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August 1, 2012

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RE: Semi-Annual Groundwater Monitoring – First Half of 2012
Former American Cyanamid Site, Bridgewater Township, New Jersey

Gentlemen:

On behalf of Wyeth Holdings Corporation (Wyeth), enclosed is the First Half of 2012 Semi-Annual Groundwater Monitoring Report (GWMR) associated with the American Cyanamid Superfund Site, Bridgewater Township, New Jersey. Groundwater monitoring is performed in accordance with the 1988 Administrative Consent Or4der (ACO) between the American Cyanamid Company (Cyanamid) and the New Jersey Department of Environmental Protection (NJDEP), as amended in 1994. The American Cyanamid Superfund Site is now owned by Wyeth Holdings Corporation, a subsidiary of Wyeth. Pfizer acquired Wyeth, the parent company of Wyeth Holdings Corporation, in October 2009. Therefore, the legal entity directly responsible for compliance with the ACO executed by American Cyanamid Corporation is Wyeth Holdings Corporation, a wholly-owned subsidiary of Pfizer.

If you should have any questions, or if I can be of any further assistance, please feel free to call me.

Very truly yours,

Russell Downey

Russell Downey
Director – Environmental Engineering, Remediation & Transactions
Pfizer Global Engineering
Pfizer Inc

enc. Semi-Annual Groundwater Monitoring – First Half of 2012, dated August 1, 2012 prepared by Golder Associates Inc.

c:	USEPA	Mr. Clifford Ng, Mr. Joseph Battipaglia, Mr. Michael Sivak
	NJDEP	Mr. Marc Romannel, Mr. Allan Motter
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WYETH HOLDINGS CORPORATION, BRIDGEWATER TOWNSHIP, NEW JERSEY
AMERICAN CYANAMID SUPERFUND SITE

SEMI-ANNUAL GROUNDWATER MONITORING REPORT

FIRST HALF 2012

CERTIFICATION

I certify under penalty of law that the information provided in this document is true, accurate, and complete. I am aware that there are significant civil penalties for knowingly submitting false, inaccurate, or incomplete information and that I am committing a crime of the fourth degree if I make a written false statement which I do not believe to be true. I am also aware that if I knowingly direct or authorize the violation of any statue, I am personally liable for the penalties.

Russell Downey[1]
Director of Environmental Engineering, Remediation & Transactions
Pfizer Inc
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Notary:

THOMAS LOGAN III
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires Mar. 24, 2014

REPORT

SEMI-ANNUAL GROUNDWATER MONITORING REPORT FIRST HALF 2012

AMERICAN CYANAMID SUPERFUND SITE

BRIDGEWATER TOWNSHIP, NEW JERSEY

Submitted To: New Jersey Department of Environmental Protection
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August 2012 **Project No. 103-86245**

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1.0 INTRODUCTION

Golder Associates Inc. (Golder Associates) has been retained by Pfizer Inc. (Pfizer) to perform semi-annual groundwater monitoring and reporting at the American Cyanamid Superfund Site (Site) located in Bridgewater, New Jersey as shown on Figure 1. This Semi-Annual Groundwater Monitoring Report presents the results of the First Half 2012 semi-annual groundwater monitoring program and covers work completed during the period of January 1, 2012 through June 30, 2012.

The Semi-Annual Groundwater Monitoring program includes site-wide groundwater pumping and monitoring, as well as the groundwater monitoring requirements for the Impound 8 Resource Conservation and Recovery Act (RCRA) Facility. This report was prepared in accordance with the Administrative Consent Order (ACO) between the American Cyanamid Company (American Cyanamid) and the New Jersey Department of Environmental Protection (NJDEP), as amended in May 1994 (ACO Amendment). The Bridgewater property comprising the Superfund Site formerly owned and operated by American Cyanamid is now owned by Wyeth Holdings Corporation (WHC), a subsidiary of Wyeth. Therefore the legal entity directly responsible for compliance with the Administrative Consent Order executed by American Cyanamid Corporation is WHC. Pfizer Inc. acquired Wyeth, the parent company of Wyeth Holdings Corporation, in October 2009.

1.1 Background

In 1982, American Cyanamid began monitoring the site-wide groundwater control system at the Site. The monitoring program was conducted in accordance with the requirements of the 1982 ACO between American Cyanamid and the NJDEP.

The NJDEP issued a final New Jersey Pollutant Discharge Elimination System-Discharge to Groundwater (NJPDES-DGW) Permit (# 0002313) for the Site on September 30, 1987. The monitoring requirements were increased for this permit by adding analyses and monitoring wells to the Site-wide program. In 1988, the NJDEP modified the NJPDES-DGW # 0002313 to include the Impound 8 Facility monitoring requirements.

The Impound 8 Facility program consists of the construction of a permitted RCRA waste management facility for the closure of several on-Site lagoons and impoundments. As part of the future Site-wide remediation program, the contents of remaining on-Site impoundments may be treated and consolidated in the Impound 8 Facility. This facility includes the areas of former Lagoons 8 and 9. Lagoon 9A has been closed and is incorporated into the groundwater monitoring program at Impound 8 Facility. The monitoring program details were presented in the Impound 8 Facility Design Report (BB&L, March 1988), the Impound 8 Facility Ground Water Detection Monitoring Program (GWDMP) Work Plan (BB&L, December 1986, Revised December 1987 and March 1988), and the Implementation Plan (BB&L, March 1988) as part of the RCRA Part B Operating Permit.

In May 1994, an amendment to the ACO (ACO Amendment) between American Cyanamid and the NJDEP was executed. The ACO Amendment incorporates and supersedes the Site-wide and Impound 8 Facility groundwater pumping and monitoring requirements (NJPDES-DGW Permit # 0002313) referred to previously.

In July of 1996, a Record of Decision (ROD) was issued by the NJDEP for the Group II Impoundments. Group II Impoundments include Impoundments 15, 16, 17, and 18. This ROD included requirements for development and implementation of an overburden groundwater monitoring program. The program was developed and agreed upon as outlined in correspondence to the NJDEP dated March 18, 1997.

In September 1997, American Home Products requested modifications to the Site-wide groundwater monitoring requirements. The modifications were approved by the NJDEP in correspondence dated September 30, 1997.

In December 2008, Wyeth requested further modifications to the Site-wide groundwater monitoring requirements. The requested modification to reduce sampling to semi-annual was approved by the NJDEP by e-mail correspondence dated December 30, 2008. Sampling events are now scheduled for April and October each year. The monitoring requirements are summarized in Table 3.

In July of 1996, a ROD was issued by the NJDEP for the Hill Property portion of the Site. The ROD includes provisions for a Classification Exception Area (CEA) covering the groundwater beneath the Hill Property. This groundwater was monitored by bedrock wells PW-16, PW-17, PW-18, and perimeter bedrock well UU. Low levels of some organic compounds were observed in these wells at the time of the ROD CEA.

The Hill Property monitoring requirements were modified as detailed in the American Home Products correspondence dated January 8, 1998 and approved by the NJDEP on February 18, 1998. The modifications include the elimination of Hill Property wells PW-17, PW-18, well UU, and well MJ from the Site-wide groundwater monitoring program. Groundwater elevations were measured in well MJ to provide a data point in this vicinity after elimination of Hill Property wells from the monitoring program. Groundwater elevations were measured in well MJ until the First quarter 2008 monitoring event. Beginning with the Second Quarter 2008 Groundwater Monitoring Event, measurements were discontinued due to the continued flooding of the well vault and modifications made by the Hill Property owner that prevented access.

Discontinuation of monitoring of well PW-16 was approved by NJDEP in correspondence dated September 8, 2004, based on volatile organic compound (VOC) results being observed below NJDEP Ground Water Quality Standards (GWQS) for two consecutive events (Fourth Quarter 2003 and Second Quarter 2004 Groundwater Monitoring Events).

By letter dated March 17, 2009, NJDEP informed WHC that it was transferring oversight and regulatory lead of the Site to USEPA and would hold in abeyance the requirements of the NJDEP ACOs, with limited possible exceptions, as long as WHC implemented the Site investigation and cleanup under USEPA oversight.

As part of the remedial design activities for the anticipated Site-wide groundwater remedy, monitoring of the groundwater in the vicinity of Impoundments 1 and 2 was initiated in the second quarter 2010. The Impoundments 1 and 2 monitoring program consists of collection of groundwater samples, from existing monitoring wells, and the monitoring of groundwater elevations. This monitoring will continue with the semi-annual monitoring until such time that the monitoring program is redefined. Impoundments 1 and 2 monitoring is included in Table 3. On November 7, 2011, piezometers PZ-1 and PZ-2, monitored during the First Half 2011, were decommissioned as part of the Groundwater Removal Action under USEPA Administrative Settlement Agreement and Order on Consent (EPA Docket No, CERCLA-02-2011-2015) dated July 19, 2011.

1.2 Program Objectives

This report has been developed to document that the following objective of fulfilling the various groundwater monitoring requirements described in Section 1.1of the ACO Agreement have been met.

1.3 Groundwater Conceptual Site Model Summary

The purpose of the groundwater conceptual site model is to integrate the relevant aspects of the geologic framework, Site groundwater flow characteristics, and chemical source and transport pathways into a cohesive understanding of groundwater impacts at the Site. It is important to present the Site-wide Groundwater Monitoring results in the context of the broader understanding of the groundwater conceptual site model. An updated draft groundwater conceptual site model has been included as Appendix H in the revised Site-wide Feasibility Study that was submitted to USEPA and NJDEP in February 2012 and a summary is provided below.

Groundwater at the Site is present in unconsolidated overburden deposits and in fractured Triassic-age bedrock. Following is a presentation of the overburden and bedrock aquifers, respectively.

Overburden materials at the Site include extensive man-made fill and alluvial deposits and remnants of the lower stream terrace deposits southwest of the Site near the New Jersey American Water Supply Company property and possibly in the southwestern part of the Site at the location of monitoring wells MW-1 and MW-9.

The alluvial deposits include Quaternary Alluvium (sands and gravel) and Modern alluvial deposits (mainly overbank deposits of sands, silts, and clays). The basal overburden layer of sand and gravels is

relatively continuous in the Site area and represents the principal overburden water-bearing zone. The thickness of overburden deposits ranges from 10 feet to 20 feet, and the basal overburden sand and gravel layer ranges in thickness from 5 feet to 10 feet

The overburden aquifer at the Site is unconfined and receives recharge from precipitation. The Raritan River and its tributaries, Cuckel's Brook and Middle Brook, are the local discharge zones for overburden groundwater.

At the Site, downward vertical hydraulic gradients between overburden and bedrock are greatly enhanced by the operation of the on-Site groundwater pumping wells PW-2 and PW-3.

In bedrock, the rocks of the Passaic Formation at the Site form a multi-aquifer system comprised of a series of gently dipping layers separated by bedding plane discontinuities with different hydrogeologic properties. At the Site, three generalized transmissive bedrock zones have been identified as a result of extensive packer testing. These zones have been termed as follows:

- Upper Moderately Transmissive Zone
- Lower Highly Transmissive Zone
- The SS Conductive Zone

Additional zones of higher permeability likely exist at the Site; however, the three zones discussed above are the main transmissive zones identified by previous Site investigation and summarized in previous Site interpretation reports. Zones of less permeable, more competent rock separate each of these conductive zones. The strike and dip of these three transmissive zones are generally consistent with the strike and dip of the bedding planes discussed above.

The bedrock aquifer at the Site and its immediate vicinity is under confined to unconfined conditions. It receives recharge from overburden and direct from precipitation in areas where overburden is very thin or not present (i.e., the southern bank of the Raritan River). The Raritan River and its tributaries Cuckel's Brook and Middle Brook are the local discharge zones for bedrock groundwater.

The groundwater flow directions at the Site are currently influenced by the operation of the groundwater extraction wells PW-2 and PW-3. The pumping rate of these wells is approximately 450 gallons per minute (gpm) or 650,000 gallons per day (gpd).

From a groundwater contaminant fate and transport perspective, it is important to note that over the past 60 years, the Site has withdrawn water from the on-Site bedrock production wells for use as non-contact cooling water in the production operations. In accordance with the 1982 and 1988 ACOs (as amended in 1994), the current average withdrawal of over 650,000 gallons per day results in groundwater flow inward

from a large portion of the Site area toward the pumping wells. This extensive groundwater withdrawal has had a significant influence on the distribution of Site impacts in overburden and bedrock groundwater.

The overall Site chemistry data indicates that there are a few reasonably well-defined areas of elevated concentrations in overburden groundwater as opposed to one gradational plume. This distribution is likely caused by the generally downward hydraulic gradients between the overburden and the bedrock which is significantly influenced by the bedrock pumping at wells PW-2 and PW-3. The general location of overburden impacts in or proximal to, areas where weathered bedrock is missing provides additional evidence that the hydraulic connection between overburden and bedrock exerts a considerable influence on the transport of Site impacts.

The overall transport of overburden impacts is horizontal, likely within the sand and gravel unit at the base of the overburden, until a hydraulic connection is made between overburden and bedrock or discharge occurs to a surface water body.

The overall transport of bedrock impacts are via transport along higher transmissivity zones in the bedrock co-located with structural bedding plans and migration down dip and along strike within the overall capture of the groundwater collection system (where hydraulic capture is achieved).

2.0 MONITORING ACTIVITIES

2.1 Groundwater Elevations

A summary of historic groundwater elevations collected as part of the Site-wide Semi-annual groundwater monitoring program from First Half of 2009 to the Second Half of 2011 are included in Table 1. A synoptic round of groundwater levels were measured on April 09, 2012 from the monitoring points listed in Table 2A and shown on Figure 2 in accordance with the Sampling and Analysis Plan (SAP) (O'Brien & Gere 2011). Measurements were taken from PW-2 and PW-3 on April 10, 2012. The groundwater elevations for the First Half of 2012 monitoring event and the groundwater elevations for the previous monitoring event (Second Half 2011) are compared and presented in Table 2B. Groundwater levels were measured to the nearest 0.01 foot (ft) from a known survey point on each well casing using an electronic water level probe, which was decontaminated between each monitoring point. Depth to water was recorded from the top of casing (TOC) reference points and water elevations were subsequently calculated using surveyed elevation information[1]. The groundwater elevations are presented in Table 1 along with historical data. No measurable separate phase liquid was encountered. Construction information including well permit numbers, TOC elevations, screen elevations, well depths, and measured depths to water for this reporting period are summarized in Table 2A.

Starting with the second quarter of 2008, wells IIII-D and JJJJ-D were temporarily modified by attaching a dedicated casing extension to each of the wells prior to water depth gauging. Each temporary casing used is permanently designated to the well to preserve accurate measurements. The new top of casing elevation is calculated by adding the length of temporary casing to the surveyed elevation. Wells IIII-D and JJJJ-D required this additional segment of PVC due to artesian conditions. Care was taken to ensure that measurements were taken from the same point on the added PVC segment in a place that corresponds to the location of the surveyed measuring point.

In addition to groundwater level measurements, fluid head levels within the FLUTe® liner (fluid holding liner in place) were measured. FLUTe® wells were purged prior to measuring groundwater elevation in wells. Purge procedures for FLUTe® wells are provided in the SAP.

Surface water level measurements were recorded on April 09, 2012 from Staff Gauges listed in Table 3 and shown on Figure 2 in accordance with the SAP. Surface water elevations were measured to the nearest 0.01 foot on a measured staff gauge with known survey points. Water elevations were calculated using the surveyed information and these surface water elevations are presented in Table 2A.

[1] Historical site survey information has been provided by O'Brien & Gere.

2.2 Sampling and Analysis

Table 3 presents the current monitoring schedule for the Site as detailed in the SAP. Table 3 also details the various wells associated with monitoring each impoundment, and indicates whether the well is screened within the overburden or bedrock formations. Locations of these wells and their associated monitoring areas are shown on Figure 2. Also, as detailed in Table 3, some monitoring wells at the Site are equipped with dedicated sampling equipment. The method of purging and sampling was dependent on the type of equipment, if any, that was installed in each well. The following sections detail the various purge and sampling methods used to collect groundwater samples at the Site. All groundwater samples were collected in accordance with the SAP and the NJDEP Field Sampling Procedures Manual (NJDEP, 2005).

The First Half 2012 Groundwater Monitoring Event (April 2012) consisted of sixty-one (61) primary samples; and the following Quality Assurance/Quality Control (QA/QC) samples:

- Six (6) trip blanks were sent along with VOC samples;
- Five (5) field blanks were collected from decontaminated non-dedicated submersible pumps;
- Four (4) field duplicates were collected from wells RCRA-D10, TT-P1, CCC-R, and 42R; and,
- Four (4) matrix spike/matrix spike duplicates (MS/MSDs) were collected from wells RCRA-D13, SS-P1, EEE-R, and 38R.

Prior to the initiation of sampling each day, the pH, specific conductivity, and turbidity meters were calibrated. Calibration of these meters was conducted in accordance with the manufacturer's specifications for each meter. Field parameter measurements (pH, dissolved oxygen [DO], conductivity, temperature, oxidation reduction potential [ORP], and turbidity) were recorded from initial water discharge and following removal of each well volume and after the sample collection. Field parameter measurements for the First Half 2012 Groundwater Monitoring Event appear in Table 4.

Volume-Averaged Purging and Sample Collection procedures were used except as otherwise noted. This method of sampling requires purging a specified volume (3 to 5 well volumes). Table 3 provides detail of which wells are fitted with dedicated pump systems (FLUTe®[2], bladder, or production well pump systems) and where no dedicated pump systems are installed. Monitoring wells without dedicated sampling equipment were sampled using a decontaminated submersible pump (i.e., Typhoon pump). Deviations from this procedure are described below:

- Piezometer PZ-12-4 was purged and sampled by Volume-Averaged methods using a peristaltic pump to purge and a bailer to sample as a preventative measure due to the potential presence of non-aqueous phase liquid (NAPL) in this well;

[2] Procedures specific to using FLUTe® systems are detailed in the SAP.

- Wells III and KKK were purged and sampled by Volume-Averaged methods using a peristaltic pump to purge and a bailer to sample since the well diameters (1.5-inch) precluded use of submersible pumps;
- Well AAA was purged and sampled by Volume-Averaged methods using a bailer to purge and sample since the well diameter (1.5-inch) precluded use of a submersible pump and equipment issues prevented purging with a peristaltic pump; and,
- Production wells PW-2 and PW-3 were sampled from in-line valves that allowed sampling while wells were actively pumping.

These deviations are not expected to have caused any material impacts in meeting the project objectives.

3.0 BEDROCK GROUNDWATER EXTRACTION SYSTEM MONITORING

The bedrock groundwater extraction and treatment system began operation on or before July 1988, which is when quarterly reporting of pumping volumes began. Pumping well rates are monitored continuously with instantaneous and totalizing flow meters, with values recorded on a daily basis. Extraction well monitoring information for the First Half of 2012 was provided by Woodard and Curran, who conducts the Operation and Maintenance at the Site.

The Site production well pumping information for the first half of 2012 (January 1, 2012 to June 30, 2012) is provided as Table 5A and the pumping volumes from the second quarter 1988 through the first half of 2012 are provided on Table 5B. The operating time for PW2 and PW3 is approximate to the nearest day. The weekly average pumping rate during the First Half of 2012 was always greater than 650,000 gallons per day in accordance with ACO requirements. The volume of water extracted and treated during the First of Half 2012 was 121.696 million gallons (Mgal) and the total volume of groundwater extracted and treated since July 1988 is 5.796 billion gallons (Bgal).

Weekly average pumping volumes, as detailed in Table 5A, ranged from 655,564 to 689,635 gallons per day (i.e., minimum to maximum), with variable contribution from PW2 and PW3. PW2 and PW3 ran for approximately 35% and 65% of the time, respectively, between January 1, 2012 and June 30, 2012.

4.0 GROUNDWATER FLOW EVALUATION

The groundwater elevations recorded during the First Half 2012 Groundwater Monitoring Event were used to prepare overburden, bedrock, and Impound 8 Facility shallow bedrock potentiometric contour maps presented on Figures 3, 4, and 6, respectively. The associated Contour Map Reporting Forms are included as Appendix B. In general, overburden and bedrock groundwater elevations are lower for this monitoring event when compared to the previous monitoring event (Second Half 2011Groundwater Monitoring Event). This observation is consistent with lower than average precipitation in the area during the monitoring period. This comparison is presented in Table 2B.

4.1 Overburden Groundwater

Overburden groundwater elevations are presented in Table 2A. An overburden groundwater potentiometric contour map has been prepared for the Site and is provided as Figure 3. Consistent with historical interpretations, the overburden groundwater surface is interpreted to have several groundwater mounds in the northern and southwestern parts of the Site. These areas are monitored by wells 21R, O-R, MW-1A, MW-9, and MW-10. These localized groundwater mounds correspond to soil piles composed of heterogeneous, low permeability, fine-grained soils and sludges. Groundwater flow direction from these local mounds is radial towards Cuckel's Brook and the central parts of the Site. In addition, the area beneath Lagoon 7 is interpreted as a groundwater mound. There are also three depressions in the overburden groundwater surface shown by wells 28-R, MW05-WS1, MW-12, and MW-19. These depressions are interpreted to be the result of pumping in the underlying bedrock aquifer, and corresponding lower potentiometric pressures that have developed along the bedding planes. It is believed that these depressions in the overburden phreatic surface exist in areas where the weathered bedrock is absent.

The following provides a description of the groundwater elevation data for each of the four areas required to be monitored by the ACO.

4.1.1 Impoundments 1 and 2 Area

The groundwater elevations in the Impoundments 1 and 2 Area are monitored by piezometers PZ-12-3, PZ-12-4, PZ-12-5 and wells 01-MW-01, 01-MW-02, 01-MW-03, FLOD-W1S, and FLOD-W2S (Figure 3). Groundwater flow is outward from Impoundments 1 and 2 to the southwest toward the east branch of Cuckel's Brook, the south toward the Raritan River, and the east toward the surface water body adjacent to I-287 (Pond 287). These interpretations of groundwater flow patterns are similar to those stated in previous reports. The groundwater elevations in this area are lower than those of the previous monitoring event (Second Half 2011Groundwater Monitoring Event) with exception of FLOD-W2S.

4.1.2 Impoundments 3, 4, and 5 Area

Wells 28-R, MW-2, MW-3, MW-5, MW-7, and MW-9 are monitored for the Impoundment 3, 4 and 5 areas (Figure 3). The groundwater surface in the vicinity of 28-R is interpreted as a depression due to higher groundwater elevations to the north and east, the groundwater mound beneath Lagoon 7 to the southwest, and groundwater mound to the southeast near MW-10.

4.1.3 Impoundment 14 Area

Groundwater in the vicinity of Impoundment 14 is monitored by wells 19R, 21R, and O-R and indicates a southerly groundwater flow direction towards the center of the main plant area (Figure 3). This flow direction is consistent with historical interpretations. As mentioned above, the Impoundment 14 area is interpreted as a groundwater mound, which corresponds to a pile of low permeability materials.

4.1.4 Impoundments 17 and 18 Area

The groundwater flow direction in the area of the Impoundments 17 and 18, monitored by wells AAA, CCC-R, EEE-R, and 16MW-2, is generally to the south towards the Raritan River (Figure 3).

4.1.5 Impoundments 19 and 24 and Lagoons 6 and 7 Area

The groundwater in the area of Lagoons 6 and 7 and Impoundments 19 and 24 is monitored by 32-R, 34-R, 36-R 38-R, 41-R, 42-R, and TFP-94-1R. The groundwater surface in this area is interpreted as a mound beneath lagoon 7. It is believed that Lagoons 6 and 7 are in relatively good hydraulic connection with underlying groundwater, resulting in local overburden groundwater mounding (e.g., Lagoons 6 and 7 have been historically dredged). Groundwater flow is outward from Lagoon 6 and 7 to the south and west toward the Raritan River, and northeast towards Cuckel's Brook. This interpretation is similar to historic groundwater flow patterns (Figure 3).

4.2 Bedrock Groundwater

Bedrock groundwater elevations for the production wells, perimeter wells, and Main Plant wells are presented in Table 2A. A bedrock groundwater potentiometric contour map has been prepared for the Site and is provided as Figure 4.

Between the third quarter of 2005 and fourth quarter of 2005, bedrock wells SS, TT, WW, XX, YY, ZZ, EEEE, FFFF, and GGGG were retrofitted with FLUTe® liners with discrete monitoring ports. The FLUTe® system is composed of several ports that target discrete flow zones. FLUTe® procedures are provided in Appendix A. Table 2A also provides a summary of the monitoring port elevations and their associated groundwater elevations. Prior to the FLUTe® liner installations, historical measurements from these wells were representative of average groundwater elevations of the entire open interval in each well.

During the creation of the bedrock potentiometric contour map (Figure 4), groundwater elevations for well SS were not used. The well integrity of SS is questionable and groundwater elevations collected from the well appear to be erroneous. Previous interpretation of equipotential contours in the vicinity of well SS assumed presence of sub-vertical fractures that connect the deeper bedrock pressures to shallow bedrock. However, a recent survey of the FLUTe well SS indicated that there is no high-density bentonite water slurry within the FLUTe liner to counteract artesian pressure in the lowermost interval. As a result, water from the deeper artesian hydrostratigraphic unit of the FLUTe well likely seeps into the shallower screened intervals which are under lower pressure. Because of this well construction issue, water level data from well SS is not used in the production of potentiometric surface maps.

Consistent with historical practice, wells that do not have screens that intersected the bedrock transmissive zone [e.g., FLOD-W2BS, WW (Port 1), XX (Port 1), ZZ (Port 1), AAAA-O/S, CCCC-S, GGGG (Port 3), IIII-O/S, and JJJJ-O/S] were selected based on the screen depth that most closely correlated in depth to an adjacent wells that has a screen within the bedrock transmissive zone. The approximate subcrop area of the transmissive zone is identified on Figure 4. Groundwater elevations for ZZ and WW are listed on the map; however, these wells were not used in the production of contours because they are located offsite.

Historically, flowing artesian conditions were observed at monitoring points IIII-D and JJJJ-D during the monitoring events from the fourth quarter of 2006 through the third quarter of 2007, then from the first quarter of 2008 through the first half of 2010, and during the second half of 2011. During April 2012 synoptic water level collection for First Half 2012 Groundwater Monitoring Event, Well IIII-D exhibited artesian conditions.

Consistent with historical interpretations, the area of influence of pumping wells PW-2 and PW-3 is elliptical in shape, is parallel to the geologic structure (i.e., bedding planes), and is mainly developed within the transmissive zones identified during previous Site investigations. Lower pressures developed along the transmissive zones provide the local hydraulic sink for adjacent bedrock groundwater, which is then conveyed to the pumping wells. A hydraulic divide exists south of the subcrop line of the lower stratigraphic limit (i.e., southern limit) of the transmissive zone. The hydraulic divide is influenced by the (apparent) groundwater mound developed beneath Lagoon 7. South of the bedrock groundwater divide, shallow bedrock groundwater ultimately discharges to the Raritan River.

4.2.1 Production Wells

The production well zone of influence, based on the April 9, 2012 groundwater elevations appears to be similar to the zone of influence observed at these locations during previous events (Figure 4).

4.2.2 Perimeter Wells

In general, changes in water levels for the monitoring intervals of the FLUTe wells appear to be similar to past trends (for example, large changes in TT - Port 3). The groundwater elevation at TT – Port 3 is anomalous and requires further study.

4.2.3 Main Plant Area

Well BBBB exhibits a lower head pressure than the nearby pumping wells which is anomalous and requires further study. Hydrogeologic testing (CDM, 1985) for this well suggests that the screened interval is located in low conductivity material (~1 X 10^{-6} cm/s) which may influence the observed head pressure.

Although wells IIII and JJJJ are not technically located in the Main Plant Area, they have been historically reported in the Main Plant Area section of the Semi-Annual Groundwater Monitoring Report. Therefore, these wells are discussed herein. Since the southern bank of the Raritan River has a higher elevation than the northern bank, bedding planes that subcrop south of the Raritan River are influenced and transmit higher pressures that are monitored by the deep screens of wells IIII and JJJJ resulting in artesian conditions.

4.3 Impound 8 Facility Groundwater

4.3.1 Overburden

The Impound 8 Facility monitoring well locations are shown on Figure 5. Overburden groundwater elevation measurements for the Impound 8 Facility were obtained on April 9, 2012 and are summarized on Table 2A. In general, natural groundwater flow direction in the vicinity of the Impound 8 Facility overburden is southerly, which is consistent with historic interpretations. However, the construction of a groundwater interceptor trench and cut off wall has altered the natural groundwater flow in this area. This is evident from several Impound 8 Facility overburden wells which were dry at the time of water level measurement. Impound 8 Facility overburden groundwater elevations listed on Figure 3 with a “less than” symbol refer to the elevation of the bottom of the well screen; conveying that the well is dry and the groundwater elevation is below the bottom of the well screen. Consistent with previous reports, the groundwater elevations for this area have not been contoured.

The lack of water in some of the Impound 8 Facility overburden wells is due to the localized collection of overburden groundwater by the interceptor trench. The trench was constructed around the western, northern, and part of the eastern boarders of the Impoundment 8 Facility in order to minimize groundwater flow beneath the facility (Figure 5). At the southern portion of the interceptor trench, along the western boarder of the facility, a cutoff wall was constructed. In this area, the bedrock is incised with a channel or trough that runs northwest to southeast along the southwest portion of Impound 8. The trough is approximately 10 feet below the top of bedrock at its deepest, approximately 500 ft wide, and filled with

overburden material. This trough is believed to act as a conduit for overburden groundwater flowing from northwest to southeast. In the area where the interceptor trench alignment intersects the pathway of this bedrock trough, the overburden material within the tough was excavated down to bedrock. The trough was filled with low permeability material from the top of bedrock to the bottom of the trench. This formed the cutoff wall which prevents overburden groundwater from bypassing the trench. Together, the interceptor trench and cutoff wall serve the purpose of minimizing saturated groundwater conditions in the overburden directly below the Impound 8 Facility. The overburden groundwater measurements from the RCRA-S series wells are used to evaluate the effectiveness of the interceptor trench and cut-off wall at achieving these conditions.

Based on the groundwater elevation data collected on April 9, 2012, monitoring wells that are located hydraulically up-gradient (or outside) of the interceptor trench and cut-off wall include RCRA-S1, RCRA-S3, RCRA-S4, RCRA-S9, and RCRA-S11. Monitoring wells that are located hydraulically down-gradient (or inside) of the interceptor trench and cut-off wall include RCRA-S2, RCRA-S5, RCRA-S6, RCRA-S7, RCRA-S8, RCRA-S10, RCRA-S12, RCRA-S13R, RCRA-S14, and RCRA-S15. Consistent with previous monitoring data, down-gradient wells RCRA-S2, RCRA-S5, RCRA-S6, RCRA-S12, and RCRA-S13R were dry at the time of water level measurement. Down-gradient wells, RCRA-S7, RCRA-S8, RCRA-S10, RCRA-S14, and RCRA-S15 contained groundwater at the time of water level measurement. Consistent with historical measurements, these down-gradient overburden wells typically contain measurable groundwater levels because they are located within the bedrock trough, which contains a greater thickness of overburden material. Although RCRA-S4 is considered an up-gradient well and is located outside of the trench alignment, it was dry at the time of water level measurement. The lack of water in RCRA-S4 is due to the influence of trench, which effectively collects the overburden groundwater that flows toward the Impound 8 Facility. Historically, RCRA-S4 has been dry at times or contained very little water, likely depending on seasonal precipitation. As evidenced by the consistently lower groundwater elevations in RCRA-S4 and in the wells hydraulically down-gradient of the interceptor trench and cutoff wall, the system is effective at controlling overburden groundwater at the Impound 8 Facility.

4.3.2 Shallow Bedrock

A total of fifteen shallow bedrock monitoring wells located around the Impound 8 Facility (as seen on Figure 5) are measured for groundwater elevations and monitored for groundwater quality. The Ground Water Detection Monitoring Program (GWDMP) (Blasland, Bouck & Lee, 1988) has designated RCRA-D1, RCRA-D2, RCRA-D3, RCRA-D4, RCRA-D7, RCRA-D8, RCRA-D9, RCRA-D10, and RCRA-D11 as down-gradient monitoring wells and RCRA-D5, RCRA-D6, RCRA-D12, RCRA-D13R, RCRA-D14, and RCRA-D15 as up-gradient monitoring wells for Impound 8. In addition, the GWDMP has designated wells RCRA-D14 and RCRA-D15 as up-gradient and wells RCRA-D12 and RCRA-D13R as down-gradient with

respect to Impound 9A. These wells provide a means of comparison between water quality before and after passing beneath Lagoon 9A.

Shallow bedrock groundwater elevation measurements for the Impound 8 Facility were obtained on April 9, 2012 and are summarized on Table 2A. A Shallow Bedrock Groundwater Potentiometric Contour Map for the Impound 8 Facility has been provided as Figure 6. Consistent with historical practice, well RCRA-D9 was listed on the Shallow Bedrock Groundwater Potentiometric Contour Map; however, it was not used in the creation of the groundwater contours.

RCRA-D series shallow groundwater elevations for First Half 2012 monitoring event indicate a southerly flow direction consistent with historic groundwater flow patterns. Historically, a divergent shallow groundwater flow pattern has been evident within the Impound 8 Facility shallow groundwater monitoring network. This divergent flow pattern was due to the operation of a bedrock pumping well located approximately 300 ft to the northeast of the Site, at Phillips Concrete Incorporated (formerly Mensing Cement Company). According to previous reports, the influence of the pumping well has historically reversed the groundwater flow direction under the northern portion of the Impound 8 Facility, resulting in a northeasterly flow direction during pumping conditions. To account for the divergent flow pattern, the GWDMP has defined two sets of down-gradient wells to monitor flow: RCRA D-1 through RCRA D-4 (to monitor the northeast flow); and RCRA D-7 through RCRA D-11 (to monitor the southwest flow). Shallow bedrock wells RCRA-D5, RCRA-D6, RCRA-D14, and RCRA-D15 have been designated as up-gradient. A more detailed discussion of the bedrock hydrogeology and the divergent bedrock groundwater flow pattern can be found in the GWDMP.

Shallow groundwater elevations for First Half 2012 monitoring event indicate a southerly flow direction and do not provide any indication of divergent flow. A northeasterly flow component of the shallow bedrock groundwater did not appear to exist during the time of monitoring for First Half of 2012. Therefore, RCRA-D1, RCRA-D2, RCRA-D3, RCRA-D4, RCRA-D14, and RCRA-D15 were up-gradient of the Impound 8 Facility and RCRA-D5, RCRA-D6, RCRA-D7, RCRA-D8, RCRA-D9, RCRA-D10, RCRA-D11, RCRA-D12, RCRA-D13R were down-gradient of the Impound 8 Facility at the time of the First Half 2012 monitoring event.

Calculations of the estimated shallow bedrock groundwater flow velocity on April 9, 2012 were performed for the east and west sides of the Impound 8 Facility. Groundwater flow velocity for the west side from RCRA-D14 to well RCRA-D11 was calculated to be 48.01 ft/yr**.** Groundwater flow velocity for the east side from RCRA-D1 to well RCRA-D6 was calculated to be 39.87 ft/yr. These calculations of the estimated shallow bedrock groundwater flow velocity on April 9, 2012 are included in Appendix B.

5.0 SAMPLE ANALYSIS AND RESULTS

5.1 Data Validation

The laboratory logged the samples into the Laboratory Information Management System upon receipt and scheduled the samples for preparation and analysis. Samples were prepared and analyzed in accordance with methods specified in Table C-1 (Appendix C). Monitoring well samples were reported in NJDEP "Full Laboratory Deliverables Format" suitable for data evaluation. Data evaluation was performed by Golder Associates, following guidelines provided by NJDEP Standard Operating Procedures for the Quality Assurance Data Validation of Analytical Deliverables for Target Compound List (TCL) Organics (based on the United States Environmental Protection Agency (USEPA) SOW OLM04.3 with Revisions) (October 2001) and Inorganics (based on USEPA SW-846 Methods) (May 2002), where applicable to the USEPA Methods shown in Table 3. The data quality assessment is presented in Appendix C. The majority of data was determined to be acceptable; with only a few exceptions, and accuracy and precision requirements were achieved. The Electronic Data Deliverable is being provided with this report in the NJDEP Hazsite File Format (NJDEP copies only).

5.2 Overburden Groundwater Quality

Overburden monitoring well analytical data is summarized in Tables 6A, 7A, 8A, 9A, and 10 and graphs of trendlines for wells that exceeded NJDEP Groundwater Quality Standards (GWQS) during the April 2012 monitoring event included as Appendix D. A summary of overburden analytical data is presented below for Impoundments 1 and 2 (Section 5.2.1), Impoundments 3, 4 and 5 (Section 5.2.2), Impoundment 14 (Section 5.2.3), Impoundments 17 and 18 (Section 5.2.4), and Impoundments 19 and 24, and Lagoons 6 and 7 (Section 5.2.5).

5.2.1 Impoundments 1 and 2 Area Groundwater Quality

As detailed in Table 3, overburden monitoring wells sampled in the Impoundments 1 and 2 area during the First Half 2012 Monitoring Event included: 01-MW-01, 01-MW-02, 01-MW-03, FLOD-W1S, FLOD-W2S, PZ-12-3, PZ-12-4, PZ-12-5, and PZ-12-6. These wells were sampled for VOCs, semi-volatile organic compounds (SVOCs), and target analyst list (TAL) Metals. Additionally, PZ-12-6 was sampled for chlorides, cyanide, and phenols. It should be noted that the removal action overburden groundwater extraction and treatment system downgradient of Impoundments 1 and 2 began operating on May 11, 2012. This system includes a slurry wall which was installed approximately six weeks prior to the start-up of the system. The following summarizes results of these analyses:

<u>VOCs</u>

- Benzene was detected above the GWQS (1 µg/L) in each monitoring well during the sampling event ranging in concentration from 497 µg/L to 374,000 µg/L. Benzene levels have shown significant fluctuation in flood plain wells more recently (i.e., 2010 to 2012).

These fluctuations may be attributable to flooding events; however, a trend cannot be discerned at this time.

- Chlorobenzene, 1,2-dichlorobenzene (1,2-DCB), and 1,4-dichlorobenzene (1,4-DCB) exceeded their respective GWQS in wells 01-MW-02, 01-MW-03, FLOD-W1S, PZ-12-4 (1,2-DCB only), and PZ-12-6 (chlorobenzene and 1,2-DCB only). These data are generally consistent with historic data.
- Toluene was detected above the GWQS (600 µg/L) in 01-MW-02, 01-MW-03, FLOD-W1S, PZ-12-4, PZ-12-5 and PZ-12-6. These results are generally consistent with previous data except at PZ-12-5 and PZ-12-6 where April 2012 results are higher than the previous two data points (only 3 data points on record). These trends will continue to be monitored to evaluate any developing trends.
- Other VOCs that were detected intermittently above the GWQS during the First Half 2012 Monitoring Event included acetone (01-MW-02), chloroethane (01-MW-03), m&p xylenes (01-MW-03, and PZ-12-4), 1,2,4-trichlorobenzene (01-MW-02), and total xylenes (01-MW-02, 01-MW-03, PZ-12-4, and PZ-12-6). These data are generally consistent with historic data.

<u>SVOCs</u>

- PZ-12-3, located up-gradient of the impoundments and 01-MW-01, which is located at the down-gradient edge of Impoundment 1 contained no SVOCs above GWQS.
- The following SVOCs were detected above the GWQS during the April 2012 monitoring event: aniline, naphthalene, and nitrobenzene. However, the limited datasets available for these compounds at these wells (generally two years of data) do not provide enough information to evaluate whether the sporadic concentrations are increasing or decreasing with time. These data will continue to be monitored to evaluate any developing trends.
- Acetophenone, 2-methylnaphthalene, and pentachlorophenol were detected above the GWQS at fewer locations during the April 2012 monitoring event. These compounds also have small fluctuating datasets and will continue to be monitored in future events to evaluate any developing trends.

<u>Inorganics</u>

- The following inorganics were detected above the GWQS during the April 2012 monitoring event: aluminum, arsenic, beryllium, iron, manganese, mercury, nickel and sodium. Generally, wells with larger datasets exhibit stable to decreasing trends; except iron in 01-MW-03 where recent data are trending downward. Aluminum, arsenic, iron, manganese, and sodium are naturally occurring soil and bedrock constituents and have been historically detected in up-gradient wells (Hydroqual, 2006).
- Mercury, chromium, cobalt, and lead were detected above the GWQS at fewer locations during the April 2012 monitoring event. These data are consistent with previous results.

5.2.2 Impoundments 3, 4, and 5 Area Groundwater Quality

Overburden monitoring wells sampled in the Impoundments 3, 4, and 5 area during the First Half 2012 Monitoring Event included: 28R and MW-2. These wells were sampled for VOCs, SVOCs, chlorides (MW-2 only), arsenic and cadmium. A review of the report tables and the trendlines indicate the following:

- No VOCs or SVOCs were detected above the GWQS in monitoring well 28R.

- The following VOCs were detected above the GWQS in monitoring well MW-2 during the sampling event: benzene, chlorobenzene, toluene, and 1,2,4-trichlorobenzene. Trends for these compounds are generally stable to decreasing.
- The following SVOCs were detected above the GWQS in monitoring well MW-2 during the sampling event: 2-Methylnaphthalene, 4-chloroaniline, aniline, naphthalene, and N-nitrosodiphenylamine. Generally trends for these compounds are stable to decreasing.
- Both 28R and MW-2 exceeded the GWQS for arsenic (3 µg/L) with concentrations of 15.1 µg/L and 28.3 µg/L, respectively. These levels are decreased from historic concentrations.
- Cadmium was not detected at either well during the April 2012 monitoring event.

5.2.3 Impoundment 14 Area Groundwater Quality

Overburden monitoring wells sampled in the Impoundment 14 area during the First Half 2012 Monitoring Event included: 19R, 21R, O-R. These wells were sampled for VOCs and SVOCs (19R only). A review of the report tables and the trendlines indicate the following:

- Benzene was detected above the GWQS in each monitoring well ranging from 1.5 µg/L to 3.1 µg/L. Concentrations of benzene in the monitoring wells are stable to decreasing in comparison with historical data.
- Only monitoring well 19R was sampled for SVOCs. 2,4-dimethylphenol, 2-methylnaphthalene, aniline, bis(2-ethylhexyl)phthalate, naphthalene, and N-nitrosodiphenylamine were detected above the GWQS. SVOC concentrations are sporadic in this well with 2,4-dimethylphenol and aniline exhibiting decreasing trends while other SVOCs listed are showing increasing trends.

5.2.4 Impoundments 17 and 18 Area Groundwater Quality

Overburden monitoring wells sampled in the Impoundments 17 and 18 area during the First Half 2012 Monitoring Event included: AAA, CCC-R (and associated field duplicate), EEE-R, III, KKK, and 16-MW-2. These wells were sampled for VOCs, SVOCs, metals (16-MW-2 was only sampled for metals), chlorides, cyanide and phenols (except III, KKK and 16-MW-2). A review of the report tables and the trendlines indicate the following:

- No VOCs were detected above the GWQS.
- There was only one SVOC exceedance of bis(2-ethylhexyl)phthalate at CCC-R (4.2 µg/L in the field duplicate) during the First Half 2012 Monitoring Event. Bis(2-ethylhexyl)phthalate was not detected in the primary sample analysis and has been below the GWQS (2 µg/L) since May 2007 (2.1 µg/L).
- The following inorganics were detected above the GWQS consistently during the First Half 2012 Monitoring Event: arsenic, iron, and manganese. Trends for these compounds are stable or decreasing except as discussed below.
- Aluminum, beryllium, chromium, lead, and nickel were detected above the GWQS at fewer locations during the April 2012 monitoring event. Trends for these compounds are stable or decreasing except as discussed below.
- Monitoring well AAA contained increased concentrations of aluminum, arsenic, chromium, iron, lead, manganese, and nickel during the First Half 2012 Monitoring Event relative to historic measurements. These increased concentrations may be the result of

elevated turbidity (800+ NTU) at the time of sample collection[3]. The sampling method will be reviewed and future results will be evaluated to assess any developing trends.

- Monitoring well III contained increased levels of aluminum, arsenic, iron and manganese during the First Half 2012 Monitoring Event compared with historic data. These current data cause trends to show overall increases for arsenic and aluminum; while iron and lead continue to show decreasing trends. These data will continue to be monitored to evaluate any developing trends. Aluminum, arsenic, iron and manganese are naturally occurring soil and bedrock constituents and have been historically detected in up-gradient wells (Hydroqual, 2006).

5.2.5 Impoundments 19 and 24 and Lagoons 6 and 7 Area Groundwater Quality

Overburden monitoring wells sampled in the Impoundments 19 and 24 and Lagoons 6 and 7 area during the First Half 2012 Monitoring Event included 32R, 34R, 38R, 42R (and associated field duplicate), and TFP-94-1R. These wells were sampled for VOCs, SVOCs (except 32R), and arsenic (except 32R). Well 38R was also sampled for chlorides, cadmium and chromium. A review of the report tables and the trendlines indicate the following:

- Benzene and chlorobenzene were detected above the GWQS in each monitoring well except 32R ranging from 12.2 µg/L to 137 µg/L and 79.6 µg/L to 8,930 µg/L, respectively. Overall trends for these wells are decreasing except for chlorobenzene at TFP-94-1R (located adjacent to the Raritan River) which exhibits sporadic levels since monitoring inception with an increasing trend.
- Additional VOC exceedances were noted in monitoring well TFP-94-1R for 1,4-dichlorobenzene and in monitoring well 38R for 1,2,4-trichlorobenzene. These detections are consistent with previous monitoring results and both have stable trends.
- The following SVOCs were detected above the GWQS: aniline, and N-nitrosodiphenylamine. Trends for these compounds in 34R and 38R are decreasing; while 42R and TFP-94-1R data show considerable fluctuation between events with overall increasing trends.
- 2-Methylnaphthalene, and bis(2-ethylhexyl)phthalate were detected above their respective GWQS 42R and 34R, respectively. These detections are comparable to historic results.
- Arsenic was detected above the GWQS in each of the wells (except 32R where arsenic was not sampled). Groundwater trendlines indicate that arsenic concentrations in these wells are decreasing or stable (anomalous 2009 and 2010 detections at 34R excluded). Arsenic is a naturally occurring soil and bedrock constituents and have been historically detected in up-gradient wells (Hydroqual, 2006).

5.3 Bedrock Groundwater Quality

Bedrock monitoring well analytical data is summarized in Tables 6B, 7B, 8B, and 9B and graphs of trendlines for wells that exceeded NJDEP GWQS are included as Appendix D. A summary of bedrock

[3] As detailed in Section 2, well AAA was purged and sampled using Volume-Averaged methods with a bailer rather than using a peristaltic pump due to equipment issues. This likely caused the increased turbidity which in turn produced elevated metals levels in the sample.

analytical data is presented below for Impoundments 1 and 2 (Section 5.3.1), production wells (Section 5.3.2), perimeter wells (Section 5.3.3), and Impoundment 8 wells (Section 5.3.4)[4].

5.3.1 Impoundments 1 and 2 Area Bedrock Groundwater Quality

Bedrock monitoring well FLOD-W2BS was sampled during the First Half 2012 Monitoring Event for VOCs, SVOC, and metals. A review of the report tables and the trendlines indicate the following:

- The following VOCs were detected above their respective GWQS: benzene, chlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene. Current concentrations of these VOCs in FLOD-W2BS are consistent with historic data with the exception of benzene (159 µg/L) which is increased since 2011 (4.7 µg/L) and is at its highest concentration since monitoring began in 2007. Until 2011, FLOD-W2BS was the only bedrock monitoring well in the Impoundment 1 and 2 Area for bedrock groundwater quality.
- Pentachlorophenol was the only SVOC[5] detected above the GWQS in monitoring well FLOD-W2BS. This compound shows a decreasing trend.
- Manganese and sodium were detected above the GWQS in monitoring well FLOD-W2BS at concentrations of 8,570 µg/L and 360,000 µg/L, respectively. The limited datasets available for these compounds indicate stable or decreasing trends. Manganese and sodium are naturally occurring soil and bedrock constituents and have been historically detected in up-gradient wells (Hydroqual, 2006).

5.3.2 Bedrock Production Well Groundwater Quality

Bedrock production wells sampled during the First Half 2012 Monitoring Event included PW-2 and PW-3. These wells were sampled for VOCs and SVOCs. A review of the report tables and the trendlines indicate the following:

- The following VOCs were detected above their respective GWQS: benzene, chlorobenzene, carbon disulfide and 1,2,4-trichlorobenzene. Historic data are limited (2010 through present) but currently indicate stable to declining concentrations.
- Aniline was the only SVOC detected above the GWQS (6 µg/L). The limited data available (2010 through present) indicate concentrations of aniline are decreasing.
- Arsenic was not detected at either well during the April 2012 monitoring event.

5.3.3 Perimeter Bedrock Groundwater Quality

Perimeter bedrock wells sampled during the First Half 2012 Monitoring Event included SS (P1, P2 and P3), TT (P1, P2 and P3), WW (P1, P2 and P3), XX (P1, P2 and P3), YY (P1, P2 and P3), and ZZ. (P1, P2, P3, and P4). These wells were sampled for VOCs. A review of the report tables and the trendlines indicate the following:

- No VOCs were detected above the GWQS in SS (P1, P2 and P3), TT (P3), WW (P2 and P3), XX (P1, P2 and P3), YY (P1 and P2), and ZZ. (P1, P2, P3 and P4).

[4] Lagoon 9A data are summarized in Section 5.6 Lagoon 9A Closure Effectiveness Evaluation.
[5] The nitrobenzene detection at FLOD-W2BS (9 B µg/L) is attributed to field rinsate blank contamination and therefore is not considered a valid exceedance.

- As discussed previously, the well integrity of SS is questionable. A recent survey of the FLUTe well SS indicated that there is no higher density bentonite water slurry within the FLUTe liner. As a result, un-impacted water from the deeper artesian hydrostratigraphic unit of the FLUTe well likely seeps into the shallower screened intervals.
- The following VOCs were detected above GWQS in TT-P1 (and its duplicate), TT-P2, WW-P1, and YY-P3: Tetrachloroethene (PCE), trichloroethene (TCE; except WW-P1 and YY-P3), vinyl chloride (only at TT-P1 and its duplicate), and cis-1,2-dichloroethene (only at TT-P1 and its duplicate). These concentrations are consistent with historic results. It is important to note that the fate and transport of chlorinated ethenes and ethanes, including parent products and daughter compounds, support the existence of a predominantly off-Site source(s). There are no significant exceedances of chlorinated ethene compounds in on-Site overburden wells.
- Arsenic was detected above the GWQS (3 µg/L) in SS-P1 (8.3 µg/L), SS-P2 (8.1 µg/L), and YY-P2 (5.4 µg/L). These data are consistent with recent results and overall show declining trends. Arsenic is a naturally occurring soil and bedrock constituents and have been historically detected in up-gradient wells (Hydroqual, 2006).

5.3.4 Impound 8 Facility Groundwater Quality

Bedrock monitoring wells sampled during the First Half 2012 Monitoring Event included RCRA-D1 through RCRA-D15. These wells were sampled for VOCs, SVOCs, metals, total dissolved solids (TDS), total organic carbon (TOC) total organic halides (TOX), pH, and conductivity[6]. A review of the report tables and the trendlines indicate the following:

- No VOCs were detected above GWQS except in RCRA-D9 and RCRA-D15 as discussed below.
- RCRA-D9 contained benzene (1.4 µg/L) slightly above the GWQS (1 µg/L). This detection is consistent with historic results.
- RCRA-D15 contained the following VOCs above their respective GWQS: carbon tetrachloride, 1,1-dichloroethene, PCE, and TCE. These concentrations are consistent with historic data.
- The following SVOCs were detected above their respective GWQS: aniline (RCRA-D9 and RCRA-D10 field duplicate only), and bis(2-ethylhexyl)phthalate (RCRA-D7). RCRA-D7 exhibit its highest level of bis(2-ethylhexyl)phthalate since October 2004 (5.1 µg/L) which is also the last and only time this compound exceeded the GWQS. Aniline in RCRA-D9 is generally consistent with historic results and exhibits an overall declining trend.
- The following inorganics were detected above their respective: aluminum, iron, manganese, and sodium. These data are consistent with historic data with the exception of iron and aluminum in monitoring well RCRA-D1 (discussed below). Aluminum, iron, manganese, and sodium are naturally occurring soil and bedrock constituents and have been historically detected in up-gradient wells (Hydroqual, 2006).
- Aluminum, iron and manganese were detected at the highest concentrations since monitoring began in 2011 at RCRA-D1. However, the limited datasets available for these compounds (three data points) do not provide enough information to fully evaluate these data. These data will continue to be monitored to evaluate any developing trends.

[6] TDS, TOC, TOX, pH, and conductivity results are discussed further in Section 5.4 Impoundment 8 Statistical Analyses.

5.4 Impound 8 Facility Statistical Analyses

In compliance with the ACO Amendment, statistical analyses were performed to compare down-gradient groundwater quality, as monitored by wells RCRA-D1 through RCRA-D4 and RCRA-D7 through RCRA-D11, to up-gradient groundwater quality, as monitored by wells RCRA-D5, RCRA-D6, RCRA-D14 and RCRA-D15. These designations were specified in the GWDMP and are maintained in this report.

For the statistical analyses, a suite of specified parameters was identified to determine if there are statistically significant differences between up-gradient and down-gradient groundwater quality in shallow bedrock monitoring wells. The suite of specified parameters includes:

- 1,1,1-Trichloroethane
- Benzene
- Chlorobenzene
- Chloroform
- Ethylbenzene
- pH
- Specific Conductivity
- TDS
- Tetrachloroethene (PCE)
- TOC
- Toluene
- TOX
- Trichloroethene (TCE)

As suggested by USEPA in *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities* (USEPA, 2009), the appropriate statistical analyses are (1) the Shapiro-Wilk Test of Normality (to confirm normality of well datasets) and (2) the Dunnett's Multiple Comparison T-test method. A complete description of these methods is provided in Appendix E. In brief, the Shapiro-Wilk Test of Normality was performed for each of the above parameters across the up-gradient wells to verify that each dataset fit a normal distribution, which is a requirement for the Multiple Comparison T-test method. This analysis confirmed a lognormal distribution for each dataset and established a log transformation of the data was necessary before further statistical analysis. Dunnett's Multiple Comparison T-test method was then performed for each down-gradient monitoring well if the parameter is present at detectable concentration and there is variance in the up-gradient well concentrations of that parameter. For parameters below detectable concentration in the up-gradient monitoring wells, a value of one-half the detection limit of the appropriate parameter was used.

Statistical analyses were performed for the following specified parameters: chlorobenzene, chloroform, pH, specific conductivity, TDS, PCE, TOC, and TCE. Statistical analyses were not performed for 1,1,1-trichloroethane, ethylbenzene, and TOX as these parameters were not detected in the up-gradient or down-gradient monitoring wells. Statistical analyses were not performed for benzene and toluene because there is no variance in the up-gradient monitoring wells. Toluene was only detected in well RCRA-D9 and estimated to be present at 0.33 µg/L, which is below the 1.0 µg/L detection limit. Benzene was only detected in well RCRA-D9 at a level (1.4 µg/L) slightly above the detection limit (1.0 µg/L). Since benzene was not detected in any of the up-gradient monitoring wells, statistical analysis could not be performed to determine if this level is of statistical significance.

Appendix E contains the statistical data. With exception of one instance (discussed below), all the calculated T-values were below the critical T-values of 5.61 for pH and 4.31 for the remaining parameters for which the statistical analyses were performed. Therefore, for these values there is no statistically significant difference between the up-gradient groundwater quality as compared to the down-gradient groundwater quality.

The calculated T-value exceeded the critical T-value for pH at well RCRA-D7 (highlighted in blue in Appendix E). The pH at this well at the time of sampling was 6.25, resulting in a calculated T-value of -12.27 as compared to the critical T-value of 5.61. Since this analysis was performed as a two-side T-test, this result indicates the pH measured at RCRA-D7 was statistically lower (and different) from the pH measured at the up-gradient wells during the same sampling event. However, historical pH data (2006 – present) ranges from 5.94 to 7.27 at RCRA-D7 which indicates this result is not likely evidence indicative of decreasing groundwater quality at RCRA-D7, but rather natural variability of groundwater quality in this area.

Overall, the statistical analyses indicate there are no statistically significant differences in groundwater quality of the down-gradient monitoring wells as compared to the up-gradient monitoring wells.

5.5 Impoundment 8 Leachate Monitoring

The Cell 1, Cell 2, Cell 3 and Cell 4 leachate detection and collection systems are being monitored in accordance with the ACO. The actual rates are determined by daily monitoring of a flow-totalizing meter installed on the leachate detection system piping. The average weekly data from the First Half 2012 monitoring event are included in Table 11. The Action Leakage Rate (ALR) is 21,302 gal per acre per day (gpad), as approved by the USEPA. Monitoring results for the First Half 2012 do not exceed the ALR.

5.6 Lagoon 9A Closure Effectiveness Evaluation

In accordance with the GWDMP for the Impound 8 Facility, and the ACO amendment, a qualitative comparison between up-gradient and down-gradient wells in the Lagoon 9A area is required to monitor

the effectiveness of the closure and potential impacts to groundwater quality. Bedrock monitoring wells associated with Lagoon 9A include RCRA-D12 through RCRA-D15. Shallow bedrock monitoring wells RCRA-D12 and RCRA-D13 were identified by the GWDMP as down-gradient of Lagoon 9A. Shallow bedrock monitoring wells RCRA-D14 and RCRA-D15 were identified as up-gradient of Lagoon 9A by the GWDMP.

The April 2012 shallow bedrock groundwater elevation data and map presented in Table 2A and Figure 6 indicate that monitoring wells RCRA-D14 and RCRA-D15 had higher groundwater elevations compared to monitoring wells RCRA-D13 and RCRA-D12, respectively.

Lagoon 9A monitoring well analytical data are summarized in Tables 6B, 7B, 8B, and 9B and graphs of trendlines for wells that exceeded NJDEP GWQS are included as Appendix D. A review of the report tables and the trendlines presented in Appendix D indicate the following with regard to groundwater concentrations:

- Carbon tetrachloride, 1,1-dichloroethene, tetrachloroethene, and trichloroethene were detected above the GWQS in up-gradient monitoring well RCRA-D15. Concentrations of VOCs in RCRA-D15 were consistent with historic data as shown on the trendlines in Appendix D. It is important to note that the fate and transport of chlorinated ethenes and ethanes, including parent products and daughter compounds, support the existence of a predominantly off-Site source(s). There are no significant exceedances of chlorinated ethene compounds in on-Site overburden wells.
- Consistent with historic data, no SVOCs were detected above the GWQS in Lagoon 9A monitoring wells.
- Iron and manganese were detected above the GWQS in down-gradient monitoring well RCRA-D12. Although only three monitoring events worth of data has been reported for RCRA-D12, data is presented in Appendix D. Iron and manganese decreased from the previous sampling event (i.e. Second Half 2011). Iron and manganese are naturally occurring soil and bedrock constituents and have been historically detected in up-gradient wells (Hydroqual, 2006).

6.0 SUMMARY

As presented in the Introduction to this report, the overall objective of the Semi-Annual Groundwater Program is to fulfill the various groundwater monitoring requirements described in Section 1.1of the ACO Agreement have been met. The following summarizes these objectives:

- **Complete the requirements of the ACO Amendment**

  The Semi-Annual Groundwater Monitoring Program has documented that the requirements of the ACO Amendment have been met, i.e., the weekly average pumping rate at pumping wells PW-2 and PW-3 during the First Half of 2012 was always greater than 650,000 gallons per day in accordance with ACO requirements. The volume of water extracted and treated during the First of Half 2012 was 121.696 million gallons (Mgal).

- **Monitor the groundwater elevation and/or groundwater quality of the following areas:**

  - **Perimeter wells**

    In general, groundwater quality at the Site perimeter is consistent with historical results. Chlorinated solvent compounds, e.g., PCE and daughter products, have been detected at wells TT-P2, WW-P1, and YY-P3. Based on an evaluation of the fate and transport of these compounds, i.e., there is no on-Site shallow “source” of chlorinated solvent compounds and the general trend across the Site is toward increased daughter product concentrations, it appears that these impacts originate from an off-Site/up-gradient source.

    An anomalous groundwater elevation measurement was identified at TT – Port 3, however no conclusion can be made at this time. Further evaluation of this well is necessary to understand the groundwater elevation anomalies at this location. The well integrity of well SS is questionable. A malfunctioning FLUTe well liner may allow un-impacted water from the deeper artesian hydrostratigraphic unit to seep into the shallower screened intervals affecting both groundwater elevation and quality measurement.

  - **Production wells**

    Concentrations of VOCs and SVOCs are stable or decreasing.

  - **Hill Property well**

    Groundwater elevation at BBBB, a bedrock groundwater well approximately 200 feet north of PW-2 and PW-3 on the Hill Property, is significantly lower than previous events (approximately 50 feet change in groundwater elevation) and lower than the nearby pumping wells which appears to be anomalous.

  - **Main Plant area**

    In general, groundwater quality in the Main Plant area is consistent with historical results. Trends are generally stable to decreasing. Groundwater elevations in overburden and bedrock are lower for this monitoring event when compared to the previous monitoring event (Second Half 2011).

  - **Impoundment 3, 4, and 5 areas**

    Trends are generally stable to decreasing. A groundwater surface depression exists near 28R due to higher groundwater elevations to the north and east, the

groundwater mound beneath Lagoon 7 to the southwest, and groundwater mound to the southeast near MW-10.

- **Impoundment 14 area**

  Concentrations of benzene in the monitoring wells are stable to decreasing in comparison with historical data. SVOC concentrations are sporadic with 2,4-dimethylphenol and aniline exhibiting decreasing trends.

- **Impoundment 17 and 18 area**

  No VOCs were detected above the GWQS.

  Aluminum, beryllium, chromium, lead, and nickel were detected above the GWQS at fewer locations during the April 2012 monitoring event. Monitoring well AAA contained increased concentrations of aluminum, arsenic, chromium, iron, lead, manganese, and nickel during the First Half 2012 Monitoring Event relative to historic measurements. These increased concentrations may be the result of elevated turbidity at the time of sample collection as metals tend to be strongly associated with solid-phase.

  Additionally overburden monitoring wells CCC-R, EEE-R and KKK were submitted for analysis of radiological compounds including radium-226, radium-228, gross alpha, and gross beta. Results of the radiological analyses were consistent with data reported during 2011.

- **Lagoons 6 and 7, and Impoundment 19 and 24 areas**

  These areas show stable to decreasing trends, however, well TFP-94-1R (located adjacent to the Raritan River) exhibits sporadic levels in several compounds (including chlorobenzene) since monitoring inception with some increasing trends.

- **Impoundments 1 and 2**

  In Impoundments 1 and 2 overburden groundwater the current VOC levels are generally consistent with historic data except in PZ-12-5 and PZ-12-6 (located east of impoundment 1) where benzene and toluene have increased since 2010. In bedrock, benzene, chlorobenzene, 1,2-dichlorobenzene, and 1,4-dichlorobenzene are consistent with historic data with the exception of benzene (159 µg/L) which is increased in FLOD-W2BS since 2011 (4.7 µg/L) and is at its highest concentration since monitoring began in 2007.

  The groundwater elevation measurement at overburden well FLOD-W2S was elevated compared to trends from other overburden wells in the area and the overall trend at the Site. Further evaluation of this well is necessary to understand the groundwater elevation anomaly at this location.

- **Monitor the Impound 8 Facility groundwater well network to gauge the effectiveness of the Impound 8 Facility interceptor trench and cut-off wall**

  In general, natural groundwater flow direction in the vicinity of the Impound 8 Facility overburden is southerly, which is consistent with historic interpretations. However, the construction of a groundwater interceptor trench and cut off wall has altered the natural groundwater flow in this area. The overburden groundwater measurements from the RCRA-S series wells are used to evaluate the effectiveness of the interceptor trench and cut-off wall at achieving these conditions. As evidenced by the consistently lower groundwater elevations in RCRA-S4 and in the wells hydraulically down-gradient of the interceptor trench and cutoff wall, the system is effective at controlling overburden groundwater at the Impound 8 Facility.

- **Maintain the Impound 8 Facility shallow bedrock groundwater monitoring well network to detect potential releases from the Impound 8 Facility**

  Overall, the statistical analyses indicate there are no statistically significant differences in groundwater quality of the down-gradient monitoring wells as compared to the up-gradient monitoring wells. The Action Leakage Rate (ALR) is 21,302 gal per acre per day (gpad), as approved by the USEPA. Monitoring results for the First Half 2012 do not exceed the current ALR.

In summary, these data indicate the overall objectives of the Semi-Annual Groundwater Program are being met at the American Cyanamid Superfund Site.

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Table 1
Summary of Groundwater Elevations (2009–2011)
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Report:	1st Half 2009		2nd Half 2009		1st Half 2010		2nd Half 2010		1st Half 2011		2nd Half 2011	
Date of Measurements:	6/16/2009		10/5/2009		4/26/2010		10/18/2010		04/25/2011		12/12/2011	
Well I.D.	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	GW Elevation (ft MSL)	DTW (ft BTOC)	MSL)
Overburden Monitoring Wells												
MW-2	7.01	27.25	9.55	24.71	7.02	27.24	11.18	23.08	7.25	27.01	7.08	27.18
MW-3	6.84	29.10	8.77	27.17	6.39	29.55	9.32	26.62	5.40	30.54	5.95	29.99
MW-5	5.95	29.05	7.88	27.12	5.95	29.05	9.67	25.33	6.18	28.82	4.95	30.05
MW-7	4.25	30.22	6.53	27.94	3.57	30.90	6.25	28.22	3.45	31.02	4.07	30.40
MW-9	10.71	30.17	15.23	25.65	13.06	27.82	13.76	27.12	11.88	29.00	12.91	27.97
MW-10	6.29	33.84	6.68	33.45	5.93	34.20	6.78	33.35	5.35	34.78	5.23	34.90
MW-12	8.23	26.03	9.96	24.30	7.78	26.48	10.76	23.50	6.24	28.02	6.65	27.61
MW-15	2.80	27.56	3.98	26.38	2.97	27.39	4.06	26.30	1.40	28.96	NM	NM
MW-17	6.85	27.57	8.28	26.14	7.10	27.32	8.85	25.57	4.66	29.76	5.60	28.82
MW-18A	7.09	27.34	7.88	26.55	6.99	27.44	7.98	26.45	6.26	28.17	6.98	27.45
MW-19	7.71	26.50	8.85	25.36	7.70	26.51	9.11	25.10	6.39	27.82	6.63	27.58
MW-22R	9.34	26.58	10.28	25.64	8.93	26.99	10.75	25.17	7.89	28.03	8.09	27.83
MW-25	7.24	27.13	8.75	25.62	7.47	26.90	8.78	25.59	5.76	28.61	6.71	27.66
MW-28	8.76	26.43	9.88	25.31	8.49	26.70	8.63	26.56	7.46	27.73	7.94	27.25
MP11-W1S	7.53	26.19	8.72	25.00	7.45	26.27	8.75	24.97	6.15	27.57	6.36	27.36
MW05-W1S	9.49	24.88	11.05	23.32	8.97	25.40	11.93	22.44	7.74	26.63	7.52	26.85
28-R	4.57	26.31	4.40	26.48	3.72	27.16	4.29	26.59	27.33	3.55	3.68	27.20
19-R	3.59	33.35	3.96	32.98	3.46	33.48	5.11	31.83	3.55	33.48	3.61	33.33
21-R	18.01	33.70	18.51	33.20	17.93	33.78	19.85	31.86	3.46	34.13	17.53	34.18
O-R	5.65	31.96	6.57	31.04	5.67	31.94	7.33	30.28	17.58	33.73	4.53	33.08
AAA	5.41	23.90	6.34	22.97	3.57	25.74	5.83	23.48	3.76	25.55	5.05	24.26
CCC-R	16.02	23.61	17.48	22.15	13.21	26.42	17.08	22.55	13.72	25.91	14.15	25.48
EEE-R	14.75	23.23	16.45	21.53	9.50	28.48	16.02	21.96	11.23	26.75	11.79	26.19
III	4.22	26.47	5.63	25.06	3.49	27.20	3.84	26.85	2.68	28.01	3.51	27.18
KKK	14.32	25.31	15.94	23.69	12.60	27.03	14.09	25.54	12.60	27.03	12.90	26.73
16-MW-2	4.63	24.17	5.35	23.45	4.30	24.50	4.79	24.01	4.17	24.63	4.70	24.10
32-R	8.35	30.30	9.73	28.92	8.71	29.94	2.24	36.41	NM	NM	8.17	30.48
34-R	16.43	26.48	17.98	24.93	16.76	26.15	17.40	25.51	14.02	28.89	15.26	27.65
36-R	11.69	27.78	13.53	25.94	11.78	27.69	12.83	26.64	9.30	30.17	10.56	28.91
P24-91-1	15.40	26.00	17.17	24.23	14.96	26.44	17.61	23.79	12.83	28.57	13.03	28.37
38-R	14.20	29.04	15.02	28.22	14.07	29.17	16.71	26.53	12.23	31.01	12.54	30.70
41-R	12.53	27.93	12.88	27.58	12.16	28.30	13.52	26.94	11.13	29.33	11.00	29.46
42-R	13.65	27.40	14.36	26.69	12.88	28.17	13.66	27.39	12.11	28.94	12.61	28.44
TFP-94-1R	5.28	26.00	7.39	23.89	5.01	26.27	7.10	24.18	3.47	27.81	4.55	26.73
PZ-12-3**	NM	NM	NM	NM	NM	NM	5.58	23.35	3.27	25.66	3.72	25.21
PZ-12-4**	NM	NM	NM	NM	NM	NM	5.54	22.06	4.25	23.35	4.36	23.24
PZ-12-5**	NM	NM	NM	NM	NM	NM	3.16	23.48	2.99	23.65	2.87	23.77
PZ-12-6**	NM	NM	NM	NM	NM	NM	4.75	21.73	3.69	22.79	4.01	22.47
01-MW-01**	NM	NM	NM	NM	NM	NM	7.22	20.11	3.81	23.52	4.28	23.05
01-MW-02**	NM	NM	NM	NM	NM	NM	7.67	20.27	4.35	23.59	4.78	23.16
01-MW-03**	NM	NM	NM	NM	NM	NM	4.14	22.87	3.11	23.90	3.22	23.79
FLOD-W2S**	NM	NM	NM	NM	NM	NM	7.83	18.48	4.15	22.16	6.00	20.31
FLOD-W1S**	NM	NM	NM	NM	NM	NM	8.34	19.28	5.24	22.38	6.05	21.57

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Well I.D.	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	GW Elevation (ft MSL)	DTW (ft BTOC)	MSL)
Staff Gauges												
Staff Gauge-1	2.58	21.03	3.50	20.11	1.67	21.94	2.55	21.06	1.94	21.67	1.28	22.33
Staff Gauge-4	11	28.29	10.96	28.33	10.46	28.83	10.83	28.46	10.52	28.77	14.28	25.01
Staff Gauge-7	0.23	18.96	NM	NM	NM	NM	1.33	17.86	NM	NM	NM	NM
Staff Gauge-8	5.91	27.91	5.96	27.86	5.75	28.07	6.06	27.76	NM	NM	NM	NM
Staff Gauge-9	5.5	25.79	5.58	25.71	5.00	26.29	3.52	27.77	3.95	27.34	NM	NM
Staff Gauge-10	NM	NM	NM	NM	NM	NM	7.83	26.95	8.48	26.3	NM	NM
Staff Gauge-11	2.29	26.29	3.25	25.33	2.96	25.62	0.99	27.59	1.48	27.1	5.68	22.9
Staff Gauge-12	3.87	24.67	4.29	24.25	3.50	25.04	3.41	25.13	3.92	24.62	6.47	22.07
Staff Gauge-14	NM	NM	NM	NM	2.75	22.67	3.73	21.69	2.94	22.48	3.38	22.04
Staff Gauge-15	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Staff Gauge-16	3.5	24.81	3.54	24.77	4.25	24.06	4.41	23.9	3.58	24.73	5.15	23.16
Production Well												
PW-2*	78.07	-41.74	82.86	-46.53	80.44	-44.11	81.42	-45.09	78.79	-42.46	65.98	-29.65
PW-3*	78.84	-42.35	80.73	-44.24	79.80	-43.31	81.67	-45.18	NM	NM	60.21	-23.72
Perimeter Bedrock Wells												
SS-P1	1.71	30.60	2.81	29.50	1.74	30.57	3.43	28.88	Artesian	NA	1.78	30.53
SS-P2	1.69	30.62	2.82	29.49	1.75	30.56	3.78	28.53	2.57	29.74	1.80	30.51
SS-P3	1.89	30.42	2.84	29.47	1.88	30.43	3.48	28.83	Artesian	NA	1.87	NA
TT-P1	23.53	24.28	24.68	23.13	22.15	25.66	22.78	25.03	21.08	26.73	22.17	25.64
TT-P2	28.86	18.95	26.50	21.31	27.40	20.41	29.02	18.79	27.00	20.81	25.04	22.77
TT-P3	62.83	-15.02	70.87	-23.06	68.38	-20.57	52.00	-4.19	70.02	-22.21	64.49	-16.68
WW-P1	8.21	16.97	9.57	15.61	6.67	18.51	9.72	15.46	6.01	19.17	7.73	17.45
WW-P2	7.63	17.55	9.08	16.10	6.41	18.77	9.65	15.53	5.53	19.65	6.49	18.69
WW-P3	7.18	18.00	8.65	16.53	6.67	18.51	8.90	16.28	5.21	19.97	5.65	19.53
XX-P1	7.97	18.80	9.98	16.79	6.49	20.28	9.74	17.03	6.18	20.59	8.00	18.77
XX-P2	7.78	18.99	14.45	12.32	7.21	19.56	8.98	17.79	5.59	21.18	3.02	23.75
XX-P3	6.98	19.79	14.62	12.15	9.08	17.69	10.06	16.71	7.07	19.70	3.36	23.41
YY-P1	39.53	32.66	20.55	51.64	38.65	33.54	42.74	29.45	39.48	32.71	33.58	38.61
YY-P2	44.86	27.33	41.05	31.14	43.95	28.24	45.53	26.66	43.51	28.68	43.49	28.70
YY-P3	49.01	23.18	52.87	19.32	50.38	21.81	52.37	19.82	49.10	23.09	48.48	23.71
ZZ-P1	11.85	30.26	13.02	29.09	11.12	30.99	13.21	28.90	10.23	31.88	9.21	32.90
ZZ-P2	11.43	30.68	12.32	29.79	3.80	38.31	7.64	34.47	3.29	38.82	2.77	39.34
ZZ-P3	4.69	37.42	5.72	36.39	3.70	38.41	7.31	34.80	3.50	38.61	2.18	39.93
ZZ-P4	5.00	37.11	5.91	36.20	3.88	38.23	6.62	35.49	3.61	38.50	2.54	39.57
Main Plant Bedrock Wells												
AAAA-O*	6.51	26.10	7.80	24.81	6.33	26.28	6.56	26.05	4.32	28.29	5.29	27.32
AAAA-S	6.79	25.62	7.98	24.43	6.23	26.18	6.84	25.57	4.94	27.47	5.59	26.82
AAAA-I	8.17	24.20	9.30	23.07	7.50	24.87	8.54	23.83	6.48	25.89	6.30	26.07
AAAA-D	6.34	26.06	7.73	24.67	6.17	26.23	6.50	25.90	4.14	28.26	5.12	27.28
BBBB-O*	9.44	26.60	10.58	25.46	8.97	27.07	11.08	24.96	7.98	28.06	8.42	27.62
BBBB-S	21.18	15.04	21.44	14.78	21.26	14.96	23.83	12.39	19.42	16.80	18.43	17.79
BBBB-D	114.31	-78.21	114.94	-78.84	115.96	-79.86	117.03	-80.93	118.10	-82.00	170.31	-134.21
CCCC-S	17.29	21.85	18.45	20.69	17.34	21.80	18.70	20.44	16.32	22.82	15.67	23.47
CCCC-I	11.60	27.41	12.39	26.62	11.86	27.15	12.84	26.17	15.83	23.18	15.05	23.96
CCCC-D	17.28	21.27	18.26	20.29	16.83	21.72	18.25	20.30	11.20	27.35	12.12	26.43

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Bridgewater, NJ

Report:	1st Half 2009		2nd Half 2009		1st Half 2010		2nd Half 2010		1st Half 2011		2nd Half 2011	
Date of Measurements:	6/16/2009		10/5/2009		4/26/2010		10/18/2010		04/25/2011		12/12/2011	
Well I.D.	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	GW Elevation (ft MSL)	DTW (ft BTOC)	MSL)
DDDD-O*	22.78	26.89	23.88	25.79	22.13	27.54	25.30	24.37	22.06	27.61	21.31	28.36
DDDD-S	43.01	6.66	44.24	5.43	42.38	7.29	43.21	6.46	40.78	8.89	37.57	12.10
DDDD-D	22.57	27.10	23.68	25.99	21.95	27.72	25.14	24.53	21.87	27.80	28.10	21.57
EEEE-P1	36.61	25.43	37.35	24.69	29.57	32.47	37.94	24.10	34.83	27.21	34.29	27.75
EEEE-P2	36.50	25.54	37.30	24.74	35.37	26.67	37.75	24.29	34.71	27.33	34.56	27.48
EEEE-P3	38.22	23.82	39.08	22.96	37.02	25.02	39.38	22.66	36.20	25.84	36.04	26.00
EEEE-P4	40.75	21.29	41.54	20.50	35.36	26.68	41.75	20.29	38.96	23.08	37.70	24.34
FFFF-P1	39.04	23.63	39.98	22.69	36.98	25.69	40.12	22.55	37.24	25.43	36.60	26.07
FFFF-P2	40.58	22.09	41.54	21.13	39.41	23.26	41.46	21.21	38.56	24.11	38.11	24.56
FFFF-P3	41.60	21.07	42.85	19.82	40.71	21.96	42.67	20.00	39.76	22.91	39.31	23.36
FFFF-P4	47.86	14.81	49.23	13.44	45.98	16.69	48.67	14.00	46.10	16.57	44.04	18.63
GGGG-P1	29.58	21.46	39.91	11.13	37.00	14.04	38.00	13.04	27.84	23.20	27.19	23.85
GGGG-P2	29.81	21.23	30.40	20.64	28.78	22.26	7.73	43.31	27.98	23.06	27.23	23.81
GGGG-P3	37.57	13.47	30.14	20.90	28.88	22.16	30.20	20.84	36.00	15.04	33.38	17.66
IIII-O*	0.39	27.85	2.78	25.46	0.17	28.07	6.06	22.18	0.18	28.06	3.92	24.32
IIII-S	7.59	20.65	9.27	18.97	6.83	21.41	9.22	19.02	5.36	22.88	7.54	20.70
IIII-D	-0.95	29.19	-1.12	29.36	-2.81	31.05	0.06	28.18	-3.10	31.34	-2.84	25.40
JJJJ-O*	0.54	28.26	2.90	25.90	0.17	28.63	6.25	22.55	0.59	28.21	5.08	23.72
JJJJ-S	5.42	23.38	8.38	20.42	5.02	23.78	8.31	20.49	4.88	23.92	6.91	21.89
JJJJ-D	-0.78	29.58	-0.78	29.58	-2.76	31.56	0.33	28.47	-3.03	31.83	-2.08	26.72
Impoundments 1&2 Bedrock Wells												
FLOD-W2BS	NM	NM	NM	NM	NM	NM	NM	NM	5.13	NA	8.96	17.16
Impound 8 Overburden Wells												
RCRA-S1	10.58	57.80	14.59	53.79	9.47	58.91	13.19	55.19	8.60	59.78	9.91	58.47
RCRA-S2	DRY	DRY	DRY	DRY	DRY	DRY	18.95	42.26	18.95	42.26	18.95	42.26
RCRA-S3	17.92	43.15	18.20	42.87	18.01	43.06	18.17	42.90	17.51	43.56	17.75	43.32
RCRA-S4	20.82	36.86	20.79	36.89	20.79	36.89	20.84	36.84	19.61	38.07	18.41	39.27
RCRA-S5	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	Dry	DRY
RCRA-S6	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	9.41	43.03	9.41	43.03
RCRA-S7	17.16	35.25	17.41	35.00	15.91	36.50	16.52	35.89	15.88	36.53	12.75	39.66
RCRA-S8	26.18	41.91	26.08	42.01	25.99	42.10	26.21	41.88	26.13	41.96	26.02	42.07
RCRA-S9	14.48	49.33	14.61	49.20	14.50	49.31	14.74	49.07	14.33	49.48	14.43	49.38
RCRA-S10	12.34	56.91	11.89	57.36	12.42	56.83	12.36	56.89	12.42	56.83	12.39	56.86
RCRA-S11	4.90	64.39	7.40	61.89	4.65	64.64	6.82	62.47	3.53	65.76	4.15	65.14
RCRA-S12	11.52	58.16	DRY	DRY	11.35	58.33	DRY	DRY	10.50	59.18	Dry	DRY
RCRA-S13R	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	Dry	DRY
RCRA-S14	28.23	38.49	28.02	38.70	27.35	39.37	25.70	41.02	28.38	38.34	27.62	39.10
RCRA-S15	20.14	34.19	20.28	34.05	19.07	35.26	28.38	25.95	19.25	35.08	17.03	37.30
Impound 8 Shallow Bedrock												
RCRA-D1*	37.44	27.35	39.70	25.09	37.26	27.53	39.64	25.15	36.23	28.56	35.21	29.58
RCRA-D2*	35.53	27.43	37.69	25.27	35.72	27.24	37.81	25.15	34.43	28.53	33.37	29.59
RCRA-D3*	34.12	27.55	35.55	26.12	34.36	27.31	36.40	25.27	33.05	28.62	31.89	29.78
RCRA-D4*	33.69	27.68	34.80	26.57	33.49	27.88	36.02	25.35	32.63	28.74	31.53	29.84
RCRA-D5*	33.85	25.24	34.81	24.28	33.25	25.84	35.50	23.59	32.28	26.81	31.15	27.94
RCRA-D6*	29.87	23.49	31.09	22.27	29.46	23.90	31.53	21.83	28.54	24.82	26.85	26.51
RCRA-D7*	28.58	23.58	29.37	22.79	27.65	24.51	29.28	22.88	26.75	25.41	24.8	27.36

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Date of Measurements:	6/16/2009		10/5/2009		4/26/2010		10/18/2010		04/25/2011		12/12/2011	
Well I.D.	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	MSL)	DTW (ft BTOC)	GW Elevation (ft MSL)	DTW (ft BTOC)	MSL)
RCRA-D8*	31.19	21.64	32.19	20.64	30.31	22.52	31.68	21.15	29.27	23.56	28.36	24.47
RCRA-D9*	24.16	32.35	23.69	32.82	22.55	33.96	24.00	32.51	23.33	33.18	22.34	34.17
RCRA-D10*	36.52	23.19	37.55	22.16	35.65	24.06	37.77	21.94	34.80	24.91	34.22	25.49
RCRA-D11*	43.82	22.77	44.92	21.67	43.09	23.50	44.98	21.61	41.98	24.61	41.51	25.08
RCRA-D12*	44.79	24.71	45.62	23.88	43.64	25.86	45.98	23.52	42.94	26.56	42.1	27.40
RCRA-D13*	45.31	25.37	47.05	23.63	44.60	26.08	46.80	23.88	43.69	26.99	42.84	27.84
RCRA-D14*	41.41	28.27	42.25	27.43	40.28	29.40	43.30	26.38	39.98	29.70	39.67	30.01
RCRA-D15*	40.89	25.30	41.79	24.40	39.99	26.20	42.25	23.94	38.63	27.56	38.66	27.53
8-D8*	28.26	23.48	29.93	21.81	28.08	23.66	29.82	21.92	26.82	24.92	26.61	25.13

Notes:

Abbreviations and Symbols

GW - Groundwater
ft BTOC - Feet below top of casing
ft msl - Feet mean sea level
NA - Not available
NM - Not measured
DTW - Depth to water in ft BTOC
* - Denotes open bedrock well
** - Denotes that reporting did not begin for well until 2nd Half 2010

1) DTW and GW elevation information from Semi-Annual GW Monitoring Reports produced by O'Brien & Gere Engineers, Inc.
2) Beginning with the second quarter 2008 sampling event, artesian flow at wells IIII-D and JJJJ-D was measured
3) 1st Half 2010 Production Well, Perimeter Bedrock Wells and Main Plant Bedrock Wells based on "July_2010_GWEs.xls" produced by O'Brien & Gere Engineers, Inc.
4) Staff gauge reference elevations were resurveyed in February 2012 and listed in the Staff Guage Reference Manual (March 2012) by O'Brien & Gere Engineers, Inc.
5) Reporting for FLOD-W2BS did not begin until First Half 2011

Table 2A
Summary of Monitoring Point Construction Information and April 2012 Depths to Water
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						Screened Interval Elevation				Depth to Water	Groundwater Elevation
Well I.D.	Permit Number	Casing Elevation (ft msl)	Well Depth (ft BTOC)	Screen Length (ft)	Bottom of Well Elevation (ft msl)	Top (ft btoc)	Bottom (ft btoc)	Top (ft msl)	Bottom (ft msl)	04/09/2012 (ft btoc)	04/09/2012 (ft msl)
Overburden Monitoring Wells											
MW-2	25-33944-3	34.26	21.1	15	13.2	6.1	21.1	28.2	13.2	7.08	27.18
MW-3	25-33945-1	35.94	22.2	15	13.7	7.2	22.2	28.7	13.7	8.84	27.10
MW-5	25-33946-0	35	22.5	15	12.5	7.5	22.5	27.5	12.5	7.34	27.66
MW-7	25-33949-4	34.47	21.7	15	12.8	6.7	21.7	27.8	12.8	5.59	28.88
MW-9	25-33950-8	40.88	25.1	20	15.8	5.1	25.1	35.8	15.8	14.83	26.05
MW-10	NA	40.13	22	18	18.1	4	22	36.1	18.1	5.91	34.22
MW-12	NA	34.26	22	18	12.3	4	22	30.3	12.3	11.28	22.98
MW-15	NA	30.36	23	20	7.4	3	23	27.4	7.4	4.58	25.78
MW-17	NA	34.42	19	15	15.4	4	19	30.4	15.4	8.73	25.69
MW-18A	NA	34.43	19	17	15.4	2	19	32.4	15.4	8.29	26.14
MW-19	NA	34.21	20	18	14.2	2	20	32.2	14.2	9.54	24.67
MW-22R	25-00065340	35.92	20	10	15.9	10	20	25.9	15.9	10.79	25.13
MW-25	NA	34.37	16.5	12.5	17.9	4	16.5	30.4	17.9	9.43	24.94
MW-28	NA	35.19	22	19	13.2	3	22	32.2	13.2	10.42	24.77
MP11-W1S	25-00065339	33.72	18	10	15.7	8	18	25.7	15.7	9.11	24.61
MW05-W1S	25-00065337	34.37	18	10	16.4	8	18	26.4	16.4	12.41	21.96
28-R	NA	30.88	17.8	5	13.1	12.8	17.8	18.1	13.1	5.06	25.82
19-R	25-31283-9	36.94	11.6	5	25.3	6.6	11.6	30.3	25.3	4.23	32.71
21-R	25-31284-7	51.71	22.6	5	29.1	17.6	22.6	34.1	29.1	18.60	33.11
O-R	25-22855	37.61	17.9	5	19.7	12.9	17.9	24.7	19.7	6.46	31.15
AAA	25-24942-8	29.31	16.8	5	12.5	11.8	16.8	17.5	12.5	6.95	22.36
CCC-R	25-50084	39.63	26.5	5	13.1	21.5	26.5	18.1	13.1	17.90	21.73
EEE-R	25-31282-1	37.98	25.1	5	12.9	20.1	25.1	17.9	12.9	16.93	21.05
III	25-25027-2	30.69	19.8	5	10.9	14.8	19.8	15.9	10.9	6.26	24.43
KKK	25-25029-9	39.63	28.3	5	11.3	23.3	28.3	16.3	11.3	16.35	23.28
16-MW-2	NA	28.8	16.1	5	12.7	11.1	16.1	17.7	12.7	6.01	22.79
32-R	25-33063-2	38.65	20.4	5	18.3	15.4	20.4	23.3	18.3	9.29	29.36
34-R	25-33062-4	42.91	26.3	5	16.6	21.3	26.3	21.6	16.6	17.85	25.06
36-R	25-33061-6	39.47	24.7	5	14.8	19.7	24.7	19.8	14.8	13.40	26.07
P24-91-1	25-39209	41.4	26.8	10	14.6	16.8	26.8	24.6	14.6	16.86	24.54
38-R	25-33064-1	43.24	25.6	5	17.6	20.6	25.6	22.6	17.6	14.70	28.54
41-R	25-33065-9	40.46	26.2	5	14.3	21.2	26.2	19.3	14.3	13.86	26.60
42-R	25-33066-7	41.05	24.2	5	16.9	19.2	24.2	21.9	16.9	14.35	26.70
TFP-94-1R	25-49039	31.28	19.1	16.57	12.2	2.53	19.1	20.2	12.2	7.41	23.87
PZ-12-3	25-56207	28.93	15	10	13.9	5	15	23.9	13.9	5.44	23.49
PZ-12-4	25-56208	27.6	16.8	10	10.8	6.8	16.8	20.8	10.8	5.30	22.30
PZ-12-5	25-56209	26.64	14.9	10	11.8	4.9	14.9	21.8	11.8	4.53	22.11
PZ-12-6	25-56210	26.48	15.2	10	11.3	5.2	15.2	21.3	11.3	4.89	21.59
01-MW-01	25-35176	27.33	15.4	NA	NA	NA	NA	NA	NA	5.69	21.64
01-MW-02	25-35177	27.94	18.1	NA	NA	NA	NA	NA	NA	6.25	21.69
01-MW-03	25-35178	27.01	17.5	NA	NA	NA	NA	NA	NA	3.96	23.05
FLOD-W2S	25-00067732	26.31	12.4	5	13.9	7.4	12.4	18.9	13.9	5.70	21.92
FLOD-W1S	25-00067731	27.62	17.4	5	10.2	12.4	17.4	15.2	10.2	7.02	19.29

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Well I.D.	Permit Number	Casing Elevation (ft msl)	Well Depth (ft BTOC)	Screen Length (ft)	Bottom of Well Elevation (ft msl)	Top (ft btoc)	Bottom (ft btoc)	Top (ft msl)	Bottom (ft msl)	04/09/2012 (ft btoc)	04/09/2012 (ft msl)
Staff Gauges											
Staff Gauge-1	NA	18.46	NA	NA	NA	NA	NA	NA	NA	1.46	17.00
Staff Gauge-4	NA	33.81	NA	NA	NA	NA	NA	NA	NA	1.08	32.73
Staff Gauge-7	NA	16.17	NA	NA	NA	NA	NA	NA	NA	0.86	15.31
Staff Gauge-8	NA	32.16	NA	NA	NA	NA	NA	NA	NA	2.30	29.86
Staff Gauge-9	NA	24.02	NA	NA	NA	NA	NA	NA	NA	1.38	22.64
Staff Gauge-10	NA	23.68	NA	NA	NA	NA	NA	NA	NA	10.04	13.64
Staff Gauge-11	NA	28.75	NA	NA	NA	NA	NA	NA	NA	4.90	23.85
Staff Gauge-12	NA	28.7	NA	NA	NA	NA	NA	NA	NA	4.48	24.22
Staff Gauge-14	NA	25.59	NA	NA	NA	NA	NA	NA	NA	3.03	22.56
Staff Gauge-15	NA	24.93	NA	NA	NA	NA	NA	NA	NA	7.93	17.00
Staff Gauge-16	NA	27.84	NA	NA	NA	NA	NA	NA	NA	4.90	22.94
Production Well											
PW-2*	25-42456	36.33	300	250	-263.7	50	300	-13.7	-263.7	114.82	-78.49
PW-3*	25-42216	36.49	299	249	-262.5	50	299	-13.5	-262.5	99.75	-63.26
Perimeter Bedrock Wells											
SS-P1	25-20094-3	32.31	60	20	-27.7	40	60	-20	-40	2.44	29.87
SS-P2	25-20094-3	32.31	255	20	-222.7	235	255	-215	-235	2.40	29.91
SS-P3	25-20094-3	32.31	382	20	-349.7	362	382	-342	-362	1.84	30.47
TT-P1	25-20095	47.81	75	20	-27.2	55	75	-17	-37	24.86	22.95
TT-P2	25-20095	47.81	192	20	-144.2	172	192	-134	-154	29.81	18.00
TT-P3	25-20095	47.81	310	20	-262.2	290	310	-252	-272	47.02	0.79
WW-P1	25-20632-0	25.18	35	20	-9.8	15	35	-1	-21	8.98	16.20
WW-P2	25-20632-0	25.18	152	20	-126.8	132	152	-118	-138	7.33	17.85
WW-P3	25-20632-0	25.18	375	20	-349.8	355	375	-341	-361	6.34	18.84
XX-P1	25-20630	26.77	35	20	-8.2	15	35	0	-20	9.00	17.77
XX-P2	25-20630	26.77	190	20	-163.2	170	190	-155	-175	8.35	18.42
XX-P3	25-20630	26.77	380	20	-353.2	360	380	-345	-365	10.69	16.08
YY-P1	25-20631	72.19	55.5	20	16.7	35.5	55.5	34	14	42.38	29.81
YY-P2	25-20631	72.19	170.5	20	-98.3	150.5	170.5	-81	-101	46.43	25.76
YY-P3	25-20631	72.19	345.5	20	-273.3	325.5	345.5	-256	-276	52.83	19.36
ZZ-P1	25-20633-8	42.11	70.5	20	-28.4	50.5	70.5	-10	-30	12.38	29.73
ZZ-P2	25-20633-8	42.11	200.5	20	-158.4	180.5	200.5	-140	-160	5.62	36.49
ZZ-P3	25-20633-8	42.11	280.5	20	-238.4	260.5	280.5	-220	-240	4.97	37.14
ZZ-P4	25-20633-8	42.11	320.5	10	-278.4	310.5	320.5	-270	-280	5.00	37.11
Main Plant Bedrock Wells											
AAAA-O*	25-25419	32.61	82.3	57.3	-49.7	25	82.3	7.6	-49.7	8.73	23.88
AAAA-S	25-25419	32.41	123.4	13.4	-91	110	123.4	-77.6	-91	8.91	23.50
AAAA-I	25-25419	32.37	201.3	6.3	-168.9	195	201.3	-162.6	-168.9	9.68	22.69
AAAA-D	25-25419	32.4	300	10	-267.6	290	300	-257.6	-267.6	8.53	23.87
BBBB-O*	25-25420-1	36.04	68.5	28.5	-32.5	40	68.5	-4	-32.5	12.25	23.79
BBBB-S	25-25420-1	36.22	155	10	-118.8	145	155	-108.8	-118.8	25.04	11.18
BBBB-D	25-25420-1	36.1	360	10	-323.9	350	360	-313.9	-323.9	168.70	-132.60
CCCC-S	25-25421	39.14	59.4	10	-20.3	49.4	59.4	-19	-29	20.09	19.05

Table 2A
Summary of Monitoring Point Construction Information and April 2012 Depths to Water
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

						Screened Interval Elevation				Depth to Water	Groundwater Elevation
Well I.D.	Permit Number	Casing Elevation (ft msl)	Well Depth (ft BTOC)	Screen Length (ft)	Bottom of Well Elevation (ft msl)	Top (ft btoc)	Bottom (ft btoc)	Top (ft msl)	Bottom (ft msl)	04/09/2012 (ft btoc)	04/09/2012 (ft msl)
CCCC-I	25-25421	39.01	185.9	10	-146.9	175.9	185.9	-109	-119	14.01	25.00
CCCC-D	25-25421	38.55	375	10	-336.5	365	375	-259	-269	19.43	19.12
DDDD-O*	25-25422	49.67	50.9	10.9	-1.2	40	50.9	9.7	-1.2	26.01	23.66
DDDD-S	25-25422	49.67	69.1	10	-19.4	59.1	69.1	-170.3	-180.3	47.69	1.98
DDDD-D	25-25422	49.67	365	10	-315.3	355	365	-305.3	-315.3	25.87	23.80
EEEE-P1	25-27783-9	62.04	55.5	20	6.5	35.5	55.5	26	6	38.14	23.90
EEEE-P2	25-27783-9	62.04	90.5	20	-28.5	70.5	90.5	-9	-29	38.04	24.00
EEEE-P3	25-27783-9	62.04	170.5	20	-108.5	150.5	170.5	-89	-109	39.83	22.21
EEEE-P4	25-27783-9	62.04	280.5	20	-218.5	260.5	280.5	-199	-219	42.61	19.43
FFFF-P1	25-27784-7	62.67	55.5	20	7.2	35.5	55.5	25	5	40.98	21.69
FFFF-P2	25-27784-7	62.67	95.5	20	-32.8	75.5	95.5	-15	-35	42.00	20.67
FFFF-P3	25-27784-7	62.67	200.5	20	-137.8	180.5	200.5	-120	-140	43.88	18.79
FFFF-P4	25-27784-7	62.67	275.5	20	-212.8	255.5	275.5	-195	-215	50.39	12.28
GGGG-P1	25-27785-5	51.04	60	20	-9	40	60	0	-20	31.12	19.92
GGGG-P2	25-27785-5	51.04	110	20	-59	90	110	-50	-70	31.72	19.32
GGGG-P3	25-27785-5	51.04	205	20	-154	185	205	-145	-165	40.03	11.01
IIII-O*	25-32189	28.24	80.7	42.7	-52.5	38	80.7	-9.8	-52.5	6.40	21.84
IIII-S	25-32189	28.24	172.4	27.4	-144.2	145	172.4	-116.8	-144.2	9.95	18.29
IIII-D	25-32189	28.24	320	40	-291.8	280	320	-251.8	-291.8	ARTESIAN	28.24
JJJJ-O*	25-32190-1	28.8	36.3	57	-7.5	-20.7	36.3	-9.2	-66.2	7.65	21.15
JJJJ-S	25-32190-1	28.8	225.8	35.8	-197	190	225.8	-161.2	-197	9.05	19.75
JJJJ-D	25-32190-1	28.8	395	30	-366.2	365	395	-336.2	-366.2	0.94	27.86
Impoundments 1&2 Bedrock Wells											
FLOD-W2BS	25-67733	26.12	40	15	-13.9	25	40	-0.9	-15.9	9.01	17.11
Impound 8 Overburden Wells											
RCRA-S1	25-35748-4	68.38	17.3	10	51.1	7.3	17.3	61.1	51.1	12.61	55.77
RCRA-S2	25-35749-2	61.21	19.4	10	41.8	9.4	19.4	51.8	41.8	DRY	41.8
RCRA-S3	25-35750-6	61.07	22.5	10	38.6	12.5	22.5	48.6	38.6	18.29	42.78
RCRA-S4	2535753-1	57.68	21	10	36.7	11	21	46.7	36.7	DRY	36.7
RCRA-S5	25-35752-2	57.97	15.2	5	42.8	10.2	15.2	47.8	42.8	DRY	42.8
RCRA-S6	25-35751-4	52.44	9.8	3	42.6	6.8	9.8	45.6	42.6	DRY	42.6
RCRA-S7	25-35759-0	52.41	24	10	28.4	14	24	38.4	28.4	15.92	36.49
RCRA-S8	25-35757-3	68.09	27.9	10	40.2	17.9	27.9	50.2	40.2	26.11	41.98
RCRA-S9	25-35756-5	63.81	23.3	11	40.5	12.3	23.3	51.5	40.5	15.51	48.30
RCRA-S10	25-35755-7	69.25	12.5	5	56.8	7.5	12.5	61.8	56.8	12.49	56.76
RCRA-S11	25-35758-1	69.29	11.6	5	57.7	6.6	11.6	62.7	57.7	5.47	63.82
RCRA-S12	25-35754-9	69.68	11.6	5	58.1	6.6	11.6	63.1	58.1	DRY	58.1
RCRA-S13R	25-43417	67.11	19.3	NA	47.8	NA	NA	NA	47.8	DRY	47.8
RCRA-S14	25-43418	66.72	30.2	NA	36.5	NA	NA	NA	36.5	27.65	39.07
RCRA-S15	25-43419	54.33	25.2	NA	29.1	NA	NA	NA	29.1	19.58	34.75

Table 2A
Summary of Monitoring Point Construction Information and April 2012 Depths to Water
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

						Screened Interval Elevation				Depth to Water	Groundwater Elevation
Well I.D.	Permit Number	Casing Elevation (ft msl)	Well Depth (ft BTOC)	Screen Length (ft)	Bottom of Well Elevation (ft msl)	Top (ft btoc)	Bottom (ft btoc)	Top (ft msl)	Bottom (ft msl)	04/09/2012 (ft btoc)	04/09/2012 (ft msl)
Impound 8 Shallow Bedrock											
RCRA-D1*	25-35765-4	64.79	71.7	50.9	-6.9	20.8	71.7	44	-6.9	40.02	24.77
RCRA-D2*	25-35764-6	62.96	81.4	60.6	-18.4	20.8	81.4	42.2	-18.4	38.21	24.75
RCRA-D3*	25-35763-8	61.67	75.7	54.9	-14	20.8	75.7	40.9	-14	36.79	24.88
RCRA-D4*	25-35762-0	61.37	83.8	58	-22.4	25.8	83.8	35.6	-22.4	36.36	25.01
RCRA-D5*	25-35752-2	59.09	59.3	37.3	-0.2	22	59.3	37.1	-0.2	36.23	22.86
RCRA-D6*	25-35751-4	53.36	58.7	38.2	-5.3	20.5	58.7	32.9	-5.3	32.67	20.69
RCRA-D7*	25-35759-0	52.16	66.2	28.7	-14	37.5	66.2	14.7	-14	30.27	21.89
RCRA-D8*	25-35760-3	52.83	62.9	20.9	-10.1	42	62.9	10.8	-10.1	33.34	19.49
RCRA-D9*	25-35747-6	56.51	87.7	58.7	-31.2	29	87.7	27.5	-31.2	28.75	27.76
RCRA-D10*	25-357-55-7	59.71	72.4	57.4	-12.7	15	72.4	44.7	-12.7	38.58	21.13
RCRA-D11*	25-35758-1	66.59	89.8	51.8	-23.2	38	89.8	28.6	-23.2	45.79	20.80
RCRA-D12*	25-35745-0	69.5	77.1	15	-7.6	62.1	77.1	7.4	-7.6	46.49	23.01
RCRA-D13*	25-35746-8	70.68	85.9	58.1	-15.2	27.8	85.9	42.9	-15.2	47.38	23.30
RCRA-D14*	25-35742-5	69.68	80.5	55.4	-10.8	25.1	80.5	44.6	-10.8	43.38	26.30
RCRA-D15*	25-35743-3	66.19	83.9	23.5	-17.7	60.4	83.9	5.8	-17.7	42.80	23.39
8-D8*	25-29745-7	51.74	72.4	59.9	-20.7	12.5	72.4	39.2	-20.7	30.79	20.95

Notes:
ft BTOC - feet below top of casing
ft msl - feet mean sea level
NA - Not available
NM - Not measured
DTW - Depth to water
Monitoring point construction information provided by O'Brien & Gere Engineers, Inc.
PW-2 and PW-3 groundwater elevation measurments were performed 04/10/2012.
* denotes open bedrock well
- Water level at well MJ was not gauged because modifications made by well owner prevent access.
-Staff gauge reference elevations were resurveyed in site datum (Feb 2012). Reference elevations in site datum were converted to ft MSL in NGVD29 (site datum- 69.29 ft = approximately ft MSL NGVD29). Water elevations were determined using converted reference elevations in approximately NGVD29.

Checked by: CMD 6/27/2012

Table 2B
Comparison of Groundwater Elevations
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Well I.D.	Groundwater Elevation Second Half of 2011 (ft MSL)	Groundwater Elevation First Half 2012 (ft MSL)	Change (ft; from last event to this event)
Overburden Monitoring Wells			
MW-2	27.18	27.18	0.00
MW-3	29.99	27.10	-2.89
MW-5	30.05	27.66	-2.39
MW-7	30.40	28.88	-1.52
MW-9	27.97	26.05	-1.92
MW-10	34.90	34.22	-0.68
MW-12	27.61	22.98	-4.63
MW-15	NM	25.78	NA
MW-17	28.82	25.69	-3.13
MW-18A	27.45	26.14	-1.31
MW-19	27.58	24.67	-2.91
MW-22R	27.83	25.13	-2.70
MW-25	27.66	24.94	-2.72
MW-28	27.25	24.77	-2.48
MP11-W1S	27.36	24.61	-2.75
MW05-W1S	26.85	21.96	-4.89
28-R	27.20	25.82	-1.38
19-R	33.33	32.71	-0.62
21-R	34.18	33.11	-1.07
O-R	33.08	31.15	-1.93
AAA	24.26	22.36	-1.90
CCC-R	25.48	21.73	-3.75
EEE-R	26.19	21.05	-5.14
III	27.18	24.43	-2.75
KKK	26.73	23.28	-3.45
16-MW-2	24.10	22.79	-1.31
32-R	30.48	29.36	-1.12
34-R	27.65	25.06	-2.59
36-R	28.91	26.07	-2.84
P24-91-1	28.37	24.54	-3.83
38-R	30.70	28.54	-2.16
41-R	29.46	26.60	-2.86
42-R	28.44	26.70	-1.74
TFP-94-1R	26.73	23.87	-2.86
PZ-12-3	25.21	23.49	-1.72
PZ-12-4	23.24	22.30	-0.94
PZ-12-5	23.77	22.11	-1.66
PZ-12-6	22.47	21.59	-0.88
01-MW-01	23.05	21.64	-1.41
01-MW-02	23.16	21.69	-1.47
01-MW-03	23.79	23.05	-0.74
FLOD-W2S	20.31	21.92	1.61
FLOD-W1S	21.57	19.29	-2.28

Table 2B
Comparison of Groundwater Elevations
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Well I.D.	Groundwater Elevation Second Half of 2011 (ft MSL)	Groundwater Elevation First Half 2012 (ft MSL)	Change (ft; from last event to this event)
Staff Gauges			
Staff Gauge-1	22.33	17.00	-5.33
Staff Gauge-4	25.01	32.73	7.72
Staff Gauge-7	NM	15.31	NA
Staff Gauge-8	NM	29.86	NA
Staff Gauge-9	NM	22.64	NA
Staff Gauge-10	NM	13.64	NA
Staff Gauge-11	22.90	23.85	0.95
Staff Gauge-12	22.07	24.22	2.15
Staff Gauge-14	22.04	22.56	0.52
Staff Gauge-15	NM	17.00	NA
Staff Gauge-16	23.16	22.94	-0.22
Production Well			
PW-2*	-29.65	-78.49	-48.84
PW-3*	-23.72	-63.26	-39.54
Former Hill Property			
PW-16*	NM	NM	NA
Perimeter Bedrock Wells			
SS-P1	30.53	29.87	-0.66
SS-P2	30.51	29.91	-0.60
SS-P3	NA	30.47	NA
TT-P1	25.64	22.95	-2.69
TT-P2	22.77	18.00	-4.77
TT-P3	-16.68	0.79	17.47
WW-P1	17.45	16.20	-1.25
WW-P2	18.69	17.85	-0.84
WW-P3	19.53	18.84	-0.69
XX-P1	18.77	17.77	-1.00
XX-P2	23.75	18.42	-5.33
XX-P3	23.41	16.08	-7.33
YY-P1	38.61	29.81	-8.80
YY-P2	28.70	25.76	-2.94
YY-P3	23.71	19.36	-4.35
ZZ-P1	32.90	29.73	-3.17
ZZ-P2	39.34	36.49	-2.85
ZZ-P3	39.93	37.14	-2.79
ZZ-P4	39.57	37.11	-2.46
Main Plant Bedrock Wells			
AAAA-O*	27.32	23.88	-3.44
AAAA-S	26.82	23.50	-3.32
AAAA-I	26.07	22.69	-3.38
AAAA-D	27.28	23.87	-3.41
BBBB-O*	27.62	23.79	-3.83
BBBB-S	17.79	11.18	-6.61
BBBB-D	-134.21	-132.60	1.61
CCCC-S	23.47	19.05	-4.42
CCCC-I	23.96	25.00	1.04
CCCC-D	26.43	19.12	-7.31
DDDD-O*	28.36	23.66	-4.70

Table 2B
Comparison of Groundwater Elevations
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Well I.D.	Groundwater Elevation Second Half of 2011 (ft MSL)	Groundwater Elevation First Half 2012 (ft MSL)	Change (ft; from last event to this event)
DDDD-S	12.10	1.98	-10.12
DDDD-D	21.57	23.80	2.23
EEEE-P1	27.75	23.90	-3.85
EEEE-P2	27.48	24.00	-3.48
EEEE-P3	26.00	22.21	-3.79
EEEE-P4	24.34	19.43	-4.91
FFFF-P1	26.07	21.69	-4.38
FFFF-P2	24.56	20.67	-3.89
FFFF-P3	23.36	18.79	-4.57
FFFF-P4	18.63	12.28	-6.35
GGGG-P1	23.85	19.92	-3.93
GGGG-P2	23.81	19.32	-4.49
GGGG-P3	17.66	11.01	-6.65
IIII-O*	24.32	21.84	-2.48
IIII-S	20.70	18.29	-2.41
IIII-D	25.40	28.24	2.84
JJJJ-O*	23.72	21.15	-2.57
JJJJ-S	21.89	19.75	-2.14
JJJJ-D	26.72	27.86	1.14
Impoundments 1&2 Shallow Bedrock Wells			
FLOD-W2BS	17.16	17.11	-0.05
Impound 8 Facility Overburden Wells			
RCRA-S1	58.47	55.77	-2.70
RCRA-S2	42.26	DRY	>0.46
RCRA-S3	43.32	42.78	-0.54
RCRA-S4	39.27	DRY	>2.57
RCRA-S5	DRY	DRY	NA
RCRA-S6	43.03	DRY	>0.43
RCRA-S7	39.66	36.49	-3.17
RCRA-S8	42.07	41.98	-0.09
RCRA-S9	49.38	48.30	-1.08
RCRA-S10	56.86	56.76	-0.10
RCRA-S11	65.14	63.82	-1.32
RCRA-S12	DRY	DRY	NA
RCRA-S13R	DRY	DRY	NA
RCRA-S14	39.10	39.07	-0.03
RCRA-S15	37.30	34.75	-2.55
Impound 8 Facility Shallow Bedrock Wells			
RCRA-D1*	29.58	24.77	-4.81
RCRA-D2*	29.59	24.75	-4.84
RCRA-D3*	29.78	24.88	-4.90
RCRA-D4*	29.84	25.01	-4.83
RCRA-D5*	27.94	22.86	-5.08
RCRA-D6*	26.51	20.69	-5.82
RCRA-D7*	27.36	21.89	-5.47
RCRA-D8*	24.47	19.49	-4.98
RCRA-D9*	34.17	27.76	-6.41
RCRA-D10*	25.49	21.13	-4.36

Table 2B
Comparison of Groundwater Elevations
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Well I.D.	Groundwater Elevation Second Half of 2011 (ft MSL)	Groundwater Elevation First Half 2012 (ft MSL)	Change (ft; from last event to this event)
RCRA-D11*	25.08	20.80	-4.28
RCRA-D12*	27.40	23.01	-4.39
RCRA-D13*	27.84	23.30	-4.54
RCRA-D14*	30.01	26.30	-3.71
RCRA-D15*	27.53	23.39	-4.14
8-D8*	25.13	20.95	-4.18

Notes:
1) Staff gauge rerference elevations were resurveyed in site datum (Feb 2012). Reference elevations in site datum were converted to approximately Ft MSL in NGVD29 (site datum - 69.29 ft = approximately ft MSL NGVD29). Groundwater elevations were determined using converted reference elevations in approximately NGVD29
2) NA = Value not available or could not be calculated
3) NM = Not Measured
4) DRY = Well was dry
5) Groundwater elevation change value listed with a greater than symbol indicates that the well was dry and the change in groudwater is calculated only to the bottom of the well screen elevation. Therefore, the value is listed with > because actual change is greater
6) * Open borehole

Compiled by: BAC 7/03/2012; Checked by ASM 7/03/2012

Table 3
Monitoring Program Summary
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Well I.D.	Date Sampled	Permit Number	Sampling Equipment	Well Type	Water Level	VOC	SVOC	TAL Metals	Chlorides	CN, Phenols	Total Dissolved Solids	Total Organic Carbon	Total Organic Halides	pH	Conductivity	Arsenic	Cadmium	Chromium	Radiologicals
Impoundments 1&2																			
PZ-12-3	4/10/12	25-56207	Submersible pump	Overburden	X	X	X	X											
PZ-12-4	4/11/12	25-56208	Peristaltic Pump to purge, bailer to sample	Overburden	x	X	X	X											
PZ-12-5	4/10/12	25-56209	Submersible pump	Overburden	X	X	X	X											
PZ-12-6	4/11/12	25-56210	Submersible pump	Overburden	X	X	X	X	X	X									
01-MW-01	4/12/12	25-35176	Submersible pump	Overburden	X	X	X	X											
01-MW-02	4/12/12	25-35177	Submersible pump	Overburden	X	X	X	X											
01-MW-03	4/11/12	25-35178	Submersible pump	Overburden	X	X	X	X											
FLOD-W2S	4/11/12	25-00067732	Submersible pump	Overburden	X	X	X	X											
FLOD-W1S	4/11/12	25-00067731	Submersible pump	Overburden	X	X	X	X											
FLOD-W2BS	4/11/12	25-00067733	Submersible pump	Bedrock	X	X	X	X											
Impoundments 3,4, & 5																			
MW-2	4/12/12	25-33944-3	Submersible pump	Overburden	X	X	X		X							X	X		
MW-3	NS	25-33945-1	NA	Overburden	X														
MW-5	NS	25-33946-0	NA	Overburden	X														
MW-7	NS	25-33949-4	NA	Overburden	X														
MW-9	NS	25-33950-8	NA	Overburden	X														
28R	4/14/12	NA	Submersible pump	Overburden	X	X	X									X	X		
Impounment 14																			
19R	4/14/12	25-31283-9	Submersible pump	Overburden	X	X	X												
21R	4/12/12	25-31284-7	Submersible pump	Overburden	X	X													
OR	4/12/12	NA	Submersible pump	Overburden	X	X													
Impoundments 17/18 Group II																			
AAA	4/13/12	25-24942	bailer to purge, bailer to sample	Overburden	X	X	X	X	X	X									
CCC-R	4/13/12	25-50084	Submersible pump	Overburden	X	X	X	X	X	X									X
EEE-R	4/13/12	25-31282-1	Submersible pump	Overburden	X	X	X	X	X	X									X
III	4/13/12	25-25027	Peristaltic Pump to purge, bailer to sample	Overburden	X	X	X	X	X										
KKK	4/13/12	25-25029	Peristaltic Pump to purge, bailer to sample	Overburden	X	X	X	X	X										X
16-MW-2	4/13/12	NA	Submersible pump	Overburden	X			X											
Impoundments19/24 Lagoon 6&7																			
32R	4/14/12	25-33063-2	Submersible pump	Overburden	X	X													
34R	4/14/12	25-33062-4	Submersible pump	Overburden	X	X	X									X			
36R	NS	25-33061-6	NA	Overburden	X														
P24-91-1	NS	25-39209	NA	Overburden	X														
38R	4/14/12	25-33064-1	Submersible pump	Overburden	X	X	X		X							X	X	X	
41R	NS	25-33065-9	NA	Overburden	X														
42R	4/14/12	25-33066-7	Submersible pump	Overburden	X	X	X									X			
TFP-94-1R	4/14/12	25-49039	Submersible pump	Overburden	X	X	X									X			
Main Plant																			
MW-15	NS	NA	NA	Overburden	X														
MW-18A	NS	NA	NA	Overburden	X														
MW-19	NS	NA	NA	Overburden	X														
MW-22R	NS	NA	NA	Overburden	X														
MW-25	NS	NA	NA	Overburden	X														
MW-28	NS	NA	NA	Overburden	X														
MP11-W1S	NS	NA	NA	Overburden	X														
AAAA-O	NS	25-25419	NA	Bedrock	X														
AAAA-S	NS	25-25419	NA	Bedrock	X														
AAAA-I	NS	25-25419	NA	Bedrock	X														
AAAA-D	NS	25-25419	NA	Bedrock	X														
BBBB-O	NS	25-25420	NA	Bedrock	X														
BBBB-S	NS	25-25420	NA	Bedrock	X														
BBBB-D	NS	25-25420	NA	Bedrock	X														
CCCC-S	NS	25-25421	NA	Bedrock	X														

Table 3
Monitoring Program Summary
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Well I.D.	Date Sampled	Permit Number	Sampling Equipment	Well Type	Water Level	VOC	SVOC	TAL Metals	Chlorides	CN, Phenols	Total Dissolved Solids	Total Organic Carbon	Total Organic Halides	pH	Conductivity	Arsenic	Cadmium	Chromium	Radiologicals
CCCC-I	NS	25-25421	NA	Bedrock	X														
CCCC-D	NS	25-25421	NA	Bedrock	X														
DDDD-O	NS	25-25422	NA	Bedrock	X														
DDDD-S	NS	25-25422	NA	Bedrock	X														
DDDD-D	NS	25-25422	NA	Bedrock	X														
EEEE-P1	NS	25-27783-9	NA	Bedrock	X														
EEEE-P2	NS	25-27783-9	NA	Bedrock	X														
EEEE-P3	NS	25-27783-9	NA	Bedrock	X														
EEEE-P4	NS	25-27783-9	NA	Bedrock	X														
FFFF-P1	NS	25-27784-7	NA	Bedrock	X														
FFFF-P2	NS	25-27784-7	NA	Bedrock	X														
FFFF-P3	NS	25-27784-7	NA	Bedrock	X														
FFFF-P4	NS	25-27784-7	NA	Bedrock	X														
GGGG-P1	NS	25-27785-5	NA	Bedrock	X														
GGGG-P2	NS	25-27785-5	NA	Bedrock	X														
GGGG-P3	NS	25-27785-5	NA	Bedrock	X														
IIII-O	NS	25-32189	NA	Bedrock	X														
IIII-S	NS	25-32189	NA	Bedrock	X														
IIII-D	NS	25-32189	NA	Bedrock	X														
JJJJ-O	NS	25-32190-1	NA	Bedrock	X														
JJJJ-S	NS	25-32190-1	NA	Bedrock	X														
JJJJ-D	NS	25-32190-1	NA	Bedrock	X														
Perimeter																			
SS-P1	4/11/12	25-20094	FLUTe™ pumping system	Bedrock	X	X										X			
SS-P2	4/11/12	25-20094	FLUTe™ pumping system	Bedrock	X	X										X			
SS-P3	4/11/12	25-20094	FLUTe™ pumping system	Bedrock	X	X										X			
TT-P1	4/13/12	25-20095	FLUTe™ pumping system	Bedrock	X	X										X			
TT-P2	4/13/12	25-20095	FLUTe™ pumping system	Bedrock	X	X										X			
TT-P3	4/13/12	25-20095	FLUTe™ pumping system	Bedrock	X	X										X			
WW-P1	4/11/12	25-20632-0	FLUTe™ pumping system	Bedrock	X	X													
WW-P2	4/11/12	25-20632-0	FLUTe™ pumping system	Bedrock	X	X													
WW-P3	4/11/12	25-20632-0	FLUTe™ pumping system	Bedrock	X	X													
XX-P1	4/13/2012	25-20630	FLUTe™ pumping system	Bedrock	X	X													
XX-P2	4/13/12	25-20630	FLUTe™ pumping system	Bedrock	X	X													
XX-P3	4/14/2012	25-20630	FLUTe™ pumping system	Bedrock	X	X													
YY-P1	4/11/12	25-20631	FLUTe™ pumping system	Bedrock	X	X										X			
YY-P2	4/11/12	25-20631	FLUTe™ pumping system	Bedrock	X	X										X			
YY-P3	4/11/12	25-20631	FLUTe™ pumping system	Bedrock	X	X										X			
ZZ-P1	4/20/12	25-20633-8	FLUTe™ pumping system	Bedrock	X	X													
ZZ-P2	4/20/12	25-20633-8	FLUTe™ pumping system	Bedrock	X	X													
ZZ-P3	4/20/12	25-20633-8	FLUTe™ pumping system	Bedrock	X	X													
ZZ-P4	4/20/12	25-20633-8	FLUTe™ pumping system	Bedrock	X	X													
Production																			
PW-2	4/10/12	25-42456	High capacity vertical turbine pumps	Bedrock	X	X	X									X			
PW-3	4/10/12	25-40851	High capacity vertical turbine pumps	Bedrock	X	X	X									X			
Other Well																			
MW-10	NS	NA	NA	Overburden	X														
MW-12	NS	NA	NA	Overburden	X														
MW-17	NS	NA	NA	Overburden	X														
MW05-W1S	NS	NA	NA	Overburden	X														
Impound 8																			
RCRA-S1	NS	25-35748-4	NA	Overburden	X														
RCRA-S2	NS	25-35749-2	NA	Overburden	X														
RCRA-S3	NS	25-35750-6	NA	Overburden	X														
RCRA-S4	NS	25-35753-1	NA	Overburden	X														
RCRA-S5	NS	25-35752-2	NA	Overburden	X														

Table 3
Monitoring Program Summary
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Well I.D.	Date Sampled	Permit Number	Sampling Equipment	Well Type	Water Level	VOC	SVOC	TAL Metals	Chlorides	CN, Phenols	Total Dissolved Solids	Total Organic Carbon	Total Organic Halides	pH	Conductivity	Arsenic	Cadmium	Chromium	Radiologicals
RCRA-S6	NS	25-35751-4	NA	Overburden	X														
RCRA-S7	NS	25-35759-0	NA	Overburden	X														
RCRA-S8	NS	25-35757-3	NA	Overburden	X														
RCRA-S9	NS	25-35756-5	NA	Overburden	X														
RCRA-S10	NS	25-35755-7	NA	Overburden	X														
RCRA-S11	NS	25-35758-1	NA	Overburden	X														
RCRA-S12	NS	25-35754-9	NA	Overburden	X														
RCRA-S13R	NS	25-43417	NA	Overburden	X														
RCRA-S14	NS	25-43418	NA	Overburden	X														
RCRA-S15	NS	25-43419	NA	Overburden	X														
RCRA-D1	4/11/12	25-35765-4	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D2	4/10/12	25-35764-6	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D3	4/10/12	25-35763-8	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D4	4/10/12	25-35762-0	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D5	4/10/12	25-35752-2	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D6	4/10/12	25-35751-4	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D7	4/12/12	25-35759-0	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D8	4/12/12	25-35760-3	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D9	4/12/12	25-35747-6	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D10	4/12/12	25-35755-7	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D11	4/11/12	25-35744-1	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
8-D8		25-29745-7	NA	Bedrock	X														
Impound 8 / Lagoon 9A																			
RCRA-D12	4/11/12	25-35745-0	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D13	4/11/12	25-35746-8	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D14	4/11/12	25-35742-5	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
RCRA-D15	4/11/12	25-35743-3	Bladder pumping system	Bedrock	X	X	X	X			X	X	X	X	X				
Cuckold's Brook																			
Staff Gauge-1	NS	NA	NA	NA	X														
Staff Gauge-4	NS	NA	NA	NA	X														
Staff Gauge-7	NS	NA	NA	NA	X														
Staff Gauge-8	NS	NA	NA	NA	X														
Staff Gauge-9	NS	NA	NA	NA	X														
Staff Gauge-10	NS	NA	NA	NA	X														
Staff Gauge-11	NS	NA	NA	NA	X														
Staff Gauge-12	NS	NA	NA	NA	X														
Staff Gauge-14	NS	NA	NA	NA	X														
Staff Gauge-15	NS	NA	NA	NA	X														
Staff Gauge-16	NS	NA	NA	NA	X														

Notes:
(1) Total metals analysis for arsenic, barium, cadmium, chromium, copper, iron, lead, manganese, mercury, selenium, silver and zinc, only
(2) Field sampling activities performed by Accutest Laboratories.
Abbreviations:
NS - Not Sampled
NA - Not Applicable

Checked by: CMD 6/27/2012

Table 4
Field Parameter Measurements - April 2012
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

		Temperature °C	pH SU	Specific Conductivity mS/cm	Turbidity ntu	Dissolved Oxygen mg/L	Oxidation-Reduction Potential mV
Sample ID	Date	Result	Result	Result	Result	Result	Result
01-MW-01	4/12/2012	9.47	3.57	1.49	2.7	9.02	310
01-MW-02	4/12/2012	11.07	2.54	8.22	8.0	2.81	343
01-MW-03	4/11/2012	10.91	2.02	4.84	6.2	4.23	407
16-MW-2	4/13/2012	11.63	6.55	0.732	12.9	7.34	-109
19R	4/14/2012	15.30	7.10	0.259	15.1	8.20	-49
21R	4/12/2012	12.52	6.69	0.369	17.0	5.51	120
28R	4/14/2012	13.19	5.95	0.974	6.0	5.62	-3
32R	4/14/2012	13.62	6.52	1.42	16.5	4.36	-102
34R	4/14/2012	12.69	6.85	0.752	5.2	2.65	-100
38R	4/14/2012	14.01	6.50	0.233	5.4	3.09	-70
42R	4/14/2012	15.90	6.76	1.25	34.7	5.50	-42
AAA	4/13/2012	12.41	6.81	0.707	800+	2.34	-130
CCC-R	4/13/2012	15.41	5.83	0.93	1.1	2.89	109
EEE-R	4/13/2012	14.56	6.27	0.881	0.7	4.97	188
FLOD-W1S	4/11/2012	10.48	3.15	3.93	14.7	9.18	270
FLOD-W2BS	4/11/2012	11.86	6.09	5.21	1.4	7.32	58
FLOD-W2S	4/11/2012	9.72	4.20	0.996	15.3	5.01	167
III	4/13/2012	12.37	6.40	0.522	3.5	3.34	-49
KKK	4/13/2012	15.12	5.87	0.299	1.7	3.07	68
MW-2	4/12/2012	12.09	8.66	3.31	165	5.31	-69
O-R	4/12/2012	10.55	7.03	0.656	10.0	4.18	105
PW-2	4/10/2012	14.60	7.50	2.72	0.0	6.94	-80
PW-3	4/10/2012	13.92	7.43	2.63	0.0	6.00	-57
PZ-12-3	4/10/2012	9.23	5.50	0.256	0.0	6.93	124
PZ-12-4	4/11/2012	13.64	2.91	1.58	282	1.77	370
PZ-12-5	4/10/2012	10.79	4.87	0.784	191	3.99	97
PZ-12-6	4/11/2012	10.34	3.97	2.49	0.0	0.00	202
RCRA-D1	4/11/2012	14.83	7.42	0.762	0.3	9.80	169
RCRA-D10	4/12/2012	14.19	7.50	0.619	2.1	7.43	128
RCRA-D11	4/11/2012	13.42	7.53	0.607	0.0	9.31	120
RCRA-D12	4/11/2012	13.62	7.00	0.984	1.8	9.27	108
RCRA-D13	4/11/2012	13.78	7.21	0.552	0.3	9.99	52
RCRA-D14	4/11/2012	13.92	7.45	0.474	1.3	5.50	171
RCRA-D15	4/11/2012	13.08	7.22	0.486	0.0	12.28	181
RCRA-D2	4/10/2012	14.29	7.40	0.804	1.5	5.16	192
RCRA-D3	4/10/2012	14.58	7.45	0.950	0.4	7.58	200
RCRA-D4	4/10/2012	14.08	7.38	0.783	0.4	7.48	198
RCRA-D5	4/10/2012	14.37	7.17	1.02	0.4	5.27	193
RCRA-D6	4/10/2012	13.54	7.16	1.63	1.9	8.43	206
RCRA-D7	4/12/2012	14.75	6.28	1.23	0.9	5.06	140
RCRA-D8	4/12/2012	15.32	7.09	0.752	1.2	7.27	134
RCRA-D9	4/12/2012	15.62	6.93	1.23	2.7	5.74	-3
SS-P1	4/11/2012	12.16	7.17	0.783	0.1	4.88	83
SS-P2	4/11/2012	11.87	7.65	0.766	0.1	3.70	52
SS-P3	4/11/2012	11.33	7.69	0.91	0.1	3.62	1
TFP-94-1R	4/14/2012	10.68	7.22	1.386	1.3	5.09	-129
TT-P1	4/13/2012	13.60	7.05	0.782	0.1	3.48	6
TT-P2	4/13/2012	13.47	6.91	2.75	0.1	3.02	19
TT-P3	4/13/2012	13.27	6.71	2.98	12.1	0.90	12
XX-P1	4/13/2012	13.25	6.28	2.54	11.2	3.18	126
XX-P2	4/13/2012	12.64	6.70	2.94	0.1	2.19	21
ZZ-P1	4/20/2012	14.41	7.36	0.512	0.9	3.74	-29
ZZ-P2	4/20/2012	14.56	7.12	1.82	3.9	2.71	-21
ZZ-P3	4/20/2012	15.17	7.07	2.39	0.1	3.59	27
ZZ-P4	4/20/2012	14.33	7.11	2.54	3.2	3.70	-32

Notes:
1) All field parameter readings are at the final measurement.
2) Accutest NJDEP certification #: 12129.

QC: CMD 6/7/2012

Abbreviations:
^{o}C - degrees Celsius
SU - standard unit
mS/cm - milliSiemens per centimeter
ntu - Nephelometric Turbidity Unit
mg/L - milligram per liter
mV - millivolt

Table 5A
Production Well Pumping Rates - Jan to June 2012
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Table 5A *Site Production Well Pumping Information*

	Days*		Hours*		Gallons
Period Ending	**PW2**	**PW3**	**PW2**	**PW3**	**(Weekly Average)**
January 7, 2012	0	7	0	168	665,493
January 14, 2012	3	4	72	96	661,250
January 21, 2012	7	0	168	0	655,564
January 28, 2012	7	0	168	0	668,790
February 4, 2012	4	3	96	72	665,962
February 11, 2012	3	4	72	96	671,287
February 18, 2012	2	5	48	120	685,067
February 25, 2012	0	7	0	168	688,843
March 3, 2012	6	1	144	24	671,983
March 10, 2012	3	4	72	96	673,807
March 17, 2012	0	7	0	168	681,517
March 24, 2012	0	7	0	168	671,579
March 31, 2012	0	7	0	168	659,951
April 7, 2012	0	7	0	168	662,285
April 14, 2012	1	6	24	144	663,312
April 21, 2012	0	7	0	168	689,635
April 28, 2012	0	7	0	168	680,124
May 5, 2012	1	6	24	144	671,189
May 12, 2012	0	7	0	168	671,335
May 19, 2012	0	7	0	168	672,800
May 26, 2012	4	3	96	72	658,467
June 2, 2012	7	0	168	0	658,514
June 9, 2012	7	0	168	0	658,110
June 16, 2012	7	0	168	0	665,076
June 23, 2012	2	5	48	120	657,036
June 30, 2012	0	7	0	168	656,148
Total Running Time:	64	118	1,536	2,832	

Notes:

1) * Values for days and hours are approximate and correspond to number of days or hours running per week.

2) Values for the final week (June 29th) are based on a six day average, while the remaining are based on a seven day average.

3) System was reset on 02/10/2012 and 04/04/2012. Raw data provided by Woodard & Curran.

4) "PW2" and "PW3" refer to pumping wells 2 and 3, respectively.

Compiled by: ASM 7/02/2012

Checked by: LMC 07/03/2012

Table 5B
Production Well Pumping Rates - Cumulative
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Report Date (Month-YY)	Report Interval	Total Production Well Volume for Reporting Interval (gal)		Cumulative Total Volume Since Start-up (gal)
July-88	2Q88	24,050,000	*	24,050,000
October-88	3Q88	59,800,000	*	83,850,000
January-89	4Q88	59,800,000	*	143,650,000
April-89	1Q89	58,500,000	*	202,150,000
July-89	2Q89	59,150,000	*	261,300,000
October-89	3Q89	59,800,000	*	321,100,000
January-90	4Q89	59,800,000	*	380,900,000
April-90	1Q90	58,500,000	*	439,400,000
July-90	2Q90	59,150,000	*	498,550,000
October-90	3Q90	59,800,000	*	558,350,000
January-91	4Q90	59,800,000	*	618,150,000
April-91	1Q91	58,500,000	*	676,650,000
July-91	2Q91	59,150,000	*	735,800,000
October-91	3Q91	59,800,000	*	795,600,000
January-92	4Q91	59,800,000	*	855,400,000
April-92	1Q92	59,150,000	*	914,550,000
July-92	2Q92	59,150,000	*	973,700,000
October-92	3Q92	59,800,000	*	1,033,500,000
January-93	4Q92	59,800,000	*	1,093,300,000
April-93	1Q93	58,500,000	*	1,151,800,000
July-93	2Q93	59,150,000	*	1,210,950,000
October-93	3Q93	59,800,000	*	1,270,750,000
January-94	4Q93	59,800,000	*	1,330,550,000
March-94	1Q94	58,500,000	*	1,389,050,000
July-94	2Q94	59,150,000	*	1,448,200,000
September-94	3Q94	59,800,000	*	1,508,000,000
January-95	4Q94	59,800,000	*	1,567,800,000
April-95	1Q95	58,500,000	*	1,626,300,000
July-95	2Q95	60,200,000		1,686,500,000
October-95	3Q95	59,800,000	*	1,746,300,000
March-96	4Q95	63,100,000		1,809,400,000
April-96	1Q96	63,100,000		1,872,500,000
July-96	2Q96	61,400,000		1,933,900,000
October-96	3Q96	61,800,000		1,995,700,000
January-97	4Q96	61,900,000		2,057,600,000
April-97	1Q97	62,600,000		2,120,200,000
July-97	2Q97	62,700,000		2,182,900,000
October-97	3Q97	62,600,000		2,245,500,000
January-98	4Q97	62,900,000		2,308,400,000
April-98	1Q98	61,300,000		2,369,700,000
July-98	2Q98	61,900,000		2,431,600,000

Table 5B
Production Well Pumping Rates - Cumulative
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Report Date (Month-YY)	Report Interval	Total Production Well Volume for Reporting Interval (gal)		Cumulative Total Volume Since Start-up (gal)
October-98	3Q98	62,700,000		2,494,300,000
January-99	4Q98	62,600,000		2,556,900,000
April-99	1Q99	58,500,000	*	2,615,400,000
July-99	2Q99	61,100,000		2,676,500,000
October-99	3Q99	55,685,000		2,732,185,000
January-00	4Q99	64,440,000		2,796,625,000
April-00	1Q00	62,980,000		2,859,605,000
July-00	2Q00	59,920,000		2,919,525,000
October-00	3Q00	59,800,000	*	2,979,325,000
January-01	4Q00	59,800,000	*	3,039,125,000
April-01	1Q01	59,410,000		3,098,535,000
July-01	2Q01	59,759,000		3,158,294,000
October-01	3Q01	59,612,000		3,217,906,000
January-02	4Q01	59,800,000	*	3,277,706,000
April-02	1Q02	58,854,000		3,336,560,000
July-02	2Q02	61,826,000		3,398,386,000
October-02	3Q02	60,881,500		3,459,267,500
January-03	4Q02	61,941,000		3,521,208,500
April-03	1Q03	59,980,000		3,581,188,500
July-03	2Q03	60,358,000		3,641,546,500
October-03	3Q03	60,058,000		3,701,604,500
January-04	4Q03	61,064,000		3,762,668,500
April-04	1Q04	52,125,000		3,814,793,500
July-04	2Q04	60,355,000		3,875,148,500
October-04	3Q04	60,887,000		3,936,035,500
January-05	4Q04	61,770,000		3,997,805,500
April-05	1Q05	60,378,000		4,058,183,500
July-05	2Q05	61,454,000		4,119,637,500
October-05	3Q05	60,842,000		4,180,479,500
January-06	4Q05	60,961,000		4,241,440,500
April-06	1Q06	59,871,000		4,301,311,500
July-06	2Q06	60,320,000		4,361,631,500
October-06	3Q06	60,306,000		4,421,937,500
January-07	4Q06	61,389,000		4,483,326,500
April-07	1Q07	59,537,000		4,542,863,500
July-07	2Q07	60,420,000		4,603,283,500
October-07	3Q07	61,084,000		4,664,367,500
January-08	4Q07	61,133,000		4,725,500,500
April-08	1Q08	60,312,000		4,785,812,500
July-08	2Q08	60,314,000		4,846,126,500
October-08	3Q08	60,974,000		4,907,100,500

Table 5B
Production Well Pumping Rates - Cumulative
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Report Date (Month-YY)	Report Interval	Total Production Well Volume for Reporting Interval (gal)		Cumulative Total Volume Since Start-up (gal)
January-09	4Q08	61,238,000		4,968,338,500
July-09	1H09	120,201,000		5,088,539,500
December-09	2H09	122,131,000		5,210,670,500
July-10	1H10	120,000,000		5,330,670,500
December-10	2H10	122,000,000		5,452,670,500
July-11	1H11	119,941,000		5,572,611,500
December-11	2H11	101,895,000		5,674,506,500
July-12	**1H12**	**121,696,000**		**5,796,202,500**
		Total to Date:		5,796,202,500
Change in Volume (Dec 2011 to July 2012):				121,696,000

Notes:

* = Defaulted to 650,000 gallons per week in absence of data.

Bold = indicates this reporting interval

Compiled by: LMC 7/02/2012

Checked by: ASM 7/02/2012

Table 6A
Summary of Overburden Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		01-MW-01			01-MW-02			01-MW-03			FLOD-W1S		
Permit Number		25-35176			25-35177			25-35178			25-00067731		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		15.4			18.1			17.5			17.4		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 100	U	100	**19,500**		5000	378		250	4,940	J	5000
Acetonitrile	100	< 1000	U	1,000	< 50000	U	50,000	< 2500	U	2,500	< 50000	U	50,000
Acrolein	5	< 500	U	500	< 25000	U	25000	< 1300	U	1300	< 25000	U	25000
Acrylonitrile	2	< 500	U	500	< 25000	U	25000	< 1300	U	1300	< 25000	U	25000
Benzene	1	**4,380**		50	**153,000**		2000	**374,000**		2000	**58,600**		500
Bromochloromethane	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Bromodichloromethane	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Bromoform	4	< 40	U	40	< 2000	U	2000	< 100	U	100	< 2000	U	2000
Bromomethane	10	< 20	U	20	< 1000	U	1000	< 50	U	50	< 1000	U	1000
2-Butanone	300	< 100	U	100	< 5000	U	5000	< 250	U	250	< 5000	U	5000
Carbon Disulfide	700	< 20	U	20	183	J	1000	528		50	< 1000	U	1000
Carbon Tetrachloride	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Chlorobenzene	50	29.6		10	**1,250**		500	**72.4**		25	**384**	J	500
Chloroethane	5	< 10	U	10	< 500	U	500	**114**		25	< 500	U	500
Chloroform	70	< 10	U	10	< 500	U	500	12.4	J	25	< 500	U	500
Chloromethane	NS	< 10	U	10	451	J	500	97.4		25	< 500	U	500
2-Chlorotoluene	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
4-Chlorotoluene	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
cis-1,2-Dichloroethene	70	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
cis-1,3-Dichloropropene	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Cyclohexane	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Dibromochloromethane	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
1,2-Dibromo-3-chloropropane	0.02	< 100	U	100	< 5000	U	5000	< 250	U	250	< 5000	U	5000
1,2-Dibromoethane	0.03	< 20	U	20	< 1000	U	1000	< 50	U	50	< 1000	U	1000
1,2-Dichlorobenzene	600	591		10	**18,300**		500	**2,110**		25	**5,640**		500
1,3-Dichlorobenzene	600	3.8	J	10	< 500	U	500	28		25	< 500	U	500
1,4-Dichlorobenzene	75	40.4		10	**1,410**		500	**128**		25	**404**	J	500
Dichlorodifluoromethane	1,000	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
1,1-Dichloroethane	50	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
1,2-Dichloroethane	2	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
1,1-Dichloroethene	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
1,2-Dichloroethene, Total	NS	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
1,2-Dichloropropane	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Diethyl Ether	1,000	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
1,4-Dioxane	10	< 1300	U	1,300	< 63000	U	63,000	< 3100	U	3,100	< 63000	U	63,000
Ethyl Acetate	6,000	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Ethyl Acrylate	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Ethylbenzene	700	< 10	U	10	< 500	U	500	176		25	< 500	U	500
Freon 113	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
2-Hexanone	300	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Isopropyl Ether	20,000	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Isopropylbenzene	700	< 20	U	20	< 1000	U	1000	185		50	< 1000	U	1000
m,p-Xylenes	1,000	< 10	U	10	871		500	**2,480**		25	297	J	500
Methyl Acetate	7,000	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Methyl Cyclohexane	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
Methyl tert-Butyl Ether	70	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Methylacrylonitrile	NS	< 100	U	100	< 5000	U	5000	< 250	U	250	< 5000	U	5000
Methylene Chloride	3	< 20	U	20	< 1000	U	1000	< 50	U	50	< 1000	U	1000
4-Methyl-2-pentanone	NS	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
2-Nitropropane	NS	< 100	U	100	< 5000	U	5000	< 250	U	250	< 5000	U	5000
o-Xylene	1,000	4.7	J	10	316	J	500	881		25	113	J	500
Styrene	100	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
1,1,2,2-Tetrachloroethane	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Tetrachloroethene	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Toluene	600	< 10	U	10	**9,810**		500	**32,100**		2000	**3,000**		500
trans-1,2-Dichloroethene	100	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
trans-1,3-Dichloropropene	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
1,2,4-Trichlorobenzene	9	< 50	U	50	**205**	J	2500	< 130	U	130	< 2500	U	2500
1,1,1-Trichloroethane	30	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
1,1,2-Trichloroethane	3	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Trichloroethene	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Trichlorofluoromethane	2,000	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
1,2,3-Trichloropropane	0.03	< 50	U	50	< 2500	U	2500	< 130	U	130	< 2500	U	2500
1,3,5-Trimethylbenzene	NS	< 20	U	20	141	J	1000	228		50	< 1000	U	1000
Vinyl Chloride	1	< 10	U	10	< 500	U	500	< 25	U	25	< 500	U	500
Xylenes, Total	1,000	4.7	J	10	**1,190**		500	**3,360**		25	409	J	500

QC: CMD 6/28/2012

Table 6A
Summary of Overburden Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		FLOD-W2S			PZ-12-3			PZ-12-4			PZ-12-5		
Permit Number		25-00067732			25-56207			25-56208			25-56209		
Sample Date		4/11/2012			4/10/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		12.4			15.0			16.8			14.9		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 2000	U	2000	< 10	U	10	< 10000	U	10000	< 5000	U	5000
Acetonitrile	100	< 20000	U	20,000	< 100	U	100	< 100000	U	100,000	< 50000	U	50,000
Acrolein	5	< 10000	U	10000	< 50	U	50	< 50000	U	50000	< 25000	U	25000
Acrylonitrile	2	< 10000	U	10000	< 50	U	50	< 50000	U	50000	< 25000	U	25000
Benzene	1	**22,900**		200	**497**		5	**150,000**		1000	**70,800**		500
Bromochloromethane	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Bromodichloromethane	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Bromoform	4	< 800	U	800	< 4	U	4	< 4000	U	4000	< 2000	U	2000
Bromomethane	10	< 400	U	400	< 2	U	2	< 2000	U	2000	< 1000	U	1000
2-Butanone	300	< 2000	U	2000	< 10	U	10	< 10000	U	10000	< 5000	U	5000
Carbon Disulfide	700	< 400	U	400	< 2	U	2	< 2000	U	2000	< 1000	U	1000
Carbon Tetrachloride	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Chlorobenzene	50	< 200	U	200	0.73	J	1	< 1000	U	1000	< 500	U	500
Chloroethane	5	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Chloroform	70	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Chloromethane	NS	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
2-Chlorotoluene	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
4-Chlorotoluene	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
cis-1,2-Dichloroethene	70	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
cis-1,3-Dichloropropene	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Cyclohexane	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Dibromochloromethane	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,2-Dibromo-3-chloropropane	0.02	< 2000	U	2000	< 10	U	10	< 10000	U	10000	< 5000	U	5000
1,2-Dibromoethane	0.03	< 400	U	400	< 2	U	2	< 2000	U	2000	< 1000	U	1000
1,2-Dichlorobenzene	600	185	J	200	1.5		1	**820**	J	1000	311	J	500
1,3-Dichlorobenzene	600	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,4-Dichlorobenzene	75	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Dichlorodifluoromethane	1,000	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
1,1-Dichloroethane	50	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,2-Dichloroethane	2	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,1-Dichloroethene	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,2-Dichloroethene, Total	NS	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,2-Dichloropropane	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Diethyl Ether	1,000	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
1,4-Dioxane	10	< 25000	U	25,000	< 130	U	130	< 130000	U	130,000	< 63000	U	63,000
Ethyl Acetate	6,000	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Ethyl Acrylate	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Ethylbenzene	700	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Freon 113	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
2-Hexanone	300	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Isopropyl Ether	20,000	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Isopropylbenzene	700	< 400	U	400	< 2	U	2	< 2000	U	2000	< 1000	U	1000
m,p-Xylenes	1,000	< 200	U	200	< 1	U	1	**1,220**		1000	433	J	500
Methyl Acetate	7,000	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Methyl Cyclohexane	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
Methyl tert-Butyl Ether	70	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Methylacrylonitrile	NS	< 2000	U	2000	< 10	U	10	< 10000	U	10000	< 5000	U	5000
Methylene Chloride	3	< 400	U	400	< 2	U	2	< 2000	U	2000	< 1000	U	1000
4-Methyl-2-pentanone	NS	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
2-Nitropropane	NS	< 2000	U	2000	< 10	U	10	< 10000	U	10000	< 5000	U	5000
o-Xylene	1,000	< 200	U	200	< 1	U	1	415	J	1000	123	J	500
Styrene	100	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
1,1,2,2-Tetrachloroethane	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Tetrachloroethene	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Toluene	600	185	J	200	< 1	U	1	**10,500**		1000	**6,440**		500
trans-1,2-Dichloroethene	100	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
trans-1,3-Dichloropropene	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,2,4-Trichlorobenzene	9	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
1,1,1-Trichloroethane	30	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
1,1,2-Trichloroethane	3	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Trichloroethene	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Trichlorofluoromethane	2,000	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
1,2,3-Trichloropropane	0.03	< 1000	U	1000	< 5	U	5	< 5000	U	5000	< 2500	U	2500
1,3,5-Trimethylbenzene	NS	< 400	U	400	< 2	U	2	< 2000	U	2000	< 1000	U	1000
Vinyl Chloride	1	< 200	U	200	< 1	U	1	< 1000	U	1000	< 500	U	500
Xylenes, Total	1,000	< 200	U	200	< 1	U	1	**1,630**		1000	556		500

QC: CMD 6/28/2012

Table 6A
Summary of Overburden Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		PZ-12-6			28R			MW-2			19R		
Permit Number		25-56210			NA			25-33944-3			25-31283-9		
Sample Date		4/11/2012			4/14/2012			4/12/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		15.2			17.8			21.1			11.6		
Well Location		Impoundments 1 & 2			Impoundments 3 & 4 & 5			Impoundments 3 & 4 & 5			Impoundment 14		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 2000	U	2000	12.9		10	161	J	200	< 10	U	10
Acetonitrile	100	< 20000	U	20,000	< 100	U	100	< 2000	U	2,000	< 100	U	100
Acrolein	5	< 10000	U	10000	< 50	U	50	< 1000	U	1000	< 50	U	50
Acrylonitrile	2	< 10000	U	10000	< 50	U	50	< 1000	U	1000	< 50	U	50
Benzene	1	**93,300**		1000	0.32	J	1	**2,480**		20	**3.1**		1
Bromochloromethane	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Bromodichloromethane	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Bromoform	4	< 800	U	800	< 4	U	4	< 80	U	80	< 4	U	4
Bromomethane	10	< 400	U	400	< 2	U	2	< 40	U	40	< 2	U	2
2-Butanone	300	< 2000	U	2000	< 10	U	10	< 200	U	200	< 10	U	10
Carbon Disulfide	700	105	J	400	< 2	U	2	< 40	U	40	< 2	U	2
Carbon Tetrachloride	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Chlorobenzene	50	**68.1**	J	200	13.4		1	**367**		20	3		1
Chloroethane	5	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Chloroform	70	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Chloromethane	NS	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
2-Chlorotoluene	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
4-Chlorotoluene	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
cis-1,2-Dichloroethene	70	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
cis-1,3-Dichloropropene	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Cyclohexane	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Dibromochloromethane	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 2000	U	2000	< 10	U	10	< 200	U	200	< 10	U	10
1,2-Dibromoethane	0.03	< 400	U	400	< 2	U	2	< 40	U	40	< 2	U	2
1,2-Dichlorobenzene	600	**696**		200	14.7		1	210		20	1.3		1
1,3-Dichlorobenzene	600	< 200	U	200	0.43	J	1	< 20	U	20	< 1	U	1
1,4-Dichlorobenzene	75	< 200	U	200	1.7		1	20.5		20	< 1	U	1
Dichlorodifluoromethane	1,000	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
1,1-Dichloroethane	50	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
1,2-Dichloroethane	2	< 200	U	200	1.8		1	< 20	U	20	< 1	U	1
1,1-Dichloroethene	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
1,2-Dichloroethene, Total	NS	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
1,2-Dichloropropane	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Diethyl Ether	1,000	< 1000	U	1000	88.6		5	67.2	J	100	< 5	U	5
1,4-Dioxane	10	< 25000	U	25,000	< 130	U	130	< 2500	U	2,500	< 130	U	130
Ethyl Acetate	6,000	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Ethyl Acrylate	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Ethylbenzene	700	75.8	J	200	< 1	U	1	54.8		20	0.58	J	1
Freon 113	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
2-Hexanone	300	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Isopropyl Ether	20,000	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Isopropylbenzene	700	77.6	J	400	0.35	J	2	8.1	J	40	< 2	U	2
m,p-Xylenes	1,000	916		200	< 1	U	1	285		20	1.5		1
Methyl Acetate	7,000	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Methyl Cyclohexane	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
Methyl tert-Butyl Ether	70	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Methylacrylonitrile	NS	< 2000	U	2000	< 10	U	10	< 200	U	200	< 10	U	10
Methylene Chloride	3	< 400	U	400	< 2	U	2	< 40	U	40	< 2	U	2
4-Methyl-2-pentanone	NS	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
2-Nitropropane	NS	< 2000	U	2000	< 10	U	10	< 200	U	200	< 10	U	10
o-Xylene	1,000	325		200	< 1	U	1	143		20	0.54	J	1
Styrene	100	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Tetrachloroethene	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Toluene	600	**8,160**		200	< 1	U	1	**924**		20	14.9		1
trans-1,2-Dichloroethene	100	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
trans-1,3-Dichloropropene	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
1,2,4-Trichlorobenzene	9	< 1000	U	1000	0.77	J	5	**9.4**	J	100	< 5	U	5
1,1,1-Trichloroethane	30	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
1,1,2-Trichloroethane	3	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Trichloroethene	1	< 200	U	200	0.48	J	1	< 20	U	20	< 1	U	1
Trichlorofluoromethane	2,000	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
1,2,3-Trichloropropane	0.03	< 1000	U	1000	< 5	U	5	< 100	U	100	< 5	U	5
1,3,5-Trimethylbenzene	NS	102	J	400	< 2	U	2	68.8		40	< 2	U	2
Vinyl Chloride	1	< 200	U	200	< 1	U	1	< 20	U	20	< 1	U	1
Xylenes, Total	1,000	**1,240**		200	< 1	U	1	428		20	2		1

QC: CMD 6/28/2012

Table 6A
Summary of Overburden Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		21R			O-R			AAA			CCC-R		
Permit Number		25-31284-7			25-22855			25-24942-8			25-50084		
Sample Date		4/12/2012			4/12/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		22.6			17.9			16.8			26.5		
Well Location		Impoundment 14			Impoundment 14			Impoundments 17 & 18			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	25.7		10	< 10	U	10	< 10	U	10	26.8		10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	**2.7**		1	**1.5**		1	0.37	J	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	0.26	J	1	2.7		1	6.4		1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	1.6		1	0.63	J	1	0.41	J	1	0.62	J	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	1.2		1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	0.38	J	1	0.29	J	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	1.4	J	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	0.39	J	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Toluene	600	0.45	J	1	< 1	U	1	0.23	J	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	0.29	J	5	0.59	J	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Trichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6A
Summary of Overburden Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		CCC-R			EEE-R			III			KKK		
Permit Number		25-50084			25-31282-1			25-25027-2			25-25029-9		
Sample Date		4/13/2012			4/13/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		FD			N			N			N		
Well Depth		26.5			25.1			19.8			28.3		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	28.9		10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	0.65	J	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	0.29	J	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	1.5	J	5	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	0.59	J	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Trichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6A
Summary of Overburden Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		32R			34R			38R			42R		
Permit Number		25-33063-2			25-33062-4			25-33064-1			25-33066-7		
Sample Date		4/14/2012			4/14/2012			4/14/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		20.4			26.3			25.6			24.2		
Well Location		Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 25	U	25
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 250	U	250
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 130	U	130
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 130	U	130
Benzene	1	< 1	U	1	**12.2**		1	**24.2**		1	**35.7**		2.5
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 10	U	10
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 5	U	5
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 25	U	25
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 5	U	5
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Chlorobenzene	50	17.5		1	**79.6**		1	**150**		1	**909**		10
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	UJ	2.5
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Cyclohexane	NS	< 5	U	5	< 5	U	5	2.6	J	5	6.1	J	13
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 25	U	25
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 5	U	5
1,2-Dichlorobenzene	600	0.72	J	1	33		1	14.8		1	137		2.5
1,3-Dichlorobenzene	600	0.61	J	1	48.5		1	1		1	55.2		2.5
1,4-Dichlorobenzene	75	1.8		1	22.5		1	20.2		1	38.3		2.5
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	UJ	2.5
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Diethyl Ether	1,000	< 5	U	5	2.2	J	5	< 5	U	5	5.6	J	13
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 310	U	310
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
Ethylbenzene	700	< 1	U	1	3.9		1	15.5		1	46		2.5
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
Isopropylbenzene	700	< 2	U	2	2.9		2	11		2	17.4		5
m,p-Xylenes	1,000	< 1	U	1	2.3		1	70.2		1	5.5		2.5
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
Methyl Cyclohexane	NS	< 5	U	5	0.3	J	5	2	J	5	4.1	J	13
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 25	U	25
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 5	U	5
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 25	U	25
o-Xylene	1,000	< 1	U	1	2.1		1	34.5		1	24.5		2.5
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Tetrachloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Toluene	600	< 1	U	1	2.5		1	29.2		1	5.8		2.5
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
1,2,4-Trichlorobenzene	9	< 5	U	5	0.47	J	5	**27.3**		5	7.8	J	13
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Trichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 13	U	13
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	15.7		2	1	J	5
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 2.5	U	2.5
Xylenes, Total	1,000	< 1	U	1	4.4		1	105		1	30.1		2.5

QC: CMD 6/28/2012

Table 6A
Summary of Overburden Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

	Sample ID	42R			TFP-94-1R		
	Permit Number	25-33066-7			25-49039		
	Sample Date	4/14/2012			4/14/2012		
	N=Normal; FD=Field Duplicate	FD			N		
	Well Depth	24.2			19.1		
	Well Location	Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds							
Acetone	6,000	< 25	U	25	< 500	U	500
Acetonitrile	100	< 250	U	250	< 5000	U	5,000
Acrolein	5	< 130	U	130	< 2500	U	2500
Acrylonitrile	2	< 130	U	130	< 2500	U	2500
Benzene	1	**37.2**		2.5	**137**		50
Bromochloromethane	NS	< 13	U	13	< 250	U	250
Bromodichloromethane	1	< 2.5	U	2.5	< 50	U	50
Bromoform	4	< 10	U	10	< 200	U	200
Bromomethane	10	< 5	U	5	< 100	U	100
2-Butanone	300	< 25	U	25	< 500	U	500
Carbon Disulfide	700	< 5	U	5	< 100	U	100
Carbon Tetrachloride	1	< 2.5	U	2.5	< 50	U	50
Chlorobenzene	50	**961**		10	**8,930**		50
Chloroethane	5	< 2.5	U	2.5	< 50	U	50
Chloroform	70	< 2.5	U	2.5	< 50	U	50
Chloromethane	NS	< 2.5	U	2.5	< 50	U	50
2-Chlorotoluene	NS	< 13	U	13	< 250	U	250
4-Chlorotoluene	NS	< 13	U	13	< 250	U	250
cis-1,2-Dichloroethene	70	0.55	J	2.5	< 50	U	50
cis-1,3-Dichloropropene	1	< 2.5	U	2.5	< 50	U	50
Cyclohexane	NS	6.1	J	13	< 250	U	250
Dibromochloromethane	1	< 2.5	U	2.5	< 50	U	50
1,2-Dibromo-3-chloropropane	0.02	< 25	U	25	< 500	U	500
1,2-Dibromoethane	0.03	< 5	U	5	< 100	U	100
1,2-Dichlorobenzene	600	140		2.5	594		50
1,3-Dichlorobenzene	600	56.5		2.5	129		50
1,4-Dichlorobenzene	75	39.2		2.5	**612**		50
Dichlorodifluoromethane	1,000	< 13	U	13	< 250	U	250
1,1-Dichloroethane	50	< 2.5	U	2.5	< 50	U	50
1,2-Dichloroethane	2	< 2.5	U	2.5	< 50	U	50
1,1-Dichloroethene	1	< 2.5	U	2.5	< 50	U	50
1,2-Dichloroethene, Total	NS	0.55	J	2.5	< 50	U	50
1,2-Dichloropropane	1	< 2.5	U	2.5	< 50	U	50
Diethyl Ether	1,000	6	J	13	< 250	U	250
1,4-Dioxane	10	< 310	U	310	< 6300	U	6,300
Ethyl Acetate	6,000	< 13	U	13	< 250	U	250
Ethyl Acrylate	NS	< 13	U	13	< 250	U	250
Ethylbenzene	700	47.4		2.5	< 50	U	50
Freon 113	NS	< 13	U	13	< 250	U	250
2-Hexanone	300	< 13	U	13	< 250	U	250
Isopropyl Ether	20,000	< 13	U	13	< 250	U	250
Isopropylbenzene	700	18.1		5	< 100	U	100
m,p-Xylenes	1,000	5.7		2.5	< 50	U	50
Methyl Acetate	7,000	< 13	U	13	< 250	U	250
Methyl Cyclohexane	NS	4.1	J	13	< 250	U	250
Methyl tert-Butyl Ether	70	< 2.5	U	2.5	< 50	U	50
Methylacrylonitrile	NS	< 25	U	25	< 500	U	500
Methylene Chloride	3	< 5	U	5	< 100	U	100
4-Methyl-2-pentanone	NS	< 13	U	13	< 250	U	250
2-Nitropropane	NS	< 25	U	25	< 500	U	500
o-Xylene	1,000	24.9		2.5	13.2	J	50
Styrene	100	< 13	U	13	< 250	U	250
1,1,2,2-Tetrachloroethane	1	< 2.5	U	2.5	< 50	U	50
Tetrachloroethene	1	< 2.5	U	2.5	< 50	U	50
Toluene	600	6.1		2.5	< 50	U	50
trans-1,2-Dichloroethene	100	< 2.5	U	2.5	< 50	U	50
trans-1,3-Dichloropropene	1	< 2.5	U	2.5	< 50	U	50
1,2,4-Trichlorobenzene	9	8.1	J	13	< 250	U	250
1,1,1-Trichloroethane	30	< 2.5	U	2.5	< 50	U	50
1,1,2-Trichloroethane	3	< 2.5	U	2.5	< 50	U	50
Trichloroethene	1	< 2.5	U	2.5	< 50	U	50
Trichlorofluoromethane	2,000	< 13	U	13	< 250	U	250
1,2,3-Trichloropropane	0.03	< 13	U	13	< 250	U	250
1,3,5-Trimethylbenzene	NS	1.2	J	5	< 100	U	100
Vinyl Chloride	1	< 2.5	U	2.5	< 50	U	50
Xylenes, Total	1,000	30.6		2.5	27.3	J	50

Notes:
All results reported in micrograms per liter (µg/L).
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold**
Qualifiers:
B = analyte found in associated blank; J= estimated value; UJ = not detected above RL, RL is approximate; R = rejected result

QC: CMD 6/28/2012

Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		FLOD-W2BS			PW-2			PW-3			RCRA-D1		
Permit Number		25-00067733			25-42456			25-42216			25-35765-4		
Sample Date		4/11/2012			4/10/2012			4/10/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		40.0			300.0			299.0			71.7		
Well Location		Impoundments 1 & 2			Bedrock--Main Plant			Bedrock--Main Plant			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 50	U	50	< 100	U	100	< 200	U	200	< 10	U	10
Acetonitrile	100	< 500	U	500	< 1000	U	1,000	< 2000	U	2,000	< 100	U	100
Acrolein	5	< 250	U	250	< 500	U	500	< 1000	U	1,000	< 50	U	50
Acrylonitrile	2	< 250	U	250	< 500	U	500	< 1000	U	1,000	< 50	U	50
Benzene	1	**159**		5	**491**		10	**462**		20	< 1	U	1
Bromochloromethane	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Bromodichloromethane	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Bromoform	4	< 20	U	20	< 40	U	40	< 80	U	80	< 4	U	4
Bromomethane	10	< 10	U	10	< 20	U	20	< 40	U	40	< 2	U	2
2-Butanone	300	< 50	U	50	< 100	U	100	< 200	U	200	< 10	U	10
Carbon Disulfide	700	< 10	U	10	**1,610**		20	**2,110**		40	< 2	U	2
Carbon Tetrachloride	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Chlorobenzene	50	**109**		5	**1,000**		10	**850**		20	< 1	U	1
Chloroethane	5	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Chloroform	70	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Chloromethane	NS	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
2-Chlorotoluene	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
4-Chlorotoluene	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
cis-1,2-Dichloroethene	70	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
cis-1,3-Dichloropropene	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Cyclohexane	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Dibromochloromethane	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 50	U	50	< 100	U	100	< 200	U	200	< 10	U	10
1,2-Dibromoethane	0.03	< 10	U	10	< 20	U	20	< 40	U	40	< 2	U	2
1,2-Dichlorobenzene	600	**1,540**		25	88.8		10	75.2		20	< 1	U	1
1,3-Dichlorobenzene	600	14.1		5	142		10	95		20	< 1	U	1
1,4-Dichlorobenzene	75	**86**		5	71.5		10	51.8		20	< 1	U	1
Dichlorodifluoromethane	1,000	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
1,1-Dichloroethane	50	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
1,2-Dichloroethane	2	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
1,1-Dichloroethene	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
1,2-Dichloroethene, Total	NS	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
1,2-Dichloropropane	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Diethyl Ether	1,000	60.2		25	23	J	50	19.4	J	100	< 5	U	5
1,4-Dioxane	10	< 630	U	630	< 1300	U	1,300	< 2500	U	2,500	< 130	U	130
Ethyl Acetate	6,000	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Ethyl Acrylate	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Ethylbenzene	700	< 5	U	5	3.5	J	10	< 20	U	20	< 1	U	1
Freon 113	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
2-Hexanone	300	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Isopropyl Ether	20,000	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Isopropylbenzene	700	1.2	J	10	< 20	U	20	< 40	U	40	< 2	U	2
m,p-Xylenes	1,000	< 5	U	5	3.4	J	10	< 20	U	20	< 1	U	1
Methyl Acetate	7,000	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Methyl Cyclohexane	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
Methyl tert-Butyl Ether	70	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Methylacrylonitrile	NS	< 50	U	50	< 100	U	100	< 200	U	200	< 10	U	10
Methylene Chloride	3	< 10	U	10	< 20	U	20	< 40	U	40	< 2	U	2
4-Methyl-2-pentanone	NS	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
2-Nitropropane	NS	< 50	U	50	< 100	U	100	< 200	U	200	< 10	U	10
o-Xylene	1,000	1.6	J	5	2.1	J	10	< 20	U	20	< 1	U	1
Styrene	100	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Tetrachloroethene	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Toluene	600	< 5	U	5	4.2	J	10	4.2	J	20	< 1	U	1
trans-1,2-Dichloroethene	100	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
trans-1,3-Dichloropropene	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
1,2,4-Trichlorobenzene	9	< 25	U	25	**168**		50	**99.8**	J	100	< 5	U	5
1,1,1-Trichloroethane	30	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
1,1,2-Trichloroethane	3	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1

QC: CMD 6/28/2012

Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		FLOD-W2BS			PW-2			PW-3			RCRA-D1		
Permit Number		25-00067733			25-42456			25-42216			25-35765-4		
Sample Date		4/11/2012			4/10/2012			4/10/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		40.0			300.0			299.0			71.7		
Well Location		Impoundments 1 & 2			Bedrock--Main Plant			Bedrock--Main Plant			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Trichlorofluoromethane	2,000	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
1,2,3-Trichloropropane	0.03	< 25	U	25	< 50	U	50	< 100	U	100	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 10	U	10	< 20	U	20	< 40	U	40	< 2	U	2
Vinyl Chloride	1	< 5	U	5	< 10	U	10	< 20	U	20	< 1	U	1
Xylenes, Total	1,000	1.6	J	5	5.4	J	10	< 20	U	20	< 1	U	1

QC: CMD 6/28/2012

Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D10			RCRA-D10			RCRA-D11			RCRA-D12		
Permit Number		25-357-55-7			25-357-55-7			25-35758-1			25-35745-0		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			FD			N			N		
Well Depth		72.4			72.4			89.8			77.1		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8/Lagoon 9A		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1	0.28	J	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	0.33	J	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	1.2	J	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	0.37	J	1	0.36	J	1	< 1	U	1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	< 5	U	5	0.3	J	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D10			RCRA-D10			RCRA-D11			RCRA-D12		
Permit Number		25-357-55-7			25-357-55-7			25-35758-1			25-35745-0		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			FD			N			N		
Well Depth		72.4			72.4			89.8			77.1		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8/Lagoon 9A		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	0.22	J	1	0.25	J	1	0.61	J	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D13			RCRA-D14			RCRA-D15			RCRA-D2		
Permit Number		25-35746-8			25-35742-5			25-35743-3			25-35764-6		
Sample Date		4/11/2012			4/11/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		85.9			80.5			83.9			81.4		
Well Location		Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	**24.7**		1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	0.26	J	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	0.22	J	1	4		1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	5.4		1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	1.2		1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	0.47	J	1	**4.8**		1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	5.4		1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	0.65	J	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	< 1	U	1	**37.4**		1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	0.27	J	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	1.1		1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D13			RCRA-D14			RCRA-D15			RCRA-D2		
Permit Number		25-35746-8			25-35742-5			25-35743-3			25-35764-6		
Sample Date		4/11/2012			4/11/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		85.9			80.5			83.9			81.4		
Well Location		Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 1	U	1	0.28	J	1	**10.6**		1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D3			RCRA-D4			RCRA-D5			RCRA-D6		
Permit Number		25-35763-8			25-35762-0			25-35752-2			25-35751-4		
Sample Date		4/10/2012			4/10/2012			4/10/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		75.7			83.8			59.3			58.7		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	0.31	J	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	0.37	J	5	< 5	U	5	< 5	U	5	0.41	J	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D3			RCRA-D4			RCRA-D5			RCRA-D6		
Permit Number		25-35763-8			25-35762-0			25-35752-2			25-35751-4		
Sample Date		4/10/2012			4/10/2012			4/10/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		75.7			83.8			59.3			58.7		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D7			RCRA-D8			RCRA-D9			SS-P1		
Permit Number		25-35759-0			25-35760-3			25-35747-6			25-20094-3		
Sample Date		4/12/2012			4/12/2012			4/12/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		66.2			62.9			87.7			60.0		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	**1.4**		1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	0.93	J	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	0.32	J	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	0.25	J	1	0.27	J	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	0.33	J	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	0.87	J	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	0.25	J	1	0.27	J	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	0.2	J	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	0.56	J	1	0.5	J	1	< 1	U	1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	0.33	J	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D7			RCRA-D8			RCRA-D9			SS-P1		
Permit Number		25-35759-0			25-35760-3			25-35747-6			25-20094-3		
Sample Date		4/12/2012			4/12/2012			4/12/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		66.2			62.9			87.7			60.0		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 1	U	1	0.34	J	1	< 1	U	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		SS-P2			SS-P3			TT-P1			TT-P1		
Permit Number		25-20094-3			25-20094-3			25-20095			25-20095		
Sample Date		4/11/2012			4/11/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			N			N			FD		
Well Depth		255.0			382.0			75.0			75.0		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	**184**		1	**189**		1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	0.55	J	1	0.56	J	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	188		1	193		1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	< 1	U	1	**29.7**		1	**30.1**		1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	4.2		1	4.2		1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		SS-P2			SS-P3			TT-P1			TT-P1		
Permit Number		25-20094-3			25-20094-3			25-20095			25-20095		
Sample Date		4/11/2012			4/11/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			N			N			FD		
Well Depth		255.0			382.0			75.0			75.0		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 1	U	1	< 1	U	1	**18.9**		1	**19.3**		1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	**1.8**		1	**1.9**		1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		TT-P2			TT-P3			WW-P1			WW-P2		
Permit Number		25-20095			25-20095			25-20632-0			25-20632-0		
Sample Date		4/13/2012			4/13/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		192.0			310.0			35.0			152.0		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	0.41	J	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	10.3		1	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	10.6		1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	**3.2**		1	< 1	U	1	**1.1**		1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

QC: CMD 6/28/2012

Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		TT-P2			TT-P3			WW-P1			WW-P2		
Permit Number		25-20095			25-20095			25-20632-0			25-20632-0		
Sample Date		4/13/2012			4/13/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		192.0			310.0			35.0			152.0		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	**2.8**		1	< 1	U	1	< 1	U	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		WW-P3			XX-P1			XX-P2			XX-P3		
Permit Number		25-20632-0			25-20630			25-20630			25-20630		
Sample Date		4/11/2012			4/13/2012			4/13/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		375.0			35.0			190.0			380.0		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	2.9	J	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	1.8		1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		WW-P3			XX-P1			XX-P2			XX-P3		
Permit Number		25-20632-0			25-20630			25-20630			25-20630		
Sample Date		4/11/2012			4/13/2012			4/13/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		375.0			35.0			190.0			380.0		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		YY-P1			YY-P2			YY-P3			ZZ-P1		
Permit Number		25-20631			25-20631			25-20631			25-20633-8		
Sample Date		4/11/2012			4/11/2012			4/11/2012			4/20/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		55.5			170.5			345.5			70.5		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds													
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	0.25	J	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	0.48	J	1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	0.44	J	1	**7.8**		1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		YY-P1			YY-P2			YY-P3			ZZ-P1		
Permit Number		25-20631			25-20631			25-20631			25-20633-8		
Sample Date		4/11/2012			4/11/2012			4/11/2012			4/20/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		55.5			170.5			345.5			70.5		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 1	U	1	0.61	J	1	0.4	J	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

QC: CMD 6/28/2012

Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		ZZ-P2			ZZ-P3			ZZ-P4		
Permit Number		25-20633-8			25-20633-8			25-20633-8		
Sample Date		4/20/2012			4/20/2012			4/20/2012		
N=Normal; FD=Field Duplicate		N			N			N		
Well Depth		200.5			280.5			320.5		
Well Location		Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Volatile Organic Compounds										
Acetone	6,000	< 10	U	10	< 10	U	10	< 10	U	10
Acetonitrile	100	< 100	U	100	< 100	U	100	< 100	U	100
Acrolein	5	< 50	U	50	< 50	U	50	< 50	U	50
Acrylonitrile	2	< 50	U	50	< 50	U	50	< 50	U	50
Benzene	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromochloromethane	NS	< 5	U	5	< 5	U	5	< 5	U	5
Bromodichloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1
Bromoform	4	< 4	U	4	< 4	U	4	< 4	U	4
Bromomethane	10	< 2	U	2	< 2	U	2	< 2	U	2
2-Butanone	300	< 10	U	10	< 10	U	10	< 10	U	10
Carbon Disulfide	700	< 2	U	2	< 2	U	2	< 2	U	2
Carbon Tetrachloride	1	< 1	U	1	< 1	U	1	< 1	U	1
Chlorobenzene	50	< 1	U	1	< 1	U	1	< 1	U	1
Chloroethane	5	< 1	U	1	< 1	U	1	< 1	U	1
Chloroform	70	< 1	U	1	< 1	U	1	< 1	U	1
Chloromethane	NS	< 1	U	1	< 1	U	1	< 1	U	1
2-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorotoluene	NS	< 5	U	5	< 5	U	5	< 5	U	5
cis-1,2-Dichloroethene	70	< 1	U	1	< 1	U	1	< 1	U	1
cis-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1
Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5
Dibromochloromethane	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dibromo-3-chloropropane	0.02	< 10	U	10	< 10	U	10	< 10	U	10
1,2-Dibromoethane	0.03	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1
1,3-Dichlorobenzene	600	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Dichlorobenzene	75	< 1	U	1	< 1	U	1	< 1	U	1
Dichlorodifluoromethane	1,000	< 5	U	5	< 5	U	5	< 5	U	5
1,1-Dichloroethane	50	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethane	2	< 1	U	1	< 1	U	1	< 1	U	1
1,1-Dichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloroethene, Total	NS	< 1	U	1	< 1	U	1	< 1	U	1
1,2-Dichloropropane	1	< 1	U	1	< 1	U	1	< 1	U	1
Diethyl Ether	1,000	< 5	U	5	< 5	U	5	< 5	U	5
1,4-Dioxane	10	< 130	U	130	< 130	U	130	< 130	U	130
Ethyl Acetate	6,000	< 5	U	5	< 5	U	5	< 5	U	5
Ethyl Acrylate	NS	< 5	U	5	< 5	U	5	< 5	U	5
Ethylbenzene	700	< 1	U	1	< 1	U	1	< 1	U	1
Freon 113	NS	< 5	U	5	< 5	U	5	< 5	U	5
2-Hexanone	300	< 5	U	5	< 5	U	5	< 5	U	5
Isopropyl Ether	20,000	< 5	U	5	< 5	U	5	< 5	U	5
Isopropylbenzene	700	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Xylenes	1,000	< 1	U	1	< 1	U	1	< 1	U	1
Methyl Acetate	7,000	< 5	U	5	< 5	U	5	< 5	U	5
Methyl Cyclohexane	NS	< 5	U	5	< 5	U	5	< 5	U	5
Methyl tert-Butyl Ether	70	< 1	U	1	< 1	U	1	< 1	U	1
Methylacrylonitrile	NS	< 10	U	10	< 10	U	10	< 10	U	10
Methylene Chloride	3	< 2	U	2	< 2	U	2	< 2	U	2
4-Methyl-2-pentanone	NS	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitropropane	NS	< 10	U	10	< 10	U	10	< 10	U	10
o-Xylene	1,000	< 1	U	1	< 1	U	1	< 1	U	1
Styrene	100	< 5	U	5	< 5	U	5	< 5	U	5
1,1,2,2-Tetrachloroethane	1	< 1	U	1	< 1	U	1	< 1	U	1
Tetrachloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1
Toluene	600	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,2-Dichloroethene	100	< 1	U	1	< 1	U	1	< 1	U	1
trans-1,3-Dichloropropene	1	< 1	U	1	< 1	U	1	< 1	U	1
1,2,4-Trichlorobenzene	9	< 5	U	5	< 5	U	5	< 5	U	5
1,1,1-Trichloroethane	30	< 1	U	1	< 1	U	1	< 1	U	1
1,1,2-Trichloroethane	3	< 1	U	1	< 1	U	1	< 1	U	1

QC: CMD 6/28/2012

Table 6B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
VOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		ZZ-P2			ZZ-P3			ZZ-P4		
Permit Number		25-20633-8			25-20633-8			25-20633-8		
Sample Date		4/20/2012			4/20/2012			4/20/2012		
N=Normal; FD=Field Duplicate		N			N			N		
Well Depth		200.5			280.5			320.5		
Well Location		Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Trichloroethene	1	< 1	U	1	< 1	U	1	< 1	U	1
Trichlorofluoromethane	2,000	< 5	U	5	< 5	U	5	< 5	U	5
1,2,3-Trichloropropane	0.03	< 5	U	5	< 5	U	5	< 5	U	5
1,3,5-Trimethylbenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2
Vinyl Chloride	1	< 1	U	1	< 1	U	1	< 1	U	1
Xylenes, Total	1,000	< 1	U	1	< 1	U	1	< 1	U	1

Notes:
All results reported in micrograms per liter (µg/L).
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold.**
Qualifiers:
B = analyte found in associated blank; J= estimated value
UJ = not detected above RL, RL is approximate; R = rejected result

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		01-MW-01			01-MW-02			01-MW-03			FLOD-W1S		
Permit Number		25-35176			25-35177			25-35178			25-00067731		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		15.4			18.1			17.5			17.4		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 100	UJ	100
1,4-Naphthoquinone	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
2,3,4,6-Tetrachlorophenol	200	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
2,4,5-Trichlorophenol	700	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
2,4,6-Trichlorophenol	20	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
2,4-Dichlorophenol	20	< 5.1	U	5.1	3.3	J	5	< 5	U	5	< 50	U	50
2,4-Dimethylphenol	100	< 5.1	U	5.1	20.4		5	17.1		5	< 50	U	50
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20	< 200	U	200
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
2-Chloroaniline	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
2-Chloronaphthalene	600	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
2-Chlorophenol	40	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
2-Methylnaphthalene	30	< 1	U	1	27.5		1	**30.7**		1	< 10	U	10
2-Methylphenol	NS	< 2	U	2	13.1		2	15.1		2	< 20	U	20
2-Nitroaniline	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
2-Nitrophenol	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
3,3'-Dichlorobenzidine	30	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
3-Nitroaniline	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20	< 200	U	200
4-Aminodiphenyl	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
4-Chloro-3-methylphenol	100	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
4-Chloroaniline	30	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
4-Nitroaniline	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 100	U	100
Acenaphthene	400	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Acenaphthylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Acetophenone	700	< 2	U	2	**1,760**		40	581	JB	100	547		20
Aniline	6	5.3		2	**35.1**		2	**477**		100	**291**		20
Anthracene	2,000	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Atrazine	3	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
Benzaldehyde	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20	< 200	U	200
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	U	20	971		400	773		500	250		200
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Biphenyl	400	< 1	U	1	< 1	U	1	4.2		1	< 10	U	10
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Carbazole	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Catechol	NS	< 10	U	10	< 10	U	10	< 10	UJ	10	< 100	UJ	100
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Diphenylamine	200	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		01-MW-01			01-MW-02			01-MW-03			FLOD-W1S		
Permit Number		25-35176			25-35177			25-35178			25-00067731		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		15.4			18.1			17.5			17.4		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Fluorene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10	< 100	U	100
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Isophorone	40	< 2	U	2	6.2		2	3.6		2	< 20	U	20
m,p-Cresol	NS	< 2	U	2	36.7		2	33.2		2	< 20	U	20
Naphthalene	300	28.6	JB	1	**1,510**		20	**2,320**		50	**535**		10
Nitrobenzene	6	< 2	U	2	**492**		40	**3,380**	JB	100	**38.5**	B	20
Nitrosomethylethylamine	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
N-Nitrosodiethylamine	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
N-Nitroso-di-n-butylamine	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2	< 20	U	20
N-Nitrosodiphenylamine	10	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
N-Nitrosomorpholine	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
N-Nitrosopiperidine	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
N-Nitrosopyrrolidine	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
o-Toluidine	NS	6.6		5.1	< 5	U	5	< 5	U	5	< 50	U	50
Pentachlorobenzene	NS	< 5.1	U	5.1	< 5	U	5	< 5	U	5	< 50	U	50
Pentachlorophenol	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3
Phenanthrene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Phenol	2,000	< 2	U	2	78.8		2	87.5		2	25		20
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1	< 10	U	10
Pyridine	NS	23.9		2	60.1		2	349	B	100	308	B	20

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		FLOD-W2S			PZ-12-3			PZ-12-4			PZ-12-5		
Permit Number		25-00067732			25-56207			25-56208			25-56209		
Sample Date		4/11/2012			4/10/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		12.4			15.0			16.8			14.9		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
1,4-Naphthoquinone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4,5-Trichlorophenol	700	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4,6-Trichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dimethylphenol	100	< 5	U	5	< 5	U	5	35.5		5	16.6		5
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chloroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Chloronaphthalene	600	< 2	U	2	< 2	U	2	5.6		2	< 2	U	2
2-Chlorophenol	40	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Methylnaphthalene	30	< 1	U	1	< 1	U	1	**40**		1	< 1	U	1
2-Methylphenol	NS	< 2	U	2	< 2	U	2	24		2	13		2
2-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitrophenol	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
4-Aminodiphenyl	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chloroaniline	30	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acenaphthene	400	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acenaphthylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acetophenone	700	< 2	U	2	< 2	U	2	**789**	JB	100	78.6		2
Aniline	6	3.2		2	< 2	U	2	**586**		100	**200**		8
Anthracene	2,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Atrazine	3	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzaldehyde	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	U	20	< 20	U	20	401	J	500	< 20	U	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	8.7		2	< 2	U	2
Biphenyl	400	< 1	U	1	< 1	U	1	3.3		1	< 1	U	1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbazole	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Catechol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	< 5	U	5	< 5	U	5	1.8	J	5	< 5	U	5
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Diphenylamine	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		FLOD-W2S			PZ-12-3			PZ-12-4			PZ-12-5		
Permit Number		25-00067732			25-56207			25-56208			25-56209		
Sample Date		4/11/2012			4/10/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		12.4			15.0			16.8			14.9		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Fluorene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Isophorone	40	< 2	U	2	< 2	U	2	4.2		2	< 2	U	2
m,p-Cresol	NS	< 2	U	2	< 2	U	2	46.4		2	52.7		2
Naphthalene	300	49.4		1	< 1	U	1	**2,420**		50	60.2		1
Nitrobenzene	6	**8**	B	2	< 2	U	2	**4,360**	JB	100	**68.8**		2
Nitrosomethylethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodiethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosomorpholine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopiperidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
o-Toluidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorobenzene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorophenol	0.3	**0.947**		0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3
Phenanthrene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Phenol	2,000	3.8		2	< 2	U	2	84.8		2	< 2	U	2
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Pyridine	NS	16.4	B	2	< 2	U	2	1,760	B	100	152		8

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Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		PZ-12-6			28R			MW-2			19R		
Permit Number		25-56210			NA			25-33944-3			25-31283-9		
Sample Date		4/11/2012			4/14/2012			4/12/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		15.2			17.8			21.1			11.6		
Well Location		Impoundments 1 & 2			Impoundments 3 & 4 & 5			Impoundments 3 & 4 & 5			Impoundment 14		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
1,4-Naphthoquinone	NS	< 5	U	5	< 5	UJ	5	< 5	U	5	< 5	UJ	5
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4,5-Trichlorophenol	700	< 5	U	5	< 5	U	5	7		5	< 5	U	5
2,4,6-Trichlorophenol	20	< 5	U	5	< 5	U	5	8.6		5	< 5	U	5
2,4-Dichlorophenol	20	< 5	U	5	< 5	U	5	10.1		5	< 5	U	5
2,4-Dimethylphenol	100	70.1		5	< 5	U	5	95.4		5	**276**		250
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chloroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Chloronaphthalene	600	< 2	U	2	< 2	U	2	< 2	U	2	5.2	J	2
2-Chlorophenol	40	< 5	U	5	< 5	U	5	1.5	J	5	< 5	U	5
2-Methylnaphthalene	30	2		1	< 1	U	1	**384**		10	**86.4**	J	1
2-Methylphenol	NS	52.2		2	< 2	U	2	28.8		2	47.3		2
2-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitrophenol	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
4-Aminodiphenyl	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chloroaniline	30	< 5	U	5	< 5	U	5	**74**		5	< 5	U	5
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acenaphthene	400	< 1	U	1	< 1	U	1	61.9		1	17.1	J	1
Acenaphthylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acetophenone	700	377	JB	40	< 2	U	2	33.7		2	< 2	U	2
Aniline	6	**959**		40	< 2	U	2	**8,590**		500	**52.5**	J	2
Anthracene	2,000	< 1	U	1	< 1	U	1	3.9		1	< 1	U	1
Atrazine	3	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzaldehyde	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	270		200	< 20	U	20	< 20	U	20	< 20	U	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	12.1		2	< 2	U	2
Biphenyl	400	< 1	U	1	< 1	U	1	44.2		1	9.3	J	1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	UJ	2	< 2	U	2	< 2	UJ	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	< 2	U	2	< 2	U	2	**29.1**	J	2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbazole	NS	< 1	U	1	< 1	U	1	10.2		1	42.7	J	1
Catechol	NS	< 10	UJ	10	< 10	UJ	10	< 10	U	10	< 10	UJ	10
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	< 5	U	5	< 5	U	5	25		5	10.1	J	5
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Diphenylamine	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1

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Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		PZ-12-6			28R			MW-2			19R		
Permit Number		25-56210			NA			25-33944-3			25-31283-9		
Sample Date		4/11/2012			4/14/2012			4/12/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		15.2			17.8			21.1			11.6		
Well Location		Impoundments 1 & 2			Impoundments 3 & 4 & 5			Impoundments 3 & 4 & 5			Impoundment 14		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Fluorene	300	< 1	U	1	< 1	U	1	24.5		1	5.2	J	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Isophorone	40	4.9		2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Cresol	NS	282		40	< 2	U	2	61.6		2	198		100
Naphthalene	300	**378**		20	< 1	U	1	**7,190**	JB	250	**6,590**	J	100
Nitrobenzene	6	**1,180**	JB	40	< 2	U	2	< 2	U	2	< 2	U	2
Nitrosomethylethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodiethylamine	NS	< 5	U	5	< 5	UJ	5	< 5	U	5	< 5	UJ	5
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	U	5	< 5	UJ	5	< 5	U	5	< 5	UJ	5
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5	U	5	< 5	U	5	**155**		50	**785**	J	250
N-Nitrosomorpholine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopiperidine	NS	< 5	U	5	< 5	UJ	5	< 5	U	5	< 5	UJ	5
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
o-Toluidine	NS	< 5	U	5	< 5	U	5	3,090		1,300	32.4	J	5
Pentachlorobenzene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorophenol	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3
Phenanthrene	100	< 1	U	1	< 1	U	1	6.1		1	1.1	J	1
Phenol	2,000	180	J	40	< 2	U	2	< 2	U	2	39.7		2
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Pyridine	NS	755	B	40	< 2	U	2	21.2		2	0.91	J	2

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Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		AAA			CCC-R			CCC-R			EEE-R		
Permit Number		25-24942-8			25-50084			25-50084			25-31282-1		
Sample Date		4/13/2012			4/13/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			FD			N			N		
Well Depth		16.8			26.5			26.5			25.1		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
1,4-Benzenediol	NS	< 10	U	10	< 10	UJ	10	< 10	UJ	10	< 10	R	10
1,4-Naphthoquinone	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2,4,5-Trichlorophenol	700	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2,4,6-Trichlorophenol	20	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2,4-Dichlorophenol	20	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2,4-Dimethylphenol	100	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2,4-Dinitrophenol	40	< 20	U	20	< 20	UJ	20	< 20	UJ	20	< 20	UJ	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
2-Chloroaniline	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2-Chloronaphthalene	600	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
2-Chlorophenol	40	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2-Methylnaphthalene	30	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
2-Methylphenol	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
2-Nitroaniline	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
2-Nitrophenol	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
3-Nitroaniline	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	UJ	20	< 20	UJ	20	< 20	UJ	20
4-Aminodiphenyl	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
4-Chloroaniline	30	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
4-Nitroaniline	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
4-Nitrophenol	NS	< 10	U	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
Acenaphthene	400	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Acenaphthylene	100	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Acetophenone	700	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Aniline	6	5.4		2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Anthracene	2,000	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Atrazine	3	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
Benzaldehyde	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
Benzidine	20	< 20	U	20	< 20	UJ	20	< 20	UJ	20	< 20	R	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1
Benzoic Acid	30,000	< 20	U	20	< 20	UJ	20	< 20	UJ	20	< 20	UJ	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	UJ	2	< 2	UJ	2	27.3	JB	2
Biphenyl	400	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	**4.2**	J	2	< 2	UJ	2	< 2	UJ	2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Caprolactum	5,000	15.3		2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Carbazole	NS	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Catechol	NS	< 10	U	10	< 10	UJ	10	< 10	UJ	10	< 10	R	10
Chrysene	5	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1
Dibenzofuran	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
Diethyl Phthalate	6,000	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Dimethyl Phthalate	100	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Diphenylamine	200	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
Fluoranthene	300	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		AAA			CCC-R			CCC-R			EEE-R		
Permit Number		25-24942-8			25-50084			25-50084			25-31282-1		
Sample Date		4/13/2012			4/13/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			FD			N			N		
Well Depth		16.8			26.5			26.5			25.1		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Fluorene	300	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	UJ	0.02	< 0.02	UJ	0.02	< 0.02	UJ	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
Hexachloroethane	7	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1
Isophorone	40	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
m,p-Cresol	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Naphthalene	300	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Nitrobenzene	6	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Nitrosomethylethylamine	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitrosodiethylamine	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
N-Nitroso-di-n-butylamine	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
N-Nitrosodiphenylamine	10	4.7	J	5	1.7	J	5	2.3	J	5	< 5	UJ	5
N-Nitrosomorpholine	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitrosopiperidine	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
o-Toluidine	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
Pentachlorobenzene	NS	< 5	U	5	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
Pentachlorophenol	0.3	< 0.3	U	0.3	< 0.3	UJ	0.3	< 0.3	UJ	0.3	< 0.3	UJ	0.3
Phenanthrene	100	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Phenol	2,000	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Pyrene	200	< 1	U	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1
Pyridine	NS	< 2	U	2	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		III			KKK			34R			38R		
Permit Number		25-25027-2			25-25029-9			25-33062-4			25-33064-1		
Sample Date		4/13/2012			4/13/2012			4/14/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		19.8			28.3			26.3			25.6		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	< 1	U	1
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	6.3	J	11	13.3	J	10
1,4-Naphthoquinone	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	UJ	5.4	< 5	UJ	5
1-Chloro-2-nitrobenzene	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2,4,5-Trichlorophenol	700	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2,4,6-Trichlorophenol	20	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2,4-Dichlorophenol	20	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2,4-Dimethylphenol	100	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2,4-Dinitrophenol	40	< 20	UJ	20	< 20	UJ	20	< 22	U	22	< 20	U	20
2,4-Dinitrotoluene	10	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
2-Chloroaniline	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2-Chloronaphthalene	600	< 2	UJ	2	< 2	UJ	2	1.1	J	2.2	< 2	U	2
2-Chlorophenol	40	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2-Methylnaphthalene	30	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	4.3		1
2-Methylphenol	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
2-Nitroaniline	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
2-Nitrophenol	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
3-Nitroaniline	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 20	UJ	20	< 20	UJ	20	< 22	U	22	< 20	U	20
4-Aminodiphenyl	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
4-Chloroaniline	30	< 5	UJ	5	< 5	UJ	5	2.8	J	5.4	1.3	J	5
4-Chlorophenyl-phenylether	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
4-Nitroaniline	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
4-Nitrophenol	NS	< 10	UJ	10	< 10	UJ	10	< 11	U	11	< 10	U	10
Acenaphthene	400	< 1	UJ	1	< 1	UJ	1	16.9		1.1	10.6		1
Acenaphthylene	100	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	< 1	U	1
Acetophenone	700	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Aniline	6	< 2	UJ	2	< 2	UJ	2	5.3		2.2	**9.6**		2
Anthracene	2,000	< 1	UJ	1	< 1	UJ	1	8.9		1.1	< 1	U	1
Atrazine	3	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
Benzaldehyde	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
Benzidine	20	< 20	UJ	20	< 20	UJ	20	< 22	U	22	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.11	U	0.11	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.11	U	0.11	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.11	U	0.11	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.11	U	0.11	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	UJ	20	< 20	UJ	20	< 22	U	22	< 20	U	20
Benzyl Alcohol	2,000	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Biphenyl	400	< 1	UJ	1	< 1	UJ	1	1.2		1.1	6.4		1
Bis(2-chloroethoxy)methane	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	UJ	2	< 2	UJ	2	< 2.2	UJ	2.2	< 2	UJ	2
Bis(2-chloroisopropyl) Ether	300	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2	UJ	2	2.5	J	2	**3.4**		2.2	< 2	U	2
Butylbenzyl Phthalate	100	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Caprolactum	5,000	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Carbazole	NS	< 1	UJ	1	< 1	UJ	1	0.45	J	1.1	0.64	J	1
Catechol	NS	< 10	UJ	10	< 10	UJ	10	< 11	UJ	11	< 10	UJ	10
Chrysene	5	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.11	U	0.11	< 0.1	U	0.1
Dibenzofuran	NS	< 5	UJ	5	< 5	UJ	5	11.7		5.4	6.9		5
Diethyl Phthalate	6,000	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Dimethyl Phthalate	100	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Diphenylamine	200	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
Fluoranthene	300	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	< 1	U	1

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		III			KKK			34R			38R		
Permit Number		25-25027-2			25-25029-9			25-33062-4			25-33064-1		
Sample Date		4/13/2012			4/13/2012			4/14/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		19.8			28.3			26.3			25.6		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Fluorene	300	< 1	UJ	1	< 1	UJ	1	3.1		1.1	2.8		1
Hexachlorobenzene	0.02	< 0.02	UJ	0.02	< 0.02	UJ	0.02	< 0.022	U	0.022	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	UJ	10	< 10	UJ	10	< 11	U	11	< 10	U	10
Hexachloroethane	7	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	UJ	0.1	< 0.1	UJ	0.1	< 0.11	U	0.11	< 0.1	U	0.1
Isophorone	40	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
m,p-Cresol	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Naphthalene	300	< 1	UJ	1	< 1	UJ	1	0.79	J	1.1	250		5
Nitrobenzene	6	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Nitrosomethylethylamine	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
N-Nitrosodiethylamine	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	UJ	5.4	< 5	UJ	5
N-Nitrosodimethylamine	0.8	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	UJ	5.4	< 5	UJ	5
N-Nitroso-di-n-propylamine	10	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5	UJ	5	< 5	UJ	5	**70.3**		5.4	**49.7**		5
N-Nitrosomorpholine	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
N-Nitrosopiperidine	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	UJ	5.4	< 5	UJ	5
N-Nitrosopyrrolidine	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
o-Toluidine	NS	< 5	UJ	5	< 5	UJ	5	9.9		5.4	12		5
Pentachlorobenzene	NS	< 5	UJ	5	< 5	UJ	5	< 5.4	U	5.4	< 5	U	5
Pentachlorophenol	0.3	< 0.3	UJ	0.3	< 0.3	UJ	0.3	< 0.33	U	0.33	< 0.3	U	0.3
Phenanthrene	100	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	0.78	J	1
Phenol	2,000	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2
Pyrene	200	< 1	UJ	1	< 1	UJ	1	< 1.1	U	1.1	< 1	U	1
Pyridine	NS	< 2	UJ	2	< 2	UJ	2	< 2.2	U	2.2	< 2	U	2

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		42R			42R			TFP-94-1R		
Permit Number		25-33066-7			25-33066-7			25-49039		
Sample Date		4/14/2012			4/14/2012			4/14/2012		
N=Normal; FD=Field Duplicate		FD			N			N		
Well Depth		24.2			24.2			19.1		
Well Location		Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	74.8	J	10
1,4-Naphthoquinone	NS	40.9	J	5	33.9	J	5	8.9	J	5
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5	U	5	< 5	U	5
2,4,5-Trichlorophenol	700	< 5	U	5	< 5	U	5	< 5	U	5
2,4,6-Trichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dimethylphenol	100	< 5	UJ	5	1.7	J	5	3.1	J	5
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2
2-Chloroaniline	NS	< 5	U	5	< 5	U	5	6		5
2-Chloronaphthalene	600	2.9		2	3.6		2	2.5		2
2-Chlorophenol	40	2.7	J	5	2.7	J	5	5.5		5
2-Methylnaphthalene	30	< 1	UJ	1	**70.9**	J	1	< 1	U	1
2-Methylphenol	NS	< 2	U	2	< 2	U	2	< 2	U	2
2-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitrophenol	NS	< 5	U	5	< 5	U	5	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5	U	5	< 5	U	5
3-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20
4-Aminodiphenyl	NS	2.1	J	5	< 5	UJ	5	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5
4-Chloroaniline	30	6.4		5	7.4		5	**32**		5
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2
4-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10
Acenaphthene	400	26.3		1	31.7		1	10.8		1
Acenaphthylene	100	< 1	U	1	< 1	U	1	3.2		1
Acetophenone	700	< 2	U	2	< 2	U	2	1.2	J	2
Aniline	6	**6.7**		2	**7.1**		2	**835**		20
Anthracene	2,000	1.4		1	1.6		1	< 1	U	1
Atrazine	3	< 5	U	5	< 5	U	5	< 5	U	5
Benzaldehyde	NS	< 5	U	5	< 5	U	5	< 5	U	5
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	U	20	< 20	U	20	< 20	U	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	< 2	U	2
Biphenyl	400	8.2		1	9.9		1	8.4		1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	UJ	2	< 2	UJ	2	< 2	UJ	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	< 2	U	2	1.9	J	2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2
Carbazole	NS	< 1	UJ	1	0.46	J	1	1.6		1
Catechol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	12		5	14.7		5	4.8	J	5
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2
Diphenylamine	200	45		5	53.1		5	< 5	U	5
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1

QC: CMD 6/28/2012

Table 7A
Summary of Overburden Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		42R			42R			TFP-94-1R		
Permit Number		25-33066-7			25-33066-7			25-49039		
Sample Date		4/14/2012			4/14/2012			4/14/2012		
N=Normal; FD=Field Duplicate		FD			N			N		
Well Depth		24.2			24.2			19.1		
Well Location		Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Fluorene	300	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Isophorone	40	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Cresol	NS	< 2	U	2	< 2	U	2	< 2	U	2
Naphthalene	300	9.1		1	10.9		1	20.2		1
Nitrobenzene	6	< 2	U	2	< 2	U	2	< 2	U	2
Nitrosomethylethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodiethylamine	NS	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitrosodiphenylamine	10	**46.9**		5	**55**		5	**61.1**		5
N-Nitrosomorpholine	NS	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopiperidine	NS	< 5	UJ	5	< 5	UJ	5	< 5	UJ	5
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5	U	5	< 5	U	5
o-Toluidine	NS	6.4		5	6.9		5	138		5
Pentachlorobenzene	NS	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorophenol	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3
Phenanthrene	100	2.1		1	2.3		1	< 1	U	1
Phenol	2,000	< 2	U	2	< 2	U	2	< 2	U	2
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1
Pyridine	NS	< 2	U	2	< 2	U	2	< 2	U	2

Notes:
All results reported in micrograms per liter (µg/L).
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold**
Qualifiers:
B = analyte found in associated blank
J = estimated value
UJ = not detected above RL, RL is approximate
R = Rejected result

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		FLOD-W2BS			PW-2			PW-3			RCRA-D1		
Permit Number		25-00067733			25-42456			25-42216			25-35765-4		
Sample Date		4/11/2012			4/10/2012			4/10/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		40.0			300.0			299.0			71.7		
Well Location		Impoundments 1 & 2			Bedrock--Main Plant			Bedrock--Main Plant			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
1,4-Naphthoquinone	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2,4,5-Trichlorophenol	700	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2,4,6-Trichlorophenol	20	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2,4-Dichlorophenol	20	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2,4-Dimethylphenol	100	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chloroaniline	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2-Chloronaphthalene	600	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chlorophenol	40	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2-Methylnaphthalene	30	< 1	U	1	7.7		1	12.8		1	< 1	U	1
2-Methylphenol	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Nitroaniline	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
2-Nitrophenol	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
3-Nitroaniline	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
4-Aminodiphenyl	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
4-Chloroaniline	30	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Nitroaniline	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acenaphthene	400	< 1	U	1	8.2		1	7.5		1	< 1	U	1
Acenaphthylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acetophenone	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Aniline	6	2.6		2	**132**		4.1	**204**		8	< 2	U	2
Anthracene	2,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Atrazine	3	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
Benzaldehyde	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Biphenyl	400	< 1	U	1	1.8		1	2.2		1	< 1	U	1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbazole	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Catechol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	< 5	U	5	2.4	J	5.1	2.8	J	5	< 5.1	U	5.1
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Diphenylamine	200	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Fluorene	300	< 1	U	1	1.92		0.1	1.81		0.1	< 1	U	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		FLOD-W2BS			PW-2			PW-3			RCRA-D1		
Permit Number		25-00067733			25-42456			25-42216			25-35765-4		
Sample Date		4/11/2012			4/10/2012			4/10/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		40.0			300.0			299.0			71.7		
Well Location		Impoundments 1 & 2			Bedrock--Main Plant			Bedrock--Main Plant			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Isophorone	40	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Cresol	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Naphthalene	300	4.5	B	1	45.7		1	72		1	< 1	U	1
Nitrobenzene	6	**9**	B	2	< 2	U	2	< 2	U	2	< 2	U	2
Nitrosomethylethylamine	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
N-Nitrosodiethylamine	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5	U	5	6.7		5.1	7.2		5	< 5.1	U	5.1
N-Nitrosomorpholine	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
N-Nitrosopiperidine	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
o-Toluidine	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
Pentachlorobenzene	NS	< 5	U	5	< 5.1	U	5.1	< 5	U	5	< 5.1	U	5.1
Pentachlorophenol	0.3	**0.688**		0.3	< 0.31	U	0.31	< 0.3	U	0.3	< 0.31	U	0.31
Phenanthrene	100	< 1	U	1	< 1	U	1	0.69	J	1	< 1	U	1
Phenol	2,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Pyridine	NS	16.4		2	< 2	U	2	< 2	U	2	< 2	U	2

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D10			RCRA-D10			RCRA-D11			RCRA-D12		
Permit Number		25-357-55-7			25-357-55-7			25-35758-1			25-35745-0		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			FD			N			N		
Well Depth		72.4			72.4			89.8			77.1		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8/Lagoon 9A		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
1,4-Naphthoquinone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4,5-Trichlorophenol	700	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4,6-Trichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dimethylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chloroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Chloronaphthalene	600	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chlorophenol	40	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Methylnaphthalene	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Methylphenol	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitrophenol	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
4-Aminodiphenyl	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chloroaniline	30	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acenaphthene	400	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acenaphthylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acetophenone	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Aniline	6	< 2	UJ	2	**6.8**	J	2	< 2	U	2	< 2	U	2
Anthracene	2,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Atrazine	3	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzaldehyde	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Biphenyl	400	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	< 2	U	2	< 2	U	2	2.3		2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbazole	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Catechol	NS	< 10	U	10	< 10	U	10	< 10	UJ	10	< 10	UJ	10
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Diphenylamine	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Fluorene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D10			RCRA-D10			RCRA-D11			RCRA-D12		
Permit Number		25-357-55-7			25-357-55-7			25-35758-1			25-35745-0		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			FD			N			N		
Well Depth		72.4			72.4			89.8			77.1		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8/Lagoon 9A		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Isophorone	40	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Cresol	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Naphthalene	300	< 1	UJ	1	7.4	J	1	< 1	U	1	< 1	U	1
Nitrobenzene	6	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Nitrosomethylethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodiethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosomorpholine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopiperidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
o-Toluidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorobenzene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorophenol	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3
Phenanthrene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Phenol	2,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Pyridine	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2

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Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D13			RCRA-D14			RCRA-D15			RCRA-D2		
Permit Number		25-35746-8			25-35742-5			25-35743-3			25-35764-6		
Sample Date		4/11/2012			4/11/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		85.9			80.5			83.9			81.4		
Well Location		Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Benzenediol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
1,4-Naphthoquinone	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4,5-Trichlorophenol	700	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4,6-Trichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dimethylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chloroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Chloronaphthalene	600	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Chlorophenol	40	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Methylnaphthalene	30	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
2-Methylphenol	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
2-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitrophenol	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
3-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
4-Aminodiphenyl	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chloroaniline	30	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
4-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Acenaphthene	400	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acenaphthylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Acetophenone	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Aniline	6	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Anthracene	2,000	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Atrazine	3	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzaldehyde	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Biphenyl	400	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Carbazole	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Catechol	NS	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10	< 10	UJ	10
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Diphenylamine	200	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Fluorene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D13			RCRA-D14			RCRA-D15			RCRA-D2		
Permit Number		25-35746-8			25-35742-5			25-35743-3			25-35764-6		
Sample Date		4/11/2012			4/11/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		85.9			80.5			83.9			81.4		
Well Location		Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Isophorone	40	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Cresol	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Naphthalene	300	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Nitrobenzene	6	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Nitrosomethylethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodiethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosomorpholine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopiperidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
o-Toluidine	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorobenzene	NS	< 5	U	5	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorophenol	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3
Phenanthrene	100	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Phenol	2,000	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Pyridine	NS	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D3			RCRA-D4			RCRA-D5			RCRA-D6		
Permit Number		25-35763-8			25-35762-0			25-35752-2			25-35751-4		
Sample Date		4/10/2012			4/10/2012			4/10/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		75.7			83.8			59.3			58.7		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds													
1,2,4,5-Tetrachlorobenzene	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
1,4-Benzenediol	NS	< 11	UJ	11	< 11	UJ	11	< 11	UJ	11	< 10	UJ	10
1,4-Naphthoquinone	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
1-Chloro-2-nitrobenzene	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2,4,5-Trichlorophenol	700	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2,4,6-Trichlorophenol	20	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2,4-Dichlorophenol	20	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2,4-Dimethylphenol	100	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2,4-Dinitrophenol	40	< 21	U	21	< 21	U	21	< 22	U	22	< 20	U	20
2,4-Dinitrotoluene	10	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
2,6-Dinitrotoluene	10	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
2-Chloroaniline	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2-Chloronaphthalene	600	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
2-Chlorophenol	40	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2-Methylnaphthalene	30	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
2-Methylphenol	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
2-Nitroaniline	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
2-Nitrophenol	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
3-Nitroaniline	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 21	U	21	< 21	U	21	< 22	U	22	< 20	U	20
4-Aminodiphenyl	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
4-Chloroaniline	30	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
4-Chlorophenyl-phenylether	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
4-Nitroaniline	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
4-Nitrophenol	NS	< 11	U	11	< 11	U	11	< 11	U	11	< 10	U	10
Acenaphthene	400	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Acenaphthylene	100	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Acetophenone	700	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Aniline	6	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Anthracene	2,000	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Atrazine	3	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
Benzaldehyde	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
Benzidine	20	< 21	U	21	< 21	U	21	< 22	U	22	< 20	U	20
Benzo[a]anthracene	0.1	< 0.11	U	0.11	< 0.11	U	0.11	< 0.11	U	0.11	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.11	U	0.11	< 0.11	U	0.11	< 0.11	U	0.11	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.11	U	0.11	< 0.11	U	0.11	< 0.11	U	0.11	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.11	U	0.11	< 0.11	U	0.11	< 0.11	U	0.11	< 0.1	U	0.1
Benzoic Acid	30,000	< 21	U	21	< 21	U	21	< 22	U	22	< 20	U	20
Benzyl Alcohol	2,000	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Biphenyl	400	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Bis(2-chloroethoxy)methane	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Bis(2-chloroisopropyl) Ether	300	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Butylbenzyl Phthalate	100	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Caprolactum	5,000	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Carbazole	NS	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Catechol	NS	< 11	UJ	11	< 11	UJ	11	< 11	UJ	11	< 10	UJ	10
Chrysene	5	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.11	U	0.11	< 0.11	U	0.11	< 0.11	U	0.11	< 0.1	U	0.1
Dibenzofuran	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
Diethyl Phthalate	6,000	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Dimethyl Phthalate	100	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Di-n-octyl Phthalate	100	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Diphenylamine	200	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
Fluoranthene	300	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Fluorene	300	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Hexachlorobenzene	0.02	< 0.021	U	0.021	< 0.021	U	0.021	< 0.022	U	0.022	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Hexachlorocyclopentadiene	40	< 11	U	11	< 11	U	11	< 11	U	11	< 10	U	10
Hexachloroethane	7	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.11	U	0.11	< 0.11	U	0.11	< 0.11	U	0.11	< 0.1	U	0.1

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D3			RCRA-D4			RCRA-D5			RCRA-D6		
Permit Number		25-35763-8			25-35762-0			25-35752-2			25-35751-4		
Sample Date		4/10/2012			4/10/2012			4/10/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		75.7			83.8			59.3			58.7		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Isophorone	40	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
m,p-Cresol	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Naphthalene	300	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Nitrobenzene	6	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Nitrosomethylethylamine	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
N-Nitrosodiethylamine	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
N-Nitrosodimethylamine	0.8	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
N-Nitroso-di-n-propylamine	10	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
N-Nitrosomorpholine	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
N-Nitrosopiperidine	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
N-Nitrosopyrrolidine	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
o-Toluidine	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
Pentachlorobenzene	NS	< 5.3	U	5.3	< 5.3	U	5.3	< 5.4	U	5.4	< 5	U	5
Pentachlorophenol	0.3	< 0.32	U	0.32	< 0.32	U	0.32	< 0.32	U	0.32	< 0.3	U	0.3
Phenanthrene	100	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Phenol	2,000	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2
Pyrene	200	< 1.1	U	1.1	< 1.1	U	1.1	< 1.1	U	1.1	< 1	U	1
Pyridine	NS	< 2.1	U	2.1	< 2.1	U	2.1	< 2.2	U	2.2	< 2	U	2

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

	Sample ID	RCRA-D7			RCRA-D8			RCRA-D9		
	Permit Number	25-35759-0			25-35760-3			25-35747-6		
	Sample Date	4/12/2012			4/12/2012			4/12/2012		
	N=Normal; FD=Field Duplicate	N			N			N		
	Well Depth	66.2			62.9			87.7		
	Well Location	Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Semivolatile Organic Compounds										
1,2,4,5-Tetrachlorobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2
1,2-Diphenylhydrazine	20	< 1	U	1	< 1	U	1	< 1	U	1
1,4-Benzenediol	NS	< 10	R	10	< 10	UJ	10	< 10	UJ	10
1,4-Naphthoquinone	NS	< 5	U	5	< 5	U	5	< 5	U	5
1-Chloro-2-nitrobenzene	NS	< 2	U	2	< 2	U	2	< 2	U	2
2,3,4,6-Tetrachlorophenol	200	< 5	U	5	< 5	U	5	< 5	U	5
2,4,5-Trichlorophenol	700	< 5	U	5	< 5	U	5	< 5	U	5
2,4,6-Trichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dichlorophenol	20	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dimethylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5
2,4-Dinitrophenol	40	< 20	U	20	< 20	U	20	< 20	U	20
2,4-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2
2,6-Dinitrotoluene	10	< 2	U	2	< 2	U	2	< 2	U	2
2-Chloroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5
2-Chloronaphthalene	600	< 2	U	2	< 2	U	2	< 2	U	2
2-Chlorophenol	40	< 5	U	5	< 5	U	5	< 5	U	5
2-Methylnaphthalene	30	< 1	U	1	< 1	U	1	< 1	U	1
2-Methylphenol	NS	< 2	U	2	< 2	U	2	< 2	U	2
2-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5
2-Nitrophenol	NS	< 5	U	5	< 5	U	5	< 5	U	5
3,3'-Dichlorobenzidine	30	< 5	U	5	< 5	U	5	< 5	U	5
3-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5
4,6-Dinitro-2-methylphenol	1	< 20	U	20	< 20	U	20	< 20	U	20
4-Aminodiphenyl	NS	< 5	U	5	< 5	U	5	< 5	U	5
4-Bromophenyl Phenyl Ether	NS	< 2	U	2	< 2	U	2	< 2	U	2
4-Chloro-3-methylphenol	100	< 5	U	5	< 5	U	5	< 5	U	5
4-Chloroaniline	30	< 5	U	5	< 5	U	5	< 5	U	5
4-Chlorophenyl-phenylether	NS	< 2	U	2	< 2	U	2	< 2	U	2
4-Nitroaniline	NS	< 5	U	5	< 5	U	5	< 5	U	5
4-Nitrophenol	NS	< 10	U	10	< 10	U	10	< 10	U	10
Acenaphthene	400	< 1	U	1	< 1	U	1	< 1	U	1
Acenaphthylene	100	< 1	U	1	< 1	U	1	< 1	U	1
Acetophenone	700	< 2	U	2	< 2	U	2	< 2	U	2
Aniline	6	< 2	U	2	< 2	U	2	**32.6**		2
Anthracene	2,000	< 1	U	1	< 1	U	1	< 1	U	1
Atrazine	3	< 5	U	5	< 5	U	5	< 5	U	5
Benzaldehyde	NS	< 5	U	5	< 5	U	5	< 5	U	5
Benzidine	20	< 20	U	20	< 20	U	20	< 20	U	20
Benzo[a]anthracene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[a]pyrene	0.1	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[b]fluoranthene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzo[g,h,i]perylene	100	< 1	U	1	< 1	U	1	< 1	U	1
Benzo[k]fluoranthene	0.5	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Benzoic Acid	30,000	< 20	U	20	< 20	U	20	< 20	U	20
Benzyl Alcohol	2,000	< 2	U	2	< 2	U	2	< 2	U	2
Biphenyl	400	< 1	U	1	< 1	U	1	< 1	U	1
Bis(2-chloroethoxy)methane	NS	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroethyl) Ether	7	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-chloroisopropyl) Ether	300	< 2	U	2	< 2	U	2	< 2	U	2
Bis(2-ethylhexyl) Phthalate	3	**5.7**		2	< 2	U	2	< 2	U	2
Butylbenzyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2
Caprolactum	5,000	< 2	U	2	< 2	U	2	< 2	U	2
Carbazole	NS	< 1	U	1	< 1	U	1	< 1	U	1
Catechol	NS	< 10	R	10	< 10	U	10	< 10	U	10
Chrysene	5	< 1	U	1	< 1	U	1	< 1	U	1
Dibenzo[a,h]anthracene	0.3	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1
Dibenzofuran	NS	< 5	U	5	< 5	U	5	< 5	U	5
Diethyl Phthalate	6,000	< 2	U	2	< 2	U	2	< 2	U	2
Dimethyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-Butyl Phthalate	700	< 2	U	2	< 2	U	2	< 2	U	2
Di-n-octyl Phthalate	100	< 2	U	2	< 2	U	2	< 2	U	2
Diphenylamine	200	< 5	U	5	< 5	U	5	< 5	U	5
Fluoranthene	300	< 1	U	1	< 1	U	1	< 1	U	1
Fluorene	300	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorobenzene	0.02	< 0.02	U	0.02	< 0.02	U	0.02	< 0.02	U	0.02
Hexachlorobutadiene	1	< 1	U	1	< 1	U	1	< 1	U	1
Hexachlorocyclopentadiene	40	< 10	U	10	< 10	U	10	< 10	U	10
Hexachloroethane	7	< 2	U	2	< 2	U	2	< 2	U	2
Indeno[1,2,3-cd]pyrene	0.2	< 0.1	U	0.1	< 0.1	U	0.1	< 0.1	U	0.1

QC: CMD 6/28/2012

Table 7B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
SVOCs
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D7			RCRA-D8			RCRA-D9		
Permit Number		25-35759-0			25-35760-3			25-35747-6		
Sample Date		4/12/2012			4/12/2012			4/12/2012		
N=Normal; FD=Field Duplicate		N			N			N		
Well Depth		66.2			62.9			87.7		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Isophorone	40	< 2	U	2	< 2	U	2	< 2	U	2
m,p-Cresol	NS	< 2	U	2	< 2	U	2	< 2	U	2
Naphthalene	300	< 1	U	1	< 1	U	1	0.47	B	1
Nitrobenzene	6	< 2	U	2	< 2	U	2	< 2	U	2
Nitrosomethylethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodiethylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosodimethylamine	0.8	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitroso-di-n-butylamine	NS	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitroso-di-n-propylamine	10	< 2	U	2	< 2	U	2	< 2	U	2
N-Nitrosodiphenylamine	10	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosomorpholine	NS	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopiperidine	NS	< 5	U	5	< 5	U	5	< 5	U	5
N-Nitrosopyrrolidine	NS	< 5	U	5	< 5	U	5	< 5	U	5
o-Toluidine	NS	< 5	U	5	< 5	U	5	16.2		5
Pentachlorobenzene	NS	< 5	U	5	< 5	U	5	< 5	U	5
Pentachlorophenol	0.3	< 0.3	U	0.3	< 0.3	U	0.3	< 0.3	U	0.3
Phenanthrene	100	< 1	U	1	< 1	U	1	< 1	U	1
Phenol	2,000	< 2	U	2	< 2	U	2	< 2	U	2
Pyrene	200	< 1	U	1	< 1	U	1	< 1	U	1
Pyridine	NS	< 2	U	2	< 2	U	2	< 2	U	2

Notes:
All results reported in micrograms per liter (µg/L).
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria. Results greater than the NJ GWQS are shown in **bold.**
Qualifiers:
B = analyte found in associated blank
J = estimated value
UJ = not detected above RL, RL is approximate
R = Rejected result

QC: CMD 6/28/2012

Table 8A
Summary of Overburden Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		01-MW-01			01-MW-02			01-MW-03			FLOD-W1S			FLOD-W2S			PZ-12-3		
Permit Number		25-35176			25-35177			25-35178			25-00067731			25-00067732			25-56207		
Sample Date		4/12/2012			4/12/2012			4/11/2012			4/11/2012			4/11/2012			4/10/2012		
N=Normal; FD=Field Duplicate		N			N			N			N			N			N		
Well Depth		15.4			18.1			17.5			17.4			12.4			15.0		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																			
Aluminum	200	**27,200**		200	**295,000**		200	**68,000**		200	**163,000**		200	**5,590**		200	**310**		200
Antimony	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6
Arsenic	3	< 3	U	3	**48.3**		3	**27.2**	J	3	**21.1**	J	3	< 3	UJ	3	< 3	U	3
Barium	6,000	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200
Beryllium	1	**6.4**		1	**18.2**		1	**4.3**		1	**13**		1	**3.3**		1	< 1	U	1
Cadmium	4	< 3	U	3	3.3		3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Calcium	NS	81,400		5,000	334,000		5,000	32,700		5,000	203,000		5,000	69,900		5,000	34,200		5,000
Chromium	70	< 10	U	10	**206**		10	**105**	J	10	**77.4**	J	10	< 10	UJ	10	< 10	U	10
Cobalt	100	62.4		50	**179**		50	< 50	U	50	**142**		50	< 50	U	50	< 50	U	50
Copper	1,300	80.6		10	165		10	45		10	< 10	U	10	< 10	U	10	< 10	U	10
Cyanide	0.1	NDR			NDR			NDR			NDR			NDR			NDR		
Iron	300	**51,100**		100	**424,000**		100	**148,000**	J	100	**244,000**	J	100	**61,100**	J	100	**3,830**		100
Lead	5	< 9	UJ	9	< 60	UJ	60	< 15	UJ	15	< 30	UJ	30	3		3	< 3	U	3
Magnesium	NS	26,500		5,000	133,000		5,000	25,900		5,000	81,200		5,000	20,000		5,000	7,510		5,000
Manganese	50	**5,380**		15	**13,000**		30	**1,820**		15	**11,200**		30	**4,020**		15	**1,220**		15
Mercury	2	< 0.2	U	0.2	**3.4**		0.2	0.37	J	0.2	1	J	0.2	< 0.2	UJ	0.2	< 0.2	U	0.2
Nickel	100	**305**		10	**1,130**		10	**132**		10	**701**		10	83.8		10	< 10	U	10
Potassium	NS	23,200		10,000	149,000		10,000	17,300	J	10,000	70,700	J	10,000	< 10000	UJ	10,000	< 10000	U	10,000
Selenium	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Silver	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Sodium	50,000	**59,700**		10,000	**334,000**		10,000	33,900		10,000	**194,000**		10,000	38,500		10,000	12,200		10,000
Thallium	2	< 6	UJ	6	< 40	UJ	40	< 10	UJ	10	< 20	UJ	20	< 2	U	2	< 2	U	2
Vanadium	NS	< 50	U	50	342		50	136	J	50	148	J	50	< 50	UJ	50	< 50	U	50
Zinc	2,000	320		20	969		20	257		20	693		20	125		20	< 20	U	20

QC: CMD 6/28/2012

Table 8A
Summary of Overburden Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		PZ-12-4			PZ-12-5			PZ-12-6			28R			MW-2			16-MW-2		
Permit Number		25-56208			25-56209			25-56210			NA			25-33944-3			NA		
Sample Date		4/11/2012			4/10/2012			4/11/2012			4/14/2012			4/12/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			N			N			N			N			N		
Well Depth		16.8			14.9			15.2			17.8			21.1			16.1		
Well Location		Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 1 & 2			Impoundments 3 & 4 & 5			Impoundments 3 & 4 & 5			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																			
Aluminum	200	**33,100**	J	400	**44,000**		200	**78,000**		200	NDR			NDR			< 200	U	200
Antimony	6	< 12	UJ	12	< 6	U	6	< 6	U	6	NDR			NDR			< 6	U	6
Arsenic	3	**13.4**	J	6	**5.9**		3	**8.4**	J	3	**28.3**		3	**15.1**		3	**23.5**		3
Barium	6,000	< 400	UJ	400	354		200	< 200	U	200	NDR			NDR			< 200	U	200
Beryllium	1	**2.6**	J	2	**4.1**		1	**11**		1	NDR			NDR			< 1	U	1
Cadmium	4	< 6	UJ	6	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Calcium	NS	23,400	J	10,000	168,000		5,000	148,000		5,000	NDR			NDR			27,500		5,000
Chromium	70	51.6	J	20	48.5		10	39.8	J	10	NDR			NDR			< 10	U	10
Cobalt	100	< 100	UJ	100	**100**		50	74.7		50	NDR			NDR			< 50	U	50
Copper	1,300	39.2	J	20	75.3		10	< 10	U	10	NDR			NDR			< 10	U	10
Cyanide	0.1	NDR			NDR			< 0.01	U	0.01	NDR			NDR			NDR		
Iron	300	**91,900**	J	200	**190,000**		100	**182,000**	J	100	NDR			NDR			**52,400**		100
Lead	5	**18.8**	J	6	< 15	UJ	15	< 15	UJ	15	NDR			NDR			< 3	U	3
Magnesium	NS	17,000	J	10,000	40,600		5,000	40,700		5,000	NDR			NDR			35,900		5,000
Manganese	50	**1,090**	J	30	**14,800**		30	**3,740**		15	NDR			NDR			**10,300**		30
Mercury	2	0.91	J	0.2	0.29		0.2	< 0.2	UJ	0.2	NDR			NDR			< 0.2	U	0.2
Nickel	100	**100**	J	20	**254**		10	**288**		10	NDR			NDR			< 10	U	10
Potassium	NS	< 20000	UJ	20,000	< 10000	U	10,000	15,500	J	10,000	NDR			NDR			< 10000	U	10,000
Selenium	40	< 20	UJ	20	< 10	U	10	< 10	U	10	NDR			NDR			< 10	U	10
Silver	40	< 20	UJ	20	< 10	U	10	< 10	U	10	NDR			NDR			< 10	U	10
Sodium	50,000	23,900	J	20,000	**62,400**		10,000	**85,400**		10,000	NDR			NDR			23,600		10,000
Thallium	2	< 4	UJ	4	< 10	UJ	10	< 10	UJ	10	NDR			NDR			< 2	U	2
Vanadium	NS	< 100	UJ	100	74.7		50	112	J	50	NDR			NDR			< 50	U	50
Zinc	2,000	198	J	40	316		20	554		20	NDR			NDR			< 20	U	20

QC: CMD 6/28/2012

Table 8A
Summary of Overburden Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		AAA			CCC-R			CCC-R			EEE-R			III			KKK		
Permit Number		25-24942-8			25-50084			25-50084			25-31282-1			25-25027-2			25-25029-9		
Sample Date		4/13/2012			4/13/2012			4/13/2012			4/13/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			FD			N			N			N			N		
Well Depth		16.8			26.5			26.5			25.1			19.8			28.3		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																			
Aluminum	200	**313,000**	J	1000	< 200	U	200	< 200	U	200	< 200	U	200	**4,640**	J	400	**413**		200
Antimony	6	< 30	UJ	30	< 6	U	6	< 6	U	6	< 6	U	6	< 12	UJ	12	< 6	U	6
Arsenic	3	**104**		30	**5.8**		3	**6.4**		3	**13.7**		3	**46.6**	J	6	< 3	U	3
Barium	6,000	2,040	J	1000	< 200	U	200	< 200	U	200	< 200	U	200	< 400	UJ	400	< 200	U	200
Beryllium	1	**21.5**	J	5	< 1	U	1	< 1	U	1	< 1	U	1	< 2	UJ	2	< 1	U	1
Cadmium	4	< 15	UJ	15	< 3	U	3	< 3	U	3	< 3	U	3	< 6	UJ	6	< 3	U	3
Calcium	NS	40,500	J	25,000	66,800		5,000	65,800		5,000	53600		5000	24,000	J	10,000	16,400		5,000
Chromium	70	**501**	J	50	< 10	U	10	< 10	U	10	< 10	U	10	< 20	U	20	< 10	U	10
Cobalt	100	< 250	UJ	250	< 50	U	50	< 50	U	50	< 50	U	50	< 100	UJ	100	< 50	U	50
Copper	1,300	486	J	50	< 10	U	10	< 10	U	10	< 10	U	10	< 20	UJ	20	< 10	U	10
Cyanide	0.1	< 0.01	UJ	0.01	< 0.01	UJ	0.01	< 0.01	UJ	0.01	< 0.01	UJ	0.01	NDR			NDR		
Iron	300	**517,000**		1000	**1,560**		100	**1,480**		100	< 100	U	100	**70,200**	J	200	**5,270**		100
Lead	5	**285**		30	< 3	U	3	< 3	U	3	< 3	U	3	**6.8**	J	6	**8.7**		3
Magnesium	NS	145,000	J	25,000	52,600		5,000	51,500		5,000	82000		5000	10,400	J	10,000	9,960		5,000
Manganese	50	**16,000**	J	75	**5,240**		15	**5,220**		15	**154**		15	**5,870**		30	**3,540**		15
Mercury	2	< 1.6	UJ	1.6	< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	U	0.2
Nickel	100	**437**	J	50	< 10	U	10	< 10	U	10	< 10	U	10	< 20	UJ	20	< 10	U	10
Potassium	NS	< 50000	UJ	50,000	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10000	< 20000	UJ	20,000	< 10000	U	10,000
Selenium	40	< 50	UJ	50	< 10	U	10	< 10	U	10	< 10	U	10	< 20	UJ	20	< 10	U	10
Silver	40	< 50	UJ	50	< 10	U	10	< 10	U	10	< 10	U	10	< 20	UJ	20	< 10	U	10
Sodium	50,000	< 50000	UJ	50,000	40,500		10,000	40,000		10,000	11200		10000	48,700	J	20,000	16,400		10,000
Thallium	2	< 20	U	20	< 2	U	2	< 2	U	2	< 2	U	2	< 4	UJ	4	< 2	U	2
Vanadium	NS	635	J	250	< 50	U	50	< 50	U	50	< 50	U	50	< 100	UJ	100	< 50	U	50
Zinc	2,000	1,430	J	100	< 20	U	20	< 20	U	20	< 20	U	20	90.8	J	40	24.4		20

QC: CMD 6/28/2012

Table 8A
Summary of Overburden Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		34R			38R			42R			42R			TFP-94-1R		
Permit Number		25-33062-4			25-33064-1			25-33066-7			25-33066-7			25-49039		
Sample Date		4/14/2012			4/14/2012			4/14/2012			4/14/2012			4/14/2012		
N=Normal; FD=Field Duplicate		N			N			FD			N			N		
Well Depth		26.3			25.6			24.2			24.2			19.1		
Well Location		Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 19 & 24; Lagoons 6 & 7		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																
Aluminum	200	NDR			NDR			NDR			NDR			NDR		
Antimony	6	NDR			NDR			NDR			NDR			NDR		
Arsenic	3	**19**		3	**4.6**		3	**17.2**		3	**16.8**		3	**86.2**		3
Barium	6,000	NDR			NDR			NDR			NDR			NDR		
Beryllium	1	NDR			NDR			NDR			NDR			NDR		
Cadmium	4	NDR			< 3	U	3	NDR			NDR			NDR		
Calcium	NS	NDR			NDR			NDR			NDR			NDR		
Chromium	70	NDR			< 10	U	10	NDR			NDR			NDR		
Cobalt	100	NDR			NDR			NDR			NDR			NDR		
Copper	1,300	NDR			NDR			NDR			NDR			NDR		
Cyanide	0.1	NDR			NDR			NDR			NDR			NDR		
Iron	300	NDR			NDR			NDR			NDR			NDR		
Lead	5	NDR			NDR			NDR			NDR			NDR		
Magnesium	NS	NDR			NDR			NDR			NDR			NDR		
Manganese	50	NDR			NDR			NDR			NDR			NDR		
Mercury	2	NDR			NDR			NDR			NDR			NDR		
Nickel	100	NDR			NDR			NDR			NDR			NDR		
Potassium	NS	NDR			NDR			NDR			NDR			NDR		
Selenium	40	NDR			NDR			NDR			NDR			NDR		
Silver	40	NDR			NDR			NDR			NDR			NDR		
Sodium	50,000	NDR			NDR			NDR			NDR			NDR		
Thallium	2	NDR			NDR			NDR			NDR			NDR		
Vanadium	NS	NDR			NDR			NDR			NDR			NDR		
Zinc	2,000	NDR			NDR			NDR			NDR			NDR		

Notes:
All results reported in micrograms per liter (µg/L).
NDR = no data reported
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold**
Qualifiers:
B = analyte found in associated blank
J = estimated value
UJ = not detected above RL, RL is approximate
R = Rejected result

QC: CMD 6/28/2012

Table 8B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

	Sample ID	FLOD-W2BS			PW-2			PW-3			RCRA-D1			RCRA-D10			RCRA-D10		
	Permit Number	25-00067733			25-42456			25-42216			25-35765-4			25-357-55-7			25-357-55-7		
	Sample Date	4/11/2012			4/10/2012			4/10/2012			4/11/2012			4/12/2012			4/12/2012		
	N=Normal; FD=Field Duplicate	N			N			N			N			N			FD		
	Well Depth	40.0			300.0			299.0			71.7			72.4			72.4		
	Well Location	Impoundments 1 & 2			Bedrock--Main Plant			Bedrock--Main Plant			Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																			
Aluminum	200	< 200	U	200	NDR			NDR			**1,800**		200	< 200	U	200	< 200	U	200
Antimony	6	< 6	U	6	NDR			NDR			< 6	U	6	< 6	U	6	< 6	U	6
Arsenic	3	< 3	UJ	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Barium	6,000	< 200	U	200	NDR			NDR			< 200	U	200	757		200	697		200
Beryllium	1	< 1	U	1	NDR			NDR			< 1	U	1	< 1	U	1	< 1	U	1
Cadmium	4	< 3	U	3	NDR			NDR			< 3	U	3	< 3	U	3	< 3	U	3
Calcium	NS	663,000		5,000	NDR			NDR			85,900		5,000	78,600		5,000	74,700		5,000
Chromium	70	< 10	UJ	10	NDR			NDR			< 10	U	10	< 10	U	10	< 10	U	10
Cobalt	100	< 50	U	50	NDR			NDR			< 50	U	50	< 50	U	50	< 50	U	50
Copper	1,300	< 10	U	10	NDR			NDR			< 10	U	10	< 10	U	10	< 10	U	10
Iron	300	208	J	100	NDR			NDR			**4,790**		100	265		100	238		100
Lead	5	< 30	UJ	30	NDR			NDR			< 3	U	3	< 3	U	3	< 3	U	3
Magnesium	NS	297,000		5,000	NDR			NDR			13,000		5,000	9,580		5,000	8,350		5,000
Manganese	50	**8,570**		15	NDR			NDR			**99.3**		15	15.2		15	< 15	U	15
Mercury	2	< 0.2	UJ	0.2	NDR			NDR			< 0.2	UJ	0.2	< 0.2	U	0.2	< 0.2	U	0.2
Nickel	100	< 10	U	10	NDR			NDR			< 10	U	10	< 10	U	10	< 10	U	10
Potassium	NS	< 10000	UJ	10,000	NDR			NDR			< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000
Selenium	40	< 10	U	10	NDR			NDR			< 10	U	10	< 10	U	10	< 10	U	10
Silver	40	< 10	U	10	NDR			NDR			< 10	U	10	< 10	U	10	< 10	U	10
Sodium	50,000	**360,000**		10,000	NDR			NDR			27,500		10,000	21,000		10,000	19,200		10,000
Thallium	2	< 20	UJ	20	NDR			NDR			< 2	U	2	< 2	U	2	< 2	U	2
Vanadium	NS	< 50	UJ	50	NDR			NDR			< 50	U	50	< 50	U	50	< 50	U	50
Zinc	2,000	< 20	U	20	NDR			NDR			< 20	U	20	< 20	U	20	< 20	U	20

QC: CMD 6/28/2012

Table 8B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

	Sample ID	RCRA-D11			RCRA-D12			RCRA-D13			RCRA-D14			RCRA-D15			RCRA-D2		
	Permit Number	25-35758-1			25-35745-0			25-35746-8			25-35742-5			25-35743-3			25-35764-6		
	Sample Date	4/11/2012			4/11/2012			4/11/2012			4/11/2012			4/11/2012			4/10/2012		
	N=Normal; FD=Field Duplicate	N			N			N			N			N			N		
	Well Depth	89.8			77.1			85.9			80.5			83.9			81.4		
	Well Location	Impoundment 8			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																			
Aluminum	200	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200
Antimony	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6
Arsenic	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Barium	6,000	788		200	< 200	U	200	1,070		200	634		200	473		200	< 200	U	200
Beryllium	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cadmium	4	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Calcium	NS	76,700		5,000	145,000		5,000	69,200		5,000	62,600		5,000	64,300		5,000	106,000		5,000
Chromium	70	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Cobalt	100	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Copper	1,300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Iron	300	< 100	U	100	**2,160**		100	< 100	U	100	210		100	< 100	U	100	**463**		100
Lead	5	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Magnesium	NS	13,000		5,000	29,600		5,000	7,160		5,000	9,050		5,000	10,800		5,000	14,400		5,000
Manganese	50	< 15	U	15	**103**		15	< 15	U	15	< 15	U	15	< 15	U	15	< 15	U	15
Mercury	2	< 0.2	UJ	0.2	< 0.2	UJ	0.2	< 0.2	UJ	0.2	< 0.2	UJ	0.2	< 0.2	UJ	0.2	< 0.2	U	0.2
Nickel	100	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Potassium	NS	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000
Selenium	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Silver	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Sodium	50,000	16,700		10,000	35,000		10,000	18,100		10,000	17,800		10,000	15,400		10,000	37,600		10,000
Thallium	2	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vanadium	NS	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Zinc	2,000	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20

QC: CMD 6/28/2012

Table 8B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

	Sample ID	RCRA-D3			RCRA-D4			RCRA-D5			RCRA-D6			RCRA-D7			RCRA-D8		
	Permit Number	25-35763-8			25-35762-0			25-35752-2			25-35751-4			25-35759-0			25-35760-3		
	Sample Date	4/10/2012			4/10/2012			4/10/2012			4/10/2012			4/12/2012			4/12/2012		
	N=Normal; FD=Field Duplicate	N			N			N			N			N			N		
	Well Depth	75.7			83.8			59.3			58.7			66.2			62.9		
	Well Location	Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																			
Aluminum	200	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200	< 200	U	200	**1,360**		200
Antimony	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6	< 6	U	6
Arsenic	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Barium	6,000	< 200	U	200	< 200	U	200	< 200	U	200	232		200	< 200	U	200	464		200
Beryllium	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1
Cadmium	4	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Calcium	NS	127,000		5,000	101,000		5,000	115,000		5,000	181,000		5,000	80,000		5,000	88,500		5,000
Chromium	70	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Cobalt	100	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Copper	1,300	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Iron	300	< 100	U	100	< 100	U	100	< 100	U	100	226		100	**987**		100	**1,950**		100
Lead	5	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3	< 3	U	3
Magnesium	NS	16,600		5,000	10,900		5,000	15,900		5,000	27,100		5,000	26,200		5,000	14,300		5,000
Manganese	50	< 15	U	15	< 15	U	15	26.4		15	**73.6**		15	**61.6**		15	< 15	U	15
Mercury	2	< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	UJ	0.2	< 0.2	U	0.2
Nickel	100	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Potassium	NS	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000	< 10000	U	10,000
Selenium	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Silver	40	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10	< 10	U	10
Sodium	50,000	41,000		10,000	33,200		10,000	**58,000**		10,000	**96,600**		10,000	**111,000**		10,000	23,900		10,000
Thallium	2	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2	< 2	U	2
Vanadium	NS	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50	< 50	U	50
Zinc	2,000	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20	< 20	U	20

QC: CMD 6/28/2012

Table 8B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

	Sample ID	RCRA-D9			SS-P1			SS-P2			SS-P3			TT-P1			TT-P1		
	Permit Number	25-35747-6			25-20094-3			25-20094-3			25-20094-3			25-20095			25-20095		
	Sample Date	4/12/2012			4/11/2012			4/11/2012			4/11/2012			4/13/2012			4/13/2012		
	N=Normal; FD=Field Duplicate	N			N			N			N			N			FD		
	Well Depth	87.7			60.0			255.0			382.0			75.0			75.0		
	Well Location	Impoundment 8			Perimeter			Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																			
Aluminum	200	< 200	U	200	NDR			NDR			NDR			NDR			NDR		
Antimony	6	< 6	U	6	NDR			NDR			NDR			NDR			NDR		
Arsenic	3	< 3	U	3	**8.3**	J	3	**8.1**	J	3	< 3	UJ	3	< 3	U	3	< 3	U	3
Barium	6,000	< 200	U	200	NDR			NDR			NDR			NDR			NDR		
Beryllium	1	< 1	U	1	NDR			NDR			NDR			NDR			NDR		
Cadmium	4	< 3	U	3	NDR			NDR			NDR			NDR			NDR		
Calcium	NS	167,000		5,000	NDR			NDR			NDR			NDR			NDR		
Chromium	70	< 10	U	10	NDR			NDR			NDR			NDR			NDR		
Cobalt	100	< 50	U	50	NDR			NDR			NDR			NDR			NDR		
Copper	1,300	< 10	U	10	NDR			NDR			NDR			NDR			NDR		
Iron	300	**1,130**		100	NDR			NDR			NDR			NDR			NDR		
Lead	5	< 3	U	3	NDR			NDR			NDR			NDR			NDR		
Magnesium	NS	28,300		5,000	NDR			NDR			NDR			NDR			NDR		
Manganese	50	**3,520**		15	NDR			NDR			NDR			NDR			NDR		
Mercury	2	< 0.2	U	0.2	NDR			NDR			NDR			NDR			NDR		
Nickel	100	< 10	U	10	NDR			NDR			NDR			NDR			NDR		
Potassium	NS	< 10000	U	10,000	NDR			NDR			NDR			NDR			NDR		
Selenium	40	< 10	U	10	NDR			NDR			NDR			NDR			NDR		
Silver	40	< 10	U	10	NDR			NDR			NDR			NDR			NDR		
Sodium	50,000	32,000		10,000	NDR			NDR			NDR			NDR			NDR		
Thallium	2	< 2	U	2	NDR			NDR			NDR			NDR			NDR		
Vanadium	NS	< 50	U	50	NDR			NDR			NDR			NDR			NDR		
Zinc	2,000	< 20	U	20	NDR			NDR			NDR			NDR			NDR		

QC: CMD 6/28/2012

Table 8B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
Inorganics
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		TT-P2			TT-P3			YY-P1			YY-P2			YY-P3		
Permit Number		25-20095			25-20095			25-20631			25-20631			25-20631		
Sample Date		4/13/2012			4/13/2012			4/11/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N			N		
Well Depth		192.0			310.0			55.5			170.5			345.5		
Well Location		Perimeter			Perimeter			Perimeter			Perimeter			Perimeter		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Inorganics																
Aluminum	200	NDR			NDR			NDR			NDR			NDR		
Antimony	6	NDR			NDR			NDR			NDR			NDR		
Arsenic	3	< 3	U	3	< 3	U	3	< 3	UJ	3	**5.4**	J	3	< 3	UJ	3
Barium	6,000	NDR			NDR			NDR			NDR			NDR		
Beryllium	1	NDR			NDR			NDR			NDR			NDR		
Cadmium	4	NDR			NDR			NDR			NDR			NDR		
Calcium	NS	NDR			NDR			NDR			NDR			NDR		
Chromium	70	NDR			NDR			NDR			NDR			NDR		
Cobalt	100	NDR			NDR			NDR			NDR			NDR		
Copper	1,300	NDR			NDR			NDR			NDR			NDR		
Iron	300	NDR			NDR			NDR			NDR			NDR		
Lead	5	NDR			NDR			NDR			NDR			NDR		
Magnesium	NS	NDR			NDR			NDR			NDR			NDR		
Manganese	50	NDR			NDR			NDR			NDR			NDR		
Mercury	2	NDR			NDR			NDR			NDR			NDR		
Nickel	100	NDR			NDR			NDR			NDR			NDR		
Potassium	NS	NDR			NDR			NDR			NDR			NDR		
Selenium	40	NDR			NDR			NDR			NDR			NDR		
Silver	40	NDR			NDR			NDR			NDR			NDR		
Sodium	50,000	NDR			NDR			NDR			NDR			NDR		
Thallium	2	NDR			NDR			NDR			NDR			NDR		
Vanadium	NS	NDR			NDR			NDR			NDR			NDR		
Zinc	2,000	NDR			NDR			NDR			NDR			NDR		

Notes:
All results reported in micrograms per liter (µg/L).
NDR = no data reported
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold**
Qualifiers:
B = analyte found in associated blank
J = estimated value
UJ = not detected above RL, RL is approximate
R = Rejected result

QC: CMD 6/28/2012

Table 9A
Summary of Overburden Monitoring Well Groundwater Analytical Results
Indicator Parameters
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		38R			AAA			CCC-R			CCC-R			EEE-R		
Permit Number		25-33064-1			25-24942-8			25-50084			25-50084			25-31282-1		
Sample Date		4/14/2012			4/13/2012			4/13/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		N			N			FD			N			N		
Well Depth		25.6			16.8			26.5			26.5			25.1		
Well Location		Impoundments 19 & 24; Lagoons 6 & 7			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Indicator Parameters																
Chloride	250	11.2		2	39.2		2	25.3		2	25.3		2	17.5		2
Phenolics, Total Recoverable	NS	NDR			< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	U	0.2	< 0.2	U	0.2

Sample ID		III			KKK			MW-2			PZ-12-6		
Permit Number		25-25027-2			25-25029-9			25-33944-3			25-56210		
Sample Date		4/13/2012			4/13/2012			4/12/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			N			N		
Well Depth		19.8			28.3			21.1			15.18		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 3 & 4 & 5			Impoundments 1 & 2		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Indicator Parameters													
Chloride	250	53.2		2	16.7		2	156		2	34.1		2
Phenolics, Total Recoverable	NS	NDR			NDR			NDR			1.7	J	0.2

Notes:
All results reported in milligrams per liter (mg/L).
NDR = no data reported
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold**
Qualifiers:
B = analyte found in associated blank
J = estimated value
UJ = not detected above RL, RL is approximate
R = Rejected result

QC: CMD 6/28/2012

Table 9B
Summary of Bedrock Monitoring Well Groundwater Analytical Results
Indicator Parameters
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		RCRA-D1			RCRA-D10			RCRA-D10			RCRA-D11			RCRA-D12			RCRA-D13			RCRA-D14		
Permit Number		25-35765-4			25-357-55-7			25-357-55-7			25-35758-1			25-35745-0			25-35746-8			25-35742-5		
Sample Date		4/11/2012			4/12/2012			4/12/2012			4/11/2012			4/11/2012			4/11/2012			4/11/2012		
N=Normal; FD=Field Duplicate		N			N			FD			N			N			N			N		
Well Depth		71.7			72.4			72.4			89.8			77.1			85.9			80.5		
Well Location		Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A			Impoundment 8/Lagoon 9A		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Indicator Parameters																						
pH	6.5-8.5	7.38		0	7.37		0	7.37		0	7.46		0	6.77		0	7.46		0	7.32		0
Specific Conductance	NS	723		0.5	613		0.5	613		0.5	613		0.5	984		0.5	522		0.5	465		0.5
Total Dissolved Solids	500	418		10	368		10	371		10	390		10	**651**		10	299		10	253		10
Total Organic Carbon	NS	< 1	U	1	< 1	U	1	< 1	U	1	< 1	U	1	3.2		1	< 1	U	1	< 1	U	1
Total Organic Halides	NS	< 0.05	U	0.05	< 0.05	U	0.05	< 0.05	U	0.05	< 0.05	U	0.05	< 0.1	UJ	0.1	< 0.05	U	0.05	< 0.05	U	0.05

Sample ID		RCRA-D15			RCRA-D2			RCRA-D3			RCRA-D4			RCRA-D5			RCRA-D6			RCRA-D7		
Permit Number		25-35743-3			25-35764-6			25-35763-8			25-35762-0			25-35752-2			25-35751-4			25-35759-0		
Sample Date		4/11/2012			4/10/2012			4/10/2012			4/10/2012			4/10/2012			4/10/2012			4/12/2012		
N=Normal; FD=Field Duplicate		N			N			N			N			N			N			N		
Well Depth		83.9			81.4			75.7			83.8			59.3			58.7			66.2		
Well Location		Impoundment 8/Lagoon 9A			Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Indicator Parameters																						
pH	6.5-8.5	7.23		0	7.42		0	7.37		0	7.68		0	7.16		0	7.16		0	**6.25**		0
Specific Conductance	NS	490		0.5	798		0.5	973		0.5	744		0.5	1,000		0.5	1,600		0.5	1,270		0.5
Total Dissolved Solids	500	259		10	456		10	**654**		10	448		10	**577**		10	**1,160**		10	**637**		10
Total Organic Carbon	NS	< 1	U	1	1.1		1	1.2		1	1.1		1	1.5		1	1.7		1	1.5		1
Total Organic Halides	NS	< 0.1	UJ	0.1	< 0.1	U	0.1	< 0.05	U	0.05	< 0.1	U	0.1	< 0.05	U	0.05	< 0.1	U	0.1	< 0.1	UJ	0.1

Sample ID		RCRA-D8			RCRA-D9		
Permit Number		25-35760-3			25-35747-6		
Sample Date		4/12/2012			4/12/2012		
N=Normal; FD=Field Duplicate		N			N		
Well Depth		62.9			87.7		
Well Location		Impoundment 8			Impoundment 8		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL
Indicator Parameters							
pH	6.5-8.5	7.17		0	6.93		0
Specific Conductance	NS	774		0.5	1,220		0.5
Total Dissolved Solids	500	437		10	**855**		10
Total Organic Carbon	NS	1.2		1	15.5		1
Total Organic Halides	NS	< 0.05	U	0.05	0.52	J	0.2

Notes:
All results reported in milligrams per liter (mg/L), except pH which is reported in Standard Units (SU) and specific conductance in umhos/cm.
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold**
Qualifiers:
B = analyte found in associated blank
J = estimated value
UJ = not detected above RL, RL is approximate
R = Rejected result

QC: CMD 6/28/2012

Table 10
Summary of Overburden Monitoring Well Groundwater Analytical Results
Radiologicals
Former American Cyanamid Superfund Site
Bridgewater, NJ

Sample ID		CCC-R			CCC-R			EEE-R			KKK		
Permit Number		25-50084			25-50084			25-31282-1			25-25029-9		
Sample Date		4/13/2012			4/13/2012			4/13/2012			4/13/2012		
N=Normal; FD=Field Duplicate		FD			N			N			N		
Well Depth		26.5			26.5			25.1			28.3		
Well Location		Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18			Impoundments 17 & 18		
Parameter	NJ GWQS	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL	Result	Qual	RL
Radiologicals													
Radioactivity (gross alpha)	NS	< 3	U	3	< 3	U	3	2.7	J	3	< 3	U	3
Radioactivity (gross beta)	NS	3.7	J	4	3.8	J	4	4.2	J	4	< 4	U	4
Radium-226	NS	0.08	J	1	< 1	U	1	< 1	U	1	0.35	J	1
Radium-228	NS	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1	< 1	UJ	1

Notes:
All results reported in picocuries per liter (pCi/L).
NDR = no data reported
NS = standard not available
Qual = qualifier
RL = reporting limit
1. NJ GWQS: Higher of the Practical Quantitation Limit and Ground Water Quality Criterion (N.J.A.C. 7:9C) 07/2010, as well as Interim Groundwater Quality Critieria.
Results greater than the NJ GWQS are shown in **bold.**
Qualifiers:
B = analyte found in associated blank
J = estimated value
UJ = not detected above RL, RL is approximate
R = Rejected result

QC: CMD 6/28/2012

Table 11
Summary of Monthly Leachate Monitoring Results
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

Cell Number	1	2	3	4
Monitoring Date of End of Week	**Weekly Average Leachate Detection (Secondary System) Quantity ($gal\ ac^{-1}\ d^{-1}$)**			
January 7, 2012	19	0	0	20
January 14, 2012	169	25	0	38
January 21, 2012	119	10	0	40
January 28, 2012	110	0	0	8
February 4, 2012	51	13	0	0
February 11, 2012	14	6	0	83
February 18, 2012	9	0	0	0
February 25, 2012	15	6	0	0
March 3, 2012	3	6	0	83
March 10, 2012	6	15	0	12
March 17, 2012	6	0	0	31
March 24, 2012	6	0	0	18
March 31, 2012	5	3	0	0
April 7, 2012	5	12	0	44
April 14, 2012	5	6	0	0
April 21, 2012	4	0	0	27
April 28, 2012	6	0	0	0
May 5, 2012	4	0	0	0
May 12, 2012	4	0	0	0
May 19, 2012	3	0	0	0
May 26, 2012	4	0	0	0
June 2, 2012	8	0	0	0
June 9, 2012	0	9	0	7
June 16, 2012	11	130	0	18
June 23, 2012	6	14	4,857	33
June 30, 2012	8	11	0	0

Notes:

1) Gallons per acre per day = gpad = $gal\ ac^{-1}\ d^{-1}$

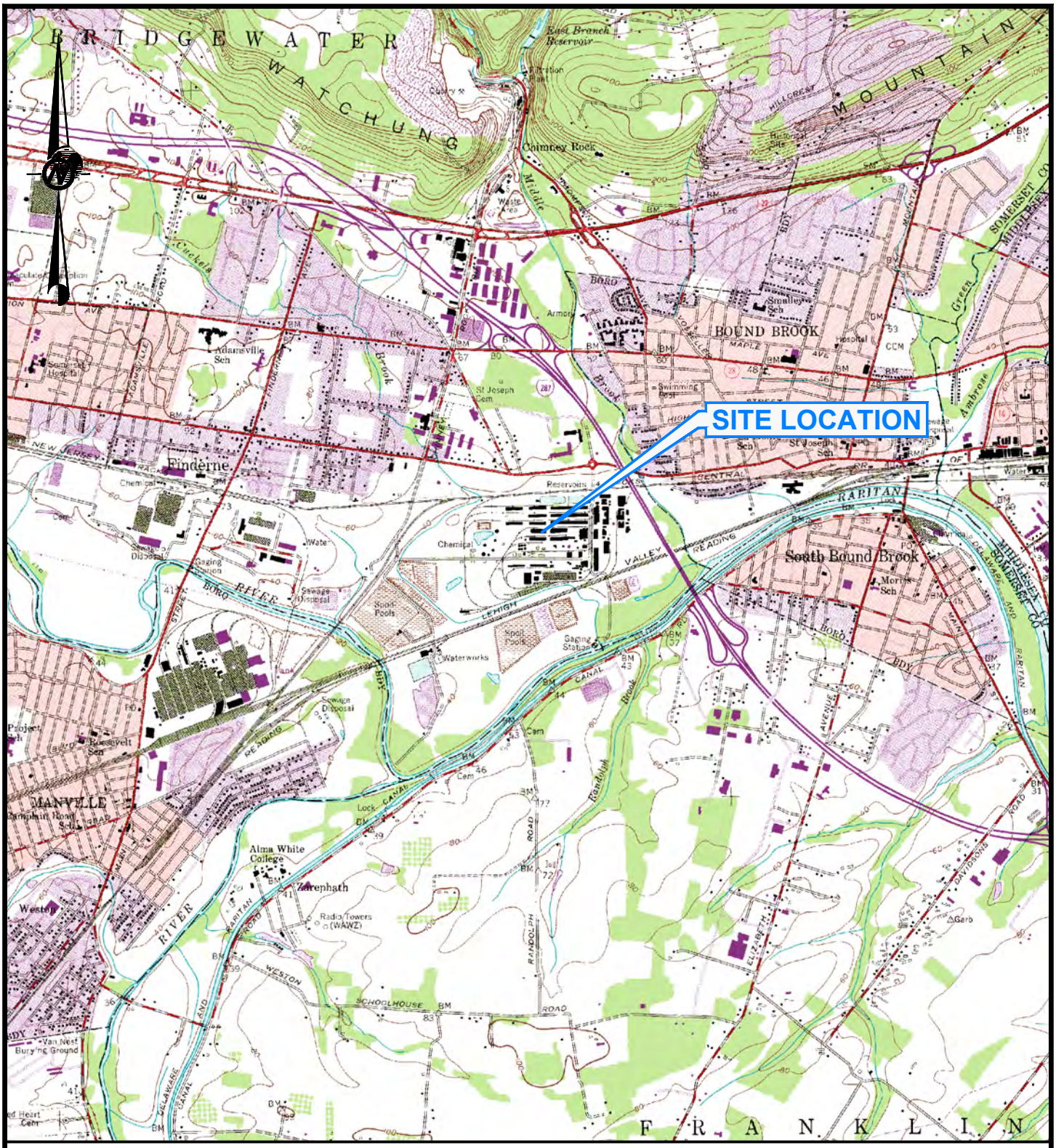
2) Raw data collected by Woodard & Curran on a daily basis. In determining weekly average volumes, volume reported for each day assumed representative of that day regardless of time of day recorded.

3) First week (i.e., week ending on January 7) is based on six days while remaining weeks are based on seven days of data.

4) Acreage per cell was as follows: Cell 1 = 4; Cell 2 = 5.15; Cell 3 = 3.5; Cell 4 = 3.

5) Action Leakage Rate (ALR) as noted by O'Brien & Gere Groundwater Monitoring Report 2nd Half 2011 is 21,302 gpad.

Compiled by: LMC 07/03/12; Checked by: ASM 07/03/12



REFERENCE

1.) MAP FROM 7.5 MINUTE U.S.G.S. QUADRANGLE OF BOUND BROOK, NEW JERSEY, DATED 1955 (PHOTOREVISED 1970).

3000 0 3000

SCALE FEET

NJ Authorization #24GA28029100

Golder Associates

Mt. Laurel, New Jersey

SCALE	AS SHOWN
DATE	07/31/12
DESIGN	CL
CADD	RG
CHECK	BAC
REVIEW	MJB

FILE No. 10386245C001

PROJECT No. 103-86245 REV. 0

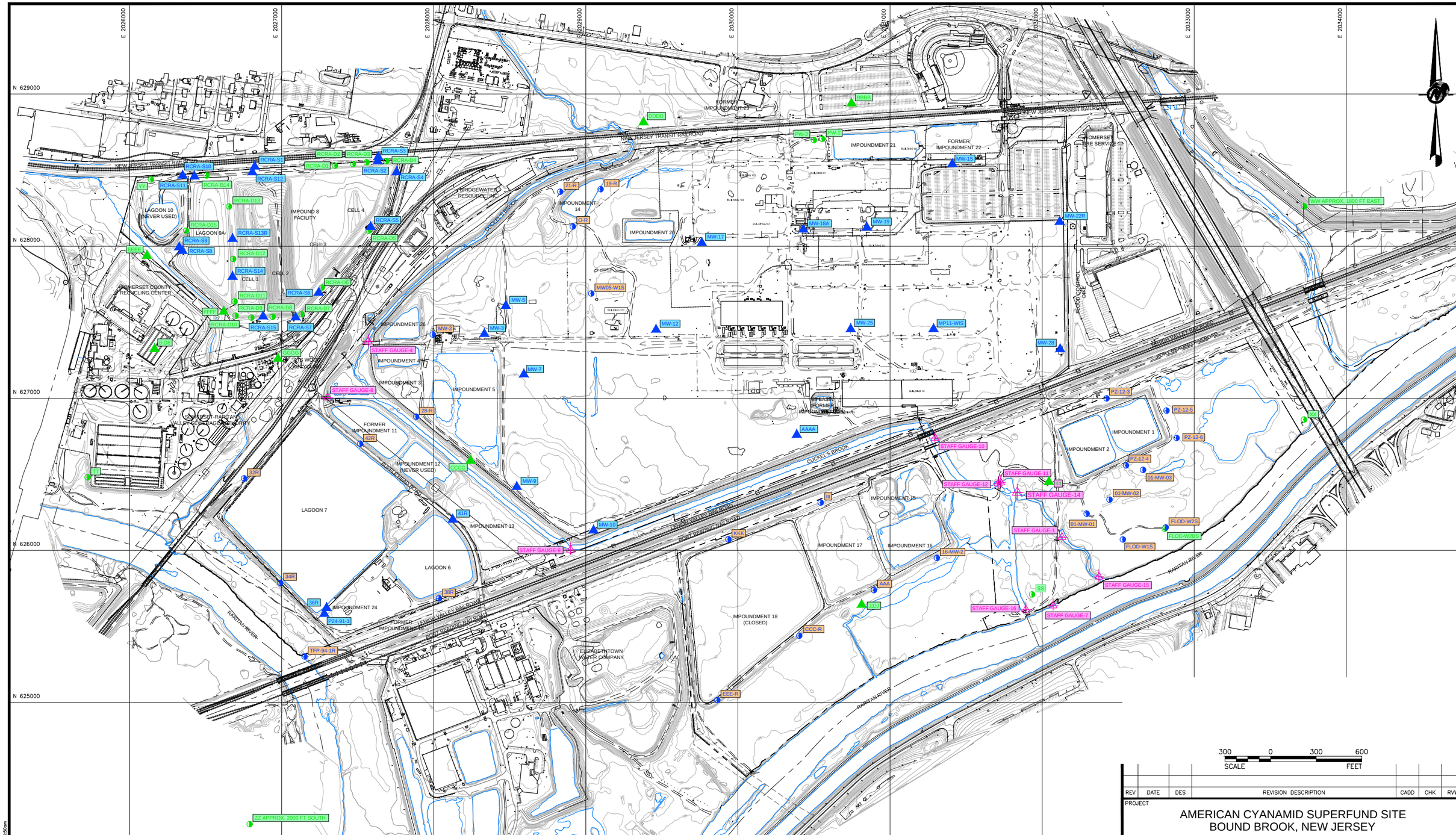
TITLE

SITE LOCATION MAP

AMERICAN CYANAMID SUPERFUND SITE

FIGURE 1

Drawing file: 10386245C01.dwg Jul 31, 2012 – 8:58am



LEGEND

- BEDROCK WELL (SAMPLED IN APRIL 2012 MONITORING EVENT)
- BEDROCK WELL (WATER LEVEL ONLY)
- OVERBURDEN WELL (SAMPLED IN APRIL 2012 MONITORING EVENT)
- OVERBURDEN WELL (WATER LEVEL ONLY)
- STAFF GAUGE

REFERENCES

1.) BASE MAP FROM DIGITAL CAD FILE AM_CYAN-04-12-11.DWG, SHEET 1 OF 36, ENTITLED "GENERAL LOCATION MAP AND SHEET KEY," DATED APRIL 12, 2011, PREPARED BY VARGO ASSOCIATES.

2.) BEARINGS ARE BASED ON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD 1927. REFERENCE TO NGS MONUMENT NO. SC 205. VERTICAL DATUM IS REFERENCED TO NGVD 1929 PLUS 69.29 FEET. REFERENCE TO NGS MONUMENT NO. L26, PUBLISHED NGVD 1929 ELEVATION EQUALS 37.53.

300 0 300 600
SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW

PROJECT

AMERICAN CYANAMID SUPERFUND SITE
BOUND BROOK, NEW JERSEY

TITLE

E□ISTING SITE CONDITIONS AND O□ERALL SITE PLAN

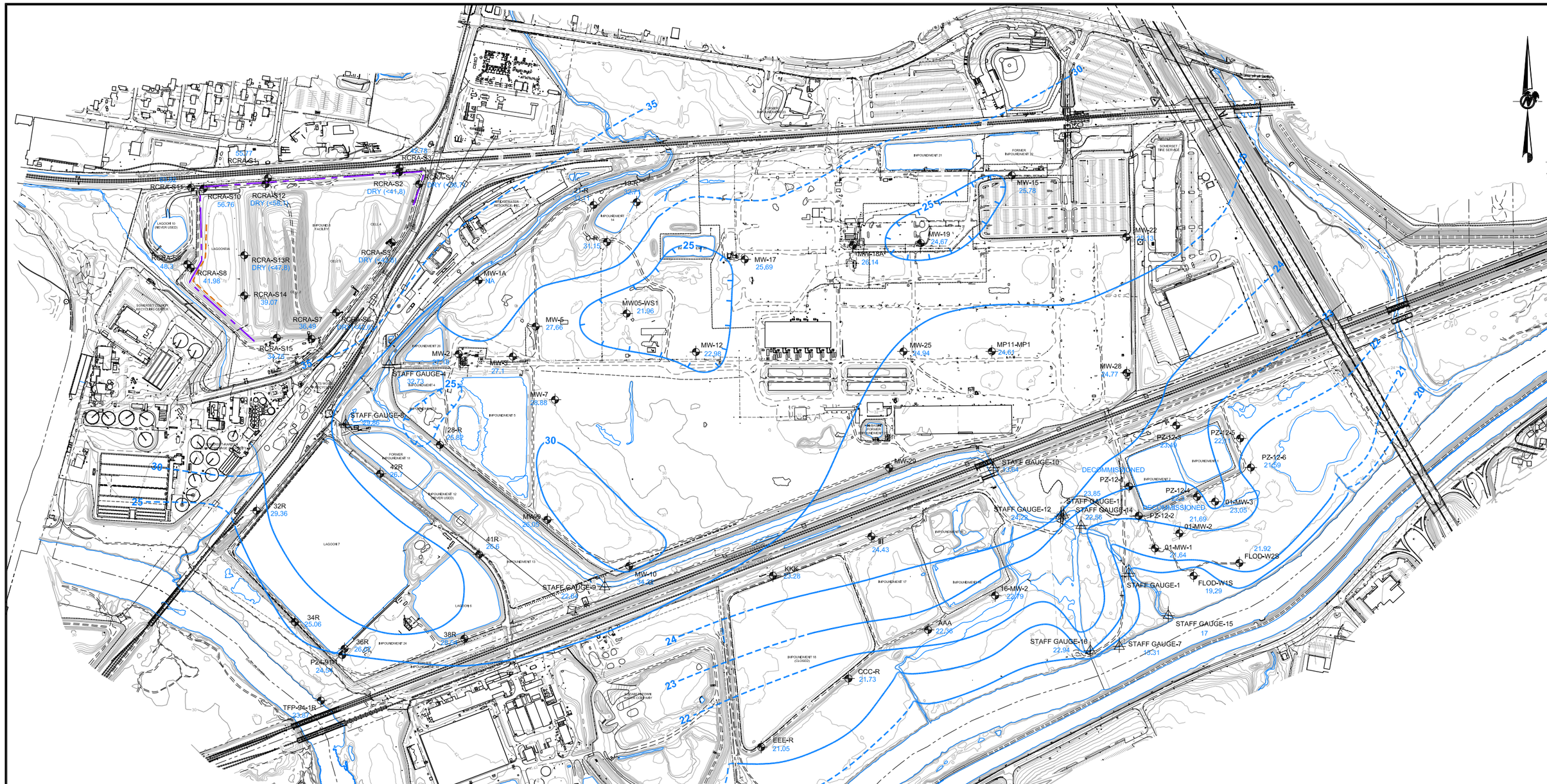
NJ Authorization #24GA28029100

Golder Associates
Mt. Laurel, New Jersey

PROJECT No.		103-86245	FILE No.	10386245C02
DESIGN	CL	07/31/12	SCALE AS SHOWN	REV. 0
CADD	RG	07/31/12		
CHECK	BAC	07/31/12		
REVIEW	MJB	07/31/12		

FIGURE 2

Drawing: Rev: 10386245C02.dwg Aug 01, 2012 - 10:50am



NOTES

1.) STAFF GAUGE REFERENCE ELEVATIONS WERE RESURVEYED IN SITE DATUM (FEB 2012). REFERENCE ELEVATIONS IN SITE DATUM WERE CONVERTED TO APPROXIMATELY FT MSL IN NGVD29 (SITE DATUM- 69.29 FT = APPROX FT MSL NGVD29). WATER ELEVATIONS WERE DETERMINED USING CONVERTED REFERENCE ELEVATIONS IN APPROX NGVD29

2.) GROUNDWATER ELEVATIONS LISTED ON THE MAP WITH A "LESS THAN" SYMBOL INDICATED THAT WELL WAS DRY AT THE TIME OF WATER LEVEL MEASUREMENT. THE ELEVATION VALUE LISTED WITH THE "LESS THAN" SYMBOL IS THE ELEVATION OF THE BOTTOM OF THE WELL SCREEN. THEREFORE, CONVEYING THAT THE WELL IS DRY AND THE GROUNDWATER ELEVATION IS BELOW THE BOTTOM OF THE WELL SCREEN.

REFERENCES

1.) BASE MAP FROM DIGITAL CAD FILE AM_CYAN-04-12-11.DWG, SHEET 1 OF 36, ENTITLED "GENERAL LOCATION MAP AND SHEET KEY," DATED APRIL 12, 2011, PREPARED BY VARGO ASSOCIATES.

2.) BEARINGS ARE BASED ON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD 1927. REFERENCE TO NGS MONUMENT NO. SC 205. VERTICAL DATUM IS REFERENCED TO NGVD 1929 PLUS 69.29 FEET. REFERENCE TO NGS MONUMENT NO. L26, PUBLISHED NGVD 1929 ELEVATION EQUALS 37.53.

3.) COMPILATION OF DATA FROM O'BRIEN & GERE AND BLASLAND, BOUCK & LEE SHOWED DISCREPANCIES RELATED TO WELL/BOREHOLE LOCATIONS, THE O'BRIEN & GERE DATA WAS USED.

4.) GROUNDWATER CUT-OFF WALL AND GROUNDWATER INTERCEPTOR TRENCH DIGITIZED FROM FIGURE 4-1, ENTITLED "IMPOUNDMENT 8 MONITORING WELL LOCATION PLAN," PREPARED BY O'BRIEN & GERE, DATED FEBRUARY 16, 2012.

LEGEND

BUILDING	OVERBURDEN MONITORING WELL
PROPERTY LINE	STAFF GAUGE
TOPOGRAPHIC CONTOUR LINE	20 — GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
RAILROAD	21.73 — GROUNDWATER ELEVATION
FENCE	NA — VALUE NOT AVAILABLE
ROAD	GROUNDWATER CUT-OFF WALL (SEE REFERENCE 4)
DRIVE	GROUNDWATER INTERCEPTOR TRENCH (SEE REFERENCE 4)
OVERHEAD WIRES	
GUIDE RAIL	

300 0 300 600
SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW

PROJECT
AMERICAN CYANAMID SUPERFUND SITE
BRIDGEWATER, NEW JERSEY

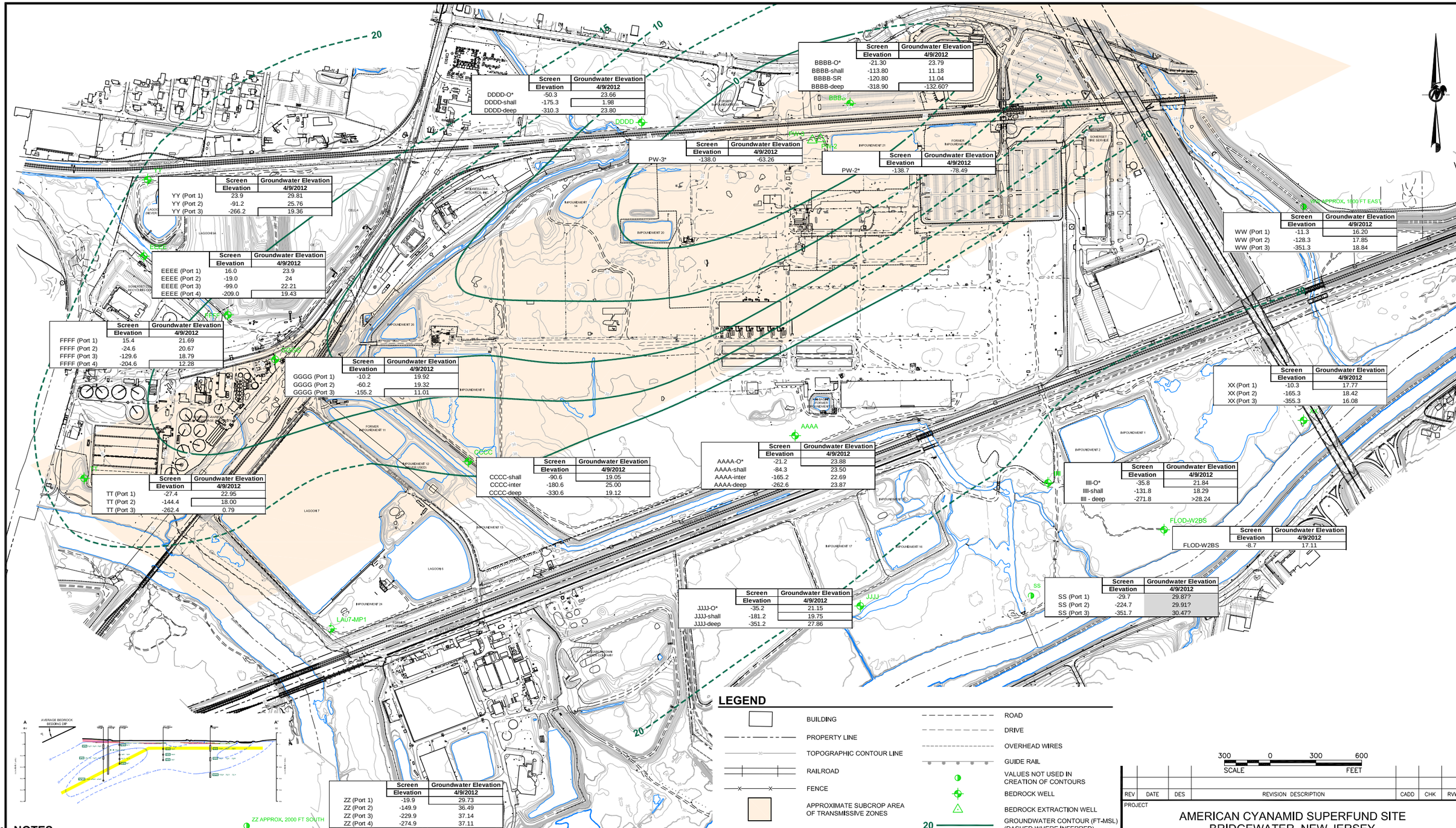
TITLE
OVERBURDEN POTENTIOMETRIC GROUNDWATER CONTOUR MAP APRIL 2012

NJ Authorization #24GA28029100
Golder Associates
Mt. Laurel, New Jersey

PROJECT No.		103-86245	FILE No.	10386245C03
DESIGN	BAC	07/31/12	SCALE AS SHOWN	REV. 0
CADD	AM	07/31/12		
CHECK	BAC	07/31/12		
REVIEW	MJB	07/31/12		

FIGURE 3

Drawing file: 10386245C03.dwg Jul 31, 2012 – 8:06am



	Screen Elevation	Groundwater Elevation 4/9/2012
DDDD-O*	-50.3	23.66
DDDD-shall	-175.3	1.98
DDDD-deep	-310.3	23.80

	Screen Elevation	Groundwater Elevation 4/9/2012
BBBB-O*	-21.30	23.79
BBBB-shall	-113.80	11.18
BBBB-SR	-120.80	11.04
BBBB-deep	-318.90	-132.60?

	Screen Elevation	Groundwater Elevation 4/9/2012
PW-3*	-138.0	-63.26

	Screen Elevation	Groundwater Elevation 4/9/2012
PW-2*	-138.7	-78.49

	Screen Elevation	Groundwater Elevation 4/9/2012
YY (Port 1)	23.9	29.81
YY (Port 2)	-91.2	25.76
YY (Port 3)	-266.2	19.36

	Screen Elevation	Groundwater Elevation 4/9/2012
EEEE (Port 1)	16.0	23.9
EEEE (Port 2)	-19.0	24
EEEE (Port 3)	-99.0	22.21
EEEE (Port 4)	-209.0	19.43

	Screen Elevation	Groundwater Elevation 4/9/2012
FFFF (Port 1)	15.4	21.69
FFFF (Port 2)	-24.6	20.67
FFFF (Port 3)	-129.6	18.79
FFFF (Port 4)	-204.6	12.28

	Screen Elevation	Groundwater Elevation 4/9/2012
GGGG (Port 1)	-10.2	19.92
GGGG (Port 2)	-60.2	19.32
GGGG (Port 3)	-155.2	11.01

	Screen Elevation	Groundwater Elevation 4/9/2012
TT (Port 1)	-27.4	22.95
TT (Port 2)	-144.4	18.00
TT (Port 3)	-262.4	0.79

	Screen Elevation	Groundwater Elevation 4/9/2012
CCCC-shall	-90.6	19.05
CCCC-inter	-180.6	25.00
CCCC-deep	-330.6	19.12

	Screen Elevation	Groundwater Elevation 4/9/2012
AAAA-O*	-21.2	23.88
AAAA-shall	-84.3	23.50
AAAA-inter	-165.2	22.69
AAAA-deep	-262.6	23.87

	Screen Elevation	Groundwater Elevation 4/9/2012
WW (Port 1)	-11.3	16.20
WW (Port 2)	-128.3	17.85
WW (Port 3)	-351.3	18.84

	Screen Elevation	Groundwater Elevation 4/9/2012
XX (Port 1)	-10.3	17.77
XX (Port 2)	-165.3	18.42
XX (Port 3)	-355.3	16.08

	Screen Elevation	Groundwater Elevation 4/9/2012
IIII-O*	-35.8	21.84
IIII-shall	-131.8	18.29
IIII - deep	-271.8	>28.24

	Screen Elevation	Groundwater Elevation 4/9/2012
FLOD-W2BS	-8.7	17.11

	Screen Elevation	Groundwater Elevation 4/9/2012
JJJJ-O*	-35.2	21.15
JJJJ-shall	-181.2	19.75
JJJJ-deep	-351.2	27.86

	Screen Elevation	Groundwater Elevation 4/9/2012
SS (Port 1)	-29.7	29.87?
SS (Port 2)	-224.7	29.91?
SS (Port 3)	-351.7	30.47?

	Screen Elevation	Groundwater Elevation 4/9/2012
ZZ (Port 1)	-19.9	29.73
ZZ (Port 2)	-149.9	36.49
ZZ (Port 3)	-229.9	37.14
ZZ (Port 4)	-274.9	37.11

LEGEND

- BUILDING
- PROPERTY LINE
- TOPOGRAPHIC CONTOUR LINE
- RAILROAD
- FENCE
- APPROXIMATE SUBCROP AREA OF TRANSMISSIVE ZONES
- ROAD
- DRIVE
- OVERHEAD WIRES
- GUIDE RAIL
- VALUES NOT USED IN CREATION OF CONTOURS
- BEDROCK WELL
- BEDROCK EXTRACTION WELL
- 20 GROUNDWATER CONTOUR (FT-MSL) (DASHED WHERE INFERRED)

Screen Elevation	Groundwater Elevation 12/4/2006	12/6/2006	8/10/2010	4/25/2011
-96.6	22.23	23.81	20.44	22.92
-180.6	22.10	27.01	26.17	23.18
-330.6	26.93	23.53	20.30	27.35

ELEVATION OF THE MID-POINT OF THE SCREENED INTERVAL AND GROUNDWATER ELEVATION DATA. A BOX AROUND A GROUNDWATER ELEVATION VALUE INDICATES DATA USED IN THE INTERPRETATION OF GROUNDWATER CONTOURS.

NOTES

1.) THE PLAN VIEW ILLUSTRATION OF GROUNDWATER POTENTIOMETRIC CONTOURS WAS COMPLETED BY CONTOURING WATER LEVELS FROM WELL SCREENS LOCATED IN THE PROXIMITY OF TWO IMAGINARY SURFACES AS FOLLOWS:
A SURFACE PARALLEL TO THE BEDROCK BEDDING PLANES DIPPING NINE DEGREES TO THE NORTH-NORTHWEST. THIS SURFACE IS POSITIONED WITHIN THE HIGHLY PERMEABLE BEDROCK ZONES THAT SUBCROP SLIGHTLY NORTH OF CONRAIL/CSX FREIGHT LINES.
A HORIZONTAL SURFACE CORRESPONDING TO SHALLOW BEDROCK, FOR THE REMAINDER OF THE SITE AREA EXTENDING TO THE SOUTH TO THE RARITAN RIVER. TRACES OF IMAGINARY SURFACES ARE SHOWN BELOW IN CROSS-SECTIONAL VIEW.

2.) THE GROUNDWATER CONTOURS ILLUSTRATE THE GENERAL TREND OF EQUAL PRESSURE DISTRIBUTION IN THE SUBSURFACE. THE DETAILED HETEROGENEITIES LOCALLY AFFECTING THE GROUNDWATER CONTOUR TRENDS ARE NOT CAPTURED ON THIS FIGURE.

3.) WELL SS LOCATION AND GROUNDWATER ELEVATION VALUES ARE INDICATED ON THE MAP; HOWEVER, VALUES WERE NOT INCLUDED IN CREATION OF CONTOURS. IT IS SUSPECTED THAT THE FLUTE WELL INTEGRITY IS COMPROMISED RESULTING IN ERRONEOUS WATER LEVEL READINGS FROM EACH PORT. THEREFORE, VALUES ARE PRESENTED IN THE MAP IN A SHADED TABLE.

4.) THE GROUNDWATER ELEVATION LISTED FOR WELL BBBB-DEEP IS BELIEVED TO BE ANOMALOUS BECAUSE THE OBSERVED GROUNDWATER ELEVATION OF BBBB-DEEP IS LOWER THAN THE OBSERVED GROUNDWATER ELEVATION IN THE EXTRACTION WELLS (PW-2/PW-3). THEREFORE, THE GROUNDWATER ELEVATION LISTED FOR WELL BBBB-DEEP IS INDICATED WITH A QUESTION MARK

5.) WELLS ZZ AND WW ARE INDICATED ON MAP; HOWEVER, ACTUAL LOCATIONS EXIST BEYOND THE EXTENT OF THE MAP (AS NOTED IN THE WELL LABEL). THEREFORE, GROUNDWATER ELEVATIONS ARE INDICATED ON THE MAP; HOWEVER; VALUES WERE NOT CONTOURED.

6.) GROUNDWATER ELEVATION FOR WELL IIII-DEEP IS LISTED ON THE MAP AS >28.24 BECAUSE WELL WAS ARTESIAN AT THE TIME OF WATER LEVEL MEASUREMENT.

REFERENCES

1.) BASE MAP FROM DIGITAL CAD FILE AM_CYAN-04-12-11.DWG, SHEET 1 OF 36, ENTITLED "GENERAL LOCATION MAP AND SHEET KEY," DATED APRIL 12, 2011, PREPARED BY VARGO ASSOCIATES.

2.) BEARINGS ARE BASED ON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD 1927.
REFERENCE TO NGS MONUMENT NO. SC 205. VERTICAL DATUM IS REFERENCED TO NGVD 1929 PLUS 69.29 FEET. REFERENCE TO NGS MONUMENT NO. L26, PUBLISHED NGVD 1929 ELEVATION EQUALS 37.53.

3.) COMPILATION OF DATA FROM O'BRIEN & GERE AND BLASLAND, BOUCK & LEE SHOWED DISCREPANCIES RELATED TO WELL/BOREHOLE LOCATIONS. THE O'BRIEN & GERE DATA WAS USED.

300 0 300 600
SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW

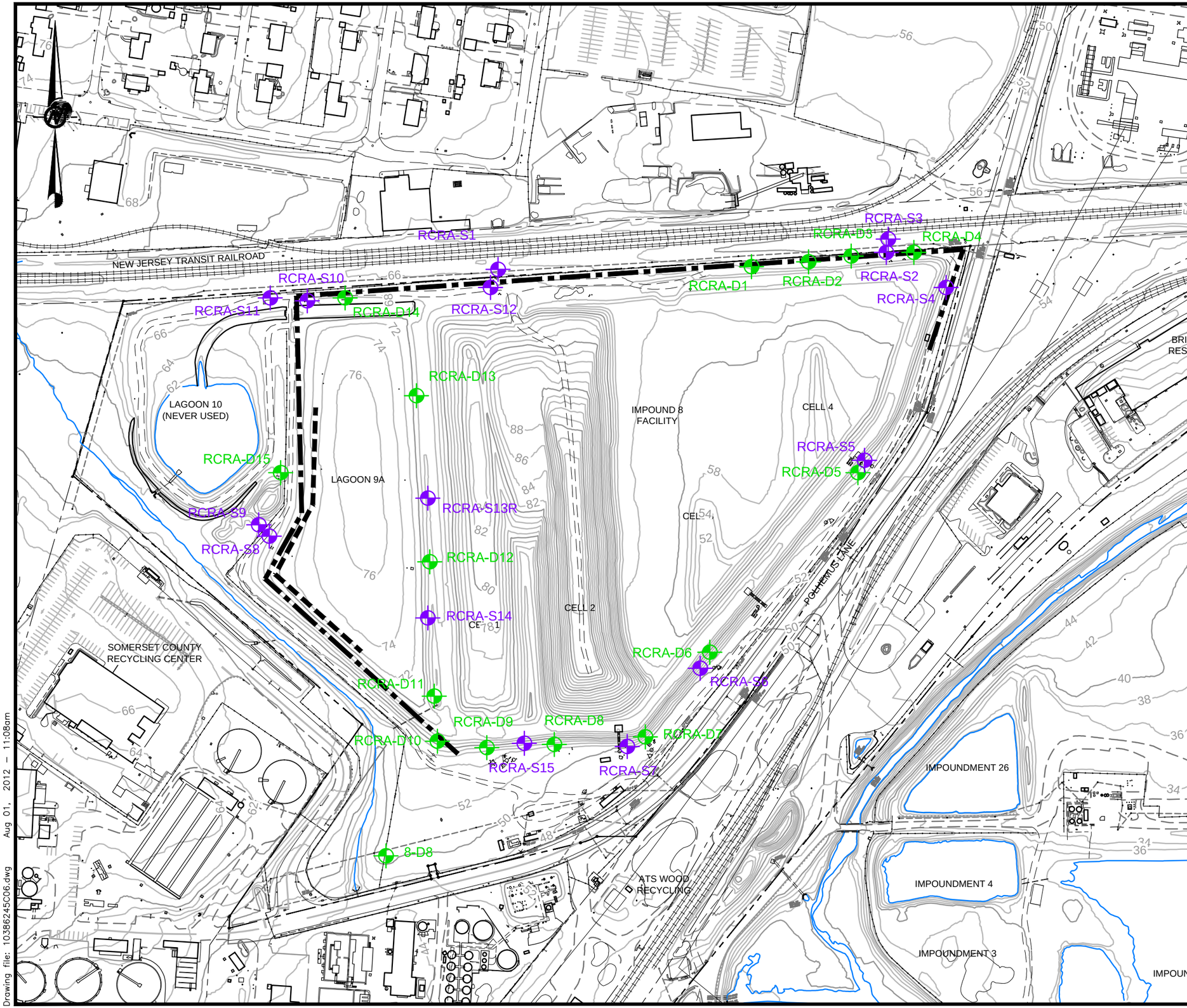
PROJECT
AMERICAN CYANAMID SUPERFUND SITE
BRIDGEWATER, NEW JERSEY

TITLE
BEDROCK GROUNDWATER POTENTIOMETRIC CONTOUR MAP APRIL 2012

NJ Authorization #24GA28029100
Golder Associates
Mt. Laurel, New Jersey

PROJECT No.		103-86245	FILE No.	10386245C04
DESIGN	BAC	07/31/12	SCALE AS SHOWN	REV. 0
CADD	AM	07/31/12		
CHECK	BAC	07/31/12	FIGURE 4	
REVIEW	MJB	07/31/12		

Drawing file: 10386245C04.dwg Jul 31, 2012 - 3:10pm



LEGEND

- BUILDING
- PROPERTY LINE
- 66 — TOPOGRAPHIC CONTOUR LINE
- RAILROAD
- FENCE
- ROAD
- DRIVE
- OVERHEAD WIRES
- GUIDE RAIL
- SHALLOW BEDROCK MONITORING WELL
- OVERBURDEN MONITORING WELL
- GROUNDWATER CUT-OFF WALL (SEE REFERENCE 4)
- GROUNDWATER INTERCEPTOR TRENCH (SEE REFERENCE 4)

REFERENCES

1.) BASE MAP FROM DIGITAL CAD FILE AM_CYAN-04-12-11.DWG, SHEET 1 OF 36, ENTITLED "GENERAL LOCATION MAP AND SHEET KEY," DATED APRIL 12, 2011, PREPARED BY VARGO ASSOCIATES.

2.) BEARINGS ARE BASED ON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD 1927.
REFERENCE TO NGS MONUMENT NO. SC 205. VERTICAL DATUM IS REFERENCED TO NGVD 1929 PLUS 69.29 FEET. REFERENCE TO NGS MONUMENT NO. L26, PUBLISHED NGVD 1929 ELEVATION EQUALS 37.53.

3.) COMPILATION OF DATA FROM O'BRIEN & GERE AND BLASLAND, BOUCK & LEE SHOWED DISCREPANCIES RELATED TO WELL/BOREHOLE LOCATIONS, THE O'BRIEN & GERE DATA WAS USED.

4.) GROUNDWATER CUT-OFF WALL AND GROUNDWATER INTERCEPTOR TRENCH DIGITIZED FROM FIGURE 4-1, ENTITLED "IMPOUNDMENT 8 MONITORING WELL LOCATION PLAN," PREPARED BY O'BRIEN & GERE, DATED FEBRUARY 16, 2012.

300 0 300
SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW

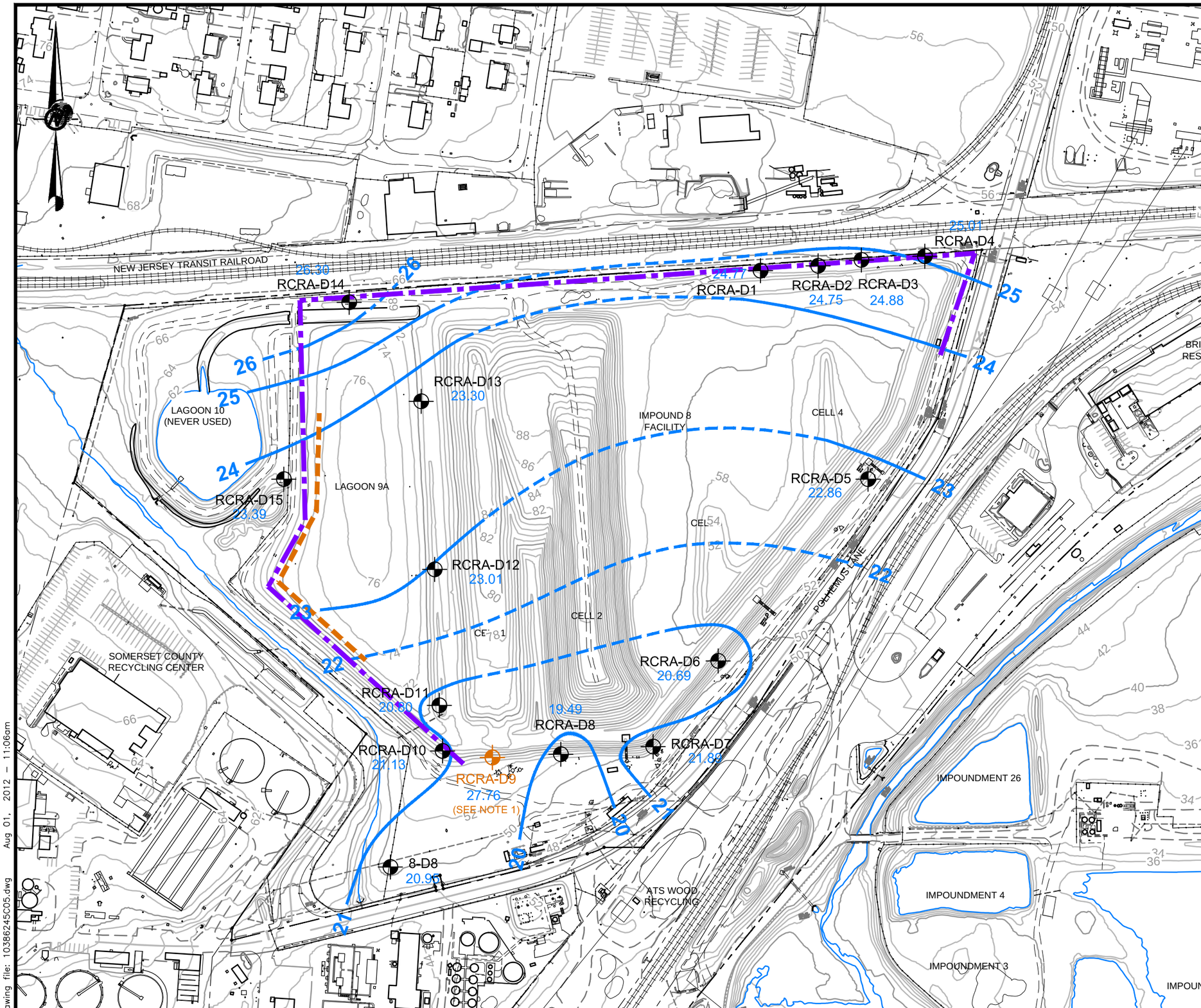
PROJECT
AMERICAN CYANAMID SUPERFUND SITE
BRIDGEWATER, NEW JERSEY

TITLE
IMPOUNDMENT 8
MONITORING WELL LOCATION MAP

NJ Authorization #24GA28029100
Golder Associates
Mt. Laurel, New Jersey

PROJECT No.		103-86245	FILE No.	10386245C06
DESIGN	BAC	07/31/12	SCALE AS SHOWN	REV. 0
CADD	AM	07/31/12		
CHECK	BAC	07/31/12	**FIGURE**	
REVIEW	MJB	07/31/12		

Drawing file: 10386245C06.dwg Aug 01, 2012 – 11:08am



LEGEND

- BUILDING
- PROPERTY LINE
- 66 — TOPOGRAPHIC CONTOUR LINE
- RAILROAD
- FENCE
- ROAD
- DRIVE
- OVERHEAD WIRES
- GUIDE RAIL
- SHALLOW BEDROCK WELL
- 20 — GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- 31.02 — GROUNDWATER ELEVATION (FT-MSL)
- GROUNDWATER CUT-OFF WALL (SEE REFERENCE 4)
- GROUNDWATER INTERCEPTOR TRENCH (SEE REFERENCE 4)

NOTE

1.) WELL RCRA-D9 INCLUDED ON MAP; HOWEVER, CONSISTENT WITH HISTORICAL PRACTICE, VALUE WAS NOT INCLUDED IN CREATION OF CONTOURS.

REFERENCES

1.) BASE MAP FROM DIGITAL CAD FILE AM_CYAN-04-12-11.DWG, SHEET 1 OF 36, ENTITLED "GENERAL LOCATION MAP AND SHEET KEY," DATED APRIL 12, 2011, PREPARED BY VARGO ASSOCIATES.

2.) BEARINGS ARE BASED ON THE NEW JERSEY STATE PLANE COORDINATE SYSTEM, NAD 1927.
REFERENCE TO NGS MONUMENT NO. SC 205. VERTICAL DATUM IS REFERENCED TO NGVD 1929 PLUS 69.29 FEET. REFERENCE TO NGS MONUMENT NO. L26, PUBLISHED NGVD 1929 ELEVATION EQUALS 37.53.

3.) COMPILATION OF DATA FROM O'BRIEN & GERE AND BLASLAND, BOUCK & LEE SHOWED DISCREPANCIES RELATED TO WELL/BOREHOLE LOCATIONS, THE O'BRIEN & GERE DATA WAS USED.

4.) GROUNDWATER CUT-OFF WALL AND GROUNDWATER INTERCEPTOR TRENCH DIGITIZED FROM FIGURE 4-1, ENTITLED "IMPOUNDMENT 8 MONITORING WELL LOCATION PLAN," PREPARED BY O'BRIEN & GERE, DATED FEBRUARY 16, 2012.

300 0 300
SCALE FEET

REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW

PROJECT
AMERICAN CYANAMID SUPERFUND SITE
BRIDGEWATER, NEW JERSEY

TITLE
IMPOUNDMENT 8 FACILITY
SHALLOW BEDROCK
GROUNDWATER POTENTIOMETRIC CONTOUR MAP
APRIL 2012

NJ Authorization #24GA28029100
Golder Associates
Mt. Laurel, New Jersey

PROJECT No.		103-86245	FILE No.	10386245C05
DESIGN	BAC	07/31/12	SCALE AS SHOWN	REV. 0
CADD	AM	07/31/12		
CHECK	BAC	07/31/12		
REVIEW	MJB	07/31/12		

FIGURE 6

Drawing file: 10386245C05.dwg Aug 01, 2012 – 11:06am

APPENDIX A

FIELD SAMPLE COLLECTION FORMS

WATER SAMPLE FIELD INFORMATION FORM

14:45 T. Depth

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: PZ-12-3

Purging Device: Typhoon
Date: 4/10/12 Time:

Depth to water before purging (ft-bmp)	5.50
Well depth (ft-bmp)	15.03
Casing diameter (in)	2.0"
Casing volume (gal)	1.55
Volume purged (gal)	5.00
Depth to water after purging (ft-bmp)	

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1405 Time Finish: 1417

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	1405 Intitial	1409 Vol. 1	1413 Vol. 2	1417 Vol. 3	Vol. 4	1423 Final	Units
Temp.	1) 10.23	2) 9.49	3) 9.33	4) 9.23	5)	6) 9.34	°C
pH	1) 7.16	2) 5.80	3) 5.61	4) 5.50	5)	6) 5.21	std. units
Sp. Cond	1) 263	2) 263	3) 258	4) 256	5)	6) 257	ms/cm
Turbidity	1) 242	2) 7.3	3) 0.0	4) 0.0	5)	6) 0.0	ntu
DO	1) 9.76	2) 7.79	3) 7.22	4) 6.93	5)	6) 1.29	mg/L
ORP	1) +26	2) +81	3) +111	4) +124	5)	6) +147	mv
Volume	1) 0	2) 2.00	3) 3.00	4) 5.00	5)	6)	gallons
DTW	1) 5.50	2) 5.65	3) 5.70	4) 5.65	5)	6) 5.64	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-10-12 / 1419 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/10/12

WATER SAMPLE FIELD INFORMATION FORM

14.00 T. Depth

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: PZ-12-5

Purging Device: Typhoon

Depth to water before purging (ft-bmp) 4.78
Date: 4-10-12 Time:
Well depth (ft-bmp) 14.88
Casing diameter (in) 2.0"
Casing volume (gal) 1.65
Volume purged (gal)
Depth to water after purging (ft-bmp)

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1500 Time Finish: 1523

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	1500 Initial	1508 Vol. 1	1515 Vol. 2	1523 Vol. 3	Vol. 4	1545 Final	Units
Temp.	1) 10.50	2) 10.40	3) 10.46	4) 10.79	5)	6) 11.30	°C
pH	1) 6.03	2) 6.05	3) 5.55	4) 4.87	5)	6) 4.51	std. units
Sp. Cond	1) 370	2) 298	3) 519	4) 784	5)	6) 3.05	ms/cm
Turbidity	1) 171	2) 134	3) 95.7	4) 191	5)	6) 89.0	ntu
DO	1) 5.08	2) 1.94	3) 4.25	4) 3.99	5)	6) 5.69	mg/L
ORP	1) +39	2) +9	3) +38	4) +97	5)	6) +161	mv
Volume	1) 0	2) 2.00	3) 3.50	4) 5.00	5)	6) 5.00	gallons
DTW	1) 4.78	2) 7.90	3) 10.78	4) 12.65	5)	6) 8.32	ft bmp (8.32)

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-10-12 1525 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/10/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: PW-3

Purging Device: Typhoon
Date: 4/10/12 Time:

Depth to water before purging (ft-bmp) 99.75
Well depth (ft-bmp)
Casing diameter (in)
Casing volume (gal)
Volume purged (gal)
Depth to water after purging (ft-bmp)

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: Time Finish:

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 13.92	2)	3)	4)	5)	6) 13.94	°C
pH	1) 7.43	2)	3)	4)	5)	6) 7.51	std. units
Sp. Cond	1) 2.63	2)	3)	4)	5)	6) 2.72	ms/cm
Turbidity	1) 0.0	2)	3)	4)	5)	6) 0.0	ntu
DO	1) 6.00	2)	3)	4)	5)	6) 6.69	mg/L
ORP	1) -57	2)	3)	4)	5)	6) -72	mv
Volume	1)	2)	3)	4)	5)	6)	gallons
DTW	1)	2)	3)	4)	5)	6)	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-10-12 / 1048 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/10/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: PW-2

Purging Device: Typhoon

Depth to water before purging (ft-bmp) 114.82 Date: 4/10/12 Time:

Well depth (ft-bmp)

Casing diameter (in)

Casing volume (gal)

Volume purged (gal)

Depth to water after purging (ft-bmp)

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 14.60	2)	3)	4)	5)	6) 13.76	°C
pH	1) 7.50	2)	3)	4)	5)	6) 7.45	std. units
Sp. Cond	1) 2.72	2)	3)	4)	5)	6) 2.69	ms/cm
Turbidity	1) 0.0	2)	3)	4)	5)	6) 0.0	ntu
DO	1) 6.94	2)	3)	4)	5)	6) 6.85	mg/L
ORP	1) -80	2)	3)	4)	5)	6) -90	mv
Volume	1) 1.5082	2)	3)	4)	5)	6) 1320	gallons
DTW	1)	2)	3)	4)	5)	6)	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-10-12 / 1315 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/10/12

10.02

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA I-2

Purging Device: Bladder Pump

Depth to water before purging (ft-bmp) 38.35 Date: 4/10/12 Time: 1255

Well depth (ft-bmp) 81.40

Casing diameter (in) 6'

Casing volume (gal) 63.28

Volume purged (gal)

Depth to water after purging (ft-bmp)

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1255 Time Finish: 1615

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	intitial	Vol. 1	Vol. 2 1505	Vol. 3 1615	Vol. 4	Final	Units
Temp.	1) 13.68	2) 14.97	3) 14.61	4) 14.29	5)	6) 13.76	°C
pH	1) 7.51	2) 7.47	3) 7.54	4) 7.40	5)	6) 7.42	std. units
Sp. Cond	1) 0.806	2) 0.790	3) 0.807	4) 0.804	5)	6) 0.778	ms/cm
Turbidity	1) 7.3	2) 1.0	3) 0.7	4) 1.5	5)	6) 4.5	ntu
DO	1) 8.62	2) 6.45	3) 5.98	4) 5.16	5)	6) 2.80	mg/L
ORP	1) +197	2) +185	3) +196	4) +192	5)	6) +144	mv
Volume	1) ∅	2) 65.0	3) 130.0	4) 195.0	5)	6) 195	gallons
DTW	1) 38.35	2) 38.51	3) 38.51	4) 38.55	5)	6) 38.60	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 04-10-12 / 1620 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/10/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Brunel Bank
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: [illegible]

Golder Associates

Sample Point ID: RCRA D-3

Purging Device: Bladder Pump

Depth to water before purging (ft-bmp): 36.82
Date: 4/10/12 Time: 1219
Well depth (ft-bmp): 75.70
Casing diameter (in): 6'
Casing volume (gal): 56.16
Volume purged (gal):
Depth to water after purging (ft-bmp):
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1219 Time Finish: 1519

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial	Vol. 1	Vol. 2	Vol. 3 1519	Vol. 4	Final	Units
Temp.	1) 14.84	2) 14.19	3) 14.77	4) 14.58	5)	6) 14.32	°C
pH	1) 7.40	2) 7.38	3) 7.41	4) 7.45	5)	6) 7.37	std. units
Sp. Cond	1) 0.705	2) 0.955	3) 0.954	4) 0.950	5)	6) 0.973	ms/cm
Turbidity	1) 1.7	2) 0.2	3) 1.0	4) 0.4	5)	6) 0.1	ntu
DO	1) 3.35	2) 4.32	3) 8.10	4) 7.58	5)	6) 2.36	mg/L
ORP	1) +189	2) +198	3) +190	4) +200	5)	6) +198	mv
Volume	1) 0	2) 60	3) 120	4) 180	5)	6) 180	gallons
DTW	1) 36.82	2) 37.31	3) 37.31	4) 37.40	5)	6) 37.38	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 04-10-12 / 1523 Method of sample collection:

Sample sequence:

Signature: [illegible] Company: Avcenta Date: 4/1/

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Barrel Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Brian Fm

Golder Associates

Sample Point ID: RCRA D-4

Purging Device: Bladder Pump

Depth to water before purging (ft-bmp): 36.33
Date: 4/10/12 Time:
Well depth (ft-bmp): 83.8
Casing diameter (in): 10
Casing volume (gal): 69.78
Volume purged (gal):
Depth to water after purging (ft-bmp):

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1157 Time Finish: 1537

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial	Vol. 1	Vol. 2	Vol. 3 1527	Vol. 4	Final	Units
Temp.	1) 14.45	2) 14.01	3) ~~14.07~~ 14.31	4) 14.08	5)	6) 13.68	°C
pH	1) 7.36	2) 7.48	3) ~~7.40~~ 7.45	4) 7.38	5)	6) 7.68	std. units
Sp. Cond	1) 0.693	2) 0.729	3) 0.761	4) 0.783	5)	6) 0.744	ms/cm
Turbidity	1) 22	2) 6.7	3) 0.0	4) 0.4	5)	6) 0.3	ntu
DO	1) 8.07	2) 3.43	3) 8.14	4) 7.48	5)	6) 7.72	mg/L
ORP	1) +182	2) +199	3) +191	4) +198	5)	6) +197	mv
Volume	1) 0	2) 70.0	3) 140	4) 210	5)	6) 210	gallons
DTW	1) 36.33	2) 37.53	3) ~~37.31~~	4) 36.60	5)	6) 37.36	ft bmp

Sample Collection Notes: 37.42 Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 04-10-12 1530 Method of sample collection:

Sample sequence:

Signature: B. F Company: Accutase Date: 4/10/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Board Brook
Location: Bridgewater NJ
Project Number: 103-86245
Sampling Team: Brian Ramer

Golder Associates

Sample Point ID: RCRA-D-5

Purging Device: Bladder Pump

Depth to water before purging (ft-bmp) 36.23
Date: 4-10-12 Time: 0919

Well depth (ft-bmp) 59.30
Casing diameter (in) 6"
Casing volume (gal) 33.91
Volume purged (gal)
Depth to water after purging (ft-bmp)

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 0919 Time Finish: 1029

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial	Vol. 1 0954	Vol. 2 1029	Vol. 3	Vol. 4	Final	Units
Temp.	1) 12.18	2) 13.22	3) 13.32	4) 14.37	5)	6) 13.85	°C
pH	1) 6.75	2) 7.12	3) 7.26	4) 7.17	5)	6) 7.16	std. units
Sp. Cond	1) 0.974	2) 0.986	3) 1.02	4) 1.02	5)	6) 1.00	ms/cm
Turbidity	1) 1.5	2) 0.9	3) 0.7	4) 0.4	5)	6) 0.4	ntu
DO	1) 9.49	2) 8.44	3) 4.54	4) 5.27	5)	6) 9.02	mg/L
ORP	1) +203	2) +186	3) +146	4) +143	5)	6) +189	mv
Volume	1) 0	2) 35.0	3) 70.0	4) 105.0	5)	6)	gallons
DTW	1) 36.23	2) 37.60	3) 37.63	4) 37.60	5)	6) 37.62	ft bmp

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/10/12 / 1120

Method of sample collection:

Sample sequence:

Signature: [signature]

Company: Accutest

Date: 4/10/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Boundbrook Site
Location: Bridgewater NJ
Project Number: 103-86245
Sampling Team: Brian Rainer

Golder Associates

Sample Point ID: RCRA D-6

Purging Device: Bladder Pump
Date: 4/10/12 Time: 0902

Depth to water before purging (ft-bmp) 32.55
Well depth (ft-bmp) 55.70
Casing diameter (in) 6"
Casing volume (gal) 38.44
Volume purged (gal) x 3
Depth to water after purging (ft-bmp)

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 0902 Time Finish: 1102

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map? Y or N
Is well located in a dry area? Y or N
Is well readily accessible? Y or N
Is well legibly labeled? Y or N
Is well protected with posts? Y or N
Is casing free of kinks/bends? Y or N
Is protective casing secure? Y or N

Is the well locked? Y or N
Is the lock in good condition? Y or N
Is the well vented? Y or N
Does casing have weep hole? Y or N
Does well have dedicated bailer? Y or N
Does well have dedicated pump? Y or N
Is equip. in good condition? Y or N

Remarks:

FIELD MEASUREMENTS

	Initial	Vol. 1 0942	Vol. 2 1022	Vol. 3 1102	Vol. 4	Final	Units
Temp.	1) 11.69°C	2) 12.90	3) 12.81	4) 13.54	5)	6) 14.57	°C
pH	1) 5.89	2) 6.97	3) 7.10	4) 7.16	5)	6) 7.16	std. units
Sp. Cond	1) 1.61	2) 1.58	3) 1.57	4) 1.63	5)	6) 1.60	ms/cm
Turbidity	1) 62.5	2) 11.3	3) 4.8	4) 1.9	5)	6) 2.0	ntu
DO	1) 8.37	2) 7.43	3) 8.24	4) 8.43	5)	6) 4.30	mg/L
ORP	1) +241	2) +192	3) +206	4) +206mV	5)	6) +201	mv
Volume	1) Ø	2) 40.0	3) 80.0	4) 120.0	5)	6) 120	gallons
DTW	1) 32.55	2) 33.55	3) 33.95	4) 34.25	5)	6) 30.63	ft bmp

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 04/10/12 1105

Method of sample collection:

Sample sequence:

Signature: [signature]

Company: AccTest

Date: 4/10/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-06245
Sampling Team: Accutest

Golder Associates

Sample Point ID: OL-MW-3

Purging Device: Typhoon

Depth to water before purging (ft-bmp): 4.09
Date: 4-11-12 Time:

Well depth (ft-bmp): 17.5

Casing diameter (in): 4"

Casing volume (gal): 8.76

Volume purged (gal): 26.27

Depth to water after purging (ft-bmp):

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1518 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1518	Vol. 1 1526	Vol. 2 1534	Vol. 3 1542	Vol. 4	Final 1550	Units
Temp.	1) 12.14	2) 11.23	3) 10.85	4) 10.91	5)	6) 10.48	°C
pH	1) 2.02	2) 1.99	3) 1.99	4) 2.02	5)	6) 2.00	std. units
Sp. Cond	1) 4.33	2) 4.76	3) 4.89	4) 4.84	5)	6) 4.89	ms/cm
Turbidity	1) 29.8	2) 13.9	3) 12.1	4) 6.2	5)	6) 4.7	ntu
DO	1) 11.02	2) 9.23	3) 9.09	4) 4.23	5)	6) 3.30	mg/L
ORP	1) +410	2) +407	3) +406	4) +407	5)	6) +406	mv
Volume	1) 0	2) 9.0	3) 18.0	4) 27.0	5)	6) 27.0	gallons
DTW	1) 4.09	2) 6.41	3) 6.51	4) 6.60	5)	6) 6.05	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 1545 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: FLOD-MW5

Purging Device: Typhoon

Depth to water before purging (ft-bmp) 7.11 Date: 4-11-12 Time:

Well depth (ft-bmp) 17.4

Casing diameter (in) 2"

Casing volume (gal) 1.677

Volume purged (gal) 5.03

Depth to water after purging (ft-bmp)

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1255 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1255	Vol. 1 1258	Vol. 2 1301	Vol. 3 1304	Vol. 4	Final	Units
Temp.	1) 11.65	2) 11.92	3) 10.75	4) 10.45	5) 10.61	6) 10.61	°C
pH	1) 4.56	2) 3.58	3) 3.19	4) 3.15	5) 3.11	6) 3.11	std. units
Sp. Cond	1) 2.42	2) 3.72	3) 3.94	4) 3.93	5) 3.94	6) 3.94	ms/cm
Turbidity	1) 56.2	2) 154	3) 36.5	4) 14.7	5)	6) 4.0	ntu
DO	1) 9.32	2) 9.38	3) 8.91	4) 9.18	5)	6) 7.78	mg/L
ORP	1) +72	2) +174	3) +264	4) +270	5)	6) +274	mv
Volume	1) Ø	2) 2.00	3) 4.00	4) 6.00	5)	6) 6.0	gallons
DTW	1) 7.11	2) 7.20	3) 7.18	4) 7.18	5) 7.16	6) 7.16	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 | 1307 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-96245
Sampling Team: Brian R.

Golder Associates

Sample Point ID: Flod-W25

Purging Device: Typhoon

Depth to water before purging (ft-bmp): 5.80 Date: 4-11-12 Time: 1055

Well depth (ft-bmp): 12.40

Casing diameter (in): 2"

Casing volume (gal): 1.07

Volume purged (gal) x3 vol: 3.22

Depth to water after purging (ft-bmp):

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1055 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS 2gal 4gal

	Initial 1055	Vol. 1 1056	Vol. 2 1057	Vol. 3 1058	Vol. 4	Final 1105	Units
Temp.	1) 10.18	2) 9.71	3) 9.65	4) 9.72	5)	6) 9.60	°C
pH	1) 4.51	2) 4.21	3) 4.20	4) 4.20	5)	6) 4.12	std. units
Sp. Cond	1) 1.00	2) 0.994	3) 0.994	4) 0.996	5)	6) 1.01	ms/cm
Turbidity	1) 716	2) 96.6	3) 30.1	4) 15.3	5)	6) 3.5	ntu
DO	1) 10.89	2) 11.32	3) 7.51	4) 5.61	5)	6) 5.57	mg/L
ORP	1) +153	2) +157	3) +159	4) +167	5)	6) +166	mv
Volume	1) 0	2) 1	3) 2	4) 4	5)	6) 4	gallons
DTW	1) 5.80	2) 5.87	3) 8.90	4) 8.91	5)	6) 8.87	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics: cy

Sample date / time: 04-11-12 / 1100 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/11/12

25

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Brian R.

Golder Associates

Sample Point ID: Flod - W8BS

Purging Device: Typhoon
Date: 4-11-12 Time:

Depth to water before purging (ft-bmp): 9.16
Well depth (ft-bmp): 46.0
Casing diameter (in): 2"
Casing volume (gal): 5.03
Volume purged (gal) x 3 vol: 15.08
Depth to water after purging (ft-bmp):
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1145 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1145	Vol. 1 1153	Vol. 2 1200	Vol. 3 1206	Vol. 4	Final	Units
Temp.	1) 12.18	2) 12.14	3) 12.00	4) 11.86	5)	6) 11.88	°C
pH	1) 5.66	2) 6.14	3) 6.00	4) 6.69	5)	6) 6.10	std. units
Sp. Cond	1) 4.70	2) 5.16	3) 5.13	4) 5.21	5)	6) 5.19	ms/cm
Turbidity	1) 41.8	2) 25.3	3) 5.5	4) 1.4	5)	6) 1.0	ntu
DO	1) 5.16	2) 7.31	3) 7.80	4) 7.32	5)	6) 7.73	mg/L
ORP	1) +87	2) +27	3) +62	4) +58	5)	6) +62	mv
Volume	1) ø	2) 5.00	3) 10.00	4) 16.0	5)	6) 16.0	gallons
DTW	1) 9.16	2) 11.93	3) 12.30	4) 12.52	5)	6) 12.79	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4-11-12 / 1210 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: PZ-12-4

Purging Device: Peristaltic/Bailer

Depth to water before purging (ft-bmp) 5.47
Date: 4/11/12 Time:
Well depth (ft-bmp) 16.80
Casing diameter (in) 1.85
Casing volume (gal)
Volume purged (gal)
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1524 Time Finish: 1540

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final (1600)	Units
Temp.	1)	2)	3)	4)	5)	6) 13.64	°C
pH	1)	2)	3)	4)	5)	6) 2.91	std. units
Sp. Cond	1)	2)	3)	4)	5)	6) 1.58	ms/cm
Turbidity	1)	2)	3)	4)	5)	6) 282	ntu
DO	1)	2)	3)	4)	5)	6) 1.77	mg/L
ORP	1)	2)	3)	4)	5)	6) +370	mv
Volume	1)	2)	3)	4)	5)	6) 6.0	gallons
DTW	1)	2)	3)	4)	5)	6) 5.47	ft bmp

Sample Collection Notes: Calibration Notes

No Readings as per Golder Rep
↳ thick NAPL present. No readings as per MCL.

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 / 1550 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

T. Depth 15.40

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: PZ-12-6

Purging Device: Typhoon
Date: 4-11-12 Time:

Depth to water before purging (ft-bmp) 05.04
Well depth (ft-bmp) 15.18
Casing diameter (in) 2"
Casing volume (gal) 1.65
Volume purged (gal) 5.00
Depth to water after purging (ft-bmp)

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1204 Time Finish: 1219

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	1204 Intitial	1209 Vol. 1	1213 Vol. 2	1219 Vol. 3	Vol. 4	1228 Final	Units
Temp.	1) 10.87	2) 10.30	3) 10.36	4) 10.34	5)	6) 10.87	°C
pH	1) 5.44	2) 4.23	3) 4.04	4) 3.97	5)	6) 3.90	std. units
Sp. Cond	1) 183	2) 1.47	3) 2.28	4) 2.49	5)	6) 3.51	ms/cm
Turbidity	1) 334	2) 124	3) 11.4	4) 0.0	5)	6) 1.9	ntu
DO	1) 2.44	2) 0.00	3) 0.00	4) 0.00	5)	6) 0.41	mg/L
ORP	1) +256	2) +221	3) +204	4) +202	5)	6) +223	mv
Volume	1) 0	2) 2.00	3) 3.50	4) 5.00	5)	6)	gallons
DTW	1) 5.04	2) 6.21	3) 6.11	4) 6.14	5)	6) 5.69	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 / 1220 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA D-1

Purging Device: BLADDER Pump

Depth to water before purging (ft-bmp): 40.15
Date: 4-11-12 Time: 0840
Well depth (ft-bmp): 71.7
Casing diameter (in): 6"
Casing volume (gal): 46.4
Volume purged (gal): 150
Depth to water after purging (ft-bmp): 40.51

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 0850 Time Finish: 1120

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial (0850)	Vol. 1 (0940)	Vol. 2 (1030)	Vol. 3 (1120)	Vol. 4	Final (1143)	Units
Temp.	1) 12.75	2) 13.92	3) 14.30	4) 14.83	5)	6) 14.46	°C
pH	1) 6.07	2) 7.14	3) 7.26	4) 7.42	5)	6) 7.38	std. units
Sp. Cond	1) .695	2) .703	3) .748	4) .762	5)	6) .723	ms/cm
Turbidity	1) 1.7	2) 1.7	3) 0.6	4) 0.3	5)	6) 25.4	ntu
DO	1) 9.23	2) 9.79	3) 9.84	4) 9.80	5)	6) 9.15	mg/L
ORP	1) 195	2) 152	3) 169	4) 169	5)	6) 171	mv
Volume	1) 0	2) 50	3) 100	4) 150	5)	6) 150	gallons
DTW	1) 40.15	2) 40.51	3) 40.54	4) 40.51	5)	6) 40.52	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 / 1132 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA D-11

Purging Device: BLADDER Pump

Depth to water before purging (ft-bmp): 45.81
Date: 4-11-12 Time: 1250
Well depth (ft-bmp): 89.8
Casing diameter (in): 6"
Casing volume (gal): 64.7
Volume purged (gal): 195
Depth to water after purging (ft-bmp):
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1250 Time Finish: 1605

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	(1251) Intitial	Vol. 1 (1355)	Vol. 2 (1500)	Vol. 3 (1605)	Vol. 4	Final (1612)	Units
Temp.	1) 13.44	2) 13.29	3) 13.65	4) 13.42	5)	6) 13.30	°C
pH	1) 7.61	2) 7.44	3) 7.36	4) 7.53	5)	6) 7.46	std. units
Sp. Cond	1) .569	2) .571	3) .616	4) .607	5)	6) .613	ms/cm
Turbidity	1) 3.6	2) 0.0	3) 0.0	4) 0.0	5)	6) 0.0	ntu
DO	1) 6.49	2) 9.47	3) 9.35	4) 9.31	5)	6) 9.35	mg/L
ORP	1) 164	2) 85	3) 27	4) 120	5)	6) 127	mv
Volume	1) 0	2) 65	3) 130	4) 195	5)	6) 195	gallons
DTW	1) 45.81	2) 47.35	3) 48.16	4) 49.04	5)	6) 49.57	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4-11-12 / 1609 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA D-12

Purging Device: BLADDER Pump

Depth to water before purging (ft-bmp): 46.69
Date: 4-11-12 Time: 1240
Well depth (ft-bmp): 77.1
Casing diameter (in): 6"
Casing volume (gal): 44.7
Volume purged (gal): 135
Depth to water after purging (ft-bmp):
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1240 Time Finish: 1455

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	(1242) Intitial	Vol. 1 (1325)	Vol. 2 (1410)	Vol. 3 (1455)	Vol. 4	Final (1509)	Units
Temp.	1) 13.48	2) 13.81	3) 13.52	4) 13.62	5)	6) 14.03	°C
pH	1) 7.26	2) 7.02	3) 7.10	4) 7.00	5)	6) 6.77	std. units
Sp. Cond	1) .908	2) .925	3) .962	4) .984	5)	6) .984	ms/cm
Turbidity	1) 24.4	2) 7.6	3) 2.9	4) 1.8	5)	6) 1.0	ntu
DO	1) 10.17	2) 6.46	3) 12.30	4) 9.27	5)	6) 8.80	mg/L
ORP	1) 177	2) 154	3) 102	4) 108	5)	6) 79	mv
Volume	1) 0	2) 45	3) 90	4) 135	5)	6) 135	gallons
DTW	1) 46.69	2) 48.09	3) 48.31	4) 48.39	5)	6) 48.29	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4-11-12 / 1504 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA D-13

Purging Device: BLADDER Pump

Depth to water before purging (ft-bmp): 47.57
Date: 4-11-12 Time: 1210
Well depth (ft-bmp): 85.9
Casing diameter (in): 6"
Casing volume (gal): 56.3
Volume purged (gal): 171
Depth to water after purging (ft-bmp):

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1210 Time Finish: 1501

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	(1211) Initial	Vol. 1 (1307)	Vol. 2 (1404)	Vol. 3 (1501)	Vol. 4	Final (1558)	Units
Temp.	1) 13.62	2) 14.90	3) 13.50	4) 13.78	5)	6) 15.02	°C
pH	1) 7.31	2) 7.33	3) 7.38	4) 7.21	5)	6) 7.46	std. units
Sp. Cond	1) .534	2) .554	3) .547	4) .552	5)	6) .522	ms/cm
Turbidity	1) 0.4	2) 2.8	3) 0.0	4) 0.3	5)	6) 0.0	ntu
DO	1) 4.09	2) 5.63	3) 9.59	4) 9.99	5)	6) 10.82	mg/L
ORP	1) 184	2) 176	3) 63	4) 52	5)	6) 106	mv
Volume	1) 0	2) 57	3) 114	4) 171	5)	6) 171	gallons
DTW	1) 47.57	2) 52.24	3) 52.28	4) 52.34	5)	6) 51.49	ft bmp

Sample Collection Notes: MS/MSD

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 / 1516

Method of sample collection:

Sample sequence:

Signature:

Company: Accutest

Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA D-14

Purging Device: BLADDER PUMP
Date: 4-11-12 Time: 0900

Depth to water before purging (ft-bmp)	43.40
Well depth (ft-bmp)	80.5
Casing diameter (in)	6"
Casing volume (gal)	54.5
Volume purged (gal)	165
Depth to water after purging (ft-bmp)	43.90

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 0905 Time Finish: 1150

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	(0905) Initial	(1000) Vol. 1	(1055) Vol. 2	(1150) Vol. 3	Vol. 4	(1202) Final	Units
Temp.	1) 13.32	2) 13.78	3) 14.15	4) 13.92	5)	6) 13.82	°C
pH	1) 6.98	2) 7.34	3) 7.50	4) 7.45	5)	6) 7.32	std. units
Sp. Cond	1) .454	2) .505	3) .486	4) .474	5)	6) .465	ms/cm
Turbidity	1) 22.4	2) 0.3	3) 0.0	4) 1.3	5)	6) 1.3	ntu
DO	1) 9.91	2) 7.32	3) 9.39	4) 5.50	5)	6) 9.36	mg/L
ORP	1) 159	2) 153	3) 150	4) 171	5)	6) 177	mv
Volume	1) 0	2) 55	3) 110	4) 165	5)	6) 165	gallons
DTW	1) 43.40	2) 43.79	3) 43.92	4) 43.90	5)	6) 43.97	ft bmp

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 / 1156

Method of sample collection:

Sample sequence:

Signature:

Company: Accutest

Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA D-15

Purging Device: BLADDER PUMP

Depth to water before purging (ft-bmp): 42.81
Date: 4-11-12 Time: 0912

Well depth (ft-bmp): 83.9
Casing diameter (in): 6"
Casing volume (gal): 60.4
Volume purged (gal): 181.2
Depth to water after purging (ft-bmp):
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 0915 Time Finish: 1216

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	(0916) Initial	(1016) Vol. 1	(1116) Vol. 2	(1216) Vol. 3	Vol. 4	(1236) Final	Units
Temp.	1) 13.75	2) 13.82	3) 14.67	4) 13.08	5)	6) 13.12	°C
pH	1) 7.08	2) 7.47	3) 7.60	4) 7.22	5)	6) 7.23	std. units
Sp. Cond	1) .494	2) .520	3) .488	4) .486	5)	6) .490	ms/cm
Turbidity	1) 10.8	2) 2.7	3) 0.0	4) 0.0	5)	6) 0.0	ntu
DO	1) 10.11	2) 6.15	3) 9.75	4) 12.28	5)	6) 9.45	mg/L
ORP	1) 159	2) 153	3) 153	4) 181	5)	6) 184	mv
Volume	1) 0	2) 60.4	3) 120.8	4) 181.2	5)	6) 181.2	gallons
DTW	1) 42.81	2) 43.23	3) 43.60	4) 43.66	5)	6) 43.69	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-11-12 / 1225 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

4-11-12

Golder Associates

Sample Point ID: S.S.

Purging Device: Flute

Depth to water before purging (ft-bmp) _____ Date: 4/11/12 Time: _____

Well depth (ft-bmp) _____

Casing diameter (in) _____

Casing volume (gal) _____

Volume purged (gal) _____

Depth to water after purging (ft-bmp) _____

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: _____ Time Finish: _____

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated baller?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial (P1)	Vol. 1	Vol 2 (P2)	Vol. 3	Vol 4 (P3)	Final	Units
Temp.	1) 12.16	2)	3) 11.87	4)	5) 11.33	6)	°C
pH	1) 7.17	2)	3) 7.65	4)	5) 7.69	6)	std. units
Sp. Cond	1) 783	2)	3) 766	4)	5) 910	6)	ms/cm
Turbidity	1) <0.1	2)	3) <0.1	4)	5) <0.1	6)	ntu
DO	1) 4.88	2)	3) 3.76	4)	5) 3.62	6)	mg/L
ORP	1) 83	2)	3) 52	4)	5) 1	6)	mv
Volume	1)	2)	3)	4)	5)	6)	gallons
DTW	1) n/a	2)	3) n/a	4)	5) n/a	6)	ft bmp

Sample Collection Notes: ~~13:30~~ 13:25

Calibration Notes 13:40 13:50

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/11/12 @ 13:25 Method of sample collection:

Sample sequence:

Signature: _____ Company: Accutest Date: 4/11/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: 01 MW-01

Purging Device: Typhoon

Depth to water before purging (ft-bmp) 5.91
Date: 4-12-12 Time: 0940
Well depth (ft-bmp) 15.40
Casing diameter (in) 4" ~~6.79~~
Casing volume (gal) 6.14 ~~18.59~~
Volume purged (gal) 18.59
Time Start: 0940 Time Finish:
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 0940	Vol. 1 0947	Vol. 2 0954	Vol. 3 1000	Vol. 4	Final 1005	Units
Temp.	1) 9.22	2) 9.39	3) 9.45	4) 9.47	5)	6) 9.47	°C
pH	1) 4.31	2) 3.76	3) 3.67	4) 3.57	5)	6) 3.57	std. units
Sp. Cond	1) 1.87	2) 1.51	3) 1.49	4) 1.49	5)	6) 1.51	ms/cm
Turbidity	1) 37.5	2) 18.2	3) 7.7	4) 2.7	5)	6) 2.2	ntu
DO	1) 9.25	2) 9.63	3) 4.81	4) 9.02	5)	6) 9.17	mg/L
ORP	1) +211	2) +281	3) +302	4) +310	5)	6) +311	mv
Volume	1) ∅	2) 7.00	3) 14.0	4) 20.0	5)	6) 20.0	gallons
DTW	1) 5.91	2) 7.50	3) 7.67	4) 8.01	5)	6) 7.73	ft bmp

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-12-12 - 1002

Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: 01 MW-02

Purging Device: Typhon

Depth to water before purging (ft-bmp) 6.53
Date: 4-12-12 Time:
Well depth (ft-bmp) 18.10
Casing diameter (in) 2
Casing volume (gal) 7.55
Volume purged (gal) 22.66
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1044 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

Initial 1044 Vol. 1 1115 Vol. 2 1130 Vol. 3 1138 Vol. 4 Final 1143

	1)	2)	3)	4)	5)	6)	Units
Temp.	10.48	11.26	11.62	11.07		10.68	°C
pH	2.42	2.55	2.53	2.54		2.53	std. units
Sp. Cond	7.59	8.03	8.05	8.22		8.28	ms/cm
Turbidity	76.5	63.3	18.5	8.0		6.9	ntu
DO	4.36	3.20	2.85	2.81		7.76	mg/L
ORP	+348	+343	+343	+343		+341	mv
Volume	∅	8.60	16.00	24.60		24.00	gallons
DTW	6.53	7.20	7.37	7.42		7.21	ft bmp

Sample Collection Notes: Calibration Notes

10:53 (7.52 DRY) Battery Died

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-12-12 - 1140 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Golder Associates

Site: Ofizer Bend Book
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Sample Point ID: MW-2

Purging Device: Typhoon
Date: 4-12-12 Time:

Depth to water before purging (ft-bmp)	9.15
Well depth (ft-bmp)	21.10
Casing diameter (in)	4
Casing volume (gal)	7.80
Volume purged (gal)	23.41
Depth to water after purging (ft-bmp)	

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1323 Time Finish:

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial 1323	Vol. 1 1335	Vol. 2 1348	Vol. 3 1400	Vol. 4	Final 1410	Units
Temp.	1) 12.21	2) 12.15	3) 12.35	4) 12.09	5)	6) 12.41	°C
pH	1) 8.10	2) 8.65	3) 8.66	4) 8.66	5)	6) 8.66	std. units
Sp. Cond	1) 3.41	2) 3.30	3) 3.32	4) 3.31	5)	6) 3.28	ms/cm
Turbidity	1) 14.1	2) 128	3) 273	4) 165	5)	6) 121	ntu
DO	1) 6.01	2) 5.86	3) 5.79	4) 5.31	5)	6) 7.93	mg/L
ORP	1) -97	2) -58	3) -71	4) -69	5)	6) -65	mv
Volume	1) Ø	2) 8.0	3) 16.0	4) 24.0	5)	6) 24.0	gallons
DTW	1) 9.15	2) 14.40	3) 14.01	4) 18.10	5)	6) 18.30	ft bmp

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-12-12 1405

Method of sample collection:

Sample sequence:

Company: Accutest

Date: 4/12/12

Signature:

100 Tubing need

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: O-R

Purging Device: Typhon
Date: 4-12-12 Time:

Depth to water before purging (ft-bmp): 6.49
Well depth (ft-bmp): 17.9
Casing diameter (in): 4'
Casing volume (gal): 7.45
Volume purged (gal): 22.35
Depth to water after purging (ft-bmp):

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1517 Time Finish:

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1517	Vol. 1 1525	Vol. 2 1533	Vol. 3 1541	Vol. 4	Final 1550	Units
Temp.	1) 11.63	2) 10.89	3) 10.49	4) 10.55	5)	6) 10.55	°C
pH	1) 6.86	2) 6.95	3) 7.03	4) 7.03	5)	6) 7.00	std. units
Sp. Cond	1) 0.597	2) 0.608	3) 0.641	4) 0.656	5)	6) 0.654	ms/cm
Turbidity	1) 6.0	2) 4.9	3) 4.0	4) 10.0	5)	6) 12.3	ntu
DO	1) 9.29	2) 9.12	3) 8.86	4) 4.18	5)	6) 3.56	mg/L
ORP	1) +104	2) +104	3) +105	4) +105	5)	6) +105	mv
Volume	1) 0	2) 8.00	3) 16.00	4) 24.00	5)	6) 24.0	gallons
DTW	1) 6.49	2) 9.10	3) 10.57	4) 11.39	5)	6) 12.10	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-12-12 1545 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Round Brook
Location: Bridgewater NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: 21-R

Purging Device: Typhoon
Date: 4-12-12 Time:

Depth to water before purging (ft-bmp) 18.55
Well depth (ft-bmp) 22.60
Casing diameter (in) 4
Casing volume (gal) 2.64
Volume purged (gal) 7.93
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1444 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1444	Vol. 1 1447	Vol. 2 1450	Vol. 3 1453	Vol. 4	Final 1500	Units
Temp.	1) 12.84	2) 12.79	3) 12.75	4) 12.52	5)	6) 12.64	°C
pH	1) 7.80	2) 7.17	3) 7.07	4) 6.69	5)	6) 6.46	std. units
Sp. Cond	1) 0.461	2) 0.398	3) 0.386	4) 0.369	5)	6) 0.364	ms/cm
Turbidity	1) 708	2) 146	3) 54.3	4) 170	5)	6) 9.6	ntu
DO	1) 5.02	2) 3.69	3) 5.05	4) 5.51	5)	6) ~~+30~~ 10	mg/L
ORP	1) +73	2) +108	3) +113	4) +120	5)	6) +125	mv
Volume	1) ∅	2) 3.00	3) 6.00	4) 8.00	5)	6) 8.00	gallons
DTW	1) 18.55	2) 19.80	3) 21.16	4) 21.51	5)	6) 21.10	ft bmp

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4-12-12 1455 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA-D7

Purging Device: Bladder Pump

Date: 4/12/12 Time: _____

Depth to water before purging (ft-bmp)	27.66
Well depth (ft-bmp)	66.20
Casing diameter (in)	6
Casing volume (gal)	56.65
Volume purged (gal)	169.96
Depth to water after purging (ft-bmp)	29.85

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 855 Time Finish: _____

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 855	Vol. 1 952	Vol. 2 1049	Vol. 3 1146	Vol. 4	Final 1155	Units
Temp.	1) 12.26	2) 14.21	3) 15.27	4) 14.75	5)	6) 15.02	°C
pH	1) 5.46	2) 6.43	3) 6.49	4) 6.28	5)	6) 6.25	std. units
Sp. Cond	1) 1.23	2) 1.22	3) 1.20	4) 1.23	5)	6) 1.27	ms/cm
Turbidity	1) 20.6	2) 3.0	3) 1.7	4) 0.9	5)	6) 1.3	ntu
DO	1) 7.99	2) 4.67	3) 8.09	4) 5.06	5)	6) 6.16	mg/L
ORP	1) 126 ~~[illegible]~~	2) 132	3) 161	4) 140	5)	6) 125	mv
Volume	1) 0	2) 57	3) 113	4) 170	5)	6) 179	gallons
DTW	1) 27.66	2) 29.53	3) 29.56	4) 29.77	5)	6) 29.85	ft bmp

Sample Collection Notes:

Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/12/12 1151

Method of sample collection:

Sample sequence:

Signature: _____ Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Beaver Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA - D8

Purging Device: Bladder Pump

Depth to water before purging (ft-bmp) 29.52
Date: 4/12/12 Time:
Well depth (ft-bmp) 62.90
Casing diameter (in) 6
Casing volume (gal) 49.06
Volume purged (gal) 147.20
Depth to water after purging (ft-bmp) 31.03

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 905 Time Finish:

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 905	Vol. 1 955	Vol. 2 1045	Vol. 3 1135	Vol. 4	Final 1144	Units
Temp.	1) 12.85	2) 13.85	3) 15.82	4) 15.32	5)	6) 14.53	°C
pH	1) 6.42	2) 6.73	3) 7.06	4) 7.09	5)	6) 7.17	std. units
Sp. Cond	1) .642	2) .786	3) .743	4) .752	5)	6) .774	ms/cm
Turbidity	1) 8.7	2) 1.4	3) 0.9	4) 1.2	5)	6) 1.8	ntu
DO	1) 9.23	2) 6.35	3) 9.17	4) 7.27	5)	6) 7.55	mg/L
ORP	1) 156	2) 105	3) 172	4) 134	5)	6) 133	mv
Volume	1) 0	2) 50	3) 100	4) 150	5)	6) 159	gallons
DTW	1) 29.52	2) 30.57	3) 30.72	4) 30.93	5)	6) 31.03	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/12/12 1140 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-96245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA - D9

Purging Device: Bladder Pump

Depth to water before purging (ft-bmp) 26.88
Date: 4/12/12 Time:
Well depth (ft-bmp) 87.70
Casing diameter (in) 6
Casing volume (gal) 89.40
Volume purged (gal) 268.21
Time Start: 9^25 Time Finish:
Depth to water after purging (ft-bmp) 39.29
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 9^35	Vol. 1 10^55	Vol. 2 12^25	Vol. 3 13^55	Vol. 4	Final 14^04	Units
Temp.	1) 12.48	2) 14.88	3) 14.21	4) 15.62	5)	6) 14.74	°C
pH	1) 6.60	2) 6.71	3) 6.76	4) 6.93	5)	6) 6.93	std. units
Sp. Cond	1) 1.29	2) 1.29	3) 1.23	4) 1.23	5)	6) 1.22	ms/cm
Turbidity	1) 1.9	2) 1.2	3) 2.9	4) 2.7	5)	6) 2.9	ntu
DO	1) 3.38	2) 3.54	3) 7.98	4) 5.74	5)	6) 7.30	mg/L
ORP	1) 89	2) 39	3) 51	4) -3	5)	6) -14	mv
Volume	1) 0	2) 90	3) 180	4) 270	5)	6) 279	gallons
DTW	1) 26.88	2) 39.72	3) 40.13	4) 39.61	5)	6) 39.29	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/12/12 14^00 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 1037-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: RCRA-D10

Purging Device: Bladder Pump

Depth to water before purging (ft-bmp) 36.14 Date: 4/12/12 Time:

Well depth (ft-bmp) 72.40

Casing diameter (in) 6

Casing volume (gal) 53.30

Volume purged (gal) 159.90 Time Start: 1230 Time Finish:

Depth to water after purging (ft-bmp) 43.22

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1230	Vol. 1 1323	Vol. 2 1416	Vol. 3 1509	Vol. 4	Final 1518	Units
Temp.	1) 14.23	2) 15.06	3) 14.46	4) 14.19	5)	6) 14.14	°C
pH	1) 7.15	2) 7.44	3) 7.31	4) 7.50	5)	6) 7.37	std. units
Sp. Cond	1) .646	2) .708	3) .674	4) .619	5)	6) .613	ms/cm
Turbidity	1) 1.3	2) 0.6	3) 1.6	4) 2.1	5)	6) 2.1	ntu
DO	1) 7.56	2) 8.66	3) 7.47	4) 7.43	5)	6) 5.80	mg/L
ORP	1) 61	2) 131	3) -10	4) 128	5)	6) 137	mv
Volume	1) 0	2) 53	3) 106	4) 160	5)	6) 169	gallons
DTW	1) 36.14	2) 41.90	3) 42.93	4) 43.20	5)	6) 43.22	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/12/12 1514 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/12/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: III

Purging Device: Peristaltic Pump / Bailer

Depth to water before purging (ft-bmp): 6.45
Date: 4/13/12 Time:
Well depth (ft-bmp): 19.80
Casing diameter (in): 1½
Casing volume (gal): 1.20
Volume purged (gal): 3.60
Depth to water after purging (ft-bmp): 6.54
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1451 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1451	Vol. 1 1456	Vol. 2 1501	Vol. 3 1506	Vol. 4 1515	Final 1525	Units
Temp.	1) 15.83	2) 13.71	3) 12.54	4) 12.37	5)	6) 13.05	°C
pH	1) 6.29	2) 6.38	3) 6.39	4) 6.40	5)	6) 6.42	std. units
Sp. Cond	1) .509	2) .512	3) .518	4) .522	5)	6) .521	ms/cm
Turbidity	1) 222	2) 14.7	3) 5.6	4) 3.5	5)	6) 800+	ntu
DO	1) 1.66	2) 3.22	3) 4.91	4) 3.34	5)	6) 4.00	mg/L
ORP	1) -42	2) -46	3) -47	4) -49	5)	6) -55	mv
Volume	1) 0	2) 1.20	3) 2.40	4) 3.60	5)	6) 4	gallons
DTW	1) 6.45	2) 6.90	3) 6.90	4) 6.90	5)	6) 6.54	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4/13/12 1515 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/13/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-88245
Sampling Team: Accutest

Golder Associates

Sample Point ID: KKK

Purging Device: Peristaltic Pump / Bailer

Depth to water before purging (ft-bmp) 16.66
Date: 4/13/12 Time:
Well depth (ft-bmp) 28.30
Casing diameter (in) 1½
Casing volume (gal) 1.04
Volume purged (gal) 3.14
Depth to water after purging (ft-bmp) 16.74
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1315 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial 1315	Vol. 1 1321	Vol. 2 1327	Vol. 3 1333	Vol. 4	Final 1414	Units
Temp.	1) 18.12	2) 14.32	3) 13.09	4) 15.12	5)	6) 17.37	°C
pH	1) 6.39	2) 6.17	3) 6.09	4) 5.87	5)	6) 5.94	std. units
Sp. Cond	1) .357	2) .303	3) .294	4) .299	5)	6) .294	ms/cm
Turbidity	1) 53.1	2) 7.1	3) 6.9	4) 6.7	5)	6) 5.5	ntu
DO	1) 5.70	2) 3.53	3) 3.85	4) 3.07	5)	6) 1.47	mg/L
ORP	1) 24	2) 41	3) 49	4) 68	5)	6) 74	mv
Volume	1) 0	2) 1	3) 2	4) 3	5)	6) 3.5	gallons
DTW	1) 16.66	2) 16.91	3) 17.18	4) 17.26	5)	6) 16.74	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4/13/12 1400 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/13/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: AAA

Purging Device: Bailer
Date: 4/13/12 Time:

Depth to water before purging (ft-bmp): 7.18
Well depth (ft-bmp): 16.80
Casing diameter (in): 1½
Casing volume (gal): 0.87
Volume purged (gal): 2.59
Depth to water after purging (ft-bmp): 7.27

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 10:48 Time Finish:

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 10:48	Vol. 1 11:00	Vol. 2 11:10	Vol. 3 11:17	Vol. 4	Final 11:35	Units
Temp.	1) 12.92	2) 13.47	3) 13.11	4) 12.41	5)	6) 13.24	°C
pH	1) 6.70	2) 6.77	3) 6.78	4) 6.81	5)	6) 6.76	std. units
Sp. Cond	1) .660	2) .706	3) .695	4) .707	5)	6) .694	ms/cm
Turbidity	1) 212	2) 800+	3) 800+	4) 800+	5)	6) 800+	ntu
DO	1) 5.24	2) 4.87	3) 8.70	4) 2.34	5)	6) 2.18	mg/L
ORP	1) 19	2) -117	3) -125	4) -130	5)	6) -118	mv
Volume	1) 0	2) 1	3) 2	4) 3	5)	6) 3	gallons
DTW	1) 7.18	2) 7.25	3) 7.30	4) 7.27	5)	6) 7.26	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/13/12 11:30 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/13/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: 16 KW -2

Purging Device: Typhoon
Date: 4/13/12 Time:

Depth to water before purging (ft-bmp) 6.31
Well depth (ft-bmp) 16.10
Casing diameter (in) 4
Casing volume (gal) 6.39
Volume purged (gal) 19.17
Depth to water after purging (ft-bmp) 6.55

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 946 Time Finish:

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial 946	Vol. 1 951	Vol. 2 956	Vol. 3 1004	Vol. 4	Final 1005	Units
Temp.	1) 12.96	2) 12.31	3) 11.89	4) 11.63	5)	6) 11.65	°C
pH	1) 6.37	2) 6.44	3) 6.57	4) 6.55	5)	6) 6.58	std. units
Sp. Cond	1) .764	2) .746	3) .737	4) .732	5)	6) .735	ms/cm
Turbidity	1) 71.1	2) 238	3) 37.1	4) 12.9	5)	6) 10.1	ntu
DO	1) 4.74	2) 3.58	3) 6.39	4) 7.34	5)	6) 2.89	mg/L
ORP	1) -70	2) -93	3) -107	4) -109	5)	6) -111	mv
Volume	1) 0	2) 7	3) 14	4) 20	5)	6) 21	gallons
DTW	1) 6.31	2) 6.54	3) 6.55	4) 6.56	5)	6) 6.55	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/13/12 1003 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/13/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: EEE-R.

Purging Device: Typhoon
Date: 4/13/12 Time:

Depth to water before purging (ft-bmp) 17.15
Well depth (ft-bmp) 25.10
Casing diameter (in)
Casing volume (gal)
Volume purged (gal)
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1532 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

1532 FIELD MEASUREMENTS

	Initial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 15.37	2) 1539 14.65	3) 1545 14.32	4) 1550 14.56	5)	6) 1615 14.47	°C
pH	1) 6.40	2) 6.40	3) 6.35	4) 6.27	5)	6) 6.38	std. units
Sp. Cond	1) 932	2) 850	3) 875	4) 881	5)	6) 892	ms/cm
Turbidity	1) 7.7	2) 6.0	3) 0.9	4) 0.7	5)	6) 0.0	ntu
DO	1) 6.78	2) 4.96	3) 5.01	4) 4.97	5)	6)	mg/L
ORP	1) +203	2) +202	3) +197	4) +188	5)	6) +176	mv
Volume	1) 0	2) 6.00	3) 12.00	4) 17.00	5)	6)	gallons
DTW	1) 17.15	2) 17.95	3) 18.14	4) 17.98	5)	6) 18.32	ft bmp

Sample Collection Notes: Calibration Notes

Perform MS/MSD sampling

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4-13-12 / 1555 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/13/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: CCC-R.

Purging Device: Typhoon Submersible.

Depth to water before purging (ft-bmp): 18.14
Date: 4-13-12 Time:
Well depth (ft-bmp): 26.50
Casing diameter (in): 4.00
Casing volume (gal): 5.43
Volume purged (gal): 18.0
Depth to water after purging (ft-bmp):

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1416 Time Finish: 1436

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	1416 Initial	Vol. 1 1424	Vol. 2 1430	Vol. 3 1436	Vol. 4	Final 1448	Units
Temp.	1) 18.06	2) 15.92	3) 15.54	4) 15.41	5)	6) 15.07	°C
pH	1) 6.34	2) 6.15	3) 6.09	4) 5.83	5)	6) 5.76	std. units
Sp. Cond	1) 891	2) 920	3) 928	4) 930	5)	6) 928	ms/cm
Turbidity	1) 2.8	2) 1.1	3) 1.7	4) 1.1	5)	6) 0.6	ntu
DO	1) 6.39	2) 3.96	3) 3.75	4) 2.89	5)	6) 5.16	mg/L
ORP	1) +189	2) +159	3) +110	4) +109	5)	6) +103	mv
Volume	1) 0	2) 6.00	3) 12.00	4) 18.00	5)	6)	gallons
DTW	1) 18.14	2) 19.85	3) 20.01	4) 20.23	5)	6) 19.55	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4-13-12 | 1440 Method of sample collection:

Sample sequence:

Signature: Perform Field duplicate Company: Accutest Date: 4/13/12

Wyeth Holding Corp
Monitoring Well Field Sheet

Date: 4-13-12

Sampler: *Harold Meissner*

Flute ID: T.T.

Notes: Purge Pressure 110 PSI

Sample Pressure: 75 PSI

Max Pressure: 125 PSI

Discard Initial Gallon @ Sample Collection

Port 1	Port 2	Port 3	~~Port 4~~ Port 3
15 min	10 min	90 min	
Purge Vol Req 3.0	Purge Vol Req 3.0	Purge Vol Req 3.4	Purge Vol Req
Purge 1	**Purge 1**	**Purge 1**	**Purge 1**
Time Start: 10:35	Time Start: 10:35	Time Start: 10:35	Time Start: 13:30
Time End: 10:40	Time End: 10:41	Time End: 10:41	Time End: 13:35
Volume: 1.75	Volume: 1.75	Volume: 1.25	Volume: 10.5
Color: Clear	Color: Clear	Color: Clear	Color: Clear 2.25
Purge 2	**Purge 2**	**Purge 2**	**Purge 2**
Time Start: 11:00	Time Start: 11:00	Time Start: 11:15	Time Start: 14:40
Time End: 11:07	Time End: 11:07	Time End: 11:19	Time End: 14:45
Volume: 1.75	Volume: 1.75	Volume: 0.5	Volume: 0.5
Color: Clear	Color: Clear	Color: Clear. 2.25	Color: 3.25
Purge 3	**Purge 3**	**Purge 3**	**Purge 3**
Time Start:	Time End:	Time Start: 11:55	Time Start: 15:15
Time End:	Volume:	Time End: 11:59	Time End: 15:20
Volume:	Color:	Volume: 0.25	Volume: 0.25
Color:		Color: Clear 2.30	Color: Clear
Total Volume 3.5	Total Volume 3.5	Total Volume →	Total Volume 3.50
Sample	**Sample**	**Sample**	**Sample**
Time Start: 11:30	Time Start: 11:45	Time Start:	Time Start: 15:40

Weather:

Comments: Field duplicate on T.T. Port 1

r. 7-5-11

WATER SAMPLE FIELD INFORMATION FORM

4-13-12

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: T.T.

Purging Device: Flute
Date: 4/13/12 Time:

Depth to water before purging (ft-bmp)
Well depth (ft-bmp)
Casing diameter (in)
Casing volume (gal)
Volume purged (gal)
Depth to water after purging (ft-bmp)

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: Time Finish:

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	(Y) or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial (P1)	Vol. 1	Vol. 2 (P2)	Vol. 3	Vol. 4 (P3)	Final	Units
Temp.	1) 13.60	2)	3) 13.47	4)	5) 13.27	6)	°C
pH	1) 7.05	2)	3) 6.91	4)	5) 6.71	6)	std. units
Sp. Cond	1) 782	2)	3) 2,750	4)	5) 2,880	6)	ms/cm
Turbidity	1) <0.1	2)	3) <0.1	4)	5) 12.1	6)	ntu
DO	1) 3.48	2)	3) 3.02	4)	5) 0.50	6)	mg/L
ORP	1) 6	2)	3) 19	4)	5) 12	6)	mv
Volume	1)	2)	3)	4)	5)	6)	gallons
DTW	1)	2)	3)	4)	5)	6)	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:
Sample characteristics:
Sample date / time: 4/13/12 @ 11:30, 11:45, 1540 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/13/12

Wyeth Holding Corp
Monitoring Well Field Sheet

Date: 4-13-12

Sampler: *Harold Meissner*

Flute ID: XX

XX

Notes: Purge Pressure 110 PSI

Sample Pressure: 75 PSI

Max Pressure: 125 PSI

Discard Initial Gallon @ Sample Collection

Port 1	Port 2	Port 3	Port 4
Purge Vol Req X	Purge Vol Req	Purge Vol Req	Purge Vol Req
Purge 1	**Purge 1**	**Purge 1**	**Purge 1**
Time Start: 09:06	Time Start: 09:06	Time Start: 09:06	Time Start:
Time End: 09:07	Time End: 09:07	Time End: 09:08	Time End:
Volume: 2.25	Volume: 2.25	Volume: 2.25	Volume:
Color: Clear	Color: Clear	Color: Clear	Color:
Purge 2	**Purge 2**	**Purge 2**	**Purge 2**
Time Start: 09:25	Time Start: 09:25	Time Start: 16:35	Time Start:
Time End: 09:32	Time End: 09:32	Time End: 16:37	Time End:
Volume: 2.25	Volume: 2.25	Volume: 2.25	Volume:
Color: Clear	Color: Clear	Color: Clear	Color:
Purge 3	**Purge 3**	**Purge 3**	**Purge 3**
Time Start:	Time Start:	Time Start:	Time Start:
Time End:	Time End:	Time End:	Time End:
Volume:	Volume:	Volume:	Volume:
Color:	Color:	Color:	Color:
Total Volume 4.5	Total Volume 4.5	Total Volume 4.50	Total Volume
Sample	**Sample**	**Sample**	**Sample**
Time Start: 09:48	Time Start: 09:58	Time Start:	Time Start:

Weather:
Comments:

r. 7-5-11

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: X.X.

Purging Device: Flute

Depth to water before purging (ft-bmp)

Date: 4/13/12 Time:

Well depth (ft-bmp)

Casing diameter (in)

Casing volume (gal)

Volume purged (gal)

Depth to water after purging (ft-bmp)

Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks: P1 P2

FIELD MEASUREMENTS

	Initial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 13.25	2)	3) 12.64	4)	5)	6)	°C
pH	1) 6.28	2)	3) 6.70	4)	5)	6)	std. units
Sp. Cond	1) 2,540	2)	3) 2,540	4)	5)	6)	ms/cm
Turbidity	1) 11.2	2)	3) <0.1	4)	5)	6)	ntu
DO	1) 3.18	2)	3) 2.19	4)	5)	6)	mg/L
ORP	1) 126	2)	3) 21	4)	5)	6)	mv
Volume	1) —	2)	3)	4)	5)	6)	gallons
DTW	1) —	2)	3)	4)	5)	6)	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling:

Sample characteristics:

Sample date / time: 4/13/12 @ 0948, 0958 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/13/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 109-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: 19R

Purging Device: Peristaltic Pump/Bailer

Depth to water before purging (ft-bmp) 4.20
Date: 4-14-12 Time:
Well depth (ft-bmp) 11.0
Casing diameter (in) 4
Casing volume (gal) 4.83
Volume purged (gal) 14.49
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1113 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1113	Vol. 1 1118	Vol. 2 1128	Vol. 3 1140	Vol. 4	Final 1150	Units
Temp.	1) 13.30	2) 13.23	3) 12.98	4) 15.30	5) 16.67	6) 16.67	°C
pH	1) 6.82	2) 6.95	3) 7.00	4) 7.10	5) ~~7.01~~	6) 7.04	std. units
Sp. Cond	1) 0.317	2) 0.274	3) 0.270	4) 0.259	5) ~~0.260~~	6) 0.260	ms/cm
Turbidity	1) 208	2) ~~16.5~~	3) 23.2	4) 15.1	5) ~~136~~	6) 136	ntu
DO	1) 9.13	2) 9.31	3) 8.58	4) 8.20	5) ~~5.11~~	6) 5.11	mg/L
ORP	1) -27	2) -47	3) -49	4) -49	5) ~~-56~~	6) -56	mv
Volume	1) ϕ	2) 5.00	3) 10.0	4) 15.0	5)	6) 15	gallons
DTW	1) 4.20	2) 7.30	3) 7.35	4) 7.72	5)	6) 8.74	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling: clear, 60's, still
Sample characteristics:
Sample date / time: 4-14-12 1145 Method of sample collection:
Sample sequence:
Signature: Company: Accutest Date: 4/14/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: 28R

Purging Device: T-pump
Date: 4-14-12 Time:

Depth to water before purging (ft-bmp): 5.87
Well depth (ft-bmp): 17.8
Casing diameter (in): 4
Casing volume (gal): 7.74
Volume purged (gal): 23.37
Depth to water after purging (ft-bmp):

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 0917 Time Finish: 0950

Remarks:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial 0917	Vol. 1 0925	Vol. 2 0933	Vol. 3 0941	Vol. 4	Final 0950	Units
Temp.	1) 12.61	2) 12.08	3) 13.00	4) 13.19	5)	6) 13.21	°C
pH	1) 5.64	2) 5.76	3) 5.91	4) 5.95	5)	6) 5.97	std. units
Sp. Cond	1) 1.62	2) 1.50	3) 1.12	4) 0.974	5)	6) 0.932	ms/cm
Turbidity	1) 75.3	2) 30.8	3) 13.2	4) 6.0	5)	6) 5.1	ntu
DO	1) 11.79	2) 4.71	3) 4.23	4) 5.62	5)	6) 8.40	mg/L
ORP	1) +80	2) +18	3) -7	4) -3	5)	6) -4	mv
Volume	1) ∅	2) 8	3) 16.0	4) 24.0	5)	6) 24.0	gallons
DTW	1) 5.87	2) 6.85	3) 6.87	4) 6.92	5)	6) 7.02	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling: Clear, 60's, still

Sample characteristics:

Sample date / time: 4-14-12 0945 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/14/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: ~~Boundbrook~~ Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Harold Meissner

Golder Associates

Sample Point ID: 32R

Purging Device: Typhoon - II
Date: 4-14-12 Time: 11:10

Depth to water before purging (ft-bmp)	09.87
Well depth (ft-bmp)	20.40
Casing diameter (in)	4
Casing volume (gal)	06.88
Volume purged (gal)	20.63
Depth to water after purging (ft-bmp)	10.36

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 11:15 Time Finish: 11:30

Remarks: 21 gal actually purged

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N n/a
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 13.86	2) 13.85	3) 13.81	4) 13.62	5)	6) 13.82	°C
pH	1) 6.75	2) 6.52	3) 6.50	4) 6.52	5)	6) 6.51	std. units
Sp. Cond	1) 1390	2) 1,410	3) 1,410	4) 1,420	5)	6) 1,410	µs/cm
Turbidity	1) 50.6	2) 120	3) 341	4) 16.5	5)	6) 12.5	ntu
DO	1) 5.32	2) 4.74	3) 4.42	4) 4.36	5)	6) 3.78	mg/L
ORP	1) -132	2) -101	3) -104	4) -102	5)	6) -102	mv
Volume	1) 0.0	2) 7	3) 14	4) 21	5)	6) 21	gallons
DTW	1) 9.87	2) 10.33	3) 10.36	4) 10.36	5)	6) 10.34	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling: Clear, Warm (66°F), Still

Sample characteristics: LT Brtint,

Sample date / time: 4-14-12 (11:45) Method of sample collection: Pump

Sample sequence: VO - - -

Signature: [signature] Company: ACCUTEST Date: 4-14-12

WATER SAMPLE FIELD INFORMATION FORM

Site: PFIZER Bound Brook
Location: ~~Bound brook~~ Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Harold Meissner

Golder Associates

Sample Point ID: 34R

Purging Device: Typhoon-II
Date: 4-14-12 Time: 12:00

Depth to water before purging (ft-bmp)	18.04
Well depth (ft-bmp)	26.30
Casing diameter (in)	4
Casing volume (gal)	5.39
Volume purged (gal)	16.12
Depth to water after purging (ft-bmp)	21.30

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 12:10 Time Finish: 12:30

Remarks: 18 gal ACM cfm

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 13.20	2) 12.77	3) 12.85	4) 12.69	5)	6) 12.53	°C
pH	1) 6.89	2) 6.85	3) 6.85	4) 6.85	5)	6) 6.86	std. units
Sp. Cond	1) 745	2) 744	3) 745	4) 752	5)	6) 755	µs/cm
Turbidity	1) 119	2) 403	3) 14.1	4) 5.2	5)	6) 4.5	ntu
DO	1) 4.58	2) 5.24	3) 3.44	4) 2.65	5)	6) 3.19	mg/L
ORP	1) -103	2) -91	3) -88	4) -100	5)	6) -99	mv
Volume	1) 0.0	2) 6	3) 12	4) 18	5)	6) 18	gallons
DTW	1) 18.04	2) 20.42	3) 20.87	4) 21.30	5)	6) 21.62	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling: Clear, warm (67°F) still
Sample characteristics: Clear
Sample date / time: 04-14-12 (12:35) Method of sample collection: Pump
Sample sequence: VO, SVO, AS.
Signature: [signature] Company: Accotest Date: 4-14-12

VO
SVO
AS

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: ~~Bound Brook~~ Bridgewater, NJ
Project Number: 103-86245
Sampling Team: H. Massner

Golder Associates

Sample Point ID: 38R

Purging Device: Typhoon - II

Depth to water before purging (ft-bmp) 15.28
Date: 4-14-12 Time: 13:05
Well depth (ft-bmp) 25.60
Casing diameter (in) 4.0" 06.74
Casing volume (gal) 20.2
Volume purged (gal) ↓
Depth to water after purging (ft-bmp) 17.88
Remarks: 21 gal actual purged

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 13:10 Time Finish: 13:40

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 18.20	2) 14.57	3) 14.35	4) 14.01	5)	6) 14.22	°C
pH	1) 7.15	2) 6.75	3) 6.57	4) 6.50	5)	6) 6.46	std. units
Sp. Cond	1) 269	2) 284	3) 261	4) 283	5)	6) 288	µs/cm
Turbidity	1) 86.6	2) 73.4	3) 22.8	4) 5.4	5)	6) 2.8	ntu
DO	1) 2.48	2) 2.56	3) 3.32	4) 3.09	5)	6) 2.52	mg/L
ORP	1) -27	2) -41	3) -59	4) -70	5)	6) -78	mv
Volume	1) 0	2) 7	3) 14	4) 21	5)	6) 21	gallons
DTW	1) 15.28	2) 17.44	3) 17.84	4) 17.85	5)	6) 17.32	ft bmp

Sample Collection Notes: Calibration Notes

MS/MSD Samples Taken on 38R

Weather conditions at time of sampling: Clear, mild (66°F), breezy.

Sample characteristics:

Sample date / time: 4-14-12 (13:50) Method of sample collection:

Sample sequence: VO, S-VO, Metals, Chl.

Signature: Company: Accutest Date: 4-14-12

WATER SAMPLE FIELD INFORMATION FORM

Site: Bound Brook
Location: Bridgewater, NJ
Project Number: 103-86245
Sampling Team: Accutest

Golder Associates

Sample Point ID: 42R

Purging Device: Typhoon
Date: 4-14-12 Time:

Depth to water before purging (ft-bmp) 15.45
Well depth (ft-bmp) 24.2
Casing diameter (in) 4
Casing volume (gal) 5.71
Volume purged (gal) 17.14
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 1250 Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Initial 1250	Vol. 1 1256	Vol. 2 1302	Vol. 3 1308	Vol. 4	Final 1320	Units
Temp.	1) 16.53	2) 15.80	3) 15.67	4) 15.90	5)	6) 18.94	°C
pH	1) 6.84	2) 6.85	3) 6.75	4) 6.76	5)	6) 6.67	std. units
Sp. Cond	1) 1.14	2) 1.07	3) 1.20	4) 1.25	5)	6) 1.21	ms/cm
Turbidity	1) 29.5	2) 18.75	3) 20.2	4) 34.7	5)	6) 34.9	ntu
DO	1) 6.26	2) 8.16	3) 3.24	4) 5.56	5)	6) 4.46	mg/L
ORP	1) +1	2) -53	3) -47	4) -42	5)	6) -28	mv
Volume	1) 6	2) 6.0	3) 12.0	4) 18.0	5)	6) 18.0	gallons
DTW	1) 15.45	2) 20.21	3) 20.80	4) 20.65	5)	6) 20.12	ft bmp

Sample Collection Notes: Calibration Notes

Weather conditions at time of sampling: clear, 60's, still

Sample characteristics:

Sample date / time: 4-14-12 1310 Method of sample collection:

Sample sequence:

Signature: Company: Accutest Date: 4/14/12

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer Bound Brook
Location: ~~Bound Brook~~ Bridgewater, NJ
Project Number: 103-86245
Sampling Team: H. Meissner

Golder Associates

Sample Point ID: TFP-94-1R

Purging Device: Typhoon - II
Date: 4-14-12 Time: 09:55

Depth to water before purging (ft-bmp)	07.52
Well depth (ft-bmp)	19.10
Casing diameter (in)	4
Casing volume (gal)	07.56
Volume purged (gal)	22.7
Depth to water after purging (ft-bmp)	08.06

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: 10:00 Time Finish: 10:25

Remarks: 24 gal actual evacuated

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated bailer?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks:

FIELD MEASUREMENTS

	Intitial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 11.92	2) 10.99	3) 10.66	4) 10.68	5)	6) 10.55	°C
pH	1) 6.31	2) 7.05	3) 7.18	4) 7.22	5)	6) 7.24	std. units
Sp. Cond	1) 1,186	2) 1,220	3) 1,390	4) 1,386	5)	6) 1,390	~~m~~ µs/cm
Turbidity	1) 9.3	2) 2.9	3) 3.1	4) 1.3	5)	6) 0.9	ntu
DO	1) 7.07	2) 5.78	3) 5.76	4) 5.09	5)	6) 5.70	mg/L
ORP	1) -18	2) -110	3) -125	4) -129	5)	6) -127	mv
Volume	1) 0.0	2) 8.0	3) 16.0	4) 24.0	5)	6) 24.0	gallons
DTW	1) 07.56	2) 07.68	3) ~~24~~ 08.02	4) 08.06	5)	6) 08.02	ft bmp

Sample Collection Notes: Calibration Notes

Sample AT [10:30] FB [10:10] Via Typhoon II

Weather conditions at time of sampling: clear, warm, (62°F) Still

Sample characteristics: Clear, mild odor, Slight Foaming to Puget St

Sample date / time: 4-14-12 10:30 Method of sample collection: Sub Pump

Sample sequence: Vo, S-vo, As.

Signature: [signature] Company: Accutest Date: 4-14-12

Vo
SVO
AS

Wyeth Holding Corp
Monitoring Well Field Sheet

Date: 4-20-12

Sampler: *Harold Meissner*

Flute ID: Z Z

Notes: Purge Pressure 110 PSI

Sample Pressure: 75 PSI

Max Pressure: 125 PSI

Discard Initial Gallon @ Sample Collection

	20'	20'	15'	15'
Port 1		**Port 2**	**Port 3**	**Port 4**
Purge Vol Req	5.1	5.1	5.4	5.3
Purge 1		**Purge 1**	**Purge 1**	**Purge 1**
Time Start:	14:30	14:30	14:30	14:30
Time End:	14:42	14:42	14:45	14:42
Volume:	2.25	2.50	2.50	2.50
Color:	clear	CL	CL	CL
Purge 2		**Purge 2**	**Purge 2**	**Purge 2**
Time Start:	15:07	15:07	15:07	15:07
Time End:	15:19	15:15	15:20	15:15
Volume:	2.25	2.50	2.50	2.5
Color:	CL	CL	CL	CL
Purge 3		**Purge 3**	**Purge 3**	**Purge 3**
Time Start:	15:35	15:35	15:35	15:35
Time End:	15:39	15:35	15:35	15:39
Volume:	1.0	1.0	1.0	1.0
Color:	CL	CL	CL	CL
Total Volume	5.5	6.0	6.0	6.0
Sample		**Sample**	**Sample**	**Sample**
Time Start:	16:20	16:15	16:00	16:05

Weather: Comments: Clear, Warm, Light Breeze

r. 7-5-11

WATER SAMPLE FIELD INFORMATION FORM

Site: Pfizer / Wyeth Bound Brook
Location: Bridgewater, N.J.
Project Number: 103-86245
Sampling Team: H.M.

Golder Associates

Sample Point ID: ZZ

Purging Device: Dedicated Flutes
Date: 4/20/12 Time:

Depth to water before purging (ft-bmp)
Well depth (ft-bmp)
Casing diameter (in)
Casing volume (gal)
Volume purged (gal)
Depth to water after purging (ft-bmp)
Remarks:

Casing Volume Calculation

1"	2"	4"	6"	8"
0.041 gal/ft	0.163 gal/ft	0.653 gal/ft	1.47 gal/ft	2.61 gal/ft

Time Start: Time Finish:

WELL INSPECTION (Circle Y or N)

Is well location correct on map?	Y or N	Is the well locked?	Y or N
Is well located in a dry area?	Y or N	Is the lock in good condition?	Y or N
Is well readily accessible?	Y or N	Is the well vented?	Y or N
Is well legibly labeled?	Y or N	Does casing have weep hole?	Y or N
Is well protected with posts?	Y or N	Does well have dedicated baller?	Y or N
Is casing free of kinks/bends?	Y or N	Does well have dedicated pump?	Y or N
Is protective casing secure?	Y or N	Is equip. in good condition?	Y or N

Remarks: Port 1 Port 2 Port 3 Port 4

FIELD MEASUREMENTS

	Intitial	Vol. 1	Vol. 2	Vol. 3	Vol. 4	Final	Units
Temp.	1) 14.41	2) 14.56	3) 15.17	4) 14.33	5)	6)	°C
pH	1) 7.36	2) 7.12	3) 7.07	4) 7.11	5)	6)	std. units
Sp. Cond	1) 512	2) 1,820	3) 2,390	4) 2,580	5)	6)	µs/cm
Turbidity	1) 0.9	2) 3.9	3) <0.1	4) 3.2	5)	6)	ntu
DO	1) 3.74	2) 2.71	3) 3.59	4) 3.70	5)	6)	mg/L
ORP	1) -29	2) -21	3) 27	4) -32	5)	6)	mv
Volume	1) —	2) —	3) —	4) —	5)	6)	gallons
DTW	1) —	2) —	3) —	4)	5)	6)	ft bmp

Sample Collection Notes: Flute wells

Calibration Notes

Weather conditions at time of sampling: Clear, warm, Lt Breeze

Sample characteristics:

Sample date / time: 4-20-12 16:20, 16:15, 16:00, 16:05 Method of sample collection: Flute well

Sample sequence: No.

Signature: Company: Accutest Date: 04-20-12

APPENDIX B

GROUNDWATER VELOCITY CALCULATIONS AND CONTOUR MAP REPORTING FORMS

Appendix B
Groundwater Velocity Calculations
First Half 2012 Semi-annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, NJ

1. Background Information

Units: L = length; T = time

K: Hydraulic Conductivity [Units: L/T]
1.52×10^{-3} ft/min (Bedrock Hydrology at Proposed Impound 8, November 1986, Camp, Dresser & McKee)
i: Hydraulic Gradient (from contour plan Figure 4-3) [Direction: Horizontal; Units: Dimensionless]

Western side
Calculated from well RCRA-D14 to well RCRA-D11 (ft msl):

$$i_{West} = \frac{26.30 \text{ ft} - 21.13 \text{ ft}}{860 \text{ ft}} = 0.00601 \text{ ft/ft} = 6.01 \times 10^{-3}$$

Eastern side
Calculated from well RCRA-D1 to well RCRA-D6 (ft msl):

$$i_{East} = \frac{24.77 \text{ ft} - 20.69 \text{ ft}}{817 \text{ ft}} = 0.00499 \text{ ft/ft} = 4.99 \times 10^{-3}$$

A: Cross-sectional Area [Units: L^2]
Q: Volumetric flow rate [Units: L^3/T]
V: Specific Discharge [Units: L/T]
v: Average linear velocity [Units: L/T]
n: Porosity [Units: %]; estimated to be 10% (from Freeze & Cherry 1979)

2. Darcy's Law
$Q = KiA$

3. Obtain specific discharge (V) by dividing (Q) by (A)
$V = Q/A = Ki$

Western Side
$V_{West} = (K)\ (i_{West})$
$V_{West} = (1.52 \times 10^{-3} \text{ ft/min})(6.01 \times 10^{-3})$
$V_{West} = 9.14 \times 10^{-6}$ ft/min

Eastern Side
$V_{East} = (K)\ (i_{East})$
$V_{East} = (1.52 \times 10^{-3} \text{ ft/min})(4.99 \times 10^{-3})$
$V_{East} = 7.58 \times 10^{-6}$ ft/min

4. Obtain average linear velocity (v) by dividing (V) by porosity (n)
$v = V/n$

Western Side
$v_{West} = V_{West}/n$
$v_{West} = (9.14 \times 10^{-6} \text{ ft/min}) \div (0.10)$
$v_{West} = 9.14 \times 10^{-5}$ ft/min

Eastern Side
$v_{East} = V_{East}/n$
$v_{East} = (7.58 \times 10^{-6} \text{ ft/min}) \div (0.10)$
$v_{East} = 7.58 \times 10^{-5}$ ft/ min

5. Convert groundwater velocity (v) from ft/min to ft/year

Western Side
Groundwater flow from
well RCRA-D14 to well RCRA-D11

$v_{West} = 9.14 \times 10^{-5}$ ft/min
v_{West} ft/yr = (v_{West} ft/min)(525600 min/yr)
$\mathbf{v_{West}} =$ **48.01 ft/yr**

Eastern Side
Groundwater flow from
well RCRA-D1 to well RCRA-D6

$v_{East} = 7.58 \times 10^{-5}$ ft/min
v_{East} ft/yr = (v_{East} ft/min)(525600 min/yr)
$\mathbf{v_{East}} =$ **39.87 ft/yr**

Compiled by: LMC 06/28/12; Checked by: JIH 06/28/12

Contour Map Reporting Form

Figure 3: Site Wide Semi-Annual Monitoring
Main Plant Overburden Groundwater Contour Map
(April 9, 2012)

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ☐ No ☒
   If yes, attach new "Well Certification-Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc...)

2. Are there any monitoring wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ☒ No ☐
   If yes, identify these wells.
   O-R, 19-R, 21-R, 28-R, 32-R, 34-R, 36-R, 38-R, 41-R, 42R, AAA, CCC-R, EEE-R, III, KKK, MW-5, MW-7, 16MW-2, TFP-94-1, PZ-12-4, PZ-12-5, PZ-12-6, FLOD-W1S, FLOD-W2S. Consistent with historic trends, does not interfere with obtaining representative samples

3. Are there any monitoring wells present at the site but omitted from the contour map? Yes ☐ No ☒
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.

4. Are there any monitoring wells containing separate phase product during this event? Yes ☐ No ☒
   Were any of the monitoring wells with separate phase product included in the groundwater contour map?
   If yes, show the formula used to correct the water table elevation.
   No measurable separate phase liquid was encountered

5. Has the groundwater flow direction changed more than 45° from the previous ground water contour map? Yes ☐ No ☒
   If yes, discuss the reasons for the change.

6. Has groundwater mounding and/or depressions been identified in the groundwater contour map? Yes ☒ No ☐
   Unless the groundwater mounds and / or depressions are caused by the groundwater remediation system, discuss the reasons for the occurrence.
   As reported historically: Lagoons 6 and 7 are in relatively good hydraulic connection with underlying groundwater, resulting in local overburden groundwater mounding (e.g., Lagoon 7 has been historically dredged). There are groundwater mounds in the northern and southwestern part of the Site monitored by wells 21R, O-R, MW-1A, MW-9, and MW-10. These localized groundwater mounds correspond to soil piles composed of heterogeneous, low permeability, fine-grained soils and sludges. Groundwater flow direction from these local mounds is radial towards Cuckels Brook and the central parts of the Site. There are three depressions in the overburden groundwater surface shown by wells MW- 2, MW05-W1S, and MW-19. These depressions are interpreted to be the result of pumping in the underlying bedrock aquifer, and corresponding lower potentiometric pressures that have developed along the bedding planes. It is believed that these depressions in the overburden phreatic surface exist in areas where the weathered bedrock is absent.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes ☒ No ☐
   If no, justify inclusion of those wells.

8. Were the groundwater contours
   ☐ computer generated
   ☐ computer aided, or
   ☒ hand-drawn?
   If computer aided or generated, identify the interpolation method(s) used.

Contour Map Reporting Form

Figure 4: Site Wide Semi-Annual Monitoring
Main Plant Bedrock Groundwater Contour Map
(April 9, 2012)

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ☐ No ☒
   If yes, attach new "Well Certification-Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc...)

2. Are there any monitoring wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ☐ No ☒
   If yes, identify these wells.

3. Are there any monitoring wells present at the site but omitted from the contour map? Yes ☐ No ☒
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.
   Well SS location and groundwater elevation values are indicated on the map; however values were not contoured. Well SS is a FLUTe well installed through a separate water bearing (SS conductive zone), which subcrops at higher elevations south of the Raritan River. As a result, Well SS intercepts a zone of higher hydraulic pressure and has been observed with artesian conditions. Due to these higher pressures, it is suspected that the FLUTe well integrity is compromised resulting in erroneous water level readings from each port.

4. Are there any monitoring wells containing separate phase product during this event? Yes ☐ No ☒
   Were any of the monitoring wells with separate phase product included in the groundwater contour map?
   If yes, show the formula used to correct the water table elevation.

5. Has the groundwater flow direction changed more than 45° from the previous ground water contour map? Yes ☐ No ☒
   If yes, discuss the reasons for the change.

6. Has groundwater mounding and/or depressions been identified in the groundwater contour map? Yes ☒ No ☐
   Unless the groundwater mounds and / or depressions are caused by the groundwater remediation system, discuss the reasons for the occurrence.
   The cone of depression is due to the remediation system (extraction wells PW-2/PW-3)

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes ☐ No ☒
   If no, justify inclusion of those wells.
   Consistent with historical practice, wells that did not have screens that intersected the bedrock transmissive zone, (including FLOD-W2BS, WW (Port 1), XX (Port 1), ZZ (Port 1), AAAA-O/S, CCCC-S, GGGG (Port 3), IIII-O/S, and JJJJ-O/S) were selected based on screen depth that most closely correlated in depth to adjacent wells that had a screen that did intersect the zone.

8. Were the groundwater contours
☐ computer generated
☐ computer aided, or
☒ hand-drawn?
If computer aided or generated, identify the interpolation method(s) used.

Contour Map Reporting Form

Figure 5: Site Wide Semi-Annual Monitoring
Impoundment 8 Facility Shallow Bedrock Wells Groundwater Contour Map
(April 9, 2012)

This reporting form shall accompany each groundwater contour map submittal. Use additional sheets as necessary.

1. Did any surveyed well casing elevations change from the previous sampling event? Yes ☐ No ☒
   If yes, attach new "Well Certification-Form B" and identify the reason for the elevation change (damage to casing, installation of recovery system in monitoring well, etc...)

2. Are there any monitoring wells in unconfined aquifers in which the water table elevation is higher than the top of the well screen? Yes ☐ No ☒
   If yes, identify these wells.

3. Are there any monitoring wells present at the site but omitted from the contour map? Yes ☐ No ☒
   Unless the omission of the well(s) has been previously approved by the Department, justify the omissions.
   Consistent with historical practices, groundwater elevation for RCRA-D9 is listed on the map; however, it was not used for the production of contours.

4. Are there any monitoring wells containing separate phase product during this event? Yes ☐ No ☒
   Were any of the monitoring wells with separate phase product included in the groundwater contour map?
   If yes, show the formula used to correct the water table elevation.

5. Has the groundwater flow direction changed more than 45° from the previous ground water contour map? Yes ☐ No ☒
   If yes, discuss the reasons for the change.

6. Has groundwater mounding and/or depressions been identified in the groundwater contour map? Yes ☐ No ☒
   Unless the groundwater mounds and / or depressions are caused by the groundwater remediation system, discuss the reasons for the occurrence.

7. Are all the wells used in the contour map screened in the same water-bearing zone? Yes ☒ No ☐
   If no, justify inclusion of those wells.

The RCRA-D series wells are screened in the shallow bedrock and generally monitor the same shallow bedrock water-bearing zone beneath the Impoundment 8 Facility; however; some areas of lower hydraulic conductivity and variable connectedness may exist due to heterogeneity within bedrock.

8. Were the groundwater contours
☐ computer generated
☐ computer aided, or
☒ hand-drawn?
If computer aided or generated, identify the interpolation method(s) used.

APPENDIX C

DATA QUALITY ASSESSMENT

Appendix C
Data Quality Assessment
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, New Jersey

This report presents the findings of the data quality assessment performed on the analyses of environmental samples collected for the *First Half 2012 Semi-Annual Groundwater Monitoring Report.* The groundwater monitoring was conducted at the Former American Cyanamid Superfund Site (Site), located in Bridgewater, New Jersey. Samples for this Monitoring Event were collected between April 10, 2012 and April 20, 2012. The chemical data for samples collected at the Site were validated to identify data quality issues which could affect the use of the data for decision making purposes. A total of sixty-two (62) primary samples and the following Quality Assurance/Quality Control (QA/QC) samples were collected:

- Six (6) trip blanks;
- Five (5) rinsate blanks;
- Six (6) matrix spike / matrix spike duplicate (MS/MSD) samples; and
- Four (4) field duplicate parameter sets.

Samples were analyzed for Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), target analyte list (TAL) Metals, cyanide, chloride, phenolics, total dissolved solids (TDS), total organic carbon (TOC), total organic halides (TOX), pH, specific conductance, gross alpha/beta, radium 226, and radium 228. Accutest Laboratories (Accutest) of Dayton, New Jersey performed all chemical analyses, with the exception of the radiological analyses (which were completed by ALS Environmental of Fort Collins, Colorado). The laboratories completed all analyses utilizing the following guidelines:

- VOCs following United States Environmental Protection Agency (USEPA) SW846[1] Method 8260B Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (December, 1996)
- SVOCs following USEPA SW846 Method 8270D and 8270D by SIM Semivolatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS) (February, 2007)
- TAL Metals by USEPA SW846 Method 6010C Inductively Coupled Plasma – Atomic Emission Spectrometry (February, 2007) and Mercury by USEPA SW846 Method 7470A Mercury in Liquid Waste (Manual Cold-Vapor Technique (September, 1994)
- Chloride by USEPA Methods for Chemical Analysis of Water and Wastes[2] (MCAWW) Method 300.0 Determination of Inorganic Anions by Ion Chromatography (August, 1993)

[1] USEPA, 1996, Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846): 3rd edition, Environmental Protection Agency, National Center for Environmental Publications, Cincinnati, Ohio, accessed at URL http://www.epa.gov/epaoswer/hazwaste/test/sw846.htm.

- Conductivity by Standard Methods for the Examination of Water and Wastewater (SM20) Method 2510B (1997)
- Cyanide by USEPA MCAWW Method 335.4 Determination of Total Cyanide by Semi-Automated Colorimetry (August, 1993)
- Gross alpha and gross beta by USEPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water Method 900.0 Gross Alpha and Gross Beta Radioactivity in Drinking Water (August, 1980)
- pH by SM20 Method 4500H B (2000)
- Phenolics by USEPA 420.1 Phenolics, Total Recoverable (Spectrophotometric, Manual 4-AAP With Distillation) (1978)
- Radium-226 by USEPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water Method 903.1 Radium-226 In Drinking Water (Radon Emanation Technique) (August, 1980)
- Radium-228 by USEPA Prescribed Procedures for Measurement of Radioactivity in Drinking Water Method 904.0 Radium-228 in Drinking Water (August, 1980)
- TDS by SM20 Method 2540C (1997)
- TOC by SM20 Method 5310B (2000)
- TOC by USEPA SW846 Method 9060A Total Organic Carbon (November 2004)
- TOX by USEPA SW846 9020B M Total Organic Halides (TOX) (September, 1994)

Information regarding the sample point identifications, analytical methods, QC samples, sampling dates, and contract laboratory sample delivery group (SDG) designations are summarized in Table C-1.

All data were validated following guidelines provided by the New Jersey Department of Environmental Protection (NJDEP) Standard Operating Procedure (SOP) for the Quality Assurance Data Validation of Analytical Deliverables – Organics No. BEMQA 5.A.13 and the NJDEP SOP for the Quality Assurance Data Validation of Analytical Deliverables for Inorganics (based on USEPA SW-846 Methods) No. BEMQA 5.A.16, as applicable to the above listed analytical methods. In general, chemical results for the samples collected at the Site were qualified on the basis of outlying precision or accuracy parameters, or on the basis of professional judgment. The following definitions provide a brief explanation of the qualifiers which may have been assigned to data during the data validation process.

U The analyte was analyzed for, but was not detected above the method detection limit.

J The analyte is present; however, the reported value may not be accurate or precise.

[2] USEPA, 1983, Methods for Chemical Analysis of Water and Wastes, EPA600/4-79-20, Office of Research and Development, Washington, D.C

B The analyte was detected in the associated blank. The presence of the analyte in the sample is negated due to blank contamination.

BJ The value reported is greater than 3 times the blank value, and is considered 'real'. However, the reported value is qualified J due to blank contamination. The qualifier alerts the end-user to the presence of this analyte in the method blank.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate.

R The sample result was rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria.

The data generated during the First Half 2012 Semi-Annual Groundwater Monitoring Event met the QC criteria established in the respective USEPA methods and NJDEP guidelines, except as noted below:

- Sample results for acetophenone, benzyl alcohol, naphthalene, and nitrobenzene were qualified as JB where sample concentrations were greater than 3 times but less than 10 times the associated field blank concentration.
- The SVOC fraction for CCC-R, EEE-R, III, KKK and Field Duplicate (Overburden) were qualified as estimated (J/UJ) as samples were re-extracted outside of the seven day technical holding time.
- Sample results for naphthalene, nitrobenzene and pyridine were qualified as B where sample concentrations were less than 3 times the associated field blank concentration.
- Sample results for benzidine, catechol and hydroquinone were rejected when the laboratory control sample and matrix spike recoveries were 0%.
- Sample results for catechol, bis(2-chloroethyl)ether, hydroquinone, 1,4-naphthoquinone, N-nitrosodi-n-butylamine, N-nitrosodiethylamine, and N-nitrosopiperidine were qualified as estimated (J/UJ) when the laboratory control sample recovery was below QC limits.
- Sample results for select SVOC compounds in 19-R were qualified as estimated (J) due to surrogate recoveries above QC limits.
- Sample results for total organic halides, lead, and thallium were qualified as estimated (UJ) when samples were analyzed at dilutions due to high interfering elements and/or matrix interferences.
- Sample results for 1,2-dichloroethene (total), 2,4-dimethylphenol, 2-methylnaphthalene, 4-aminobiphenyl, carbazole, cis-1,2-dichloroethene, aniline, and naphthalene were qualified as estimated (J/UJ) where the associated field duplicate relative percent difference (RPD) was greater than 50%.
- Sample results for TAL metals in PZ-12-4, AAA, and III were qualified as estimated (J/UJ) as the sample was diluted due to matrix effects and/or high interfering elements.
- Sample results for mercury were qualified as estimated (UJ) when the associated matrix spike RPD was greater than QC limits (20%).
- Sample results for phenol were qualified as estimated (J) where the matrix spike recovery was greater than QC limits.

- Sample results for cyanide were qualified as estimated (UJ) where the matrix spike recoveries were below QC limits.
- Sample results for arsenic, chromium, iron, potassium, and vanadium were qualified as estimated (J/UJ) as the serial dilution percent difference was greater than 10%.
- Sample results for radium-228 were qualified as estimated (UJ) due to barium recoveries below QC limits.
- Sample results for gross alpha, gross beta, and radium-226 were qualified as estimated (J) where concentrations were reported between the sample specific minimum detectable concentration (MDC) and the requested MDC.

Table C-2 summarizes all qualifications applied to the data, with applicable qualifier codes. A summary of the analytical results is presented in Tables 6A through 10 of the *First Half 2012 Semi-Annual Groundwater Monitoring Report*.

Based on the data validations and data quality assessment, the analytical data for samples collected at the Site were determined to be acceptable (including estimated data) for their intended use, with the exception of data qualified as **R** (rejected). Generally, acceptable levels of accuracy and precision, based on LCS, MS/MSD, field duplicate and surrogate recoveries, were achieved for the data. In addition, the data completeness (i.e. the ratio of the amount of valid data obtained to the amount expected, including estimated data (J/UJ)) was 99.9 percent.

Table C-1
Sample Point Identifications
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, New Jersey

SDG	Field ID	Matrix	Sample Date	TCL VOCs	TCL SVOCs	TAL Metals	Arsenic	Arsenic & Cadmium	Arsenic, Cadmium, & Chromium	Chloride	Cyanide	Gross Alpha & Gross Beta	Phenols	Radium-226/228	TOC	TOX	TDS	pH, Specific Conductance	MS/MSD	Duplicate
Primary Samples																				
JB3829	PZ-12-3	GW	4/10/2012	X	X	X														
JB3829	PZ-12-5	GW	4/10/2012	X	X	X														
JB3829	PW-2	GW	4/10/2012	X	X	X														
JB3829	PW-3	GW	4/10/2012	X	X	X														
JB3831	RCRA D-2	GW	4/10/2012	X	X	X									X	X	X	X		
JB3831	RCRA D-3	GW	4/10/2012	X	X	X									X	X	X	X		
JB3831	RCRA D-4	GW	4/10/2012	X	X	X									X	X	X	X		
JB3831	RCRA D-5	GW	4/10/2012	X	X	X									X	X	X	X		
JB3831	RCRA D-6	GW	4/10/2012	X	X	X									X	X	X	X		
JB3956	RCRA D-1	GW	4/11/2012	X	X	X									X	X	X	X		
JB3956	RCRA D-11	GW	4/11/2012	X	X	X									X	X	X	X		
JB3956	RCRA D-12	GW	4/11/2012	X	X	X									X	X	X	X		
JB3956	RCRA D-13	GW	4/11/2012	X	X	X									X	X	X	X	X	
JB3956	RCRA D-14	GW	4/11/2012	X	X	X									X	X	X	X		
JB3956	RCRA D-15	GW	4/11/2012	X	X	X									X	X	X	X		
JB3957	SS PORT 1	GW	4/11/2012	X			X												X	
JB3957	SS PORT 2	GW	4/11/2012	X			X													
JB3957	SS PORT 3	GW	4/11/2012	X			X													
JB3957	WW PORT 1	GW	4/11/2012	X																
JB3957	WW PORT 2	GW	4/11/2012	X																
JB3957	WW PORT 3	GW	4/11/2012	X																
JB3957	YY PORT 1	GW	4/11/2012	X			X													
JB3957	YY PORT 2	GW	4/11/2012	X			X													
JB3957	YY PORT 3	GW	4/11/2012	X			X													
JB3957	01-MW-3	GW	4/11/2012	X	X	X														
JB3957	FLOD-W1S	GW	4/11/2012	X	X	X														
JB3957	FLOD-W2S	GW	4/11/2012	X	X	X														
JB3957	FLOD-W2BS	GW	4/11/2012	X	X	X														
JB3957	PZ-12-4	GW	4/11/2012	X	X	X														
JB3957	PZ-12-6	GW	4/11/2012	X	X	X				X	X		X							
JB4042	RCRA-D7	GW	4/12/2012	X	X	X									X	X	X	X		
JB4042	RCRA-D8	GW	4/12/2012	X	X	X									X	X	X	X		
JB4042	RCRA-D9	GW	4/12/2012	X	X	X									X	X	X	X		
JB4042	RCRA-D10	GW	4/12/2012	X	X	X									X	X	X	X		
JB4042	FIELD DUP(RCRA-D10)	GW	4/12/2012	X	X	X									X	X	X	X		X
JB4042	01-MW-01	GW	4/12/2012	X	X	X														
JB4042	01-MW-02	GW	4/12/2012	X	X	X														
JB4042	MW-2	GW	4/12/2012	X	X			X		X										
JB4042	0-R	GW	4/12/2012	X																
JB4042	21-R	GW	4/12/2012	X																
JB4154	TT Port 1	GW	4/13/2012	X																
JB4154	TT Port 2	GW	4/13/2012	X																

Table C-1
Sample Point Identifications
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, New Jersey

SDG	Field ID	Matrix	Sample Date	TCL VOCs	TCL SVOCs	TAL Metals	Arsenic	Arsenic & Cadmium	Arsenic, Cadmium, & Chromium	Chloride	Cyanide	Gross Alpha & Gross Beta	Phenols	Radium-226/228	TOC	TOX	TDS	pH, Specific Conductance	MS/MSD	Duplicate
JB4154	TT Port 3	GW	4/13/2012	X															X	
JB4154	XX Port 1	GW	4/13/2012	X																
JB4154	XX Port 2	GW	4/13/2012	X																
JB4154	Field duplicate (Flute)	GW	4/13/2012	X																X
JB4163	AAA	GW	4/13/2012	X	X	X				X	X		X							
JB4163	CCCR	GW	4/13/2012	X	X	X				X	X	X	X	X						
JB4163	EEER	GW	4/13/2012	X	X	X				X	X	X	X	X						
JB4163	III	GW	4/13/2012	X	X	X				X									X	
JB4163	KKK	GW	4/13/2012	X	X	X				X		X	X	X						
JB4163	16-MW-2	GW	4/13/2012			X														
JB4163	Field Duplicate (Overburden)	GW	4/13/2012	X	X	X				X	X	X	X	X						X
JB4201	19R	GW	4/14/2012	X	X															
JB4201	28R	GW	4/14/2012	X	X			X												
JB4201	32R	GW	4/14/2012	X																
JB4201	34R	GW	4/14/2012	X	X		X													
JB4201	38R	GW	4/14/2012	X	X				X	X									X	
JB4201	42R	GW	4/14/2012	X	X		X													
JB4201	TFP-94-1R	GW	4/14/2012	X	X		X													
JB4201	Field Duplicate	GW	4/14/2012	X	X		X													
JB4201	XX Port 3	GW	4/14/2012	X																
JB4714	ZZ PORT 1	GW	4/20/2012	X															X	
JB4714	ZZ PORT 2	GW	4/20/2012	X																
JB4714	ZZ PORT 3	GW	4/20/2012	X																
JB4714	ZZ PORT 4	GW	4/20/2012	X																
Trip Blanks																				
JB3829	Trip Blank	TB	4/10/2012	X																
JB3957	Trip Blank	TB	4/11/2012	X																
JB4042	Trip Blank	TB	4/12/2012	X																
JB4163	Trip Blank	TB	4/13/2012	X																
JB4201	Trip Blank	TB	4/14/2012	X																
JB4714	Trip Blank	TB	4/20/2012	X																
Rinse Blanks																				
JB3829	Field Blank	FB	4/10/2012	X	X	X														
JB3957	Field Blank	FB	4/11/2012	X	X	X				X	X		X							
JB4042	Field Blank	FB	4/12/2012	X	X	X				X										
JB4163	Field Blank	FB	4/13/2012	X	X	X				X	X	X	X	X						
JB4201	Field Blank	FB	4/14/2012	X	X				X	X										

GW = Groundwater
MS/MSD = Matrix Spike / Matrix Spike Duplicate
SDG = Sample Delivery Group
SVOCs = Semivolatile Organic Compounds
TAL - Target Analyte List
TCL = Target Compound List
TDS = Total Dissolved Solids
TOC = Total Organic Carbon
TOX = Total Organic Halides
VOCs = Volatile Organic Compounds

Table C-2
Data Qualifications
First Half 2012 Semi-Annual Groundwater Monitoring Report
Former American Cyanamid Superfund Site
Bridgewater, New Jersey

SDG	Sample Name	Constituent	New Result	New QL	Qualifier	Reason
JB3829	PW-2	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3829	PW-3	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3829	PZ-12-3	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3829	PZ-12-5	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3829	PW-2	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3829	PW-3	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3829	PZ-12-3	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3829	PZ-12-5	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3829	PZ-12-5	Lead	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3829	PZ-12-5	Thallium	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3831	RCRA D-2	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-3	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-4	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-5	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-6	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-2	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-3	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-4	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-5	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-6	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3831	RCRA D-2	Total Organic Halides	-	-	UJ	Sample matrix interference.
JB3831	RCRA D-4	Total Organic Halides	-	-	UJ	Sample matrix interference.
JB3831	RCRA D-6	Total Organic Halides	-	-	UJ	Sample matrix interference.
JB3956	RCRA D-1	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-11	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-12	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-13	Catechol	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB3956	RCRA D-14	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-15	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-1	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-11	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-12	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-13	Hydroquinone	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB3956	RCRA D-14	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-15	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3956	RCRA D-1	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3956	RCRA D-11	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3956	RCRA D-12	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3956	RCRA D-13	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3956	RCRA D-14	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3956	RCRA D-15	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3956	RCRA D-12	Total Organic Halides	-	-	UJ	Sample matrix interference.
JB3956	RCRA D-15	Total Organic Halides	-	-	UJ	Sample matrix interference.
JB3957	01-MW-3	Acetophenone	-	-	JB	Field blank contamination.
JB3957	PZ-12-4	Acetophenone	-	-	JB	Field blank contamination.
JB3957	PZ-12-6	Acetophenone	-	-	JB	Field blank contamination.
JB3957	PZ-12-4	All Metals Analytes	-	-	J/UJ	Elevated sample detection limit due to sample matrix effects.
JB3957	01-MW-3	Arsenic	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W1S	Arsenic	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W2BS	Arsenic	-	-	UJ	Serial dilution %D above QC limit.
JB3957	FLOD-W2S	Arsenic	-	-	UJ	Serial dilution %D above QC limit.
JB3957	PZ-12-6	Arsenic	-	-	J	Serial dilution %D above QC limit.
JB3957	SS PORT 1	Arsenic	-	-	J	Serial dilution %D above QC limit.
JB3957	SS PORT 2	Arsenic	-	-	J	Serial dilution %D above QC limit.
JB3957	SS PORT 3	Arsenic	-	-	UJ	Serial dilution %D above QC limit.
JB3957	YY PORT 1	Arsenic	-	-	UJ	Serial dilution %D above QC limit.
JB3957	YY PORT 2	Arsenic	-	-	J	Serial dilution %D above QC limit.
JB3957	YY PORT 3	Arsenic	-	-	UJ	Serial dilution %D above QC limit.
JB3957	01-MW-3	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3957	FLOD-W1S	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3957	FLOD-W2BS	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3957	FLOD-W2S	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3957	PZ-12-4	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3957	PZ-12-6	Catechol	-	-	UJ	LCS recovery below QC limit.
JB3957	01-MW-3	Chromium	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W1S	Chromium	-	-	J	Serial dilution %D above QC limit.

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SDG	Sample Name	Constituent	New Result	New QL	Qualifier	Reason
JB3957	FLOD-W2BS	Chromium	-	-	UJ	Serial dilution %D above QC limit.
JB3957	FLOD-W2S	Chromium	-	-	UJ	Serial dilution %D above QC limit.
JB3957	PZ-12-6	Chromium	-	-	J	Serial dilution %D above QC limit.
JB3957	01-MW-3	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3957	FLOD-W1S	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3957	FLOD-W2BS	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3957	FLOD-W2S	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3957	PZ-12-4	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3957	PZ-12-6	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB3957	01-MW-3	Iron	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W1S	Iron	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W2BS	Iron	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W2S	Iron	-	-	J	Serial dilution %D above QC limit.
JB3957	PZ-12-6	Iron	-	-	J	Serial dilution %D above QC limit.
JB3957	01-MW-3	Lead	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	FLOD-W1S	Lead	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	FLOD-W2BS	Lead	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	PZ-12-6	Lead	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	01-MW-3	Mercury	-	-	J	MS/MSD RPD above QC limit.
JB3957	FLOD-W1S	Mercury	-	-	J	MS/MSD RPD above QC limit.
JB3957	FLOD-W2BS	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3957	FLOD-W2S	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3957	PZ-12-4	Mercury	-	-	J	MS/MSD RPD above QC limit.
JB3957	PZ-12-6	Mercury	-	-	UJ	MS/MSD RPD above QC limit.
JB3957	FLOD-W2BS	Naphthalene	-	-	B	Field blank contamination.
JB3957	01-MW-3	Nitrobenzene	-	-	JB	Field blank contamination.
JB3957	FLOD-W1S	Nitrobenzene	-	-	B	Field blank contamination.
JB3957	FLOD-W2BS	Nitrobenzene	-	-	B	Field blank contamination.
JB3957	FLOD-W2S	Nitrobenzene	-	-	B	Field blank contamination.
JB3957	PZ-12-4	Nitrobenzene	-	-	JB	Field blank contamination.
JB3957	PZ-12-6	Nitrobenzene	-	-	JB	Field blank contamination.
JB3957	PZ-12-6	Phenol	-	-	J	MS recovery above QC Limit.
JB3957	01-MW-3	Potassium	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W1S	Potassium	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W2BS	Potassium	-	-	UJ	Serial dilution %D above QC limit.
JB3957	FLOD-W2S	Potassium	-	-	UJ	Serial dilution %D above QC limit.
JB3957	PZ-12-6	Potassium	-	-	J	Serial dilution %D above QC limit.
JB3957	01-MW-3	Pyridine	-	-	B	Field blank contamination.
JB3957	FLOD-W1S	Pyridine	-	-	B	Field blank contamination.
JB3957	FLOD-W2S	Pyridine	-	-	B	Field blank contamination.
JB3957	PZ-12-4	Pyridine	-	-	B	Field blank contamination.
JB3957	PZ-12-6	Pyridine	-	-	B	Field blank contamination.
JB3957	01-MW-3	Thallium	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	FLOD-W1S	Thallium	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	FLOD-W2BS	Thallium	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	PZ-12-6	Thallium	-	-	UJ	Analyzed at dilution due to high interfering element.
JB3957	01-MW-3	Vanadium	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W1S	Vanadium	-	-	J	Serial dilution %D above QC limit.
JB3957	FLOD-W2BS	Vanadium	-	-	UJ	Serial dilution %D above QC limit.
JB3957	FLOD-W2S	Vanadium	-	-	UJ	Serial dilution %D above QC limit.
JB3957	PZ-12-6	Vanadium	-	-	J	Serial dilution %D above QC limit.
JB4042	FIELD DUP(RCRA-D10)	Aniline	-	-	J	Field duplicate RPD above QC limit.
JB4042	RCRA-D10	Aniline	-	-	UJ	Field duplicate RPD above QC limit.
JB4042	RCRA-D7	Catechol	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB4042	01-MW-01	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4042	01-MW-02	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4042	FIELD DUP(RCRA-D10)	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4042	MW-2	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4042	RCRA-D10	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4042	RCRA-D7	Hydroquinone	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB4042	RCRA-D8	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4042	RCRA-D9	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4042	01-MW-01	Lead	-	-	UJ	Analyzed at dilution due to high interfering element.
JB4042	01-MW-02	Lead	-	-	UJ	Analyzed at dilution due to high interfering element.
JB4042	RCRA-D7	Mercury	-	-	UJ	MS/MSD RPD above QC limit.

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JB4042	01-MW-01	Naphthalene	-	-	JB	Field blank contamination.
JB4042	FIELD DUP(RCRA-D10)	Naphthalene	-	-	B	Field blank contamination.
JB4042	FIELD DUP(RCRA-D10)	Naphthalene	-	-	J	Field duplicate RPD above QC limit.
JB4042	MW-2	Naphthalene	-	-	JB	Field blank contamination.
JB4042	RCRA-D10	Naphthalene	-	-	UJ	Field duplicate RPD above QC limit.
JB4042	RCRA-D9	Naphthalene	-	-	B	Field blank contamination.
JB4042	01-MW-01	Thallium	-	-	UJ	Analyzed at dilution due to high interfering element.
JB4042	01-MW-02	Thallium	-	-	UJ	Analyzed at dilution due to high interfering element.
JB4042	RCRA-D7	Total Organic Halides	-	-	UJ	Sample matrix interference.
JB4042	RCRA-D9	Total Organic Halides	-	-	J	Sample matrix interference.
JB4163	CCCR	All SVOC results	-	-	J/UJ	Sample extracted outside technical holding time.
JB4163	Field Duplicate (Overburden)	All SVOC results	-	-	J/UJ	Sample extracted outside technical holding time.
JB4163	III	All SVOC results	-	-	J/UJ	Sample extracted outside technical holding time.
JB4163	KKK	All SVOC results	-	-	J/UJ	Sample extracted outside technical holding time.
JB4163	EEER	All SVOC results except catechol, hydroquinone and benzidine	-	-	J/UJ	Sample extracted outside technical holding time.
JB4163	AAA	Aluminum	-	-	J	Sample matrix interference.
JB4163	III	Aluminum	-	-	J	Sample matrix interference.
JB4163	AAA	Antimony	-	-	UJ	Sample matrix interference.
JB4163	III	Antimony	-	-	UJ	Sample matrix interference.
JB4163	III	Arsenic	-	-	J	Sample matrix interference.
JB4163	AAA	Barium	-	-	J	Sample matrix interference.
JB4163	III	Barium	-	-	UJ	Sample matrix interference.
JB4163	EEER	Benzidine	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB4163	EEER	Benzyl alcohol	-	-	JB	Field blank contamination
JB4163	AAA	Beryllium	-	-	J	Sample matrix interference.
JB4163	III	Beryllium	-	-	UJ	Sample matrix interference.
JB4163	AAA	Cadmium	-	-	UJ	Sample matrix interference.
JB4163	III	Cadmium	-	-	UJ	Sample matrix interference.
JB4163	AAA	Calcium	-	-	J	Sample matrix interference.
JB4163	III	Calcium	-	-	J	Sample matrix interference.
JB4163	EEER	Catechol	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB4163	AAA	Chromium	-	-	J	Sample matrix interference.
JB4163	AAA	Cobalt	-	-	UJ	Sample matrix interference.
JB4163	III	Cobalt	-	-	UJ	Sample matrix interference.
JB4163	AAA	Copper	-	-	J	Sample matrix interference.
JB4163	III	Copper	-	-	UJ	Sample matrix interference.
JB4163	AAA	Cyanide	-	-	UJ	MS/MSD recovery below QC limit.
JB4163	CCCR	Cyanide	-	-	UJ	MS/MSD recovery below QC limit.
JB4163	EEER	Cyanide	-	-	UJ	MS/MSD recovery below QC limit.
JB4163	Field Duplicate (Overburden)	Cyanide	-	-	UJ	MS/MSD recovery below QC limit.
JB4163	EEER	GROSS ALPHA	-	-	J	Result reported between MDC and Requested MDC.
JB4163	CCCR	GROSS BETA	-	-	J	Result reported between MDC and Requested MDC.
JB4163	Field Duplicate (Overburden)	GROSS BETA	-	-	J	Result reported between MDC and Requested MDC.
JB4163	EEER	Hydroquinone	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB4163	III	Iron	-	-	J	Sample matrix interference.
JB4163	III	Lead	-	-	J	Sample matrix interference.
JB4163	AAA	Magnesium	-	-	J	Sample matrix interference.
JB4163	III	Magnesium	-	-	J	Sample matrix interference.
JB4163	AAA	Manganese	-	-	J	Sample matrix interference.
JB4163	AAA	Mercury	-	-	UJ	Sample matrix interference.
JB4163	AAA	Nickel	-	-	J	Sample matrix interference.
JB4163	III	Nickel	-	-	UJ	Sample matrix interference.
JB4163	AAA	Potassium	-	-	UJ	Sample matrix interference.
JB4163	III	Potassium	-	-	UJ	Sample matrix interference.
JB4163	F DUP	Radium-226	-	-	J	Result reported between MDC and Requested MDC.
JB4163	KKK	Radium-226	-	-	J	Result reported between MDC and Requested MDC.
JB4163	CCCR	Radium-228	-	-	UJ	Barium concentration below QC limits.
JB4163	EEER	Radium-228	-	-	UJ	Barium concentration below QC limits.
JB4163	EEER Dup	Radium-228	-	-	UJ	Barium concentration below QC limits.
JB4163	F DUP	Radium-228	-	-	UJ	Barium concentration below QC limits.
JB4163	KKK	Radium-228	-	-	UJ	Barium concentration below QC limits.

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SDG	Sample Name	Constituent	New Result	New QL	Qualifier	Reason
JB4163	AAA	Selenium	-	-	UJ	Sample matrix interference.
JB4163	III	Selenium	-	-	UJ	Sample matrix interference.
JB4163	AAA	Silver	-	-	UJ	Sample matrix interference.
JB4163	III	Silver	-	-	UJ	Sample matrix interference.
JB4163	AAA	Sodium	-	-	UJ	Sample matrix interference.
JB4163	III	Sodium	-	-	J	Sample matrix interference.
JB4163	III	Thallium	-	-	UJ	Sample matrix interference.
JB4163	AAA	Vanadium	-	-	J	Sample matrix interference.
JB4163	III	Vanadium	-	-	UJ	Sample matrix interference.
JB4163	AAA	Zinc	-	-	J	Sample matrix interference.
JB4163	III	Zinc	-	-	J	Sample matrix interference.
JB4201	19R	1,1'-biphenyl	-	-	J	Surrogate recovery above QC limit.
JB4201	42R	1,2-Dichloroethene (total)	-	-	UJ	Field duplicate RPD above QC limit.
JB4201	Field Duplicate	1,2-Dichloroethene (total)	-	-	J	Field duplicate RPD above QC limit.
JB4201	19R	1,4-naphthoquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	28R	1,4-naphthoquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	34R	1,4-naphthoquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	38R	1,4-naphthoquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	42R	1,4-naphthoquinone	-	-	J	LCS recovery below QC limit.
JB4201	Field Duplicate	1,4-naphthoquinone	-	-	J	LCS recovery below QC limit.
JB4201	TFP-94-1R	1,4-naphthoquinone	-	-	J	LCS recovery below QC limit.
JB4201	42R	2,4-Dimethylphenol	-	-	J	Field duplicate RPD above QC limit.
JB4201	Field Duplicate	2,4-Dimethylphenol	-	-	UJ	Field duplicate RPD above QC limit.
JB4201	19R	2-chloronaphthalene	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	2-methylnaphthalene	-	-	J	Surrogate recovery above QC limit.
JB4201	42R	2-Methylnaphthalene	-	-	J	Field duplicate RPD above QC limit.
JB4201	Field Duplicate	2-Methylnaphthalene	-	-	UJ	Field duplicate RPD above QC limit.
JB4201	42R	4-Aminobiphenyl	-	-	UJ	Field duplicate RPD above QC limit.
JB4201	Field Duplicate	4-Aminobiphenyl	-	-	J	Field duplicate RPD above QC limit.
JB4201	19R	Acenaphthene	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	Aniline	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	bis(2-chloroethyl)ether	-	-	UJ	LCS recovery below QC limit.
JB4201	28R	bis(2-chloroethyl)ether	-	-	UJ	LCS recovery below QC limit.
JB4201	34R	bis(2-chloroethyl)ether	-	-	UJ	LCS recovery below QC limit.
JB4201	38R	bis(2-chloroethyl)ether	-	-	UJ	LCS recovery below QC limit.
JB4201	42R	bis(2-chloroethyl)ether	-	-	UJ	LCS recovery below QC limit.
JB4201	Field Duplicate	bis(2-chloroethyl)ether	-	-	UJ	LCS recovery below QC limit.
JB4201	TFP-94-1R	bis(2-chloroethyl)ether	-	-	UJ	LCS recovery below QC limit.
JB4201	19R	bis(2-ethylhexyl)phthalate	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	Catechol	-	-	J	Surrogate recovery above QC limit.
JB4201	42R	Catechol	-	-	J	Field duplicate RPD above QC limit.
JB4201	Field Duplicate	Catechol	-	-	UJ	Field duplicate RPD above QC limit.
JB4201	19R	Catechol	-	-	UJ	LCS recovery below QC limit.
JB4201	28R	Catechol	-	-	UJ	LCS recovery below QC limit.
JB4201	34R	Catechol	-	-	UJ	LCS recovery below QC limit.
JB4201	38R	Catechol	-	-	R	MS/MSD & LCS Recovery below QC Limits.
JB4201	42R	Catechol	-	-	UJ	LCS recovery below QC limit.
JB4201	Field Duplicate	Catechol	-	-	UJ	LCS recovery below QC limit.
JB4201	TFP-94-1R	Catechol	-	-	UJ	LCS recovery below QC limit.
JB4201	42R	cis-1,2-Dichloroethene	-	-	UJ	Field duplicate RPD above QC limit.
JB4201	Field Duplicate	cis-1,2-Dichloroethene	-	-	J	Field duplicate RPD above QC limit.
JB4201	19R	Dibenzofuran	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	Fluorene	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	28R	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	34R	Hydroquinone	-	-	J	LCS recovery below QC limit.
JB4201	38R	Hydroquinone	-	-	J	LCS recovery below QC limit.
JB4201	42R	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	Field Duplicate	Hydroquinone	-	-	UJ	LCS recovery below QC limit.
JB4201	TFP-94-1R	Hydroquinone	-	-	J	LCS recovery below QC limit.
JB4201	19R	Naphthalene	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	N-nitrosodiethylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	28R	N-nitrosodiethylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	34R	N-nitrosodiethylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	38R	N-nitrosodiethylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	42R	N-nitrosodiethylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	Field Duplicate	N-nitrosodiethylamine	-	-	UJ	LCS recovery below QC limit.

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JB4201	TFP-94-1R	N-nitrosodiethylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	19R	N-nitrosodi-n-butylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	28R	N-nitrosodi-n-butylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	34R	N-nitrosodi-n-butylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	38R	N-nitrosodi-n-butylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	42R	N-nitrosodi-n-butylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	Field Duplicate	N-nitrosodi-n-butylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	TFP-94-1R	N-nitrosodi-n-butylamine	-	-	UJ	LCS recovery below QC limit.
JB4201	19R	n-nitrosodiphenylamine	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	N-nitrosopiperidine	-	-	UJ	LCS recovery below QC limit.
JB4201	28R	N-nitrosopiperidine	-	-	UJ	LCS recovery below QC limit.
JB4201	34R	N-nitrosopiperidine	-	-	UJ	LCS recovery below QC limit.
JB4201	38R	N-nitrosopiperidine	-	-	UJ	LCS recovery below QC limit.
JB4201	42R	N-nitrosopiperidine	-	-	UJ	LCS recovery below QC limit.
JB4201	Field Duplicate	N-nitrosopiperidine	-	-	UJ	LCS recovery below QC limit.
JB4201	TFP-94-1R	N-nitrosopiperidine	-	-	UJ	LCS recovery below QC limit.
JB4201	19R	o-Toluidine	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	Phenanthrene	-	-	J	Surrogate recovery above QC limit.
JB4201	19R	Pyridine	-	-	J	Surrogate recovery above QC limit.

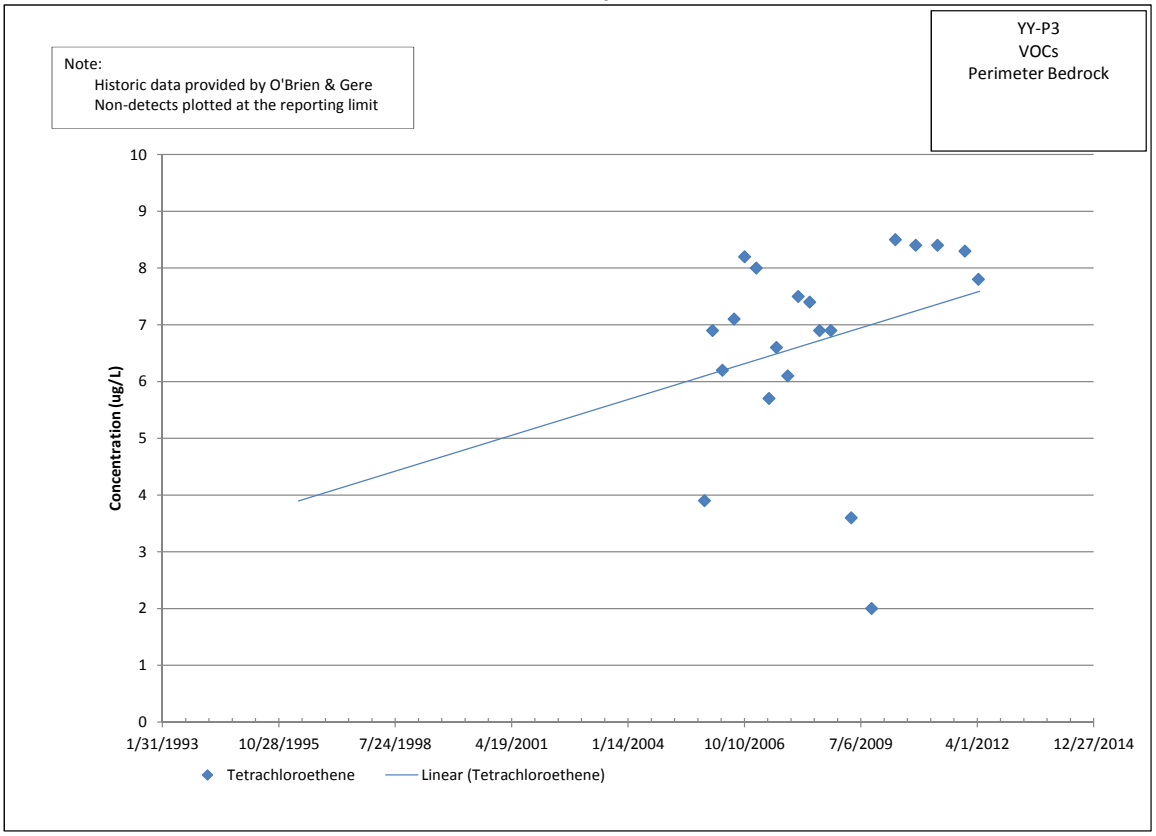
Notes:
%D = Percent Difference
%R = Percent Recovery
LCS = Laboratory Control Sample
MDC = Minimum Detectable Concentration
MS/MSD = Matrix Spike / Matrix Spike Duplicate
QC = Quality Control
QL = Quantitation Limit
RPD = Relative Percent Difference
SDG = Sample Delivery Group
SVOCs = Semivolatile Organic Compounds
VOCs = Volatile Organic Compounds

Qualifiers:
B = analyte found in associated blank, sample result less than 3x the blank concentration.
J = estimated value
JB = analyte found in associated blank, sample result less than 10x the blank concentration.
UJ = not detected above RL, RL is approximate
R = Rejected result

APPENDIX D

GROUNDWATER TRENDLINES

Former American Cyanamid Site



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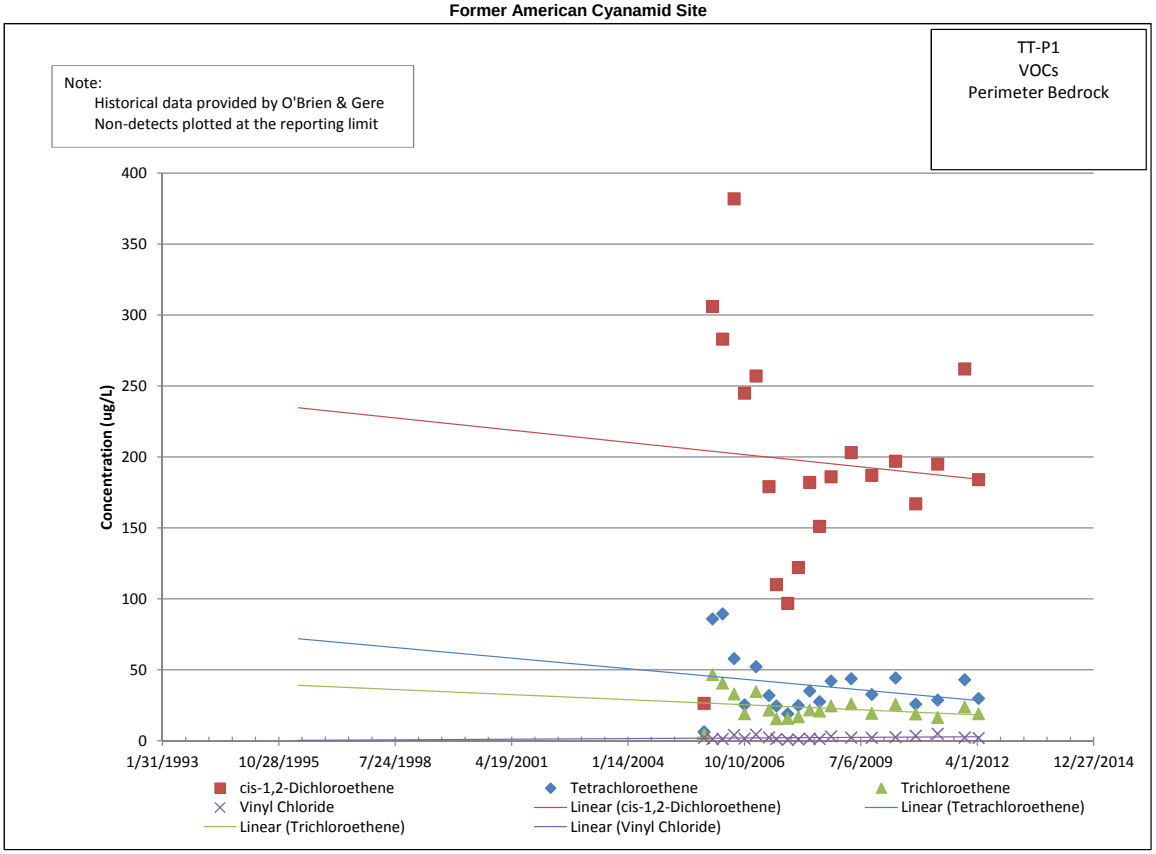

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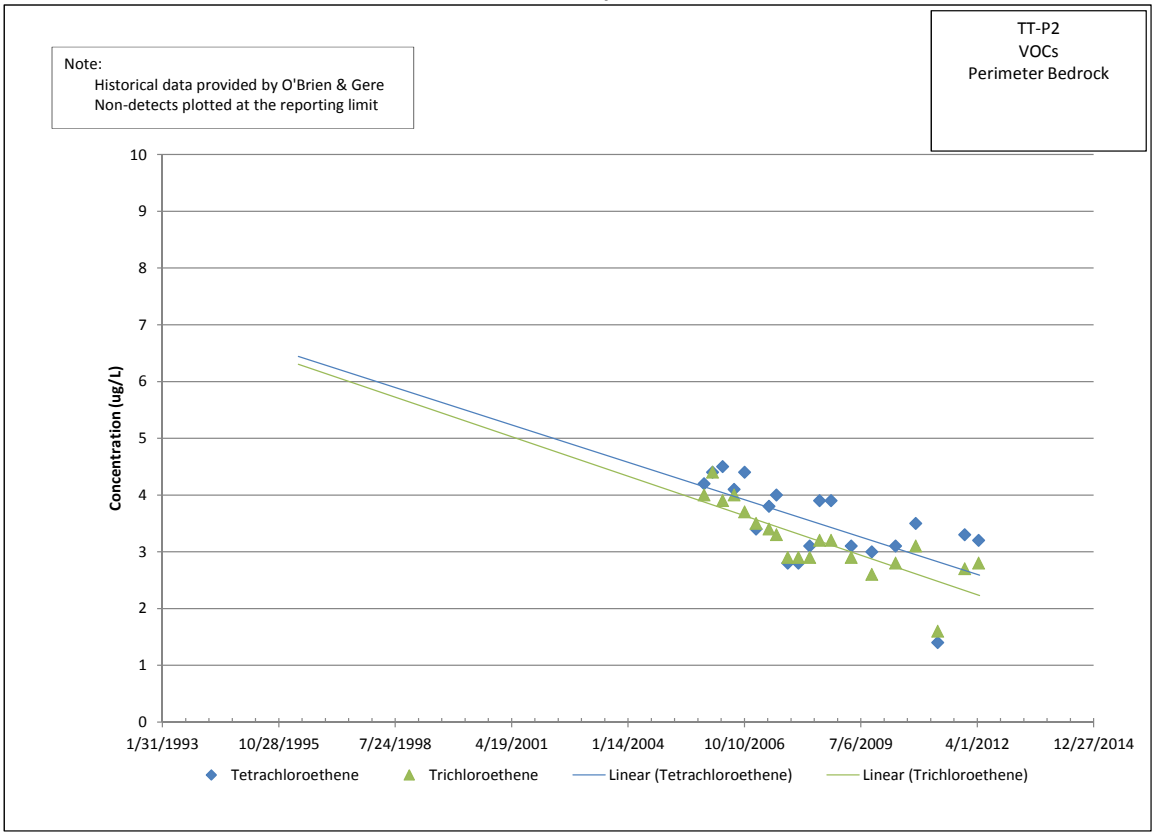

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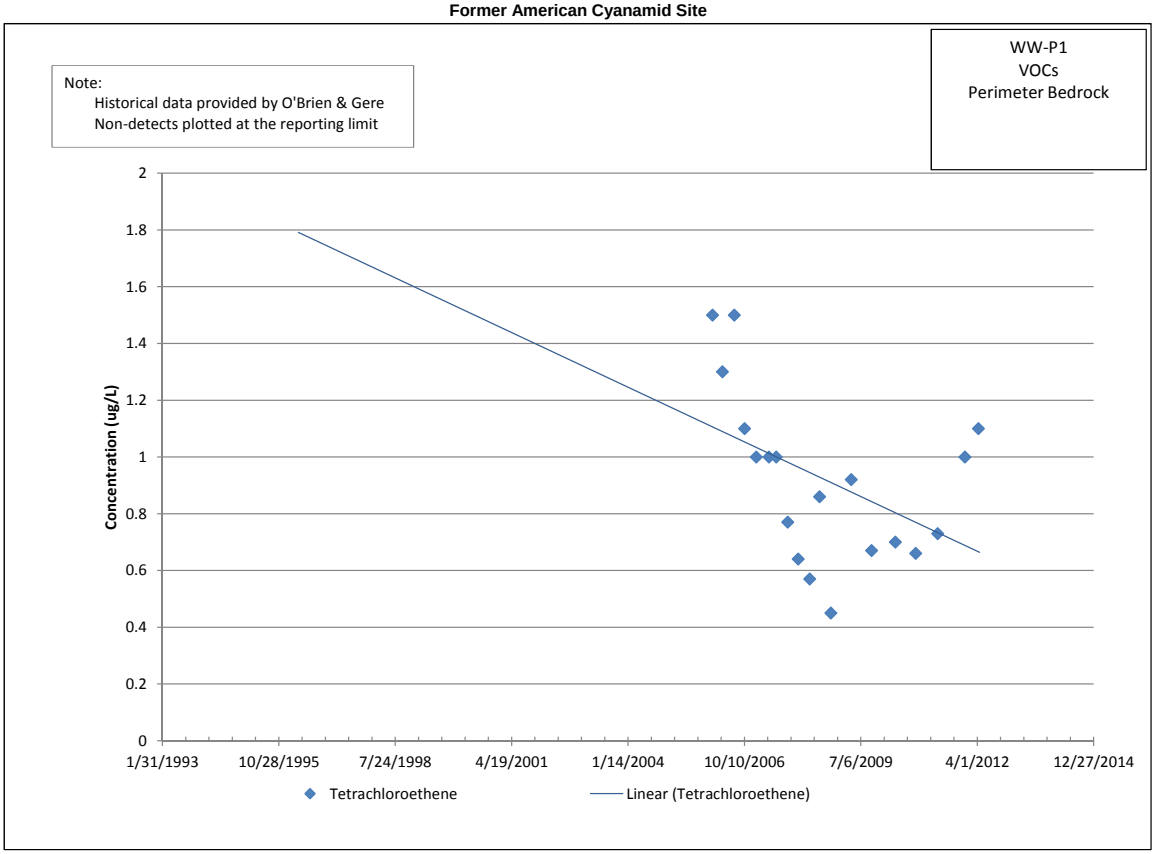

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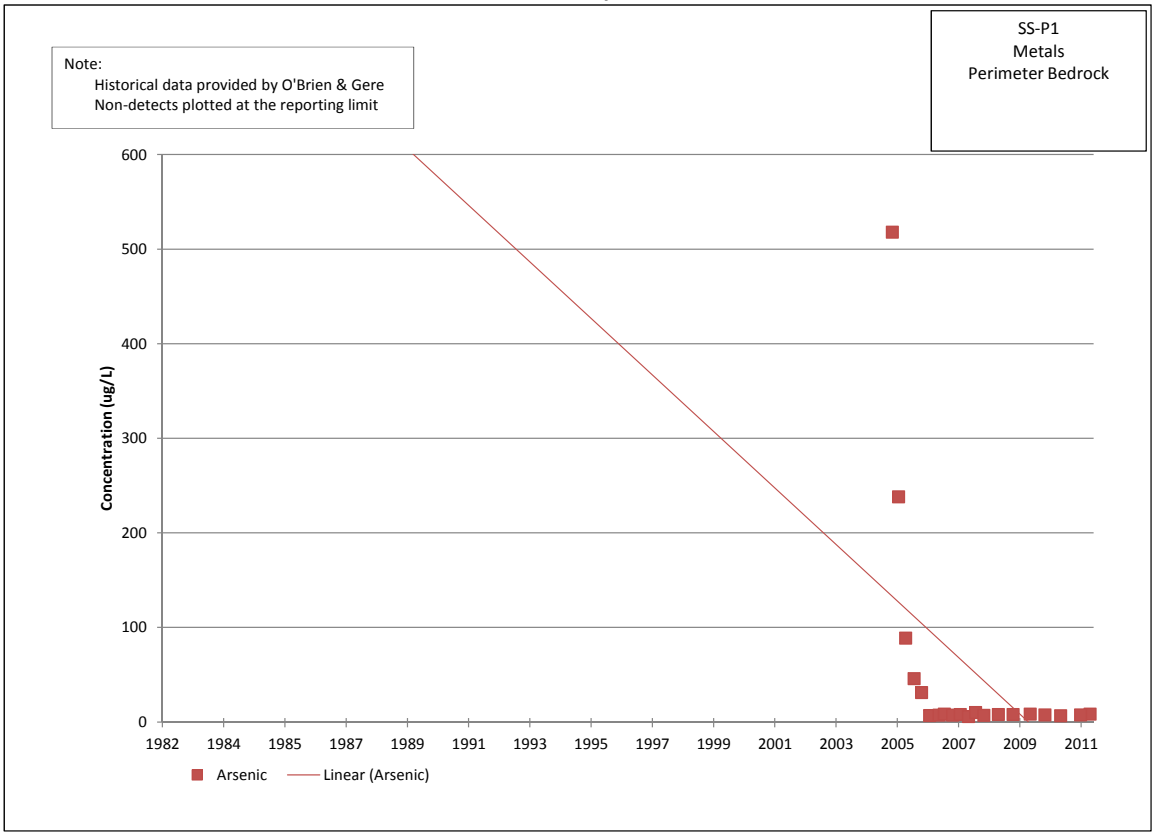

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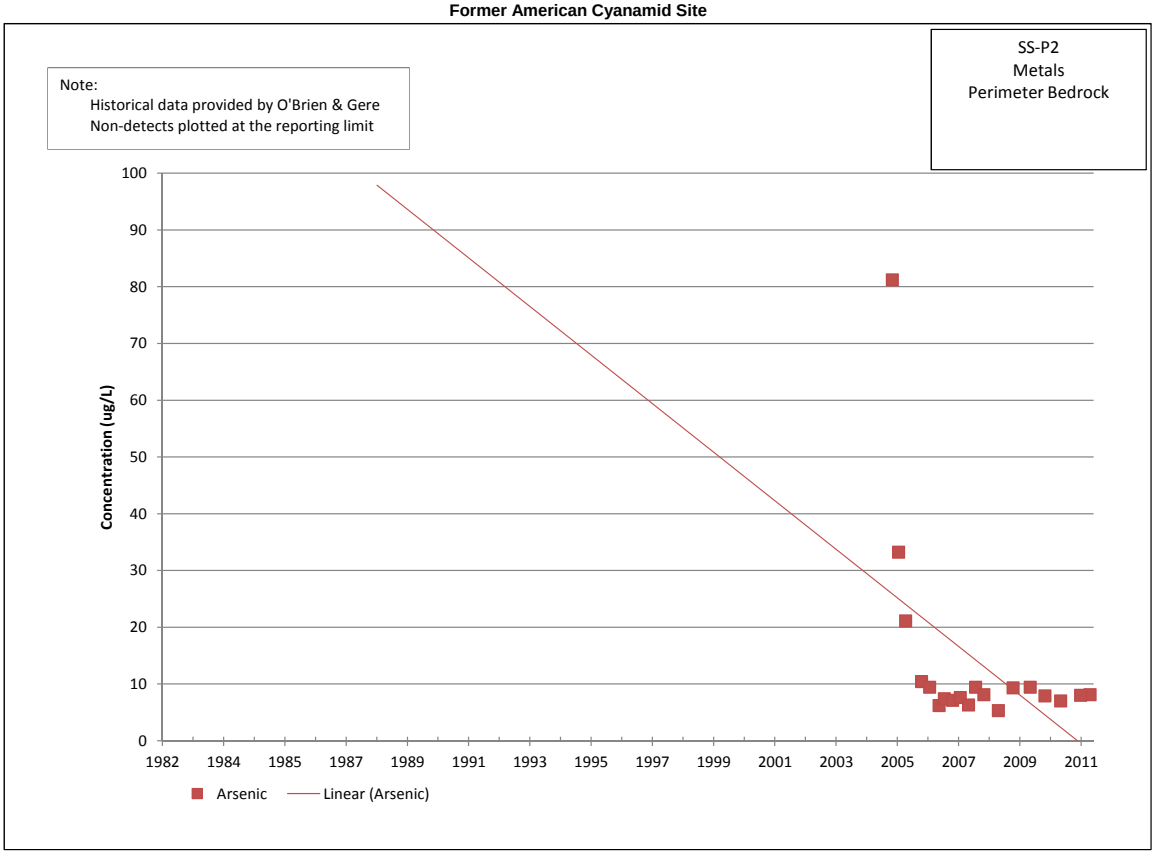

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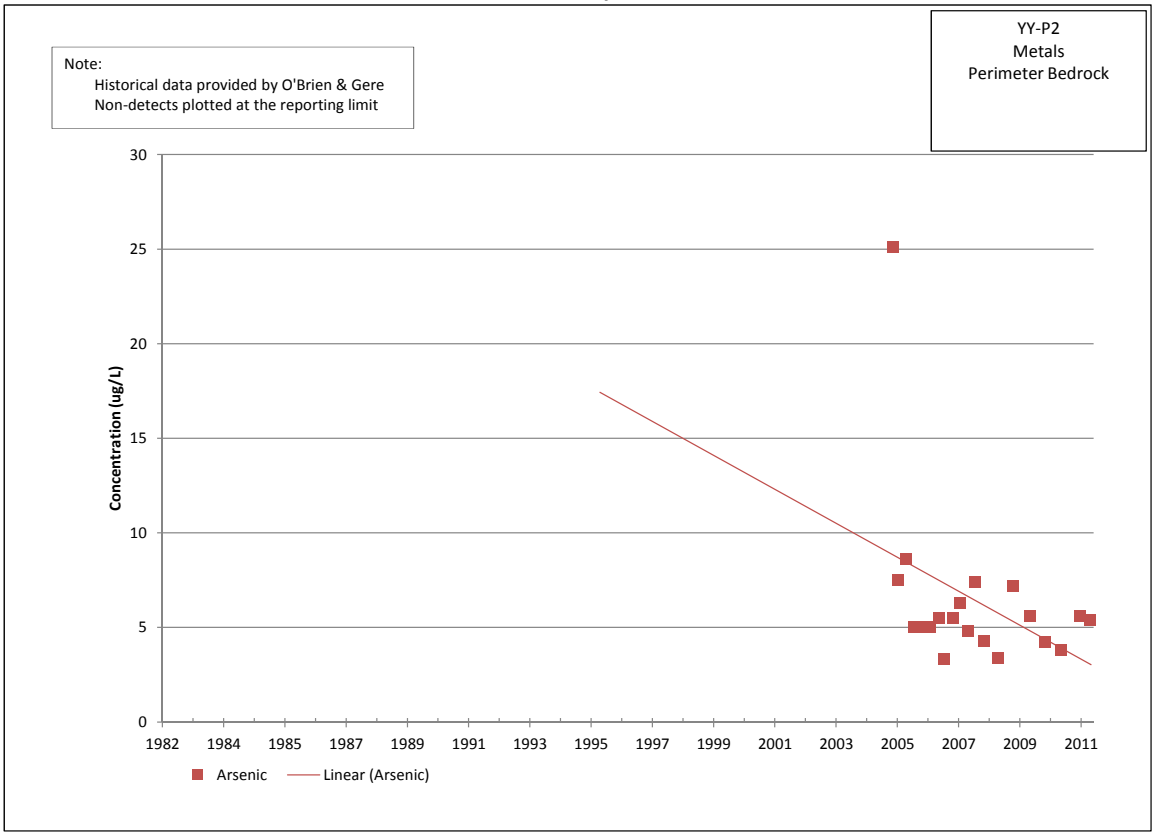

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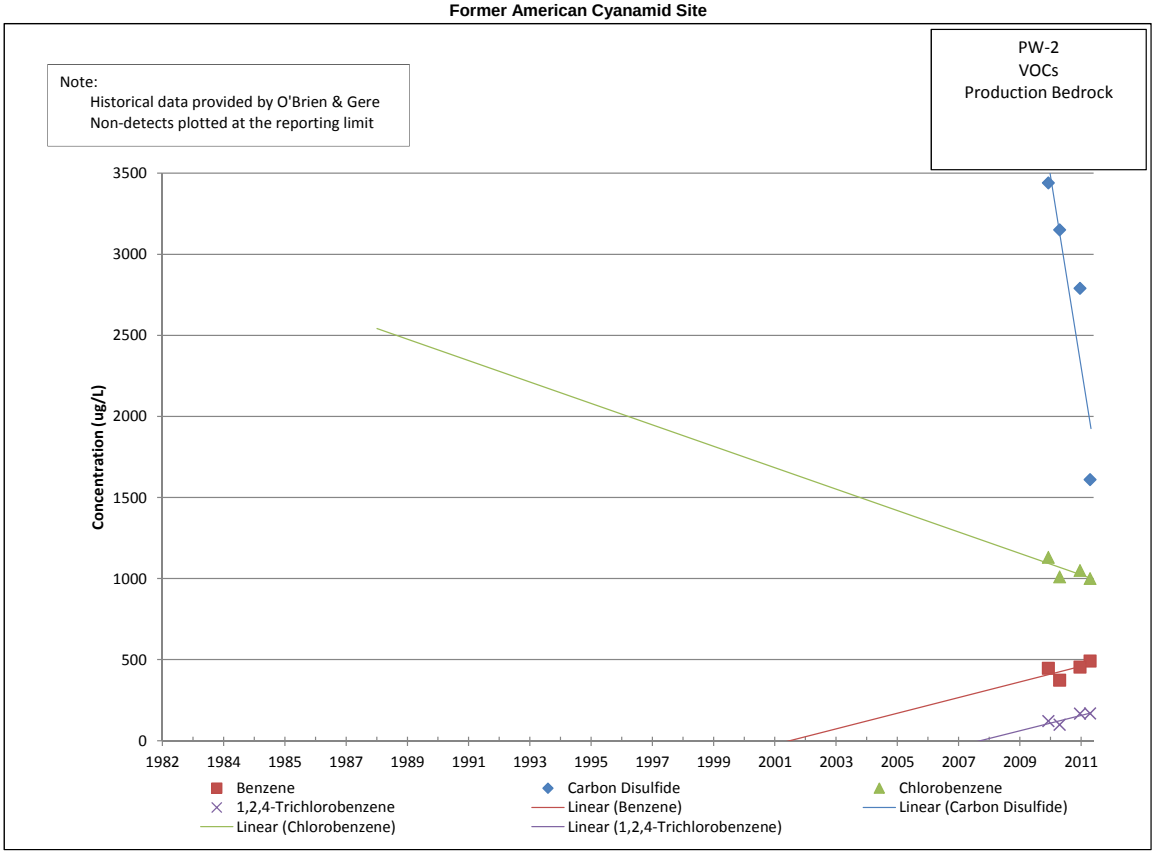

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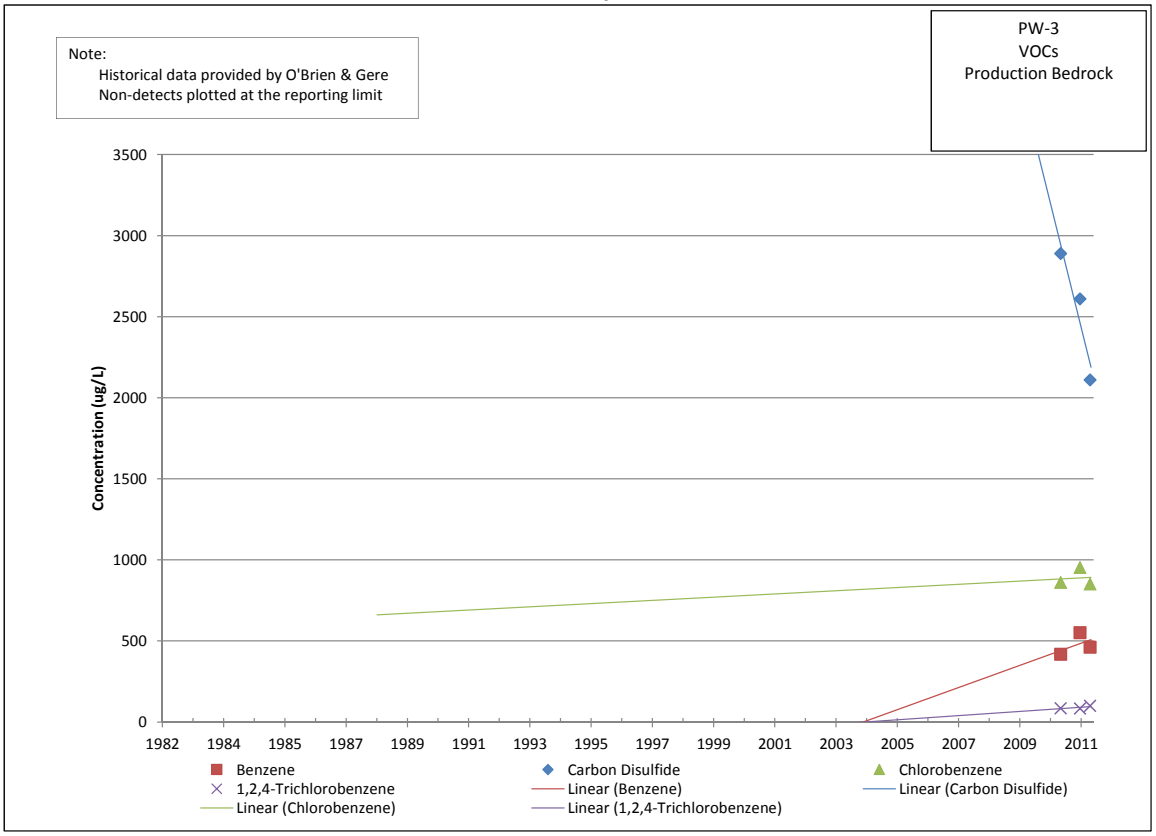

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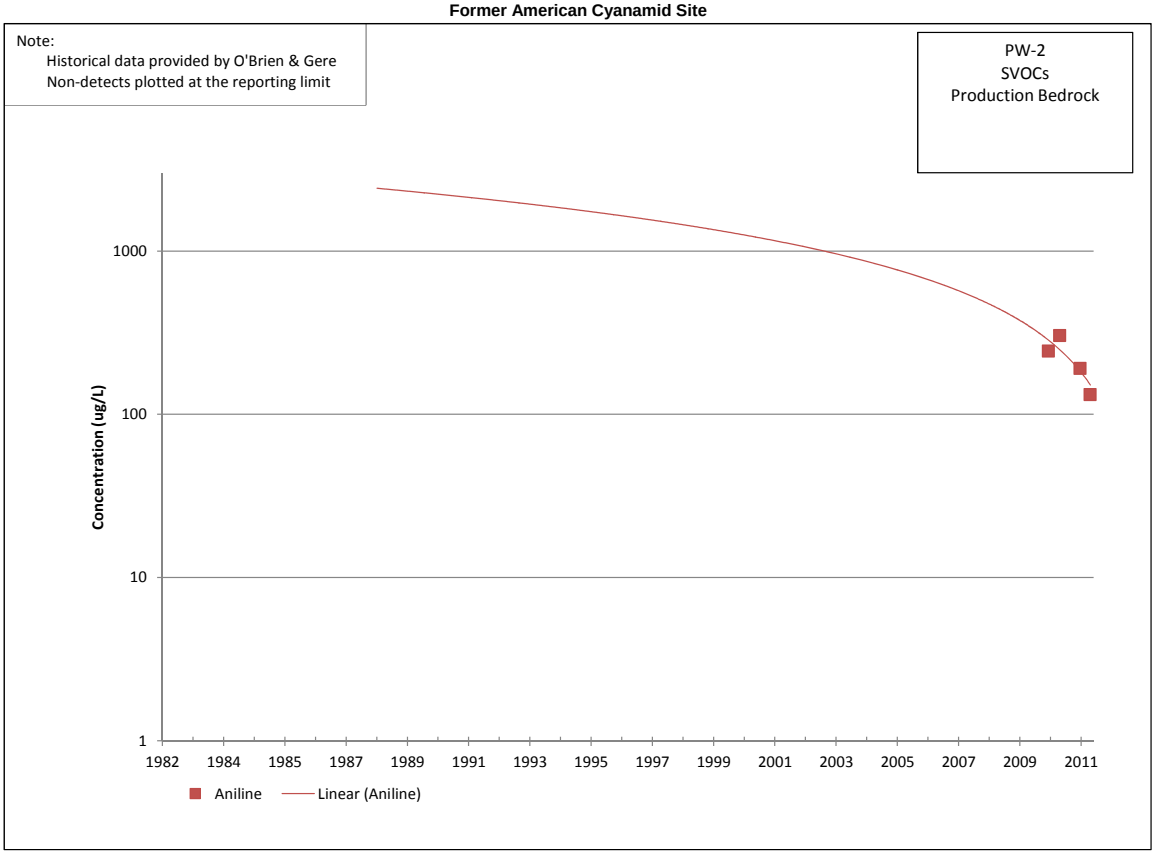

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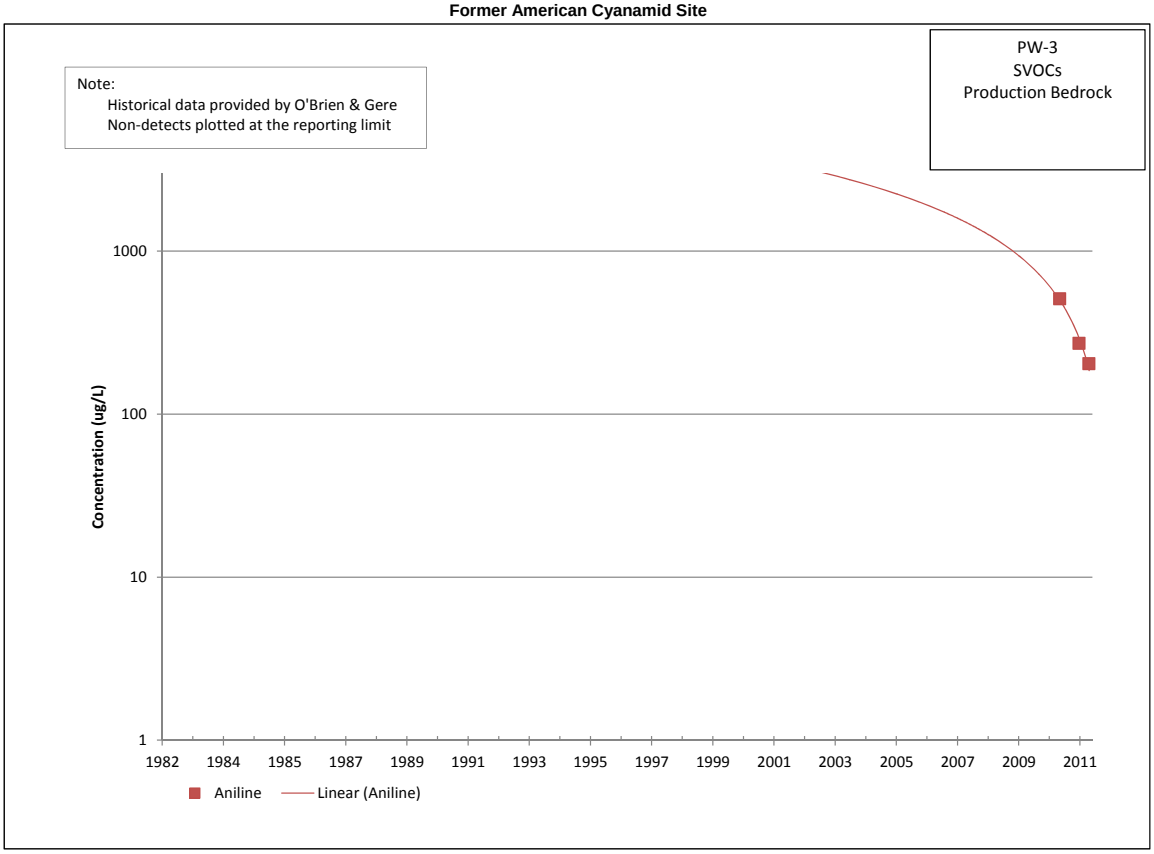

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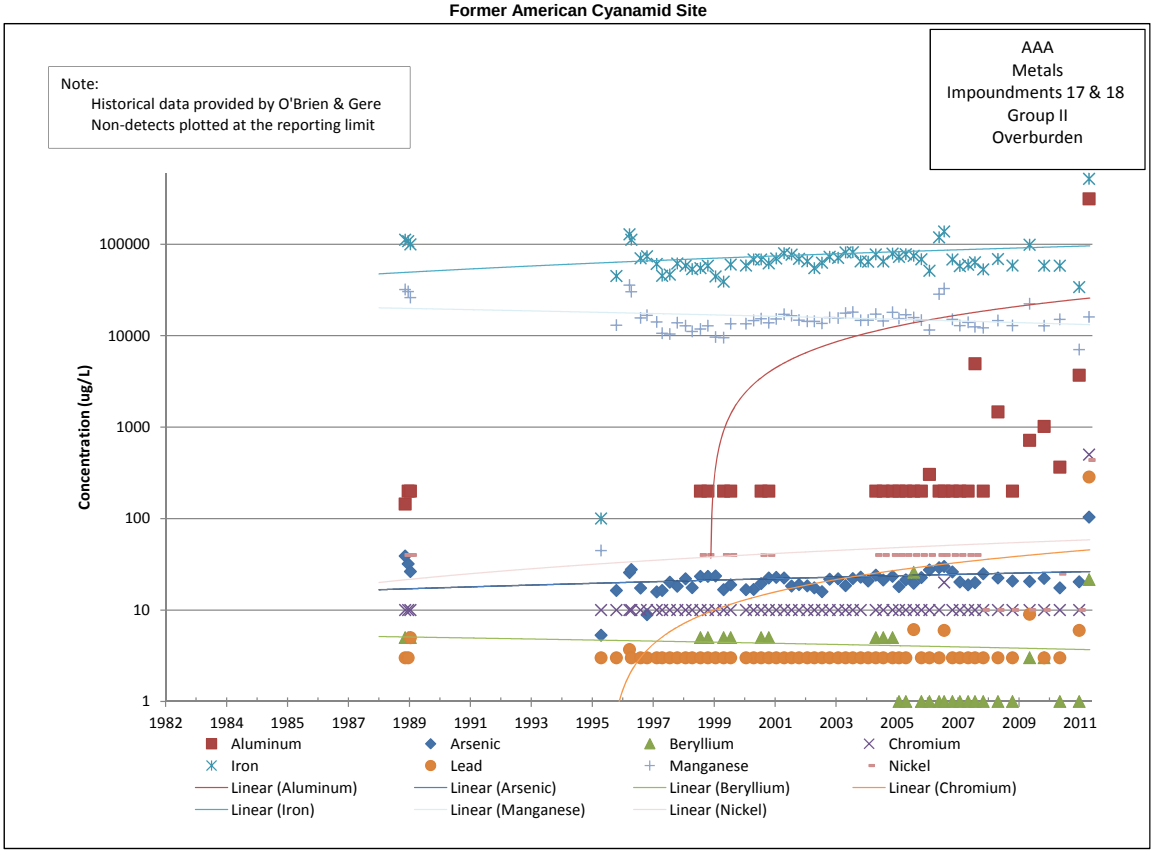

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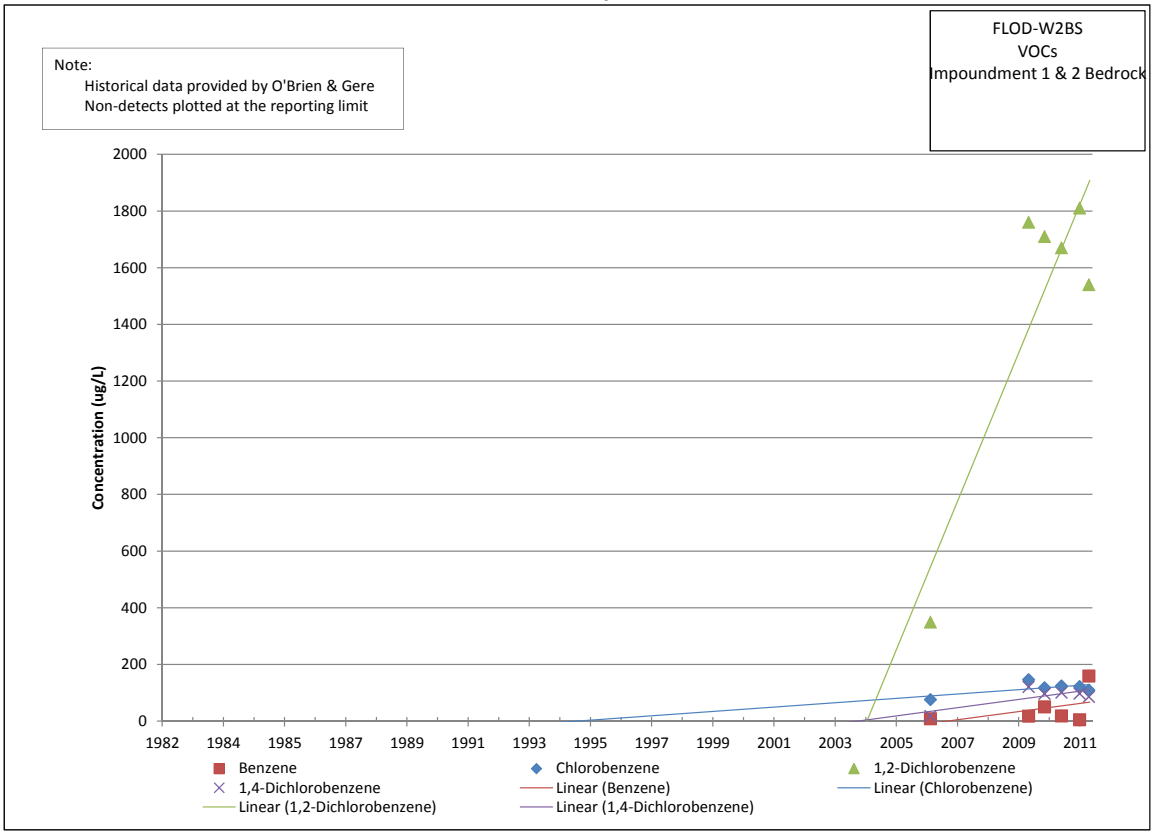

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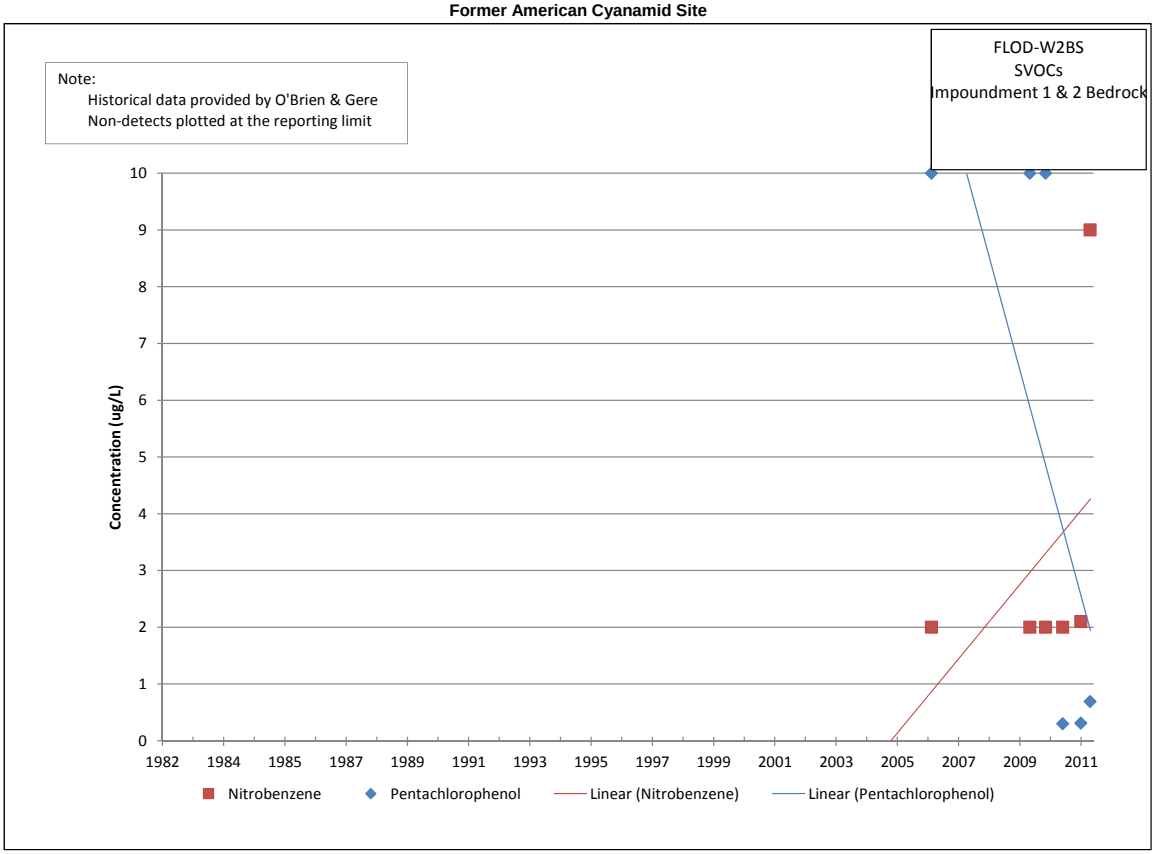

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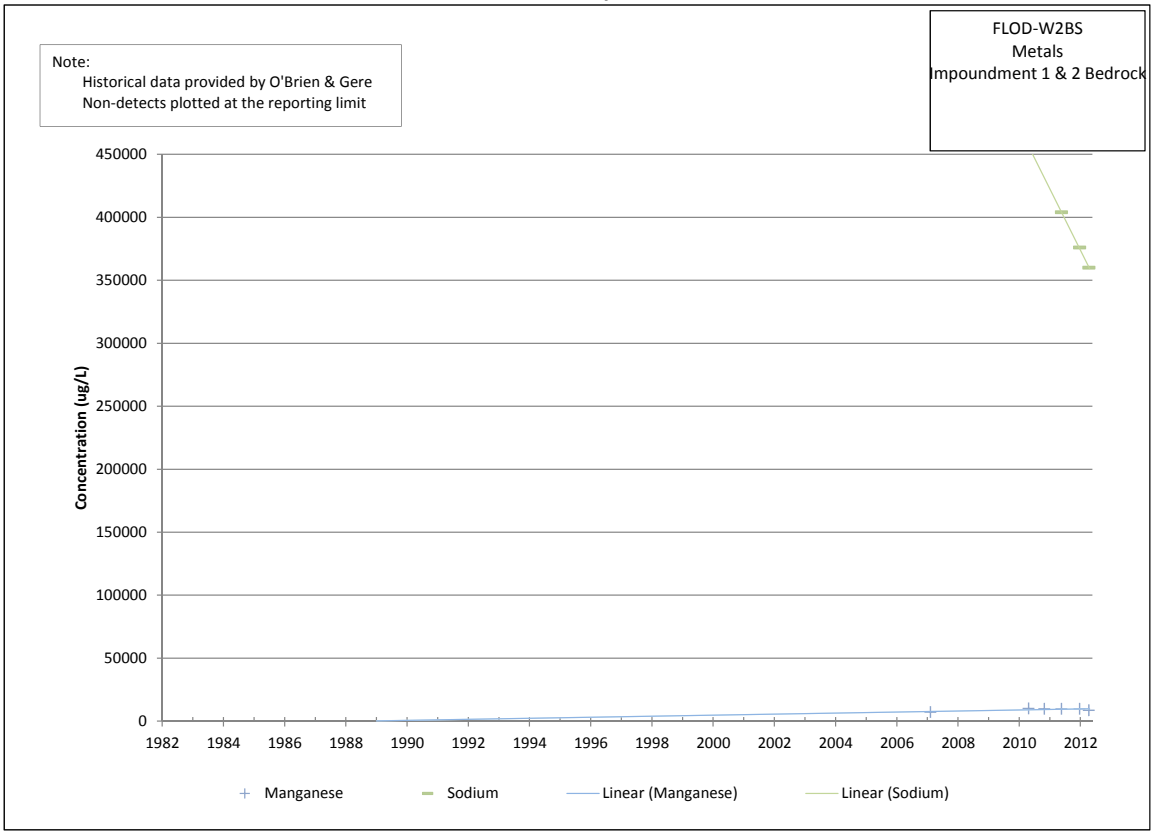

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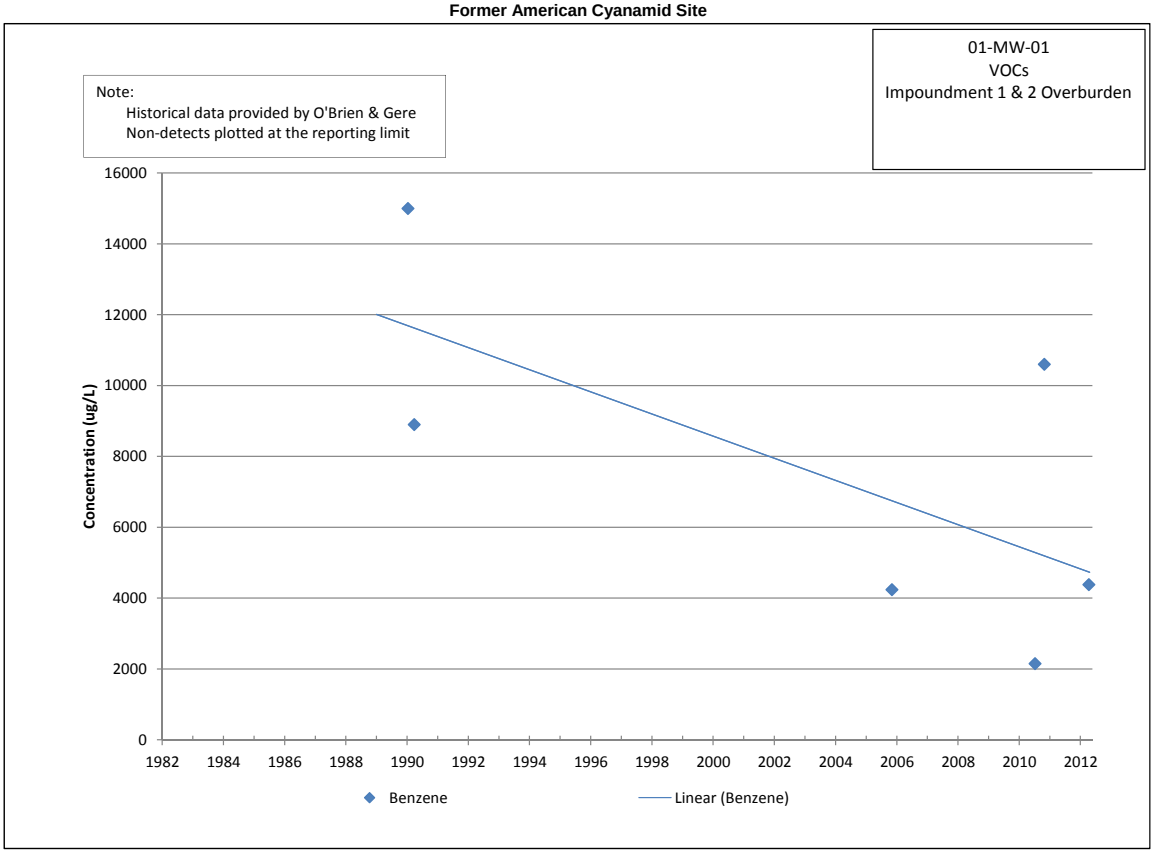

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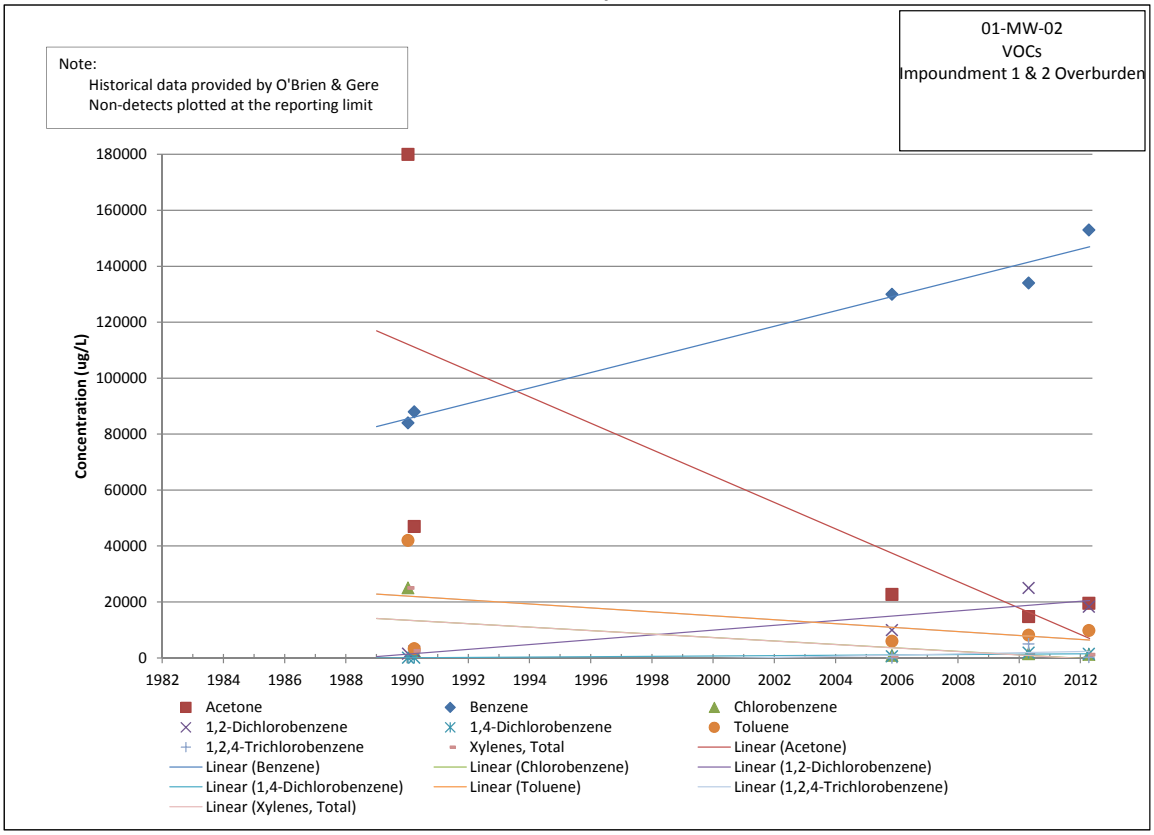

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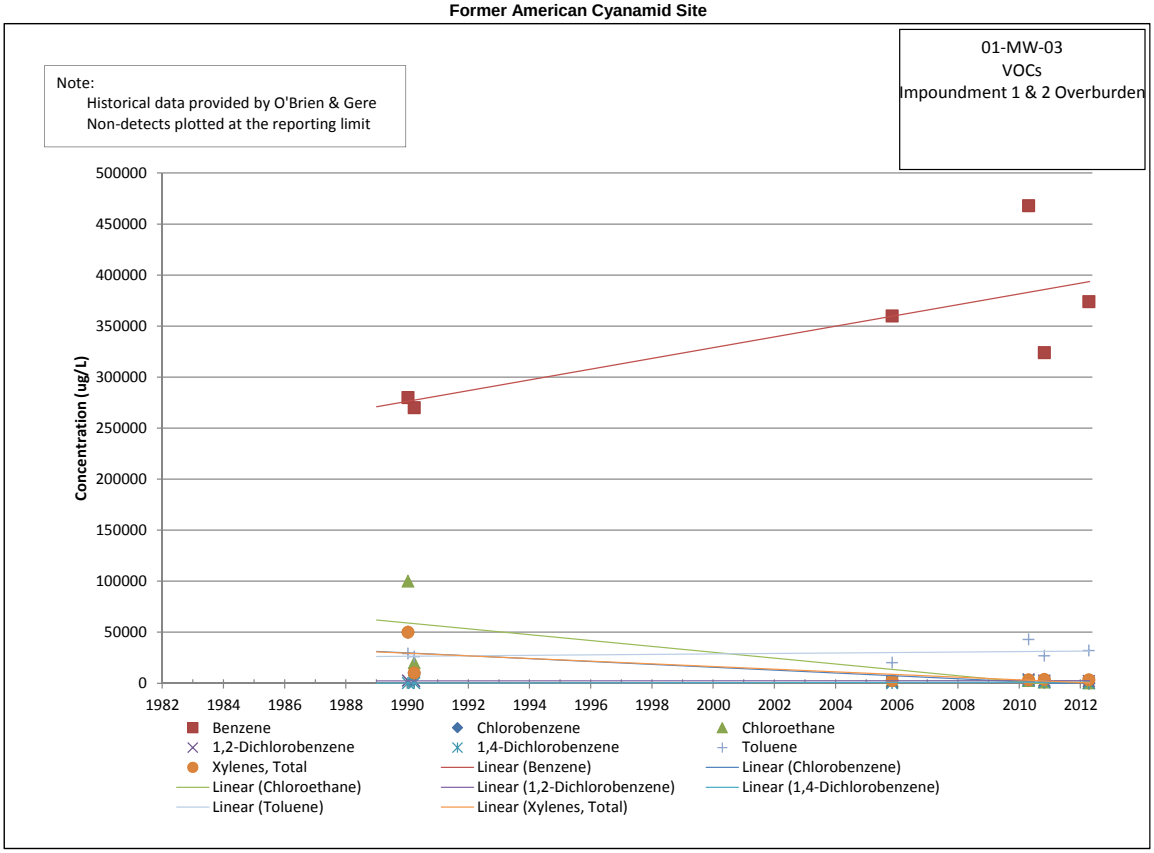

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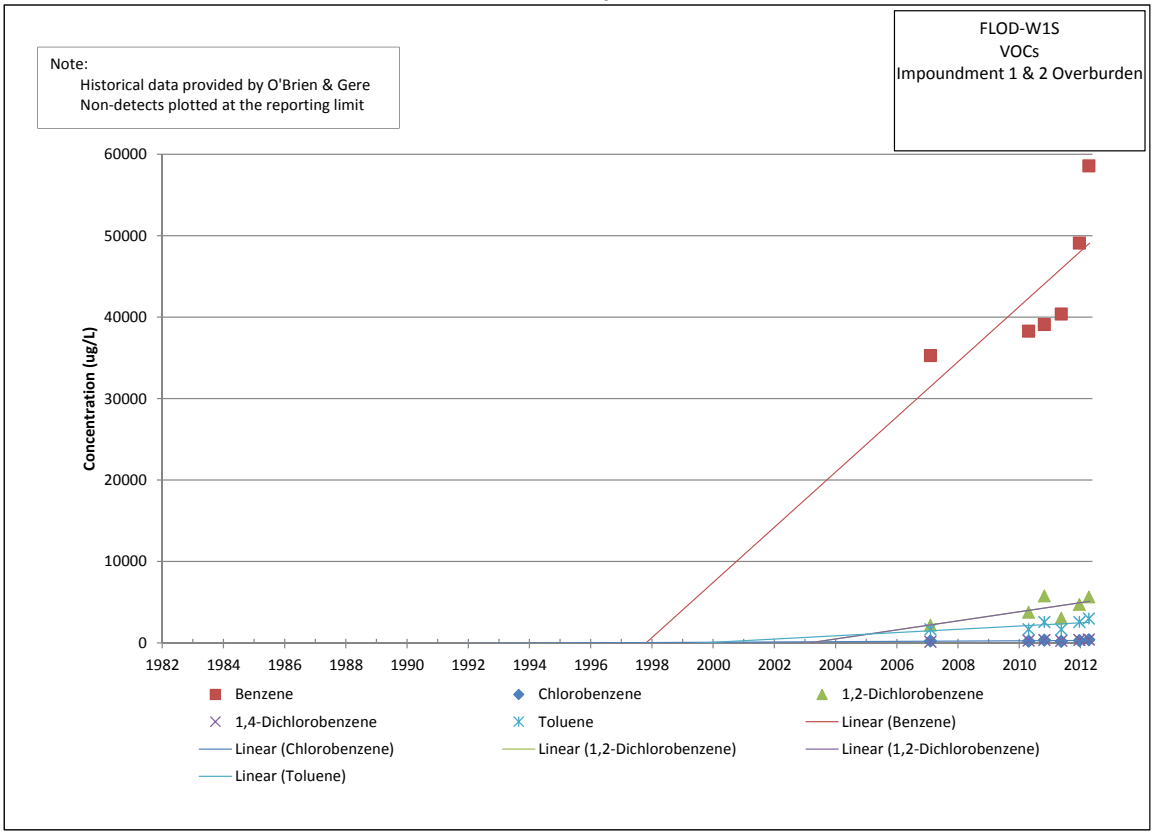

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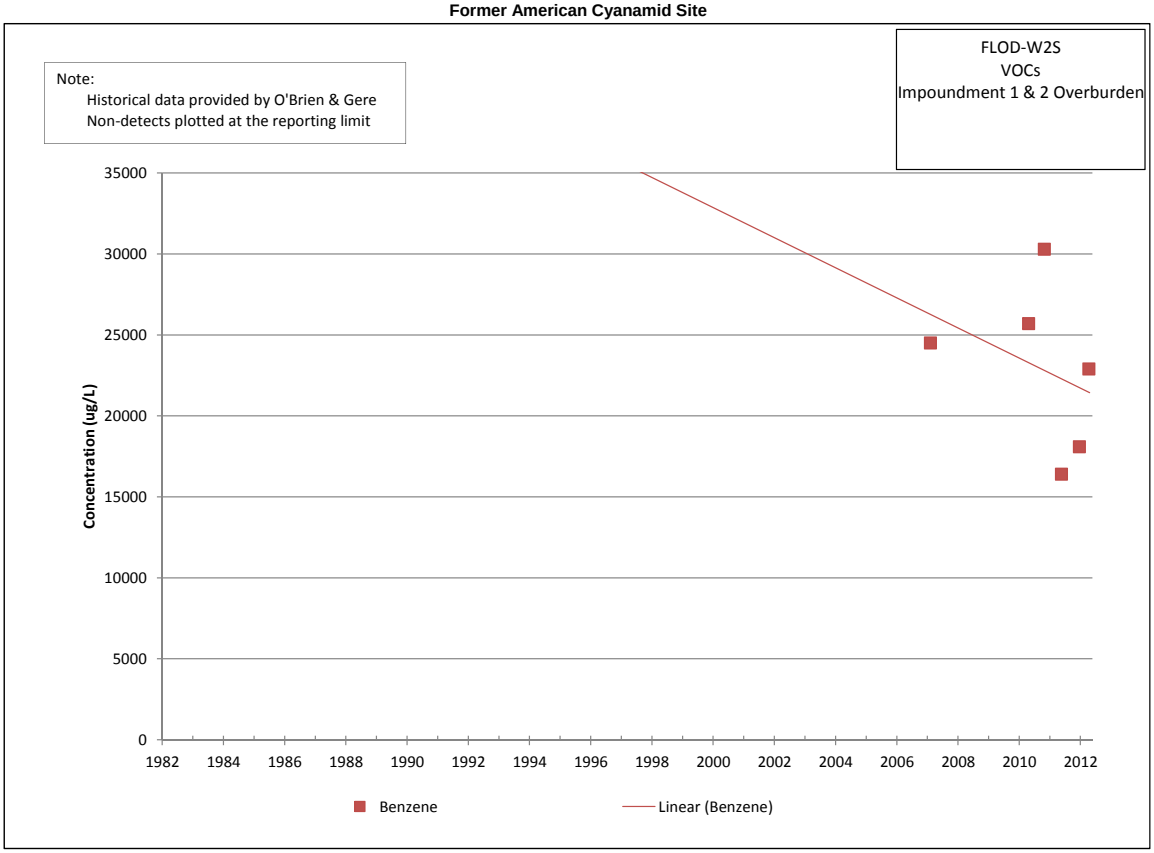

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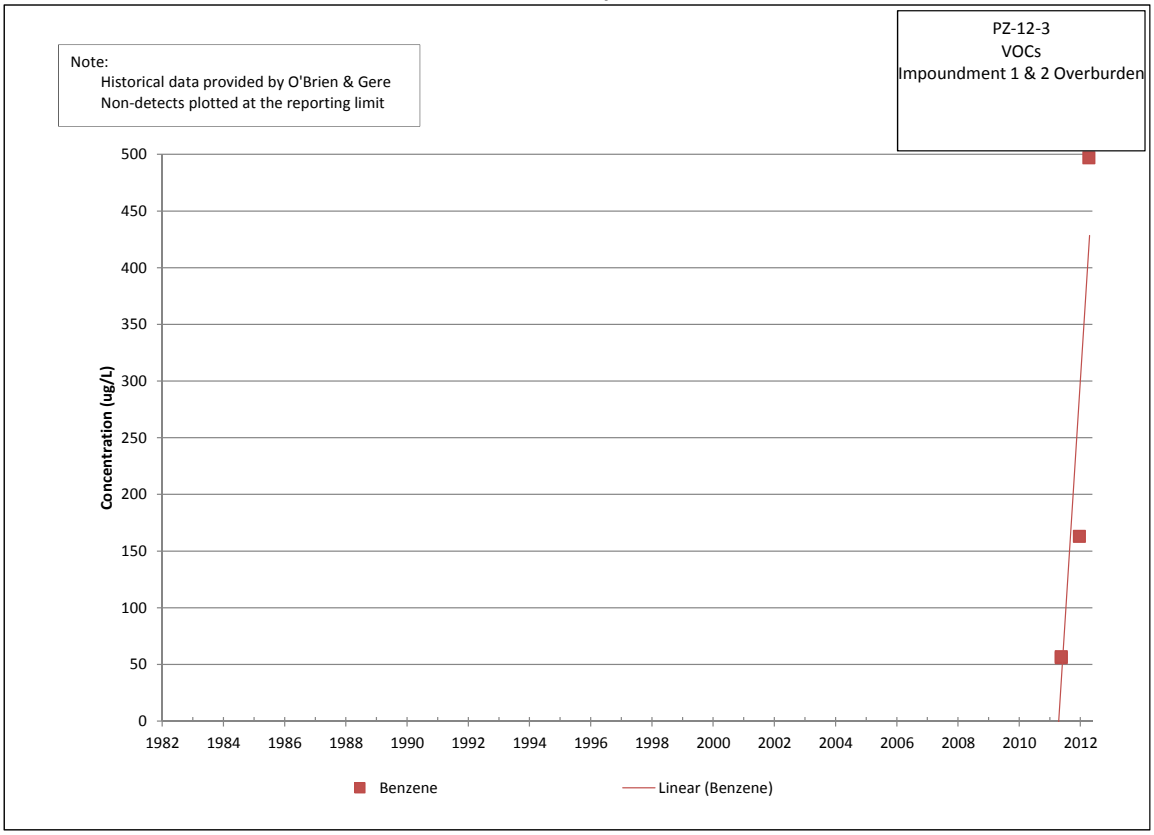

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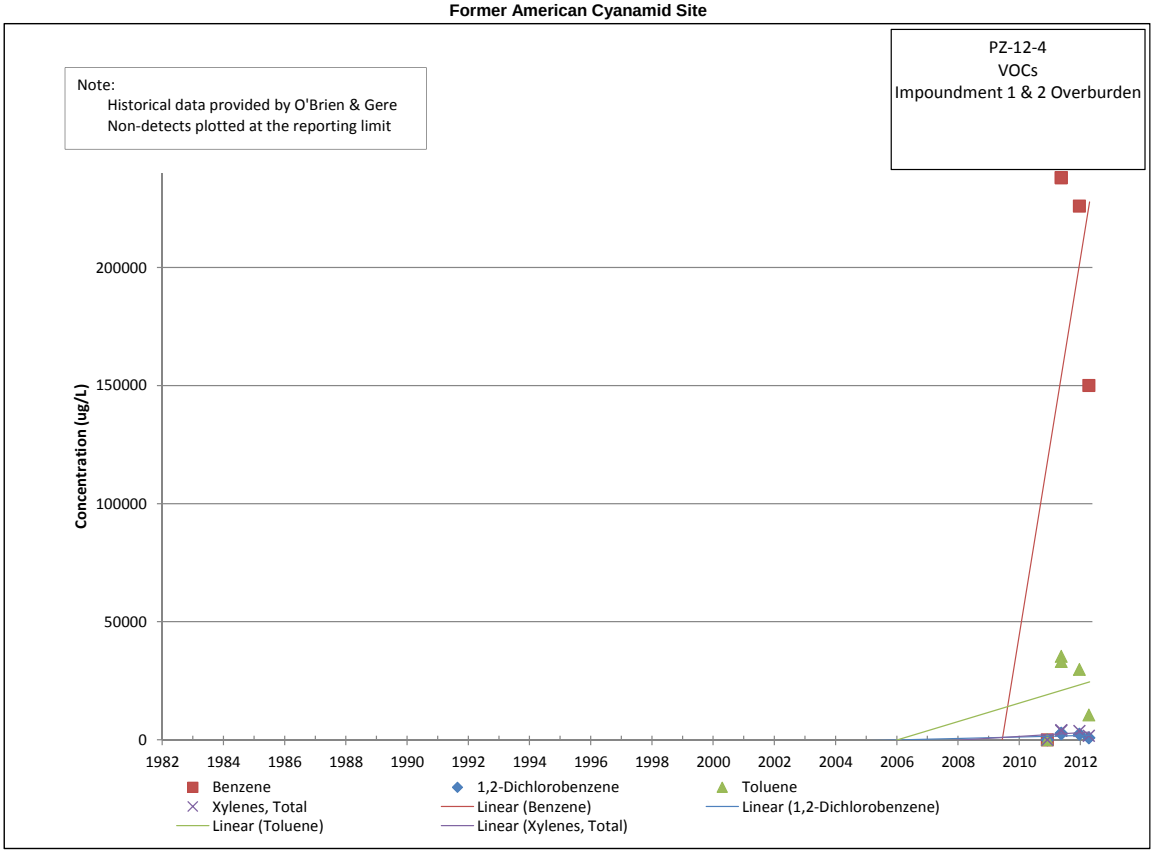

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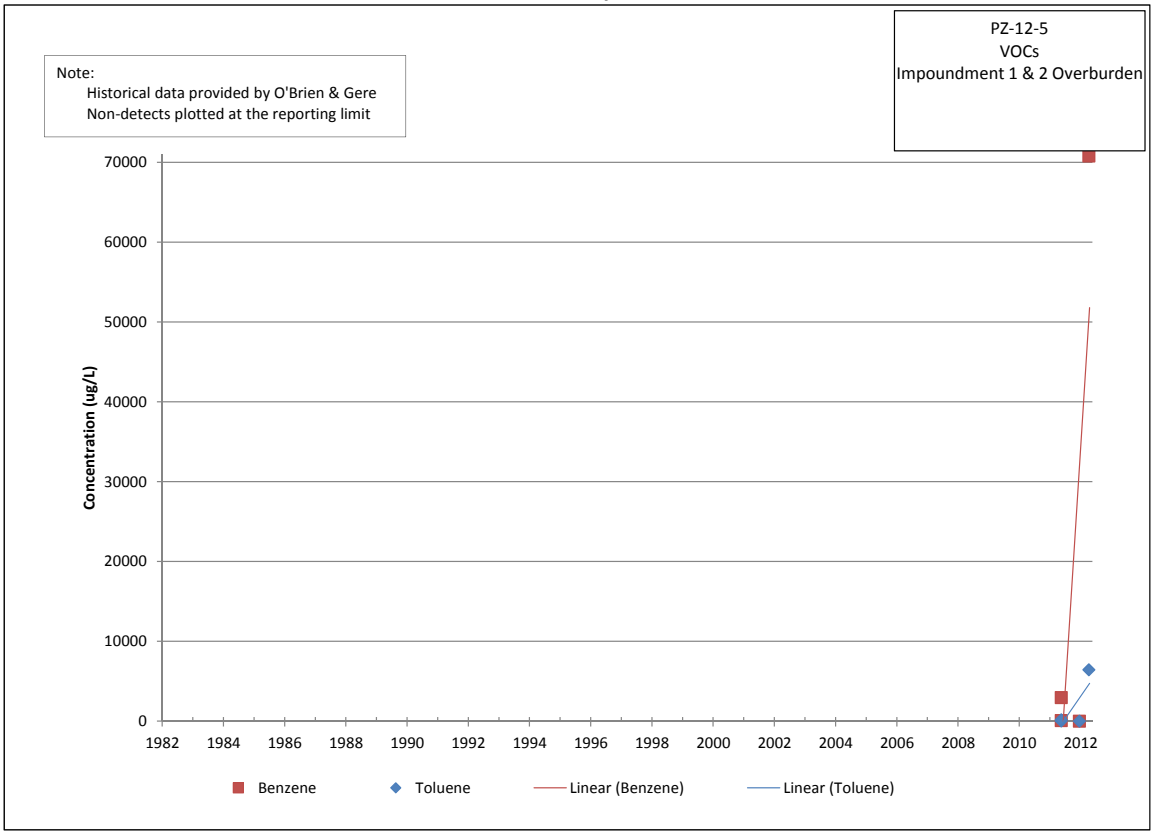

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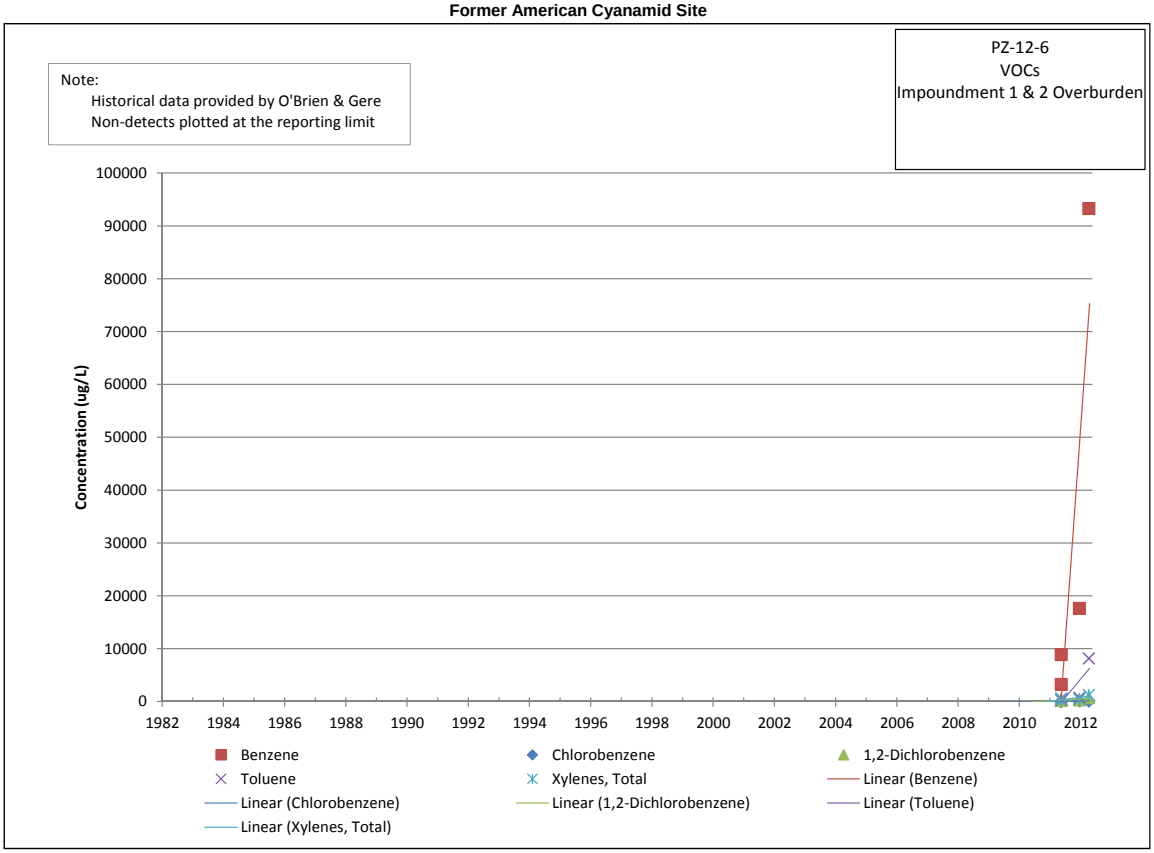

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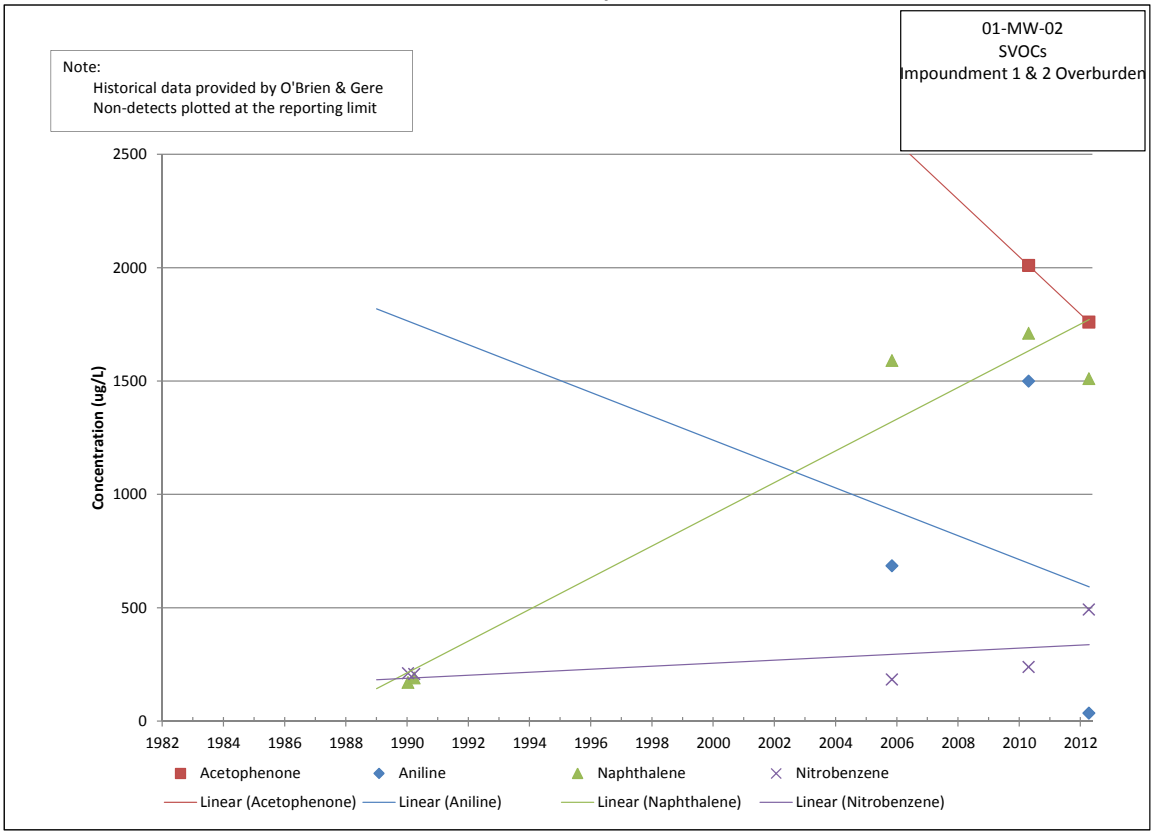

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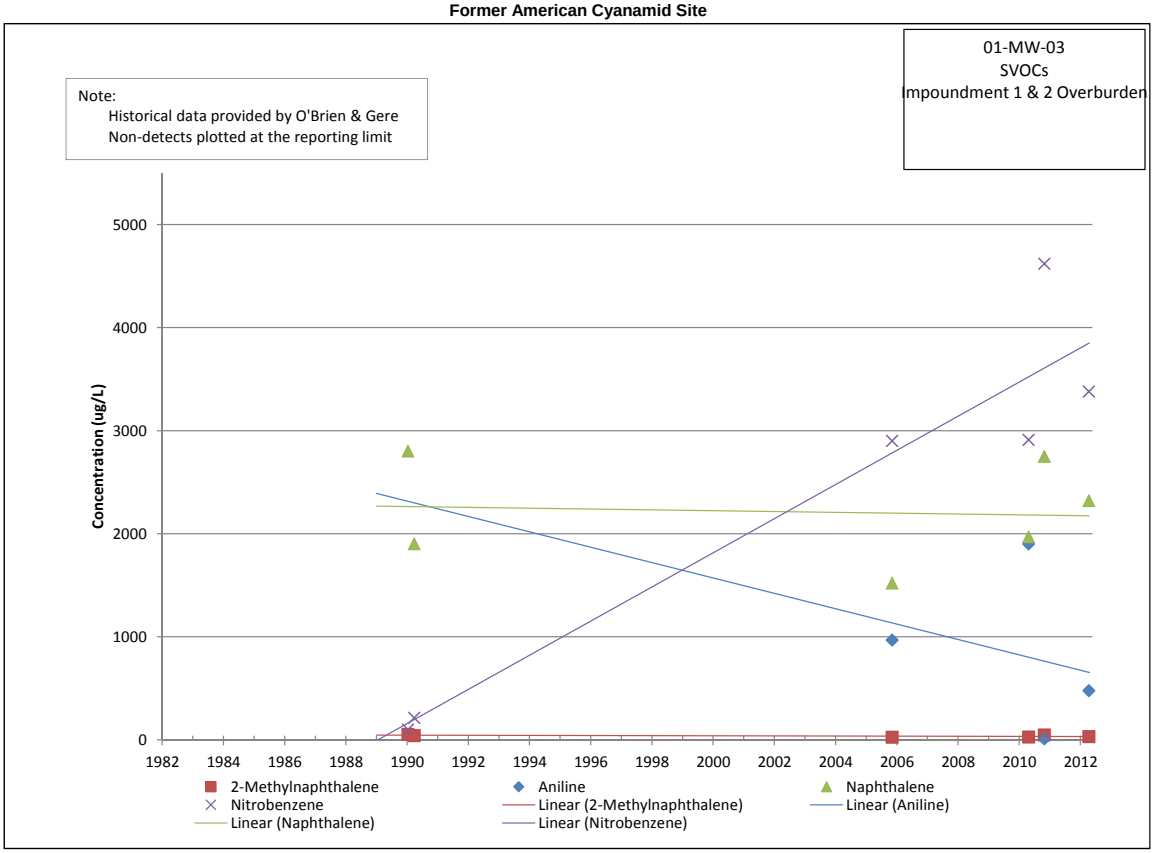

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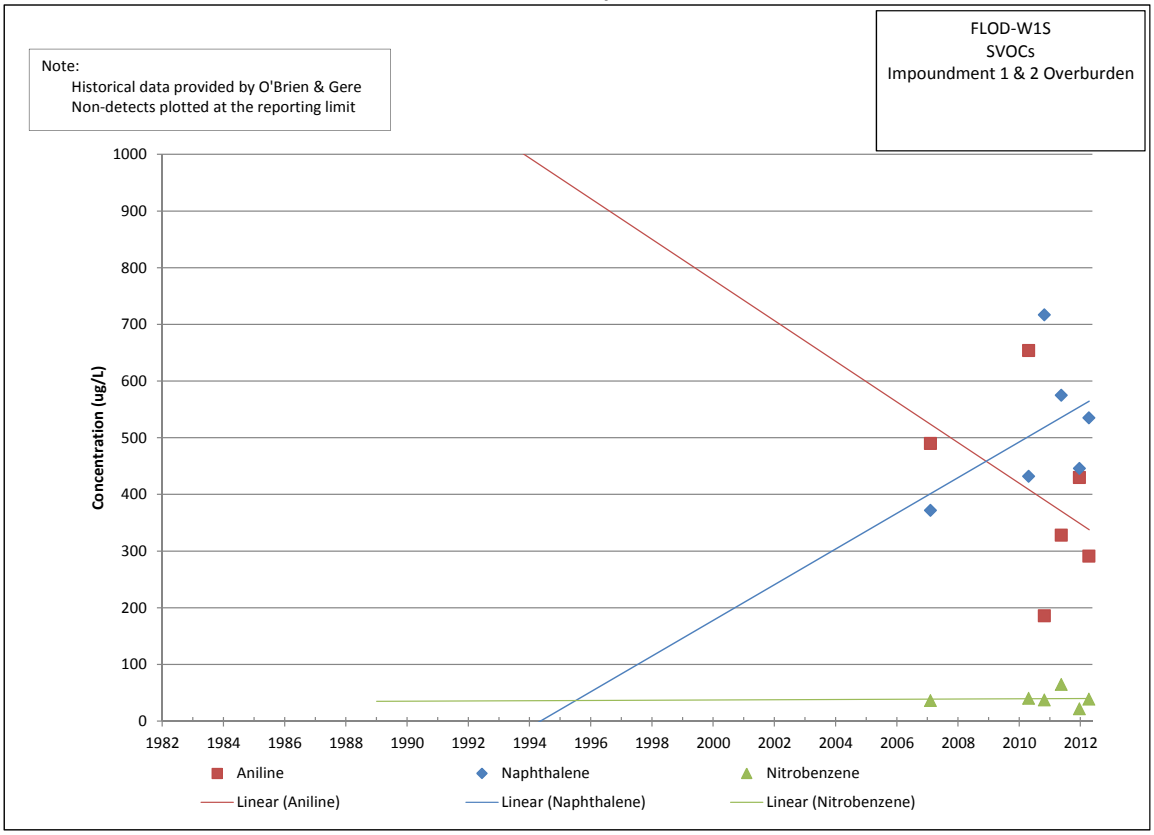

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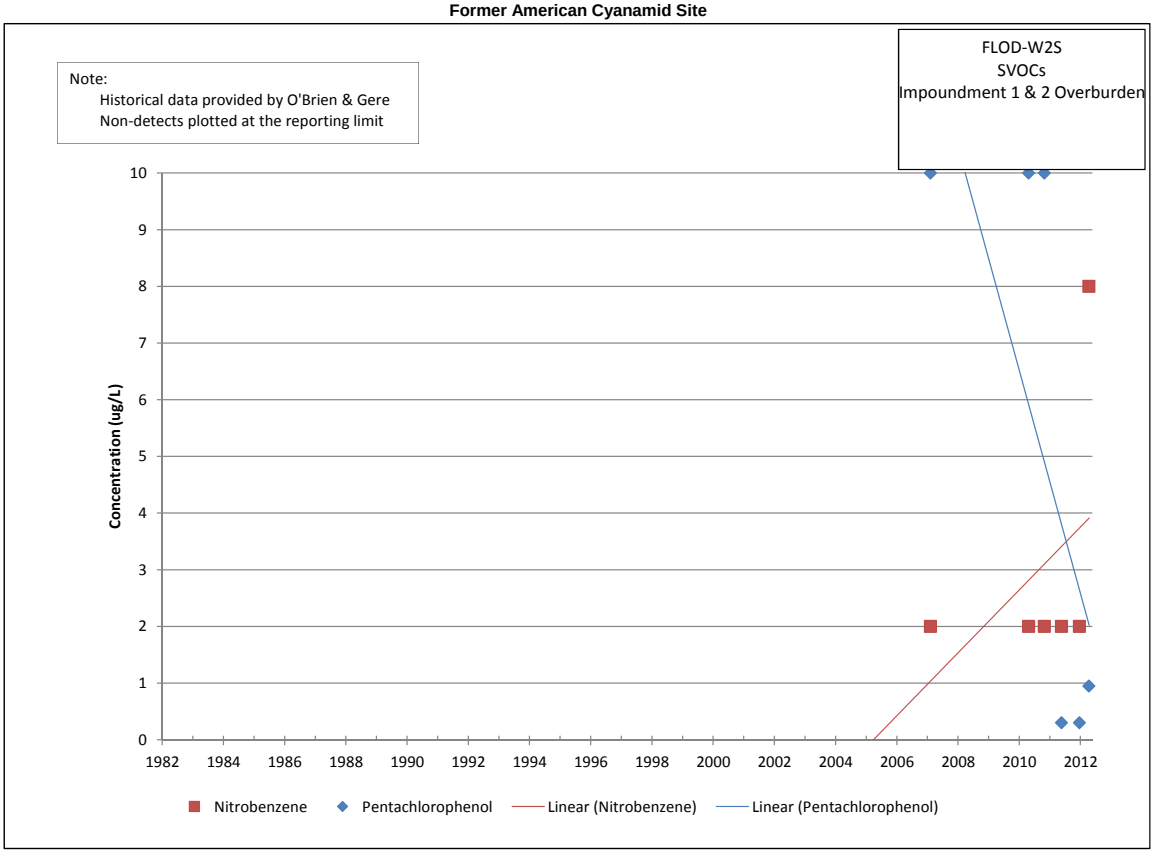

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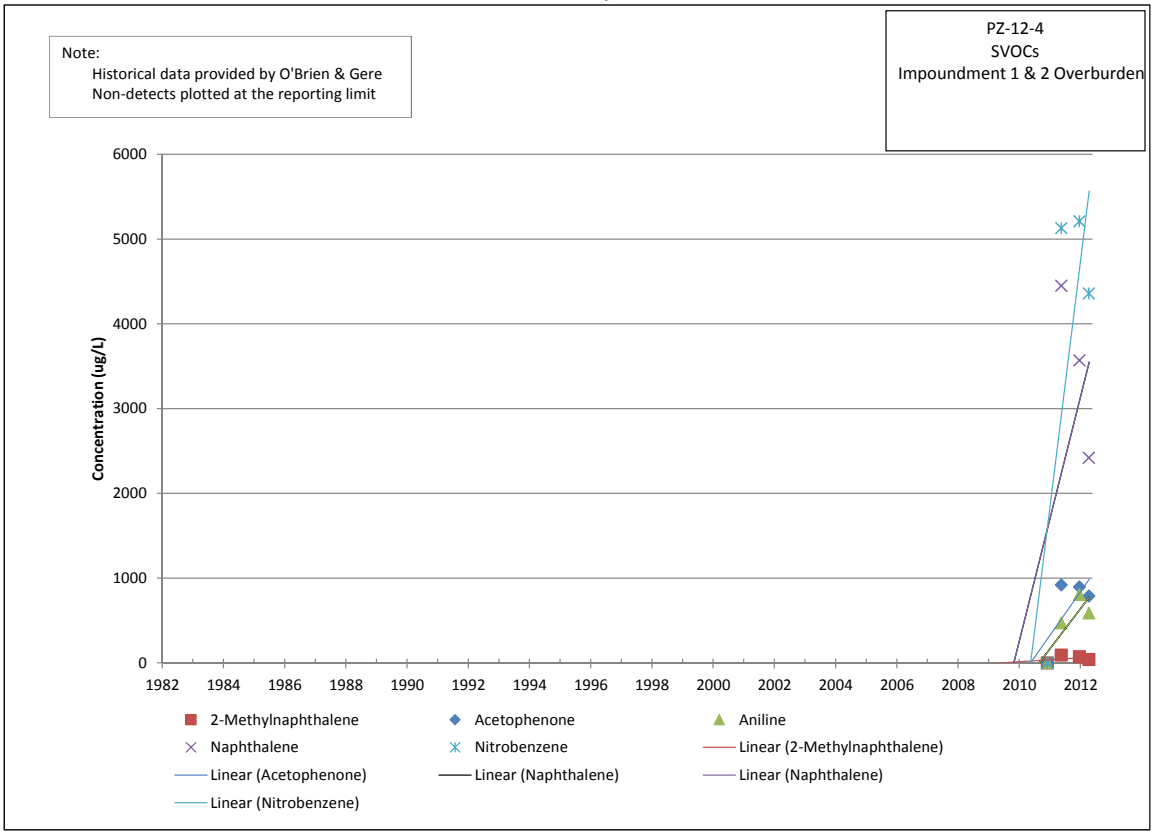

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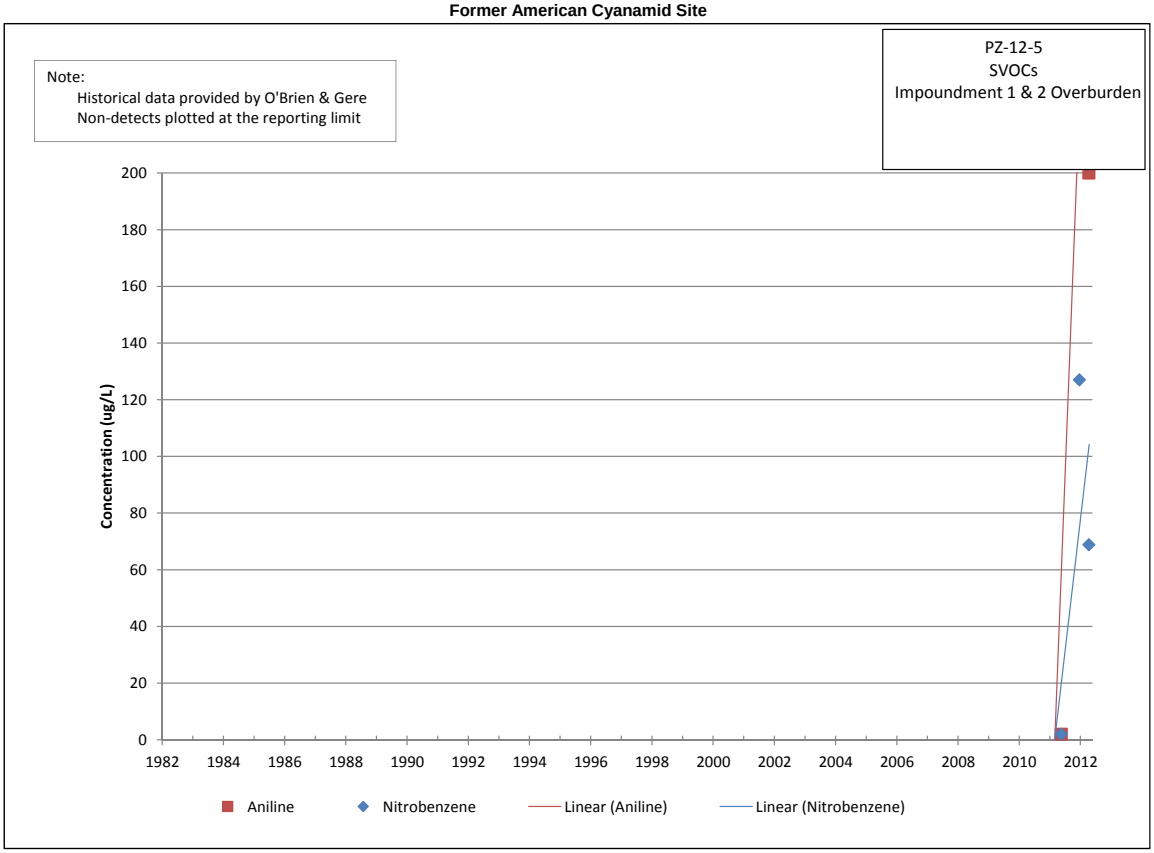

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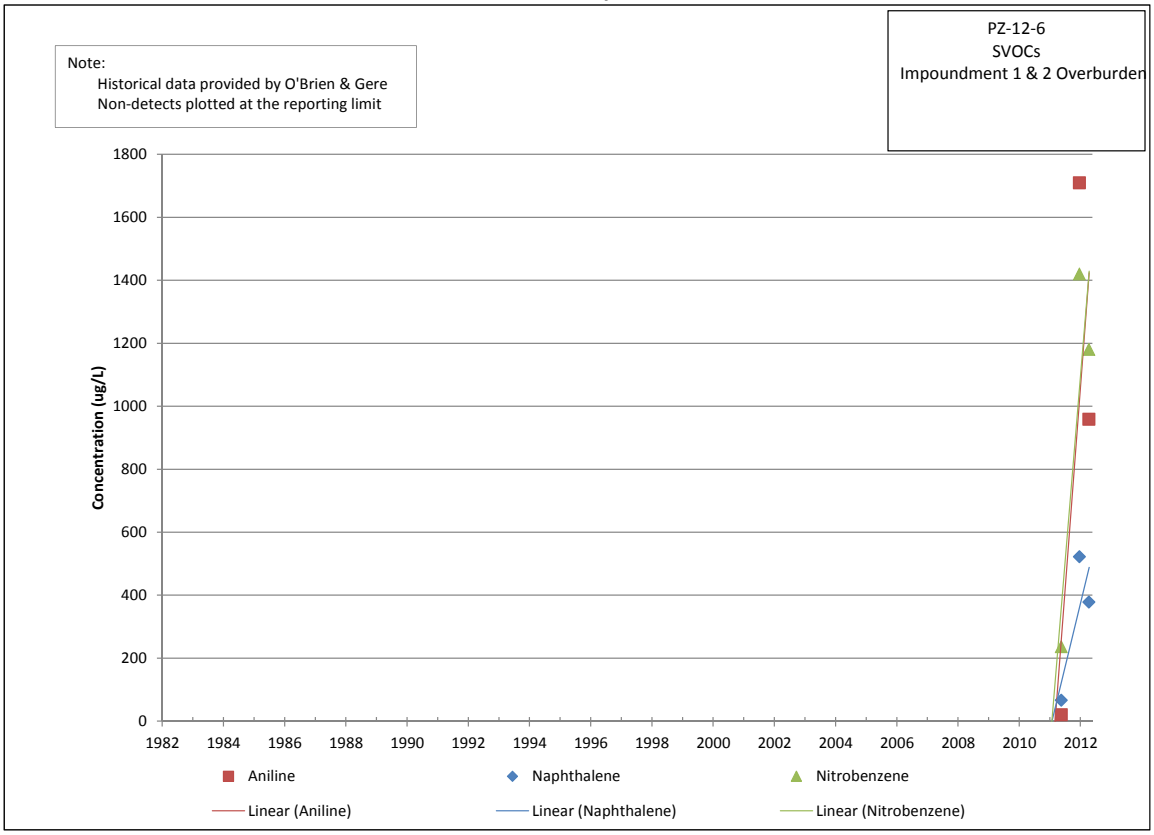

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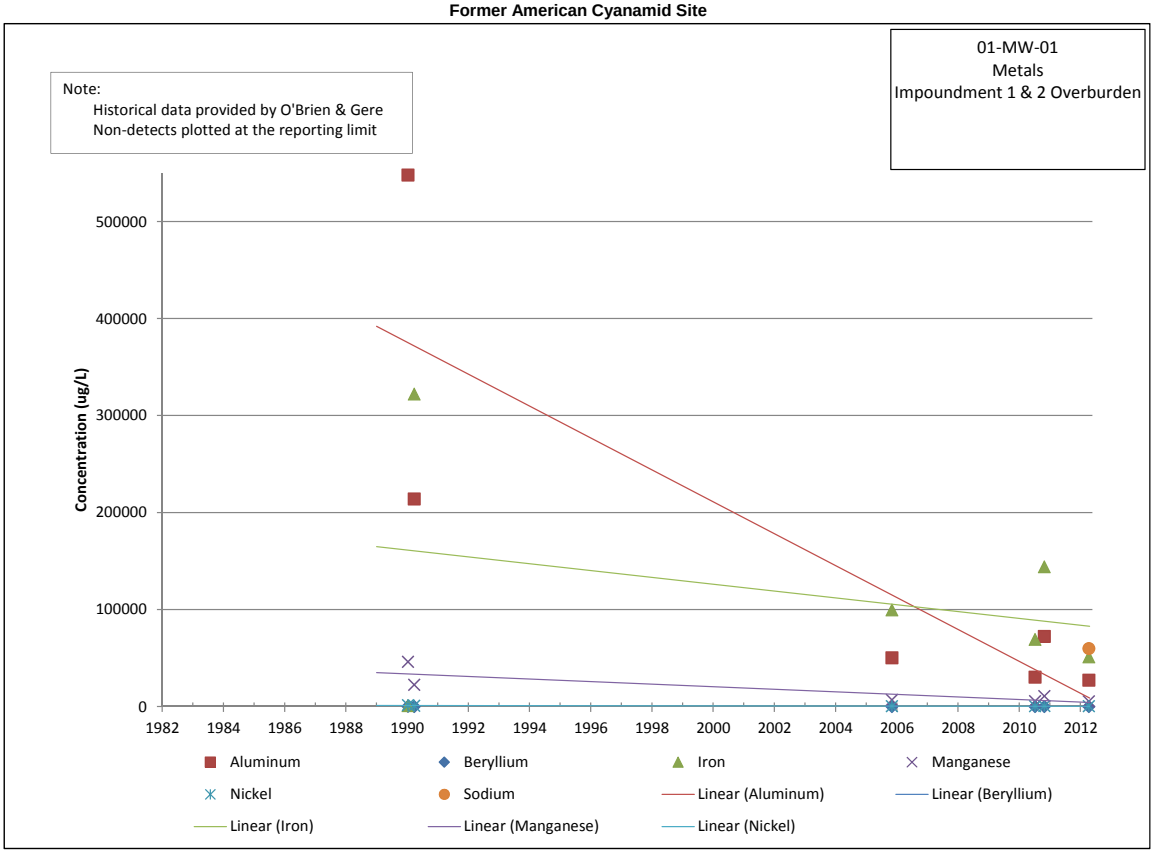

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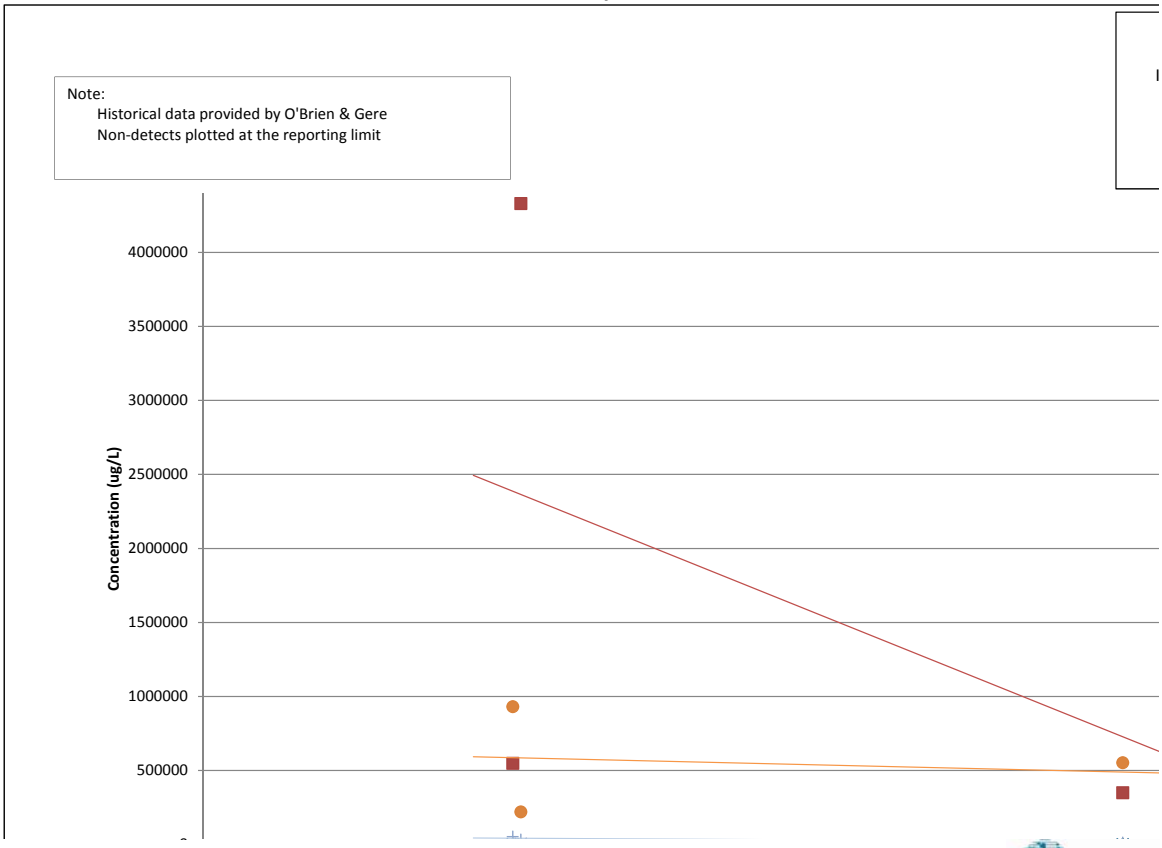

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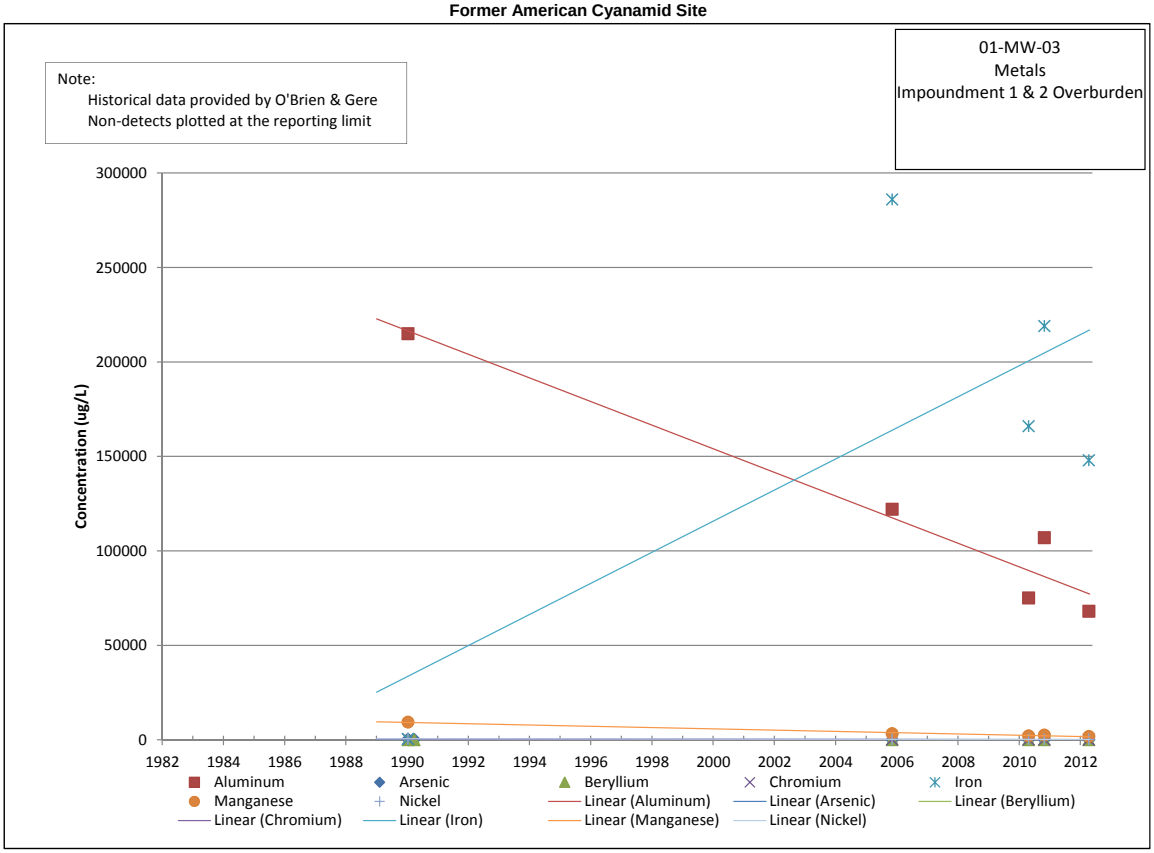

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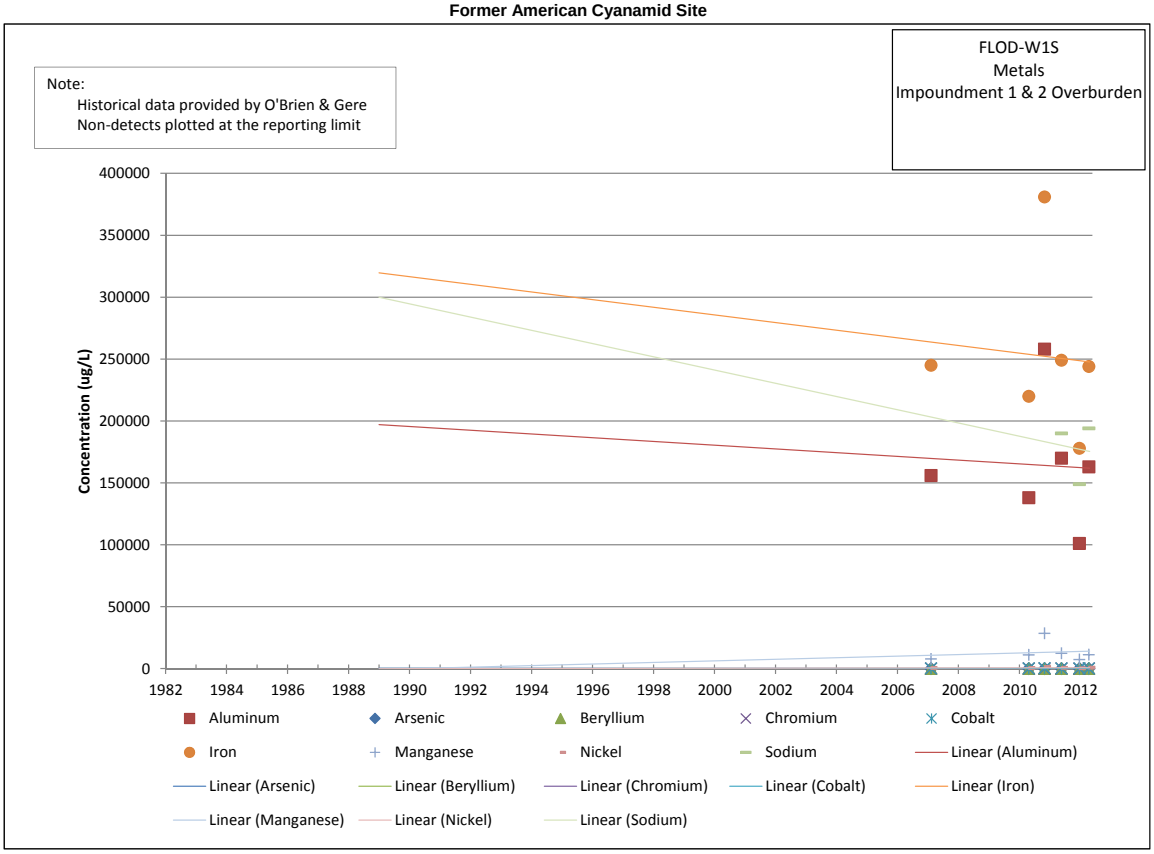

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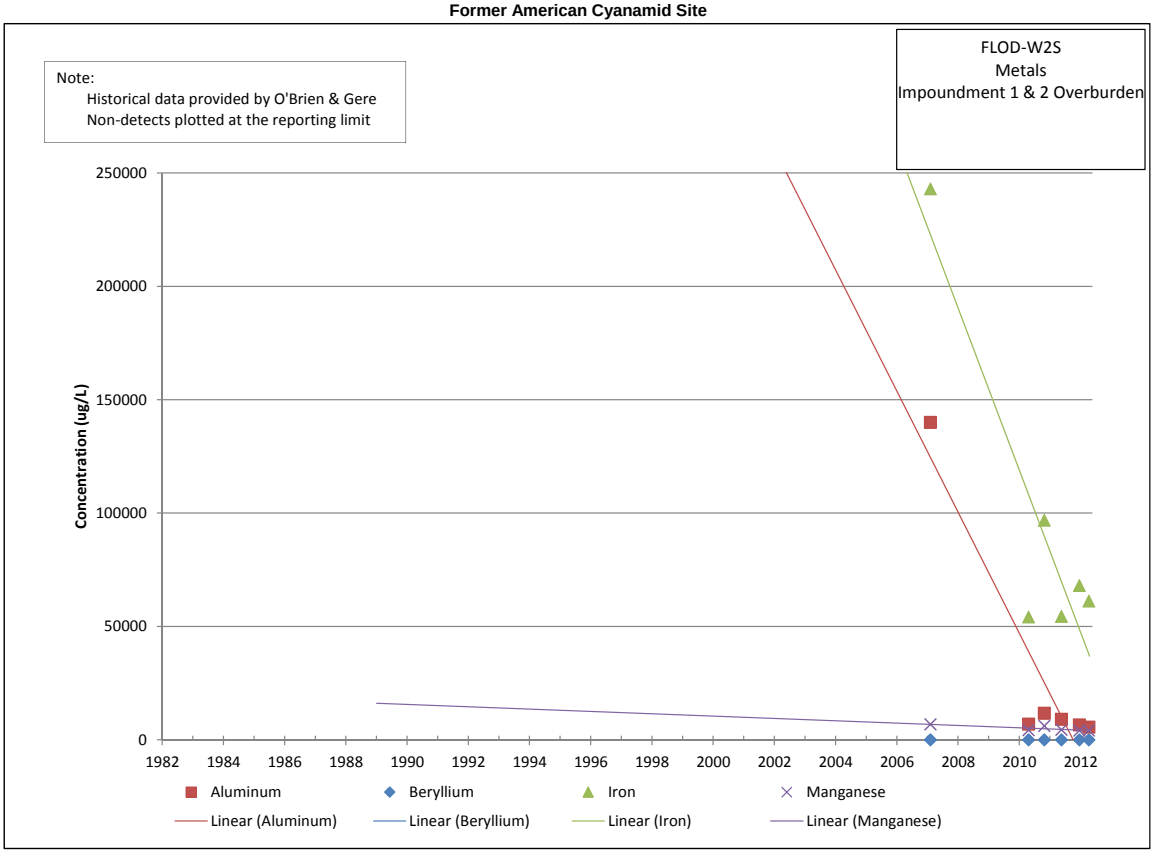

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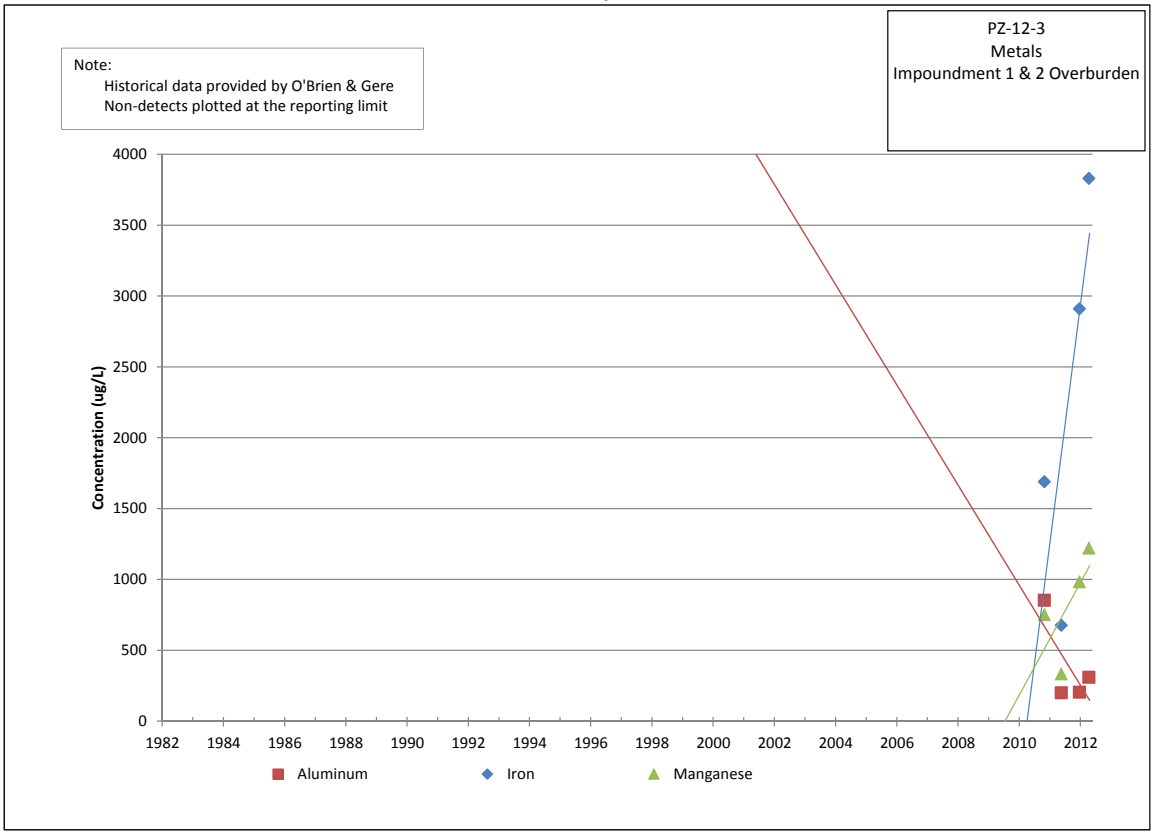

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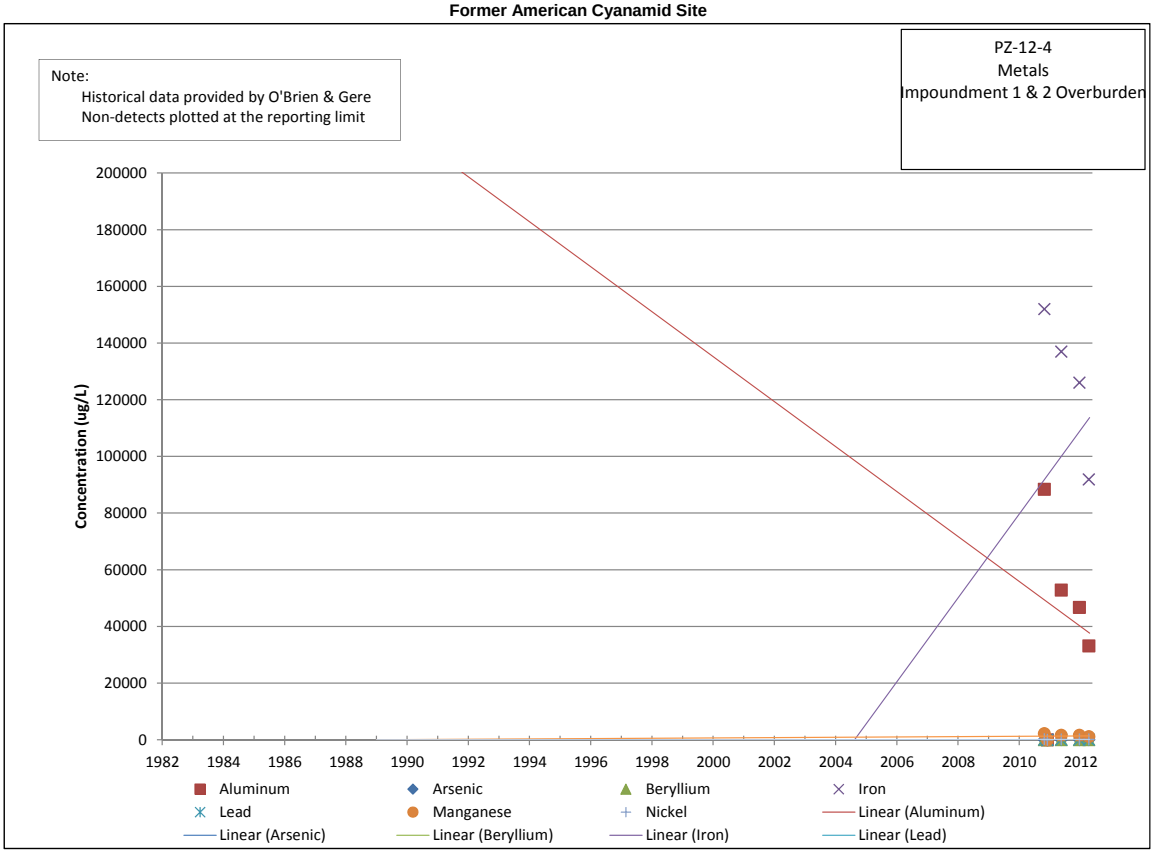

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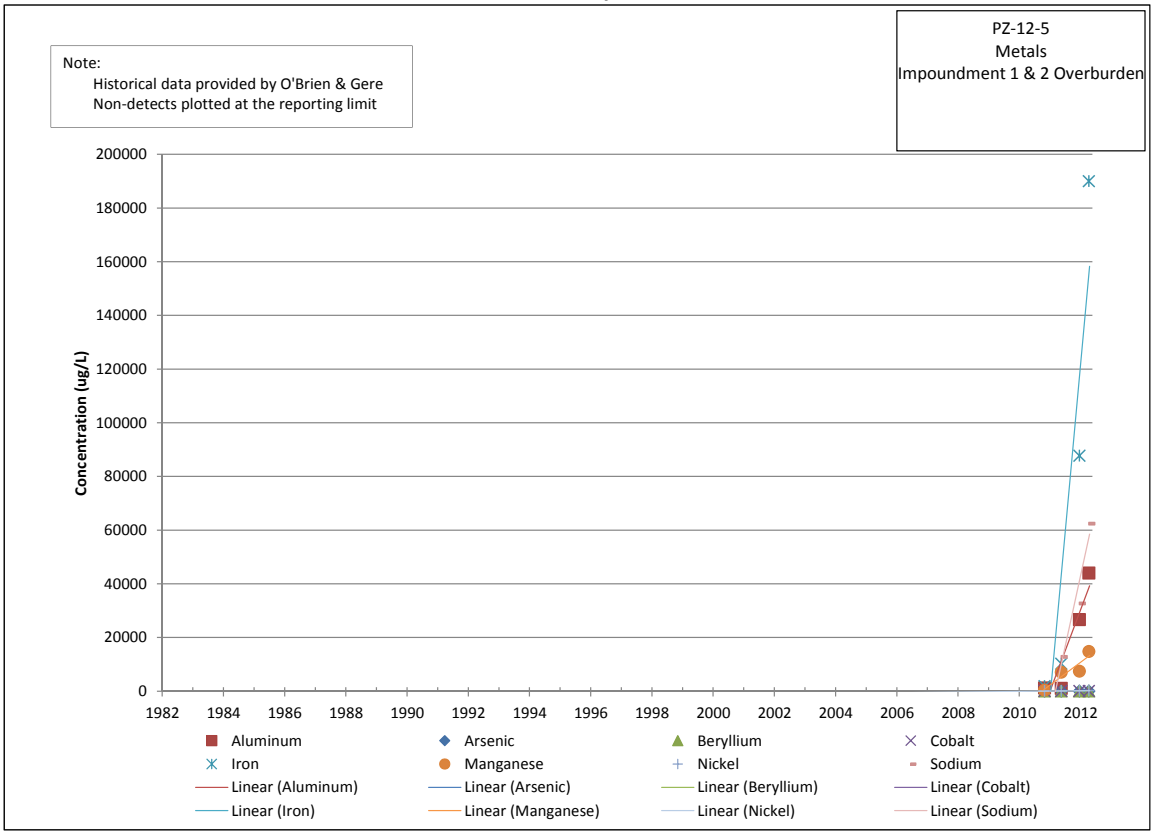

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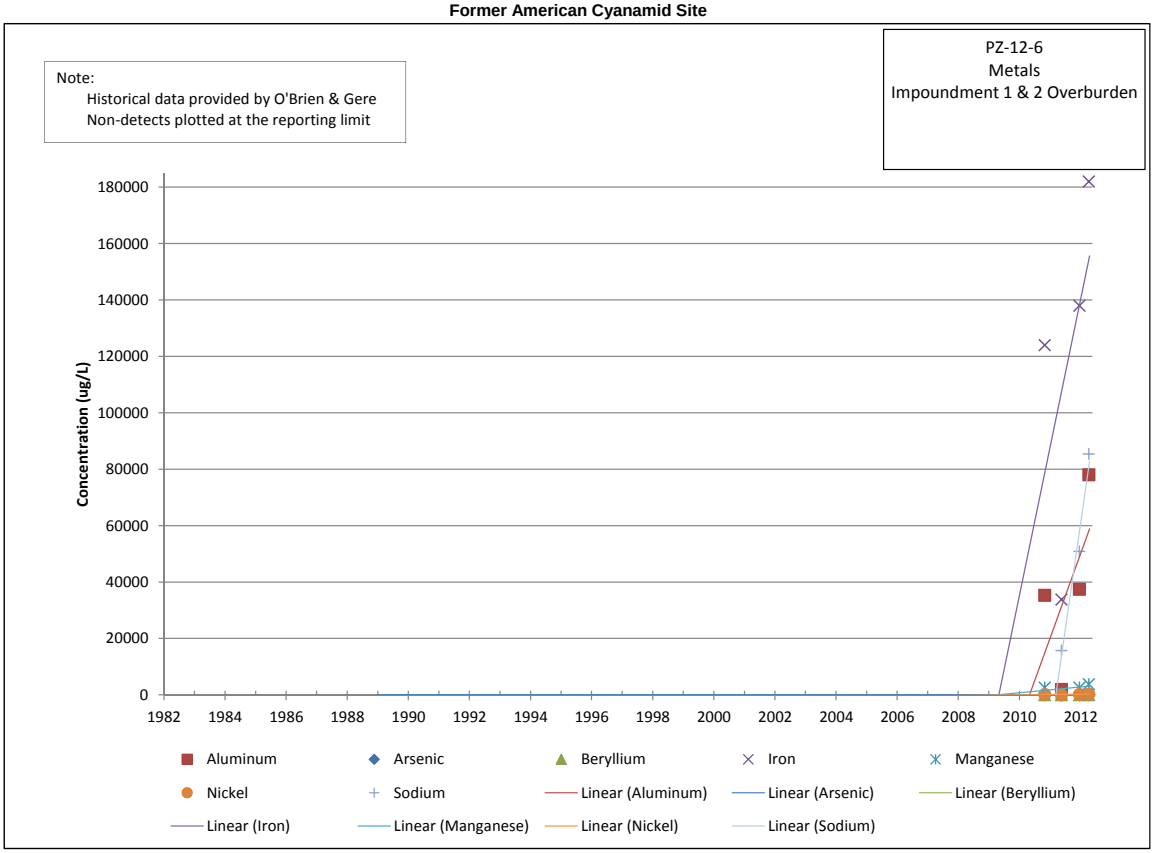

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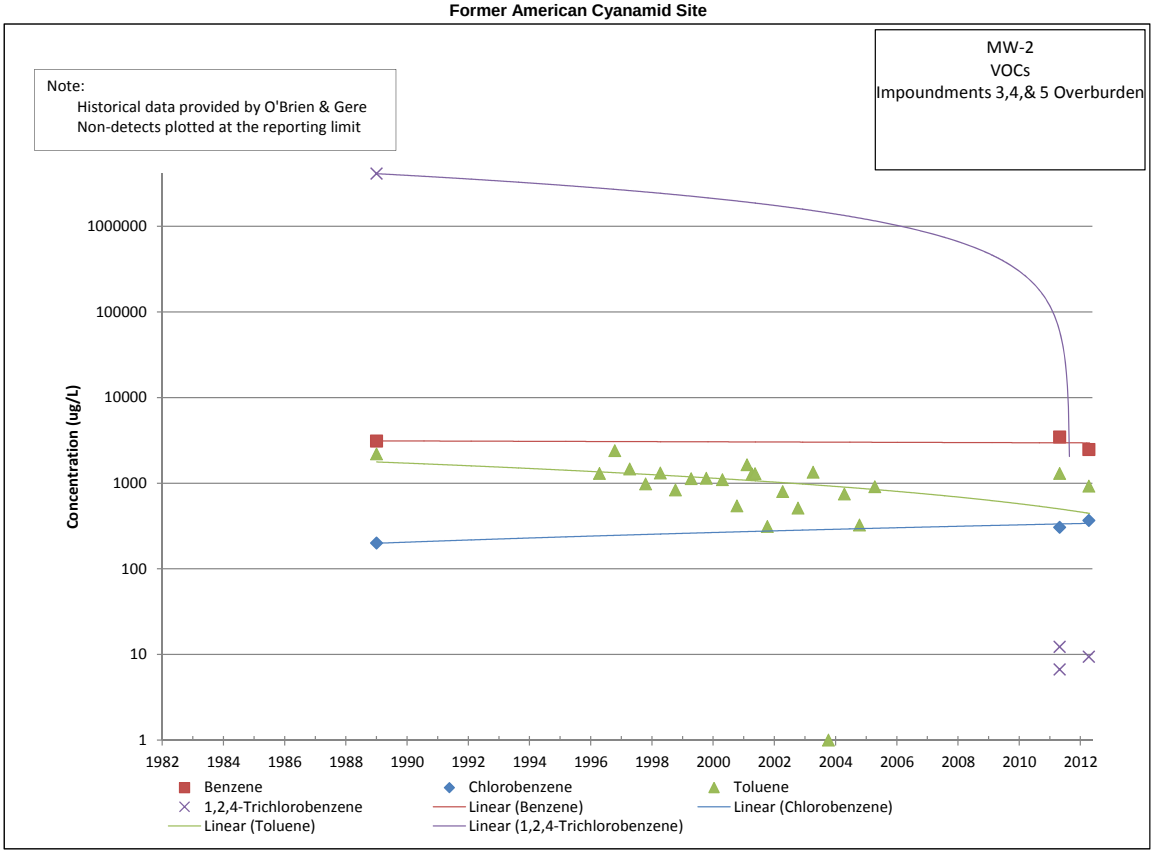

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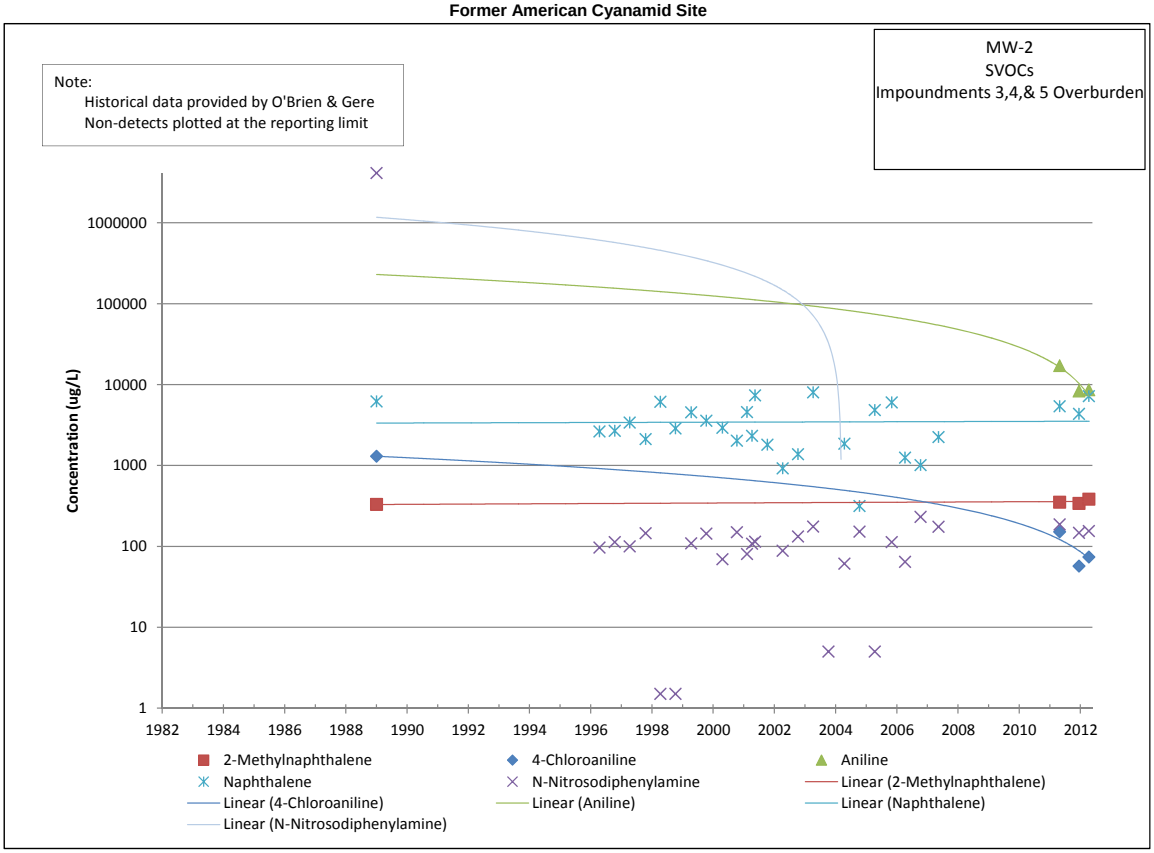

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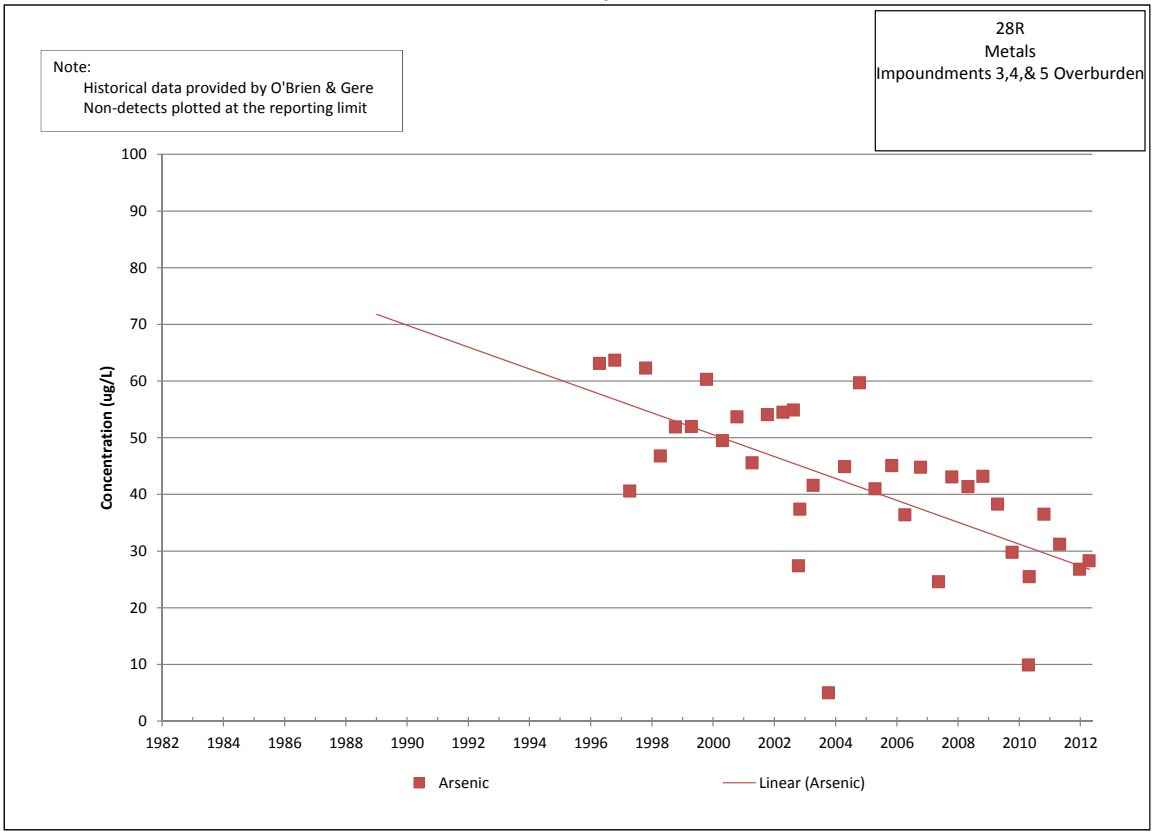

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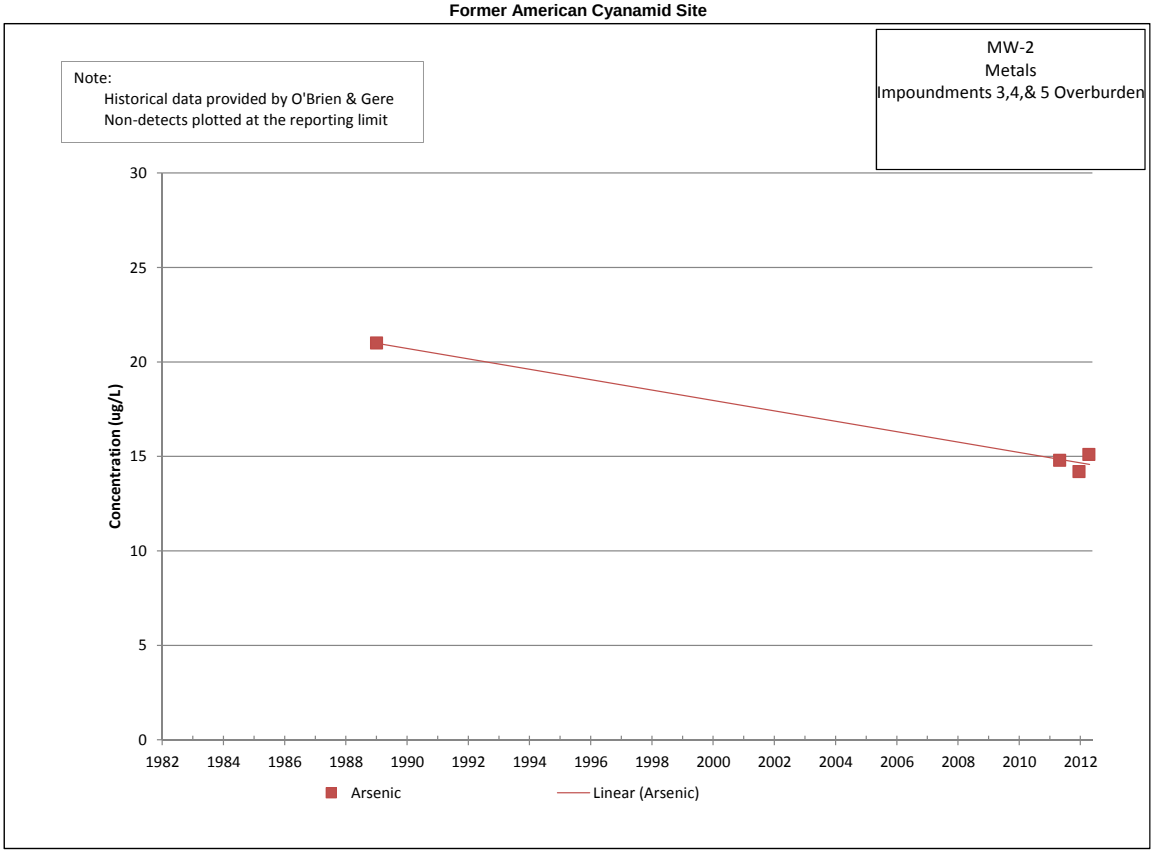

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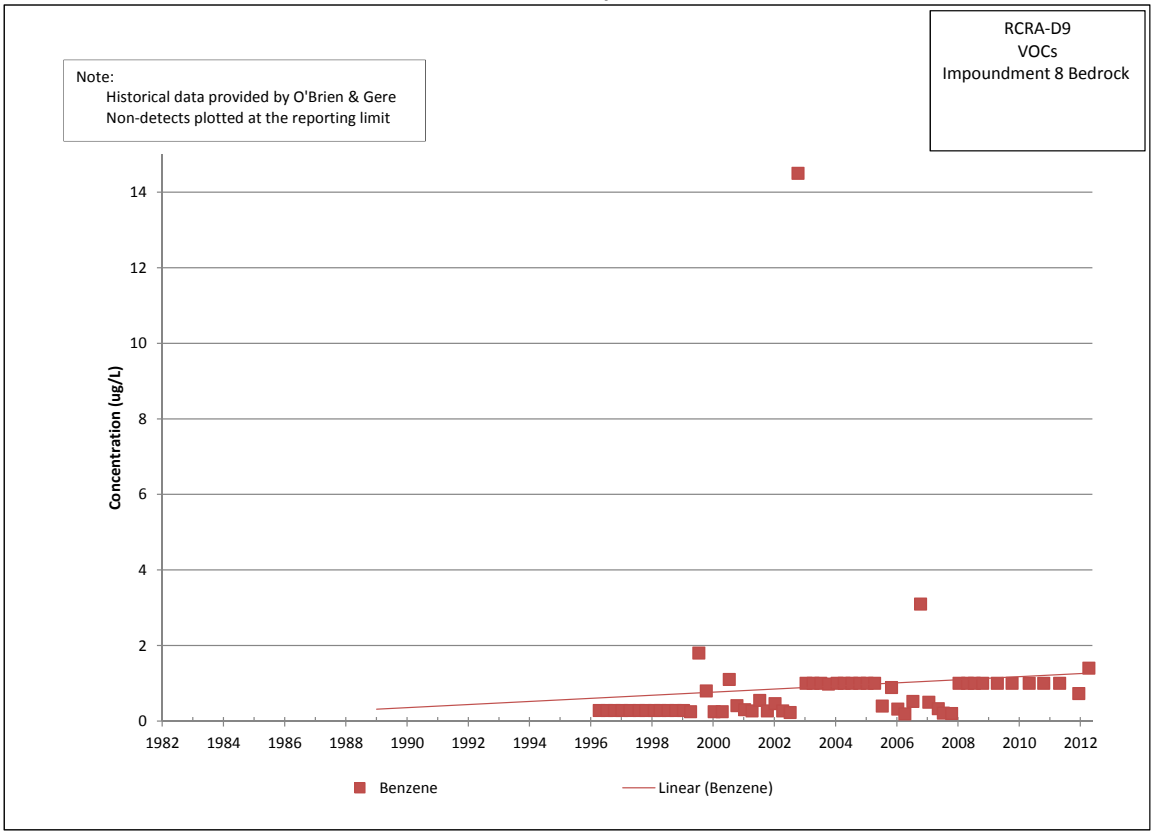

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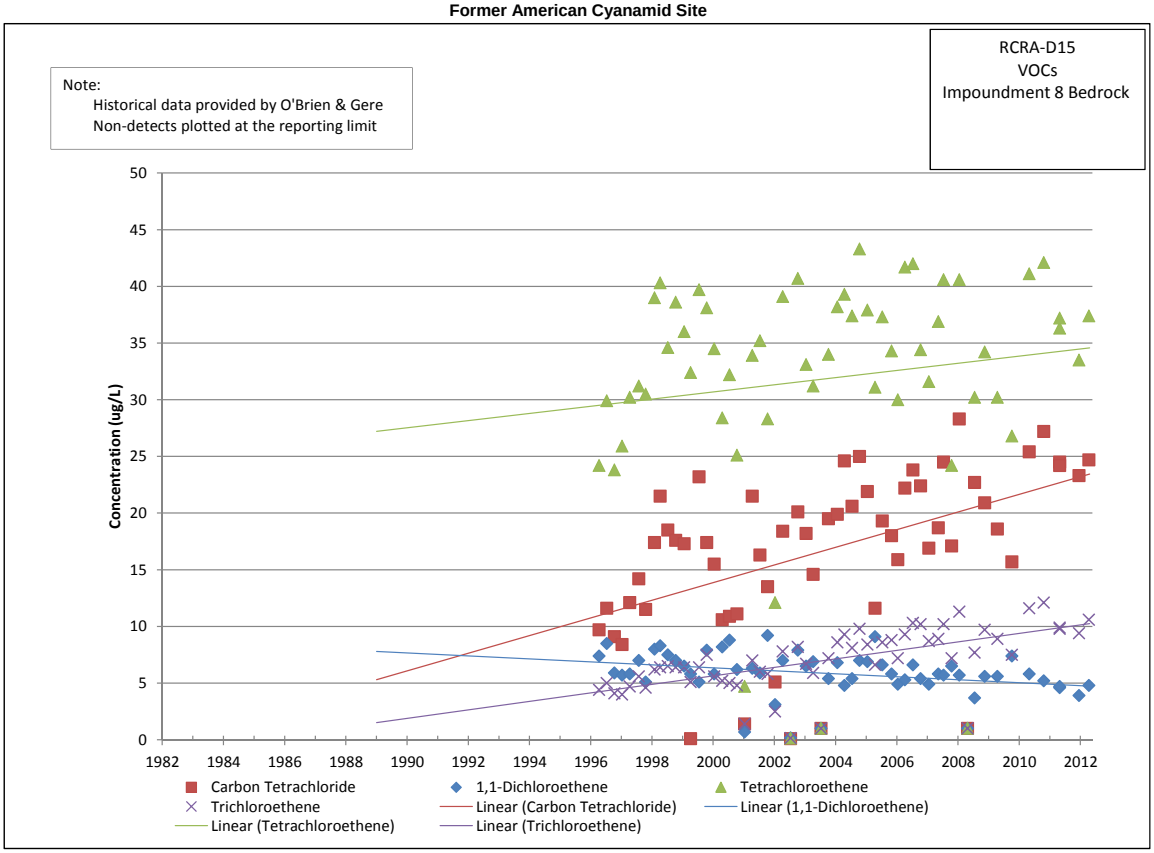

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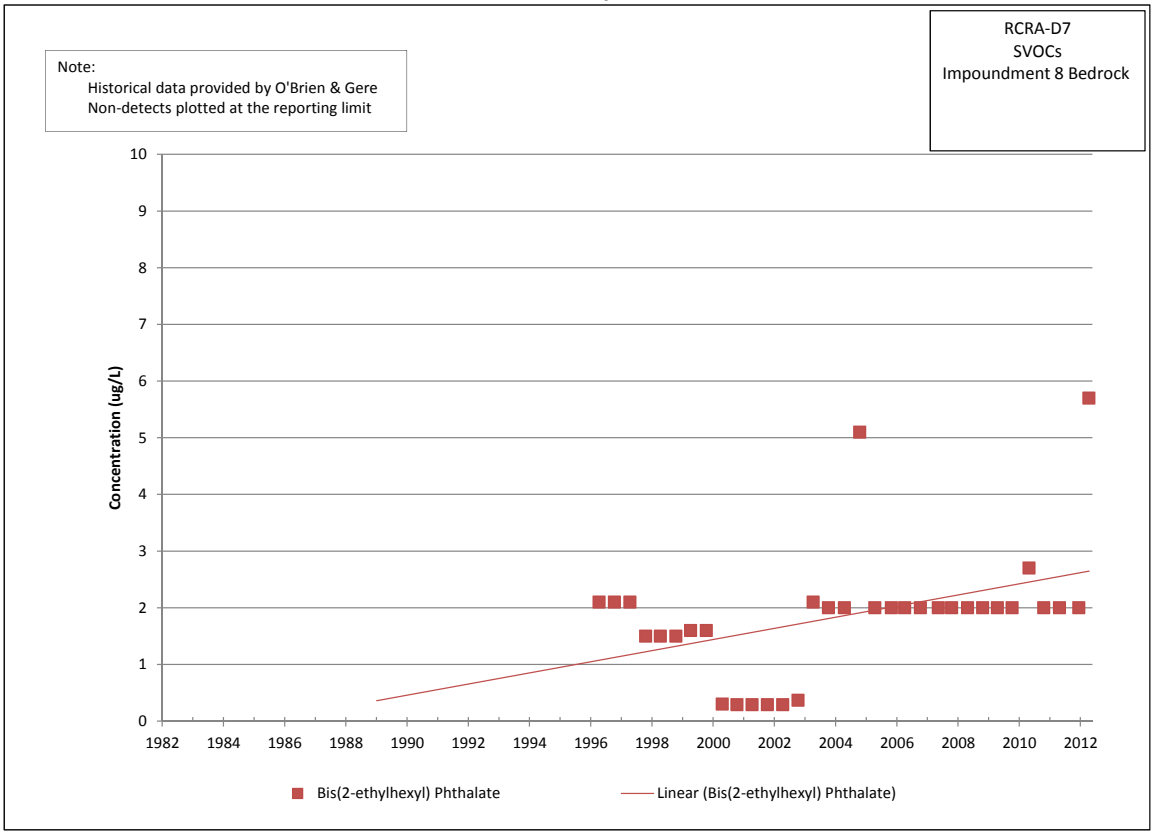

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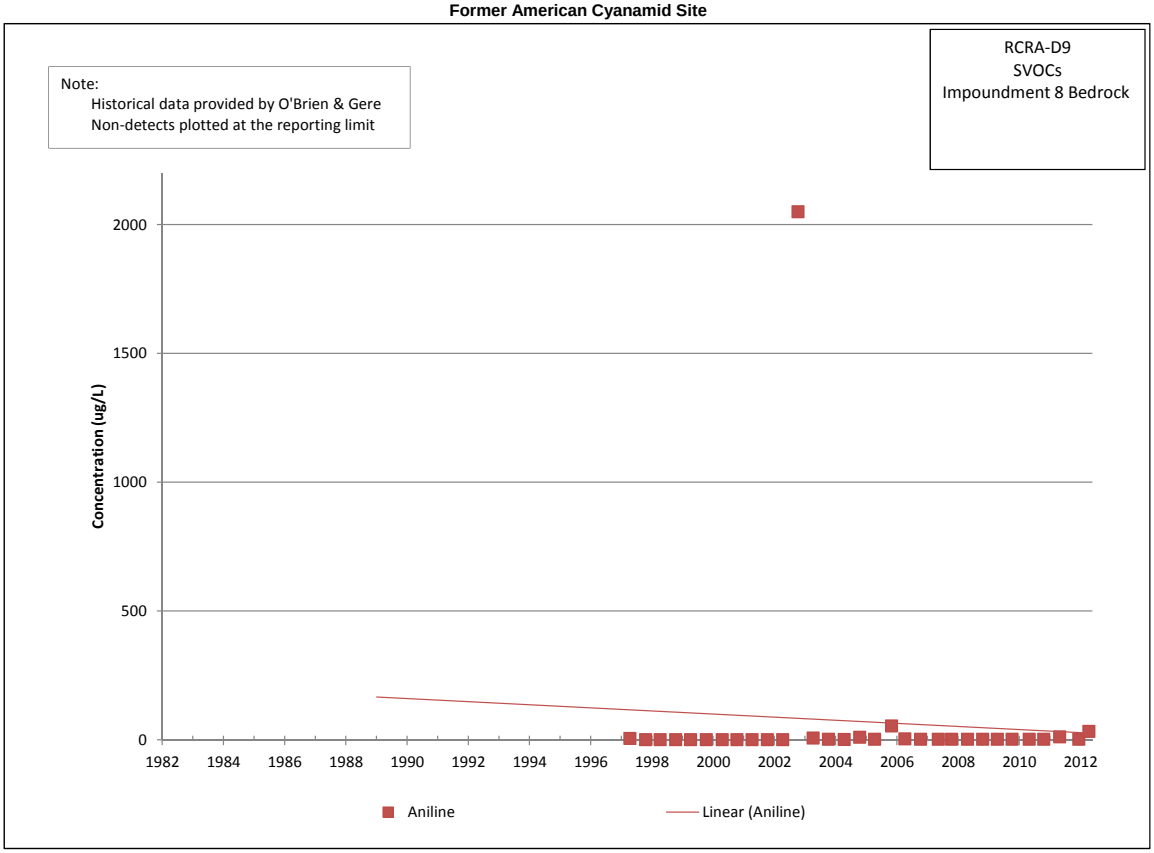

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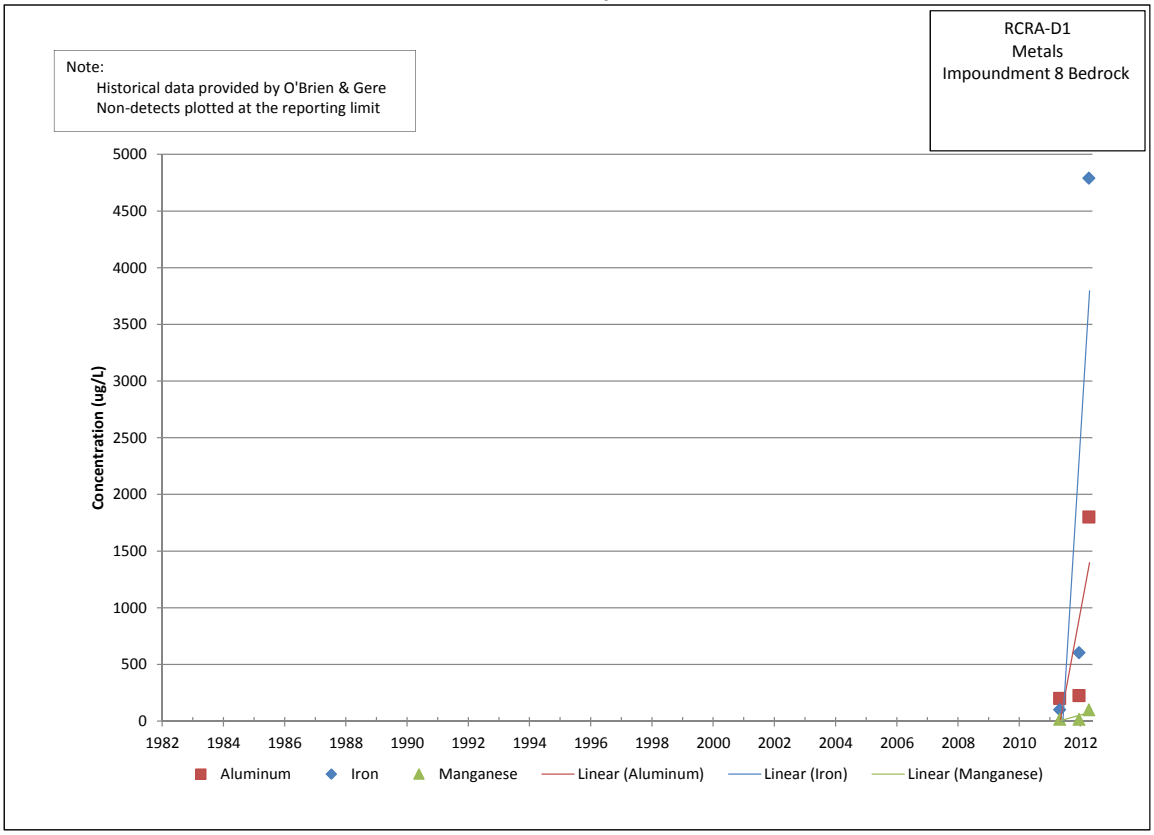

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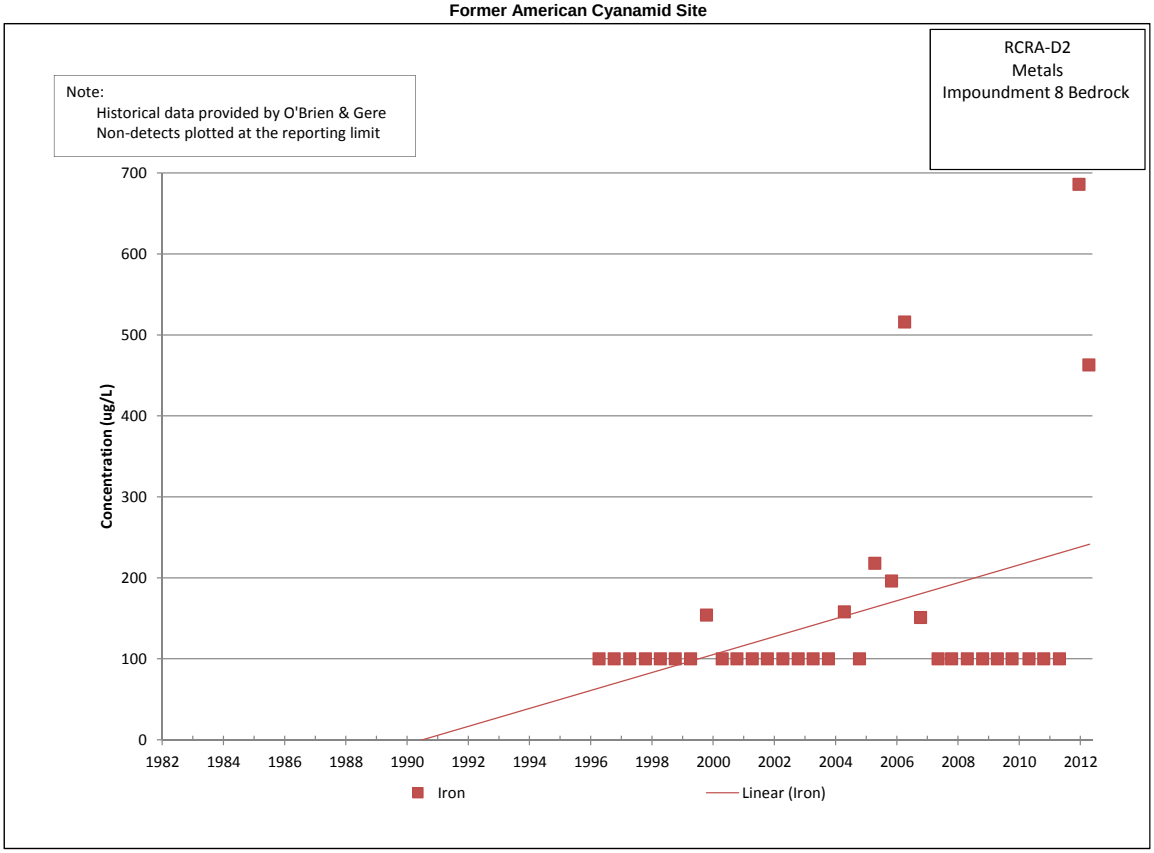

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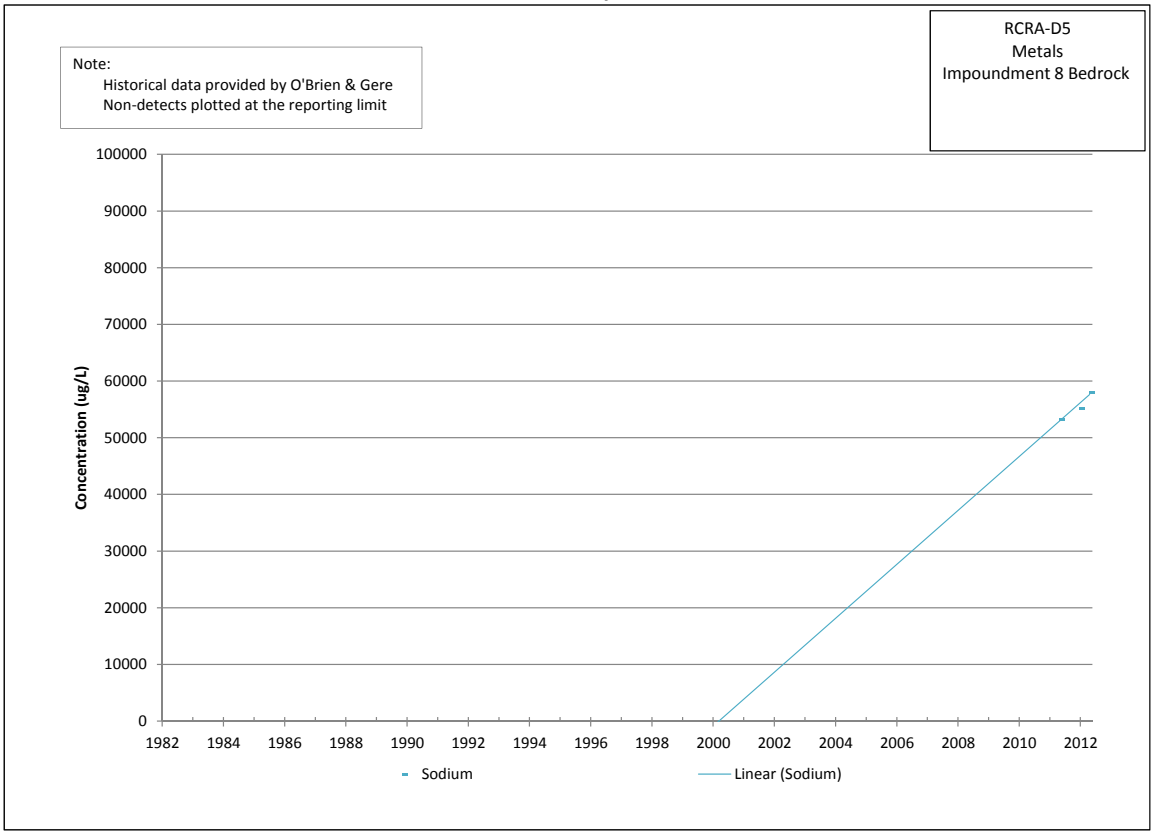

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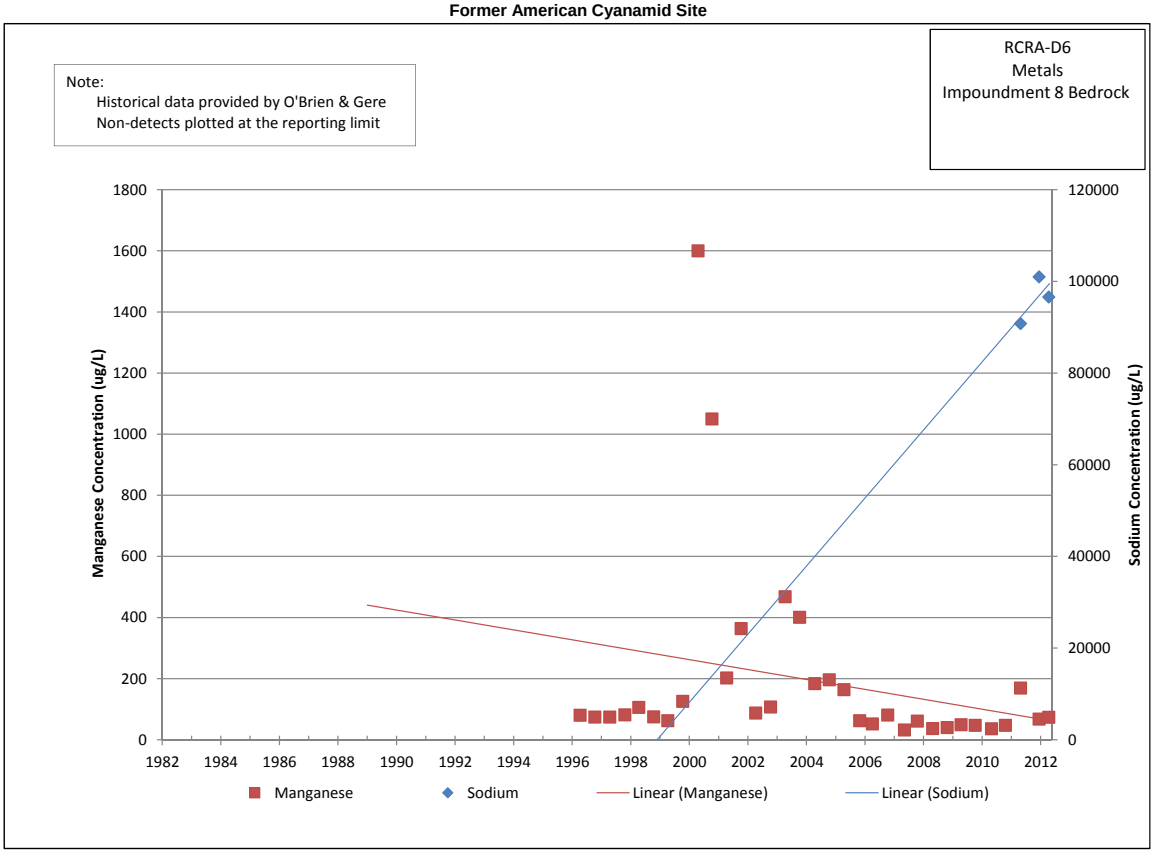

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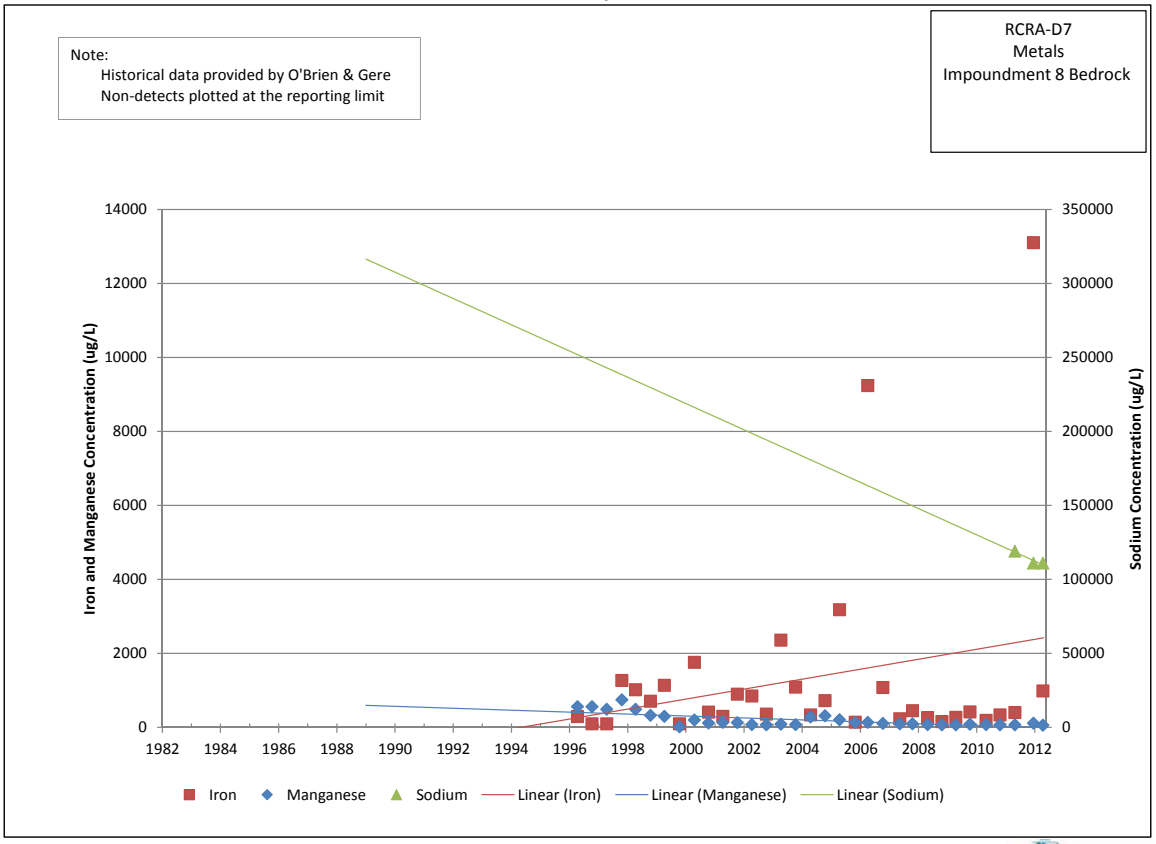

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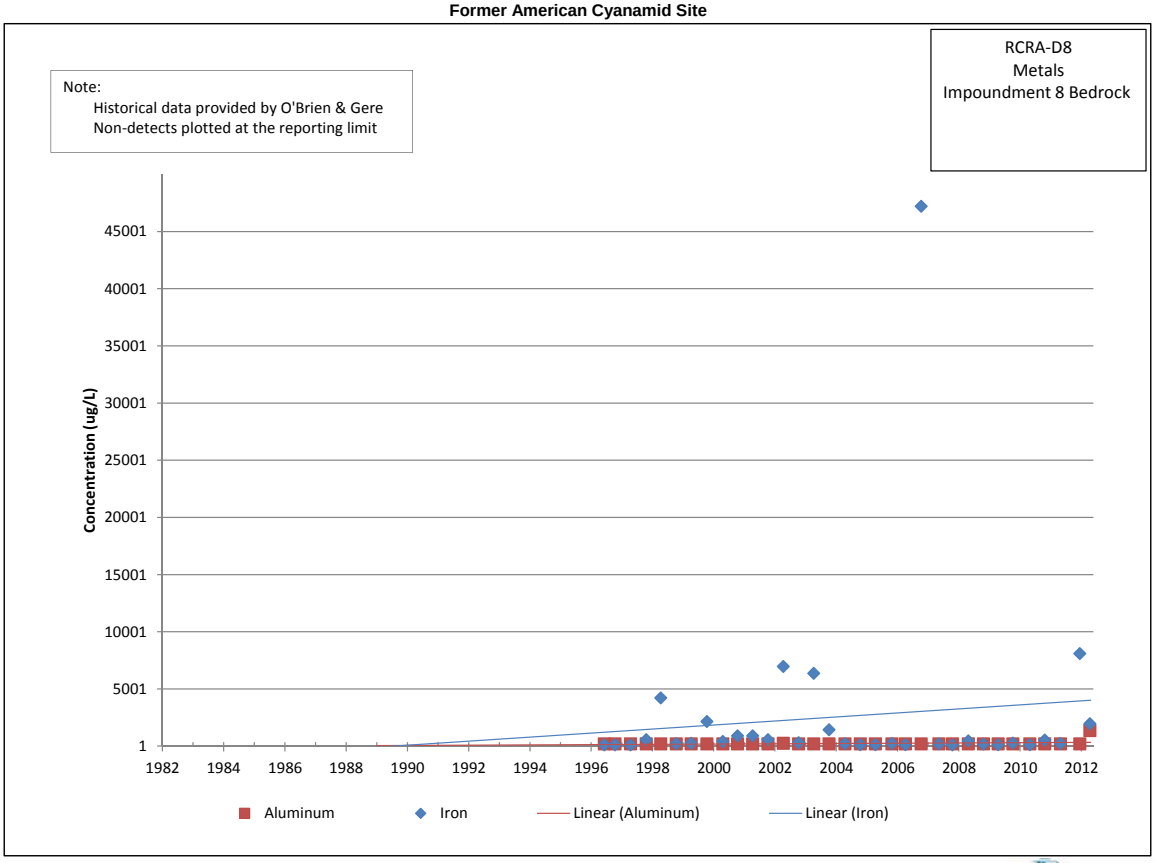

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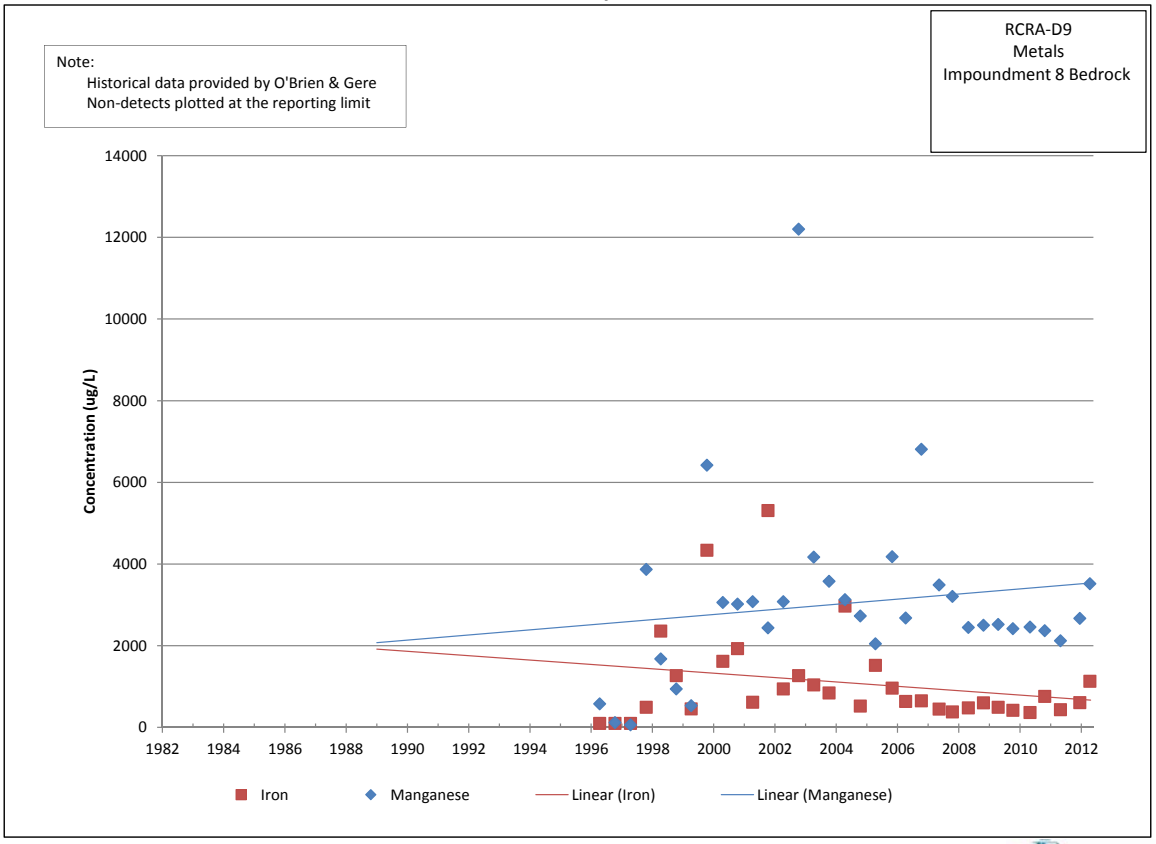

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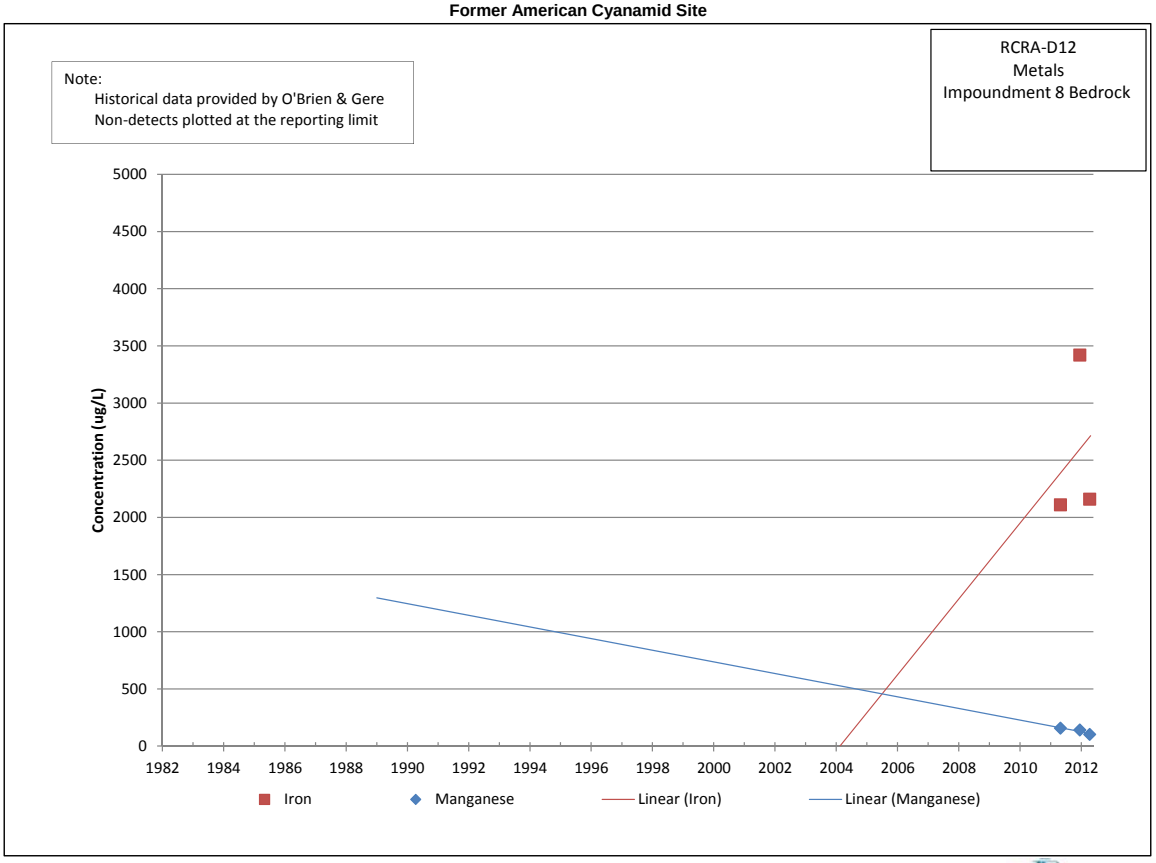

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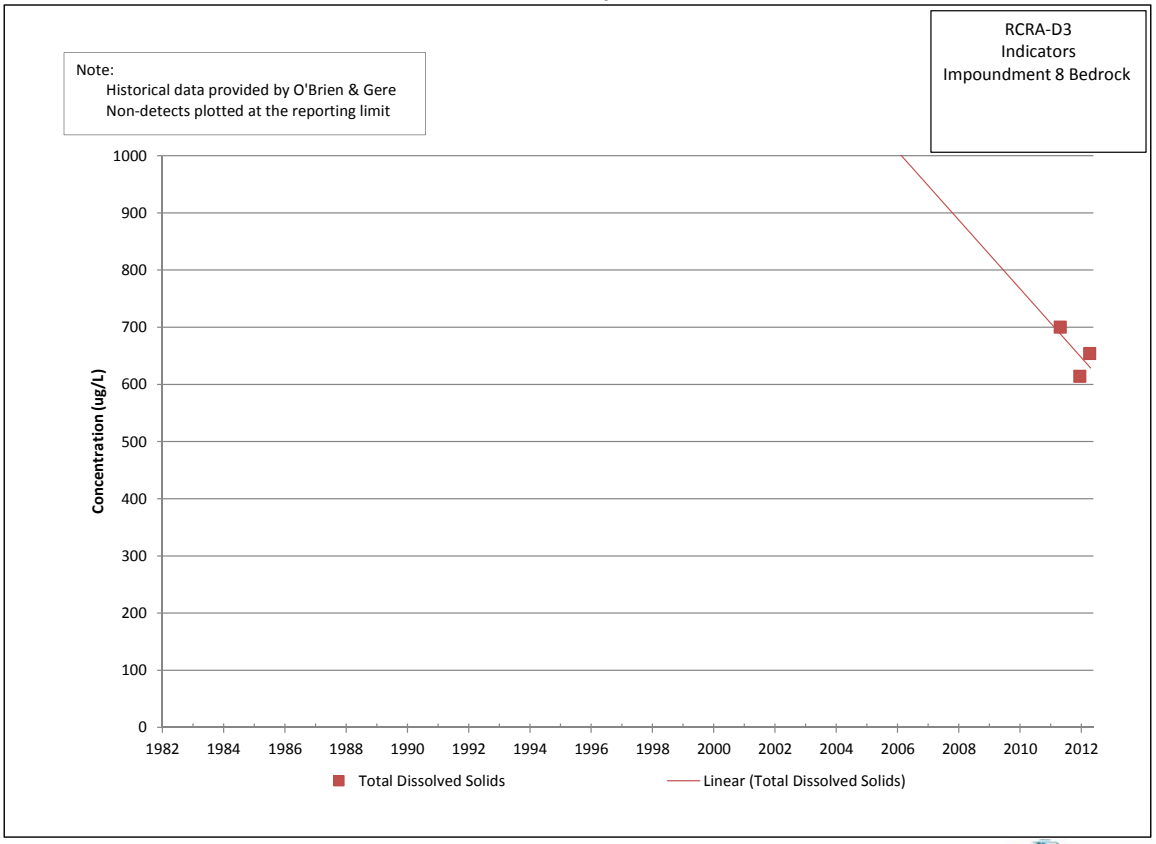

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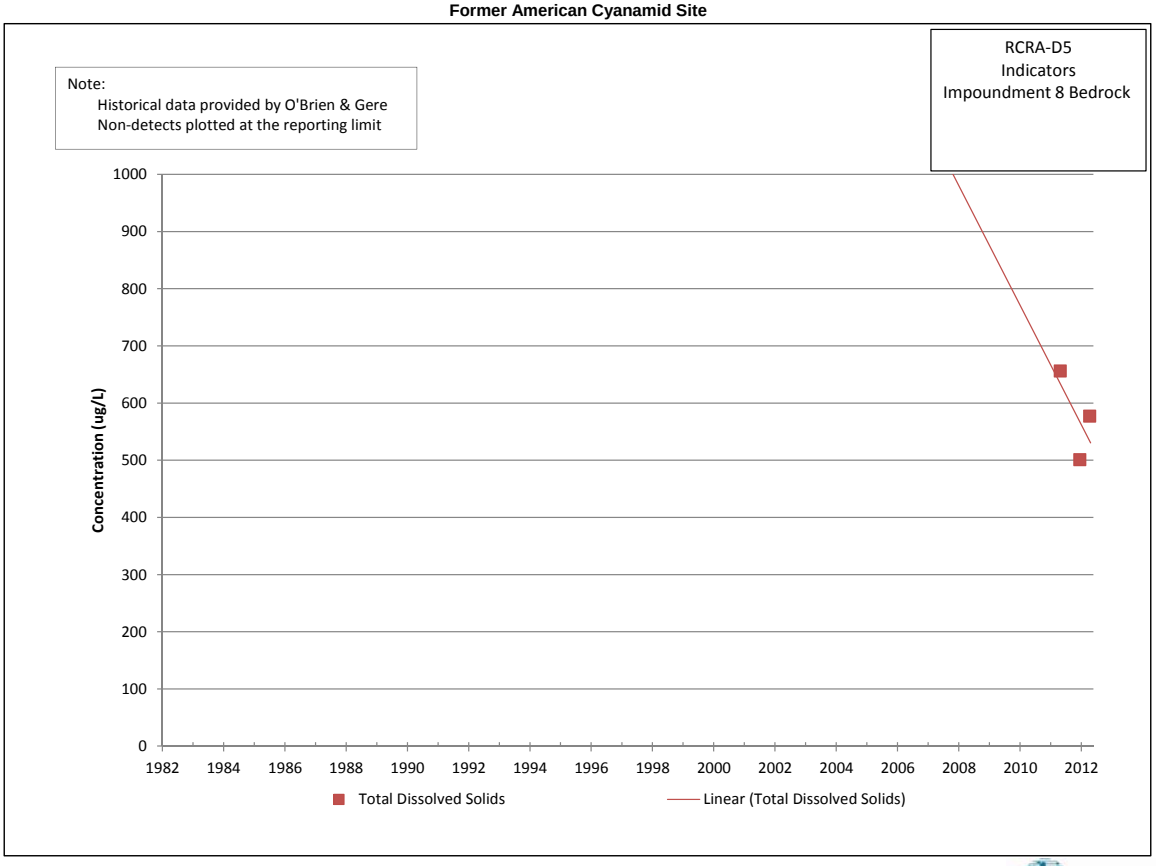

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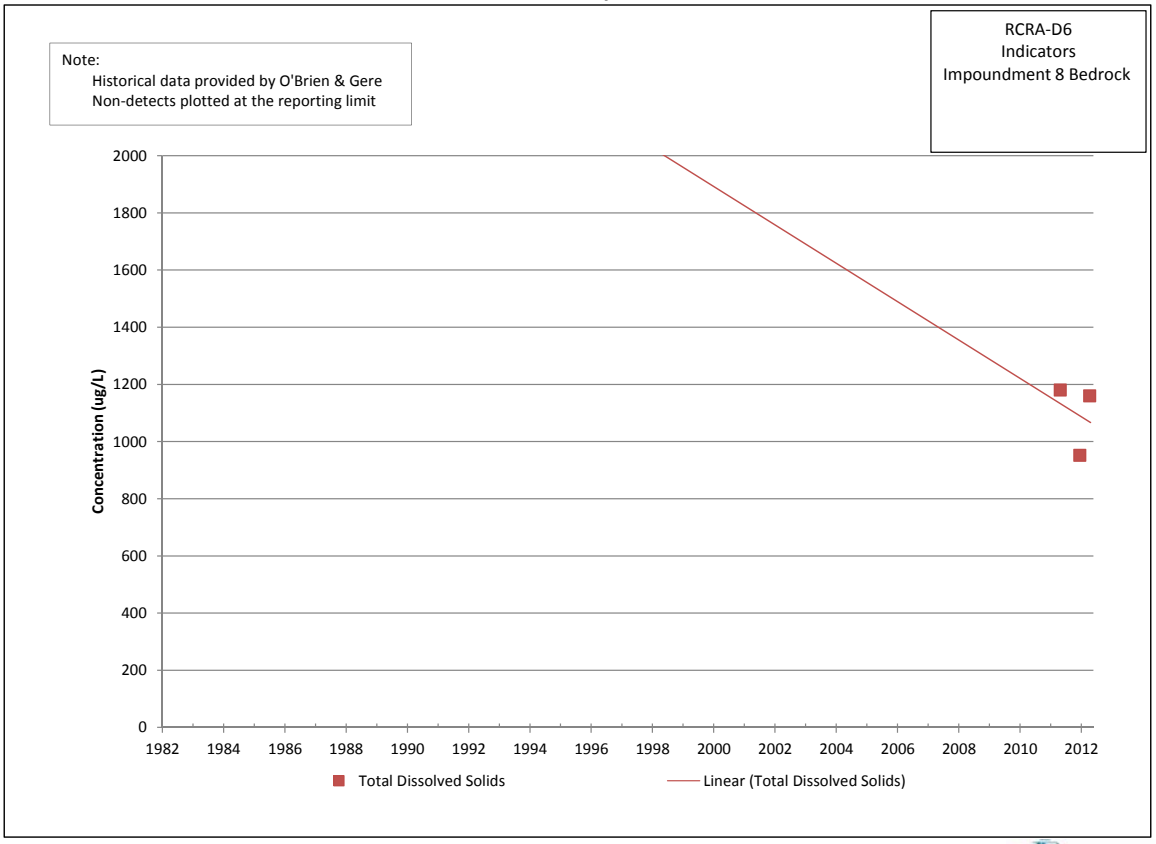

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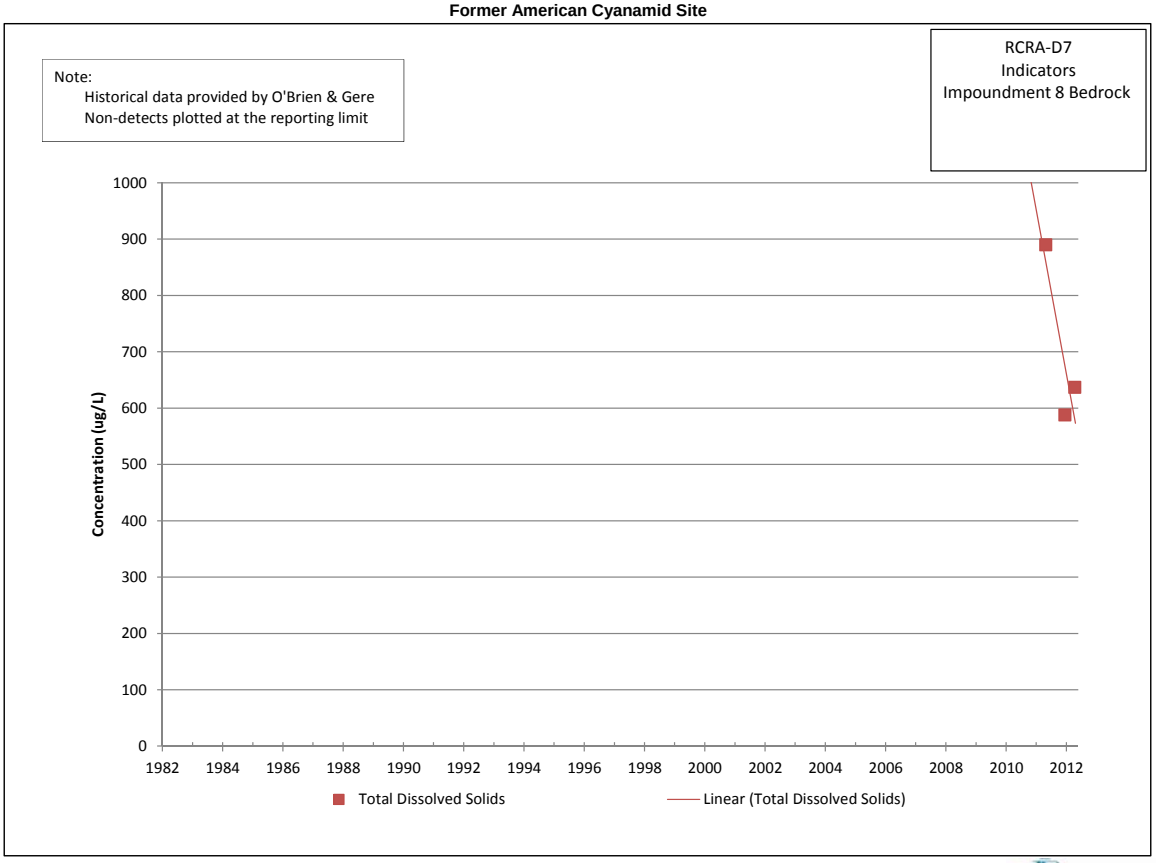

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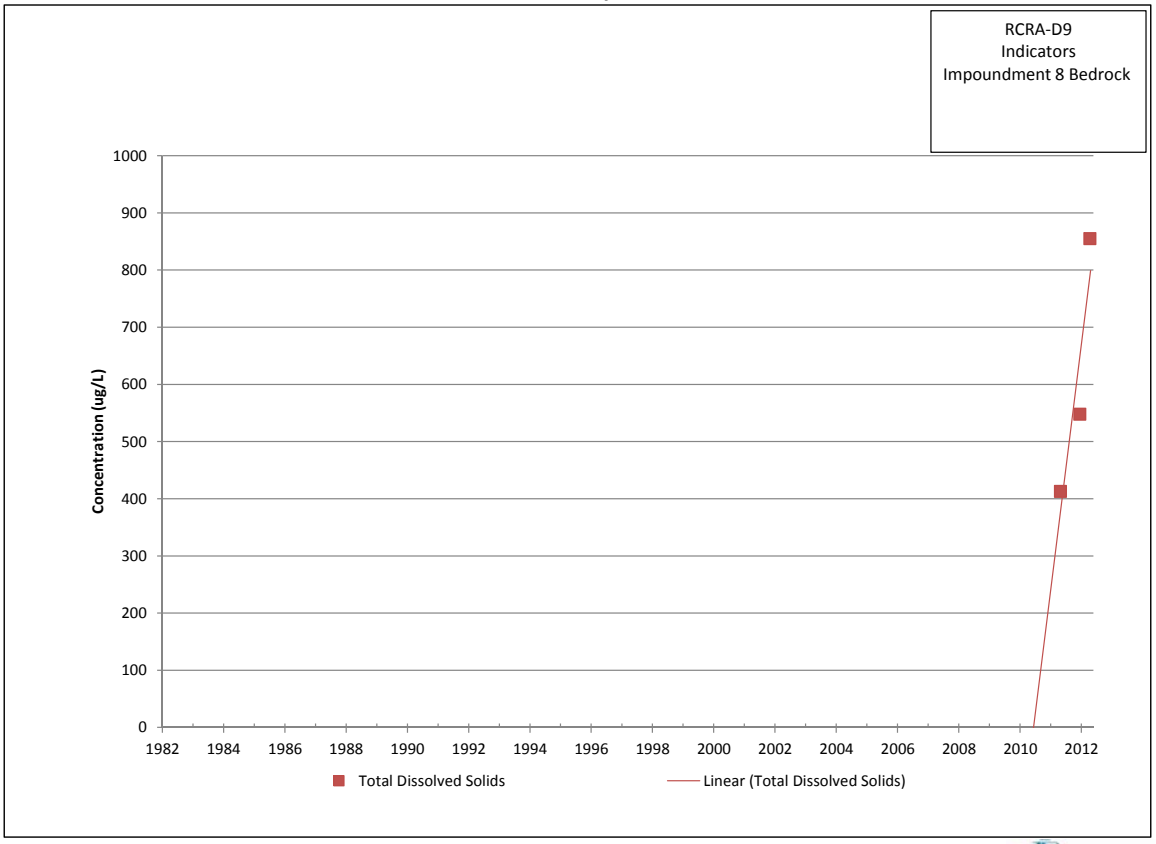

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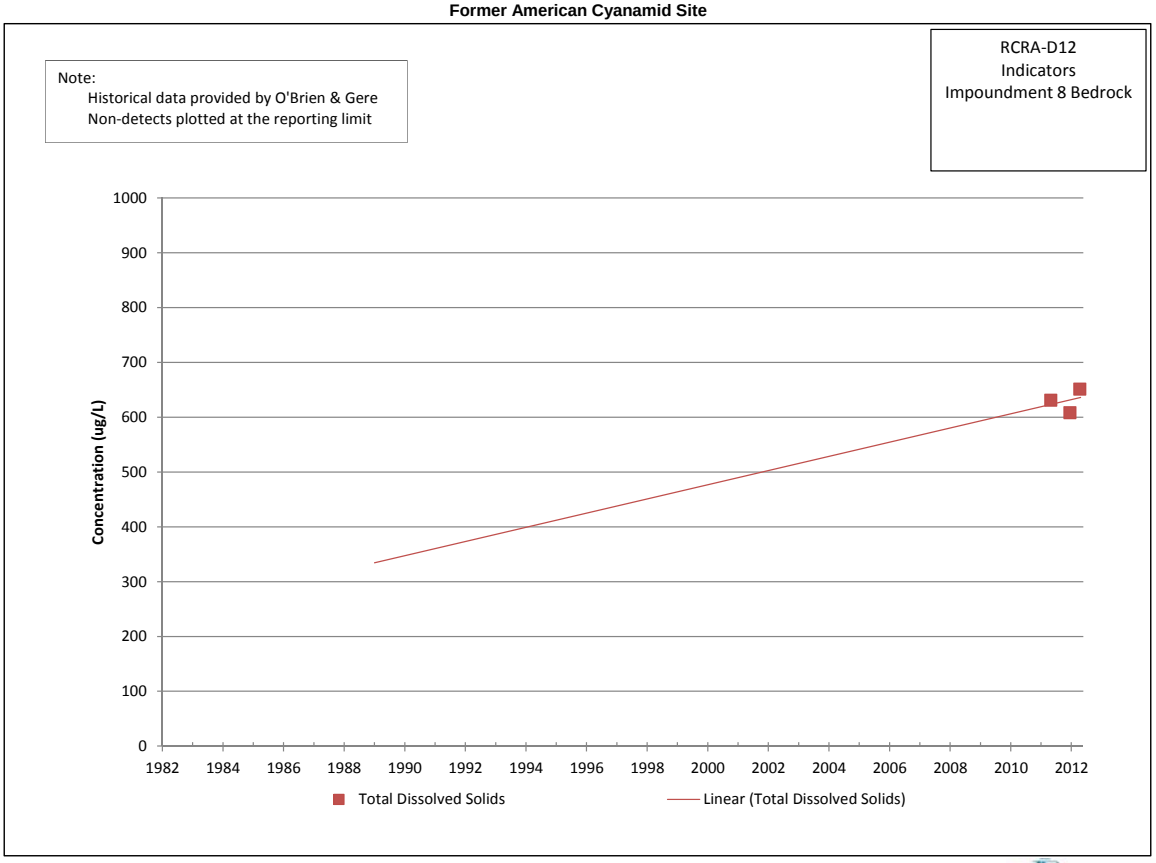

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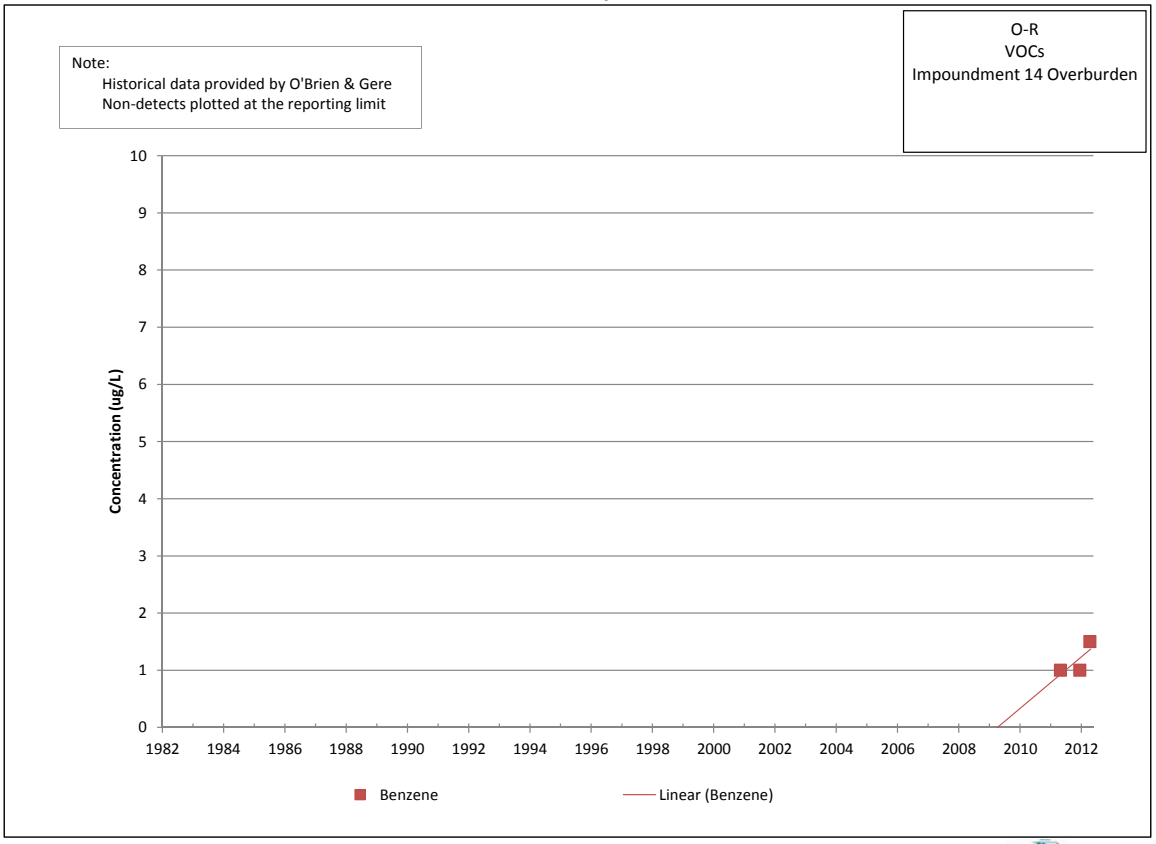

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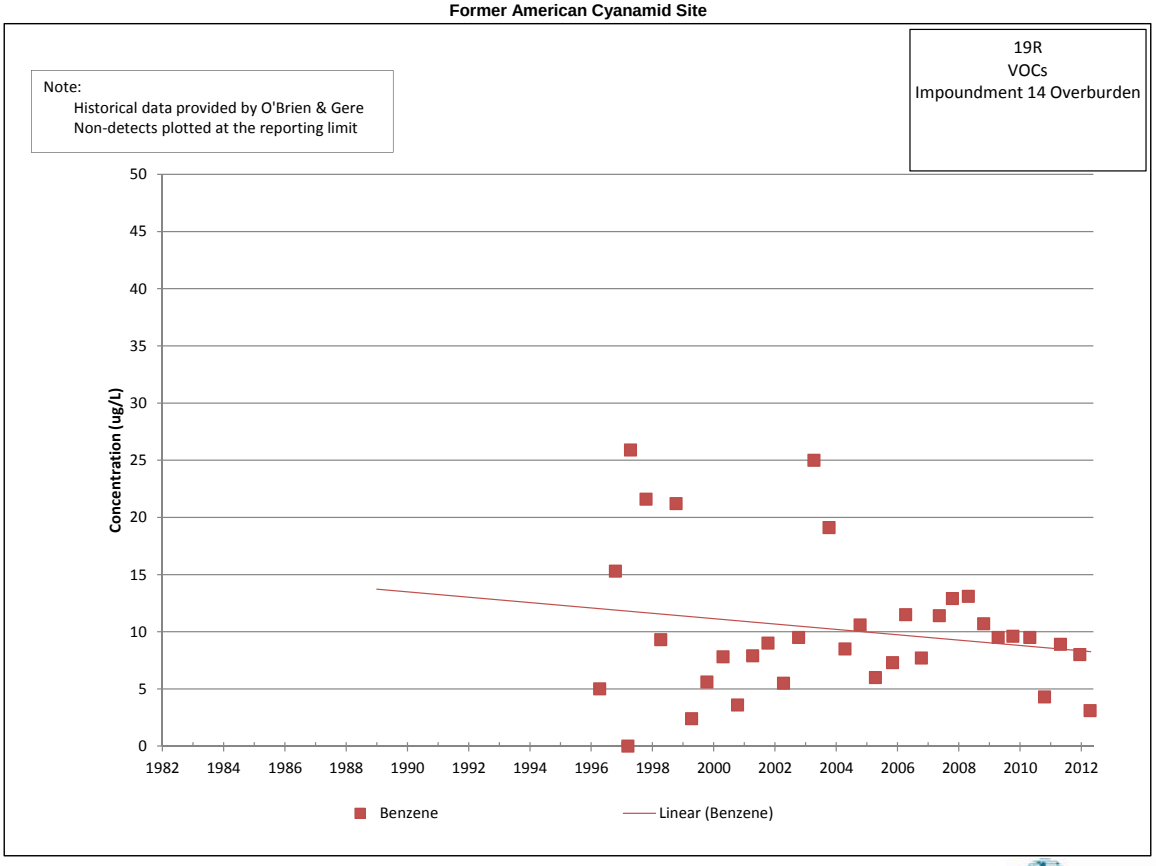

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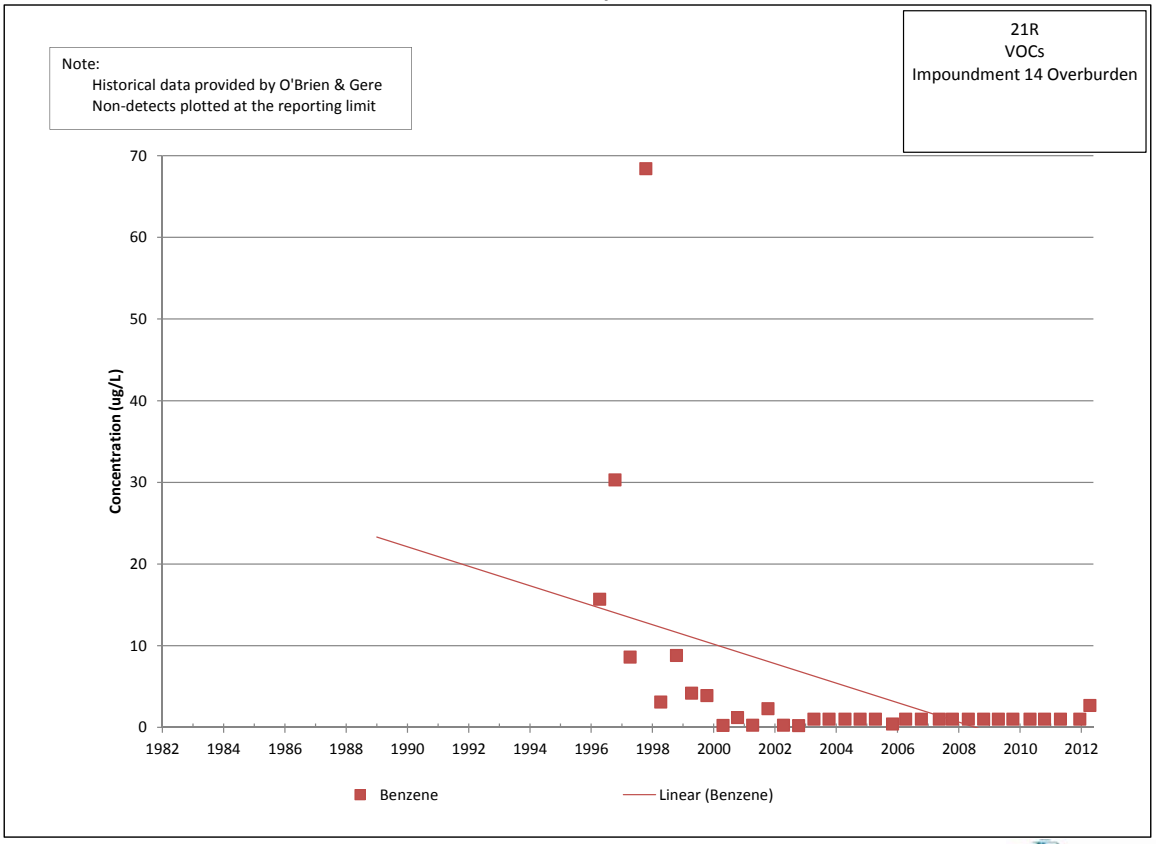

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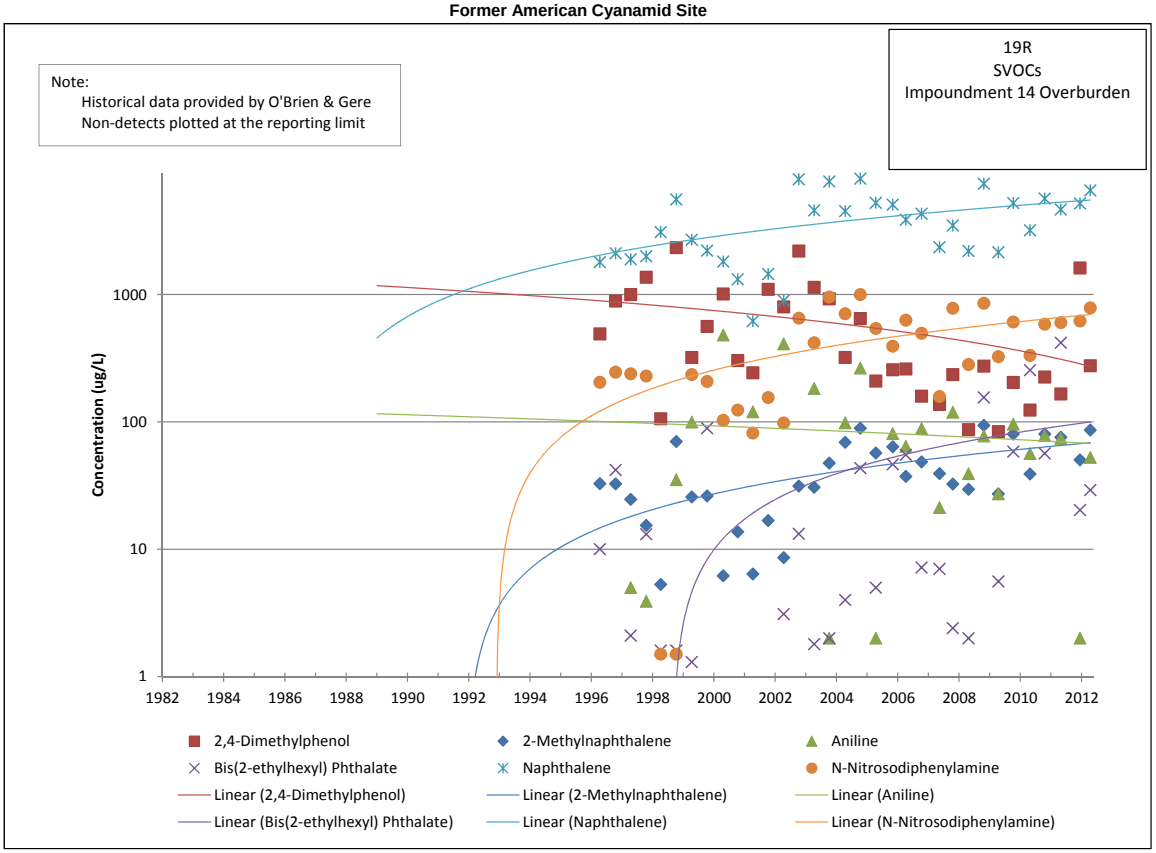

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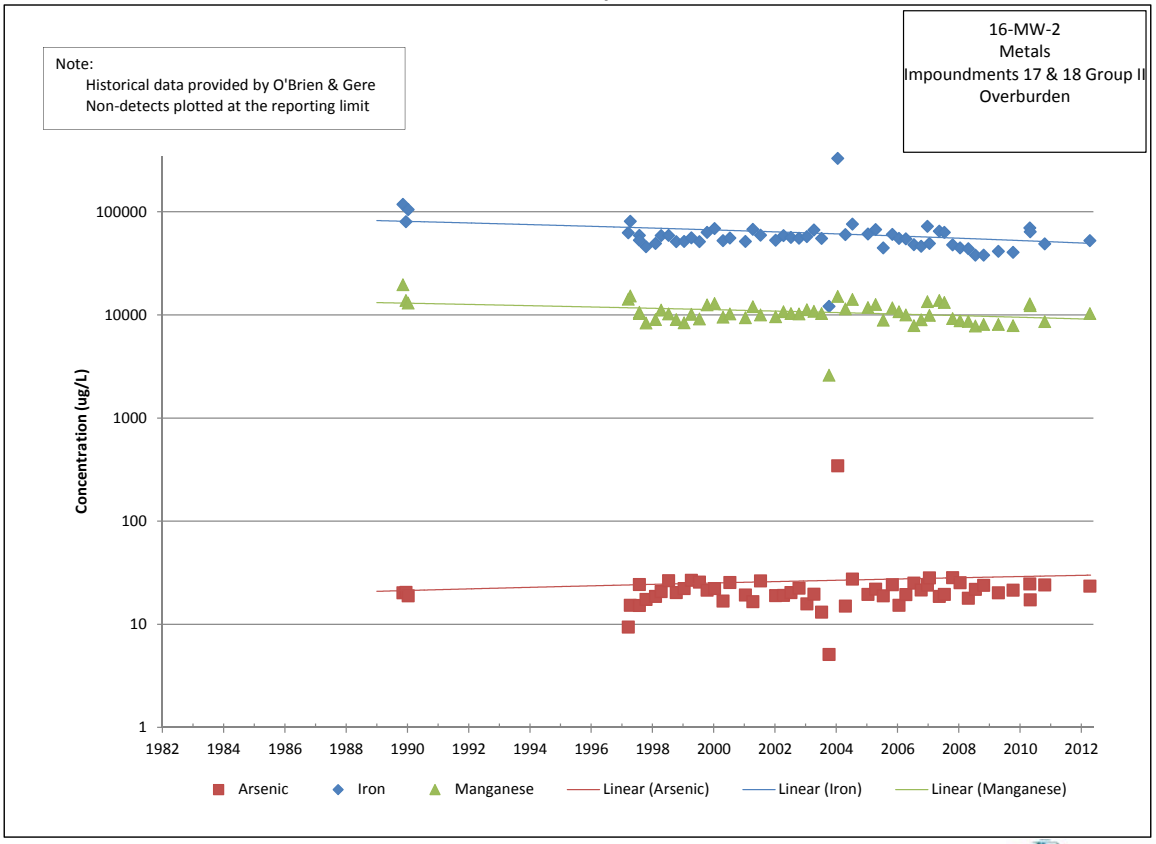

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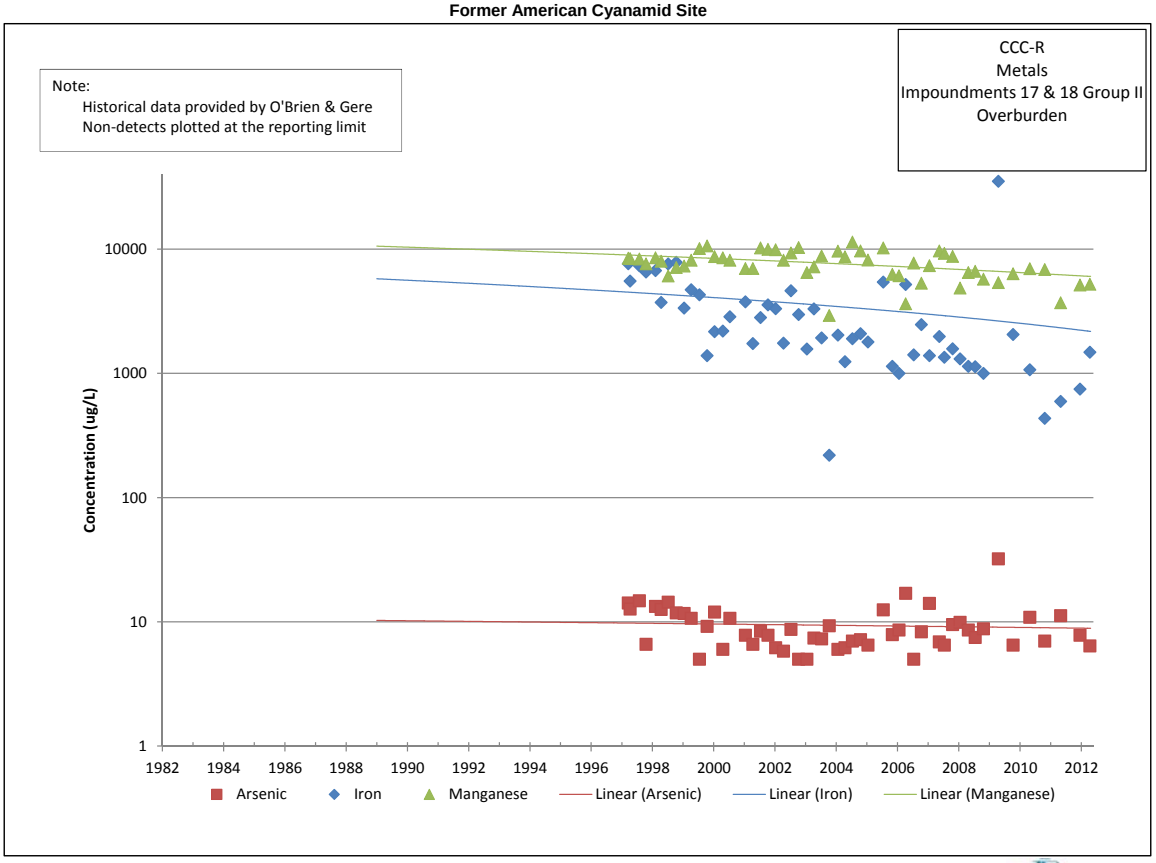

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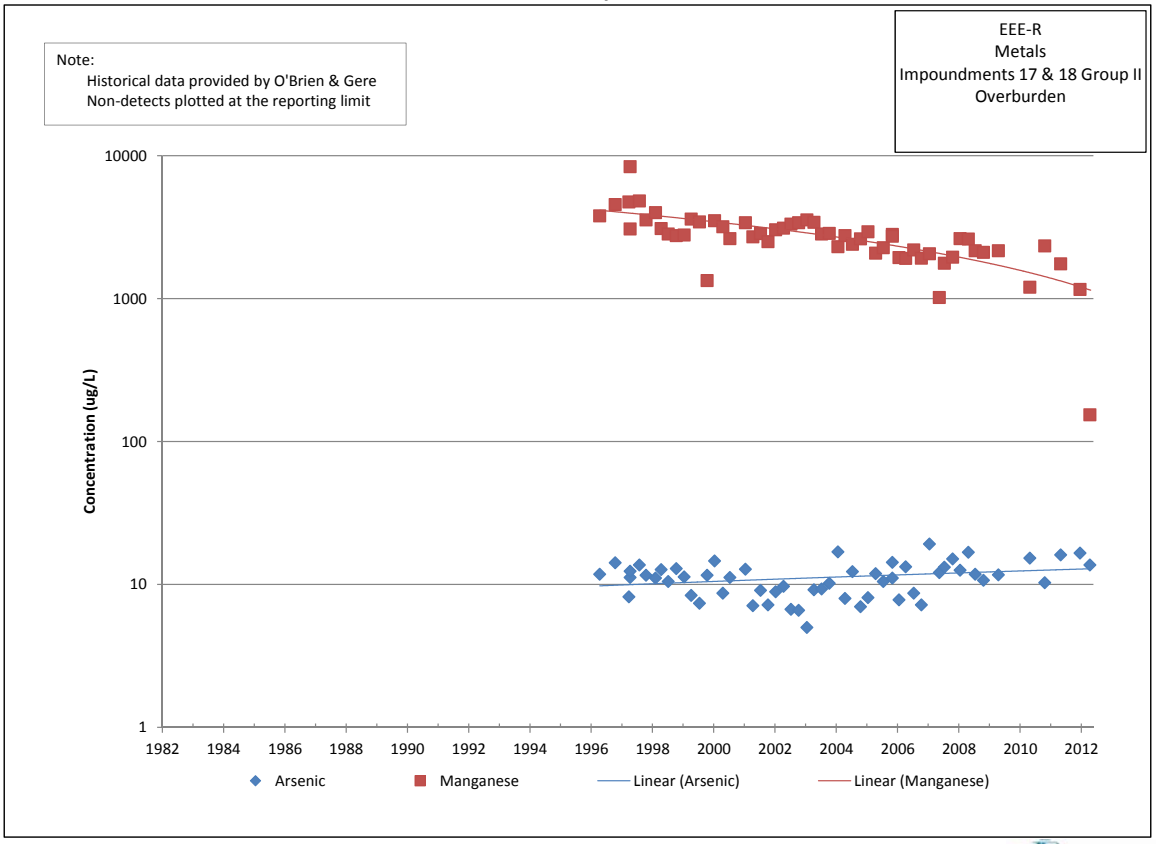

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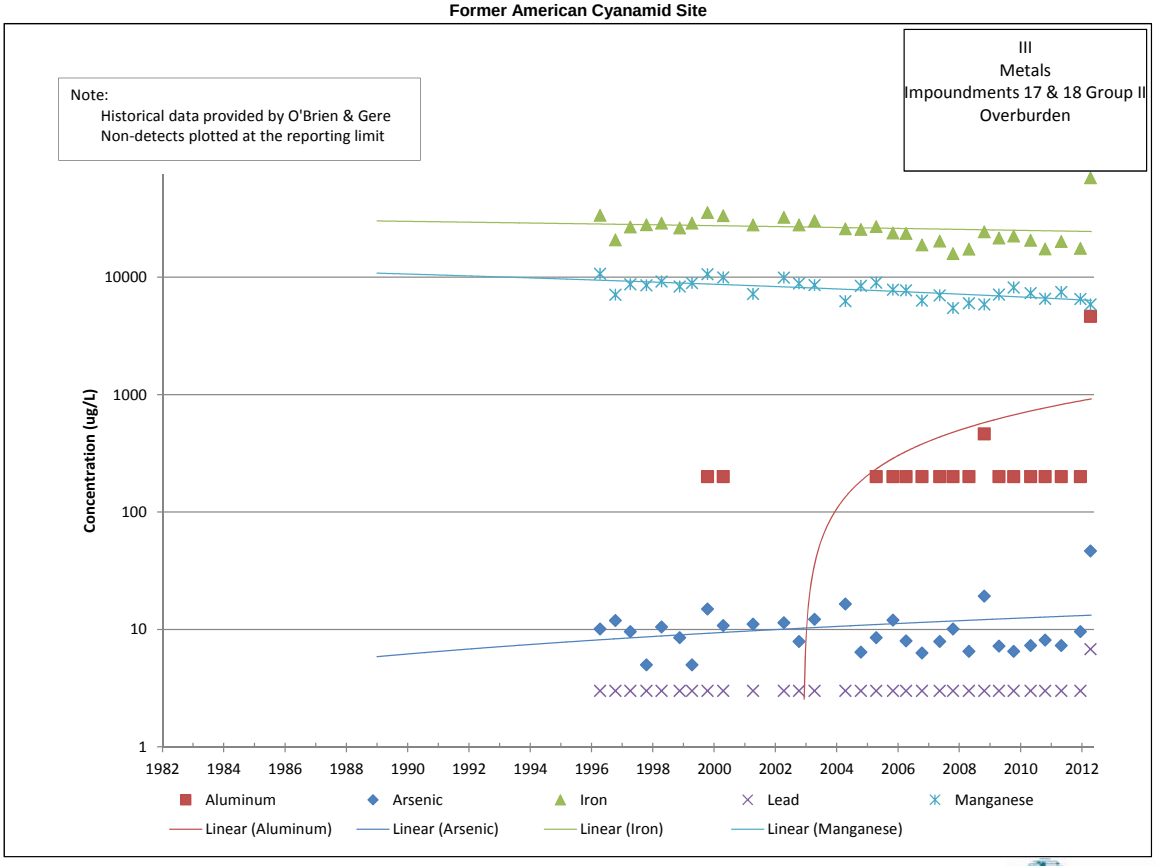

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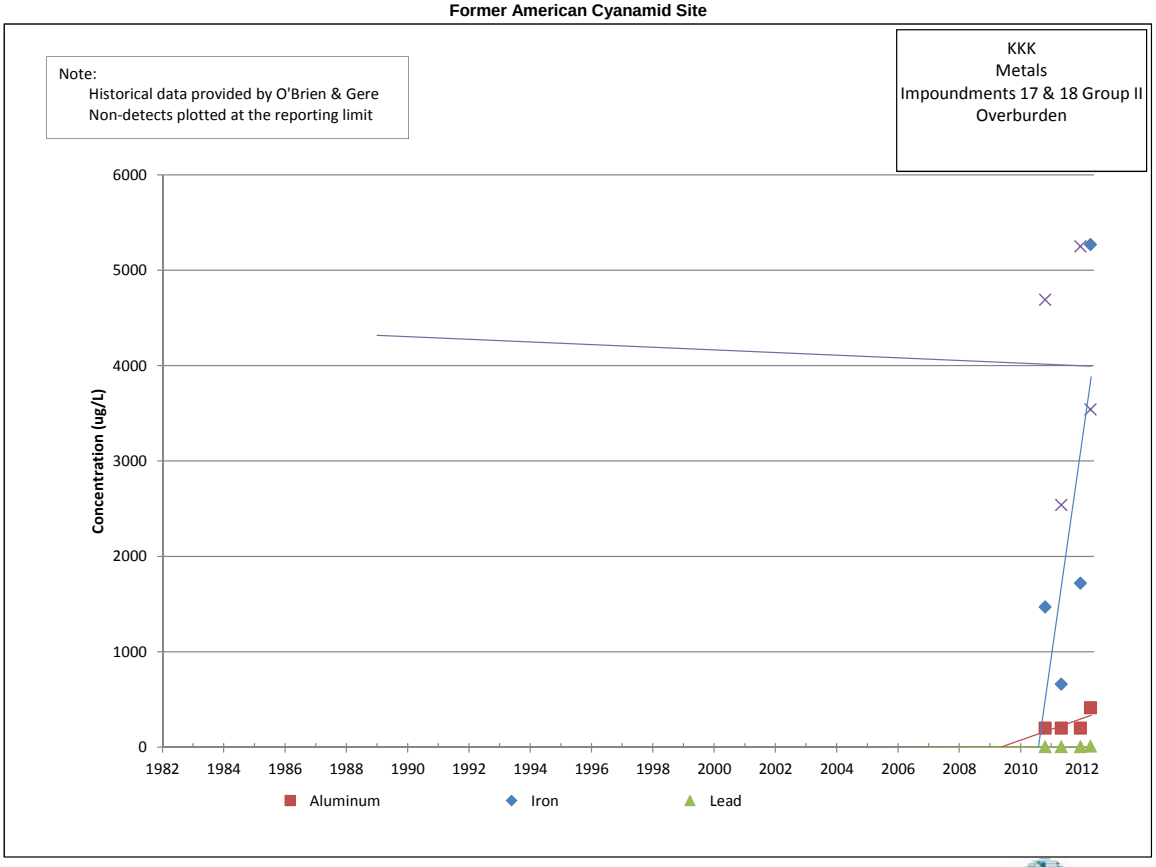

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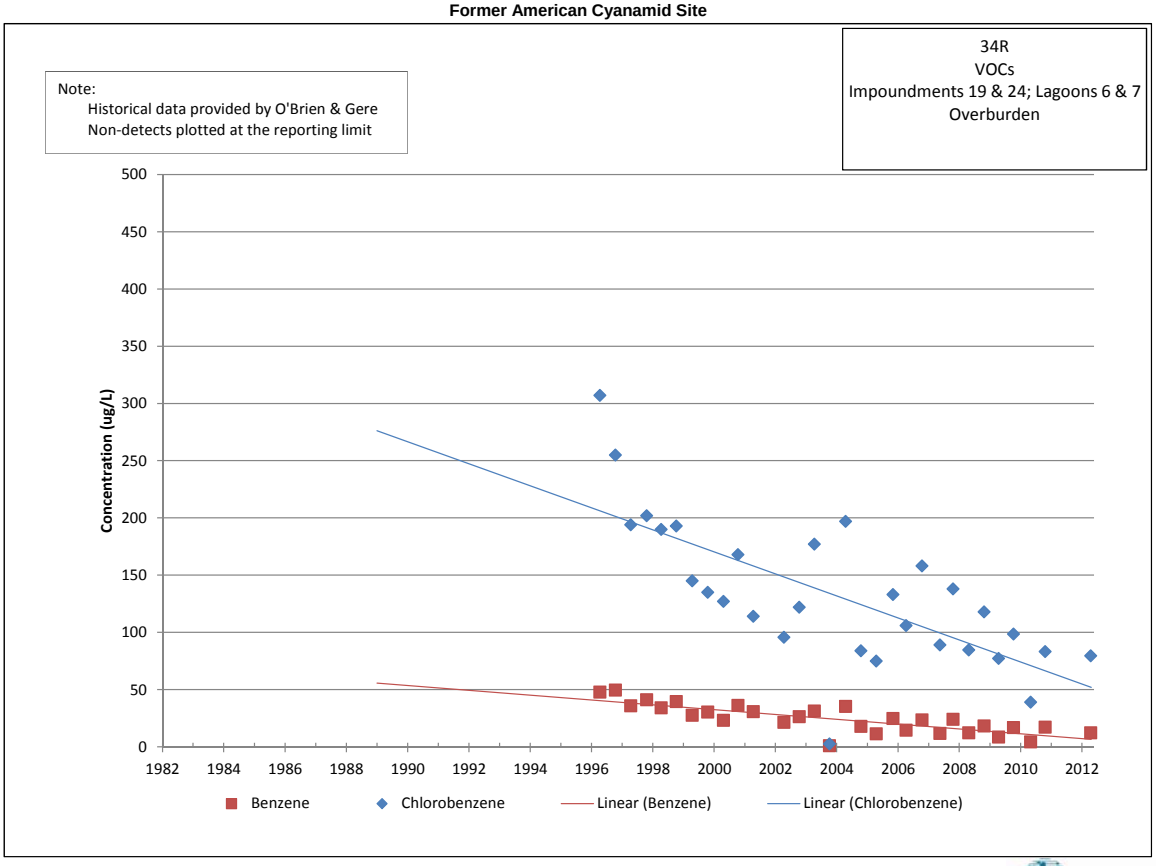

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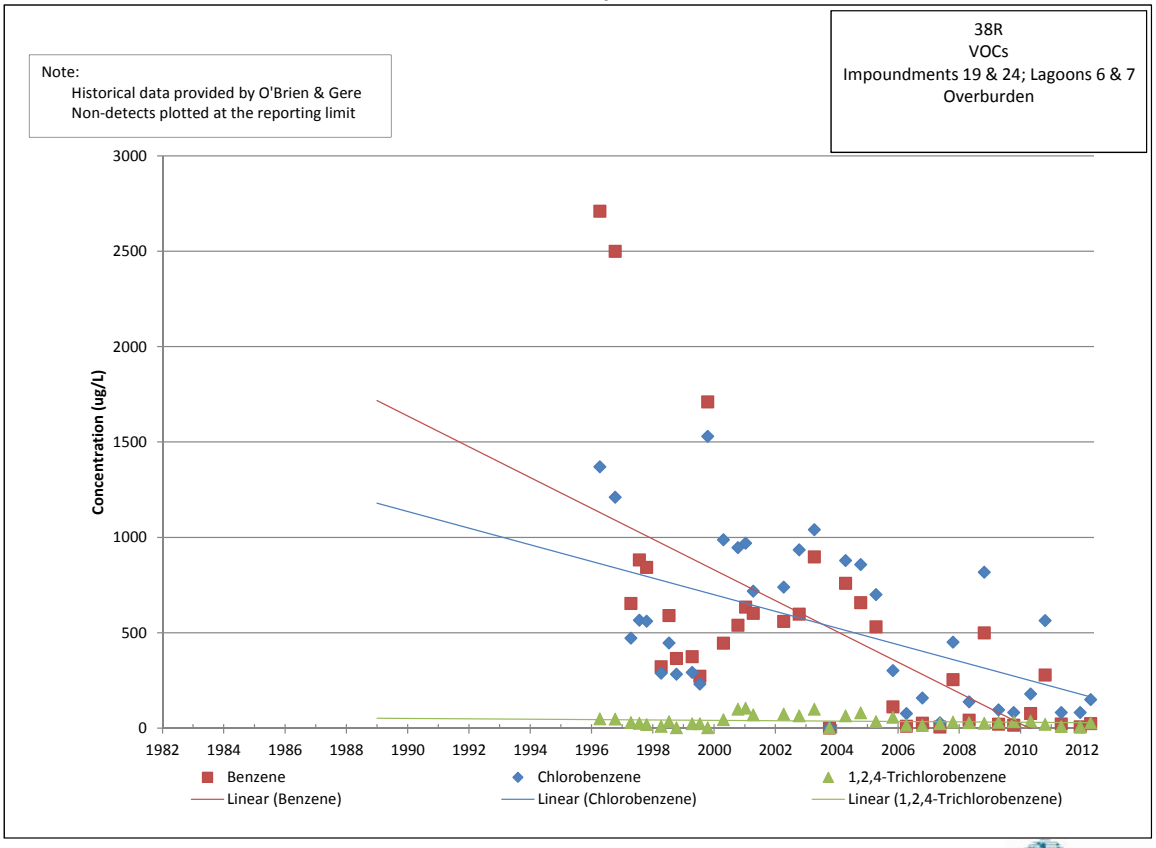

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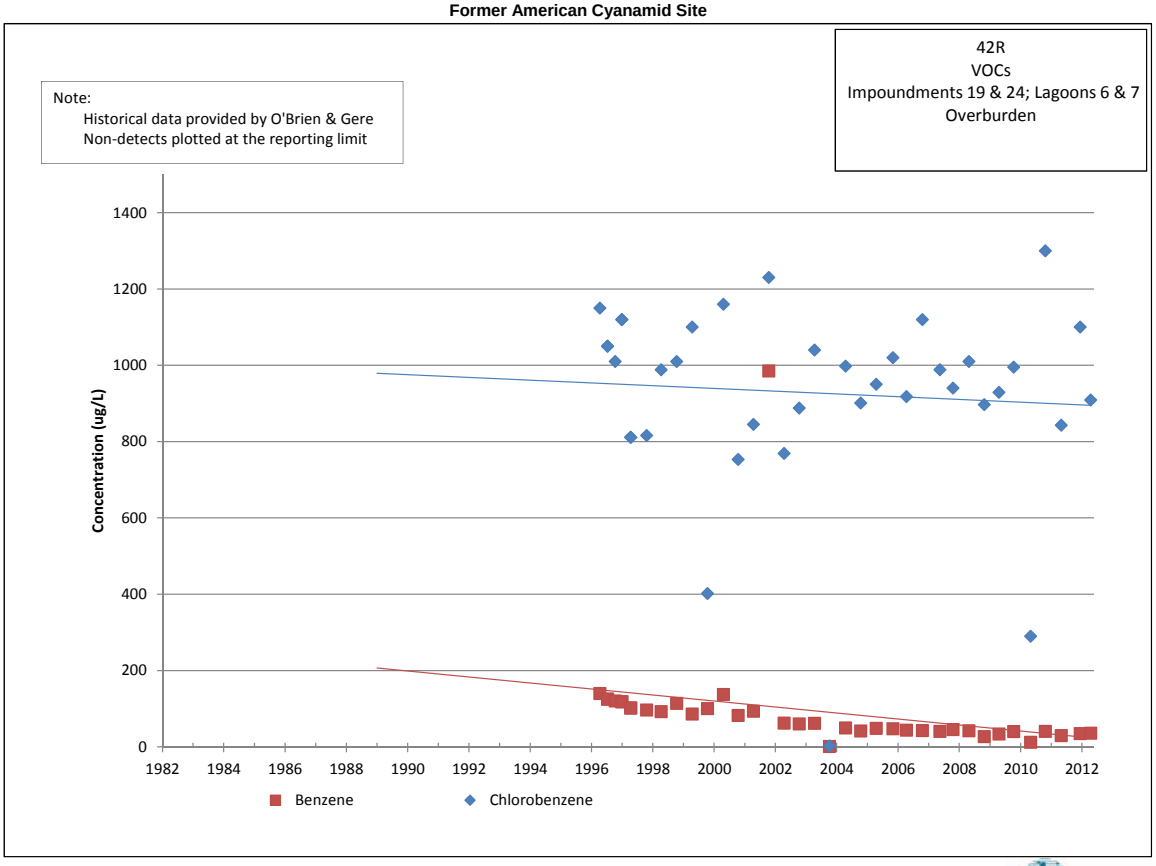

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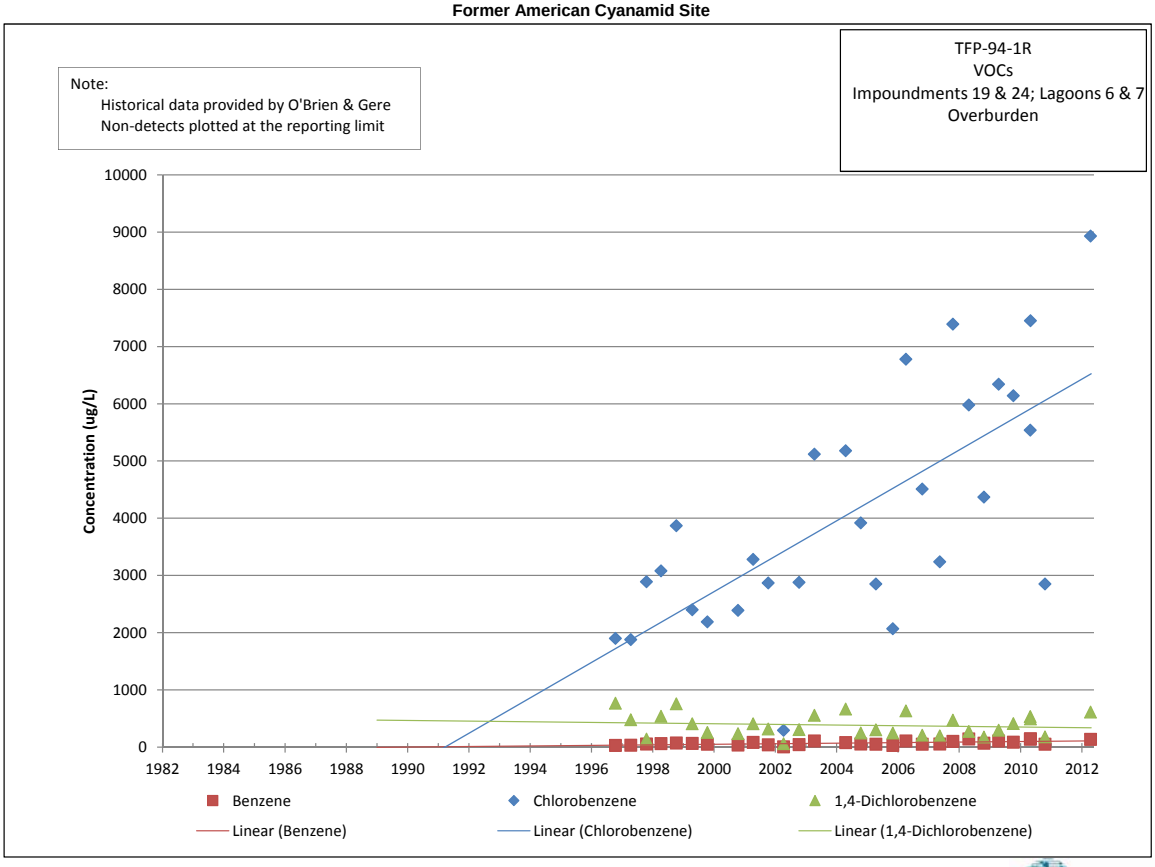

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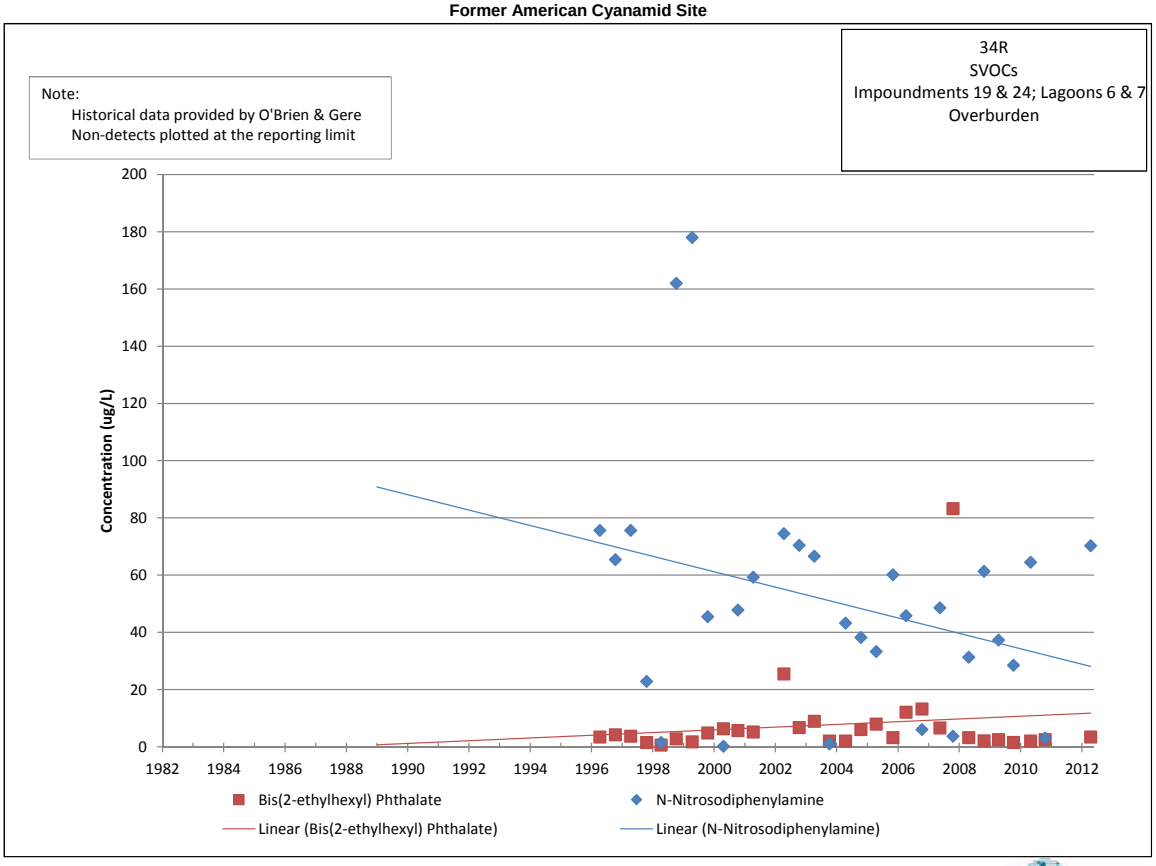

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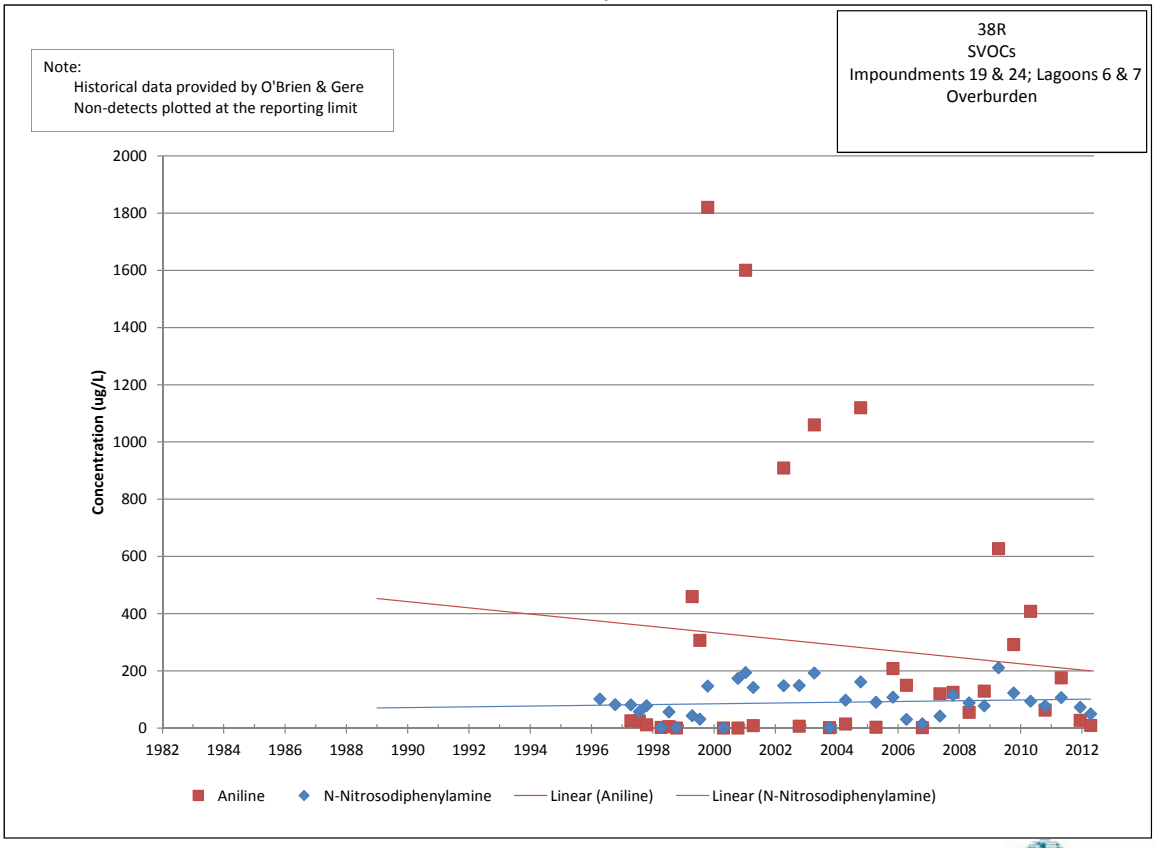

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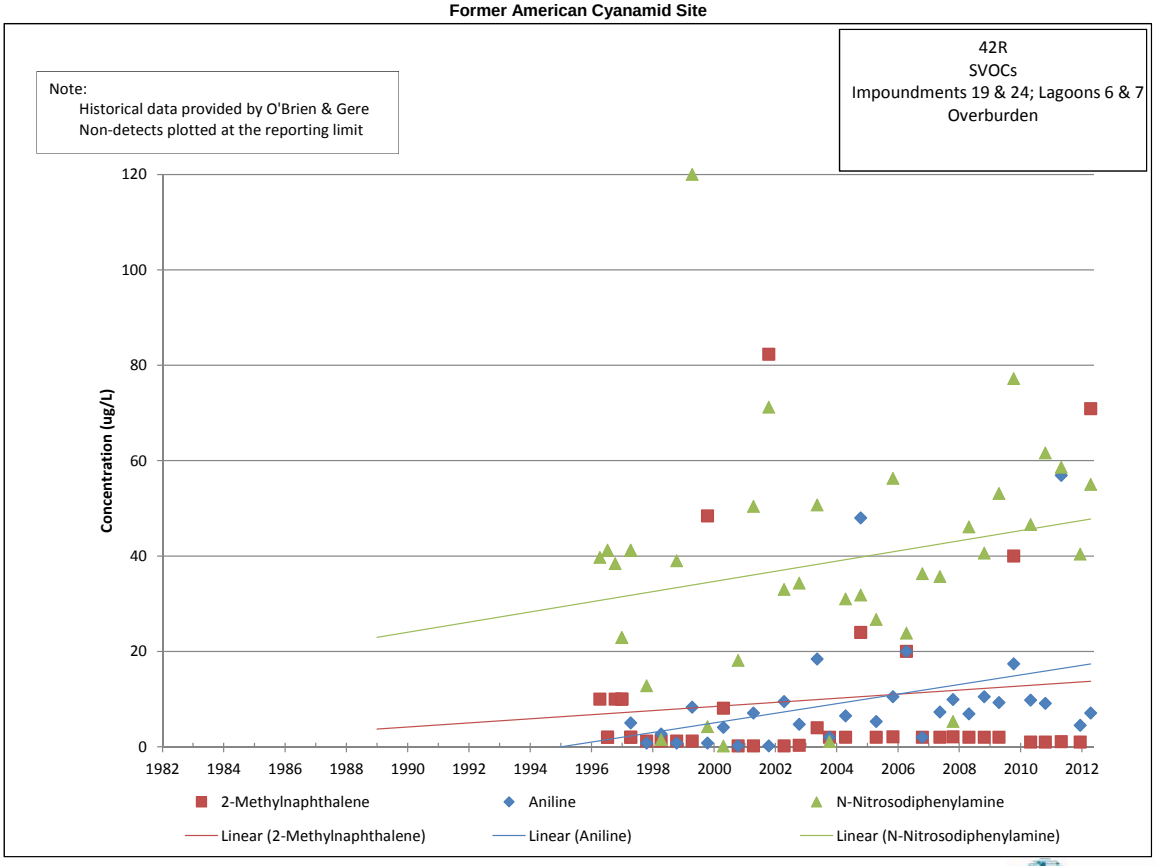

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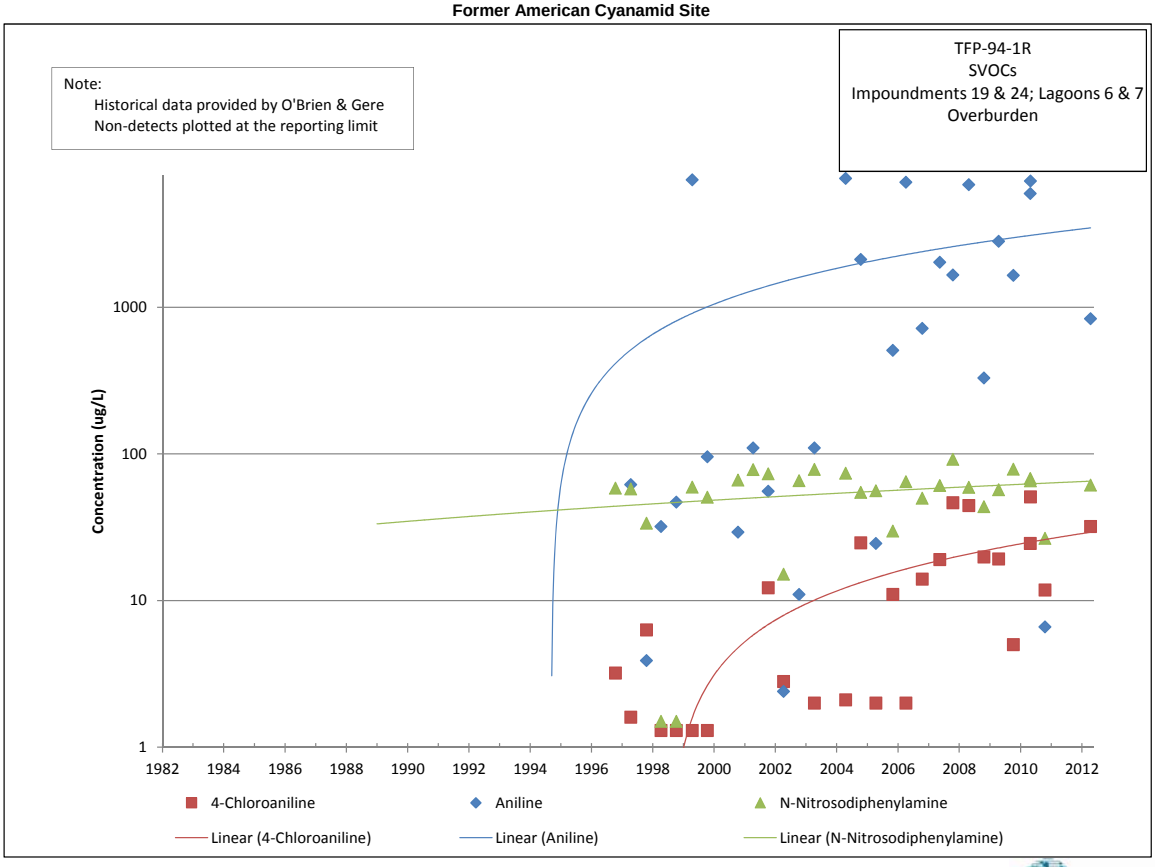

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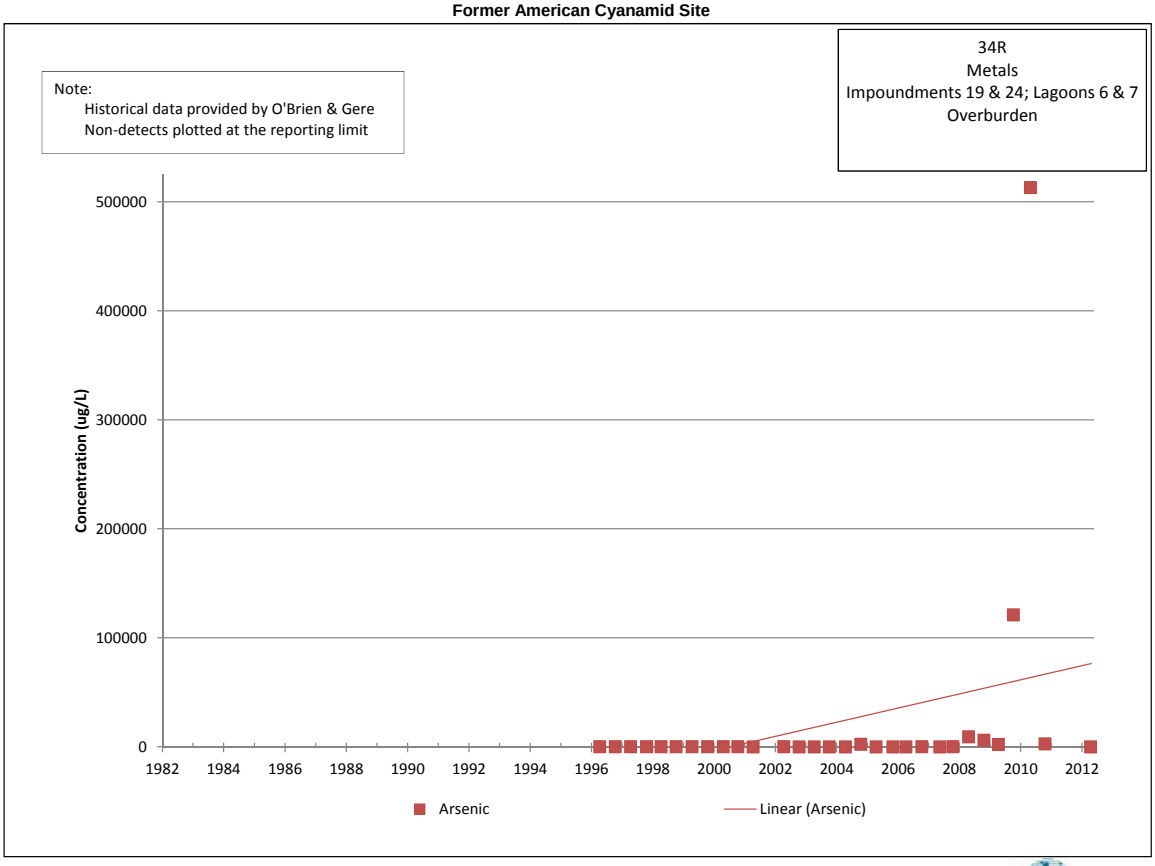

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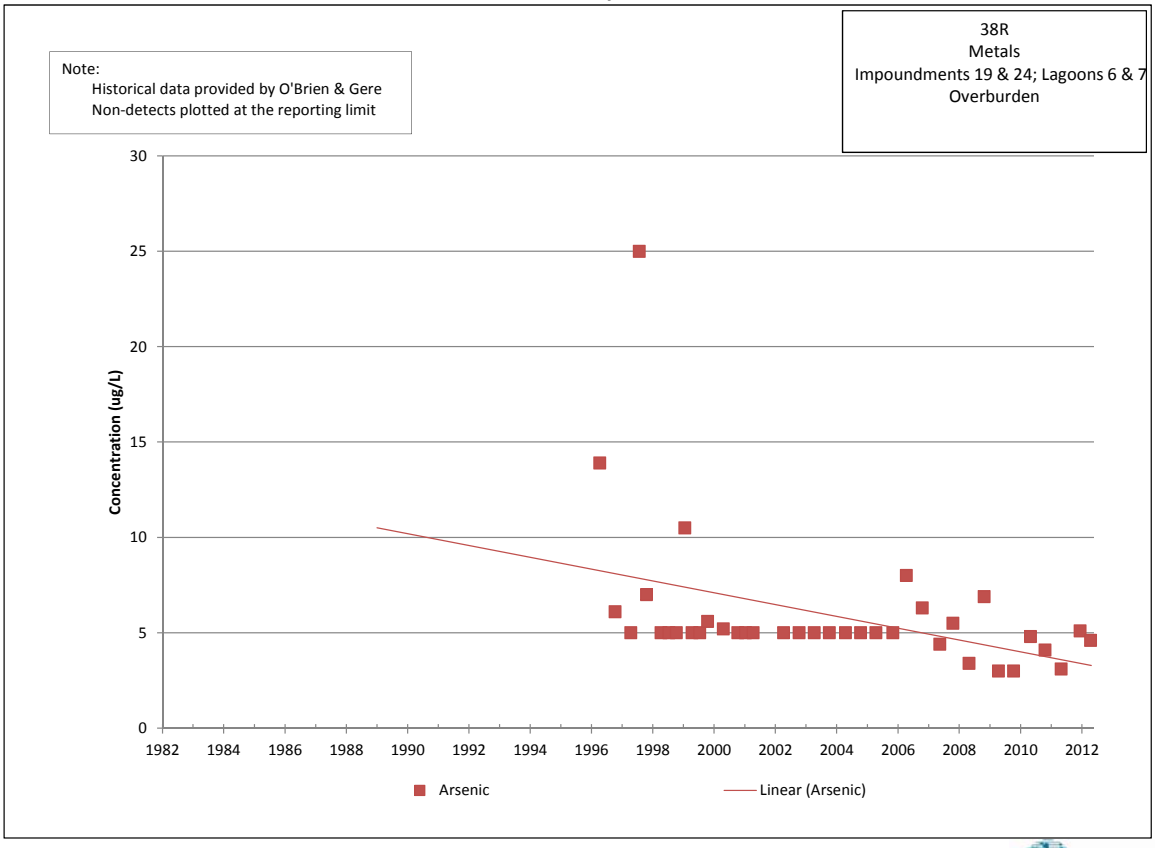

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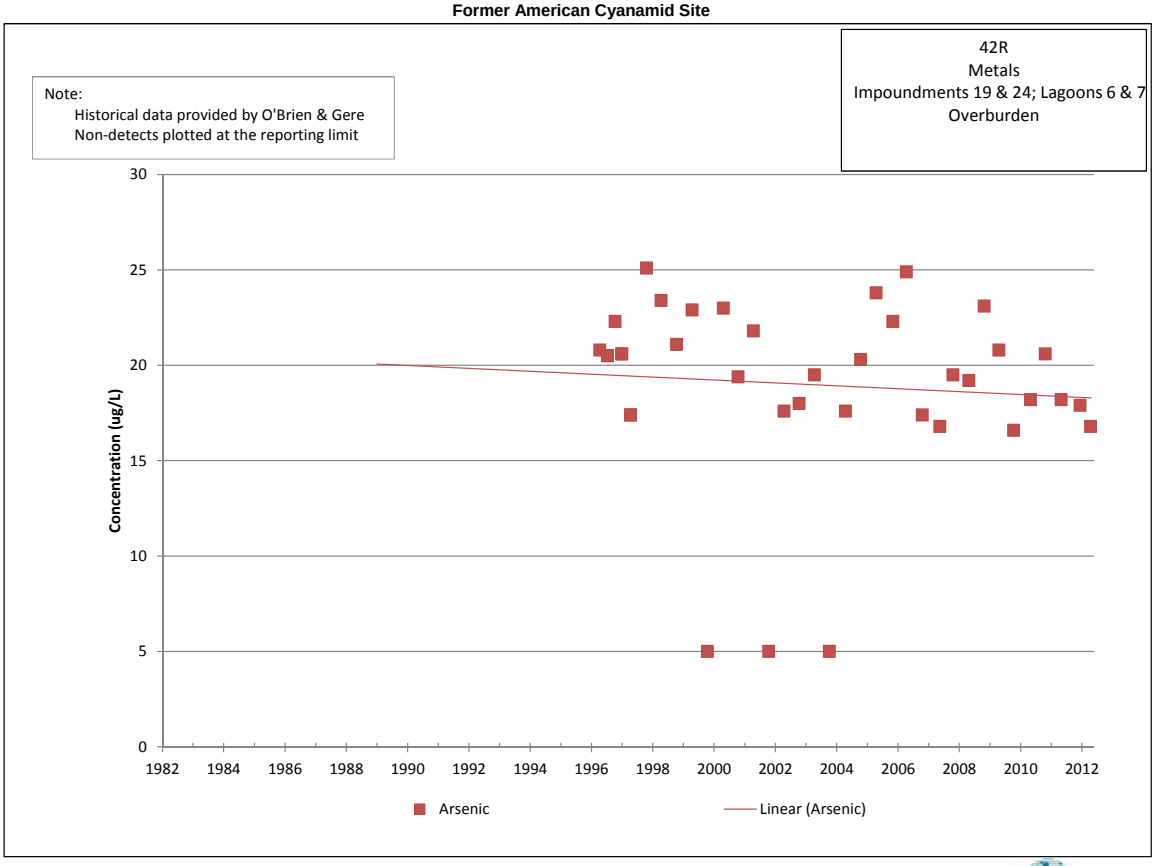

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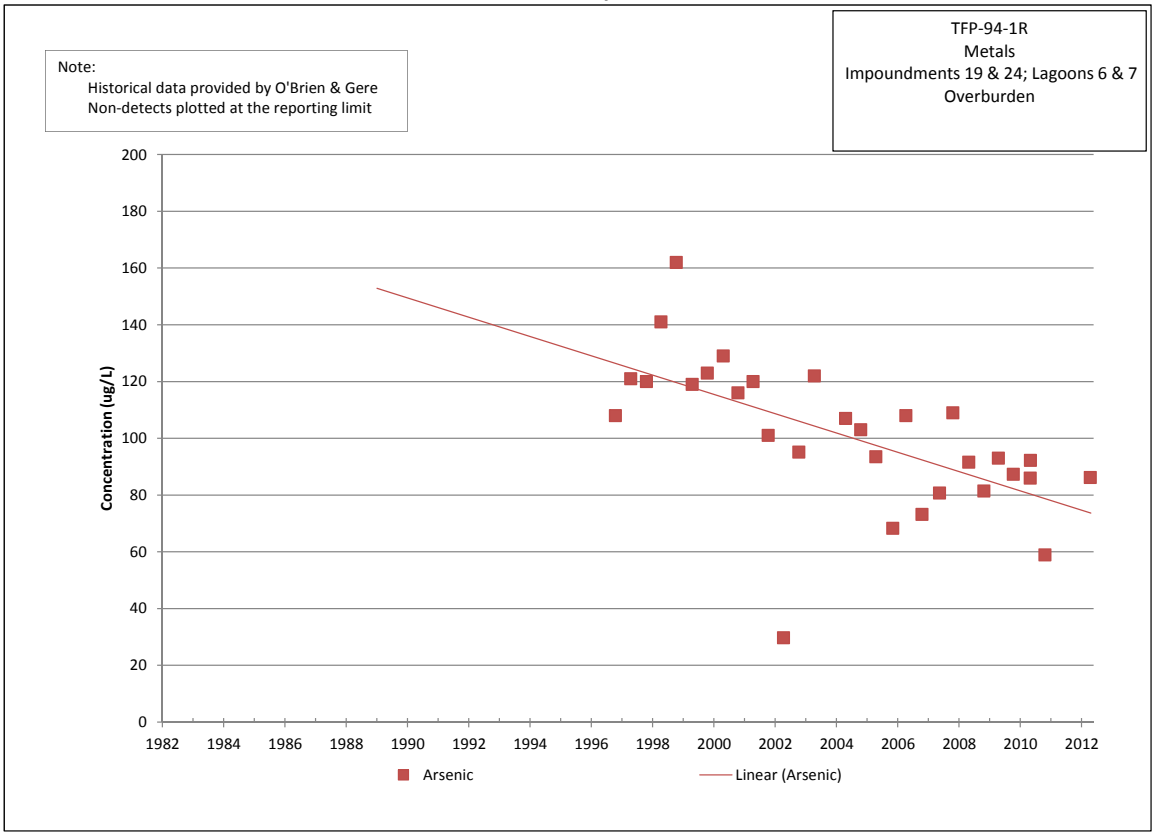

APPENDIX E

IMPOUNDMENT 8 STATISTICAL ANALYSES

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The upgradient well (RCRA-D5, RCRA-D6, RCRA-D14, RCRA-D15) datasets for each parameter were first tested for normality via the Shapiro-Wilk Test of Normality method without any data transformation. A log transformation was then performed on all the data, which was then tested for normality via the Shapiro-Wilk test. For all parameters with variance, comparisons of these values to the critical point value for the Shapiro-Wilk test indicate the data fit a log-normal distribution. Therefore, a log transformation was performed on all data before subsequent statistical analysis.

To compare the indicator parameters for downgradient wells with a set of upgradient wells, Dunnett's Multiple Comparison T-test method was then performed for each downgradient monitoring well if the parameter is present at detectable concentration and there is variance in the upgradient well concentrations of that parameter. The t-test statistic is:

$$t_i = (y_i - \bar{x})/\left(s\sqrt{1 + 1/n}\right)$$

where $\bar{x}$ and s (with n -1 equals degrees of freedom) are the average and standard deviation of results for n upgradient wells and y_i is observed for the i-th downgradient well. For statistical analyses performed on the pH measurements, a two-sided t-test was employed to determine if the pH of the respective downgradient well is significantly more or less than the pH of the upgradient wells. For statistical analyses performed on the remaining parameters a one-sided t-test was implemented to determine if the concentration of the parameter was significantly different (greater) than the concentration present in the upgradient wells.

Critical values for the t-test are required for the case where results from nine downgradient wells are to be compared against the distribution from four upgradient wells. To determine the critical values for the statistical analysis a significance level of 0.05 was used. In the analyses presented in this report, the parameter ρ equals $1/(1 + n)$, or 0.2 in the present case. Additionally, to determine the critical value in a multiple comparisons t-test it is also necessary to evaluate k, which is the number of downgradient wells being compared or $k = 9$ in the present case. Hahn and Hendrickson (1971) tabulate critical values for two-sided tests for values of $\rho = 0.2$, degrees of freedom 3 or greater and k up to 20. The authors do not provide values for one-sided tests; thus, the value for two-sided level 0.10 is used as an approximation to one-sided level 0.05. Multiple comparison critical t values for comparison of nine downgradient wells with four upgradient wells using t_i $(i=1,\ldots,9)$ were from Table 2 of Hahn and Hendrickson (1971) for $\rho = 0.2$, degress of freedom = 3 and $k = 9$ (interpolation between k = 8 and k = 10). These values are tabulated in the following table.

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Multiple Comparisons t:	Critical t value for 0.5 significance level One-sided	Two-sided
All t_i statistics for nine downgradient wells are below the critical value with probability 0.95 when $y_1, \ldots, y_9$ come from the same normal population as $x_1, \ldots, x_4$.	4.31*	5.61

* Critical value for 0.10 level two-side test

RCRA-D1 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.38	2.00
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	1.90			
Critical t-value	5.61			

RCRA-D2 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.42	2.00
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	2.36			
Critical t-value	5.61			

RCRA-D3 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.37	2.00
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	1.79			
Critical t-value	5.61			

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RCRA-D4 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.68	2.04
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	5.30			
Critical t-value	5.61			

RCRA-D7 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	6.25	1.83
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00011			
t-value	-12.27			
Critical t-value	5.61			

RCRA-D8 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.17	1.97
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	-0.56			
Critical t-value	5.61			

RCRA-D9 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	6.93	1.94
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00011			
t-value	-3.46			
Critical t-value	5.61			

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RCRA-D10 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.37	2.00
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	1.79			
Critical t-value	5.61			

RCRA-D10 Field Duplicate ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.37	2.00
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	1.79			
Critical t-value	5.61			

RCRA-D11 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.46	2.01
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	2.82			
Critical t-value	5.61			

RCRA-D12 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	6.77	1.91
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	-5.46			
Critical t-value	5.61			

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RCRA-D13 ***pH Analysis***

Upgradient Well	Upgradient Value (pH)	ln(Upgradient Value)	Downgradient Value (pH)	ln(Downgradient Value)
RCRA-D5	7.16	1.97	7.46	2.01
RCRA-D6	7.16	1.97		
RCRA-D14	7.32	1.99		
RCRA-D15	7.23	1.98		
Variance	0.00			
t-value	2.82			
Critical t-value	5.61			

RCRA-D1 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	418.00	6.04
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.11			
Critical t-value	4.31			

RCRA-D2 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	456.00	6.12
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.004			
Critical t-value	4.31			

RCRA-D3 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	654.00	6.48
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	0.44			
Critical t-value	4.31			

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RCRA-D4 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	448.00	6.10
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.03			
Critical t-value	4.31			

RCRA-D7 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	637.00	6.46
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	0.41			
Critical t-value	4.31			

RCRA-D8 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	437.00	6.08
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.06			
Critical t-value	4.31			

RCRA-D9 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	855.00	6.75
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	0.77			
Critical t-value	4.31			

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RCRA-D10 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	368.00	5.91
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.27			
Critical t-value	4.31			

RCRA-D10 Field Duplicate ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	371.00	5.92
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.26			
Critical t-value	4.31			

RCRA-D11 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	390.00	5.97
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.20			
Critical t-value	4.31			

RCRA-D12 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	651.00	6.48
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	0.43			
Critical t-value	4.31			

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RCRA-D13 ***TDS Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	577.00	6.36	299.00	5.70
RCRA-D6	1160.00	7.06		
RCRA-D14	253.00	5.53		
RCRA-D15	259.00	5.56		
Variance	0.53			
t-value	-0.52			
Critical t-value	4.31			

RCRA-D2 ***TOC Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	1.50	0.41	1.10	0.10
RCRA-D6	1.70	0.53		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.50	-0.69		
Variance	0.45			
t-value	0.28			
Critical t-value	4.31			

RCRA-D3 ***TOC Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	1.50	0.41	1.20	0.18
RCRA-D6	1.70	0.53		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.50	-0.69		
Variance	0.45			
t-value	0.39			
Critical t-value	4.31			

RCRA-D4 ***TOC Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	1.50	0.41	1.10	0.10
RCRA-D6	1.70	0.53		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.50	-0.69		
Variance	0.45			
t-value	0.28			
Critical t-value	4.31			

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RCRA-D7 ***TOC Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	1.50	0.41	1.50	0.41
RCRA-D6	1.70	0.53		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.50	-0.69		
Variance	0.45			
t-value	0.69			
Critical t-value	4.31			

RCRA-D8 ***TOC Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	1.50	0.41	1.20	0.18
RCRA-D6	1.70	0.53		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.50	-0.69		
Variance	0.45			
t-value	0.39			
Critical t-value	4.31			

RCRA-D9 ***TOC Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	1.50	0.41	15.50	2.74
RCRA-D6	1.70	0.53		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.50	-0.69		
Variance	0.45			
t-value	3.80			
Critical t-value	4.31			

RCRA-D12 ***TOC Analysis***

Upgradient Well	Upgradient Concentration (mg/L)	ln(Upgradient Conc.)	Downgradient Cocnentration (mg/L)	ln(Downgradient Conc.)
RCRA-D5	1.50	0.41	3.20	1.16
RCRA-D6	1.70	0.53		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.50	-0.69		
Variance	0.45			
t-value	1.70			
Critical t-value	4.31			

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RCRA-D1 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	723.00	6.58
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	-0.11			
Critical t-value	4.31			

RCRA-D2 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	798.00	6.68
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	0.04			
Critical t-value	4.31			

RCRA-D3 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	973.00	6.88
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	0.34			
Critical t-value	4.31			

RCRA-D4 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	744.00	6.61
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	-0.07			
Critical t-value	4.31			

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RCRA-D7 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	1270.00	7.15
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	0.74			
Critical t-value	4.31			

RCRA-D8 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	774.00	6.65
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	-0.01			
Critical t-value	4.31			

RCRA-D9 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	1220.00	7.11
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	0.68			
Critical t-value	4.31			

RCRA-D10 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	613.00	6.42
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	-0.36			
Critical t-value	4.31			

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RCRA-D10 Field Duplicate ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	613.00	6.42
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	-0.36			
Critical t-value	4.31			

RCRA-D11 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	613.00	6.42
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	-0.36			
Critical t-value	4.31			

RCRA-D12 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	984.00	6.89
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	0.36			
Critical t-value	4.31			

RCRA-D13 ***Specific Conductivity Analysis***

Upgradient Well	Upgradient Value (µmho/cm)	ln(Upgradient Value)	Downgradient Value (µmho/cm)	ln(Downgradient Value)
RCRA-D5	1000.00	6.91	522.00	6.26
RCRA-D6	1600.00	7.38		
RCRA-D14	465.00	6.14		
RCRA-D15	490.00	6.19		
Variance	0.35			
t-value	-0.60			
Critical t-value	4.31			

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RCRA-D9 ***Chlorobenzene Analysis***

Upgradient Well	Upgradient Concentration (µg/L)	ln(Upgradient Conc.)	Downgradient Concentration (µg/L)	ln(Downgradient Conc.)
RCRA-D5	0.50	-0.69	0.93	-0.07
RCRA-D6	0.50	-0.69		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.26	-1.35		
Variance	0.11			
t-value	2.14			
Critical t-value	4.31			

RCRA-D12 ***Chlorobenzene Analysis***

Upgradient Well	Upgradient Concentration (µg/L)	ln(Upgradient Conc.)	Downgradient Concentration (µg/L)	ln(Downgradient Conc.)
RCRA-D5	0.50	-0.69	0.28	-1.27
RCRA-D6	0.50	-0.69		
RCRA-D14	0.50	-0.69		
RCRA-D15	0.26	-1.35		
Variance	0.11			
t-value	-1.14			
Critical t-value	4.31			

RCRA-D8 ***Chloroform Analysis***

Upgradient Well	Upgradient Concentration (µg/L)	ln(Upgradient Conc.)	Downgradient Concentration (µg/L)	ln(Downgradient Conc.)
RCRA-D5	0.50	-0.69	0.32	-1.14
RCRA-D6	0.50	-0.69		
RCRA-D14	0.22	-1.51		
RCRA-D15	4.00	1.39		
Variance	1.53			
t-value	-0.55			
Critical t-value	4.31			

RCRA-D7 ***Tetrachloroethene Analysis***

Upgradient Well	Upgradient Concentration (µg/L)	ln(Upgradient Conc.)	Downgradient Concentration (µg/L)	ln(Downgradient Conc.)
RCRA-D5	0.50	-0.69	0.56	-0.58
RCRA-D6	0.50	-0.69		
RCRA-D14	0.50	-0.69		
RCRA-D15	37.40	3.62		
Variance	4.65			
t-value	-0.40			
Critical t-value	4.31			