	20.0	18.7		ug/L		94	80 - 131
1,2-Dichloroethane	20.0	14.6		ug/L		73	73 - 124
1,2-Dichloropropane	20.0	17.4		ug/L		87	80 - 120
Benzene	20.0	18.0		ug/L		90	80 - 120
Chloroform	20.0	17.4		ug/L		87	80 - 120
cis-1,2-Dichloroethene	20.0	19.4		ug/L		97	80 - 125
Ethylbenzene	20.0	16.9		ug/L		85	80 - 120
Tetrachloroethene	20.0	17.4		ug/L		87	80 - 120
Toluene	20.0	16.7		ug/L		84	80 - 120
trans-1,2-Dichloroethene	20.0	18.0		ug/L		90	80 - 126
Trichloroethene	20.0	16.5		ug/L		82	80 - 120
Vinyl chloride	20.0	19.3		ug/L		96	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*
4-Bromofluorobenzene (Surr)	*93*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*94*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 410-294613/7
Matrix: Water
Analysis Batch: 294613

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/11/22 11:57	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 11:57	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 11:57	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/11/22 11:57	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/11/22 11:57	1
Benzene	ND		1.0	0.30	ug/L			09/11/22 11:57	1
Chloroform	ND		1.0	0.30	ug/L			09/11/22 11:57	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/11/22 11:57	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/11/22 11:57	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/11/22 11:57	1
Toluene	ND		1.0	0.20	ug/L			09/11/22 11:57	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/11/22 11:57	1
Trichloroethene	ND		1.0	0.30	ug/L			09/11/22 11:57	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/11/22 11:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*09/11/22 11:57*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/11/22 11:57*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 120*		*09/11/22 11:57*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*09/11/22 11:57*	*1*

Lab Sample ID: LCS 410-294613/4
Matrix: Water
Analysis Batch: 294613

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	19.2		ug/L		96	67 - 126
1,1-Dichloroethane	20.0	18.8		ug/L		94	80 - 120
1,1-Dichloroethene	20.0	19.9		ug/L		100	80 - 131
1,2-Dichloroethane	20.0	19.2		ug/L		96	73 - 124
1,2-Dichloropropane	20.0	18.6		ug/L		93	80 - 120
Benzene	20.0	19.4		ug/L		97	80 - 120
Chloroform	20.0	19.0		ug/L		95	80 - 120
cis-1,2-Dichloroethene	20.0	19.8		ug/L		99	80 - 125
Ethylbenzene	20.0	19.9		ug/L		100	80 - 120
Tetrachloroethene	20.0	19.7		ug/L		98	80 - 120
Toluene	20.0	20.0		ug/L		100	80 - 120
trans-1,2-Dichloroethene	20.0	19.0		ug/L		95	80 - 126
Trichloroethene	20.0	19.2		ug/L		96	80 - 120
Vinyl chloride	20.0	16.9		ug/L		85	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 410-294613/5
Matrix: Water
Analysis Batch: 294613

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	19.5		ug/L		98	67 - 126	2	30
1,1-Dichloroethane			20.0	18.8		ug/L		94	80 - 120	0	30
1,1-Dichloroethene			20.0	20.1		ug/L		101	80 - 131	1	30
1,2-Dichloroethane			20.0	19.2		ug/L		96	73 - 124	0	30
1,2-Dichloropropane			20.0	18.6		ug/L		93	80 - 120	0	30
Benzene			20.0	19.4		ug/L		97	80 - 120	0	30
Chloroform			20.0	19.2		ug/L		96	80 - 120	1	30
cis-1,2-Dichloroethene			20.0	20.1		ug/L		100	80 - 125	1	30
Ethylbenzene			20.0	20.0		ug/L		100	80 - 120	0	30
Tetrachloroethene			20.0	19.9		ug/L		100	80 - 120	1	30
Toluene			20.0	20.0		ug/L		100	80 - 120	0	30
trans-1,2-Dichloroethene			20.0	19.1		ug/L		96	80 - 126	1	30
Trichloroethene			20.0	19.0		ug/L		95	80 - 120	1	30
Vinyl chloride			20.0	17.3		ug/L		87	56 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 410-294732/6
Matrix: Water
Analysis Batch: 294732

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:07	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:07	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:07	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/12/22 10:07	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/12/22 10:07	1
Benzene	ND		1.0	0.30	ug/L			09/12/22 10:07	1
Chloroform	ND		1.0	0.30	ug/L			09/12/22 10:07	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:07	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/12/22 10:07	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/12/22 10:07	1
Toluene	ND		1.0	0.20	ug/L			09/12/22 10:07	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/12/22 10:07	1
Trichloroethene	ND		1.0	0.30	ug/L			09/12/22 10:07	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/12/22 10:07	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*80 - 120*		*09/12/22 10:07*	*1*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*		*09/12/22 10:07*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 120*		*09/12/22 10:07*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*09/12/22 10:07*	*1*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 410-294732/4
Matrix: Water
Analysis Batch: 294732

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	18.7		ug/L		94	67 - 126
1,1-Dichloroethane	20.0	19.4		ug/L		97	80 - 120
1,1-Dichloroethene	20.0	21.0		ug/L		105	80 - 131
1,2-Dichloroethane	20.0	17.0		ug/L		85	73 - 124
1,2-Dichloropropane	20.0	19.6		ug/L		98	80 - 120
Benzene	20.0	20.5		ug/L		103	80 - 120
Chloroform	20.0	18.7		ug/L		93	80 - 120
cis-1,2-Dichloroethene	20.0	21.1		ug/L		106	80 - 125
Ethylbenzene	20.0	18.5		ug/L		92	80 - 120
Tetrachloroethene	20.0	18.5		ug/L		93	80 - 120
Toluene	20.0	18.7		ug/L		93	80 - 120
trans-1,2-Dichloroethene	20.0	21.0		ug/L		105	80 - 126
Trichloroethene	20.0	18.7		ug/L		93	80 - 120
Vinyl chloride	20.0	20.9		ug/L		105	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*92*		*80 - 120*

Lab Sample ID: 410-96362-15 MS
Matrix: Ground Water
Analysis Batch: 294732

Client Sample ID: MW-28-1-20220831
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		20.0	21.2		ug/L		106	67 - 126
1,1-Dichloroethane	ND		20.0	21.9		ug/L		110	80 - 120
1,1-Dichloroethene	ND		20.0	22.6		ug/L		113	80 - 131
1,2-Dichloroethane	ND		20.0	17.3		ug/L		87	73 - 124
1,2-Dichloropropane	ND		20.0	21.0		ug/L		105	80 - 120
Benzene	ND		20.0	21.7		ug/L		109	80 - 120
Chloroform	41		20.0	63.6		ug/L		113	80 - 120
cis-1,2-Dichloroethene	ND		20.0	22.2		ug/L		111	80 - 125
Ethylbenzene	ND		20.0	20.5		ug/L		103	80 - 120
Tetrachloroethene	ND		20.0	21.6		ug/L		108	80 - 120
Toluene	ND		20.0	20.3		ug/L		101	80 - 120
trans-1,2-Dichloroethene	ND		20.0	22.3		ug/L		112	80 - 126
Trichloroethene	ND		20.0	20.2		ug/L		101	80 - 120
Vinyl chloride	ND	F1 cn	20.0	26.6	F1	ug/L		133	56 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*80 - 120*
4-Bromofluorobenzene (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*99*		*80 - 120*
Toluene-d8 (Surr)	*93*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-96362-15 MSD
Matrix: Ground Water
Analysis Batch: 294732

Client Sample ID: MW-28-1-20220831
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		20.0	21.2		ug/L		106	67 - 126	0	30
1,1-Dichloroethane	ND		20.0	21.2		ug/L		106	80 - 120	4	30
1,1-Dichloroethene	ND		20.0	23.8		ug/L		119	80 - 131	5	30
1,2-Dichloroethane	ND		20.0	17.2		ug/L		86	73 - 124	1	30
1,2-Dichloropropane	ND		20.0	20.3		ug/L		101	80 - 120	3	30
Benzene	ND		20.0	21.4		ug/L		107	80 - 120	1	30
Chloroform	41		20.0	62.2		ug/L		106	80 - 120	2	30
cis-1,2-Dichloroethene	ND		20.0	23.1		ug/L		115	80 - 125	4	30
Ethylbenzene	ND		20.0	20.0		ug/L		100	80 - 120	3	30
Tetrachloroethene	ND		20.0	21.3		ug/L		107	80 - 120	1	30
Toluene	ND		20.0	20.8		ug/L		104	80 - 120	2	30
trans-1,2-Dichloroethene	ND		20.0	22.9		ug/L		114	80 - 126	3	30
Trichloroethene	ND		20.0	19.6		ug/L		98	80 - 120	3	30
Vinyl chloride	ND	F1 cn	20.0	25.9	F1	ug/L		129	56 - 120	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*95*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*93*		*80 - 120*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-292631/1-A
Matrix: Water
Analysis Batch: 292808

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 292631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/03/22 10:17	09/06/22 07:48	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*97*		*10 - 110*	*09/03/22 10:17*	*09/06/22 07:48*	*1*
Fluoranthene-d10 (Surr)	*88*		*47 - 128*	*09/03/22 10:17*	*09/06/22 07:48*	*1*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*09/03/22 10:17*	*09/06/22 07:48*	*1*

Lab Sample ID: LCS 410-292631/2-A
Matrix: Water
Analysis Batch: 292808

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 292631

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
1,4-Dioxane			1.00	0.401		ug/L		40	23 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*98*		*10 - 110*
Fluoranthene-d10 (Surr)	*84*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*82*		*36 - 111*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: MB 410-292679/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293252 — **Prep Batch: 292679**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/04/22 10:59	09/07/22 07:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*97*		*10 - 110*	*09/04/22 10:59*	*09/07/22 07:18*	*1*
Fluoranthene-d10 (Surr)	*93*		*47 - 128*	*09/04/22 10:59*	*09/07/22 07:18*	*1*
1-Methylnaphthalene-d10 (Surr)	*86*		*36 - 111*	*09/04/22 10:59*	*09/07/22 07:18*	*1*

Lab Sample ID: LCS 410-292679/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293252 — **Prep Batch: 292679**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.00	0.474		ug/L		47	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*98*		*10 - 110*
Fluoranthene-d10 (Surr)	*90*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*72*		*36 - 111*

Lab Sample ID: MB 410-293067/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293231 — **Prep Batch: 293067**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/06/22 15:33	09/07/22 07:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*90*		*10 - 110*	*09/06/22 15:33*	*09/07/22 07:27*	*1*
Fluoranthene-d10 (Surr)	*82*		*47 - 128*	*09/06/22 15:33*	*09/07/22 07:27*	*1*
1-Methylnaphthalene-d10 (Surr)	*75*		*36 - 111*	*09/06/22 15:33*	*09/07/22 07:27*	*1*

Lab Sample ID: LCS 410-293067/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 293231 — **Prep Batch: 293067**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.00	0.435		ug/L		43	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*97*		*10 - 110*
Fluoranthene-d10 (Surr)	*89*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*83*		*36 - 111*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Lab Sample ID: 410-96362-15 MS — **Client Sample ID: MW-28-1-20220831**
Matrix: Ground Water — **Prep Type: Total/NA**
Analysis Batch: 293231 — **Prep Batch: 293067**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	ND		1.02	0.423		ug/L		42	23 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*95*		*10 - 110*
Fluoranthene-d10 (Surr)	*88*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*85*		*36 - 111*

Lab Sample ID: 410-96362-15 MSD — **Client Sample ID: MW-28-1-20220831**
Matrix: Ground Water — **Prep Type: Total/NA**
Analysis Batch: 293231 — **Prep Batch: 293067**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	ND		1.01	0.392		ug/L		39	23 - 120	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*96*		*10 - 110*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*85*		*36 - 111*

QC Association Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

GC/MS VOA

Analysis Batch: 294464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-1	MW-50-20220829	Total/NA	Ground Water	8260D	
410-96362-2	MW-59-20220829	Total/NA	Ground Water	8260D	
410-96362-3	MW-49-20220829	Total/NA	Ground Water	8260D	
410-96362-4	MW-34-20220829	Total/NA	Ground Water	8260D	
410-96362-5	MW-29-1-20220829	Total/NA	Ground Water	8260D	
410-96362-6	FB-20220829	Total/NA	Water	8260D	
MB 410-294464/6	Method Blank	Total/NA	Water	8260D	
LCS 410-294464/4	Lab Control Sample	Total/NA	Water	8260D	

Analysis Batch: 294613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-7	MW-37-20220830	Total/NA	Ground Water	8260D	
410-96362-8	MW-38-20220830	Total/NA	Ground Water	8260D	
410-96362-9	MW-32-20220830	Total/NA	Ground Water	8260D	
410-96362-10	MW-33-2-20220830	Total/NA	Ground Water	8260D	
410-96362-11	MW-40-20220830	Total/NA	Ground Water	8260D	
410-96362-12	FB-20220830	Total/NA	Water	8260D	
MB 410-294613/7	Method Blank	Total/NA	Water	8260D	
LCS 410-294613/4	Lab Control Sample	Total/NA	Water	8260D	
LCSD 410-294613/5	Lab Control Sample Dup	Total/NA	Water	8260D	

Analysis Batch: 294732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-13	MW-24-1-20220831	Total/NA	Ground Water	8260D	
410-96362-14	MW-24-2-20220831	Total/NA	Ground Water	8260D	
410-96362-15	MW-28-1-20220831	Total/NA	Ground Water	8260D	
410-96362-16	MW-28-2-20220831	Total/NA	Ground Water	8260D	
410-96362-17	MW-29-2-20220831	Total/NA	Ground Water	8260D	
410-96362-18	DUP-20220830	Total/NA	Ground Water	8260D	
410-96362-19	FB-20220831	Total/NA	Water	8260D	
410-96362-20	TB-20220831	Total/NA	Water	8260D	
MB 410-294732/6	Method Blank	Total/NA	Water	8260D	
LCS 410-294732/4	Lab Control Sample	Total/NA	Water	8260D	
410-96362-15 MS	MW-28-1-20220831	Total/NA	Ground Water	8260D	
410-96362-15 MSD	MW-28-1-20220831	Total/NA	Ground Water	8260D	

GC/MS Semi VOA

Prep Batch: 292631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-7	MW-37-20220830	Total/NA	Ground Water	3510C	
410-96362-8	MW-38-20220830	Total/NA	Ground Water	3510C	
410-96362-9	MW-32-20220830	Total/NA	Ground Water	3510C	
410-96362-10	MW-33-2-20220830	Total/NA	Ground Water	3510C	
410-96362-11	MW-40-20220830	Total/NA	Ground Water	3510C	
410-96362-12	FB-20220830	Total/NA	Water	3510C	
410-96362-18	DUP-20220830	Total/NA	Ground Water	3510C	
MB 410-292631/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-292631/2-A	Lab Control Sample	Total/NA	Water	3510C	

QC Association Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

GC/MS Semi VOA

Prep Batch: 292679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-1	MW-50-20220829	Total/NA	Ground Water	3510C	
410-96362-2	MW-59-20220829	Total/NA	Ground Water	3510C	
410-96362-3	MW-49-20220829	Total/NA	Ground Water	3510C	
410-96362-4	MW-34-20220829	Total/NA	Ground Water	3510C	
410-96362-5	MW-29-1-20220829	Total/NA	Ground Water	3510C	
410-96362-6	FB-20220829	Total/NA	Water	3510C	
MB 410-292679/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-292679/2-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 292808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-7	MW-37-20220830	Total/NA	Ground Water	8270E SIM	292631
410-96362-8	MW-38-20220830	Total/NA	Ground Water	8270E SIM	292631
MB 410-292631/1-A	Method Blank	Total/NA	Water	8270E SIM	292631
LCS 410-292631/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	292631

Prep Batch: 293067

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-13	MW-24-1-20220831	Total/NA	Ground Water	3510C	
410-96362-14	MW-24-2-20220831	Total/NA	Ground Water	3510C	
410-96362-15	MW-28-1-20220831	Total/NA	Ground Water	3510C	
410-96362-16	MW-28-2-20220831	Total/NA	Ground Water	3510C	
410-96362-17	MW-29-2-20220831	Total/NA	Ground Water	3510C	
410-96362-19	FB-20220831	Total/NA	Water	3510C	
MB 410-293067/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-293067/2-A	Lab Control Sample	Total/NA	Water	3510C	
410-96362-15 MS	MW-28-1-20220831	Total/NA	Ground Water	3510C	
410-96362-15 MSD	MW-28-1-20220831	Total/NA	Ground Water	3510C	

Analysis Batch: 293131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-11	MW-40-20220830	Total/NA	Ground Water	8270E SIM	292631
410-96362-12	FB-20220830	Total/NA	Water	8270E SIM	292631

Analysis Batch: 293231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-13	MW-24-1-20220831	Total/NA	Ground Water	8270E SIM	293067
410-96362-15	MW-28-1-20220831	Total/NA	Ground Water	8270E SIM	293067
410-96362-19	FB-20220831	Total/NA	Water	8270E SIM	293067
MB 410-293067/1-A	Method Blank	Total/NA	Water	8270E SIM	293067
LCS 410-293067/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	293067
410-96362-15 MS	MW-28-1-20220831	Total/NA	Ground Water	8270E SIM	293067
410-96362-15 MSD	MW-28-1-20220831	Total/NA	Ground Water	8270E SIM	293067

Analysis Batch: 293252

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-2	MW-59-20220829	Total/NA	Ground Water	8270E SIM	292679
410-96362-3	MW-49-20220829	Total/NA	Ground Water	8270E SIM	292679
410-96362-4	MW-34-20220829	Total/NA	Ground Water	8270E SIM	292679
410-96362-5	MW-29-1-20220829	Total/NA	Ground Water	8270E SIM	292679
410-96362-6	FB-20220829	Total/NA	Water	8270E SIM	292679

GC/MS Semi VOA (Continued)

Analysis Batch: 293252 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-9	MW-32-20220830	Total/NA	Ground Water	8270E SIM	292631
410-96362-10	MW-33-2-20220830	Total/NA	Ground Water	8270E SIM	292631
410-96362-18	DUP-20220830	Total/NA	Ground Water	8270E SIM	292631
MB 410-292679/1-A	Method Blank	Total/NA	Water	8270E SIM	292679
LCS 410-292679/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	292679

Analysis Batch: 293679

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-1	MW-50-20220829	Total/NA	Ground Water	8270E SIM	292679

Analysis Batch: 293683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96362-14	MW-24-2-20220831	Total/NA	Ground Water	8270E SIM	293067
410-96362-16	MW-28-2-20220831	Total/NA	Ground Water	8270E SIM	293067
410-96362-17	MW-29-2-20220831	Total/NA	Ground Water	8270E SIM	293067

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-50-20220829
Date Collected: 08/29/22 11:37
Date Received: 08/31/22 19:09

Lab Sample ID: 410-96362-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294464	K4WN	ELLE	09/10/22 01:22
Total/NA	Prep	3510C			292679	QJZ6	ELLE	09/04/22 10:59
Total/NA	Analysis	8270E SIM		10	293679	SJ89	ELLE	09/08/22 06:04

Client Sample ID: MW-59-20220829
Date Collected: 08/29/22 12:33
Date Received: 08/31/22 19:09

Lab Sample ID: 410-96362-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294464	K4WN	ELLE	09/10/22 01:42
Total/NA	Prep	3510C			292679	QJZ6	ELLE	09/04/22 10:59
Total/NA	Analysis	8270E SIM		1	293252	SJ89	ELLE	09/07/22 16:14

Client Sample ID: MW-49-20220829
Date Collected: 08/29/22 13:32
Date Received: 08/31/22 19:09

Lab Sample ID: 410-96362-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294464	K4WN	ELLE	09/10/22 02:01
Total/NA	Prep	3510C			292679	QJZ6	ELLE	09/04/22 10:59
Total/NA	Analysis	8270E SIM		1	293252	SJ89	ELLE	09/07/22 16:35

Client Sample ID: MW-34-20220829
Date Collected: 08/29/22 14:28
Date Received: 08/31/22 19:09

Lab Sample ID: 410-96362-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294464	K4WN	ELLE	09/10/22 02:21
Total/NA	Prep	3510C			292679	QJZ6	ELLE	09/04/22 10:59
Total/NA	Analysis	8270E SIM		1	293252	SJ89	ELLE	09/07/22 16:57

Client Sample ID: MW-29-1-20220829
Date Collected: 08/29/22 15:24
Date Received: 08/31/22 19:09

Lab Sample ID: 410-96362-5
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294464	K4WN	ELLE	09/10/22 02:41
Total/NA	Prep	3510C			292679	QJZ6	ELLE	09/04/22 10:59
Total/NA	Analysis	8270E SIM		1	293252	SJ89	ELLE	09/07/22 17:19

Client Sample ID: FB-20220829
Date Collected: 08/29/22 15:50
Date Received: 08/31/22 19:09

Lab Sample ID: 410-96362-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294464	K4WN	ELLE	09/09/22 22:05

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: FB-20220829 — Lab Sample ID: 410-96362-6

Date Collected: 08/29/22 15:50
Date Received: 08/31/22 19:09
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			292679	QJZ6	ELLE	09/04/22 10:59
Total/NA	Analysis	8270E SIM		1	293252	SJ89	ELLE	09/07/22 17:40

Client Sample ID: MW-37-20220830 — Lab Sample ID: 410-96362-7

Date Collected: 08/30/22 09:20
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294613	TQ4J	ELLE	09/11/22 17:51
Total/NA	Prep	3510C			292631	QJZ6	ELLE	09/03/22 10:17
Total/NA	Analysis	8270E SIM		1	292808	SJ89	ELLE	09/06/22 15:00

Client Sample ID: MW-38-20220830 — Lab Sample ID: 410-96362-8

Date Collected: 08/30/22 10:10
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294613	TQ4J	ELLE	09/11/22 18:13
Total/NA	Prep	3510C			292631	QJZ6	ELLE	09/03/22 10:17
Total/NA	Analysis	8270E SIM		1	292808	SJ89	ELLE	09/06/22 15:22

Client Sample ID: MW-32-20220830 — Lab Sample ID: 410-96362-9

Date Collected: 08/30/22 12:03
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294613	TQ4J	ELLE	09/11/22 18:35
Total/NA	Prep	3510C			292631	QJZ6	ELLE	09/03/22 10:17
Total/NA	Analysis	8270E SIM		5	293252	SJ89	ELLE	09/07/22 08:00

Client Sample ID: MW-33-2-20220830 — Lab Sample ID: 410-96362-10

Date Collected: 08/30/22 12:55
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294613	TQ4J	ELLE	09/11/22 18:57
Total/NA	Prep	3510C			292631	QJZ6	ELLE	09/03/22 10:17
Total/NA	Analysis	8270E SIM		10	293252	SJ89	ELLE	09/07/22 08:22

Client Sample ID: MW-40-20220830 — Lab Sample ID: 410-96362-11

Date Collected: 08/30/22 14:00
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294613	TQ4J	ELLE	09/11/22 19:19

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-40-20220830
Lab Sample ID: 410-96362-11
Date Collected: 08/30/22 14:00
Matrix: Ground Water
Date Received: 08/31/22 19:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			292631	QJZ6	ELLE	09/03/22 10:17
Total/NA	Analysis	8270E SIM		1	293131	UJM0	ELLE	09/06/22 21:35

Client Sample ID: FB-20220830
Lab Sample ID: 410-96362-12
Date Collected: 08/30/22 14:30
Matrix: Water
Date Received: 08/31/22 19:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294613	TQ4J	ELLE	09/11/22 13:04
Total/NA	Prep	3510C			292631	QJZ6	ELLE	09/03/22 10:17
Total/NA	Analysis	8270E SIM		1	293131	UJM0	ELLE	09/06/22 21:57

Client Sample ID: MW-24-1-20220831
Lab Sample ID: 410-96362-13
Date Collected: 08/31/22 09:21
Matrix: Ground Water
Date Received: 08/31/22 19:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 13:05
Total/NA	Prep	3510C			293067	QJZ6	ELLE	09/06/22 15:33
Total/NA	Analysis	8270E SIM		1	293231	SJ89	ELLE	09/07/22 16:09

Client Sample ID: MW-24-2-20220831
Lab Sample ID: 410-96362-14
Date Collected: 08/31/22 10:08
Matrix: Ground Water
Date Received: 08/31/22 19:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 13:25
Total/NA	Prep	3510C			293067	QJZ6	ELLE	09/06/22 15:33
Total/NA	Analysis	8270E SIM		10	293683	SJ89	ELLE	09/08/22 06:41

Client Sample ID: MW-28-1-20220831
Lab Sample ID: 410-96362-15
Date Collected: 08/31/22 11:12
Matrix: Ground Water
Date Received: 08/31/22 19:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 12:06
Total/NA	Prep	3510C			293067	QJZ6	ELLE	09/06/22 15:33
Total/NA	Analysis	8270E SIM		1	293231	SJ89	ELLE	09/07/22 14:21

Client Sample ID: MW-28-2-20220831
Lab Sample ID: 410-96362-16
Date Collected: 08/31/22 12:01
Matrix: Ground Water
Date Received: 08/31/22 19:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 13:45

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Client Sample ID: MW-28-2-20220831 — Lab Sample ID: 410-96362-16

Date Collected: 08/31/22 12:01
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			293067	QJZ6	ELLE	09/06/22 15:33
Total/NA	Analysis	8270E SIM		5	293683	SJ89	ELLE	09/08/22 07:03

Client Sample ID: MW-29-2-20220831 — Lab Sample ID: 410-96362-17

Date Collected: 08/31/22 13:37
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 14:04
Total/NA	Prep	3510C			293067	QJZ6	ELLE	09/06/22 15:33
Total/NA	Analysis	8270E SIM		5	293683	SJ89	ELLE	09/08/22 07:24

Client Sample ID: DUP-20220830 — Lab Sample ID: 410-96362-18

Date Collected: 08/30/22 00:00
Date Received: 08/31/22 19:09
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 14:24
Total/NA	Prep	3510C			292631	QJZ6	ELLE	09/03/22 10:17
Total/NA	Analysis	8270E SIM		5	293252	SJ89	ELLE	09/07/22 08:43

Client Sample ID: FB-20220831 — Lab Sample ID: 410-96362-19

Date Collected: 08/31/22 14:10
Date Received: 08/31/22 19:09
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 10:27
Total/NA	Prep	3510C			293067	QJZ6	ELLE	09/06/22 15:33
Total/NA	Analysis	8270E SIM		1	293231	SJ89	ELLE	09/07/22 17:36

Client Sample ID: TB-20220831 — Lab Sample ID: 410-96362-20

Date Collected: 08/31/22 00:00
Date Received: 08/31/22 19:09
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	294732	ULCP	ELLE	09/12/22 10:47

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	09-20-22

Method Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96362-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-96362-1	MW-50-20220829	Ground Water	08/29/22 11:37	08/31/22 19:09
410-96362-2	MW-59-20220829	Ground Water	08/29/22 12:33	08/31/22 19:09
410-96362-3	MW-49-20220829	Ground Water	08/29/22 13:32	08/31/22 19:09
410-96362-4	MW-34-20220829	Ground Water	08/29/22 14:28	08/31/22 19:09
410-96362-5	MW-29-1-20220829	Ground Water	08/29/22 15:24	08/31/22 19:09
410-96362-6	FB-20220829	Water	08/29/22 15:50	08/31/22 19:09
410-96362-7	MW-37-20220830	Ground Water	08/30/22 09:20	08/31/22 19:09
410-96362-8	MW-38-20220830	Ground Water	08/30/22 10:10	08/31/22 19:09
410-96362-9	MW-32-20220830	Ground Water	08/30/22 12:03	08/31/22 19:09
410-96362-10	MW-33-2-20220830	Ground Water	08/30/22 12:55	08/31/22 19:09
410-96362-11	MW-40-20220830	Ground Water	08/30/22 14:00	08/31/22 19:09
410-96362-12	FB-20220830	Water	08/30/22 14:30	08/31/22 19:09
410-96362-13	MW-24-1-20220831	Ground Water	08/31/22 09:21	08/31/22 19:09
410-96362-14	MW-24-2-20220831	Ground Water	08/31/22 10:08	08/31/22 19:09
410-96362-15	MW-28-1-20220831	Ground Water	08/31/22 11:12	08/31/22 19:09
410-96362-16	MW-28-2-20220831	Ground Water	08/31/22 12:01	08/31/22 19:09
410-96362-17	MW-29-2-20220831	Ground Water	08/31/22 13:37	08/31/22 19:09
410-96362-18	DUP-20220830	Ground Water	08/30/22 00:00	08/31/22 19:09
410-96362-19	FB-20220831	Water	08/31/22 14:10	08/31/22 19:09
410-96362-20	TB-20220831	Water	08/31/22 00:00	08/31/22 19:09

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

410-96362 Chain of Custody

eurofins Environment Testing America

Client Information	Sampler:	Lab PM: Weyandt, Barbara A	C No: 0-33363-10388 5
Client Contact: Mr. Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@et.eurofinsus.com	State of Origin: NJ	Page: Page 5 of 7
Company: Brown and Caldwell	PWSID:		Job #:
Address: 500 N. Franklin Turnpike Suite 306	Due Date Requested:		
City: Ramsey	TAT Requested (days): STAndard		
State, Zip: NJ, 07446	Compliance Project: Δ Yes Δ No		
Phone: 201-574-4706(Tel)	PO #: Purchase Order Requested		
Email: cmeyn@brwncald.com	WO #:		
Project Name: D'Imperio Property	Project #: 41000706		
Site: D'Imperio	SSOW#:		

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Filtered Sample (Y or N)	Perform MS/MSD (Y or N)	8260D - VOCs	8270E_SIM - 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	N		
MW-50-20220829	08/29/22	1137	G	GW			X	X		
MW-54-20220829	↓	1233	↓	↓			X	X		
MW-49-20220829	↓	1332	↓	↓			X	X		
MW-34-20220829	↓	1428	↓	↓			X	X		
MW-29-1-20220829	↓	1524	↓	↓			X	X		
FB-20220829	↓	1550	↓	DI			X	X		
MW-37-20220830	08/30/22	0920	↓	GW			X	X		
MW-38-20220830	↓	1010	↓	↓			X	X		
MW-32-20220830	↓	1203	↓	↓			X	X		
MW-33-2-20220830	↓	1255	↓	↓			X	X		
MW-46-20220830	↓	1406	↓	↓			X	X		

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC EQuIS

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
[signature]	8/31/22 1500	BC	[signature]	8-31-22 1500	
[signature]	8-31-22 1750				
			[signature]	8-31-22 1909	ELLE

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: not present	Cooler Temperature(s) °C and Other Remarks: 2.6 – 4.5°C

Ver: 06/08/2021

Eurofins Lancaster Laboratories Environme
2425 New Holland Pike
Lancaster, PA 17601
Phone: 717-656-2300 Fax: 717-656-2681

Chain of Custody Record

eurofins Environment Testing America

Client Information	Sampler:	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-33363-10388.6
Client Contact: Mr. Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@et.eurofinsus.com	State of Origin: NJ	Page: Page 6 of 7
Company: Brown and Caldwell	PWSID:			Job #:
Address: 500 N. Franklin Turnpike Suite 306	Due Date Requested:			
City: Ramsey	TAT Requested (days): Standard			
State, Zip: NJ, 07446	Compliance Project: Δ Yes Δ No			
Phone: 201-574-4706(Tel)	PO #: Purchase Order Requested			
Email: cmeyn@brwncald.com	WO #:			
Project Name: D'Imperio Property	Project #: 41000706			
Site: D'Imperio	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8260D - VOCs	8270E_SIM - 1,4-Dioxane		Total Number of containers	Special Instructions/Note:
			Preservation Code:			A	N			
FB-20220830	08/30/22	1430	G	DI		X	X			
MW-24-1-20220831	08/31/22	0921		GW		X	X			
MW-24-2-20220831		1008				X	X			* MW-24-2-R-20220831
MW-28-1-20220831 (MS/MSD)		1112			X	X	X			
MW-28-2-20220831		1201				X	X			
MW-29-2-20220831		1337				X	X			
DUP-20220830	08/30/22	9999				X	X			
FB-20220831	08/31/22	1410		DI		X	X			
TB-20220831		LAB	G	DI		X	X	MHM		* No 1,4-Dioxane

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☑ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC Equis

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	8/31/22 1500	BC	[signature]	8-31-22 15:00	
[signature]	8-31-22 1850				
			[signature]	8-31-22 1909	ELLE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: not present

Cooler Temperature(s) °C and Other Remarks: 2.6 – 4.5°C

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Brown and Caldwell

Job Number: 410-96362-1

Login Number: 96362
List Number: 1
Creator: Renner, Melissa

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	Not present
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	False	Refer to Job Narrative for details.
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

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ANALYTICAL REPORT

Eurofins Lancaster Laboratories Environment Testing, LLC
2425 New Holland Pike
Lancaster, PA 17601
Tel: (717)656-2300

Laboratory Job ID: 410-96645-1
Client Project/Site: D'Imperio Property

For:
Brown and Caldwell
500 N. Franklin Turnpike
Suite 306
Ramsey, New Jersey 07446

Attn: Mr. Charles Meyn

Barb Weyandt

Authorized for release by:
9/15/2022 1:30:43 PM

Barbara Weyandt, Project Manager
(717)556-7264
Barbara.Weyandt@et.eurofinsus.com

LINKS

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Analytical test results meet all requirements of the associated regulatory program (e.g., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis. Data qualifiers are applied to note exceptions. Noncompliant quality control (QC) is further explained in narrative comments.
· QC results that exceed the upper limits and are associated with non-detect samples are qualified but further narration is not required since the bias is high and does not change a non-detect result. Further narration is also not required with QC blank detection when the associated sample concentration is non-detect or more than ten times the level in the blank.
· Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD is performed, unless otherwise specified in the method.
· Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.
Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Measurement uncertainty values, as applicable, are available upon request.

Test results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" and tested in the laboratory are not performed within 15 minutes of collection.

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Barb Weyandt

Barbara Weyandt
Project Manager
9/15/2022 1:30:43 PM

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Definitions/Glossary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
1C	Result is from the primary column on a dual-column method.
2C	Result is from the confirmation column on a dual-column method.
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Job ID: 410-96645-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

Narrative

Job Narrative
410-96645-1

Receipt
The samples were received on 9/2/2022 7:28 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.1°C

GC/MS VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

GC/MS Semi VOA
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Detection Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Client Sample ID: MW-35-20220901 — Lab Sample ID: 410-96645-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	7.6		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	4.1		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-41-20220901 — Lab Sample ID: 410-96645-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	10		1.0	0.30	ug/L	1		8260D	Total/NA

Client Sample ID: MW-43-20220901 — Lab Sample ID: 410-96645-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.5		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.15	J	0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-52-20220901 — Lab Sample ID: 410-96645-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	3.6		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	1.4		0.31	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: MW-20-3-R-20220901 — Lab Sample ID: 410-96645-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	2.2		0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: FB-20220901 — Lab Sample ID: 410-96645-6

No Detections.

Client Sample ID: DUP-20220901 — Lab Sample ID: 410-96645-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	1.5		1.0	0.30	ug/L	1		8260D	Total/NA
1,4-Dioxane	0.14	J	0.30	0.10	ug/L	1		8270E SIM	Total/NA

Client Sample ID: TB-20220901 — Lab Sample ID: 410-96645-8

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Client Sample ID: MW-35-20220901

Lab Sample ID: 410-96645-1
Date Collected: 09/01/22 09:28
Matrix: Groundwater
Date Received: 09/02/22 19:28

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 12:42	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 12:42	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 12:42	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 12:42	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 12:42	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 12:42	1
Chloroform	**7.6**		1.0	0.30	ug/L			09/13/22 12:42	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 12:42	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 12:42	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 12:42	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 12:42	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 12:42	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 12:42	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 12:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/13/22 12:42*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*09/13/22 12:42*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 120*		*09/13/22 12:42*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/13/22 12:42*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**4.1**		0.30	0.10	ug/L		09/08/22 15:40	09/09/22 07:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*89*		*10 - 110*	*09/08/22 15:40*	*09/09/22 07:57*	*1*
Fluoranthene-d10 (Surr)	*87*		*47 - 128*	*09/08/22 15:40*	*09/09/22 07:57*	*1*
1-Methylnaphthalene-d10 (Surr)	*79*		*36 - 111*	*09/08/22 15:40*	*09/09/22 07:57*	*1*

Client Sample ID: MW-41-20220901

Lab Sample ID: 410-96645-2
Date Collected: 09/01/22 10:19
Matrix: Groundwater
Date Received: 09/02/22 19:28

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:04	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:04	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:04	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:04	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 13:04	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 13:04	1
Chloroform	**10**		1.0	0.30	ug/L			09/13/22 13:04	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:04	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 13:04	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 13:04	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 13:04	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 13:04	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:04	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 13:04	1

Client Sample ID: MW-41-20220901

Lab Sample ID: 410-96645-2

Date Collected: 09/01/22 10:19

Matrix: Groundwater

Date Received: 09/02/22 19:28

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/13/22 13:04	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/13/22 13:04	1
Dibromofluoromethane (Surr)	102		80 - 120		09/13/22 13:04	1
Toluene-d8 (Surr)	101		80 - 120		09/13/22 13:04	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		09/08/22 15:40	09/09/22 08:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	85		10 - 110	09/08/22 15:40	09/09/22 08:18	1
Fluoranthene-d10 (Surr)	87		47 - 128	09/08/22 15:40	09/09/22 08:18	1
1-Methylnaphthalene-d10 (Surr)	71		36 - 111	09/08/22 15:40	09/09/22 08:18	1

Client Sample ID: MW-43-20220901

Lab Sample ID: 410-96645-3

Date Collected: 09/01/22 11:07

Matrix: Groundwater

Date Received: 09/02/22 19:28

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:26	1
1,1-Dichloroethane	**1.5**		1.0	0.30	ug/L			09/13/22 13:26	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:26	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:26	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 13:26	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 13:26	1
Chloroform	ND		1.0	0.30	ug/L			09/13/22 13:26	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:26	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 13:26	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 13:26	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 13:26	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 13:26	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:26	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 13:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		09/13/22 13:26	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/13/22 13:26	1
Dibromofluoromethane (Surr)	100		80 - 120		09/13/22 13:26	1
Toluene-d8 (Surr)	102		80 - 120		09/13/22 13:26	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.15**	**J**	0.31	0.10	ug/L		09/08/22 15:40	09/09/22 08:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	86		10 - 110	09/08/22 15:40	09/09/22 08:40	1
Fluoranthene-d10 (Surr)	87		47 - 128	09/08/22 15:40	09/09/22 08:40	1
1-Methylnaphthalene-d10 (Surr)	76		36 - 111	09/08/22 15:40	09/09/22 08:40	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Client Sample ID: MW-52-20220901

Lab Sample ID: 410-96645-4

Date Collected: 09/01/22 12:42
Date Received: 09/02/22 19:28

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:48	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:48	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:48	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 13:48	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 13:48	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 13:48	1
Chloroform	**3.6**		1.0	0.30	ug/L			09/13/22 13:48	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:48	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 13:48	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 13:48	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 13:48	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 13:48	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 13:48	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 13:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*		*09/13/22 13:48*	*1*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*		*09/13/22 13:48*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 120*		*09/13/22 13:48*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*09/13/22 13:48*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**1.4**		0.31	0.10	ug/L		09/08/22 15:40	09/09/22 06:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*64*		*10 - 110*	*09/08/22 15:40*	*09/09/22 06:31*	*1*
Fluoranthene-d10 (Surr)	*88*		*47 - 128*	*09/08/22 15:40*	*09/09/22 06:31*	*1*
1-Methylnaphthalene-d10 (Surr)	*75*		*36 - 111*	*09/08/22 15:40*	*09/09/22 06:31*	*1*

Client Sample ID: MW-20-3-R-20220901

Lab Sample ID: 410-96645-5

Date Collected: 09/01/22 13:33
Date Received: 09/02/22 19:28

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 14:54	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 14:54	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 14:54	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 14:54	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 14:54	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 14:54	1
Chloroform	ND		1.0	0.30	ug/L			09/13/22 14:54	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 14:54	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 14:54	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 14:54	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 14:54	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 14:54	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 14:54	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 14:54	1

Client Sample ID: MW-20-3-R-20220901

Lab Sample ID: 410-96645-5

Date Collected: 09/01/22 13:33
Matrix: Groundwater
Date Received: 09/02/22 19:28

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		80 - 120		09/13/22 14:54	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/13/22 14:54	1
Dibromofluoromethane (Surr)	102		80 - 120		09/13/22 14:54	1
Toluene-d8 (Surr)	102		80 - 120		09/13/22 14:54	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**2.2**		0.30	0.10	ug/L		09/08/22 15:40	09/09/22 09:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	89		10 - 110	09/08/22 15:40	09/09/22 09:01	1
Fluoranthene-d10 (Surr)	93		47 - 128	09/08/22 15:40	09/09/22 09:01	1
1-Methylnaphthalene-d10 (Surr)	80		36 - 111	09/08/22 15:40	09/09/22 09:01	1

Client Sample ID: FB-20220901

Lab Sample ID: 410-96645-6

Date Collected: 09/01/22 14:00
Matrix: Water
Date Received: 09/02/22 19:28

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 11:58	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 11:58	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 11:58	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 11:58	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 11:58	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 11:58	1
Chloroform	ND		1.0	0.30	ug/L			09/13/22 11:58	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 11:58	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 11:58	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 11:58	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 11:58	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 11:58	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 11:58	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 11:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		80 - 120		09/13/22 11:58	1
4-Bromofluorobenzene (Surr)	99		80 - 120		09/13/22 11:58	1
Dibromofluoromethane (Surr)	102		80 - 120		09/13/22 11:58	1
Toluene-d8 (Surr)	101		80 - 120		09/13/22 11:58	1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.31	0.10	ug/L		09/08/22 15:40	09/09/22 09:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Benzo(a)pyrene-d12 (Surr)	86		10 - 110	09/08/22 15:40	09/09/22 09:23	1
Fluoranthene-d10 (Surr)	83		47 - 128	09/08/22 15:40	09/09/22 09:23	1
1-Methylnaphthalene-d10 (Surr)	75		36 - 111	09/08/22 15:40	09/09/22 09:23	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Client Sample ID: DUP-20220901

Lab Sample ID: 410-96645-7

Date Collected: 09/01/22 00:00
Date Received: 09/02/22 19:28

Matrix: Groundwater

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 15:16	1
1,1-Dichloroethane	**1.5**		1.0	0.30	ug/L			09/13/22 15:16	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 15:16	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 15:16	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 15:16	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 15:16	1
Chloroform	ND		1.0	0.30	ug/L			09/13/22 15:16	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 15:16	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 15:16	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 15:16	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 15:16	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 15:16	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 15:16	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 15:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*09/13/22 15:16*	*1*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*		*09/13/22 15:16*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 120*		*09/13/22 15:16*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/13/22 15:16*	*1*

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	**0.14**	**J**	0.30	0.10	ug/L		09/08/22 15:40	09/09/22 09:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*73*		*10 - 110*	*09/08/22 15:40*	*09/09/22 09:44*	*1*
Fluoranthene-d10 (Surr)	*80*		*47 - 128*	*09/08/22 15:40*	*09/09/22 09:44*	*1*
1-Methylnaphthalene-d10 (Surr)	*66*		*36 - 111*	*09/08/22 15:40*	*09/09/22 09:44*	*1*

Client Sample ID: TB-20220901

Lab Sample ID: 410-96645-8

Date Collected: 09/01/22 00:00
Date Received: 09/02/22 19:28

Matrix: Water

Method: 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 12:20	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 12:20	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 12:20	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 12:20	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 12:20	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 12:20	1
Chloroform	ND		1.0	0.30	ug/L			09/13/22 12:20	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 12:20	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 12:20	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 12:20	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 12:20	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 12:20	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 12:20	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 12:20	1

Client Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Client Sample ID: TB-20220901

Date Collected: 09/01/22 00:00
Date Received: 09/02/22 19:28

Lab Sample ID: 410-96645-8

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		80 - 120		09/13/22 12:20	1
4-Bromofluorobenzene (Surr)	98		80 - 120		09/13/22 12:20	1
Dibromofluoromethane (Surr)	101		80 - 120		09/13/22 12:20	1
Toluene-d8 (Surr)	101		80 - 120		09/13/22 12:20	1

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-96645-1	MW-35-20220901	102	99	101	101
410-96645-2	MW-41-20220901	102	99	102	101
410-96645-3	MW-43-20220901	100	99	100	102
410-96645-4	MW-52-20220901	102	100	103	102
410-96645-4 MS	MW-52-20220901	101	99	100	101
410-96645-4 MSD	MW-52-20220901	100	99	101	102
410-96645-5	MW-20-3-R-20220901	102	99	102	102
410-96645-7	DUP-20220901	101	99	102	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)	(80-120)
410-96645-6	FB-20220901	99	99	102	101
410-96645-8	TB-20220901	100	98	101	101
LCS 410-295186/4	Lab Control Sample	102	101	101	101
MB 410-295186/6	Method Blank	101	101	100	101

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Groundwater **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		BAPd12	FLN10	MNPd10
Lab Sample ID	Client Sample ID	(10-110)	(47-128)	(36-111)
410-96645-1	MW-35-20220901	89	87	79
410-96645-2	MW-41-20220901	85	87	71
410-96645-3	MW-43-20220901	86	87	76
410-96645-4	MW-52-20220901	64	88	75
410-96645-4 MS	MW-52-20220901	66	89	76
410-96645-4 MSD	MW-52-20220901	56	86	71
410-96645-5	MW-20-3-R-20220901	89	93	80
410-96645-7	DUP-20220901	73	80	66

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

Surrogate Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)		
Lab Sample ID	**Client Sample ID**	**BAPd12 (10-110)**	**FLN10 (47-128)**	**MNPd10 (36-111)**
410-96645-6	FB-20220901	86	83	75
LCS 410-294007/2-A	Lab Control Sample	94	86	71
MB 410-294007/1-A	Method Blank	89	85	72

Surrogate Legend

BAPd12 = Benzo(a)pyrene-d12 (Surr)
FLN10 = Fluoranthene-d10 (Surr)
MNPd10 = 1-Methylnaphthalene-d10 (Surr)

QC Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 410-295186/6
Matrix: Water
Analysis Batch: 295186

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.30	ug/L			09/13/22 10:53	1
1,1-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 10:53	1
1,1-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 10:53	1
1,2-Dichloroethane	ND		1.0	0.30	ug/L			09/13/22 10:53	1
1,2-Dichloropropane	ND		1.0	0.30	ug/L			09/13/22 10:53	1
Benzene	ND		1.0	0.30	ug/L			09/13/22 10:53	1
Chloroform	ND		1.0	0.30	ug/L			09/13/22 10:53	1
cis-1,2-Dichloroethene	ND		1.0	0.30	ug/L			09/13/22 10:53	1
Ethylbenzene	ND		1.0	0.40	ug/L			09/13/22 10:53	1
Tetrachloroethene	ND		1.0	0.30	ug/L			09/13/22 10:53	1
Toluene	ND		1.0	0.20	ug/L			09/13/22 10:53	1
trans-1,2-Dichloroethene	ND		2.0	0.70	ug/L			09/13/22 10:53	1
Trichloroethene	ND		1.0	0.30	ug/L			09/13/22 10:53	1
Vinyl chloride	ND		1.0	0.20	ug/L			09/13/22 10:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*		*09/13/22 10:53*	*1*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*		*09/13/22 10:53*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 120*		*09/13/22 10:53*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*09/13/22 10:53*	*1*

Lab Sample ID: LCS 410-295186/4
Matrix: Water
Analysis Batch: 295186

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	20.0	18.1		ug/L		90	67 - 126
1,1-Dichloroethane	20.0	17.9		ug/L		90	80 - 120
1,1-Dichloroethene	20.0	18.4		ug/L		92	80 - 131
1,2-Dichloroethane	20.0	18.1		ug/L		91	73 - 124
1,2-Dichloropropane	20.0	18.2		ug/L		91	80 - 120
Benzene	20.0	18.4		ug/L		92	80 - 120
Chloroform	20.0	18.0		ug/L		90	80 - 120
cis-1,2-Dichloroethene	20.0	19.0		ug/L		95	80 - 125
Ethylbenzene	20.0	18.5		ug/L		93	80 - 120
Tetrachloroethene	20.0	18.4		ug/L		92	80 - 120
Toluene	20.0	18.4		ug/L		92	80 - 120
trans-1,2-Dichloroethene	20.0	17.7		ug/L		89	80 - 126
Trichloroethene	20.0	18.3		ug/L		91	80 - 120
Vinyl chloride	20.0	16.3		ug/L		81	56 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*101*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 410-96645-4 MS
Matrix: Groundwater
Analysis Batch: 295186

Client Sample ID: MW-52-20220901
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	ND		20.0	22.4		ug/L		112	67 - 126
1,1-Dichloroethane	ND		20.0	21.8		ug/L		109	80 - 120
1,1-Dichloroethene	ND		20.0	23.6		ug/L		118	80 - 131
1,2-Dichloroethane	ND		20.0	21.0		ug/L		105	73 - 124
1,2-Dichloropropane	ND		20.0	21.5		ug/L		108	80 - 120
Benzene	ND		20.0	22.2		ug/L		111	80 - 120
Chloroform	3.6		20.0	25.5		ug/L		109	80 - 120
cis-1,2-Dichloroethene	ND		20.0	22.8		ug/L		114	80 - 125
Ethylbenzene	ND		20.0	22.4		ug/L		112	80 - 120
Tetrachloroethene	ND		20.0	23.0		ug/L		115	80 - 120
Toluene	ND		20.0	22.1		ug/L		111	80 - 120
trans-1,2-Dichloroethene	ND		20.0	22.1		ug/L		110	80 - 126
Trichloroethene	ND		20.0	22.3		ug/L		112	80 - 120
Vinyl chloride	ND		20.0	20.8		ug/L		104	56 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: 410-96645-4 MSD
Matrix: Groundwater
Analysis Batch: 295186

Client Sample ID: MW-52-20220901
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		20.0	20.0		ug/L		100	67 - 126	11	30
1,1-Dichloroethane	ND		20.0	19.3		ug/L		97	80 - 120	12	30
1,1-Dichloroethene	ND		20.0	21.1		ug/L		105	80 - 131	11	30
1,2-Dichloroethane	ND		20.0	19.1		ug/L		96	73 - 124	9	30
1,2-Dichloropropane	ND		20.0	19.3		ug/L		96	80 - 120	11	30
Benzene	ND		20.0	19.9		ug/L		99	80 - 120	11	30
Chloroform	3.6		20.0	22.9		ug/L		96	80 - 120	11	30
cis-1,2-Dichloroethene	ND		20.0	20.6		ug/L		103	80 - 125	10	30
Ethylbenzene	ND		20.0	20.1		ug/L		101	80 - 120	11	30
Tetrachloroethene	ND		20.0	21.0		ug/L		105	80 - 120	9	30
Toluene	ND		20.0	19.8		ug/L		99	80 - 120	11	30
trans-1,2-Dichloroethene	ND		20.0	20.0		ug/L		100	80 - 126	10	30
Trichloroethene	ND		20.0	19.8		ug/L		99	80 - 120	12	30
Vinyl chloride	ND		20.0	18.4		ug/L		92	56 - 120	12	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*99*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*

QC Sample Results

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM)

Lab Sample ID: MB 410-294007/1-A
Matrix: Water
Analysis Batch: 294125

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 294007

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.30	0.10	ug/L		09/08/22 15:40	09/09/22 04:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Benzo(a)pyrene-d12 (Surr)	*89*		*10 - 110*	*09/08/22 15:40*	*09/09/22 04:23*	*1*
Fluoranthene-d10 (Surr)	*85*		*47 - 128*	*09/08/22 15:40*	*09/09/22 04:23*	*1*
1-Methylnaphthalene-d10 (Surr)	*72*		*36 - 111*	*09/08/22 15:40*	*09/09/22 04:23*	*1*

Lab Sample ID: LCS 410-294007/2-A
Matrix: Water
Analysis Batch: 294125

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 294007

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.00	0.445		ug/L		44	23 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*94*		*10 - 110*
Fluoranthene-d10 (Surr)	*86*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*71*		*36 - 111*

Lab Sample ID: 410-96645-4 MS
Matrix: Groundwater
Analysis Batch: 294125

Client Sample ID: MW-52-20220901
Prep Type: Total/NA
Prep Batch: 294007

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dioxane	1.4		1.04	2.09		ug/L		68	23 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*66*		*10 - 110*
Fluoranthene-d10 (Surr)	*89*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*76*		*36 - 111*

Lab Sample ID: 410-96645-4 MSD
Matrix: Groundwater
Analysis Batch: 294125

Client Sample ID: MW-52-20220901
Prep Type: Total/NA
Prep Batch: 294007

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,4-Dioxane	1.4		1.01	1.92		ug/L		53	23 - 120	9	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Benzo(a)pyrene-d12 (Surr)	*56*		*10 - 110*
Fluoranthene-d10 (Surr)	*86*		*47 - 128*
1-Methylnaphthalene-d10 (Surr)	*71*		*36 - 111*

QC Association Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

GC/MS VOA

Analysis Batch: 295186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96645-1	MW-35-20220901	Total/NA	Groundwater	8260D	
410-96645-2	MW-41-20220901	Total/NA	Groundwater	8260D	
410-96645-3	MW-43-20220901	Total/NA	Groundwater	8260D	
410-96645-4	MW-52-20220901	Total/NA	Groundwater	8260D	
410-96645-5	MW-20-3-R-20220901	Total/NA	Groundwater	8260D	
410-96645-6	FB-20220901	Total/NA	Water	8260D	
410-96645-7	DUP-20220901	Total/NA	Groundwater	8260D	
410-96645-8	TB-20220901	Total/NA	Water	8260D	
MB 410-295186/6	Method Blank	Total/NA	Water	8260D	
LCS 410-295186/4	Lab Control Sample	Total/NA	Water	8260D	
410-96645-4 MS	MW-52-20220901	Total/NA	Groundwater	8260D	
410-96645-4 MSD	MW-52-20220901	Total/NA	Groundwater	8260D	

GC/MS Semi VOA

Prep Batch: 294007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96645-1	MW-35-20220901	Total/NA	Groundwater	3510C	
410-96645-2	MW-41-20220901	Total/NA	Groundwater	3510C	
410-96645-3	MW-43-20220901	Total/NA	Groundwater	3510C	
410-96645-4	MW-52-20220901	Total/NA	Groundwater	3510C	
410-96645-5	MW-20-3-R-20220901	Total/NA	Groundwater	3510C	
410-96645-6	FB-20220901	Total/NA	Water	3510C	
410-96645-7	DUP-20220901	Total/NA	Groundwater	3510C	
MB 410-294007/1-A	Method Blank	Total/NA	Water	3510C	
LCS 410-294007/2-A	Lab Control Sample	Total/NA	Water	3510C	
410-96645-4 MS	MW-52-20220901	Total/NA	Groundwater	3510C	
410-96645-4 MSD	MW-52-20220901	Total/NA	Groundwater	3510C	

Analysis Batch: 294125

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
410-96645-1	MW-35-20220901	Total/NA	Groundwater	8270E SIM	294007
410-96645-2	MW-41-20220901	Total/NA	Groundwater	8270E SIM	294007
410-96645-3	MW-43-20220901	Total/NA	Groundwater	8270E SIM	294007
410-96645-4	MW-52-20220901	Total/NA	Groundwater	8270E SIM	294007
410-96645-5	MW-20-3-R-20220901	Total/NA	Groundwater	8270E SIM	294007
410-96645-6	FB-20220901	Total/NA	Water	8270E SIM	294007
410-96645-7	DUP-20220901	Total/NA	Groundwater	8270E SIM	294007
MB 410-294007/1-A	Method Blank	Total/NA	Water	8270E SIM	294007
LCS 410-294007/2-A	Lab Control Sample	Total/NA	Water	8270E SIM	294007
410-96645-4 MS	MW-52-20220901	Total/NA	Groundwater	8270E SIM	294007
410-96645-4 MSD	MW-52-20220901	Total/NA	Groundwater	8270E SIM	294007

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Client Sample ID: MW-35-20220901
Date Collected: 09/01/22 09:28
Date Received: 09/02/22 19:28

Lab Sample ID: 410-96645-1
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 12:42
Total/NA	Prep	3510C			294007	QJZ6	ELLE	09/08/22 15:40
Total/NA	Analysis	8270E SIM		1	294125	UJM0	ELLE	09/09/22 07:57

Client Sample ID: MW-41-20220901
Date Collected: 09/01/22 10:19
Date Received: 09/02/22 19:28

Lab Sample ID: 410-96645-2
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 13:04
Total/NA	Prep	3510C			294007	QJZ6	ELLE	09/08/22 15:40
Total/NA	Analysis	8270E SIM		1	294125	UJM0	ELLE	09/09/22 08:18

Client Sample ID: MW-43-20220901
Date Collected: 09/01/22 11:07
Date Received: 09/02/22 19:28

Lab Sample ID: 410-96645-3
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 13:26
Total/NA	Prep	3510C			294007	QJZ6	ELLE	09/08/22 15:40
Total/NA	Analysis	8270E SIM		1	294125	UJM0	ELLE	09/09/22 08:40

Client Sample ID: MW-52-20220901
Date Collected: 09/01/22 12:42
Date Received: 09/02/22 19:28

Lab Sample ID: 410-96645-4
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 13:48
Total/NA	Prep	3510C			294007	QJZ6	ELLE	09/08/22 15:40
Total/NA	Analysis	8270E SIM		1	294125	UJM0	ELLE	09/09/22 06:31

Client Sample ID: MW-20-3-R-20220901
Date Collected: 09/01/22 13:33
Date Received: 09/02/22 19:28

Lab Sample ID: 410-96645-5
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 14:54
Total/NA	Prep	3510C			294007	QJZ6	ELLE	09/08/22 15:40
Total/NA	Analysis	8270E SIM		1	294125	UJM0	ELLE	09/09/22 09:01

Client Sample ID: FB-20220901
Date Collected: 09/01/22 14:00
Date Received: 09/02/22 19:28

Lab Sample ID: 410-96645-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 11:58

Lab Chronicle

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Client Sample ID: FB-20220901 — Lab Sample ID: 410-96645-6

Date Collected: 09/01/22 14:00
Date Received: 09/02/22 19:28
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			294007	QJZ6	ELLE	09/08/22 15:40
Total/NA	Analysis	8270E SIM		1	294125	UJM0	ELLE	09/09/22 09:23

Client Sample ID: DUP-20220901 — Lab Sample ID: 410-96645-7

Date Collected: 09/01/22 00:00
Date Received: 09/02/22 19:28
Matrix: Groundwater

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 15:16
Total/NA	Prep	3510C			294007	QJZ6	ELLE	09/08/22 15:40
Total/NA	Analysis	8270E SIM		1	294125	UJM0	ELLE	09/09/22 09:44

Client Sample ID: TB-20220901 — Lab Sample ID: 410-96645-8

Date Collected: 09/01/22 00:00
Date Received: 09/02/22 19:28
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	295186	TQ4J	ELLE	09/13/22 12:20

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Accreditation/Certification Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Laboratory: Eurofins Lancaster Laboratories Environment Testing, LLC

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New Jersey	NELAP	PA011	06-30-23

Method Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	ELLE
8270E SIM	Semivolatile Organic Compounds (GC/MS SIM)	SW846	ELLE
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	ELLE
5030C	Purge and Trap	SW846	ELLE

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

ELLE = Eurofins Lancaster Laboratories Environment Testing, LLC, 2425 New Holland Pike, Lancaster, PA 17601, TEL (717)656-2300

Sample Summary

Client: Brown and Caldwell
Project/Site: D'Imperio Property

Job ID: 410-96645-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
410-96645-1	MW-35-20220901	Groundwater	09/01/22 09:28	09/02/22 19:28
410-96645-2	MW-41-20220901	Groundwater	09/01/22 10:19	09/02/22 19:28
410-96645-3	MW-43-20220901	Groundwater	09/01/22 11:07	09/02/22 19:28
410-96645-4	MW-52-20220901	Groundwater	09/01/22 12:42	09/02/22 19:28
410-96645-5	MW-20-3-R-20220901	Groundwater	09/01/22 13:33	09/02/22 19:28
410-96645-6	FB-20220901	Water	09/01/22 14:00	09/02/22 19:28
410-96645-7	DUP-20220901	Groundwater	09/01/22 00:00	09/02/22 19:28
410-96645-8	TB-20220901	Water	09/01/22 00:00	09/02/22 19:28

410-96645 Chain of Custody

vironme

Chain of Custody Record

eurofins Environment Testing America

Sampler: MHM/PFP	Lab PM: Weyandt, Barbara A	Carrier Tracking No(s):	COC No: 410-33363-10388.7
Client Contact: Mr. Charles Meyn	Phone:	E-Mail: Barbara.Weyandt@et.eurofinsus.com	State of Origin: NJ	Page: Page 7 of 7
Company: Brown and Caldwell	PWSID:			Job #:

Address: 500 N. Franklin Turnpike Suite 306	Due Date Requested:
City: Ramsey	TAT Requested (days): Standard
State, Zip: NJ, 07446	Compliance Project: Δ Yes Δ No
Phone: 201-574-4706(Tel)	PO #: Purchase Order Requested
Email: cmeyn@brwncald.com	WO #:
Project Name: D'Imperio Property	Project #: 41000706
Site: D'Imperio	SSOW#:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Filtered Sample (Yes or No)	8260D - VOCs	8270E_SIM - 1,4-Dioxane	Total Number of containers	Special Instructions/Note:
MW-35-20220901	09/01/22	0928	G	GW		X	X	5	
MW-41-20220901	↓	1019	↓	↓		X	X		
MW-43-20220901	↓	1107	↓	↓		X	X		
MW-52-20220901 (MS/MSD)	↓	1242	↓	↓	X	X	X		
MW-20-3-R-20220901	↓	1333	↓	↓		X	X		
FB-20220901	↓	1400	↓	DI		X	X		
DUP-20220901	↓	9999	↓	GW		X	X		
TB-20220901	↓	LAB	↓	DI		X			

Possible Hazard Identification: ☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) BC Equis

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
MAX MADONEY	09/02/22 1611	BC	Brad Bye	9/2/22 1611	Eurofins
Brad Bye	9/2/22 1905	Eurofins			
				9-2-22 1928	ELLE

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 1.1

Ver: 06/08/2021

9/15/2022

Login Sample Receipt Checklist

Client: Brown and Caldwell

Job Number: 410-96645-1

Login Number: 96645
List Number: 1
Creator: Jeremiah, Cory T

List Source: Eurofins Lancaster Laboratories Environment Testing, LLC

Question	Answer	Comment
The cooler's custody seal is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable (</=6C, not frozen).	True	
Cooler Temperature is recorded.	True	
WV: Container Temperature is acceptable (</=6C, not frozen).	N/A	
WV: Container Temperature is recorded.	N/A	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the containers received and the COC.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses.	True	
Is the Field Sampler's name present on COC?	True	
Sample custody seals are intact.	True	
VOA sample vials do not have headspace >6mm in diameter (none, if from WV)?	True	

Appendix C: Data Verification Reports

Data Verification Report Groundwater Quality Monitoring Data 1st Half 2022 Semi-Annual Sampling Event, March 2022

Introduction

This Data Verification Report addresses the 1st half 2022 (1H22) semi-annual sampling event that was performed during the first quarter of 2022 (1Q22) at the D'Imperio Property Site. The 1H22 sampling event was performed between March 7, 2022 and March 10, 2022.

The data verification has been performed in accordance with the Long-Term Groundwater Monitoring Plan, Revision 3A" "LTGMP-3A", (Brown and Caldwell, April 2020) including the updated "Quality Assurance Project Plan" (QAPP), (Brown and Caldwell, April 2020). These documents are consistent with the "Approval with Modifications" letter from Ms. Kim O'Connell of USEPA dated March 13, 2020.

Summary of Findings

The collection of the field samples for 1H22 was performed using methods and techniques as documented in the LTGMP-3A and the QAPP. Only wells monitored on a semi-annual basis were sampled as part of this event. The 1H22 sampling event included the following samples as listed in Table 2-1 of the LTGMP-3A:

- 19 monitoring wells ("MW" and "OBW" series).
- Seven (7) field Quality Assurance/Quality Control (QA/QC) samples including four (4) field blanks ("FB"), two (2) trip blanks, and one (1) blind field duplicate ("DUP").
- Samples from one (1) monitoring well were collected in triplicate to be utilized for laboratory QA/QC purposes as a matrix spike/matrix spike duplicate (MS/MSD).

One additional sample from BR-3-E was collected by the operations contractor (O&M, Inc.) from the site extraction wells per Table 2-1 of the LTGMP-3A. Results from these samples will be reported in the Semi-Annual (1H-22) Groundwater Sampling Report and the 2022 Annual Groundwater Report.

Each well was sampled for volatile organic compounds (VOCs) by 8260D. Per the revised analytical parameters specified in the LTGMP-3A, three parameters (2-butanone, chlorobenzene, and methylene chloride) that were included in prior sampling events were omitted. The non-performance standard VOC vinyl chloride was added to the analyte list.

Based on a review of field and laboratory documentation for 1H22, the field sampling program and laboratory testing have yielded acceptable results per the verification criteria as described in the LTGMP-3A and the QAPP. In review of field documentation from the 1H22 semi-annual sampling event, it has been concluded that each sample was collected and documented in accordance with the LTGMP-3A and

QAPP with no substantive deviations from these documents. Laboratory analytical data for the samples listed below have been received, reviewed, and a completeness check was performed. Following the initial review and completeness check, the electronic data deliverable (EDD) was uploaded into the existing database.

A review of the analytical data reports revealed that each sample collected during 1H22 was analyzed within the required holding times and the required analyses were performed per approved methods. The project performance criteria have been met by the laboratory Method Detection Limits (MDLs) for the analytes.

Sample Delivery Group (SDG) 410-75512-1

Samples from the listed sample delivery group (SDG) were collected from March 7 through March 9, 2022. Each sample in the SDG is listed below with the corresponding laboratory identification provided in parenthesis.

- MW-79-20220307 (410-755-12-1)
- MW-80-20220307 (410-755-12-2)
- MW-74-20220307 (410-755-12-3)
- FB-20220307 (410-755-12-4)
- MW-41-20220308 (410-755-12-5)
- MW-24-1-20220308 (410-755-12-6)
- MW-49-20220308 (410-755-12-7)
- MW-56-20220308 (410-755-12-8)
- OBW-62-20220308 (410-755-12-9)
- OBS-63-20220308 (410-755-12-10)
- FB-20220308 (410-755-12-11)
- MW-55-20220309 (410-755-12-12)
- MW-59-250220309 (410-755-12-13)
- MW-28-1-20220309 (410-755-12-14)
- MW-28-2-20220309 (410-755-12-15)
- MW-43-20220309 (410-755-12-16)
- FB-20220309 (410-755-12-17)
- TB-20220309 (410-755-12-18)

Comparison to Prior Samples

Based on comparison and evaluation, results from the monitoring well samples are generally consistent with previous sampling data. Data observations of note are provided for the wells listed below:

MW-80 - The 1H22 sampling event included Lower Cohansey Detached Plume (LCDP) Sentinel well MW-80 which is located downgradient of the three LCDP extraction wells (LC-7E, LC-8E and LC-9E). No Performance Standard VOCs, excluding chloroform, were detected in MW-80. These results are consistent with prior data.

MW-79 - The 1H22 sampling event included LCDP Sentinel well MW-79 which is located downgradient of the three LCDP extraction wells (LC-7E, LC-8E and LC-9E). No Performance Standard VOCs, excluding chloroform, were detected in in wells MW-79. These results are consistent with prior data.

OBW-62 – The 1H22 sampling event revealed a TVOC concentration (excluding chloroform) of 2.91 µg/L (J-qualified) in OBW-62 which is located downgradient of Lower Cohansey Main Plume extraction wells

LC-3E and LC-4E. This TVOC is a reduction from the 2H21 result of 6.78 µg/L (J-qualified). Concentrations in this well will continue to be monitored to confirm whether the installation of new groundwater extraction pumps in extraction wells LC-3-E and LC-4-E have mitigated potential breakthrough between these wells.

MW-55, MW-56, MW-59 and OBW-63 - Constituent concentrations detected in the Lower Cohansey Main Plume sentinel wells MW-55, MW-56, MW-59 and OBW-63 were below Performance Standard levels during the 1H22 sampling event.

Other QA/QC Criteria Evaluation for SDG 410-75512-1

Observations of QA/QC criteria for the SDG are listed below:

- The three field blanks were found to be non-detect for each of the analyzed parameters with the exception of chloroform which was detected between 2.4 and 2.6 ug/L in each field blank.
- The trip blank analysis resulted in non-detects for each of the analyzed parameters.
- The surrogate percent recoveries were each within prescribed measurement performance criteria for each sample.
- The laboratory control sample (LCS) percent recoveries were each within prescribed measurement performance criteria.
- The MS/MSD recoveries were each within prescribed performance criteria.

Sample Delivery Group (SDG) 410-75949-1

Samples from the listed SDG were collected on March 10, 2022. Each sample in the SDG is listed below with the corresponding laboratory identification provided in parenthesis.

- MW-73-20220310 (410-75949-1)
- MW-70-20220310 (410-75949-2)
- MW-71-20220310 (410-75949-3)
- MW-69-20220310 (410-75949-4)
- MW-24-2-R-20220310 (410-75949-5)
- FB-20220310 (410-75949-6)
- TB-20220310 (410-75949-7)
- DUP-20220310 (410-75949-8) - Duplicate of MW-69-20220310

Comparison to Prior Samples

Based on comparison and evaluation, results from the monitoring well samples were generally consistent with previous sampling data. Data observations of note are provided for the wells listed below:

MW-71 - MW-71 is intended to define the southeasterly sidegradient extent of the LCDP (toward the Hamilton Preserve) as discussed in the LCDP Delineation Report (Brown and Caldwell, August 2014). For this sampling event, MW-71 was found to have a TVOC concentration of 10.15 ug/l, which is a decrease from the concentration of 17.24 µg/L detected during the 2H21 sampling event.

MW-69 – At the time of installation, MW-69 was positioned in the approximate center of mass of the LCDP. In the 1H21 sampling event, the TVOC concentration in MW-69 was 16.63 µg/L, a decrease from the 19.63 µg/L concentration detected in 2H21 and well below the 120.8 µg/L concentration detected during the 3Q19 sampling event. This lower range of concentrations in recent sampling events suggests that the center of mass of the LCDP has migrated downgradient towards the extraction well array.

Other QA/QC Criteria Evaluation for SDG 410-75949-1

Observations of QA/QC criteria for the SDG are listed below:

- The analysis of the field blank, FB-20220310 resulted in non-detects for each of the analyzed parameters.
- The trip blank analysis resulted in non-detects for each of the analyzed parameters.
- The sample results for the duplicate sample DUP-20220310 were consistent with the results of the parent sample MW-69-20220310.
- The surrogate percent recoveries were each within prescribed measurement performance criteria for each sample.
- The laboratory control sample (LCS) percent recoveries were each within prescribed measurement performance criteria.

Data Verification Report Groundwater Quality Monitoring Data

2nd Half 2022 Semi-Annual Sampling Event, August-September 2022

Introduction

This Data Verification Report addresses the 2nd half 2022 (2H22) semi-annual sampling event that was performed during the third quarter of 2022 (3Q22) at the D'Imperio Property Site. The 2H22 sampling event was performed between August 22, 2022, and September 1, 2022.

The data verification has been performed in accordance with the Long-Term Groundwater Monitoring Plan, Revision 3A" "LTGMP-3A", (Brown and Caldwell, April 2020) including the updated "Quality Assurance Project Plan" (QAPP), (Brown and Caldwell, April 2020). These documents are consistent with the "Approval with Modifications" letter from Ms. Kim O'Connell of USEPA dated March 13, 2020.

Summary of Findings

The collection of the field samples for 2H22 was performed using methods and techniques as documented in the LTGMP-3A and the QAPP. Only wells monitored on a semi-annual basis were sampled as part of this event. The 2H22 sampling event included the following samples as listed in Table 2-1 of the LTGMP-3A:

- Forty-five (45) monitoring wells ("MW" and "OBW" series).
- Sixteen (16) field Quality Assurance/Quality Control (QA/QC) samples including nine (9) field blanks ("FB"), four (4) trip blanks, and three (3) blind field duplicates ("DUP").
- Samples from three (3) monitoring well were collected in triplicate to be utilized for laboratory QA/QC purposes as a matrix spike/matrix spike duplicate (MS/MSD).

Additional sample from were collected by the operations contractor (O&M, Inc.) from the site extraction wells per Table 2-1 of the LTGMP-3A. Results from these samples will be reported in the Semi-Annual (2H-22) Groundwater Sampling Report and the 2022 Annual Groundwater Report.

Each well was sampled for the Performance Standard volatile organic compounds (VOCs) by USEPA Method 8260D and for 1,4-dioxane by USEPA Method 8270E SIM. Per the revised analytical parameters specified in the LTGMP-3A, three parameters (2-butanone, chlorobenzene, and methylene chloride) that were included in prior sampling events were omitted. The non-performance standard VOC vinyl chloride was added to the analyte list.

Based on a review of field and laboratory documentation for 2H22, the field sampling program and laboratory testing have yielded acceptable results per the verification criteria as described in the LTGMP-3A and the QAPP. In review of field documentation from the 2H22 semi-annual sampling event, it has

been concluded that each sample was collected and documented in accordance with the LTGMP-3A and QAPP with no substantive deviations from these documents. Laboratory analytical data for the samples listed below have been received, reviewed, and a completeness check was performed. Following the initial review and completeness check, the electronic data deliverable (EDD) was uploaded into the existing database.

A review of the analytical data reports revealed that each sample collected during 2H22 was analyzed within the required holding times and the required analyses were performed per approved methods. The project performance criteria have been met by the laboratory Method Detection Limits (MDLs) for the analytes.

Sample Delivery Group (SDG) 410-95559-1

Samples from the listed sample delivery group (SDG) were collected from August 22 through August 23, 2022. Each sample in the SDG is listed below with the corresponding laboratory identification provided in parenthesis.

- MW-80-20220822 (410-95559-1)
- MW-79-20220822 (410-95559-2)
- MW-76-20220822 (410-95559-3)
- FB-20220822 (410-95559-4)
- MW-77-20220823 (410-95559-5)
- MW-78-20220823 (410-95559-6)
- MW-75-20220823 (410-95559-7)
- MW-74-20220823 (410-95559-8)
- MW-71-20220823 (410-95559-9)
- MW-73-20220823 (410-95559-10)
- FB-20220823 (410-95559-11)

Comparison to Prior Samples

Based on comparison and evaluation, results from the monitoring well samples are generally consistent with previous sampling data. Data observations of note are provided for the wells listed below:

MW-80 - The 2H22 sampling event included Lower Cohansey Detached Plume (LCDP) Sentinel well MW-80 which is located downgradient of the three LCDP extraction wells (LC-7E, LC-8E and LC-9E). No Performance Standard VOCs, excluding chloroform, were detected in MW-80. These results are consistent with prior data.

MW-79 - The 2H22 sampling event included LCDP Sentinel well MW-79 which is located downgradient of the three LCDP extraction wells (LC-7E, LC-8E and LC-9E). No Performance Standard VOCs, excluding chloroform, were detected in in wells MW-79. These results are consistent with prior data.

MW-75, MW-76, MW-77 and MW-78 - The 2H22 sampling event included MW-75, MW-76, MW-77 and MW-78 that form a transect aligned perpendicularly to the projected path of the LCDP along which the three (3) LCDP extraction wells are also located. The constituent trichloroethene was detected in MW-76 at a concentration of 0.38 J µg/L. No Performance Standard VOCs, excluding chloroform, were detected in MW-75, MW-77 or MW-78.

MW-71 - MW-71 defines the southeasterly sidegradient extent of the LCDP (toward the Hamilton Preserve) as discussed in the LCDP Delineation Report[1]. For this sampling event, MW-71 was found to

[1] *Lower Cohansey Detached Plume Delineation Report*, Brown and Caldwell, July 2014

have a TVOC concentration of 9.04 µg/L, which is a decrease from the concentration of 10.15 µg/L detected during the 1H22 sampling event.

Other QA/QC Criteria Evaluation for SDG 410-95559-1

Observations of QA/QC criteria for the SDG are listed below:

- The two field blanks were found to be non-detect for each of the analyzed parameters.
- The surrogate percent recoveries were each within prescribed measurement performance criteria for each sample.
- The laboratory control sample (LCS) percent recoveries were each within prescribed measurement performance criteria.
- The MS/MSD recoveries were each within prescribed performance criteria.

Sample Delivery Group (SDG) 410-95557-1

Samples from the listed SDG were collected on August 24, 2022. Each sample in the SDG is listed below with the corresponding laboratory identification provided in parenthesis.

- MW-70-20220824 (410-95557-1)
- MW-72-20220824 (410-95557-2)
- MW-69-20220824 (410-95557-3)
- MW-68-20220824 (410-95557-4)
- MW-66-20220824 (410-95557-5)
- DUP-20220824 (410-95557-6) – Duplicate of MW-72-20220824
- FB-20220824 (410-95557-7)
- TB-20220824 (410-95557-8)

Comparison to Prior Samples

Based on comparison and evaluation, results from the monitoring well samples were generally consistent with previous sampling data. Data observations of note are provided for the wells listed below:

MW-70 - Monitoring well MW-70 was installed during February 2014 downgradient of MW-69 and is located close to the axis of the LCDP. This well, together with MW-71, are the furthest downgradient LCDP wells where exceedances of the Performance Standards have been detected. During the 2H22 sampling event, TVOC concentrations in MW-70 were found to be 7.59 µg/L, a decrease from the 10.9 µg/L detected during the 1H22 sampling event. There were no exceedances of the Performance Standards for MW-70 during this event.

MW-72 - MW-72 defines the northwesterly sidegradient extent of the LCDP (toward the MLV condominiums) as discussed in the LCDP Delineation Report. MW-72 was found to have a TVOC concentration of 0.42 µg/L. This is similar to the concentration of 1.45 µg/L detected in the 1H21 sampling event in this well.

MW-69 – At the time of installation, MW-69 was positioned in the approximate center of mass of the LCDP. In the 2H22 sampling event, the TVOC concentration in MW-69 was 12.43 µg/L, a decrease from the 16.63 µg/L concentration detected in 1H22 and well below the historic, maximum 120.8 µg/L concentration detected during the 3Q19 sampling event. This lower range of concentrations in recent sampling events suggests that the center of mass of the LCDP has migrated downgradient towards the extraction well array.

Other QA/QC Criteria Evaluation for SDG 410-95557-1

Observations of QA/QC criteria for the SDG are listed below:

- The analysis of the field blank resulted in non-detects for each of the analyzed parameters.
- The trip blank analysis resulted in non-detects for each of the analyzed parameters.
- The sample results for the duplicate sample DUP-20220824 were consistent with the results of the parent sample MW-72-20220824.
- The surrogate percent recoveries were each within prescribed measurement performance criteria for each sample.
- The laboratory control sample (LCS) percent recoveries were each within prescribed measurement performance criteria.

Sample Delivery Group (SDG) 410-95874-1

Samples from the listed SDG were collected on August 25th and 26th, 2022. Each sample in the SDG is listed below with the corresponding laboratory identification provided in parenthesis.

- MW-60-20220824 (410-95874-1)
- MW-57-20220825 (410-95874-2)
- MW-56-20220825 (410-95874-3)
- OBW-62-20220825 (410-95874-4)
- OBW-63-20220825 (410-95874-5)
- MW-51-20220825 (410-95874-6)
- FB-20220825 (410-95874-7)
- MW-47-20220826 (410-95874-8)
- MW-53-20220826 (410-95874-9)
- MW-55-20220826 (410-95874-10)
- MW-45-20220826 (410-95874-11)
- MW-46-20220826 (410-95874-12)
- FB-20220826 (410-95874-13)
- TB-20220826 (410-95874-14)

Comparison to Prior Samples

Based on comparison and evaluation, results from these monitoring well samples were generally consistent with previous sampling data. Data observations of note are provided for the wells listed below:

OBW-62 – The 2H22 sampling event revealed a TVOC concentration (excluding chloroform) of 4.38 µg/L (J-qualified) in OBW-62 which is located downgradient of Lower Cohansey Main Plume extraction wells LC-3E and LC-4E. This TVOC is an increase from the 1H22 result of 2.91 µg/L (J-qualified). Concentrations in this well will continue to be monitored to confirm whether the installation of new groundwater extraction pumps in extraction wells LC-3-E and LC-4-E have mitigated potential breakthrough between these wells.

MW-55, MW-56, MW-59 and OBW-63 - Constituent concentrations detected in the Lower Cohansey Main Plume sentinel wells MW-55, MW-56, OBW-63 and MW-59 (Reported below) were below Performance Standard levels during the 2H22 sampling event.

Other QA/QC Criteria Evaluation for SDG 410-95874-1

Observations of QA/QC criteria for the SDG are listed below:

- The analysis of the two field blanks resulted in non-detects for each of the analyzed parameters.
- The trip blank analysis resulted in non-detects for each of the analyzed parameters.
- The surrogate percent recoveries were each within prescribed measurement performance criteria for each sample.
- The laboratory control sample (LCS) percent recoveries were each within prescribed measurement performance criteria.

Sample Delivery Group (SDG) 410-96362-1

Samples from the listed SDG were collected on August 29th and 31st, 2022. Each sample in the SDG is listed below with the corresponding laboratory identification provided in parenthesis.

- MW-50-20220829 (410-96362-1)
- MW-59-20220829 (410-96362-2)
- MW-49-20220829 (410-96362-3)
- MW-34-20220829 (410-96362-4)
- MW-29-1-20220829 (410-96362-5)
- FB-20220829 (410-96362-6)
- MW-37-20220830 (410-96362-7)
- MW-38-20220830 (410-96362-8)
- MW-32-20220830 (410-96362-9)
- MW-33-2-20220830 (410-96362-10)
- MW-40-20220830 (410-96362-11)
- FB-20220830 (410-96362-12)
- MW-24-1-20220831 (410-96362-13)
- MW-24-2-20220831 (410-96362-14)
- MW-28-1-20220831 (410-96362-15)
- MW-28-2-20220831 (410-96362-16)
- MW-29-2-20220931 (410-96362-17)
- DUP-20220830 (410-96362-18) – Duplicate of MW-38-20220830
- FB-20220931 (410-96362-19)
- TB-20220831 (410-96362-20)

Comparison to Prior Samples

Based on comparison and evaluation, results from the monitoring well samples were generally consistent with previous sampling data.

Other QA/QC Criteria Evaluation for SDG 410-96362-1

Observations of QA/QC criteria for the SDG are listed below:

- The analysis of the three field blanks resulted in non-detects for each of the analyzed parameters.
- The trip blank analysis resulted in non-detects for each of the analyzed parameters.
- The sample results for the duplicate sample DUP-20220830 were consistent with the results of the parent sample MW-38-20220830.
- The surrogate percent recoveries were each within prescribed measurement performance criteria for each sample.

- The laboratory control sample (LCS) percent recoveries were each within prescribed measurement performance criteria.

Sample Delivery Group (SDG) 410-96645-1

Samples from the listed SDG were collected on September 1st, 2022. Each sample in the SDG is listed below with the corresponding laboratory identification provided in parenthesis.

- MW-35-20220901 (410-96645-1)
- MW-41-20220901 (410-96645-2)
- MW-43-20220901 (410-96645-3)
- MW-52-20220901 (410-96645-4)
- MW-20-3-R-20220901 (410-96645-5)
- FB-20220901 (410-96645-6)
- DUP-20220901 (410-96645-7) – Duplicate of MW-43-20220901
- TB-20220901 (410-96645-8)

Comparison to Prior Samples

Based on comparison and evaluation, results from these monitoring well samples were generally consistent with previous sampling data.

Other QA/QC Criteria Evaluation for SDG 410-96645-1

Observations of QA/QC criteria for the SDG are listed below:

- The analysis of the field blanks resulted in non-detects for each of the analyzed parameters.
- The trip blank analysis resulted in non-detects for each of the analyzed parameters.
- The sample results for the duplicate sample DUP-20220901 were consistent with the results of the parent sample MW-43-20220901.
- The surrogate percent recoveries were each within prescribed measurement performance criteria for each sample.
- The laboratory control sample (LCS) percent recoveries were each within prescribed measurement performance criteria.

Appendix D: Chloroform Data in Groundwater (1983-2022)

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	20-1	12/01/1983	10 U
Tbr	20-1	01/01/1984	10 U
Tbr	20-1	01/01/1992	10 U
Tbr	20-2	12/01/1983	10 U
Tbr	20-2	01/01/1984	10 U
Tbr	20-2	01/01/1992	5
Tbr	20-2	03/01/1994	10 U
Tbr	20-2	06/01/1994	10 U
Tbr	20-2	09/16/2003	1 J
Tbr	20-2	05/18/2015	0.5 U
Tbr	21-1	12/01/1983	5
Tbr	21-1	01/01/1984	10 U
Tbr	21-1	01/01/1992	10 U
Tbr	21-1	06/01/1994	10 U
Tbr	22-1	12/01/1983	5
Tbr	22-1	01/01/1984	10 U
Tbr	23-1	12/01/1983	6
Tbr	23-1	01/01/1984	4
Tbr	23-1	01/01/1992	2
Tbr	23-1	03/01/1994	4.5 J
Tbr	23-1	06/01/1994	2.4 J
Tbr	23-1	09/17/2003	44
Tbr	24-1	03/01/1984	2
Tbr	24-1	03/01/1994	10
Tbr	24-1	06/01/1994	6.1 J
Tbr	24-1	11/07/2001	21
Tbr	24-1	09/17/2003	21
Tbr	24-1	08/24/2006	58
Tbr	24-1	08/16/2007	56
Tbr	24-1	08/14/2008	57
Tbr	24-1	08/13/2009	52
Tbr	24-1	08/09/2010	41
Tbr	24-1	11/10/2010	43
Tbr	24-1	08/16/2011	42
Tbr	24-1	08/17/2012	40
Tbr	24-1	08/13/2013	40
Tbr	24-1	08/19/2014	31
Tbr	24-1	08/10/2015	51
Tbr	24-1	02/08/2016	49
Tbr	24-1	08/08/2016	64
Tbr	24-1	08/08/2016	71
Tbr	24-1	02/21/2017	61
Tbr	24-1	08/10/2017	40
Tbr	24-1	08/20/2018	52
Tbr	24-1	08/28/2019	48
Tbr	24-1	08/28/2019	49
Tbr	24-1	09/16/2020	26
Tbr	24-1	03/15/2021	20

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	24-1	09/16/2021	28
Tbr	24-1	03/08/2022	34.0
Tbr	24-1	08/31/2022	20.0
Tbr	25-1	03/01/1984	12
Tbr	25-1	02/01/1992	22
Tbr	25-1	06/01/1994	19
Tbr	26-1	12/01/1983	10 U
Tbr	26-1	01/01/1984	10 U
Tbr	26-1	03/01/1994	9 J
Tbr	26-1	06/01/1994	5.8 J
Tbr	27-1	03/01/1984	10 U
Tbr	BR-1-E	09/17/2003	16
Tbr	BR-2-E	09/17/2003	7
Tbr	BR-2-E	02/21/2006	8
Tbr	BR-2-E	08/24/2006	5 U
Tbr	BR-2-E	03/14/2007	5 U
Tbr	BR-2-E	08/15/2007	9
Tbr	BR-2-E	02/20/2008	5 U
Tbr	BR-2-E	08/13/2008	5 U
Tbr	BR-2-E	02/04/2009	5 U
Tbr	BR-2-E	08/12/2009	5 U
Tbr	BR-2-E	02/03/2010	5 U
Tbr	BR-2-E	08/12/2010	5 U
Tbr	BR-2-E	11/10/2010	2 J
Tbr	BR-2-E	02/23/2011	2 J
Tbr	BR-2-E	08/17/2011	1 J
Tbr	BR-2-E	02/15/2012	2 J
Tbr	BR-2-E	08/22/2012	0.8 U
Tbr	BR-2-E	08/22/2012	0.8 U
Tbr	BR-2-E	02/27/2013	0.8 U
Tbr	BR-2-E	08/07/2013	0.8 U
Tbr	BR-2-E	02/12/2014	0.8 U
Tbr	BR-2-E	08/06/2014	0.5 U
Tbr	BR-2-E	02/18/2015	0.5 U
Tbr	BR-2-E	05/20/2015	0.5 U
Tbr	BR-2-E	08/12/2015	5
Tbr	BR-2-E	02/10/2016	0.5 U
Tbr	BR-2-E	08/09/2016	0.5 U
Tbr	BR-2-E	02/22/2017	0.5 U
Tbr	BR-2-E	08/09/2017	0.5 U
Tbr	BR-2-E	08/20/2018	0.2 U
Tbr	BR-2-E	08/14/2019	0.2 U
Tbr	BR-2-E	03/10/2021	1 U
Tbr	BR-3-E	09/18/2003	12
Tbr	BR-3-E	02/21/2006	31
Tbr	BR-3-E	08/24/2006	27
Tbr	BR-3-E	03/14/2007	29
Tbr	BR-3-E	08/15/2007	28

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	BR-3-E	02/20/2008	27
Tbr	BR-3-E	08/13/2008	34
Tbr	BR-3-E	02/04/2009	14
Tbr	BR-3-E	08/12/2009	1 J
Tbr	BR-3-E	02/03/2010	21
Tbr	BR-3-E	08/12/2010	22
Tbr	BR-3-E	11/10/2010	26
Tbr	BR-3-E	02/23/2011	29
Tbr	BR-3-E	08/17/2011	21
Tbr	BR-3-E	02/15/2012	26
Tbr	BR-3-E	08/22/2012	21
Tbr	BR-3-E	02/27/2013	28
Tbr	BR-3-E	08/07/2013	20
Tbr	BR-3-E	02/12/2014	21
Tbr	BR-3-E	08/06/2014	19
Tbr	BR-3-E	08/06/2014	20
Tbr	BR-3-E	02/18/2015	17
Tbr	BR-3-E	08/12/2015	17
Tbr	BR-3-E	02/10/2016	17
Tbr	BR-3-E	08/09/2016	25
Tbr	BR-3-E	02/22/2017	24
Tbr	BR-3-E	08/09/2017	26
Tbr	BR-3-E	08/20/2018	24
Tbr	BR-3-E	08/14/2019	26 J
Tbr	BR-3-E	09/16/2020	22
Tbr	BR-3-E	03/10/2021	20
Tbr	BR-3-E	03/11/2022	16.0
Tbr	BR-3-E	08/24/2022	14.0
Tbr	BR-4-E	09/17/2003	5
Tbr	BR-4-E	02/21/2006	2 J
Tbr	BR-4-E	08/24/2006	3 J
Tbr	BR-4-E	03/14/2007	1 J
Tbr	BR-4-E	08/15/2007	0.9 J
Tbr	BR-4-E	02/20/2008	4 J
Tbr	BR-4-E	08/13/2008	2 J
Tbr	BR-4-E	02/04/2009	4 J
Tbr	BR-4-E	08/12/2009	1 J
Tbr	BR-4-E	02/03/2010	5 U
Tbr	BR-4-E	08/12/2010	13 U
Tbr	BR-4-E	11/10/2010	3 J
Tbr	BR-4-E	02/23/2011	3 J
Tbr	BR-4-E	08/17/2011	1 J
Tbr	BR-4-E	02/15/2012	1 J
Tbr	BR-4-E	08/22/2012	3 J
Tbr	BR-4-E	02/27/2013	4 J
Tbr	BR-4-E	08/07/2013	7
Tbr	BR-4-E	02/12/2014	3 J
Tbr	BR-4-E	08/06/2014	0.6 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	BR-4-E	02/18/2015	0.5 U
Tbr	BR-4-E	05/20/2015	0.5 U
Tbr	BR-4-E	08/12/2015	0.5 U
Tbr	BR-4-E	02/10/2016	0.5 U
Tbr	BR-4-E	08/09/2016	0.5 U
Tbr	BR-4-E	02/22/2017	1
Tbr	BR-4-E	08/09/2017	0.8 J
Tbr	BR-4-E	08/20/2018	0.9 J
Tbr	BR-4-E	08/14/2019	2 J
Tbr	BR-4-E	03/10/2021	0.68 J
Tbr	BRMW-3	01/01/1992	10 U
Tbr	BRMW-3	07/01/1994	3.60 J
Tbr	DMT	10/22/2002	11
Tbr	DMT	12/17/2002	1 J
Tbr	DMT	05/13/2003	1 J
Tbr	DMT	09/18/2003	0.8 U
Tbr	DMT	11/20/2003	0.8 U
Tbr	DMT	02/25/2004	0.8 U
Tbr	DMT	02/25/2004	0.8 U
Tbr	DMT	05/12/2004	0.8 U
Tbr	DMT	08/11/2004	0.8 U
Tbr	DMT	11/09/2004	0.8 U
Tbr	DMT	02/08/2005	5 U
Tbr	DMT	05/24/2005	5 U
Tbr	DMT	08/30/2005	5 U
Tbr	DMT	11/08/2005	5 U
Tbr	DMT-OLD	10/05/1998	10 U
Tbr	DMT-OLD	12/09/1998	10 U
Tbr	DMT-OLD	02/17/1999	10 U
Tbr	DMT-OLD	05/18/1999	1.1 J
Tbr	DMT-OLD	09/01/1999	2 J
Tbr	DMT-OLD	12/13/1999	1.1 J
Tbr	DMT-OLD	03/16/2000	1.1 J
Tbr	DMT-OLD	06/19/2000	1.1 J
Tbr	DMT-OLD	09/07/2000	1 J
Tbr	DMT-OLD	12/05/2000	1.2 J
Tbr	DMT-OLD	03/28/2001	2 J
Tbr	DMT-OLD	06/12/2001	1 J
Tbr	DMT-OLD	09/19/2001	1 J
Tbr	DMT-OLD	11/05/2001	1 J
Tbr	DMT-OLD	04/10/2002	1 U
Tbr	HP 1	03/01/1994	10 U
Tbr	HP 1	03/01/1994	10 U
Tbr	HP 1	04/01/1994	2.1 J
Tbr	HP 1	04/01/1994	4.3 J
Tbr	HP 10	05/01/1994	2.4 J
Tbr	HP 10	05/01/1994	3.3 J
Tbr	HP 10	05/01/1994	3.9 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	HP 10	05/01/1994	10 U
Tbr	HP 10	05/01/1994	10 U
Tbr	HP 11	01/01/1995	10 U
Tbr	HP 11	02/01/1995	2 J
Tbr	HP 11	02/01/1995	10 U
Tbr	HP 11	02/01/1995	10 U
Tbr	HP 11	02/01/1995	10 U
Tbr	HP 2	03/01/1994	1.8 J
Tbr	HP 2	03/01/1994	10 U
Tbr	HP 3	03/01/1994	5.2 J
Tbr	HP 3	03/01/1994	10 U
Tbr	HP 4	03/01/1994	1.6 J
Tbr	HP 4	03/01/1994	10 U
Tbr	HP 4	03/01/1994	11
Tbr	HP 4	03/01/1994	17
Tbr	HP 5	04/01/1994	5.3 J
Tbr	HP 5	04/01/1994	10 U
Tbr	HP 6	04/01/1994	0.7 J
Tbr	HP 6	04/01/1994	1.6 J
Tbr	HP 6	04/01/1994	5.3 J
Tbr	HP 6	04/01/1994	10 U
Tbr	HP 6	04/01/1994	10 U
Tbr	HP 6	04/01/1994	11
Tbr	HP 7	04/01/1994	4.8 J
Tbr	HP 7	05/01/1994	4.4 J
Tbr	HP 7	05/01/1994	10 U
Tbr	HP 7	05/01/1994	10 U
Tbr	HP 7	05/01/1994	10 U
Tbr	HP 8	04/01/1994	10 U
Tbr	HP 8	04/01/1994	10 U
Tbr	HP 8	05/01/1994	5.1 J
Tbr	HP 8	05/01/1994	10 U
Tbr	HP 9	05/01/1994	5.7 J
Tbr	HP 9	05/01/1994	9.5 J
Tbr	HP 9	05/01/1994	10 U
Tbr	HP 9	05/01/1994	10 U
Tbr	HP 9	05/01/1994	10 U
Tbr	HP 9	05/01/1994	10 U
Tbr	MW-20-1-R	06/16/1998	10 U
Tbr	MW-20-1-R	12/09/1998	10 U
Tbr	MW-20-1-R	05/19/1999	10 U
Tbr	MW-20-1-R	12/13/1999	6 J
Tbr	MW-20-1-R	06/19/2000	44
Tbr	MW-20-1-R	12/05/2000	110
Tbr	MW-20-1-R	06/12/2001	45
Tbr	MW-20-1-R	11/05/2001	35
Tbr	MW-20-1-R	10/22/2002	8
Tbr	MW-20-1-R	05/15/2003	3 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-20-1-R	09/15/2003	2 J
Tbr	MW-20-1-R	11/20/2003	2 J
Tbr	MW-20-1-R	05/13/2004	0.8 U
Tbr	MW-20-1-R	05/26/2005	1 J
Tbr	MW-20-1-R	11/08/2005	2 J
Tbr	MW-20-1-R	08/23/2006	0.9 J
Tbr	MW-20-1-R	08/17/2007	1 J
Tbr	MW-20-1-R	08/11/2008	1 J
Tbr	MW-20-1-R	08/13/2009	1 J
Tbr	MW-20-1-R	08/11/2010	5 U
Tbr	MW-20-1-R	11/10/2010	0.8 J
Tbr	MW-20-1-R	08/17/2011	1 J
Tbr	MW-20-1-R	08/16/2012	0.8 U
Tbr	MW-20-1-R	08/12/2013	0.8 U
Tbr	MW-20-1-R	08/18/2014	0.5 U
Tbr	MW-20-1-R	05/18/2015	0.7 J
Tbr	MW-20-1-R	05/18/2015	0.7 J
Tbr	MW-20-1-R	08/10/2015	0.7 J
Tbr	MW-20-1-R	08/10/2015	0.8 J
Tbr	MW-20-1-R	08/08/2016	1
Tbr	MW-20-1-R	08/10/2017	0.5 J
Tbr	MW-20-1-R	08/20/2018	0.5 J
Tbr	MW-20-1-R	08/27/2019	0.7 J
Tbr	MW-20-1-R	03/22/2021	0.58 J
Tbr	MW-25-1-R	06/16/1998	12
Tbr	MW-25-1-R	12/09/1998	12
Tbr	MW-25-1-R	05/19/1999	15
Tbr	MW-25-1-R	06/21/2000	36
Tbr	MW-25-1-R	06/14/2001	13
Tbr	MW-25-1-R	11/07/2001	17
Tbr	MW-25-1-R	10/23/2002	4 J
Tbr	MW-25-1-R	05/13/2003	28
Tbr	MW-25-1-R	09/17/2003	6
Tbr	MW-25-1-R	11/20/2003	5 J
Tbr	MW-25-1-R	05/13/2004	16
Tbr	MW-25-1-R	05/25/2005	4 J
Tbr	MW-25-1-R	11/09/2005	5 J
Tbr	MW-25-1-R	08/22/2006	15
Tbr	MW-25-1-R	08/13/2007	21
Tbr	MW-25-1-R	08/11/2008	29
Tbr	MW-25-1-R	08/10/2009	11
Tbr	MW-25-1-R	08/09/2010	41
Tbr	MW-25-1-R	11/10/2010	16
Tbr	MW-25-1-R	08/15/2011	33
Tbr	MW-25-1-R	08/16/2012	11
Tbr	MW-25-1-R	08/12/2013	9
Tbr	MW-25-1-R	08/19/2014	15
Tbr	MW-28-1	06/01/1994	5.1 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-28-1	03/31/1998	3.1 J
Tbr	MW-28-1	06/16/1998	10 U
Tbr	MW-28-1	09/29/1998	3.1 J
Tbr	MW-28-1	12/08/1998	7.3 J
Tbr	MW-28-1	02/17/1999	8 J
Tbr	MW-28-1	05/19/1999	4.3 J
Tbr	MW-28-1	08/31/1999	3.7 J
Tbr	MW-28-1	12/13/1999	7.3 J
Tbr	MW-28-1	03/16/2000	10
Tbr	MW-28-1	06/20/2000	20
Tbr	MW-28-1	09/07/2000	26
Tbr	MW-28-1	12/06/2000	6.3 J
Tbr	MW-28-1	03/28/2001	51
Tbr	MW-28-1	06/13/2001	56
Tbr	MW-28-1	09/19/2001	46
Tbr	MW-28-1	11/05/2001	48
Tbr	MW-28-1	04/10/2002	46
Tbr	MW-28-1	09/25/2002	41
Tbr	MW-28-1	10/23/2002	44
Tbr	MW-28-1	12/17/2002	38
Tbr	MW-28-1	02/13/2003	40
Tbr	MW-28-1	05/14/2003	60
Tbr	MW-28-1	09/15/2003	26
Tbr	MW-28-1	11/20/2003	30
Tbr	MW-28-1	02/25/2004	34
Tbr	MW-28-1	05/13/2004	28
Tbr	MW-28-1	08/11/2004	36
Tbr	MW-28-1	02/08/2005	28
Tbr	MW-28-1	05/26/2005	50
Tbr	MW-28-1	08/30/2005	29
Tbr	MW-28-1	11/09/2005	19
Tbr	MW-28-1	02/22/2006	53
Tbr	MW-28-1	08/28/2006	34
Tbr	MW-28-1	03/13/2007	36
Tbr	MW-28-1	08/14/2007	45
Tbr	MW-28-1	02/20/2008	48
Tbr	MW-28-1	08/15/2008	47
Tbr	MW-28-1	02/04/2009	56
Tbr	MW-28-1	08/13/2009	49
Tbr	MW-28-1	02/02/2010	41
Tbr	MW-28-1	08/10/2010	5 J
Tbr	MW-28-1	11/12/2010	9
Tbr	MW-28-1	02/22/2011	16
Tbr	MW-28-1	08/19/2011	24
Tbr	MW-28-1	02/14/2012	29
Tbr	MW-28-1	08/21/2012	38
Tbr	MW-28-1	02/26/2013	52
Tbr	MW-28-1	02/26/2013	54

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-28-1	08/15/2013	28
Tbr	MW-28-1	02/11/2014	27
Tbr	MW-28-1	02/11/2014	28
Tbr	MW-28-1	08/15/2014	29
Tbr	MW-28-1	02/18/2015	19
Tbr	MW-28-1	08/12/2015	23
Tbr	MW-28-1	02/09/2016	41
Tbr	MW-28-1	08/10/2016	31
Tbr	MW-28-1	08/10/2016	31
Tbr	MW-28-1	02/22/2017	39
Tbr	MW-28-1	08/09/2017	32
Tbr	MW-28-1	02/09/2018	24
Tbr	MW-28-1	08/22/2018	30
Tbr	MW-28-1	02/26/2019	49
Tbr	MW-28-1	07/01/2019	18
Tbr	MW-28-1	08/21/2019	15
Tbr	MW-28-1	10/03/2019	2
Tbr	MW-28-1	11/04/2019	17
Tbr	MW-28-1	09/18/2020	41
Tbr	MW-28-1	03/08/2021	33
Tbr	MW-28-1	09/15/2021	31
Tbr	MW-28-1	03/09/2022	32.0
Tbr	MW-28-1	08/31/2022	41.0
Tbr	MW-29-A	03/15/2007	5 U
Tbr	MW-29-A	08/15/2007	5 U
Tbr	MW-29-A	02/19/2008	5 U
Tbr	MW-29-A	08/15/2008	5 U
Tbr	MW-29-A	02/02/2009	5 U
Tbr	MW-29-A	08/12/2009	5 U
Tbr	MW-29-A	02/01/2010	5 U
Tbr	MW-29-A	08/12/2010	5 U
Tbr	MW-29-A	11/10/2010	5 U
Tbr	MW-29-A	02/21/2011	5 U
Tbr	MW-29-A	08/17/2011	5 U
Tbr	MW-29-A	02/13/2012	0.8 U
Tbr	MW-29-A	08/21/2012	0.8 U
Tbr	MW-29-A	02/26/2013	0.8 U
Tbr	MW-29-A	08/15/2013	0.8 U
Tbr	MW-29-A	02/10/2014	0.8 U
Tbr	MW-29-A	08/12/2014	0.5 U
Tbr	MW-29-A	02/17/2015	0.5 U
Tbr	MW-29-A	02/17/2015	0.5 U
Tbr	MW-29-A	08/10/2015	0.5 U
Tbr	MW-29-A	08/08/2016	0.5 U
Tbr	MW-29-A	08/07/2017	0.5 U
Tbr	MW-29-A	08/29/2019	0.2 U
Tbr	MW-30-1	07/01/1994	10 U
Tbr	MW-31-A	03/14/2007	5 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-40	04/11/2002	3 J
Tbr	MW-40	09/26/2002	3 J
Tbr	MW-40	12/18/2002	5 J
Tbr	MW-40	09/17/2003	4 J
Tbr	MW-40	02/22/2006	1 J
Tbr	MW-40	08/22/2006	1 J
Tbr	MW-40	03/16/2007	5 U
Tbr	MW-40	08/16/2007	2 J
Tbr	MW-40	02/19/2008	2 J
Tbr	MW-40	08/11/2008	9
Tbr	MW-40	02/02/2009	10
Tbr	MW-40	08/18/2009	5
Tbr	MW-40	02/01/2010	5 J
Tbr	MW-40	08/09/2010	4 J
Tbr	MW-40	11/10/2010	6
Tbr	MW-40	02/21/2011	12
Tbr	MW-40	08/15/2011	7
Tbr	MW-40	02/13/2012	7
Tbr	MW-40	08/17/2012	5 J
Tbr	MW-40	02/25/2013	7
Tbr	MW-40	08/13/2013	2 J
Tbr	MW-40	02/10/2014	2 J
Tbr	MW-40	08/14/2014	1
Tbr	MW-40	02/17/2015	4
Tbr	MW-40	08/10/2015	6
Tbr	MW-40	08/09/2016	2
Tbr	MW-40	08/10/2017	5
Tbr	MW-40	08/23/2018	10
Tbr	MW-40	08/28/2019	3
Tbr	MW-40	09/18/2020	5.4
Tbr	MW-40	03/15/2021	3.9
Tbr	MW-40	08/30/2022	6.2
Tbr	MW-41	06/16/1998	18
Tbr	MW-41	12/09/1998	13
Tbr	MW-41	05/18/1999	8.5 J
Tbr	MW-41	12/13/1999	5.1 J
Tbr	MW-41	06/21/2000	5.2 J
Tbr	MW-41	12/06/2000	2.3 J
Tbr	MW-41	06/13/2001	7
Tbr	MW-41	11/06/2001	13
Tbr	MW-41	10/23/2002	7
Tbr	MW-41	05/14/2003	10
Tbr	MW-41	09/16/2003	13
Tbr	MW-41	11/18/2003	18
Tbr	MW-41	05/12/2004	19
Tbr	MW-41	05/25/2005	25
Tbr	MW-41	11/09/2005	19
Tbr	MW-41	05/23/2006	38

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-41	08/29/2006	36
Tbr	MW-41	03/13/2007	33
Tbr	MW-41	08/21/2007	39
Tbr	MW-41	02/21/2008	29
Tbr	MW-41	08/20/2008	14
Tbr	MW-41	02/05/2009	7
Tbr	MW-41	08/19/2009	21
Tbr	MW-41	02/01/2010	17
Tbr	MW-41	08/11/2010	14
Tbr	MW-41	11/12/2010	10
Tbr	MW-41	02/28/2011	12
Tbr	MW-41	08/23/2011	8
Tbr	MW-41	02/21/2012	12
Tbr	MW-41	08/28/2012	9
Tbr	MW-41	03/01/2013	28
Tbr	MW-41	08/22/2013	31
Tbr	MW-41	02/18/2014	33
Tbr	MW-41	08/14/2014	7
Tbr	MW-41	02/19/2015	11
Tbr	MW-41	08/11/2015	11
Tbr	MW-41	02/08/2016	15
Tbr	MW-41	08/09/2016	21
Tbr	MW-41	02/21/2017	30
Tbr	MW-41	08/10/2017	16
Tbr	MW-41	08/23/2018	11
Tbr	MW-41	08/28/2019	13
Tbr	MW-41	09/16/2020	19
Tbr	MW-41	03/15/2021	15
Tbr	MW-41	09/15/2021	6.9
Tbr	MW-41	03/08/2022	5.2
Tbr	MW-41	09/01/2022	10.0
Tbr	MW-42	04/11/2002	17
Tbr	MW-42	09/26/2002	8
Tbr	MW-42	12/18/2002	7
Tbr	MW-42	09/18/2003	5
Tbr	MW-42	08/22/2006	23
Tbr	MW-42	08/17/2007	19
Tbr	MW-42	08/12/2008	14
Tbr	MW-42	08/10/2009	12
Tbr	MW-42	08/11/2010	13
Tbr	MW-42	11/11/2010	8
Tbr	MW-42	08/16/2011	11
Tbr	MW-42	08/21/2012	16
Tbr	MW-42	08/13/2013	21
Tbr	MW-42	08/14/2014	28
Tbr	MW-42	08/11/2015	14
Tbr	MW-42	08/09/2016	13
Tbr	MW-42	08/14/2017	14

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-42	08/28/2019	6
Tbr	MW-42	03/22/2021	9.8
Tbr	MW-43	06/16/1998	10 U
Tbr	MW-43	12/09/1998	1.5 J
Tbr	MW-43	05/18/1999	3.1 J
Tbr	MW-43	12/13/1999	1.3 J
Tbr	MW-43	06/21/2000	10 U
Tbr	MW-43	12/06/2000	10 U
Tbr	MW-43	06/14/2001	10 U
Tbr	MW-43	11/06/2001	10 U
Tbr	MW-43	10/22/2002	0.8 U
Tbr	MW-43	05/15/2003	0.8 U
Tbr	MW-43	09/16/2003	1 J
Tbr	MW-43	11/18/2003	1 J
Tbr	MW-43	05/13/2004	0.8 U
Tbr	MW-43	05/25/2005	5 U
Tbr	MW-43	11/09/2005	5 U
Tbr	MW-43	05/23/2006	5 U
Tbr	MW-43	08/29/2006	5 U
Tbr	MW-43	03/16/2007	5 U
Tbr	MW-43	08/21/2007	5 U
Tbr	MW-43	02/26/2008	5 U
Tbr	MW-43	08/20/2008	5 U
Tbr	MW-43	02/05/2009	5 U
Tbr	MW-43	08/19/2009	5 U
Tbr	MW-43	02/04/2010	5 U
Tbr	MW-43	08/16/2010	10 U
Tbr	MW-43	11/12/2010	5 U
Tbr	MW-43	02/24/2011	5 U
Tbr	MW-43	08/23/2011	5 U
Tbr	MW-43	02/16/2012	0.8 U
Tbr	MW-43	08/28/2012	0.8 U
Tbr	MW-43	03/01/2013	0.8 U
Tbr	MW-43	08/21/2013	0.8 U
Tbr	MW-43	02/14/2014	0.8 U
Tbr	MW-43	08/18/2014	0.5 U
Tbr	MW-43	02/20/2015	0.5 U
Tbr	MW-43	05/18/2015	0.5 U
Tbr	MW-43	08/11/2015	0.5 U
Tbr	MW-43	08/09/2016	0.5 U
Tbr	MW-43	08/14/2017	0.5 U
Tbr	MW-43	08/14/2017	0.5 U
Tbr	MW-43	08/21/2018	0.2 U
Tbr	MW-43	08/21/2018	0.2 U
Tbr	MW-43	09/06/2018	0.2 U
Tbr	MW-43	08/28/2019	0.2 U
Tbr	MW-43	10/03/2019	0.5
Tbr	MW-43	09/16/2020	1 U

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CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-43	03/19/2021	1 U
Tbr	MW-43	09/15/2021	1 U
Tbr	MW-43	03/09/2022	1.0 U
Tbr	MW-43	09/01/2022	1.0 U
Tbr	MW-44-1	03/31/1998	10 U
Tbr	MW-44-1	06/16/1998	10 U
Tbr	MW-44-1	09/29/1998	10 U
Tbr	MW-44-1	12/08/1998	10 U
Tbr	MW-44-1	02/17/1999	10 U
Tbr	MW-44-1	05/18/1999	10 U
Tbr	MW-44-1	08/31/1999	10 U
Tbr	MW-44-1	12/09/1999	10 U
Tbr	MW-44-1	03/16/2000	10 U
Tbr	MW-44-1	06/19/2000	10 U
Tbr	MW-44-1	09/07/2000	10 U
Tbr	MW-44-1	12/05/2000	10 U
Tbr	MW-44-1	03/28/2001	10 U
Tbr	MW-44-1	06/12/2001	10 U
Tbr	MW-44-1	09/19/2001	10 U
Tbr	MW-44-1	11/05/2001	10 U
Tbr	MW-44-1	04/10/2002	1 U
Tbr	MW-44-1	09/26/2002	0.8 U
Tbr	MW-44-1	10/23/2002	0.8 U
Tbr	MW-44-1	12/18/2002	0.8 U
Tbr	MW-44-1	02/13/2003	0.8 U
Tbr	MW-44-1	05/13/2003	0.9 J
Tbr	MW-44-1	09/15/2003	0.8 U
Tbr	MW-44-1	11/18/2003	0.8 U
Tbr	MW-44-1	02/25/2004	0.8 U
Tbr	MW-44-1	05/12/2004	0.8 U
Tbr	MW-44-1	08/11/2004	0.8 U
Tbr	MW-44-1	11/09/2004	0.8 U
Tbr	MW-44-1	02/08/2005	3 J
Tbr	MW-44-1	05/24/2005	1 J
Tbr	MW-44-1	08/30/2005	3 J
Tbr	MW-44-1	11/08/2005	2 J
Tbr	MW-44-1	08/22/2006	5 U
Tbr	MW-44-1	08/16/2007	5 U
Tbr	MW-44-1	08/14/2008	5 U
Tbr	MW-44-1	08/11/2009	5 U
Tbr	MW-44-1	08/10/2010	5 U
Tbr	MW-44-1	11/12/2010	5 U
Tbr	MW-44-1	08/17/2011	5 U
Tbr	MW-44-1	08/17/2012	0.8 U
Tbr	MW-44-1	08/13/2013	0.8 U
Tbr	MW-44-1	08/13/2013	0.8 U
Tbr	MW-44-1	08/19/2014	0.5 U
Tbr	MW-44-1	08/12/2015	0.5 U

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CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tbr	MW-44-1	08/10/2016	0.5 U
Tbr	MW-44-1	08/11/2017	0.5 U
Tbr	MW-44-1	08/23/2018	0.2 U
Tbr	MW-44-1	08/21/2019	0.2 U
Tbr	MW-44-1	03/12/2021	1 U
Tbr	MW-52	09/18/2003	0.8 U
Tbr	MW-52	08/29/2006	5 U
Tbr	MW-52	08/20/2007	5 U
Tbr	MW-52	08/15/2008	5 U
Tbr	MW-52	08/24/2009	5 U
Tbr	MW-52	08/16/2010	5 U
Tbr	MW-52	11/12/2010	5 U
Tbr	MW-52	02/24/2011	5 U
Tbr	MW-52	08/22/2011	5 U
Tbr	MW-52	02/17/2012	0.8 U
Tbr	MW-52	08/28/2012	0.8 U
Tbr	MW-52	03/04/2013	0.8 U
Tbr	MW-52	08/21/2013	0.8 U
Tbr	MW-52	02/18/2014	0.8 U
Tbr	MW-52	08/18/2014	0.5 U
Tbr	MW-52	02/20/2015	0.5 U
Tbr	MW-52	05/18/2015	0.5 U
Tbr	MW-52	08/11/2015	0.5 U
Tbr	MW-52	08/09/2016	0.5 J
Tbr	MW-52	08/11/2017	1
Tbr	MW-52	08/24/2018	0.9 J
Tbr	MW-52	08/27/2019	4
Tbr	MW-52	09/16/2020	2.6
Tbr	MW-52	03/22/2021	2.1
Tbr	MW-52	09/01/2022	3.6
Tlco	HP 1 09	09/03/2010	0.9 J
Tlco	HP 1 09	09/03/2010	2 J
Tlco	HP 1 09	09/03/2010	5 U
Tlco	HP 1 09	09/07/2010	2 J
Tlco	HP 1 09	09/07/2010	3 J
Tlco	HP 1 09	09/07/2010	4 J
Tlco	HP 1 09	09/07/2010	5 U
Tlco	HP 2 09	08/31/2010	5 U
Tlco	HP 2 09	08/31/2010	5 U
Tlco	HP 2 09	09/01/2010	1 J
Tlco	HP 2 09	09/01/2010	3 J
Tlco	HP 2 09	09/01/2010	5 U
Tlco	LC-1-E	04/10/2002	2 J
Tlco	LC-1-E	09/25/2002	2 J
Tlco	LC-1-E	12/17/2002	3 J
Tlco	LC-1-E	09/18/2003	2 J
Tlco	LC-1-E	02/21/2006	3 J
Tlco	LC-1-E	05/23/2006	4 J

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CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	LC-1-E	08/24/2006	3 J
Tlco	LC-1-E	03/14/2007	8
Tlco	LC-1-E	05/02/2007	4 J
Tlco	LC-1-E	08/15/2007	5
Tlco	LC-1-E	11/13/2007	4 J
Tlco	LC-1-E	02/20/2008	3 J
Tlco	LC-1-E	08/13/2008	3 J
Tlco	LC-1-E	11/11/2008	3 J
Tlco	LC-1-E	02/04/2009	3 J
Tlco	LC-1-E	05/13/2009	3 J
Tlco	LC-1-E	08/12/2009	3 J
Tlco	LC-1-E	11/11/2009	3 J
Tlco	LC-1-E	02/03/2010	3 J
Tlco	LC-1-E	05/05/2010	4 J
Tlco	LC-1-E	08/12/2010	3 J
Tlco	LC-1-E	11/10/2010	4 J
Tlco	LC-1-E	02/23/2011	4 J
Tlco	LC-1-E	05/18/2011	3 J
Tlco	LC-1-E	08/17/2011	3 J
Tlco	LC-1-E	11/09/2011	3 J
Tlco	LC-1-E	02/15/2012	4 J
Tlco	LC-1-E	05/31/2012	3 J
Tlco	LC-1-E	08/22/2012	3 J
Tlco	LC-1-E	11/07/2012	3 J
Tlco	LC-1-E	02/27/2013	3 J
Tlco	LC-1-E	05/22/2013	4 J
Tlco	LC-1-E	08/07/2013	6
Tlco	LC-1-E	11/13/2013	4 J
Tlco	LC-1-E	02/12/2014	5 J
Tlco	LC-1-E	05/14/2014	7
Tlco	LC-1-E	08/06/2014	6
Tlco	LC-1-E	11/05/2014	5
Tlco	LC-1-E	02/18/2015	6
Tlco	LC-1-E	05/20/2015	5
Tlco	LC-1-E	08/12/2015	6
Tlco	LC-2-E	02/21/2006	5
Tlco	LC-2-E	05/23/2006	5
Tlco	LC-2-E	08/24/2006	6
Tlco	LC-2-E	03/14/2007	5 J
Tlco	LC-2-E	05/02/2007	5
Tlco	LC-2-E	08/15/2007	5 J
Tlco	LC-2-E	11/13/2007	5 J
Tlco	LC-2-E	02/20/2008	4 J
Tlco	LC-2-E	08/13/2008	3 J
Tlco	LC-2-E	11/11/2008	4 J
Tlco	LC-2-E	02/04/2009	4 J
Tlco	LC-2-E	05/13/2009	3 J
Tlco	LC-2-E	08/12/2009	4 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	LC-2-E	11/11/2009	3 J
Tlco	LC-2-E	02/03/2010	3 J
Tlco	LC-2-E	05/05/2010	4 J
Tlco	LC-2-E	08/12/2010	3 J
Tlco	LC-2-E	11/10/2010	3 J
Tlco	LC-2-E	02/23/2011	4 J
Tlco	LC-2-E	05/18/2011	3 J
Tlco	LC-2-E	08/17/2011	3 J
Tlco	LC-2-E	11/09/2011	4 J
Tlco	LC-2-E	02/15/2012	4 J
Tlco	LC-2-E	05/31/2012	4 J
Tlco	LC-2-E	08/22/2012	3 J
Tlco	LC-2-E	11/07/2012	4 J
Tlco	LC-2-E	02/27/2013	3 J
Tlco	LC-2-E	05/22/2013	4 J
Tlco	LC-2-E	08/07/2013	5 J
Tlco	LC-2-E	11/13/2013	4 J
Tlco	LC-2-E	02/12/2014	4 J
Tlco	LC-2-E	05/14/2014	4
Tlco	LC-2-E	08/06/2014	4
Tlco	LC-2-E	11/05/2014	4
Tlco	LC-2-E	02/18/2015	4
Tlco	LC-2-E	02/18/2015	4
Tlco	LC-2-E	05/20/2015	3
Tlco	LC-2-E	08/12/2015	4
Tlco	LC-2-E	11/12/2015	4
Tlco	LC-2-E	02/10/2016	3
Tlco	LC-2-E	08/09/2016	4
Tlco	LC-2-E	02/22/2017	3
Tlco	LC-2-E	08/09/2017	4
Tlco	LC-2-E	02/07/2018	4
Tlco	LC-2-E	08/20/2018	4
Tlco	LC-2-E	08/14/2019	4 J
Tlco	LC-2-E	09/16/2020	3.5
Tlco	LC-2-E	03/10/2021	3.4
Tlco	LC-2-E	08/24/2022	2.8
Tlco	LC-3-E	02/21/2006	6
Tlco	LC-3-E	05/23/2006	5
Tlco	LC-3-E	08/24/2006	4 J
Tlco	LC-3-E	03/16/2007	5
Tlco	LC-3-E	05/02/2007	4 J
Tlco	LC-3-E	08/15/2007	4 J
Tlco	LC-3-E	11/13/2007	4 J
Tlco	LC-3-E	02/20/2008	4 J
Tlco	LC-3-E	08/13/2008	4 J
Tlco	LC-3-E	11/11/2008	4 J
Tlco	LC-3-E	02/04/2009	4 J
Tlco	LC-3-E	05/13/2009	4 J

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D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	LC-3-E	08/12/2009	4 J
Tlco	LC-3-E	11/11/2009	3 J
Tlco	LC-3-E	02/03/2010	4 J
Tlco	LC-3-E	05/05/2010	4 J
Tlco	LC-3-E	08/12/2010	4 J
Tlco	LC-3-E	11/10/2010	5 J
Tlco	LC-3-E	02/23/2011	5 J
Tlco	LC-3-E	05/18/2011	4 J
Tlco	LC-3-E	08/17/2011	4 J
Tlco	LC-3-E	11/09/2011	4 J
Tlco	LC-3-E	02/15/2012	4 J
Tlco	LC-3-E	05/31/2012	4 J
Tlco	LC-3-E	08/22/2012	3 J
Tlco	LC-3-E	11/07/2012	4 J
Tlco	LC-3-E	02/27/2013	3 J
Tlco	LC-3-E	05/22/2013	4 J
Tlco	LC-3-E	08/07/2013	4 J
Tlco	LC-3-E	11/13/2013	3 J
Tlco	LC-3-E	02/12/2014	3 J
Tlco	LC-3-E	05/14/2014	4
Tlco	LC-3-E	08/06/2014	4
Tlco	LC-3-E	11/05/2014	3
Tlco	LC-3-E	02/18/2015	4
Tlco	LC-3-E	05/20/2015	3
Tlco	LC-3-E	08/12/2015	4
Tlco	LC-3-E	11/12/2015	4
Tlco	LC-3-E	11/12/2015	4
Tlco	LC-3-E	02/10/2016	4
Tlco	LC-3-E	08/09/2016	2
Tlco	LC-3-E	02/22/2017	3
Tlco	LC-3-E	08/09/2017	4
Tlco	LC-3-E	02/07/2018	4
Tlco	LC-3-E	08/20/2018	4
Tlco	LC-3-E	08/14/2019	5 J
Tlco	LC-3-E	08/14/2019	5 J
Tlco	LC-3-E	09/16/2020	5.2
Tlco	LC-3-E	03/10/2021	5.7
Tlco	LC-3-E	08/24/2022	4.9
Tlco	LC-4-E	02/24/2006	3 J
Tlco	LC-4-E	05/23/2006	3 J
Tlco	LC-4-E	08/24/2006	2 J
Tlco	LC-4-E	03/14/2007	2 J
Tlco	LC-4-E	05/02/2007	2 J
Tlco	LC-4-E	08/15/2007	2 J
Tlco	LC-4-E	11/13/2007	2 J
Tlco	LC-4-E	02/20/2008	2 J
Tlco	LC-4-E	08/13/2008	2 J
Tlco	LC-4-E	11/11/2008	2 J

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CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	LC-4-E	02/04/2009	2 J
Tlco	LC-4-E	05/13/2009	2 J
Tlco	LC-4-E	08/12/2009	2 J
Tlco	LC-4-E	11/11/2009	2 J
Tlco	LC-4-E	02/03/2010	2 J
Tlco	LC-4-E	05/05/2010	4 J
Tlco	LC-4-E	08/12/2010	2 J
Tlco	LC-4-E	11/10/2010	2 J
Tlco	LC-4-E	02/23/2011	2 J
Tlco	LC-4-E	05/18/2011	2 J
Tlco	LC-4-E	08/17/2011	2 J
Tlco	LC-4-E	11/09/2011	2 J
Tlco	LC-4-E	02/15/2012	2 J
Tlco	LC-4-E	05/31/2012	2 J
Tlco	LC-4-E	08/22/2012	2 J
Tlco	LC-4-E	11/07/2012	2 J
Tlco	LC-4-E	02/27/2013	2 J
Tlco	LC-4-E	05/22/2013	2 J
Tlco	LC-4-E	08/07/2013	2 J
Tlco	LC-4-E	11/13/2013	2 J
Tlco	LC-4-E	02/12/2014	2 J
Tlco	LC-4-E	05/14/2014	3
Tlco	LC-4-E	08/06/2014	2
Tlco	LC-4-E	11/05/2014	2
Tlco	LC-4-E	02/18/2015	2
Tlco	LC-4-E	05/20/2015	2
Tlco	LC-4-E	08/12/2015	2
Tlco	LC-4-E	08/12/2015	2
Tlco	LC-4-E	11/12/2015	2
Tlco	LC-4-E	02/10/2016	2
Tlco	LC-4-E	02/10/2016	2
Tlco	LC-4-E	08/09/2016	4
Tlco	LC-4-E	08/09/2016	4
Tlco	LC-4-E	02/22/2017	2
Tlco	LC-4-E	08/09/2017	2
Tlco	LC-4-E	08/09/2017	2
Tlco	LC-4-E	02/07/2018	2
Tlco	LC-4-E	08/20/2018	2
Tlco	LC-4-E	08/14/2019	2 J
Tlco	LC-4-E	09/16/2020	1.7
Tlco	LC-4-E	03/10/2021	2
Tlco	LC-4-E	08/24/2022	1.8
Tlco	LC-5-E	02/21/2006	3 J
Tlco	LC-5-E	05/23/2006	3 J
Tlco	LC-5-E	08/24/2006	3 J
Tlco	LC-5-E	03/14/2007	3 J
Tlco	LC-5-E	05/02/2007	4 J
Tlco	LC-5-E	08/15/2007	4 J

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D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	LC-5-E	11/13/2007	3 J
Tlco	LC-5-E	02/20/2008	3 J
Tlco	LC-5-E	08/13/2008	3 J
Tlco	LC-5-E	11/11/2008	3 J
Tlco	LC-5-E	02/04/2009	3 J
Tlco	LC-5-E	05/13/2009	3 J
Tlco	LC-5-E	08/12/2009	3 J
Tlco	LC-5-E	11/11/2009	3 J
Tlco	LC-5-E	02/03/2010	3 J
Tlco	LC-5-E	05/05/2010	4 J
Tlco	LC-5-E	08/12/2010	3 J
Tlco	LC-5-E	11/10/2010	4 J
Tlco	LC-5-E	02/23/2011	3 J
Tlco	LC-5-E	05/18/2011	3 J
Tlco	LC-5-E	08/17/2011	3 J
Tlco	LC-5-E	11/09/2011	3 J
Tlco	LC-5-E	02/15/2012	3 J
Tlco	LC-5-E	05/31/2012	3 J
Tlco	LC-5-E	08/22/2012	3 J
Tlco	LC-5-E	11/07/2012	3 J
Tlco	LC-5-E	02/27/2013	3 J
Tlco	LC-5-E	02/27/2013	3 J
Tlco	LC-5-E	05/22/2013	4 J
Tlco	LC-5-E	08/07/2013	4 J
Tlco	LC-5-E	08/07/2013	4 J
Tlco	LC-5-E	11/13/2013	3 J
Tlco	LC-5-E	02/12/2014	4 J
Tlco	LC-5-E	05/14/2014	4
Tlco	LC-5-E	08/06/2014	4
Tlco	LC-5-E	11/05/2014	4
Tlco	LC-5-E	02/18/2015	4
Tlco	LC-5-E	05/20/2015	3
Tlco	LC-5-E	08/12/2015	4
Tlco	LC-5-E	11/12/2015	4
Tlco	LC-5-E	02/10/2016	4
Tlco	LC-5-E	08/09/2016	4
Tlco	LC-5-E	02/22/2017	3
Tlco	LC-5-E	02/22/2017	4
Tlco	LC-5-E	08/09/2017	4
Tlco	LC-5-E	02/07/2018	4
Tlco	LC-5-E	08/20/2018	4
Tlco	LC-5-E	08/20/2018	4
Tlco	LC-5-E	08/14/2019	4 J
Tlco	LC-5-E	09/16/2020	3.3
Tlco	LC-5-E	03/10/2021	3.5
Tlco	LC-5-E	08/24/2022	3.9
Tlco	LC-7-E	11/12/2015	2
Tlco	LC-7-E	02/10/2016	2

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	LC-7-E	05/24/2016	2
Tlco	LC-7-E	08/09/2016	2
Tlco	LC-7-E	11/15/2016	3
Tlco	LC-7-E	02/22/2017	3
Tlco	LC-7-E	05/24/2017	3
Tlco	LC-7-E	08/09/2017	3
Tlco	LC-7-E	11/17/2017	3
Tlco	LC-7-E	02/07/2018	2
Tlco	LC-7-E	08/20/2018	2
Tlco	LC-7-E	11/14/2018	2
Tlco	LC-7-E	08/14/2019	2 J
Tlco	LC-7-E	09/16/2020	2.9
Tlco	LC-7-E	03/10/2021	2.7
Tlco	LC-7-E	08/24/2022	2.0
Tlco	LC-8-E	11/12/2015	4
Tlco	LC-8-E	02/10/2016	3
Tlco	LC-8-E	05/24/2016	3
Tlco	LC-8-E	08/09/2016	3
Tlco	LC-8-E	11/15/2016	3
Tlco	LC-8-E	02/22/2017	3
Tlco	LC-8-E	05/24/2017	3
Tlco	LC-8-E	08/09/2017	3
Tlco	LC-8-E	11/17/2017	3
Tlco	LC-8-E	02/07/2018	3
Tlco	LC-8-E	08/20/2018	3
Tlco	LC-8-E	11/14/2018	3
Tlco	LC-8-E	08/14/2019	3 J
Tlco	LC-8-E	09/16/2020	2.7
Tlco	LC-8-E	03/10/2021	2.7
Tlco	LC-8-E	08/24/2022	2.6
Tlco	LC-9-E	11/12/2015	2
Tlco	LC-9-E	02/10/2016	3
Tlco	LC-9-E	05/24/2016	3
Tlco	LC-9-E	08/09/2016	3
Tlco	LC-9-E	11/15/2016	3
Tlco	LC-9-E	02/22/2017	2
Tlco	LC-9-E	05/24/2017	2
Tlco	LC-9-E	08/09/2017	3
Tlco	LC-9-E	11/17/2017	3
Tlco	LC-9-E	02/07/2018	2
Tlco	LC-9-E	08/20/2018	3
Tlco	LC-9-E	11/14/2018	2
Tlco	LC-9-E	08/14/2019	3 J
Tlco	LC-9-E	09/16/2020	2.6
Tlco	LC-9-E	09/16/2020	2.7
Tlco	LC-9-E	03/10/2021	2.6
Tlco	LC-9-E	08/24/2022	2.8
Tlco	MW/GW-3	03/01/1994	10 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW/GW-4	03/01/1994	10 U
Tlco	MW-29-2	07/01/1994	10 U
Tlco	MW-29-2	06/01/1995	1.6 J
Tlco	MW-29-2	11/04/1997	4.3 J
Tlco	MW-29-2	12/01/1997	10 U
Tlco	MW-29-2	06/16/1998	10 U
Tlco	MW-29-2	12/08/1998	10 U
Tlco	MW-29-2	05/19/1999	10 U
Tlco	MW-29-2	12/09/1999	10 U
Tlco	MW-29-2	06/20/2000	10 U
Tlco	MW-29-2	12/05/2000	10 U
Tlco	MW-29-2	06/12/2001	10 U
Tlco	MW-29-2	11/05/2001	10 U
Tlco	MW-29-2	10/22/2002	0.8 U
Tlco	MW-29-2	05/14/2003	0.8 U
Tlco	MW-29-2	09/23/2003	0.8 U
Tlco	MW-29-2	11/20/2003	0.8 U
Tlco	MW-29-2	05/13/2004	0.8 U
Tlco	MW-29-2	05/24/2005	5 U
Tlco	MW-29-2	11/08/2005	5 U
Tlco	MW-29-2	02/22/2006	5 U
Tlco	MW-29-2	08/28/2006	5 U
Tlco	MW-29-2	03/14/2007	5 U
Tlco	MW-29-2	08/22/2007	5 U
Tlco	MW-29-2	02/21/2008	5 U
Tlco	MW-29-2	08/20/2008	5 U
Tlco	MW-29-2	02/10/2009	5 U
Tlco	MW-29-2	08/19/2009	5 U
Tlco	MW-29-2	02/04/2010	5 U
Tlco	MW-29-2	08/11/2010	5 U
Tlco	MW-29-2	02/28/2011	5 U
Tlco	MW-29-2	08/24/2011	5 U
Tlco	MW-29-2	02/21/2012	0.8 U
Tlco	MW-29-2	08/29/2012	0.8 U
Tlco	MW-29-2	03/04/2013	0.8 U
Tlco	MW-29-2	08/22/2013	0.8 U
Tlco	MW-29-2	02/19/2014	0.8 U
Tlco	MW-29-2	02/19/2014	0.8 U
Tlco	MW-29-2	08/12/2014	0.5 U
Tlco	MW-29-2	02/23/2015	0.5 U
Tlco	MW-29-2	08/17/2015	0.5 U
Tlco	MW-29-2	08/12/2016	0.5 U
Tlco	MW-29-2	08/15/2017	0.5 U
Tlco	MW-29-2	08/28/2018	0.3 J
Tlco	MW-29-2	08/29/2019	0.2 U
Tlco	MW-29-2	09/14/2020	1 U
Tlco	MW-29-2	03/09/2021	1 U
Tlco	MW-29-2	08/31/2022	1.0 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-31-2	05/01/1995	10 U
Tlco	MW-31-2	11/05/1997	4.5 J
Tlco	MW-31-2	12/01/1997	4 J
Tlco	MW-31-2	06/16/1998	4 J
Tlco	MW-31-2	12/09/1998	3.8 J
Tlco	MW-31-2	05/19/1999	4.2 J
Tlco	MW-31-2	12/09/1999	5.2 J
Tlco	MW-31-2	06/20/2000	2.2 J
Tlco	MW-31-2	12/05/2000	1.8 J
Tlco	MW-31-2	06/14/2001	1 J
Tlco	MW-31-2	11/06/2001	2 J
Tlco	MW-31-2	10/22/2002	2 J
Tlco	MW-31-2	05/13/2003	2 J
Tlco	MW-31-2	09/23/2003	2 J
Tlco	MW-31-2	11/18/2003	2 J
Tlco	MW-31-2	05/12/2004	2 J
Tlco	MW-31-2	11/09/2004	2 J
Tlco	MW-31-2	05/24/2005	3 J
Tlco	MW-31-2	11/09/2005	3 J
Tlco	MW-32	05/01/1995	7.5 J
Tlco	MW-32	10/31/1997	5 J
Tlco	MW-32	12/01/1997	4 J
Tlco	MW-32	04/21/1998	3.3 J
Tlco	MW-32	11/06/2001	2 J
Tlco	MW-32	04/11/2002	1 J
Tlco	MW-32	09/25/2002	0.8 U
Tlco	MW-32	12/18/2002	0.8 U
Tlco	MW-32	09/23/2003	0.8 U
Tlco	MW-32	11/10/2004	5 U
Tlco	MW-32	02/22/2006	0.8 J
Tlco	MW-32	08/30/2006	5 U
Tlco	MW-32	03/15/2007	5 U
Tlco	MW-32	08/22/2007	5 U
Tlco	MW-32	02/27/2008	5 U
Tlco	MW-32	08/18/2008	5 U
Tlco	MW-32	02/09/2009	5 U
Tlco	MW-32	08/21/2009	5 U
Tlco	MW-32	02/04/2010	5 U
Tlco	MW-32	08/17/2010	5 U
Tlco	MW-32	02/25/2011	5 U
Tlco	MW-32	08/24/2011	5 U
Tlco	MW-32	02/16/2012	0.8 U
Tlco	MW-32	08/29/2012	0.8 U
Tlco	MW-32	03/05/2013	0.8 U
Tlco	MW-32	08/23/2013	0.8 U
Tlco	MW-32	02/19/2014	0.8 U
Tlco	MW-32	08/12/2014	0.5 U
Tlco	MW-32	02/23/2015	0.5 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-32	08/17/2015	0.5 U
Tlco	MW-32	08/15/2016	0.5 U
Tlco	MW-32	08/16/2017	0.5 U
Tlco	MW-32	08/28/2018	0.2 U
Tlco	MW-32	08/26/2019	0.2 U
Tlco	MW-32	10/04/2019	0.2
Tlco	MW-32	09/17/2020	1 U
Tlco	MW-32	03/18/2021	1 U
Tlco	MW-32	08/30/2022	1.0 U
Tlco	MW-33-2	05/01/1995	3.4 J
Tlco	MW-33-2	10/31/1997	3.3 J
Tlco	MW-33-2	12/01/1997	10 U
Tlco	MW-33-2	11/06/2001	6 J
Tlco	MW-33-2	09/25/2002	4 J
Tlco	MW-33-2	12/18/2002	4 J
Tlco	MW-33-2	09/22/2003	2 J
Tlco	MW-33-2	02/18/2004	3 J
Tlco	MW-33-2	11/11/2004	2 J
Tlco	MW-33-2	02/22/2006	5 U
Tlco	MW-33-2	08/30/2006	2 J
Tlco	MW-33-2	03/15/2007	1 J
Tlco	MW-33-2	08/22/2007	2 J
Tlco	MW-33-2	02/27/2008	2 J
Tlco	MW-33-2	08/19/2008	1 J
Tlco	MW-33-2	02/10/2009	1 J
Tlco	MW-33-2	08/21/2009	1 J
Tlco	MW-33-2	02/04/2010	5 U
Tlco	MW-33-2	08/17/2010	5 U
Tlco	MW-33-2	02/25/2011	5 U
Tlco	MW-33-2	08/24/2011	5 U
Tlco	MW-33-2	02/21/2012	0.8 U
Tlco	MW-33-2	08/29/2012	0.8 U
Tlco	MW-33-2	03/05/2013	0.8 U
Tlco	MW-33-2	08/23/2013	0.8 U
Tlco	MW-33-2	02/19/2014	0.8 U
Tlco	MW-33-2	08/12/2014	0.5 U
Tlco	MW-33-2	02/23/2015	0.5 U
Tlco	MW-33-2	08/17/2015	0.5 U
Tlco	MW-33-2	08/15/2016	0.5 U
Tlco	MW-33-2	08/16/2017	0.5 U
Tlco	MW-33-2	08/28/2018	0.2 U
Tlco	MW-33-2	08/26/2019	0.2 U
Tlco	MW-33-2	09/17/2020	1 U
Tlco	MW-33-2	03/18/2021	1 U
Tlco	MW-33-2	08/30/2022	1.0 U
Tlco	MW-45	03/25/1998	7.8 J
Tlco	MW-45	04/21/1998	5.2 J
Tlco	MW-45	05/08/1998	6.4 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-45	02/17/1999	8.7 J
Tlco	MW-45	05/18/1999	10
Tlco	MW-45	08/31/1999	9.9 J
Tlco	MW-45	12/09/1999	9.8 J
Tlco	MW-45	09/22/2003	11
Tlco	MW-45	02/17/2004	10
Tlco	MW-45	08/04/2004	12
Tlco	MW-45	11/10/2004	12
Tlco	MW-45	08/30/2006	5 J
Tlco	MW-45	08/23/2007	5 U
Tlco	MW-45	08/19/2008	5 U
Tlco	MW-45	08/25/2009	0.9 J
Tlco	MW-45	08/18/2010	0.9 J
Tlco	MW-45	08/25/2011	5 U
Tlco	MW-45	08/30/2012	0.8 U
Tlco	MW-45	08/26/2013	0.8 U
Tlco	MW-45	08/26/2013	0.8 U
Tlco	MW-45	08/08/2014	0.5 U
Tlco	MW-45	08/18/2015	0.5 U
Tlco	MW-45	08/15/2016	0.5 U
Tlco	MW-45	08/16/2017	0.5 U
Tlco	MW-45	08/21/2018	0.2 U
Tlco	MW-45	08/21/2018	0.3 J
Tlco	MW-45	09/06/2018	0.2 J
Tlco	MW-45	08/22/2019	0.2 J
Tlco	MW-45	10/04/2019	0.6
Tlco	MW-45	09/15/2020	0.2 J
Tlco	MW-45	09/15/2020	0.3 J
Tlco	MW-45	03/18/2021	0.32 J
Tlco	MW-45	08/26/2022	0.3 J
Tlco	MW-46	03/26/1998	5.5 J
Tlco	MW-46	04/21/1998	4.6 J
Tlco	MW-46	05/08/1998	4.8 J
Tlco	MW-46	09/29/1998	4.6 J
Tlco	MW-46	12/08/1998	5.3 J
Tlco	MW-46	02/17/1999	5.6 J
Tlco	MW-46	03/16/2000	4.3 J
Tlco	MW-46	06/20/2000	5.2 J
Tlco	MW-46	09/07/2000	4.4 J
Tlco	MW-46	12/05/2000	4.1 J
Tlco	MW-46	03/28/2001	2 J
Tlco	MW-46	06/12/2001	5 J
Tlco	MW-46	09/19/2001	5 J
Tlco	MW-46	11/06/2001	6
Tlco	MW-46	04/10/2002	5
Tlco	MW-46	09/25/2002	5 J
Tlco	MW-46	10/22/2002	5
Tlco	MW-46	12/17/2002	4 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-46	02/13/2003	4 J
Tlco	MW-46	05/13/2003	2 J
Tlco	MW-46	09/22/2003	4 J
Tlco	MW-46	11/18/2003	4 J
Tlco	MW-46	02/25/2004	4 J
Tlco	MW-46	05/12/2004	3 J
Tlco	MW-46	08/03/2004	4 J
Tlco	MW-46	08/11/2004	4 J
Tlco	MW-46	11/09/2004	4 J
Tlco	MW-46	02/08/2005	2 J
Tlco	MW-46	05/24/2005	3 J
Tlco	MW-46	08/30/2005	3 J
Tlco	MW-46	11/08/2005	3 J
Tlco	MW-46	08/30/2006	4 J
Tlco	MW-46	08/22/2007	4 J
Tlco	MW-46	08/20/2008	4 J
Tlco	MW-46	08/25/2009	5 J
Tlco	MW-46	08/17/2010	2 J
Tlco	MW-46	08/25/2011	4 J
Tlco	MW-46	08/30/2012	4 J
Tlco	MW-46	08/26/2013	5 J
Tlco	MW-46	08/08/2014	6
Tlco	MW-46	08/18/2015	5
Tlco	MW-46	08/16/2016	5
Tlco	MW-46	08/16/2016	5
Tlco	MW-46	08/15/2017	4
Tlco	MW-46	08/15/2017	4
Tlco	MW-46	08/22/2019	3
Tlco	MW-46	09/15/2020	3.4
Tlco	MW-46	03/18/2021	3.7
Tlco	MW-46	08/26/2022	3.4
Tlco	MW-47	03/30/1998	8.6 J
Tlco	MW-47	04/21/1998	6.3 J
Tlco	MW-47	05/08/1998	9.7 J
Tlco	MW-47	09/22/2003	12
Tlco	MW-47	02/17/2004	12
Tlco	MW-47	08/04/2004	13
Tlco	MW-47	11/10/2004	13
Tlco	MW-47	08/31/2006	8
Tlco	MW-47	08/23/2007	5 J
Tlco	MW-47	08/18/2008	3 J
Tlco	MW-47	08/25/2009	5
Tlco	MW-47	08/18/2010	5
Tlco	MW-47	08/24/2011	3 J
Tlco	MW-47	08/30/2012	1 J
Tlco	MW-47	08/26/2013	2 J
Tlco	MW-47	08/06/2014	2
Tlco	MW-47	08/18/2015	1

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-47	08/16/2016	2
Tlco	MW-47	08/16/2017	2
Tlco	MW-47	08/16/2017	2
Tlco	MW-47	08/22/2019	9
Tlco	MW-47	09/15/2020	3.3
Tlco	MW-47	03/18/2021	1.8
Tlco	MW-47	08/26/2022	6.3
Tlco	MW-50	08/23/2003	4 J
Tlco	MW-50	08/23/2003	5 J
Tlco	MW-50	08/24/2003	4 J
Tlco	MW-50	08/24/2003	5 J
Tlco	MW-50	08/24/2003	5 J
Tlco	MW-50	08/24/2003	5
Tlco	MW-50	09/22/2003	2 J
Tlco	MW-50	02/18/2004	0.8 U
Tlco	MW-50	08/05/2004	0.8 U
Tlco	MW-50	11/11/2004	5 U
Tlco	MW-50	02/22/2006	5 U
Tlco	MW-50	08/31/2006	5 U
Tlco	MW-50	03/15/2007	5 U
Tlco	MW-50	08/22/2007	5 U
Tlco	MW-50	02/26/2008	5 U
Tlco	MW-50	08/19/2008	5 U
Tlco	MW-50	02/06/2009	5 U
Tlco	MW-50	08/21/2009	0.8 J
Tlco	MW-50	02/05/2010	5 U
Tlco	MW-50	08/17/2010	1 J
Tlco	MW-50	02/28/2011	5 U
Tlco	MW-50	08/25/2011	5 U
Tlco	MW-50	02/16/2012	0.8 U
Tlco	MW-50	08/30/2012	0.8 U
Tlco	MW-50	03/05/2013	0.8 U
Tlco	MW-50	03/05/2013	0.8 U
Tlco	MW-50	08/27/2013	0.8 U
Tlco	MW-50	02/19/2014	0.8 U
Tlco	MW-50	08/11/2014	0.5 U
Tlco	MW-50	02/24/2015	0.5 U
Tlco	MW-50	08/18/2015	0.5 U
Tlco	MW-50	02/09/2016	0.5 U
Tlco	MW-50	02/09/2016	0.5 U
Tlco	MW-50	08/16/2016	1
Tlco	MW-50	02/22/2017	1
Tlco	MW-50	08/16/2017	1
Tlco	MW-50	08/28/2018	3
Tlco	MW-50	08/20/2019	3
Tlco	MW-50	09/15/2020	3.7
Tlco	MW-50	03/18/2021	1
Tlco	MW-50	08/29/2022	1.1

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-51	09/03/2003	2 J
Tlco	MW-51	09/03/2003	4 J
Tlco	MW-51	09/03/2003	5 J
Tlco	MW-51	09/03/2003	5
Tlco	MW-51	09/04/2003	6
Tlco	MW-51	09/22/2003	3 J
Tlco	MW-51	02/18/2004	2 J
Tlco	MW-51	08/05/2004	4 J
Tlco	MW-51	11/10/2004	5
Tlco	MW-51	08/31/2006	7
Tlco	MW-51	08/23/2007	6
Tlco	MW-51	08/18/2008	9
Tlco	MW-51	08/20/2009	5
Tlco	MW-51	08/18/2010	3 J
Tlco	MW-51	08/24/2011	2 J
Tlco	MW-51	08/30/2012	0.9 J
Tlco	MW-51	08/30/2012	0.9 J
Tlco	MW-51	08/26/2013	3 J
Tlco	MW-51	08/12/2014	2
Tlco	MW-51	08/19/2015	0.8 J
Tlco	MW-51	08/16/2016	0.8 J
Tlco	MW-51	08/17/2017	1
Tlco	MW-51	08/17/2017	1
Tlco	MW-51	08/29/2018	2
Tlco	MW-51	08/26/2019	0.4 J
Tlco	MW-51	09/15/2020	0.2 J
Tlco	MW-51	03/19/2021	1 U
Tlco	MW-51	08/25/2022	1.1
Tlco	MW-53	07/08/2004	0.8 U
Tlco	MW-53	07/08/2004	0.8 U
Tlco	MW-53	07/08/2004	0.8 U
Tlco	MW-53	07/08/2004	5 J
Tlco	MW-53	08/04/2004	8
Tlco	MW-53	11/09/2004	7
Tlco	MW-53	02/23/2006	8
Tlco	MW-53	08/24/2006	2 J
Tlco	MW-53	03/14/2007	1 J
Tlco	MW-53	08/17/2007	1 J
Tlco	MW-53	02/25/2008	2 J
Tlco	MW-53	08/13/2008	2 J
Tlco	MW-53	02/03/2009	4 J
Tlco	MW-53	08/20/2009	3 J
Tlco	MW-53	02/03/2010	3 J
Tlco	MW-53	08/13/2010	3 J
Tlco	MW-53	02/23/2011	3 J
Tlco	MW-53	08/18/2011	2 J
Tlco	MW-53	02/15/2012	2 J
Tlco	MW-53	08/22/2012	1 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-53	02/28/2013	1 J
Tlco	MW-53	08/14/2013	1 J
Tlco	MW-53	02/12/2014	2 J
Tlco	MW-53	08/12/2014	3
Tlco	MW-53	02/19/2015	6
Tlco	MW-53	08/18/2015	8
Tlco	MW-53	02/09/2016	6
Tlco	MW-53	08/16/2016	6
Tlco	MW-53	02/22/2017	4
Tlco	MW-53	08/17/2017	5
Tlco	MW-53	08/29/2018	3
Tlco	MW-53	08/20/2019	2
Tlco	MW-53	09/15/2020	1.2
Tlco	MW-53	03/19/2021	1.3
Tlco	MW-53	08/26/2022	1.9
Tlco	MW-54	07/13/2004	0.8 U
Tlco	MW-54	07/13/2004	0.8 U
Tlco	MW-54	07/13/2004	2 J
Tlco	MW-54	07/13/2004	2 J
Tlco	MW-54	07/13/2004	2 J
Tlco	MW-54	08/05/2004	3 J
Tlco	MW-54	11/10/2004	2 J
Tlco	MW-54	05/22/2006	3 J
Tlco	MW-54	08/28/2006	3 J
Tlco	MW-54	03/14/2007	2 J
Tlco	MW-54	08/23/2007	2 J
Tlco	MW-54	02/27/2008	2 J
Tlco	MW-54	08/18/2008	3 J
Tlco	MW-54	02/06/2009	3 J
Tlco	MW-54	08/21/2009	3 J
Tlco	MW-54	02/05/2010	4 J
Tlco	MW-54	08/17/2010	3 J
Tlco	MW-54	02/28/2011	2 J
Tlco	MW-54	08/25/2011	2 J
Tlco	MW-54	02/17/2012	3 J
Tlco	MW-54	08/30/2012	1 J
Tlco	MW-54	03/05/2013	2 J
Tlco	MW-54	08/27/2013	2 J
Tlco	MW-54	02/19/2014	2 J
Tlco	MW-54	08/11/2014	2
Tlco	MW-54	02/24/2015	1
Tlco	MW-54	08/18/2015	2
Tlco	MW-54	08/16/2016	1
Tlco	MW-54	08/16/2017	2
Tlco	MW-54	08/20/2019	2
Tlco	MW-54	03/18/2021	0.77 J
Tlco	MW-55	06/22/2004	1 J
Tlco	MW-55	06/22/2004	3 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-55	06/22/2004	3 J
Tlco	MW-55	06/23/2004	0.8 U
Tlco	MW-55	08/04/2004	4 J
Tlco	MW-55	11/09/2004	3 J
Tlco	MW-55	06/02/2005	4 J
Tlco	MW-55	02/23/2006	6
Tlco	MW-55	05/22/2006	6
Tlco	MW-55	08/28/2006	6
Tlco	MW-55	11/20/2006	8
Tlco	MW-55	03/12/2007	9
Tlco	MW-55	05/01/2007	8
Tlco	MW-55	08/15/2007	5 J
Tlco	MW-55	11/14/2007	3 J
Tlco	MW-55	02/20/2008	3 J
Tlco	MW-55	05/15/2008	3 J
Tlco	MW-55	08/14/2008	2 J
Tlco	MW-55	11/12/2008	2 J
Tlco	MW-55	02/03/2009	3 J
Tlco	MW-55	05/13/2009	3 J
Tlco	MW-55	08/12/2009	4 J
Tlco	MW-55	11/10/2009	2 J
Tlco	MW-55	02/02/2010	3 J
Tlco	MW-55	05/04/2010	3 J
Tlco	MW-55	08/13/2010	3 J
Tlco	MW-55	11/11/2010	2 J
Tlco	MW-55	02/23/2011	3 J
Tlco	MW-55	05/24/2011	3 J
Tlco	MW-55	08/18/2011	2 J
Tlco	MW-55	11/07/2011	3 J
Tlco	MW-55	02/13/2012	3 J
Tlco	MW-55	05/31/2012	3 J
Tlco	MW-55	08/23/2012	4 J
Tlco	MW-55	11/26/2012	4 J
Tlco	MW-55	02/26/2013	4 J
Tlco	MW-55	05/22/2013	4 J
Tlco	MW-55	08/15/2013	5 J
Tlco	MW-55	11/15/2013	5
Tlco	MW-55	02/11/2014	5
Tlco	MW-55	05/13/2014	4
Tlco	MW-55	08/08/2014	6
Tlco	MW-55	11/03/2014	6
Tlco	MW-55	02/18/2015	6
Tlco	MW-55	05/22/2015	6
Tlco	MW-55	08/19/2015	6
Tlco	MW-55	02/10/2016	7
Tlco	MW-55	08/17/2016	5
Tlco	MW-55	02/22/2017	3
Tlco	MW-55	08/07/2017	3

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-55	02/08/2018	3
Tlco	MW-55	08/29/2018	2
Tlco	MW-55	02/27/2019	2
Tlco	MW-55	07/02/2019	2
Tlco	MW-55	08/22/2019	2
Tlco	MW-55	11/06/2019	2
Tlco	MW-55	09/11/2020	2.8
Tlco	MW-55	03/09/2021	1.4
Tlco	MW-55	09/14/2021	1.2
Tlco	MW-55	03/09/2022	1.1
Tlco	MW-55	08/26/2022	1.0
Tlco	MW-56	06/28/2004	2 J
Tlco	MW-56	06/28/2004	2 J
Tlco	MW-56	06/28/2004	2 J
Tlco	MW-56	06/29/2004	1 J
Tlco	MW-56	06/29/2004	1 J
Tlco	MW-56	08/04/2004	8
Tlco	MW-56	11/09/2004	8
Tlco	MW-56	06/02/2005	8
Tlco	MW-56	02/23/2006	9
Tlco	MW-56	05/22/2006	10
Tlco	MW-56	08/24/2006	10
Tlco	MW-56	11/20/2006	8
Tlco	MW-56	03/12/2007	8
Tlco	MW-56	05/01/2007	11
Tlco	MW-56	08/13/2007	9
Tlco	MW-56	11/13/2007	7
Tlco	MW-56	02/25/2008	6
Tlco	MW-56	05/14/2008	7
Tlco	MW-56	08/14/2008	6
Tlco	MW-56	11/11/2008	4 J
Tlco	MW-56	02/03/2009	3 J
Tlco	MW-56	05/13/2009	2 J
Tlco	MW-56	08/17/2009	2 J
Tlco	MW-56	11/10/2009	1 J
Tlco	MW-56	02/03/2010	1 J
Tlco	MW-56	05/04/2010	1 J
Tlco	MW-56	08/13/2010	1 J
Tlco	MW-56	11/11/2010	1 J
Tlco	MW-56	02/22/2011	1 J
Tlco	MW-56	05/24/2011	2 J
Tlco	MW-56	08/18/2011	1 J
Tlco	MW-56	11/08/2011	1 J
Tlco	MW-56	02/14/2012	1 J
Tlco	MW-56	05/29/2012	2 J
Tlco	MW-56	08/23/2012	2 J
Tlco	MW-56	08/23/2012	2 J
Tlco	MW-56	11/26/2012	3 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-56	02/27/2013	4 J
Tlco	MW-56	05/21/2013	3 J
Tlco	MW-56	08/16/2013	4 J
Tlco	MW-56	11/15/2013	3 J
Tlco	MW-56	02/11/2014	3 J
Tlco	MW-56	05/12/2014	3
Tlco	MW-56	08/07/2014	3
Tlco	MW-56	11/03/2014	3
Tlco	MW-56	02/18/2015	3
Tlco	MW-56	05/22/2015	3
Tlco	MW-56	08/19/2015	3
Tlco	MW-56	02/10/2016	3
Tlco	MW-56	08/17/2016	3
Tlco	MW-56	02/23/2017	2
Tlco	MW-56	08/08/2017	3
Tlco	MW-56	02/08/2018	2
Tlco	MW-56	08/29/2018	2
Tlco	MW-56	02/27/2019	2
Tlco	MW-56	07/02/2019	4
Tlco	MW-56	08/23/2019	3
Tlco	MW-56	11/06/2019	3
Tlco	MW-56	09/10/2020	2.8
Tlco	MW-56	03/10/2021	2.3
Tlco	MW-56	09/14/2021	2.2
Tlco	MW-56	03/08/2022	2.0
Tlco	MW-56	08/25/2022	2.4
Tlco	MW-57	07/02/2004	3 J
Tlco	MW-57	07/02/2004	3 J
Tlco	MW-57	07/02/2004	3 J
Tlco	MW-57	07/02/2004	5 J
Tlco	MW-57	08/04/2004	6
Tlco	MW-57	11/09/2004	6
Tlco	MW-57	06/02/2005	7
Tlco	MW-57	02/23/2006	5
Tlco	MW-57	05/22/2006	5 J
Tlco	MW-57	08/24/2006	5
Tlco	MW-57	11/20/2006	4 J
Tlco	MW-57	03/13/2007	4 J
Tlco	MW-57	05/01/2007	6
Tlco	MW-57	08/14/2007	5 J
Tlco	MW-57	11/14/2007	5
Tlco	MW-57	02/20/2008	4 J
Tlco	MW-57	05/14/2008	5 J
Tlco	MW-57	08/12/2008	5 J
Tlco	MW-57	11/11/2008	5
Tlco	MW-57	02/04/2009	4 J
Tlco	MW-57	05/14/2009	4 J
Tlco	MW-57	08/11/2009	4 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-57	11/11/2009	4 J
Tlco	MW-57	02/02/2010	5
Tlco	MW-57	05/05/2010	5 J
Tlco	MW-57	08/10/2010	3 J
Tlco	MW-57	11/12/2010	3 J
Tlco	MW-57	02/22/2011	3 J
Tlco	MW-57	05/25/2011	2 J
Tlco	MW-57	08/19/2011	2 J
Tlco	MW-57	11/08/2011	2 J
Tlco	MW-57	02/14/2012	1 J
Tlco	MW-57	05/31/2012	1 J
Tlco	MW-57	08/24/2012	0.8 U
Tlco	MW-57	08/24/2012	0.8 U
Tlco	MW-57	11/28/2012	0.8 U
Tlco	MW-57	11/28/2012	0.8 U
Tlco	MW-57	02/26/2013	0.8 U
Tlco	MW-57	05/22/2013	0.8 U
Tlco	MW-57	05/22/2013	0.8 U
Tlco	MW-57	08/16/2013	0.8 U
Tlco	MW-57	11/15/2013	0.8 U
Tlco	MW-57	02/11/2014	1 J
Tlco	MW-57	05/16/2014	0.7 J
Tlco	MW-57	08/07/2014	1
Tlco	MW-57	11/04/2014	1
Tlco	MW-57	02/18/2015	1
Tlco	MW-57	05/20/2015	2
Tlco	MW-57	08/12/2015	2
Tlco	MW-57	02/09/2016	2
Tlco	MW-57	08/10/2016	3
Tlco	MW-57	02/22/2017	4
Tlco	MW-57	08/09/2017	4
Tlco	MW-57	08/29/2018	4
Tlco	MW-57	08/23/2019	3
Tlco	MW-57	10/04/2019	3
Tlco	MW-57	09/10/2020	2.7
Tlco	MW-57	03/10/2021	2.4
Tlco	MW-57	08/25/2022	2.2
Tlco	MW-58	10/26/2004	2 J
Tlco	MW-58	10/26/2004	2 J
Tlco	MW-58	10/26/2004	2 J
Tlco	MW-58	10/26/2004	5 U
Tlco	MW-58	10/26/2004	5 U
Tlco	MW-58	11/10/2004	4 J
Tlco	MW-58	02/23/2006	5
Tlco	MW-58	08/24/2006	7
Tlco	MW-58	03/14/2007	6
Tlco	MW-58	08/20/2007	7
Tlco	MW-58	02/25/2008	6

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-58	08/13/2008	7
Tlco	MW-58	02/03/2009	6
Tlco	MW-58	08/20/2009	6
Tlco	MW-58	02/03/2010	6
Tlco	MW-58	08/12/2010	8
Tlco	MW-58	02/23/2011	8
Tlco	MW-58	08/18/2011	6
Tlco	MW-58	02/15/2012	6
Tlco	MW-58	08/22/2012	4 J
Tlco	MW-58	02/28/2013	5
Tlco	MW-58	08/15/2013	5 J
Tlco	MW-58	02/12/2014	4 J
Tlco	MW-58	08/11/2014	3
Tlco	MW-58	02/19/2015	3
Tlco	MW-58	03/17/2021	0.54 J
Tlco	MW-59	05/10/2005	1 J
Tlco	MW-59	05/10/2005	1 J
Tlco	MW-59	05/10/2005	1 J
Tlco	MW-59	05/10/2005	1 J
Tlco	MW-59	05/10/2005	4 J
Tlco	MW-59	06/02/2005	5 J
Tlco	MW-59	02/23/2006	2 J
Tlco	MW-59	08/31/2006	5 J
Tlco	MW-59	03/14/2007	4 J
Tlco	MW-59	08/23/2007	4 J
Tlco	MW-59	02/27/2008	3 J
Tlco	MW-59	08/19/2008	2 J
Tlco	MW-59	02/09/2009	2 J
Tlco	MW-59	08/21/2009	3 J
Tlco	MW-59	02/04/2010	3 J
Tlco	MW-59	08/18/2010	4 J
Tlco	MW-59	02/28/2011	1 J
Tlco	MW-59	08/25/2011	4 J
Tlco	MW-59	02/17/2012	4 J
Tlco	MW-59	08/31/2012	2 J
Tlco	MW-59	03/05/2013	5
Tlco	MW-59	08/27/2013	4 J
Tlco	MW-59	02/19/2014	5 J
Tlco	MW-59	08/07/2014	4
Tlco	MW-59	02/24/2015	5
Tlco	MW-59	02/24/2015	5
Tlco	MW-59	08/19/2015	4
Tlco	MW-59	02/10/2016	3
Tlco	MW-59	08/17/2016	7
Tlco	MW-59	02/23/2017	4
Tlco	MW-59	08/08/2017	5
Tlco	MW-59	02/08/2018	5
Tlco	MW-59	08/30/2018	6

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-59	02/27/2019	6
Tlco	MW-59	07/02/2019	5
Tlco	MW-59	08/22/2019	6
Tlco	MW-59	11/06/2019	5
Tlco	MW-59	09/11/2020	5.4
Tlco	MW-59	03/10/2021	4.8
Tlco	MW-59	09/14/2021	4.8
Tlco	MW-59	03/09/2022	2.9
Tlco	MW-59	08/29/2022	4.0
Tlco	MW-60	12/19/2005	4 J
Tlco	MW-60	12/19/2005	4 J
Tlco	MW-60	12/19/2005	4 J
Tlco	MW-60	12/19/2005	7
Tlco	MW-60	01/24/2006	5 J
Tlco	MW-60	02/23/2006	1 J
Tlco	MW-60	05/22/2006	5 U
Tlco	MW-60	08/25/2006	6
Tlco	MW-60	11/20/2006	5
Tlco	MW-60	03/13/2007	5 U
Tlco	MW-60	05/01/2007	6
Tlco	MW-60	08/15/2007	5
Tlco	MW-60	11/14/2007	6
Tlco	MW-60	02/25/2008	5 J
Tlco	MW-60	05/14/2008	5 J
Tlco	MW-60	08/15/2008	5 J
Tlco	MW-60	11/11/2008	4 J
Tlco	MW-60	02/03/2009	4 J
Tlco	MW-60	05/13/2009	4 J
Tlco	MW-60	08/17/2009	4 J
Tlco	MW-60	11/11/2009	3 J
Tlco	MW-60	02/03/2010	3 J
Tlco	MW-60	05/05/2010	3 J
Tlco	MW-60	08/13/2010	4 J
Tlco	MW-60	11/11/2010	3 J
Tlco	MW-60	02/23/2011	4 J
Tlco	MW-60	05/25/2011	4 J
Tlco	MW-60	08/18/2011	3 J
Tlco	MW-60	11/08/2011	4 J
Tlco	MW-60	02/14/2012	4 J
Tlco	MW-60	05/29/2012	4 J
Tlco	MW-60	08/23/2012	4 J
Tlco	MW-60	11/26/2012	4 J
Tlco	MW-60	02/27/2013	5 J
Tlco	MW-60	05/21/2013	5 J
Tlco	MW-60	08/20/2013	5 J
Tlco	MW-60	08/20/2013	5 J
Tlco	MW-60	11/15/2013	4 J
Tlco	MW-60	02/11/2014	4 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-60	05/14/2014	3
Tlco	MW-60	08/05/2014	4
Tlco	MW-60	11/03/2014	3
Tlco	MW-60	11/03/2014	3
Tlco	MW-60	02/19/2015	3
Tlco	MW-60	05/21/2015	3
Tlco	MW-60	08/20/2015	3
Tlco	MW-60	02/11/2016	4
Tlco	MW-60	08/17/2016	4
Tlco	MW-60	02/23/2017	3
Tlco	MW-60	08/08/2017	4
Tlco	MW-60	08/30/2018	4
Tlco	MW-60	08/23/2019	3
Tlco	MW-60	09/11/2020	2.8
Tlco	MW-60	03/09/2021	2
Tlco	MW-60	08/25/2022	1.6
Tlco	MW-64	09/09/2010	5 U
Tlco	MW-64	09/09/2010	5 U
Tlco	MW-64	09/09/2010	25 U
Tlco	MW-64	09/10/2010	4 J
Tlco	MW-64	09/10/2010	4 J
Tlco	MW-64	09/10/2010	9
Tlco	MW-64	09/10/2010	10
Tlco	MW-64	09/30/2010	6
Tlco	MW-64	11/11/2010	7
Tlco	MW-64	02/24/2011	9
Tlco	MW-64	05/25/2011	10
Tlco	MW-64	08/22/2011	8
Tlco	MW-64	11/08/2011	9
Tlco	MW-64	02/14/2012	9
Tlco	MW-64	05/31/2012	9
Tlco	MW-64	08/23/2012	9
Tlco	MW-64	11/27/2012	8
Tlco	MW-64	02/28/2013	10
Tlco	MW-64	05/23/2013	10
Tlco	MW-64	08/20/2013	10
Tlco	MW-64	11/15/2013	10
Tlco	MW-64	02/12/2014	10
Tlco	MW-64	05/14/2014	9
Tlco	MW-64	08/06/2014	10
Tlco	MW-65	08/25/2010	5 U
Tlco	MW-65	08/25/2010	5 U
Tlco	MW-65	08/26/2010	1 J
Tlco	MW-65	08/26/2010	2 J
Tlco	MW-65	08/26/2010	4 J
Tlco	MW-65	09/30/2010	3 J
Tlco	MW-65	11/11/2010	1 J
Tlco	MW-65	02/23/2011	4 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-65	05/25/2011	4 J
Tlco	MW-65	08/22/2011	6
Tlco	MW-65	11/07/2011	5 J
Tlco	MW-65	02/15/2012	6
Tlco	MW-65	05/30/2012	6
Tlco	MW-65	08/24/2012	6
Tlco	MW-65	11/27/2012	6
Tlco	MW-65	02/27/2013	7
Tlco	MW-65	05/22/2013	7
Tlco	MW-65	08/20/2013	7
Tlco	MW-65	11/14/2013	6
Tlco	MW-65	02/12/2014	7
Tlco	MW-65	02/12/2014	7
Tlco	MW-65	05/14/2014	7
Tlco	MW-65	08/05/2014	7
Tlco	MW-65	08/05/2014	7
Tlco	MW-66	03/20/2012	3 J
Tlco	MW-66	04/09/2012	2 J
Tlco	MW-66	04/09/2012	2 J
Tlco	MW-66	05/29/2012	2 J
Tlco	MW-66	08/27/2012	2 J
Tlco	MW-66	11/28/2012	3 J
Tlco	MW-66	03/06/2013	4 J
Tlco	MW-66	05/23/2013	5 J
Tlco	MW-66	08/19/2013	5 J
Tlco	MW-66	11/12/2013	4 J
Tlco	MW-66	02/20/2014	4 J
Tlco	MW-66	05/15/2014	4
Tlco	MW-66	08/05/2014	4
Tlco	MW-66	11/04/2014	4
Tlco	MW-66	02/24/2015	4
Tlco	MW-66	05/21/2015	4
Tlco	MW-66	08/20/2015	4
Tlco	MW-66	08/18/2016	4
Tlco	MW-66	08/18/2017	4
Tlco	MW-66	08/30/2018	5
Tlco	MW-66	08/19/2019	3
Tlco	MW-66	09/18/2020	3.2
Tlco	MW-66	03/22/2021	3.2
Tlco	MW-66	08/24/2022	3.1
Tlco	MW-67	09/06/2011	0.9 J
Tlco	MW-67	11/08/2011	2 J
Tlco	MW-67	02/15/2012	2 J
Tlco	MW-67	05/30/2012	2 J
Tlco	MW-67	08/24/2012	0.8 U
Tlco	MW-67	11/27/2012	2 J
Tlco	MW-67	02/28/2013	2 J
Tlco	MW-67	05/22/2013	2 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-67	08/20/2013	2 J
Tlco	MW-67	11/14/2013	2 J
Tlco	MW-67	02/12/2014	2 J
Tlco	MW-67	05/15/2014	2
Tlco	MW-67	08/05/2014	2
Tlco	MW-68	11/09/2012	4 J
Tlco	MW-68	03/06/2013	4 J
Tlco	MW-68	05/23/2013	2 U
Tlco	MW-68	08/19/2013	4 J
Tlco	MW-68	11/13/2013	4 J
Tlco	MW-68	02/20/2014	5
Tlco	MW-68	05/15/2014	4
Tlco	MW-68	05/15/2014	4
Tlco	MW-68	08/06/2014	4
Tlco	MW-68	11/05/2014	4
Tlco	MW-68	11/05/2014	4
Tlco	MW-68	02/25/2015	3
Tlco	MW-68	05/21/2015	4
Tlco	MW-68	08/20/2015	4
Tlco	MW-68	02/11/2016	4
Tlco	MW-68	08/18/2016	4
Tlco	MW-68	02/23/2017	3
Tlco	MW-68	08/21/2017	5
Tlco	MW-68	08/21/2017	5
Tlco	MW-68	09/05/2018	3
Tlco	MW-68	08/19/2019	4
Tlco	MW-68	09/18/2020	5.5
Tlco	MW-68	03/16/2021	5.5
Tlco	MW-68	08/24/2022	4.9
Tlco	MW-69	04/16/2013	0.3 U
Tlco	MW-69	04/17/2013	0.6 J
Tlco	MW-69	04/17/2013	2.08
Tlco	MW-69	04/17/2013	2.12
Tlco	MW-69	04/17/2013	2.29
Tlco	MW-69	04/22/2013	0.3 U
Tlco	MW-69	04/22/2013	1.72 J
Tlco	MW-69	05/23/2013	4 J
Tlco	MW-69	08/19/2013	4 J
Tlco	MW-69	11/12/2013	4 J
Tlco	MW-69	11/12/2013	4 J
Tlco	MW-69	02/20/2014	2 J
Tlco	MW-69	05/13/2014	3
Tlco	MW-69	08/05/2014	4
Tlco	MW-69	11/05/2014	4
Tlco	MW-69	02/25/2015	2
Tlco	MW-69	05/21/2015	4
Tlco	MW-69	08/21/2015	5
Tlco	MW-69	02/11/2016	3

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-69	08/18/2016	3
Tlco	MW-69	02/24/2017	3
Tlco	MW-69	08/21/2017	4
Tlco	MW-69	08/22/2018	2
Tlco	MW-69	08/22/2018	4
Tlco	MW-69	09/06/2018	3
Tlco	MW-69	08/19/2019	3
Tlco	MW-69	10/03/2019	3
Tlco	MW-69	09/09/2020	2.7
Tlco	MW-69	03/16/2021	2.7
Tlco	MW-69	09/16/2021	4.1
Tlco	MW-69	03/10/2022	3.2
Tlco	MW-69	08/24/2022	4.1
Tlco	MW-70	02/04/2014	1.06 J
Tlco	MW-70	02/05/2014	2 U
Tlco	MW-70	02/05/2014	2 U
Tlco	MW-70	02/05/2014	4.3
Tlco	MW-70	02/06/2014	2 U
Tlco	MW-70	02/06/2014	3.38
Tlco	MW-70	02/28/2014	2.66
Tlco	MW-70	03/17/2014	3 J
Tlco	MW-70	05/12/2014	4
Tlco	MW-70	08/06/2014	4
Tlco	MW-70	11/04/2014	5
Tlco	MW-70	02/25/2015	4
Tlco	MW-70	05/21/2015	5
Tlco	MW-70	05/21/2015	5
Tlco	MW-70	08/21/2015	5
Tlco	MW-70	11/11/2015	4
Tlco	MW-70	02/11/2016	5
Tlco	MW-70	02/11/2016	6
Tlco	MW-70	05/24/2016	5
Tlco	MW-70	08/18/2016	5
Tlco	MW-70	11/16/2016	4
Tlco	MW-70	11/16/2016	5
Tlco	MW-70	02/24/2017	4
Tlco	MW-70	05/26/2017	5
Tlco	MW-70	08/21/2017	5
Tlco	MW-70	11/17/2017	4
Tlco	MW-70	09/06/2018	4
Tlco	MW-70	08/20/2019	4
Tlco	MW-70	10/03/2019	3
Tlco	MW-70	09/10/2020	3.3
Tlco	MW-70	03/17/2021	2.8
Tlco	MW-70	09/17/2021	2.9
Tlco	MW-70	03/10/2022	2.6
Tlco	MW-70	08/24/2022	2.2
Tlco	MW-71	02/18/2014	2 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-71	02/18/2014	2 U
Tlco	MW-71	02/18/2014	4 U
Tlco	MW-71	02/19/2014	2 U
Tlco	MW-71	02/19/2014	2.49
Tlco	MW-71	02/19/2014	2.71
Tlco	MW-71	02/28/2014	1.24 J
Tlco	MW-71	03/17/2014	2 J
Tlco	MW-71	03/17/2014	2 J
Tlco	MW-71	05/12/2014	3
Tlco	MW-71	08/06/2014	3
Tlco	MW-71	11/04/2014	4
Tlco	MW-71	02/25/2015	4
Tlco	MW-71	05/20/2015	5
Tlco	MW-71	08/21/2015	5
Tlco	MW-71	11/11/2015	4
Tlco	MW-71	11/11/2015	5
Tlco	MW-71	02/11/2016	5
Tlco	MW-71	05/25/2016	4
Tlco	MW-71	08/18/2016	4
Tlco	MW-71	11/16/2016	4
Tlco	MW-71	02/24/2017	4
Tlco	MW-71	05/26/2017	5
Tlco	MW-71	05/26/2017	5
Tlco	MW-71	08/18/2017	5
Tlco	MW-71	11/17/2017	4
Tlco	MW-71	09/06/2018	5
Tlco	MW-71	08/16/2019	4
Tlco	MW-71	10/03/2019	4
Tlco	MW-71	11/05/2019	4
Tlco	MW-71	11/05/2019	4
Tlco	MW-71	09/09/2020	4.9
Tlco	MW-71	03/16/2021	4.4
Tlco	MW-71	09/16/2021	4.9
Tlco	MW-71	03/10/2022	4.3
Tlco	MW-71	08/23/2022	5.3
Tlco	MW-72	02/24/2014	3.64
Tlco	MW-72	02/25/2014	2 U
Tlco	MW-72	02/25/2014	2 U
Tlco	MW-72	02/25/2014	2.94
Tlco	MW-72	02/25/2014	7.27
Tlco	MW-72	02/26/2014	6.14
Tlco	MW-72	02/28/2014	1.11 J
Tlco	MW-72	03/17/2014	1 J
Tlco	MW-72	05/12/2014	1
Tlco	MW-72	05/12/2014	1
Tlco	MW-72	08/06/2014	2
Tlco	MW-72	11/04/2014	1 J
Tlco	MW-72	02/26/2015	0.9 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-72	05/20/2015	0.7 J
Tlco	MW-72	08/21/2015	0.5 U
Tlco	MW-72	11/09/2015	2
Tlco	MW-72	02/11/2016	2
Tlco	MW-72	05/25/2016	0.9 J
Tlco	MW-72	08/18/2016	1
Tlco	MW-72	11/14/2016	3
Tlco	MW-72	02/24/2017	1
Tlco	MW-72	05/24/2017	1
Tlco	MW-72	08/18/2017	3
Tlco	MW-72	08/18/2017	3
Tlco	MW-72	11/16/2017	2
Tlco	MW-72	08/31/2018	2
Tlco	MW-72	08/16/2019	5
Tlco	MW-72	09/10/2020	3.5
Tlco	MW-72	03/17/2021	3.3
Tlco	MW-72	08/24/2022	3.4
Tlco	MW-73	04/08/2014	4.64
Tlco	MW-73	04/09/2014	0.4 U
Tlco	MW-73	04/09/2014	1.42 J
Tlco	MW-73	04/10/2014	0.4 U
Tlco	MW-73	04/10/2014	0.4 U
Tlco	MW-73	04/10/2014	0.98 J
Tlco	MW-73	04/21/2014	1.61 J
Tlco	MW-73	04/21/2014	1.7 J
Tlco	MW-73	05/12/2014	2
Tlco	MW-73	08/04/2014	1
Tlco	MW-73	11/04/2014	1
Tlco	MW-73	02/26/2015	0.9 J
Tlco	MW-73	05/20/2015	0.5 U
Tlco	MW-73	08/24/2015	0.5 U
Tlco	MW-73	11/11/2015	0.5 U
Tlco	MW-73	02/12/2016	0.5 U
Tlco	MW-73	05/25/2016	0.5 U
Tlco	MW-73	08/19/2016	0.7 J
Tlco	MW-73	08/19/2016	0.7 J
Tlco	MW-73	11/15/2016	0.6 J
Tlco	MW-73	02/27/2017	0.6 J
Tlco	MW-73	05/24/2017	1
Tlco	MW-73	08/21/2017	1 J
Tlco	MW-73	11/17/2017	0.5 J
Tlco	MW-73	11/17/2017	0.5 J
Tlco	MW-73	08/31/2018	0.4 J
Tlco	MW-73	08/19/2019	0.3 J
Tlco	MW-73	09/10/2020	0.4 J
Tlco	MW-73	03/17/2021	1 U
Tlco	MW-73	09/17/2021	0.51 J
Tlco	MW-73	03/10/2022	0.4 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-73	08/23/2022	1.0 U
Tlco	MW-74	04/15/2014	0.4 U
Tlco	MW-74	04/15/2014	1.17 J
Tlco	MW-74	04/16/2014	0.38 U
Tlco	MW-74	04/16/2014	2.47
Tlco	MW-74	04/16/2014	3.39
Tlco	MW-74	04/17/2014	0.94 J
Tlco	MW-74	04/22/2014	1.03 J
Tlco	MW-74	05/13/2014	0.7 J
Tlco	MW-74	08/04/2014	1
Tlco	MW-74	11/04/2014	1
Tlco	MW-74	02/26/2015	0.8 J
Tlco	MW-74	05/20/2015	1
Tlco	MW-74	08/24/2015	0.8 J
Tlco	MW-74	11/09/2015	1 J
Tlco	MW-74	02/12/2016	0.8 J
Tlco	MW-74	05/24/2016	0.5 U
Tlco	MW-74	08/19/2016	0.7 J
Tlco	MW-74	11/14/2016	0.5 U
Tlco	MW-74	02/27/2017	0.5 U
Tlco	MW-74	05/26/2017	0.5 J
Tlco	MW-74	08/18/2017	0.5 J
Tlco	MW-74	11/16/2017	0.5 U
Tlco	MW-74	11/16/2017	0.5 U
Tlco	MW-74	08/31/2018	0.6 J
Tlco	MW-74	08/16/2019	0.5 J
Tlco	MW-74	09/09/2020	0.78 J
Tlco	MW-74	03/16/2021	0.74 J
Tlco	MW-74	09/16/2021	0.79 J
Tlco	MW-74	03/07/2022	0.9 J
Tlco	MW-74	08/23/2022	0.9 J
Tlco	MW-75	03/23/2015	1
Tlco	MW-75	05/19/2015	0.9 J
Tlco	MW-75	08/24/2015	1 J
Tlco	MW-75	11/09/2015	1
Tlco	MW-75	02/12/2016	2
Tlco	MW-75	05/24/2016	2
Tlco	MW-75	08/19/2016	2
Tlco	MW-75	11/14/2016	2
Tlco	MW-75	02/27/2017	2
Tlco	MW-75	02/27/2017	2
Tlco	MW-75	05/25/2017	2
Tlco	MW-75	08/17/2017	1
Tlco	MW-75	11/16/2017	0.9 J
Tlco	MW-75	08/31/2018	0.6 J
Tlco	MW-75	08/31/2018	0.6 J
Tlco	MW-75	08/16/2019	0.9 J
Tlco	MW-75	09/09/2020	1.7

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-75	03/16/2021	2.7
Tlco	MW-75	08/23/2022	0.9 J
Tlco	MW-76	03/23/2015	2
Tlco	MW-76	03/31/2015	2.2
Tlco	MW-76	03/31/2015	2.2
Tlco	MW-76	05/19/2015	3
Tlco	MW-76	08/24/2015	3
Tlco	MW-76	11/09/2015	3
Tlco	MW-76	02/12/2016	3
Tlco	MW-76	05/24/2016	3
Tlco	MW-76	08/19/2016	3
Tlco	MW-76	11/16/2016	3
Tlco	MW-76	11/16/2016	3
Tlco	MW-76	02/27/2017	2
Tlco	MW-76	05/25/2017	2
Tlco	MW-76	05/25/2017	2
Tlco	MW-76	08/17/2017	2
Tlco	MW-76	11/16/2017	2
Tlco	MW-76	09/05/2018	1
Tlco	MW-76	08/15/2019	2
Tlco	MW-76	09/08/2020	1.8
Tlco	MW-76	03/12/2021	0.96 J
Tlco	MW-76	08/22/2022	1.2
Tlco	MW-77	03/23/2015	0.6 J
Tlco	MW-77	03/23/2015	0.7 J
Tlco	MW-77	03/31/2015	0.5
Tlco	MW-77	05/19/2015	0.6 J
Tlco	MW-77	08/25/2015	0.5 U
Tlco	MW-77	11/10/2015	2
Tlco	MW-77	02/16/2016	3
Tlco	MW-77	05/23/2016	3
Tlco	MW-77	08/22/2016	3
Tlco	MW-77	11/15/2016	3
Tlco	MW-77	02/28/2017	3
Tlco	MW-77	05/25/2017	4
Tlco	MW-77	08/17/2017	3
Tlco	MW-77	11/15/2017	2
Tlco	MW-77	09/05/2018	3
Tlco	MW-77	08/15/2019	2
Tlco	MW-77	08/15/2019	2
Tlco	MW-77	09/08/2020	4.3
Tlco	MW-77	03/12/2021	3.8
Tlco	MW-77	08/23/2022	4.9
Tlco	MW-78	03/23/2015	0.5 U
Tlco	MW-78	05/19/2015	0.5 U
Tlco	MW-78	08/25/2015	0.5 U
Tlco	MW-78	11/10/2015	0.5 U
Tlco	MW-78	02/16/2016	1

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-78	05/23/2016	1
Tlco	MW-78	08/22/2016	2
Tlco	MW-78	11/15/2016	2
Tlco	MW-78	02/28/2017	2
Tlco	MW-78	05/25/2017	2
Tlco	MW-78	08/17/2017	1
Tlco	MW-78	11/15/2017	1
Tlco	MW-78	09/05/2018	0.8 J
Tlco	MW-78	08/15/2019	0.4 J
Tlco	MW-78	09/09/2020	0.37 J
Tlco	MW-78	03/12/2021	0.5 J
Tlco	MW-78	08/23/2022	0.7 J
Tlco	MW-79	03/31/2015	0.7
Tlco	MW-79	08/25/2015	1
Tlco	MW-79	11/10/2015	1
Tlco	MW-79	02/16/2016	2
Tlco	MW-79	05/23/2016	3
Tlco	MW-79	05/23/2016	3
Tlco	MW-79	08/22/2016	2
Tlco	MW-79	11/15/2016	3
Tlco	MW-79	02/28/2017	2
Tlco	MW-79	05/24/2017	2
Tlco	MW-79	08/08/2017	2
Tlco	MW-79	11/15/2017	2
Tlco	MW-79	02/07/2018	3
Tlco	MW-79	09/05/2018	2
Tlco	MW-79	02/26/2019	2
Tlco	MW-79	02/26/2019	2
Tlco	MW-79	07/01/2019	2
Tlco	MW-79	08/15/2019	2
Tlco	MW-79	11/05/2019	2
Tlco	MW-79	09/08/2020	1
Tlco	MW-79	03/08/2021	0.96 J
Tlco	MW-79	09/13/2021	1.1
Tlco	MW-79	03/07/2022	0.7 J
Tlco	MW-79	08/22/2022	1.6
Tlco	MW-80	03/31/2015	1.9
Tlco	MW-80	08/25/2015	2
Tlco	MW-80	08/25/2015	2
Tlco	MW-80	11/10/2015	2
Tlco	MW-80	02/16/2016	0.6 J
Tlco	MW-80	05/23/2016	1
Tlco	MW-80	08/22/2016	2
Tlco	MW-80	11/15/2016	2
Tlco	MW-80	02/28/2017	2
Tlco	MW-80	05/24/2017	2
Tlco	MW-80	08/08/2017	2
Tlco	MW-80	11/15/2017	2

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	MW-80	02/07/2018	2
Tlco	MW-80	08/22/2018	1
Tlco	MW-80	08/22/2018	1
Tlco	MW-80	09/06/2018	1
Tlco	MW-80	02/26/2019	1
Tlco	MW-80	07/01/2019	2
Tlco	MW-80	08/15/2019	1
Tlco	MW-80	10/03/2019	1
Tlco	MW-80	11/04/2019	1
Tlco	MW-80	09/08/2020	1.9
Tlco	MW-80	03/08/2021	1.4
Tlco	MW-80	09/13/2021	1.3
Tlco	MW-80	03/07/2022	0.9 J
Tlco	MW-80	08/22/2022	1.0
Tlco	OBW-61	01/24/2006	4 J
Tlco	OBW-61	02/26/2008	1 J
Tlco	OBW-61	08/19/2008	1 J
Tlco	OBW-62	01/24/2006	5
Tlco	OBW-62	02/26/2008	2 J
Tlco	OBW-62	08/13/2008	4 J
Tlco	OBW-62	11/12/2008	3 J
Tlco	OBW-62	02/09/2009	4 J
Tlco	OBW-62	05/14/2009	3 J
Tlco	OBW-62	08/17/2009	4 J
Tlco	OBW-62	11/10/2009	3 J
Tlco	OBW-62	02/03/2010	3 J
Tlco	OBW-62	05/05/2010	3 J
Tlco	OBW-62	08/18/2010	2 J
Tlco	OBW-62	02/24/2011	2 J
Tlco	OBW-62	05/24/2011	1 J
Tlco	OBW-62	08/22/2011	2 J
Tlco	OBW-62	02/16/2012	2 J
Tlco	OBW-62	08/24/2012	3 J
Tlco	OBW-62	03/01/2013	4 J
Tlco	OBW-62	08/21/2013	3 J
Tlco	OBW-62	02/14/2014	2 J
Tlco	OBW-62	08/07/2014	1
Tlco	OBW-62	02/19/2015	0.8 J
Tlco	OBW-62	08/20/2015	1
Tlco	OBW-62	08/20/2015	1
Tlco	OBW-62	02/10/2016	1
Tlco	OBW-62	08/17/2016	2
Tlco	OBW-62	02/23/2017	2
Tlco	OBW-62	08/09/2017	4
Tlco	OBW-62	11/16/2017	4
Tlco	OBW-62	02/08/2018	6
Tlco	OBW-62	08/30/2018	5
Tlco	OBW-62	02/27/2019	5

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	OBW-62	07/02/2019	4
Tlco	OBW-62	08/26/2019	3
Tlco	OBW-62	11/05/2019	2
Tlco	OBW-62	09/11/2020	2.5
Tlco	OBW-62	03/10/2021	3.5
Tlco	OBW-62	09/14/2021	3.4
Tlco	OBW-63	01/24/2006	5 J
Tlco	OBW-63	02/26/2008	2 J
Tlco	OBW-63	08/13/2008	2 J
Tlco	OBW-63	02/09/2009	1 J
Tlco	OBW-63	05/14/2009	2 J
Tlco	OBW-63	08/17/2009	2 J
Tlco	OBW-63	11/11/2009	2 J
Tlco	OBW-63	02/03/2010	2 J
Tlco	OBW-63	05/05/2010	1 J
Tlco	OBW-63	08/18/2010	5 U
Tlco	OBW-63	02/24/2011	1 J
Tlco	OBW-63	05/24/2011	5 U
Tlco	OBW-63	08/22/2011	5 U
Tlco	OBW-63	02/15/2012	0.9 J
Tlco	OBW-63	08/28/2012	0.8 U
Tlco	OBW-63	03/01/2013	2 J
Tlco	OBW-63	08/21/2013	2 J
Tlco	OBW-63	02/14/2014	2 J
Tlco	OBW-63	08/07/2014	2
Tlco	OBW-63	02/19/2015	3
Tlco	OBW-63	08/20/2015	3
Tlco	OBW-63	02/10/2016	2
Tlco	OBW-63	08/17/2016	2
Tlco	OBW-63	02/23/2017	1
Tlco	OBW-63	08/10/2017	1
Tlco	OBW-63	02/08/2018	1
Tlco	OBW-63	02/08/2018	1
Tlco	OBW-63	08/30/2018	1
Tlco	OBW-63	02/27/2019	1
Tlco	OBW-63	07/02/2019	1
Tlco	OBW-63	07/02/2019	1
Tlco	OBW-63	08/26/2019	0.8 J
Tlco	OBW-63	11/05/2019	1 J
Tlco	OBW-63	09/11/2020	1
Tlco	OBW-63	03/10/2021	0.9 J
Tlco	OBW-63	09/14/2021	0.95 J
Tlco	OBW-LC-2-E	05/19/2005	2 J
Tlco	OBW-LC-2-E	05/19/2005	3 J
Tlco	OBW-LC-2-E	05/19/2005	3 J
Tlco	OBW-LC-2-E	05/19/2005	3 J
Tlco	OBW-LC-2-E	05/24/2005	0.8 U
Tlco	OBW-LC-3-E	06/06/2005	2 J

APPENDIX D
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D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tlco	OBW-LC-3-E	06/07/2005	4 J
Tlco	OBW-LC-3-E	06/07/2005	5 J
Tlco	OBW-LC-3-E	06/07/2005	8
Tlco	OBW-LC-3-E	06/08/2005	0.8 U
Tlco	OBW-LC-4-E	06/01/2005	1 J
Tlco	OBW-LC-4-E	06/02/2005	0.8 U
Tlco	OBW-LC-4-E	06/02/2005	4 J
Tlco	OBW-LC-4-E	06/02/2005	4 J
Tlco	OBW-LC-4-E	06/02/2005	5
Tlco	OBW-LC-5-E	05/26/2005	2 J
Tlco	OBW-LC-5-E	05/26/2005	3 J
Tlco	OBW-LC-5-E	05/26/2005	4 J
Tlco	OBW-LC-5-E	05/27/2005	0.8 U
Tlco	OBW-LC-5-E	05/27/2005	2 J
Tlco	OBW-LC-6-E	09/06/2011	4 J
Tlco	OBW-LC-6-E	11/08/2011	4 J
Tlco	OBW-LC-6-E	02/15/2012	6
Tlco	OBW-LC-6-E	05/30/2012	5 J
Tlco	OBW-LC-6-E	08/23/2012	4 J
Tlco	OBW-LC-6-E	11/27/2012	4 J
Tlco	OBW-LC-6-E	02/27/2013	6
Tlco	OBW-LC-6-E	05/22/2013	4 J
Tlco	OBW-LC-6-E	08/20/2013	3 J
Tlco	OBW-LC-6-E	11/14/2013	3 J
Tlco	OBW-LC-6-E	02/12/2014	3 J
Tlco	OBW-LC-6-E	05/13/2014	3
Tlco	OBW-LC-6-E	08/07/2014	3
Tuco	20-3	12/01/1983	10 U
Tuco	20-3	01/01/1984	10 U
Tuco	20-3	01/01/1992	10 U
Tuco	20-3	03/01/1994	10 U
Tuco	20-3	06/01/1994	10 U
Tuco	21-2	12/01/1983	10 U
Tuco	21-2	01/01/1984	10 U
Tuco	21-2	01/01/1992	10 U
Tuco	21-2	06/01/1994	10 U
Tuco	22-2	12/01/1983	10 U
Tuco	22-2	01/01/1984	10 U
Tuco	23-2	12/01/1983	10 U
Tuco	23-2	01/01/1984	10 U
Tuco	23-2	01/01/1992	2
Tuco	23-2	03/01/1994	10 U
Tuco	23-2	06/01/1994	10 U
Tuco	23-2	09/17/2003	1 J
Tuco	23-2	08/29/2006	5 U
Tuco	23-2	08/20/2007	5 U
Tuco	23-2	08/19/2008	5 U
Tuco	23-2	08/24/2009	5 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tuco	23-2	08/16/2010	5 U
Tuco	23-2	08/23/2011	5 U
Tuco	23-2	08/28/2012	0.8 U
Tuco	23-2	08/21/2013	0.8 U
Tuco	23-2	08/14/2014	0.5 U
Tuco	23-2	08/13/2015	0.5 U
Tuco	23-2	08/11/2016	0.5 U
Tuco	23-2	08/14/2017	0.5 U
Tuco	23-2	08/23/2018	0.2 J
Tuco	23-2	08/27/2019	0.2 U
Tuco	23-2	03/11/2021	1 U
Tuco	24-2	03/01/1984	1
Tuco	24-2	01/01/1992	10 U
Tuco	24-2	03/01/1994	10 U
Tuco	24-2	06/01/1994	10 U
Tuco	24-2	08/31/2022	1.0 U
Tuco	25-2	03/01/1984	1
Tuco	25-2	06/01/1994	10 U
Tuco	25-2	09/16/2003	0.8 U
Tuco	26-2	12/01/1983	10 U
Tuco	26-2	01/01/1984	10 U
Tuco	26-2	03/01/1994	4.6 J
Tuco	26-2	06/01/1994	10 U
Tuco	26-2	09/17/2003	0.8 U
Tuco	HTBOE-IW	06/17/2011	5 U
Tuco	HTBOE-IW	08/18/2011	2 J
Tuco	IW-1	05/17/2012	0.8 U
Tuco	IW-1	05/16/2014	0.5 U
Tuco	IW-2	05/17/2012	4 J
Tuco	IW-2	05/16/2014	4
Tuco	IW-3	05/17/2012	5 J
Tuco	IW-3	06/24/2014	3
Tuco	IW-4	05/17/2012	0.8 J
Tuco	IW-4	05/16/2014	0.5 U
Tuco	MW-20-3-R	06/16/1998	10 U
Tuco	MW-20-3-R	12/09/1998	10 U
Tuco	MW-20-3-R	05/19/1999	10 U
Tuco	MW-20-3-R	12/13/1999	10 U
Tuco	MW-20-3-R	06/19/2000	10 U
Tuco	MW-20-3-R	12/05/2000	10 U
Tuco	MW-20-3-R	06/12/2001	10 U
Tuco	MW-20-3-R	11/05/2001	10 U
Tuco	MW-20-3-R	10/22/2002	0.8 U
Tuco	MW-20-3-R	05/15/2003	0.8 U
Tuco	MW-20-3-R	09/15/2003	0.8 U
Tuco	MW-20-3-R	11/20/2003	0.8 U
Tuco	MW-20-3-R	05/13/2004	0.8 U
Tuco	MW-20-3-R	05/26/2005	5 U

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CHLOROFORM DATA IN GROUNDWATER (1983-2022)
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Zone	Well Name	Sample Date	Concentration
Tuco	MW-20-3-R	11/08/2005	5 U
Tuco	MW-20-3-R	08/29/2006	5 U
Tuco	MW-20-3-R	08/21/2007	5 U
Tuco	MW-20-3-R	08/18/2008	5 U
Tuco	MW-20-3-R	08/19/2009	5 U
Tuco	MW-20-3-R	08/11/2010	5 U
Tuco	MW-20-3-R	08/23/2011	5 U
Tuco	MW-20-3-R	08/28/2012	0.8 U
Tuco	MW-20-3-R	08/22/2013	0.8 U
Tuco	MW-20-3-R	08/19/2014	0.7 J
Tuco	MW-20-3-R	08/11/2015	0.5 U
Tuco	MW-20-3-R	08/10/2016	0.5 U
Tuco	MW-20-3-R	08/11/2017	0.5 U
Tuco	MW-20-3-R	08/20/2018	0.2 U
Tuco	MW-20-3-R	08/20/2018	0.2 U
Tuco	MW-20-3-R	08/27/2019	0.2 U
Tuco	MW-20-3-R	09/16/2020	1 U
Tuco	MW-20-3-R	03/22/2021	1 U
Tuco	MW-20-3-R	09/01/2022	1.0 U
Tuco	MW-24-2-R	06/16/1998	10 U
Tuco	MW-24-2-R	12/09/1998	10 U
Tuco	MW-24-2-R	05/18/1999	10 U
Tuco	MW-24-2-R	12/13/1999	10 U
Tuco	MW-24-2-R	06/21/2000	10 U
Tuco	MW-24-2-R	12/06/2000	10 U
Tuco	MW-24-2-R	06/13/2001	10 U
Tuco	MW-24-2-R	11/06/2001	10 U
Tuco	MW-24-2-R	10/22/2002	0.8 U
Tuco	MW-24-2-R	05/14/2003	0.8 U
Tuco	MW-24-2-R	09/16/2003	0.8 U
Tuco	MW-24-2-R	11/20/2003	0.8 U
Tuco	MW-24-2-R	05/13/2004	2 U
Tuco	MW-24-2-R	11/09/2004	0.8 U
Tuco	MW-24-2-R	05/24/2005	5 U
Tuco	MW-24-2-R	11/09/2005	5 U
Tuco	MW-24-2-R	05/23/2006	5 U
Tuco	MW-24-2-R	08/28/2006	5 U
Tuco	MW-24-2-R	03/15/2007	5 U
Tuco	MW-24-2-R	08/21/2007	5 U
Tuco	MW-24-2-R	02/21/2008	5 U
Tuco	MW-24-2-R	08/18/2008	5 U
Tuco	MW-24-2-R	02/10/2009	5 U
Tuco	MW-24-2-R	08/24/2009	5 U
Tuco	MW-24-2-R	02/03/2010	5 U
Tuco	MW-24-2-R	08/11/2010	5 U
Tuco	MW-24-2-R	02/25/2011	5 U
Tuco	MW-24-2-R	08/23/2011	5 U
Tuco	MW-24-2-R	02/21/2012	0.8 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tuco	MW-24-2-R	08/29/2012	0.8 U
Tuco	MW-24-2-R	03/04/2013	0.8 U
Tuco	MW-24-2-R	08/22/2013	0.8 U
Tuco	MW-24-2-R	02/18/2014	0.8 U
Tuco	MW-24-2-R	08/14/2014	0.5 U
Tuco	MW-24-2-R	02/20/2015	0.5 U
Tuco	MW-24-2-R	08/13/2015	0.5 U
Tuco	MW-24-2-R	08/11/2016	0.5 U
Tuco	MW-24-2-R	08/10/2017	0.5 U
Tuco	MW-24-2-R	08/10/2017	0.5 U
Tuco	MW-24-2-R	08/22/2018	0.2 U
Tuco	MW-24-2-R	08/28/2019	0.2 U
Tuco	MW-24-2-R	10/04/2019	0.2
Tuco	MW-24-2-R	09/16/2020	1 U
Tuco	MW-24-2-R	03/15/2021	1 U
Tuco	MW-24-2-R	09/16/2021	1 U
Tuco	MW-24-2-R	03/10/2022	1.0 U
Tuco	MW-24-2-R	08/31/2022	1.0 U
Tuco	MW-28-2	07/01/1994	10 U
Tuco	MW-28-2	06/16/1998	10 U
Tuco	MW-28-2	12/08/1998	10 U
Tuco	MW-28-2	05/19/1999	10 U
Tuco	MW-28-2	12/13/1999	10 U
Tuco	MW-28-2	06/20/2000	1.2 J
Tuco	MW-28-2	12/06/2000	50 UD
Tuco	MW-28-2	06/13/2001	10 U
Tuco	MW-28-2	11/05/2001	10 U
Tuco	MW-28-2	10/23/2002	0.8 U
Tuco	MW-28-2	05/14/2003	0.8 U
Tuco	MW-28-2	09/16/2003	0.8 U
Tuco	MW-28-2	11/20/2003	0.8 U
Tuco	MW-28-2	05/13/2004	0.8 U
Tuco	MW-28-2	05/25/2005	5 U
Tuco	MW-28-2	11/09/2005	5 U
Tuco	MW-28-2	05/23/2006	5 U
Tuco	MW-28-2	08/28/2006	5 U
Tuco	MW-28-2	03/15/2007	5 U
Tuco	MW-28-2	08/22/2007	5 U
Tuco	MW-28-2	02/19/2008	5 U
Tuco	MW-28-2	08/18/2008	5 U
Tuco	MW-28-2	02/05/2009	5 U
Tuco	MW-28-2	08/24/2009	5 U
Tuco	MW-28-2	02/04/2010	5 U
Tuco	MW-28-2	08/17/2010	5 U
Tuco	MW-28-2	02/25/2011	5 U
Tuco	MW-28-2	08/24/2011	5 U
Tuco	MW-28-2	02/16/2012	0.8 U
Tuco	MW-28-2	08/29/2012	0.8 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tuco	MW-28-2	03/04/2013	0.8 U
Tuco	MW-28-2	08/22/2013	0.8 U
Tuco	MW-28-2	02/18/2014	0.8 U
Tuco	MW-28-2	08/13/2014	0.5 U
Tuco	MW-28-2	02/23/2015	0.5 U
Tuco	MW-28-2	08/13/2015	0.5 U
Tuco	MW-28-2	08/11/2016	0.5 U
Tuco	MW-28-2	08/14/2017	0.5 U
Tuco	MW-28-2	08/21/2018	0.2 U
Tuco	MW-28-2	08/21/2018	0.2 U
Tuco	MW-28-2	09/06/2018	0.2 U
Tuco	MW-28-2	08/29/2019	0.2 J
Tuco	MW-28-2	10/03/2019	0.2
Tuco	MW-28-2	09/18/2020	1 U
Tuco	MW-28-2	09/18/2020	1 U
Tuco	MW-28-2	03/22/2021	1 U
Tuco	MW-28-2	09/15/2021	1 U
Tuco	MW-28-2	03/09/2022	1.0 U
Tuco	MW-28-2	08/31/2022	1.0 U
Tuco	MW-29-1	06/01/1994	4.3 J
Tuco	MW-29-1	03/31/1998	4.6 J
Tuco	MW-29-1	06/16/1998	3.9 J
Tuco	MW-29-1	09/29/1998	6.3 J
Tuco	MW-29-1	12/08/1998	6.9 J
Tuco	MW-29-1	02/17/1999	7.9 J
Tuco	MW-29-1	05/19/1999	8.8 J
Tuco	MW-29-1	08/31/1999	7.8 J
Tuco	MW-29-1	12/09/1999	8.4 J
Tuco	MW-29-1	03/16/2000	1.1 J
Tuco	MW-29-1	06/20/2000	9.6 J
Tuco	MW-29-1	09/07/2000	7.9 J
Tuco	MW-29-1	12/05/2000	6.9 J
Tuco	MW-29-1	03/28/2001	8
Tuco	MW-29-1	06/12/2001	8
Tuco	MW-29-1	09/19/2001	7
Tuco	MW-29-1	11/05/2001	7
Tuco	MW-29-1	04/10/2002	7
Tuco	MW-29-1	09/25/2002	7
Tuco	MW-29-1	10/22/2002	9
Tuco	MW-29-1	12/17/2002	7
Tuco	MW-29-1	02/13/2003	6
Tuco	MW-29-1	05/14/2003	5
Tuco	MW-29-1	09/15/2003	11
Tuco	MW-29-1	11/20/2003	12
Tuco	MW-29-1	02/25/2004	14
Tuco	MW-29-1	05/13/2004	12
Tuco	MW-29-1	08/11/2004	10
Tuco	MW-29-1	02/08/2005	10

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
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Zone	Well Name	Sample Date	Concentration
Tuco	MW-29-1	05/24/2005	10
Tuco	MW-29-1	08/30/2005	9
Tuco	MW-29-1	11/08/2005	10
Tuco	MW-29-1	02/22/2006	12
Tuco	MW-29-1	08/25/2006	11
Tuco	MW-29-1	03/14/2007	6
Tuco	MW-29-1	08/14/2007	8
Tuco	MW-29-1	02/20/2008	8
Tuco	MW-29-1	08/15/2008	9
Tuco	MW-29-1	02/04/2009	10
Tuco	MW-29-1	08/11/2009	9
Tuco	MW-29-1	02/02/2010	11
Tuco	MW-29-1	08/10/2010	12
Tuco	MW-29-1	02/22/2011	13
Tuco	MW-29-1	08/19/2011	12
Tuco	MW-29-1	02/14/2012	16
Tuco	MW-29-1	02/14/2012	16
Tuco	MW-29-1	08/22/2012	14
Tuco	MW-29-1	02/26/2013	15
Tuco	MW-29-1	08/15/2013	12
Tuco	MW-29-1	02/14/2014	15
Tuco	MW-29-1	08/15/2014	15
Tuco	MW-29-1	08/15/2014	15
Tuco	MW-29-1	02/18/2015	15
Tuco	MW-29-1	08/12/2015	14
Tuco	MW-29-1	02/09/2016	13
Tuco	MW-29-1	08/10/2016	18
Tuco	MW-29-1	02/22/2017	14
Tuco	MW-29-1	02/22/2017	15
Tuco	MW-29-1	08/09/2017	16
Tuco	MW-29-1	08/24/2018	11
Tuco	MW-29-1	08/24/2018	11
Tuco	MW-29-1	08/21/2019	13
Tuco	MW-29-1	09/14/2020	11
Tuco	MW-29-1	03/09/2021	9.6
Tuco	MW-29-1	08/29/2022	8.1
Tuco	MW-30-2	07/01/1994	3.9 J
Tuco	MW-31-1	05/01/1995	7.4 J
Tuco	MW-31-1	09/15/2003	6
Tuco	MW-33-1	04/11/2002	1 U
Tuco	MW-33-1	09/15/2003	0.8 U
Tuco	MW-34	11/07/2001	6
Tuco	MW-34	09/17/2003	9
Tuco	MW-34	08/13/2015	16
Tuco	MW-34	08/11/2016	14
Tuco	MW-34	08/08/2017	15
Tuco	MW-34	08/24/2018	12
Tuco	MW-34	08/30/2019	11

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Zone	Well Name	Sample Date	Concentration
Tuco	MW-34	09/14/2020	8.9
Tuco	MW-34	03/09/2021	7
Tuco	MW-34	08/29/2022	9.7
Tuco	MW-35	11/07/2001	6
Tuco	MW-35	09/17/2003	6
Tuco	MW-35	08/13/2015	9
Tuco	MW-35	08/11/2016	8
Tuco	MW-35	08/07/2017	11
Tuco	MW-35	08/27/2018	11
Tuco	MW-35	08/29/2019	7
Tuco	MW-35	09/17/2020	9.2
Tuco	MW-35	03/11/2021	12
Tuco	MW-35	09/01/2022	7.6
Tuco	MW-36	09/17/2003	15
Tuco	MW-37	09/18/2003	18
Tuco	MW-37	08/22/2006	6
Tuco	MW-37	08/15/2007	11
Tuco	MW-37	08/12/2008	9
Tuco	MW-37	08/18/2009	11
Tuco	MW-37	08/12/2010	11
Tuco	MW-37	08/16/2011	7
Tuco	MW-37	08/20/2012	5 J
Tuco	MW-37	08/14/2013	3 J
Tuco	MW-37	08/13/2014	10
Tuco	MW-37	08/13/2015	9
Tuco	MW-37	08/11/2016	6
Tuco	MW-37	08/15/2017	6
Tuco	MW-37	08/27/2018	2
Tuco	MW-37	08/29/2019	10
Tuco	MW-37	09/17/2020	7.7
Tuco	MW-37	03/11/2021	9.1
Tuco	MW-37	08/30/2022	7.7
Tuco	MW-38	09/17/2003	3 J
Tuco	MW-38	08/23/2006	4 J
Tuco	MW-38	08/17/2007	4 J
Tuco	MW-38	08/12/2008	5
Tuco	MW-38	08/18/2009	6
Tuco	MW-38	08/12/2010	3 J
Tuco	MW-38	08/17/2011	3 J
Tuco	MW-38	08/20/2012	2 J
Tuco	MW-38	08/14/2013	2 J
Tuco	MW-38	08/13/2014	2
Tuco	MW-38	08/14/2015	2
Tuco	MW-38	08/12/2016	3
Tuco	MW-38	08/15/2017	3
Tuco	MW-38	08/27/2018	1
Tuco	MW-38	08/29/2019	1
Tuco	MW-38	09/17/2020	0.8 J

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
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Zone	Well Name	Sample Date	Concentration
Tuco	MW-38	03/11/2021	0.8 J
Tuco	MW-38	08/30/2022	1.1
Tuco	MW-39	11/07/2001	6
Tuco	MW-39	09/18/2003	5 J
Tuco	MW-39	11/14/2007	7
Tuco	MW-44-2	03/31/1998	10 U
Tuco	MW-44-2	06/16/1998	10 U
Tuco	MW-44-2	09/29/1998	10 U
Tuco	MW-44-2	12/08/1998	10 U
Tuco	MW-44-2	02/17/1999	10 U
Tuco	MW-44-2	05/18/1999	1.4 J
Tuco	MW-44-2	08/31/1999	1.1 J
Tuco	MW-44-2	12/09/1999	1.1 J
Tuco	MW-44-2	03/16/2000	1 J
Tuco	MW-44-2	06/19/2000	1.2 J
Tuco	MW-44-2	09/07/2000	1.4 J
Tuco	MW-44-2	12/05/2000	1.3 J
Tuco	MW-44-2	03/28/2001	2 J
Tuco	MW-44-2	06/12/2001	1 J
Tuco	MW-44-2	09/19/2001	1 J
Tuco	MW-44-2	11/05/2001	2 J
Tuco	MW-44-2	04/10/2002	1 J
Tuco	MW-44-2	09/25/2002	1 J
Tuco	MW-44-2	10/22/2002	1 J
Tuco	MW-44-2	12/17/2002	1 J
Tuco	MW-44-2	02/13/2003	1 J
Tuco	MW-44-2	05/13/2003	1 J
Tuco	MW-44-2	09/15/2003	0.8 J
Tuco	MW-44-2	11/18/2003	0.8 J
Tuco	MW-44-2	02/25/2004	1 J
Tuco	MW-44-2	05/12/2004	1 J
Tuco	MW-44-2	08/11/2004	0.8 J
Tuco	MW-44-2	11/09/2004	1 J
Tuco	MW-44-2	02/08/2005	0.8 J
Tuco	MW-44-2	05/24/2005	1 J
Tuco	MW-44-2	08/30/2005	1 J
Tuco	MW-44-2	11/08/2005	1 J
Tuco	MW-44-2	08/22/2006	0.9 J
Tuco	MW-44-2	08/16/2007	1 J
Tuco	MW-44-2	08/14/2008	0.9 J
Tuco	MW-44-2	08/11/2009	5 U
Tuco	MW-44-2	08/10/2010	1 J
Tuco	MW-44-2	08/17/2011	1 J
Tuco	MW-44-2	08/20/2012	1 J
Tuco	MW-44-2	08/13/2013	1 J
Tuco	MW-44-2	08/19/2014	1
Tuco	MW-44-2	08/12/2015	1
Tuco	MW-44-2	08/10/2016	1

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tuco	MW-44-2	08/11/2017	1
Tuco	MW-44-2	08/27/2018	0.8 J
Tuco	MW-44-2	08/21/2019	0.5 J
Tuco	MW-44-2	08/21/2019	0.5 J
Tuco	MW-44-2	03/12/2021	0.55 J
Tuco	MW-48	08/19/2003	2 J
Tuco	MW-48	08/19/2003	11
Tuco	MW-48	08/19/2003	11
Tuco	MW-48	08/19/2003	14
Tuco	MW-48	08/19/2003	17
Tuco	MW-48	09/18/2003	16
Tuco	MW-48	08/23/2006	14
Tuco	MW-48	08/17/2007	19
Tuco	MW-48	08/12/2008	31
Tuco	MW-48	08/18/2009	24
Tuco	MW-48	08/12/2010	17
Tuco	MW-48	08/16/2011	23
Tuco	MW-48	08/20/2012	18
Tuco	MW-48	08/14/2013	17
Tuco	MW-48	08/14/2014	15
Tuco	MW-48	08/14/2015	15
Tuco	MW-48	08/14/2015	15
Tuco	MW-48	08/12/2016	17
Tuco	MW-48	08/15/2017	11
Tuco	MW-48	08/28/2018	15
Tuco	MW-48	08/27/2019	18
Tuco	MW-48	03/11/2021	11
Tuco	MW-49	08/21/2003	4 J
Tuco	MW-49	08/21/2003	6
Tuco	MW-49	08/21/2003	6
Tuco	MW-49	08/21/2003	6
Tuco	MW-49	09/18/2003	14
Tuco	MW-49	08/23/2006	10
Tuco	MW-49	08/20/2007	11
Tuco	MW-49	08/13/2008	7
Tuco	MW-49	08/19/2009	12
Tuco	MW-49	08/12/2010	15
Tuco	MW-49	08/17/2011	10
Tuco	MW-49	08/21/2012	11
Tuco	MW-49	08/14/2013	8
Tuco	MW-49	08/13/2014	10
Tuco	MW-49	08/13/2014	10
Tuco	MW-49	08/14/2015	10
Tuco	MW-49	02/08/2016	12
Tuco	MW-49	08/12/2016	10
Tuco	MW-49	02/21/2017	10
Tuco	MW-49	08/15/2017	9
Tuco	MW-49	02/09/2018	9

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tuco	MW-49	08/23/2018	7
Tuco	MW-49	08/23/2018	10
Tuco	MW-49	09/06/2018	11
Tuco	MW-49	02/26/2019	7
Tuco	MW-49	07/01/2019	6
Tuco	MW-49	08/30/2019	5
Tuco	MW-49	10/04/2019	6
Tuco	MW-49	11/04/2019	7
Tuco	MW-49	09/14/2020	6.9
Tuco	MW-49	03/09/2021	8.8
Tuco	MW-49	09/13/2021	6
Tuco	MW-49	03/08/2022	6.1
Tuco	MW-49	08/29/2022	4.8
Tuco	PZ-45	09/16/2003	0.8 U
Tuco	PZ-46	09/16/2003	0.8 U
Tuco	UC-1-E	09/17/2003	0.9 J
Tuco	UC-1-E	02/21/2006	5 U
Tuco	UC-1-E	08/24/2006	5 U
Tuco	UC-1-E	03/14/2007	5 U
Tuco	UC-1-E	08/15/2007	5 U
Tuco	UC-1-E	02/20/2008	5 U
Tuco	UC-1-E	08/13/2008	5 U
Tuco	UC-1-E	02/04/2009	5 U
Tuco	UC-1-E	08/12/2009	5 U
Tuco	UC-1-E	02/03/2010	5 U
Tuco	UC-1-E	08/12/2010	5 U
Tuco	UC-1-E	02/23/2011	5 U
Tuco	UC-1-E	08/17/2011	5 U
Tuco	UC-1-E	02/17/2012	0.8 U
Tuco	UC-1-E	08/22/2012	0.8 U
Tuco	UC-1-E	02/27/2013	0.8 U
Tuco	UC-1-E	08/07/2013	0.8 U
Tuco	UC-1-E	02/12/2014	0.8 U
Tuco	UC-1-E	08/06/2014	0.5 U
Tuco	UC-1-E	02/18/2015	0.5 U
Tuco	UC-1-E	08/12/2015	0.5 U
Tuco	UC-1-E	02/10/2016	0.5 U
Tuco	UC-1-E	08/09/2016	1
Tuco	UC-1-E	02/22/2017	0.9 J
Tuco	UC-1-E	08/09/2017	0.9 J
Tuco	UC-1-E	08/20/2018	0.4 J
Tuco	UC-1-E	08/14/2019	0.3 J
Tuco	UC-1-E	03/10/2021	1 U
Tuco	UC-2-E	09/18/2003	0.8 U
Tuco	UC-2-E	05/23/2006	5 U
Tuco	UC-2-E	08/24/2006	5 U
Tuco	UC-2-E	03/14/2007	5 U
Tuco	UC-2-E	08/15/2007	5 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tuco	UC-2-E	02/20/2008	5 U
Tuco	UC-2-E	08/13/2008	5 U
Tuco	UC-2-E	02/04/2009	5 U
Tuco	UC-2-E	08/12/2009	5 U
Tuco	UC-2-E	02/03/2010	5 U
Tuco	UC-2-E	08/12/2010	5 U
Tuco	UC-2-E	02/23/2011	5 U
Tuco	UC-2-E	08/17/2011	5 U
Tuco	UC-2-E	02/17/2012	0.8 U
Tuco	UC-2-E	08/22/2012	0.8 U
Tuco	UC-2-E	02/27/2013	0.8 U
Tuco	UC-2-E	08/07/2013	0.8 U
Tuco	UC-2-E	02/12/2014	0.8 U
Tuco	UC-2-E	08/06/2014	0.5 U
Tuco	UC-2-E	02/18/2015	0.5 U
Tuco	UC-2-E	08/12/2015	0.5 U
Tuco	UC-2-E	02/10/2016	0.5 U
Tuco	UC-2-E	08/09/2016	0.5 J
Tuco	UC-2-E	02/22/2017	0.5 U
Tuco	UC-2-E	08/09/2017	0.5 U
Tuco	UC-2-E	08/20/2018	0.4 J
Tuco	UC-2-E	08/14/2019	0.2 U
Tuco	UC-2-E	03/10/2021	1 U
Tuco	UC-3-E	09/18/2003	0.8 U
Tuco	UC-3-E	02/21/2006	5 U
Tuco	UC-3-E	08/24/2006	5 U
Tuco	UC-3-E	03/14/2007	5 U
Tuco	UC-3-E	08/15/2007	5 U
Tuco	UC-3-E	02/20/2008	5 U
Tuco	UC-3-E	08/13/2008	5 U
Tuco	UC-3-E	02/04/2009	5 U
Tuco	UC-3-E	08/12/2009	5 U
Tuco	UC-3-E	02/03/2010	5 U
Tuco	UC-3-E	08/12/2010	5 U
Tuco	UC-3-E	02/23/2011	5 U
Tuco	UC-3-E	08/17/2011	5 U
Tuco	UC-3-E	02/17/2012	0.8 U
Tuco	UC-3-E	08/22/2012	0.8 U
Tuco	UC-3-E	02/27/2013	0.8 U
Tuco	UC-3-E	08/16/2013	0.8 U
Tuco	UC-3-E	02/12/2014	0.8 U
Tuco	UC-3-E	02/12/2014	0.8 U
Tuco	UC-3-E	08/06/2014	0.5 U
Tuco	UC-3-E	02/18/2015	0.5 U
Tuco	UC-3-E	08/12/2015	0.5 U
Tuco	UC-3-E	02/10/2016	0.5 U
Tuco	UC-3-E	08/09/2016	0.5 U
Tuco	UC-3-E	02/22/2017	0.5 U

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

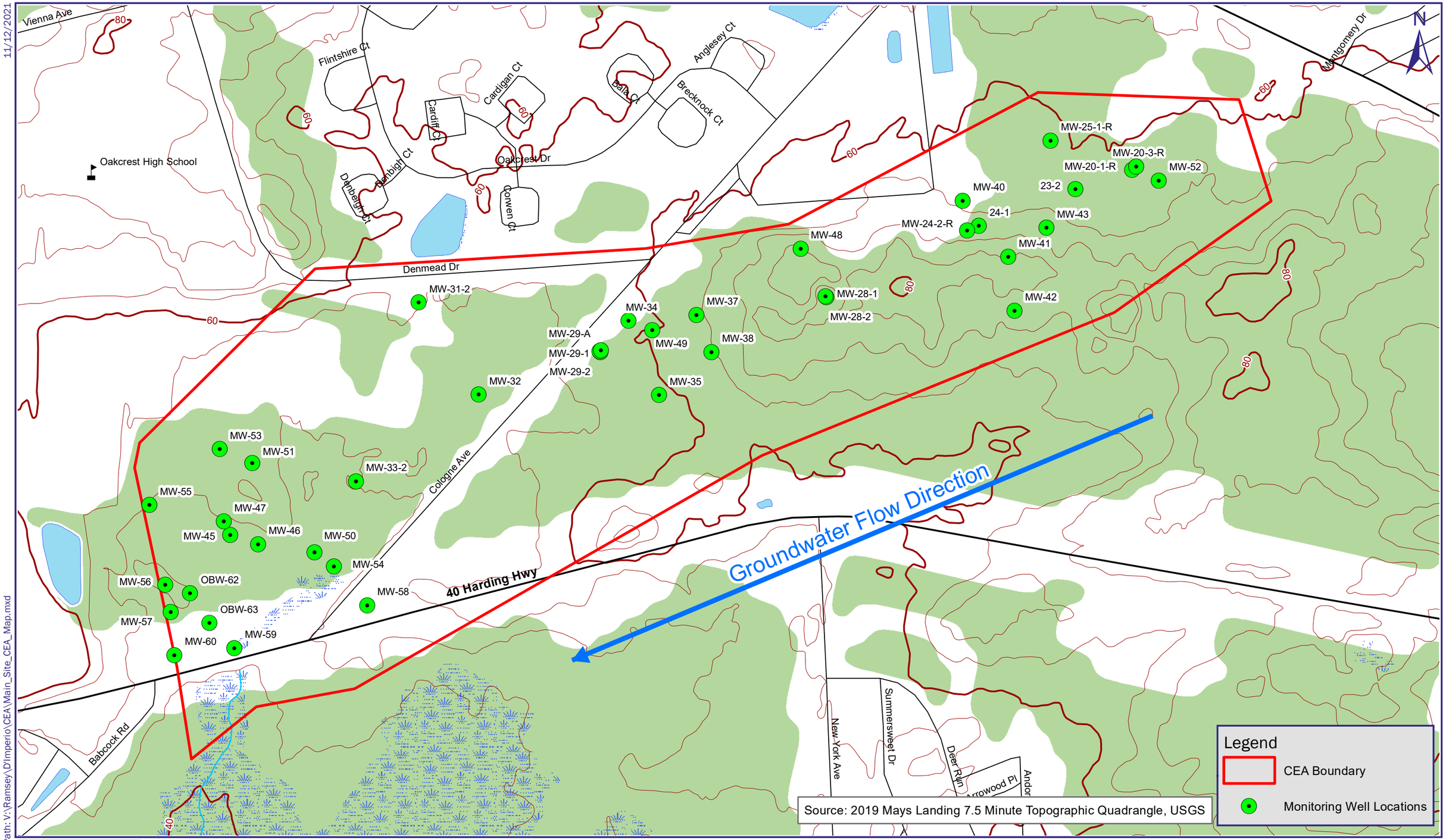
Zone	Well Name	Sample Date	Concentration
Tuco	UC-3-E	08/09/2017	0.5 U
Tuco	UC-3-E	08/20/2018	0.2 U
Tuco	UC-3-E	08/14/2019	4 J
Tuco	UC-3-E	03/10/2021	1 U
Tuco	UC-4-E	09/17/2003	3 J
Tuco	UC-4-E	05/23/2006	6
Tuco	UC-4-E	08/24/2006	5
Tuco	UC-4-E	03/14/2007	3 J
Tuco	UC-4-E	08/15/2007	6
Tuco	UC-4-E	02/20/2008	7
Tuco	UC-4-E	08/13/2008	8
Tuco	UC-4-E	02/04/2009	7
Tuco	UC-4-E	08/12/2009	18
Tuco	UC-4-E	02/03/2010	8
Tuco	UC-4-E	08/12/2010	4 J
Tuco	UC-4-E	02/23/2011	4 J
Tuco	UC-4-E	08/17/2011	10
Tuco	UC-4-E	02/15/2012	5 J
Tuco	UC-4-E	08/22/2012	10
Tuco	UC-4-E	02/27/2013	9
Tuco	UC-4-E	08/07/2013	8
Tuco	UC-4-E	02/12/2014	11
Tuco	UC-4-E	08/06/2014	16
Tuco	UC-4-E	02/18/2015	12
Tuco	UC-4-E	08/12/2015	13
Tuco	UC-4-E	02/10/2016	10
Tuco	UC-4-E	08/09/2016	13
Tuco	UC-4-E	02/22/2017	8
Tuco	UC-4-E	08/09/2017	10
Tuco	UC-4-E	08/20/2018	7
Tuco	UC-4-E	08/14/2019	4 J
Tuco	UC-4-E	09/16/2020	9.6
Tuco	UC-4-E	03/10/2021	9.2
Tuco	UC-4-E	08/24/2022	11.0
Tuco	UC-6-E	09/16/2003	7
Tuco	UC-6-E	09/16/2003	7
Tuco	UC-6-E	02/21/2006	6
Tuco	UC-6-E	08/24/2006	6
Tuco	UC-6-E	03/14/2007	6
Tuco	UC-6-E	08/15/2007	6
Tuco	UC-6-E	02/20/2008	6
Tuco	UC-6-E	08/13/2008	6
Tuco	UC-6-E	02/04/2009	5
Tuco	UC-6-E	08/12/2009	6
Tuco	UC-6-E	02/03/2010	6
Tuco	UC-6-E	08/12/2010	5
Tuco	UC-6-E	02/23/2011	6
Tuco	UC-6-E	08/17/2011	6

APPENDIX D
CHLOROFORM DATA IN GROUNDWATER (1983-2022)
D'IMPERIO PROPERTY SITE

Zone	Well Name	Sample Date	Concentration
Tuco	UC-6-E	02/15/2012	6
Tuco	UC-6-E	02/15/2012	6
Tuco	UC-6-E	08/22/2012	6
Tuco	UC-6-E	02/27/2013	5
Tuco	UC-6-E	08/07/2013	7
Tuco	UC-6-E	02/12/2014	5
Tuco	UC-6-E	08/06/2014	5
Tuco	UC-6-E	02/18/2015	6
Tuco	UC-6-E	08/12/2015	6
Tuco	UC-6-E	02/10/2016	5
Tuco	UC-6-E	08/09/2016	5
Tuco	UC-6-E	02/22/2017	5
Tuco	UC-6-E	08/09/2017	6
Tuco	UC-6-E	08/20/2018	5
Tuco	UC-6-E	08/14/2019	5 J
Tuco	UC-6-E	09/16/2020	4.5
Tuco	UC-6-E	03/10/2021	4.6
Tuco	UC-6-E	08/24/2022	3.1

Notes:
U - Indicates that the constituent was not detected above the associated method detection limit.
J - Indicates that the associated concentration is an estimate.

Appendix E: CEA Extents



Author: CMeyn Path: V:\Ramsey\D'Imperio\CEA\Main_Site_CEA_Map.mxd

11/12/2021

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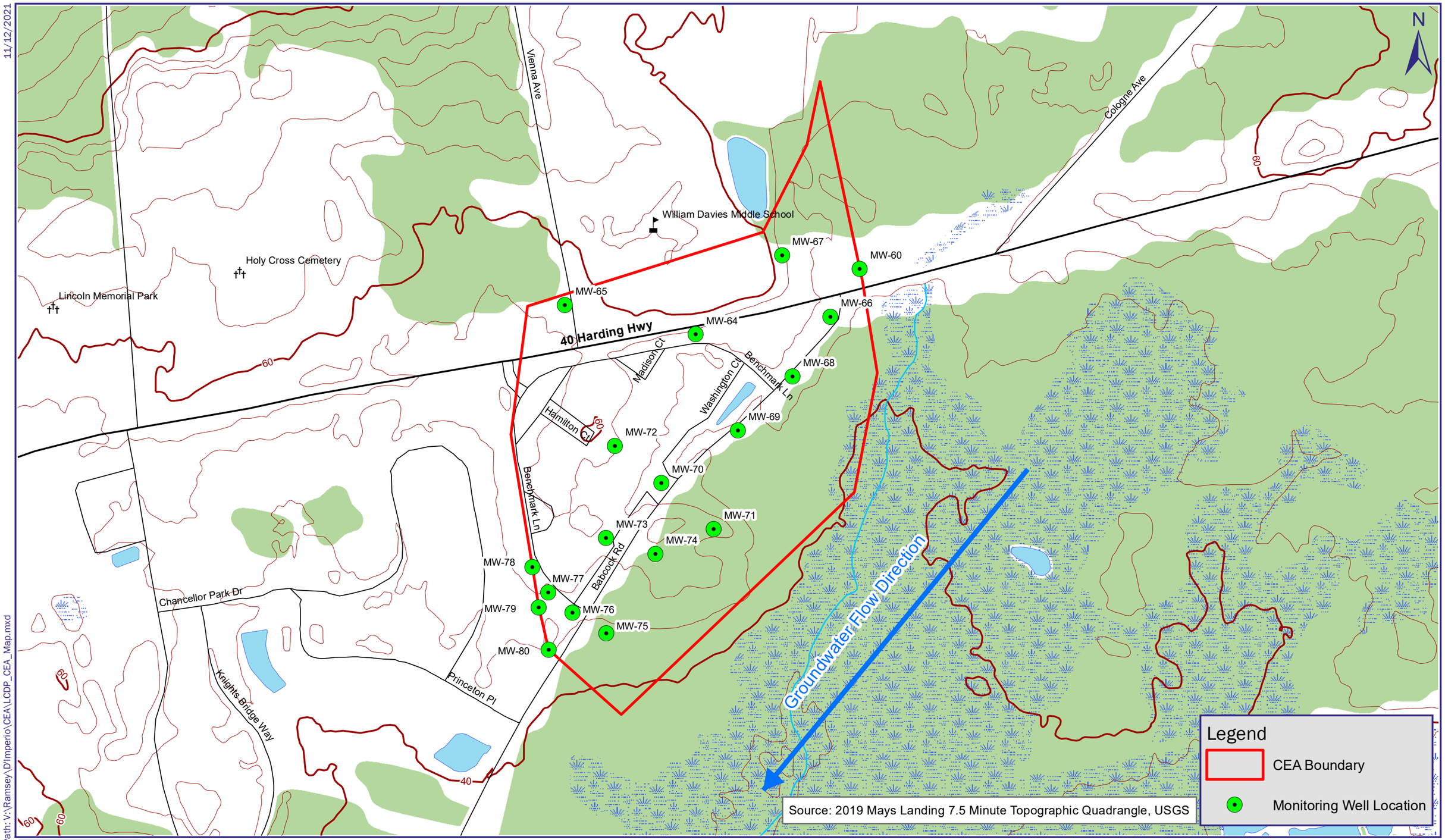
APPENDIX E-1
COMBINED TBR, TUCO AND TLCO CEA MAP
D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY

11/12/2021



Author: CMeyn Path: V:\Ramsey\D'Imperio\CEA\LCDP_CEA_Map.mxd

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APPENDIX E-2
LDCP CEA MAP
D'IMPERIO PROPERTY SITE, HAMILTON TWP, ATLANTIC CO. NEW JERSEY