

NRG Potomac River, LLC
25100 Chalk Point Road
Aquasco, MD 20608

April 28, 2017

Via email delivery only

Mr. Alex Wardle
Virginia Department of Environmental Quality (DEQ)
Northern Regional Office
13901 Crown Court
Woodbridge, VA 22193

**Re: Quarterly CAP Implementation Monitoring Report
NRG Potomac River Generating Station
1400 North Royal Street
Alexandria, VA 22314
PC#2013-3154**

Dear Mr. Wardle:

NRG Potomac River LLC (PRGS) is pleased to submit the Quarterly CAP Implementation Monitoring Report (CMR).

The following activities were conducted during the First Quarter of 2017:

- Monthly liquid level gauging and manual light non-aqueous phase liquid (LNAPL) bailing of select site monitoring wells;
- Comprehensive gauging of all accessible site monitoring wells on February 21, 2017;
- Biostimulation headspace vapor monitoring of select site monitoring wells to measure the presence of volatile organic compounds (VOCs), oxygen, carbon dioxide, and methane on February 21, 2017;
- Down-well water quality measurements recorded on February 21, 2017 of select site groundwater wells to monitor dissolved oxygen, pH, temperature, oxidation reduction potential and conductivity;
- Routine quarterly sampling of groundwater from select site monitoring wells for petroleum hydrocarbons and from select wells for biostimulation parameters, in accordance with the groundwater sampling plan, on February 21-22, March 7, and March 29, 2017;
- Continued semi-monthly operation and maintenance (O&M) field events of the remediation system from January to March, 2017; and

- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises.

If you have any questions or require additional information please contact me at (301) 843-4439 or by email at Mark.Nitz@nrg.com. For any technical questions, if you prefer, you can contact our consultants at GES directly.

Sincerely,



Mark G. Nitz, P.E.

Environmental Specialist, NRG

Cc: J. Rodriguez, DOEE; K. Tran, City of Alexandria, VA; P. McCallum, NPS



**Groundwater
& Environmental Services, Inc.**

**QUARTERLY CAP IMPLEMENTATION MONITORING
REPORT
APRIL 2017**

**POTOMAC RIVER GENERATING STATION
1400 NORTH ROYAL STREET
ALEXANDRIA, VA**

PC# 2013-3154

PREPARED FOR:
**MARK G. NITZ, P.E.
NRG POTOMAC RIVER LLC
25100 CHALK POINT ROAD
AQUASCO, MD 20608**

SUBMITTED TO:
**VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY
NORTHERN REGIONAL OFFICE
13901 CROWN COURT
WOODBIDGE, VA 22193-1453**

PREPARED BY:
**GROUNDWATER & ENVIRONMENTAL SERVICES, INC.
1350 BLAIR DRIVE, SUITE A
ODENTON, MD 21113**

APRIL 28, 2017



SITE NAME: Potomac River Generating Station

SITE LOCATION: 1400 North Royal Street, Alexandria, VA

VDEQ PC# 2013-3154

DATE OF REPORT: April 28, 2017

LAND USE CLASSIFICATION: Industrial

CURRENT PROPERTY OWNER: NRG Potomac River LLC
8301 Professional Place, Suite 250
Landover, MD 20785

CONSULTANT: Groundwater & Environmental Services, Inc.
1350 Blair Drive, Suite A
Odenton, MD 21113
(800) 220-3606

RELEASE INFORMATION: Release from two former 25,000 gallon Number 2 fuel oil underground storage tanks

Prepared by:

A handwritten signature in black ink, appearing to read "Scott Andresini".

Scott Andresini
Staff Environmental Scientist

Reviewed by:

A handwritten signature in blue ink, appearing to read "Dan Drennan".

Dan Drennan, PE
Project Engineer

A handwritten signature in black ink, appearing to read "A. Ashley Bell".

A. Ashley Bell
Senior Project Manager

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1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES) has prepared this First Quarter 2017 CAP Implementation Monitoring Report (CMR) on behalf of NRG Potomac River LLC (NRG), documenting environmental monitoring and corrective action activities performed at the Potomac River Generating Station (PRGS), located at 1400 North Royal Street, Alexandria, VA (the site). Site activities were performed to address a subsurface petroleum release regulated by the Virginia Department of Environmental Quality (VDEQ) Northern Regional Office (NRO) under Pollution Complaint (PC) #2013-3154. The site is the location of a decommissioned power generating facility. A Site Location Map is provided as **Figure 1**, a Site Layout Map, depicting pertinent features of the site and adjacent areas, is provided as **Figure 2**, and a Site Map is provided as **Figure 3**.

Specifically, this summary report documents the following activities conducted during the 1st Quarter 2017:

- Monthly liquid level gauging and manual bailing of light non-aqueous phase liquid (LNAPL), if present, from select site groundwater wells;
- Comprehensive gauging of all accessible site groundwater wells on February 21, 2017;
- Down-well water quality measurements recorded on February 21, 2017 of select site groundwater wells to monitor dissolved oxygen, pH, temperature, oxidation reduction potential (ORP) and conductivity;
- Quarterly groundwater sampling on February 21 and 22, 2017 from select site groundwater wells for total petroleum hydrocarbons – diesel range organics (TPH-DRO), as well as from select wells for biological indicator parameters, benzene, toluene, ethylbenzene, and xylenes (BTEX), and naphthalene;
- Headspace vapor measurements recorded on February 21, 2017 from select site groundwater wells to monitor the presence of volatile organic compounds (VOCs), oxygen, carbon dioxide, and methane;
- Bi-monthly operations and maintenance (O&M) events during January through March, including once a month gauging of recovery wells and groundwater and vapor sampling of the system;
- Active P&T Wells: RW-05, RW-14, RW-25, RW-31, and RW-51;
- Active TPE Wells: RW-05S, MW-10S, RW-25S, RW-28S, RW-30S, RW-72S, RW-116S, RW-117S, RW-118S, RW-119S, and RW-123S; and
- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises (AlexRenew).

1.1 SITE HISTORY

The site was developed as a power generating facility in the 1940s. The first generating unit was constructed by 1949, and the last of the five units was brought online in 1954. The facility used Number 2 (No. 2) fuel oil to preheat its generating unit boilers and coal as its primary fuel to generate electricity. The No. 2 fuel



oil was stored in two adjoining 25,000-gallon underground storage tanks (USTs) centrally located within the power plant complex, as shown on the Site Map provided as **Figure 3**. On October 1, 2012, the coal-fired power plant ceased operation.

The VDEQ opened PC #2013-3154 following the detection of petroleum hydrocarbons during closure activities associated with the two 25,000-gallon fuel oil USTs. The VDEQ requested that a Site Characterization Report (SCR) be prepared to characterize the extent of contamination at the site. URS Corporation (URS) submitted a Site Conceptual Model (SCM) on June 11, 2013, which included a discussion of the initial detection of petroleum hydrocarbons during the closures of the two No. 2 fuel oil USTs, as well as descriptions of the various subsurface utilities in the vicinity of the USTs.

The VDEQ subsequently requested the submittal of a Site Characterization Report Addendum (SCRA), as stated in a directive letter dated July 10, 2013. This SCRA was submitted on February 14, 2014, by URS and described the activities associated with a subsurface characterization of the site using laser-induced fluorescence (LIF), the advancement of soil borings for soil sampling at the site, and the installation of fourteen monitoring wells. The site history, recent field activities, laboratory analytical results, a preliminary risk assessment, and an assessment of remedial options were also discussed in the SCRA.

After review of the SCRA, on March 4, 2014, the VDEQ requested that a Corrective Action Plan (CAP) be developed for the site. GES and Geosyntec Consultants (Geosyntec), on September 5, 2014, submitted Part I of a CAP, (CAP-I) summarizing the site characterization data and evaluation; presenting an updated SCM based on this data; and providing a presentation, assessment, and evaluation of the viable remedial technologies that can be employed, consistent with the CAP requirements. Subsequently, Part II of the CAP (CAP-II) was submitted to the VDEQ on December 23, 2014. The CAP was approved by the VDEQ on March 17, 2015, and was assigned CAP tracking number 513.

During the 2nd Quarter 2015, GES initiated remediation system installation on site with the install of eight total phase extraction (TPE), three standard compliance/delineation monitoring, and six air sparge wells from June 22, 2015 to July 8, 2015. On June 26, 2015, Product Recovery Management, Inc. (PRM) was chosen to construct the remediation system after winning the three-vendor bid system process for the system design and procurement packages. On October 15, 2015, the remediation system was delivered to the Site. GES selected Odyssey Environmental Services (Odyssey) to install the system's piping to the onsite TPE, pump and treat (P&T), and air sparge wells and began piping installs on September 28, 2015, which continued through October 2015. GES worked to obtain a Special Use Permit from the National Park Service (NPS) for offsite access and system install activities throughout 2nd and 3rd Quarters 2015.

During the 4th Quarter 2015, power connections to the onsite system and aboveground piping and wellhead connections for 8 onsite air/biosparge wells, 11 TPE wells, and 5 P&T wells was completed. Pumps were installed in the P&T wells and the treated groundwater discharge line to an AlexRenew sanitary sewer tie-in location was installed. On November 12, 2015 a draft Special Use Permit was issued by NPS. GES sent a final permit package for groundwater discharge authorization to AlexRenew on November 20, 2015.

During the 1st Quarter 2016, all remaining installation tasks associated with the remediation system were completed, except for offsite installs on the NPS property. On January 13, 2016, AlexRenew issued an



approval letter with special requirements for discharge. The onsite remediation system was started on March 14, 2016 and continues to operate.

NPS authorized a final Special Use Permit on February 11, 2016 for planned field activities on NPS property. Once GES obtained the NPS Special Use Permit, installation of the offsite remediation system and bulkhead wall seep sealing were initiated. CAP-II requirements to repair and seal the bulkhead wall seep were completed between April and June 2016. A total of 6 bulkhead wall seep areas, 17 rigging holes, and 3 outfall pipes in need of repair were identified within the steel bulkhead wall along the Potomac River. These areas were identified as locations with the potential for impacted groundwater to migrate into the Potomac River, and were therefore, sealed. On April 4, 2016, Odyssey and GES mobilized to the Site to clear vegetation for the installation of seven new biosparge points (SP-09, SP-10, SP-11, SP-12, SP-13, SP-14, and SP-15) on NPS property. Remediation trenching, piping, well head modifications and tie-ins, and manifold connections were completed from April 13 through April 18, 2016, and the seven biosparge wells were brought online on May 3, 2016. GES worked on the agreement and implementation of the site restoration with the NPS from April 25 through May 17, 2016. On May 16, 2016 tree planting was initiated under GES supervision.

1.2 SURROUNDING PROPERTIES

The surrounding properties in the immediate vicinity of the site are primarily residential and commercial, with some buildings used as office space. To the north, south, and west, the site is bordered by a mixture of condominiums and office buildings. To the east, the site is bordered by the NPS Mt. Vernon Trail, beyond which lies the Potomac River.

2.0 SITE CHARACTERIZATION AND MONITORING ACTIVITIES

A Well Construction Table, included as **Table 1**, details well construction of monitored and sampled wells. The Groundwater Monitoring and Sampling Plan, included as **Table 2**, details the quarterly and annual monitoring and sampling schedule of monitoring and recovery wells. The following site characterization and monitoring activities were conducted during the 1st Quarter 2017:

- January – March 2017:
 - Monthly gauging of select groundwater wells.
- February 21, 2017:
 - Site-wide gauging and headspace vapor monitoring and collection of down-well field parameters of select groundwater wells.
- February 21-22, 2017, March 7, 2017, and March 29, 2017:
 - Gauging and groundwater sampling of accessible site groundwater wells in accordance with the Groundwater Monitoring and Sampling Plan.

2.1 WELL GAUGING AND LNAPL BAILING

An oil-water interface probe capable of measuring groundwater and LNAPL to 0.01 feet was used to gauge the site groundwater wells. During the 1st Quarter 2017, all accessible site groundwater wells were gauged during a comprehensive gauging event on February 21, 2017. Select groundwater wells that historically exhibited measureable LNAPL or elevated dissolved phase hydrocarbon concentrations were also gauged on a monthly basis. Gauging events conducted during the 1st Quarter 2017 are summarized below:

- Monthly gauging of select wells:
 - January 30, 2017
 - February 21, 2017
 - March 29, 2017
- Site-wide gauging of all accessible wells:
 - February 21, 2017

Historical and 1st Quarter 2017 groundwater and LNAPL elevation data is presented in **Table 3** – Historical Groundwater Monitoring and Analytical Data Summary. LNAPL was detected in groundwater well MW-25S during the 1st Quarter 2017, with a maximum thickness of 0.02 feet measured on February 21, 2017. During the February groundwater sampling event, a trace of LNAPL was bailed from MW-25S. No LNAPL was bailed from any wells connected to the remediation system. During comprehensive gauging on February 21, 2017 monitoring wells MW-16S, MW-106, MW-107, and MW-117S were dry.

Measured groundwater depths ranged from 3.11 feet below ground surface (bgs) in MW-105 to 33.80 feet bgs in MW/RW-51 during the 1st quarter 2017, which is consistent with historical data from the site. Site-wide gauging was conducted on February 21, 2017, in accordance with the tidal cycle of the Potomac River. High tide occurred at 10:08 am on February 21, 2017 at the site. Multiple personnel gauged the site wells as quickly as possible bracketing the river's high tide, with priority given to gauging of the deep wells as they are the ones affected by the tidal cycle. This approach minimized the impact of tidal influence on groundwater elevation data.

Groundwater contour maps representing shallow zone and deep zone data, respectively, from the February 21, 2017 comprehensive gauging event are presented as **Figure 4** and **Figure 5**. The shallow zone groundwater contour map indicates that groundwater flow is predominantly towards the east-northeast, towards the Potomac River. Mounding was observed around MW-08S, MW-51S, MW-108, RW-28S, and RW-117S. Drawdown was observed around RW-05S, RW-10S, and RW-25S. The deep zone groundwater contour map indicates that groundwater flow is predominantly to the east-northeast towards the Potomac River. Drawdown is observed around RW-25, RW-31 and RW-51. The calculated hydraulic gradient at the site ranged from approximately 0.012 feet per foot in the shallow zone to approximately 0.03 feet per foot in the deep zone during the February 2017 monitoring event.

2.2 HEADSPACE VAPOR MONITORING

Monitoring well vapor headspace readings were collected at select groundwater wells on February 21, 2017 using a photoionization detector (PID) and a GEM 2000 landfill gas meter. The PID was fitted with a 10.6 electron volt bulb and was calibrated using a factory-supplied calibration gas standard (100 parts per million

[ppm] isobutylene) prior to use.

To obtain reproducible and stable readings, a vapor monitoring well cap was inserted securely into the well, and the PID and landfill gas meter were used to record VOC, oxygen, carbon dioxide, and methane concentrations. This arrangement allows for the withdrawal of air from the well through the PID and landfill gas meter pumps while minimizing the exchange of ambient air. The PID and landfill gas meter responses were recorded in the field book after the stabilization period.

Detailed PID and landfill gas meter response data are presented in **Table 4** – Historical Groundwater Field Parameters Data Summary.

2.3 GROUNDWATER SAMPLING

On February 21 and 22, 2017, groundwater samples were collected from 25 groundwater monitoring/recovery wells (MW-01S, MW-08S, MW/RW-10S, MW/RW-14, MW-16, MW/RW-25, MW-27, MW/RW-31, MW-51S, MW/RW-51, MW/RW-72, MW-106, MW-121, MW-122, MW/RW-123S, RW-1, RW-05S, MW/RW-05, RW-25S, RW-28S, RW-30S, RW-116S, RW-117S, RW-118S and RW-119S) and 6 temporary wells (TW-03, TW-04, TW-05, TW-06, TW-07, and TW-14) using disposable bailers or dedicated sampling ports. Monitoring well MW-121 was sampled on March 7, 2017 and analyzed for naphthalene. Temporary well TW-06 was re-sampled on March 29, 2017 due to an anomalous concentration of TPH-DRO. Monitoring well MW-25S could not be sampled due to the presence of LNAPL. Monitoring wells MW/RW-72S, TW-12S, MW-107, and MW-108 were not sampled during the 1st Quarter 2017 sampling event since the wells had insufficient water. The sampling plan is presented in **Table 2**.

Each monitoring well was gauged prior to purging and sampling, and gauging data is presented in **Table 3**. Prior to the collection of groundwater samples, a minimum of three well volumes of water was purged from each monitoring well using purge bailers. Purge bailers were decontaminated prior to purging each well. System wells with pumps were sampled using sampling ports at the well heads. Select wells containing minimal volumes of water were not purged, and grab samples were immediately collected. Purge water was containerized in 55-gallon drums and stored on site for proper disposal. On March 6, 2017, Triumvirate pumped out one drum and transported the purge water to their facility in Baltimore, MD. Waste documentation is included in **Attachment A**. Groundwater samples were collected directly in laboratory provided bottleware, packaged on ice in coolers, and transported under proper chain of custody to Eurofins Lancaster Laboratories Environmental (Eurofins) in Lancaster, PA. Samples were requested to be analyzed for the following:

- Quarterly parameters (select wells)
 - Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO)
 - BTEX
 - Naphthalene
- Biological indicator parameters (select wells)
 - Alkalinity
 - Nitrate (NO_3^{1-})
 - Nitrite (NO_2^{1-})

- Manganese (Mn^{2+})
- Ferrous Iron (Fe^{2+})
- Sulfate (SO_4^{2-})
- Methane

TPH-DRO, BTEX, and naphthalene analytical results are presented in the Historical Groundwater Monitoring and Analytical Data Summary included as **Table 3** and discussed further in **Section 2.4**. Concentration trend graphs are included as **Attachment B** and discussed further in **Section 2.4**. The analytical results for biological indicator parameters are presented in the Historical Groundwater Biostimulation Analytical Data Summary provided as **Table 5** and discussed further in **Section 2.4**.

The complete laboratory reports and chain of custody documentation for the groundwater sampling event conducted in February and March 2017 are included in **Attachment C**.

2.4 GROUNDWATER ANALYTICAL FINDINGS

During the 1st Quarter 2017, 31 monitoring, recovery and temporary wells were sampled for TPH-DRO and two were sampled for BTEX and naphthalene during the quarterly groundwater sampling event in February. Current and historical BTEX, methyl tert-butyl ether (MTBE), tert-butyl alcohol, 1,2-dibromoethane, 1,2-dichloroethane, naphthalene, and TPH-GRO data are also presented for select wells in the Historical Groundwater Monitoring and Analytical Data Table (**Table 3**). Two TPH-DRO contour maps representing shallow zone data and deep zone data, respectively, from February's sampling event are presented as **Figure 6** and **Figure 7**. The results from the collection and analysis of groundwater samples during the 1st Quarter 2017 are presented below:

- TPH-DRO was detected in 30 of the 31 groundwater monitoring wells sampled during the quarterly sampling event in February, with a maximum concentration of 1,200,000 micrograms per liter ($\mu\text{g/L}$) in recovery well MW/RW-10S. TPH-DRO was also detected in all temporary wells sampled (TW-03, TW-04, TW-05, TW-06, TW-07 and TW-14), with a maximum concentration of 49,000 $\mu\text{g/L}$ in temporary well TW-06. A re-sampling event took place on March 29, 2017 for TW-06 with a resulting concentration of 10,000 $\mu\text{g/L}$.
- Benzene was detected in groundwater monitoring well MW-51S, with a concentration of 9 $\mu\text{g/L}$.
- Toluene was not detected during the February sampling event.
- Ethylbenzene was detected in groundwater monitoring well MW-51S, with a concentration of 12 $\mu\text{g/L}$.
- Total xylenes were detected in groundwater monitoring well MW-51S, with a concentration of 3 $\mu\text{g/L}$.
- Naphthalene was detected in groundwater monitoring well MW-51S, with a concentration of 1 (J) $\mu\text{g/L}$. The J qualifier indicates the result is estimated. Naphthalene was not detected in monitoring well MW-121, which had exceeded the remedial goal of 10 $\mu\text{g/L}$ during 4th Quarter 2016.

Concentration trend graphs are presented in **Attachment B**, showing historical and current benzene, naphthalene, and TPH-DRO concentrations, depths to water, and depths to LNAPL for select monitoring, recovery, and temporary wells. Trends observed as of 1st Quarter 2017 are presented below:

- TPH-DRO concentrations have an overall increasing trend in wells MW-01S, MW/RW-10S, MW/RW-14, MW-51S, MW/RW-123S, RW-05S, RW-28S, RW-116S, and RW-119S. TPH-DRO concentrations have an overall decreasing trend in wells MW/RW-05, MW-08S, MW/RW-25, MW/RW-31, MW/RW-51, MW/RW-72, TW-03, TW-04, TW-06, TW-07, RW-1, RW-117S, and RW-118S. TPH-DRO concentrations are relatively stable in wells MW-25S, MW-27, RW-30S, and MW/RW-72S. There is not sufficient data to show a trend in recovery well RW-25S due to the presence of LNAPL in the well until May 2016.
- In wells that have been sampled for naphthalene enough times to establish a trend, an overall decreasing trend is observed in wells MW-27, MW/RW-72, TW-03, TW-04, TW-06, and TW-07.
- In wells that have been sampled for benzene enough times to establish a trend, an overall decreasing trend is observed in MW/RW-72 and TW-04. Wells TW-03, TW-06, and TW-07 have an overall stable trend with low or non-detect concentrations.

Biological indicator data and field parameters were collected from select wells within the shallow and deep zone aquifers in order to evaluate the natural attenuation potential of the aquifers and to determine the dominant terminal electron accepting process. A Historical Groundwater Biostimulation Analytical Data Summary is presented as **Table 5**, and a Historical Groundwater Field Parameters Data Summary is presented as **Table 4**.

The following chart details the anticipated changes in groundwater chemistry in order of reaction preference during various stages of biodegradation from aerobic to highly anaerobic conditions. Increased concentrations of alkalinity, nitrite, dissolved manganese, ferrous iron, and methane and decreased concentrations of oxidation reduction potential (ORP), dissolved oxygen (DO), nitrate, and sulfate are indicators of anaerobic activity.

	Time →					
	← Distance from Source					
	Aerobic Respiration	Nitrate Reduction	Manganese Reduction	Ferric Iron Reduction	Sulfate Reduction	Methanogenesis
	Aerobic	Anaerobic				
Electron Acceptor	O ₂	NO ₃ ⁻	Mn ⁴⁺	Fe ³⁺ (solid)	SO ₄ ²⁻	CO ₂
Metabolic By-Product	CO ₂	N ₂ , CO ₂	Mn ²⁺	Fe ²⁺ (dissolved)	H ₂ S	CH ₄ (methane)
Expected Relationship with High BTEX	O ₂ ↓	NO ₃ ⁻ ↓	Mn ²⁺ ↑	Fe ²⁺ ↑	SO ₄ ²⁻ ↓	CH ₄ ↑

The observed concentrations of DO, ORP, carbonate alkalinity, nitrate nitrogen, nitrite nitrogen, manganese, ferrous iron, sulfate as SO_4^{2-} , and methane generally provide supporting evidence that due to system start-up in March 2016, site conditions within the dissolved hydrocarbon plume have changed from anaerobic to aerobic. Based on a review of the biological indicator data and the field parameters, the following observations have been made:

- The groundwater quality data from monitoring wells MW-112S (shallow zone aquifer) and MW-114 (deep zone aquifer) are considered to be representative of background conditions due to the historical relative absence of dissolved-phase hydrocarbons and aerobic conditions within these wells.
- Prior to the start-up of the remediation system, DO concentrations within the dissolved hydrocarbon plume in both the shallow and deep zone aquifers were indicative of anaerobic conditions. During the 1st Quarter 2017, DO concentrations were considered aerobic ($> 1.0 \text{ mg/L}$) in four of the ten measured shallow zone aquifer wells (RW-1, RW-28S, RW-30S, and RW-116S) and in eleven of the fourteen measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-51, MW/RW-72, MW-106, TW-03, TW-05, TW-06, and TW-07). DO concentrations were considered anaerobic in seven wells during the quarterly sampling event (MW-01S, MW-RW-10S, MW-51S, MW/RW-123S, MW-121, MW-122, and RW-05S). Five of these wells, MW-01S, MW-RW-10S, MW-51S, MW/RW-123S, and RW-05S became anaerobic since the last time they were measured.
- ORP values were positive in six of the ten measured shallow aquifer zone wells (MW/RW-10S, MW/RW-123S, RW-05S, RW-28S, RW-30S, and RW-116S) and in twelve of the fourteen measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-51, MW/RW-72, MW-106, RW-1, TW-03, TW-05, TW-06 and TW-07) during the quarterly groundwater monitoring event in February. Positive ORP values are indicative of aerobic conditions. The ORP value in MW/RW-51, MW/RW-123S, RW-30S, and TW-06 was negative during the 4th quarter 2016 and became positive during this sampling event. Wells with negative ORP readings included MW-01S and MW-51S in the shallow zone aquifer and MW-121 and MW-122 in the deep zone aquifer.
- Alkalinity generally shows a decreasing trend at a majority of monitoring wells where a trend can be established; additional decreases were observed in a number of wells during the 1st Quarter 2017. At monitoring wells MW/RW-14, MW-27, MW/RW-72S, and TW-06 declines in alkalinity are the most notable. The pH levels in wells across the site remained favorable for biological degradation during the 1st quarter 2017. The pH is below 6.0 at only 6 of the 25 wells where it was measured. It is below 5.0 at only 2 of the monitoring wells (MW-106 and TW-07).
- Nitrate was detected in neither of the 2 shallow zone aquifer wells where it was measured and in 2 of the 9 deep zone aquifer wells where it was measured (MW/RW-14 and MW/RW-72). Slight decreases in nitrate concentrations (an indicator nitrate reduction is occurring) were observed in MW/RW-14 and MW-27; both of these wells had shown previous rebounds in nitrate concentrations.
- Nitrite, an intermediate in denitrification, was detected at low levels in one (MW-01S) of the shallow zone aquifer wells where it was measured and in four (MW-121, TW-03, TW-05, and TW-

06) of the deep zone aquifer wells where it was measured; these wells all showed slight increases in nitrite compared with the last measurements taken. However, these increases did not correlate with decreases in nitrate in the wells.

- Manganese concentrations have decreased in a majority of wells across the site since system start-up, although most wells still exceed background concentrations. This indicates that manganese reduction formerly occurring at the site has largely diminished. The only wells that have shown consistent increased dissolved manganese concentrations (an indicator manganese reduction is occurring) since system startup are TW-05 and TW-06. Supplying oxygen to these areas should continue to be a focus of the biosparge system.
- Ferrous iron concentrations have generally decreased since system operation began. This reduction is likely due to the increase in oxygen in the system and the conversion of ferrous iron to ferric iron. However, this trend is not consistent across the site. Increases in ferrous iron concentrations have been observed in monitoring wells MW-01S, MW/RW-10S, MW/RW-72S, TW-03, TW-05 and TW-06, suggesting iron reduction may be occurring in these areas.
- Sulfate concentrations have remained stable or have increased in the majority of wells since system operation began, suggesting that sulfate is not currently a significant electron acceptor in the aquifer. Increases in sulfate have been observed and may be due to historic power plant operations. Sulfate concentrations continue to decrease in MW-51S, which may be due to the introduction of oxygen with system operation.
- Methane concentrations were generally non-detect or showed a decrease during 1st quarter 2017 with the exception of two wells. Low or decreasing methane concentrations are consistent with the introduction of oxygen into the subsurface and a reduction in contaminant mass. MW/RW-14 had a slight but insignificant increase in methane since 4th quarter 2016 and TW-05 had a more significant increase in methane since 4th quarter 2016. Based on the TPH-DRO concentration in TW-05 of 61 J µg/L, the increasing methane concentration is not a concern.

Overall, the biological indicator data and field parameters indicate that the remediation system continues to successfully introduce oxygen into the subsurface, particularly in the source area.

3.0 REMEDIATION SYSTEM OPERATION

The remediation system operated during the 1st Quarter 2017, in accordance with the CAP-II, which was approved by the VDEQ on March 17, 2015. The remediation system consists of three separate systems: total phase extraction (TPE), pump and treat (P&T), and biosparge. The locations of the current wells used for each system are shown on the Remediation System Layout Map (**Figure 9**). The TPE, P&T, and biosparge systems all operated during the 1st Quarter 2017. The reporting period for the 1st Quarter 2017 was from December 22-March 29, 2017, and was controlled by the O&M schedule. Activities of note completed during the 1st Quarter 2017 included:

- Bi-monthly system operations and/or maintenance (O&M) visits were performed on January 9, 19 and 30, February 6 and 22, March 7 and 29, including monthly system sampling and gauging of select wells.



- Monthly Self-Monitoring Reports (SMRs) for 1st Quarter 2017 were submitted to AlexRenew on February 3, March 7, and April 4, 2017.
- On January 10, 2017, GES performed air compressor and TPE blower maintenance, including oil changes, oil filter replacement, air filter replacement, inline condensation and oil coalescing filters, and greasing of motors.
- On January 10, 2017, following a power outage from utility work in the area, the air compressor was found to be in alarm. After troubleshooting the air compressor, the system fabricator (Product Recovery Management) made two visits to the site on January 19th and January 30th to repair the air compressor. The repairs included replacement of a failed relay and dual voltage transformer. The P&T and biosparge systems were down from January 10th to the 30th, but the TPE system operated during that time.
- On February 22, 2017, the pump in recovery well RW-51 was pulled and cleaned, and a repair was made. The RW-31 pump was pulled for repair and reinstalled on February 28, 2017.
- On February 28, 2017, the pump in recovery well RW-14 was not operating on arrival. The pump was operational on departure following cleaning and maintenance.
- On March 6, 2017 an oil/water separator (OWS) and system-cleaning event was conducted and one groundwater purge drum was pumped out and properly transported, treated, and disposed. The Bill of Lading for the wastewater from system cleaning and purged groundwater/LNAPL waste is appended in **Attachment A – Waste Documentation**.
- On March 28, 29 and April 6, 2017, TPE upgrades were completed. TPE recovery was discontinued at recovery wells RW-72S and RW-118S and recovery was started at monitoring wells MW-01S, MW-25S, and MW-51S.

The TPE system operated for approximately 94 days out of 97 days during the reporting period, with a system uptime of 97%. The average vapor flow rate for the reporting period was 362 standard cubic feet per minute (scfm). The total groundwater recovered for the reporting period was 14,115 gallons (gal) with an average flow rate of 0.1 gallons per minute (gpm). The cumulative groundwater flow was 73,252 gallons by the end of the reporting period. The estimated vapor C1-C10 hydrocarbon recovery for the reporting period was 685 pounds (lbs), and the estimated groundwater TPH-DRO recovery for the reporting period was 3.8 lbs. A TPE Operational Summary is included as **Table 6**, TPE recovery data is included in **Table 9**, and system sampling analytical reports are included in **Attachment D**.

The P&T system operated for approximately 74 days out of 97 days during the reporting period, with a system uptime of 77%. The total groundwater flow for the reporting period was 136,320 gallons, with an average flow rate of 1.3 gpm. The cumulative groundwater flow since system startup was 893,837 gallons. The estimated groundwater TPH-DRO recovery for the reporting period was 0.5 lbs. An additional 0.0 lbs of LNAPL was recovered by the oil/water separator and manual bailing. A P&T Operational Summary is included as **Table 7**, P&T recovery data is included in **Table 9**, and analytical reports are included in **Attachment D**.



The biosparge system operated for approximately 76 days out of 97 days during the reporting period, with a system uptime of 78%. The average flow for each of the biosparge wells on the first leg (SP-01 through SP-08) was 0.7 scfm and the average flow for the wells on the second leg (SP-09 through SP-13) was 0.4 scfm. A Biosparge Operational Summary is included as **Table 8** and recovery data is provided in **Table 9**.

The total estimated hydrocarbon recovery to date is 2,899 lbs (396 gallons). This includes 99 lbs of dissolved-phase, 2,715 lbs of vapor-phase, and 85 lbs of liquid-phase. The liquid-phase recovery is inclusive of previously bailed LNAPL and recovery from the TPE and P&T systems. A Hydrocarbon Recovery Summary is included as **Table 9**.

Hydrocarbon Recovery:

Dissolved-Phase Hydrocarbons (Period/Cumulative): **4.4 lbs / 99 lbs**

Vapor-Phase Hydrocarbons (Period/Cumulative): **685 lbs / 2,715 lbs**

Liquid-Phase Hydrocarbons (Period/Cumulative): **0 lbs / 85 lbs**

Total Hydrocarbon Recovery (Period/Cumulative): **689 lbs / 2,899 lbs**

3.1 PERMIT SUMMARY

Special Use Permit

Required for: Work along the NPS Trail

Issued by: National Parks Service

Status: Special Use Permit NCR GWMP 6000-15-088 is effective 2/11/2016 – 10/31/2018.

Significant Industrial User Permit:

Required for: Sanitary sewer discharges less than 25,000 gallons per day with low risk of negatively impacting the sanitary sewer system.

Issued by: AlexRenew

Status: AlexRenew issued an approval letter on January 13, 2016, pending results from initial system effluent sampling. Following receipt of the preliminary system effluent sampling results, final approval to discharge was granted on March 11, 2016. Monthly SMRs were submitted to AlexRenew during the 1st Quarter 2017.

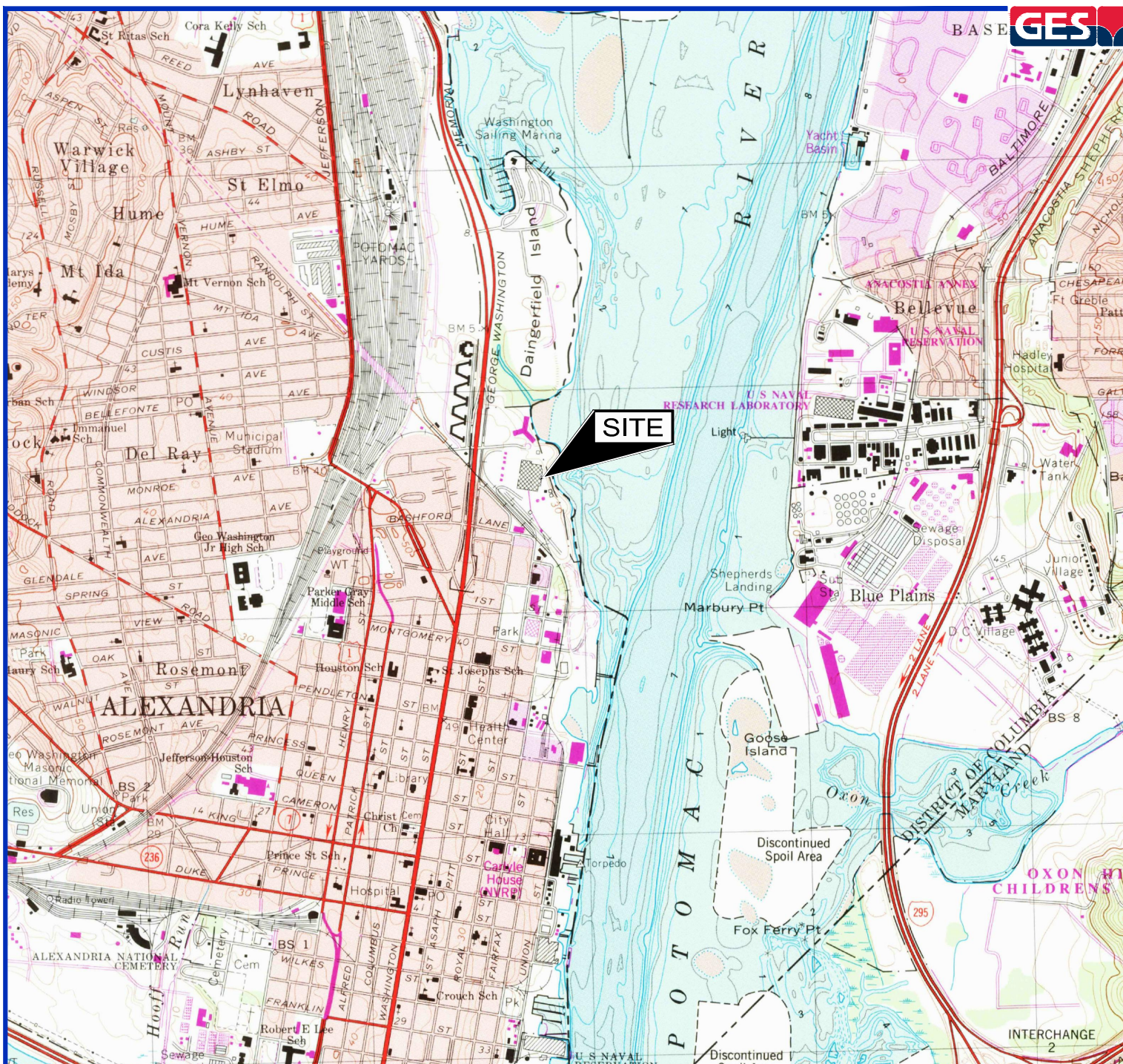
Air Permit

A Minor New Source Review permit would only be required for the site if the uncontrolled emissions exceed 25 tons per year for VOCs for a new source. Because the maximum uncontrolled emissions were projected to be less than 25 tons per year, a Minor New Source Review permit was not required. Current discharge rates are far below 25 tons per year. Nuisance odors have not been a problem since system start-up.

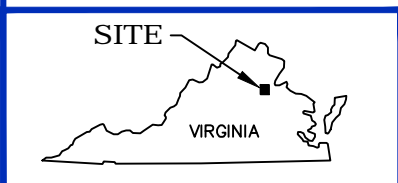


4.0 FUTURE ACTIVITIES (2ND QUARTER 2017)

- Routine quarterly groundwater sampling for petroleum and biological indicator parameters in accordance with the groundwater sampling plan;
- Monthly gauging of select wells;
- Twice monthly system O&M field events, including system sampling;
- Submittal of quarterly CMR; and
- Submittal of monthly SMRs.



REFERENCE: "ALEXANDRIA, VIRGINIA"
7.5' QUADRANGLE, USGS, (1965, PHOTOREVISED 1983,
BATHYMETRY 1982).



QUADRANGLE LOCATION
NO SCALE

DRAFTED BY:

JW

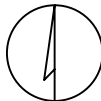
CHECKED BY:

NG

REVIEWED BY:

AC

NORTH



SITE LOCATION MAP

FORMER POTOMAC RIVER GENERATING STATION ALEXANDRIA, VIRGINIA

Groundwater & Environmental Services, Inc.
1350 BLAIR DR., SUITE A, CROFTON, MD 21113

SCALE IN FEET

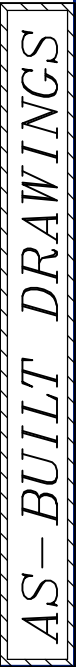


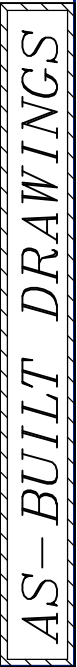
DATE

7-17-15

FIGURE

1





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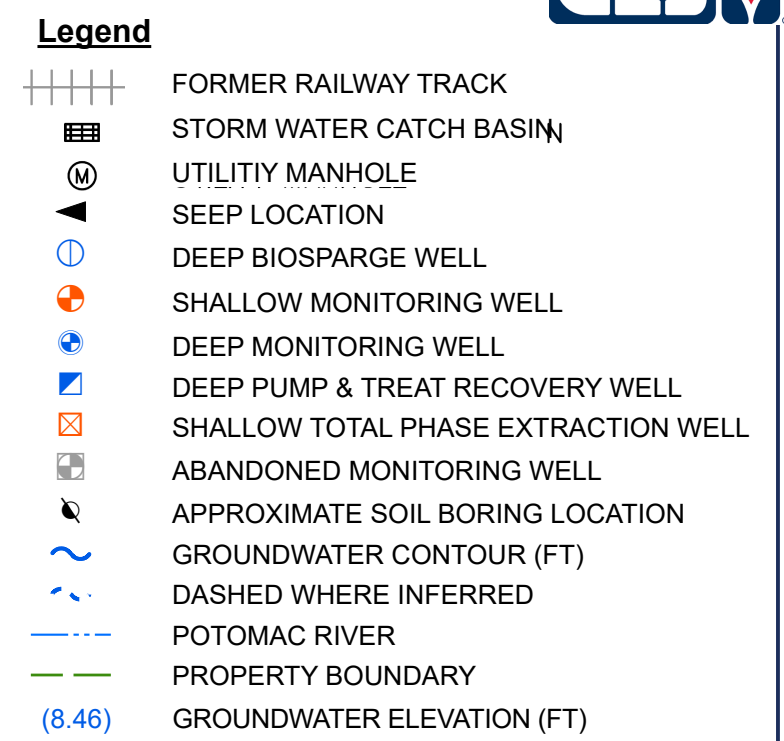




Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- GROUNDWATER CONTOUR (FT)
- DASHED WHERE INFERRED
- SEEP LOCATION
- DEEP BIOSPARGE WELL
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- SHALLOW TOTAL PHASE EXTRACTION WELL
- ABANDONED MONITORING WELL
- APPROXIMATE SOIL BORING LOCATION
- POTOMAC RIVER
- PROPERTY BOUNDARY
- GROUNDWATER ELEVATION (FT)
- NOT MEASURED

NOTE:
MW-25S was gauged on February 21, 2017 and measured 0.02 feet of LNAPL.
*RW-10S, RW-116S, RW-119S, and MW-01S were excluded from contour analysis due to anomalous groundwater elevations.

DRAFTED BY: GKS	POTENTIOMETRIC SURFACE SHALLOW ZONE AQUIFER - FEBRUARY 21, 2017		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY: AAB	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
NORTH	SCALE IN FEET 0 50	DATE 4-24-17	FIGURE 4



DRAFTED BY: GKS	POTENTIOMETRIC SURFACE DEEP ZONE AQUIFER - FEBRUARY 21, 2017		
	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
CHECKED BY: DMC	Groundwater and Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
REVIEWED BY: AAB	SCALE IN FEET 	DATE 4-24-17	FIGURE 5
NORTH 			

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Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- SEEP LOCATION
- DEEP BIOSPARGE WELL
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- SHALLOW TOTAL PHASE EXTRACTION WELL
- ABANDONED MONITORING WELL
- APPROXIMATE SOIL BORING LOCATION
- TPH-DRO CONCENTRATION CONTOUR ($\mu\text{g/L}$)
- DASHED WHERE INFERRED
- LNAPL OBSERVED
- LNAPL CONTOUR
- (1,600) TPH-DRO CONCENTRATION ($\mu\text{g/L}$)
- (NS) NOT SAMPLED
- (0.13) LNAPL THICKNESS (FT)

Note:
1) TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics
2) $\mu\text{g/L}$: Micrograms per liter
3) MW/RW-72S, TW-12S, MW-107, and MW-108 could not be sampled due to an insufficient amount of water.
4) MW-16S, MW-103, MW-104, and MW-105 were not sampled since they are currently not in the sampling plan.

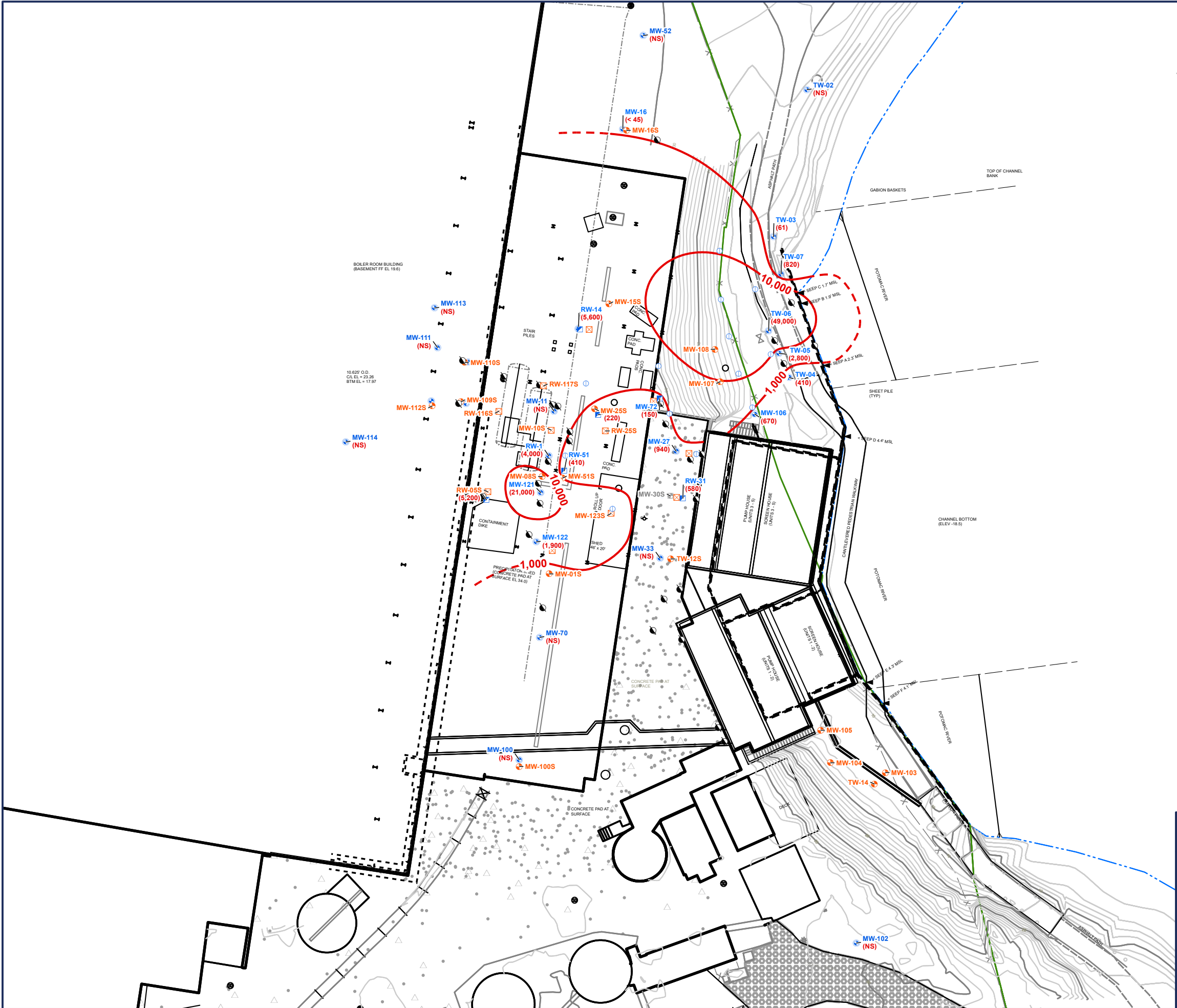
DRAFTED BY: GKS	TPH-DRO CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER - FIRST QUARTER 2017		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY: AAB	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
NORTH 	SCALE IN FEET 	DATE 4-22-17	FIGURE 6

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Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- SEEP LOCATION
- DEEP BIOSPARGE WELL
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- SHALLOW TOTAL PHASE EXTRACTION WELL
- ABANDONED MONITORING WELL
- APPROXIMATE SOIL BORING LOCATION
- TPH-DRO CONCENTRATION CONTOUR (UG/L)
- DASHED WHERE INFERRED
- (1,100) TPH-DRO CONCENTRATION (UG/L)
- (NS) NOT SAMPLED



Note:

TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics

UG/L: Micrograms per liter

DRAFTED BY:	GKS		
CHECKED BY:	DMC		
REVIEWED BY:	AAB		
NORTH			
TPH-DRO CONCENTRATION CONTOURS DEEP ZONE AQUIFER - FIRST QUARTER 2017			
FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA			
Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113			
SCALE IN FEET	DATE	FIGURE	
	4-22-17	7	

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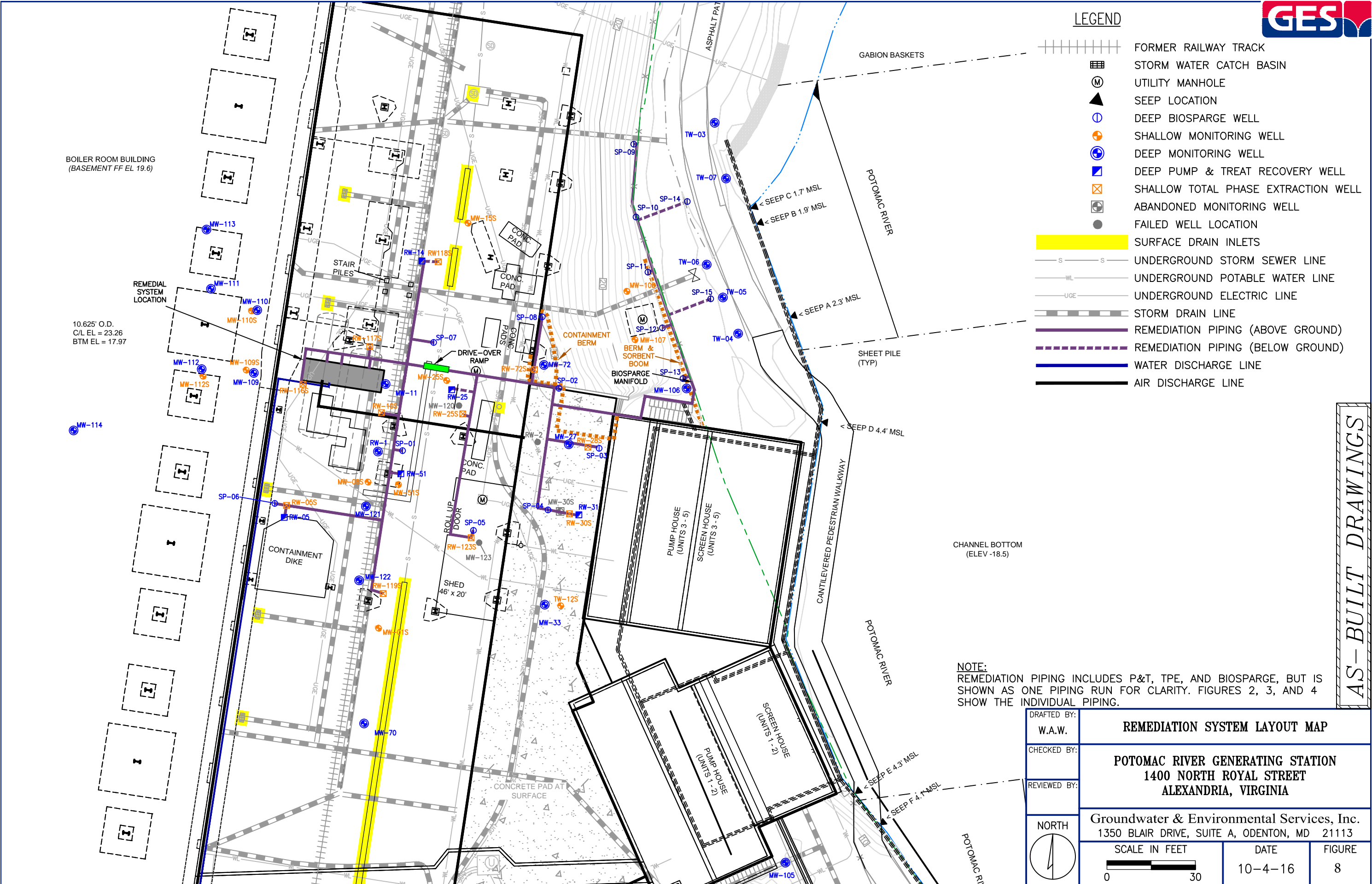


Table 1

WELL CONSTRUCTION TABLE

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Well type	Aquifer Zone Designation	Date Installed	Well Diameter (in)	Total Depth of Well from Ground Surface (ft)	Length of Casing (ft)	Length of Screen (ft)
MW-01S	MW	Shallow	7/29/2014	4	27	17	10
MW-05 / RW-05	P&T	Deep	8/1/2014	4	35	25	10
MW-08S	MW	Shallow	7/23/2014	4	25	15	10
MW-10S / RW-10S	TPE	Shallow	7/28/2014	4	27	17	10
MW-11	MW	Deep	7/24/2014	4	35	25	10
MW-14 / RW-14	P&T	Deep	7/29/2014	4	38.5	28.5	10
MW-15S	MW	Shallow	7/31/2014	4	26	16	10
MW-16S	MW	Shallow	8/13/2014	2	25	15	10
MW-16	MW	Deep	8/14/2014	2	36	26	10
MW-25S	MW	Shallow	8/5/2014	4	26	16	10
MW-25 / RW-25	P&T	Deep	7/24/2014	4	35	25	10
MW-27	MW	Deep	7/21/2014	4	35	25	10
MW-31 / RW-31	P&T	Deep	8/5/2014	4	36	26	10
MW-33	MW	Deep	8/5/2014	4	35	25	10
MW-51S	MW	Shallow	8/6/2014	4	25.5	15.5	10
MW-51 / RW-51	P&T	Deep	7/22/2014	4	37	27	10
MW-52	MW	Deep	8/14/2014	2	36	26	10
MW-70	MW	Deep	8/13/2014	2	36	26	10
MW-72S / RW-72S	TPE	Shallow	8/7/2014	4	25	15	10
MW-72 / RW-72	MW	Deep	7/30/2014	4	35	25	10
MW-100S	MW	Shallow	8/12/2014	2	24.5	14.5	10
MW-100	MW	Deep	8/12/2014	2	37.5	27.5	10
MW-102	MW	Deep	8/11/2014	2	37	27	10

Table 1

WELL CONSTRUCTION TABLE

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Well type	Aquifer Zone Designation	Date Installed	Well Diameter (in)	Total Depth of Well from Ground Surface (ft)	Length of Casing (ft)	Length of Screen (ft)
MW-103	MW	Shallow	7/23/2014	2	15	5	10
MW-104	MW	Shallow	7/24/2014	2	12	2	10
MW-105	MW	Shallow	7/24/2014	2	10	1	9
MW-106	MW	Deep	7/22/2014	2	10	3	7
MW-107	MW	Shallow	7/22/2014	2	11	3	8
MW-108	MW	Shallow	7/23/2014	2	10	4	6
MW-109S	MW	Shallow	8/20/2014	4	13.5	3.5	10
MW-109	MW	Deep	8/19/2014	4	24	14	10
MW-110S	MW	Shallow	8/20/2014	4	13	3	10
MW-110	MW	Deep	8/20/2014	4	24	14	10
MW-111	MW	Deep	8/18/2014	2	22	12	10
MW-112S	MW	Shallow	8/12/2014	4	13	3	10
MW-112	MW	Deep	8/12/2014	4	24	14	10
MW-113	MW	Deep	8/19/2014	2	23	13	10
MW-114	MW	Deep	8/21/2014	2	23	13	10
MW-121	MW	Deep	7/2/2015	4	37	27	10
MW-122	MW	Deep	6/24/2015	4	37	27	10
MW-123S / RW-123S	TPE	Shallow	7/7/2015	4	25	21	4
TW-02	MW	Deep	12/12/2013	1	24	14	10
TW-03	MW	Deep	12/12/2013	1	15	5	10
TW-04	MW	Deep	12/13/2013	1	15	5	10
TW-05	MW	Deep	12/13/2013	1	10	0	10
TW-06	MW	Deep	12/13/2013	1	15	5	10

Table 1

WELL CONSTRUCTION TABLE

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Well type	Aquifer Zone Designation	Date Installed	Well Diameter (in)	Total Depth of Well from Ground Surface (ft)	Length of Casing (ft)	Length of Screen (ft)
TW-07	MW	Deep	12/13/2013	1	15	5	10
TW-12S	MW	Shallow	12/18/2013	1	25	15	10
TW-14	MW	Shallow	1/15/2014	1	5.5	0.5	5
RW-1	MW	Deep	10/2/2014	4	41	26	15
RW-05S	TPE	Shallow	6/29/2015	4	26	21	5
RW-25S	TPE	Shallow	7/7/2015	4	25	20	5
RW-28S	TPE	Shallow	7/6/2015	4	27	22	5
RW-30S	TPE	Shallow	6/23/2015	4	29	24	5
RW-116S	TPE	Shallow	6/26/2015	4	26	21	5
RW-117S	TPE	Shallow	6/23/2015	4	25	20	5
RW-118S	TPE	Shallow	6/25/2015	4	25	20	5
RW-119S	TPE	Shallow	6/29/2015	4	26	21	5
SP-01	SP	Deep	10/2/2014	2	35	32	3
SP-02	SP	Deep	9/30/2014	2	36	33	3
SP-03	SP	Deep	6/30/2015	2	36	33	3
SP-04	SP	Deep	7/1/2015	2	36	33	3
SP-05	SP	Deep	7/8/2015	2	36	33	3
SP-06	SP	Deep	6/30/2015	2	36	33	3
SP-07	SP	Deep	6/25/2015	2	36	33	3
SP-08	SP	Deep	7/8/2015	2	36	33	3
SP-09	SP	Deep	4/12/2016	2	21	18	3
SP-10	SP	Deep	4/7/2016	2	24.5	21.5	3
SP-11	SP	Deep	4/11/2016	2	19.5	16.5	3

Table 1

WELL CONSTRUCTION TABLE

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Well type	Aquifer Zone Designation	Date Installed	Well Diameter (in)	Total Depth of Well from Ground Surface (ft)	Length of Casing (ft)	Length of Screen (ft)
SP-12	SP	Deep	4/13/2016	2	19	16	3
SP-13	SP	Deep	4/13/2016	2	19	16	3
SP-14	SP	Deep	4/8/2016	2	18	15	3
SP-15	SP	Deep	4/8/2016	2	15	12	3

Notes:

Field parameters include pH, specific conductance, temperature, oxidation reduction potential (ORP), dissolved oxygen (DO), headspace carbon dioxide concentration, headspace volatile organic compound concentration, headspace oxygen concentration

Volatile organic compound (VOC) groundwater samples were analyzed for benzene, toluene, ethylbenzene, total xylenes, and naphthalene.

Biostimulation parameters include alkalinity, nitrate nitrogen, manganese, ferrous iron, sulfate as SO_4^{2-} , and methane.

- = Not available

ft = Feet

in = Inches

NA = Not applicable

MW = Monitoring Well

P&T = Pump & Treat Well

SP = Air Sparge Point

TPE = Total Phase Extraction Well

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

VDEQ = Virginia Department of Environmental Quality

DDOE = District Department of the Environment



Table 2

GROUNDWATER MONITORING AND SAMPLING PLAN

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Aquifer Zone	Field Parameters								Laboratory Parameters								Sample Method	Comments
		pH	Specific Conductance	Temperature	Oxidation Reduction Potential	Dissolved Oxygen	Headspace CO2 concentration	Headspace VOC concentration	Headspace O2	TPH-DRO C10-C28 (SW-846 8015B)	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ₂ ⁻² (EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfate SO ₄ ²⁻ (EPA 300.0)	Methane (RSKSOP-175 modified)		
MW-01S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-05 / RW-05	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A							P&S	
MW-08S	Shallow									Q	A							P&S	
MW-10S / RW-10S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-11	Deep									A								P&S	
MW-14 / RW-14	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-15S	Shallow									A								P&S	
MW-16S	Shallow																	NS	Gauge only
MW-16	Deep									Q	A							P&S	
MW-25S	Shallow									Q	A							P&S	LNAPL**
MW-25 / RW-25	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A							P&S	
MW-27	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	
MW-31 / RW-31	Deep									Q								P&S	
MW-33	Deep									A								P&S	
MW-51S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-51 / RW-51	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A							P&S	
MW-52	Deep																	NS	Gauge only
MW-70	Deep																	NS	Gauge only
MW-72S / RW-72S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-72 / RW-72	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-100S	Shallow	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	P&S	

Table 2

GROUNDWATER MONITORING AND SAMPLING PLAN

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Aquifer Zone	Field Parameters								Laboratory Parameters								Sample Method	Comments
		pH	Specific Conductance	Temperature	Oxidation Reduction Potential	Dissolved Oxygen	Headspace CO ₂ concentration	Headspace VOC concentration	Headspace O ₂	TPH-DRO C10-C28 (SW-846 8015B)	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ₂ ⁻² (EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfate SO ₄ ²⁻ (EPA 300.0)	Methane (RSKSOP-175 modified)		
MW-100	Deep	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	P&S	
MW-102	Deep																	NS	Gauge only
MW-103	Shallow																	NS	Gauge only
MW-104	Shallow																	NS	Gauge only
MW-105	Shallow																	NS	Gauge only
MW-106	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-107	Shallow									A								P&S	
MW-108	Shallow									Q								P&S	
MW-109S	Shallow									A								P&S	
MW-109	Deep									A								P&S	
MW-110S	Shallow									A								P&S	
MW-110	Deep									A								P&S	
MW-111	Deep									A								P&S	
MW-112S	Shallow									A								P&S	
MW-112	Deep									A								P&S	
MW-113	Deep									A								P&S	
MW-114	Deep									A								P&S	
MW-121	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	P&S	
MW-122	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	
MW-123S / RW-123S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
TW-02	Deep																	NS	Gauge only
TW-03	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	LF	Begin biostimulation sampling 1Q16
TW-04	Deep									Q								LF	
TW-05	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	LF	Begin biostimulation sampling 1Q16
TW-06	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	LF	

Table 2

GROUNDWATER MONITORING AND SAMPLING PLAN

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Aquifer Zone	Field Parameters								Laboratory Parameters								Sample Method	Comments
		pH	Specific Conductance	Temperature	Oxidation Reduction Potential	Dissolved Oxygen	Headspace CO ₂ concentration	Headspace VOC concentration	Headspace O ₂	TPH-DRO C10-C28 (SW-846 8015B)	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ₂ ⁻² (EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfate SO ₄ ²⁻ (EPA 300.0)	Methane (RSKSOP-175 modified)		
TW-07	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q								LF	Begin collection of field parameters 1Q16
TW-12S	Shallow									Q								P&S	
TW-14	Shallow									Q	A							LF	
RW-1	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-05S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-25S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q	A							P&S	
RW-28S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-30S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	Begin collection of field parameters 1Q16
RW-116S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-117S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-118S	Shallow									Q								P&S	
RW-119S	Shallow									Q								P&S	

Notes:

Select annual samples were collected during the 4th quarter of 2015. Moving forward, annual sampling to be completed in the 4th quarter of a year.

** - Wells with LNAPL will only be sampled when no measurable LNAPL is observed.

Q - Quarterly sampling frequency

A - Annual sampling frequency

P&S - Purge and Sample

LF - Low Flow Sampling

NS - No Sampling Planned

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-01S	08/08/2014	30.78	22.67	-	-	-	26.58	8.11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	08/11/2014	30.78	22.62	-	-	-	-	8.16	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	08/15/2014	30.78	22.60	-	-	-	-	8.18	-	-	-	-	-	-	-	-	-	-	-	2,670	-
MW-01S	08/18/2014	30.78	22.88	-	-	-	-	7.90	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	08/25/2014	30.87	22.27	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	09/02/2014	30.87	22.28	-	-	-	-	8.59	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	09/15/2014	30.87	22.61	-	-	-	-	8.26	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	09/22/2014	30.87	22.75	-	-	-	-	8.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	09/24/2014	30.87	22.95	-	-	-	-	7.92	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	10/01/2014	30.87	22.94	-	-	-	26.59	7.93	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	10/10/2014	30.87	23.06	-	-	-	-	7.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	10/20/2014	30.87	23.53	-	-	-	26.58	7.34	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	10/22/2014	30.87	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23,000	-
MW-01S	02/24/2015	30.87	25.89	25.74	0.15	-	26.65	5.11	15:24	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	02/26/2015	30.87	25.61	25.51	0.10	-	-	5.35	16:10	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/04/2015	30.87	25.63	25.52	0.11	-	-	5.34	14:21	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/11/2015	30.87	25.51	25.39	0.12	-	-	5.47	13:00	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/18/2015	30.87	25.14	25.03	0.11	-	-	5.83	11:19	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/26/2015	30.87	25.07	24.98	0.09	-	26.60	5.88	10:35	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/02/2015	30.87	25.06	24.96	0.10	-	26.60	5.90	11:33	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/08/2015	30.87	25.10	24.96	0.14	-	26.64	5.89	9:27	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/13/2015	30.87	24.92	24.83	0.09	-	-	6.03	10:35	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/23/2015	30.87	24.38	24.35	0.03	-	26.55	6.52	12:04	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/29/2015	30.87	24.38	24.34	0.04	-	26.60	6.53	14:29	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/04/2015	30.87	24.32	24.28	0.04	-	-	6.59	11:55	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/11/2015	30.87	24.37	24.31	0.06	-	-	6.55	10:55	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/21/2015	30.87	24.46	24.41	0.05	-	-	6.45	12:15	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/28/2015	30.87	24.65	24.54	0.11	-	26.55	6.32	11:50	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/02/2015	30.87	24.52	24.46	0.06	-	-	6.40	13:16	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/09/2015	30.87	24.12	24.10	0.02	-	-	6.77	10:43	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/16/2015	30.87	24.05	24.04	0.01	-	-	6.83	11:37	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/26/2015	30.87	23.72	-	-	-	26.50	7.15	10:43	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-01S	07/01/2015	30.87	23.25	23.24	0.01	-	-	7.63	12:34	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	07/08/2015	30.87	22.93	22.93	TRACE	TRACE	-	7.94	11:50	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/13/2015	30.87	22.72	-	-	-	-	8.15	9:42	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/20/2015	30.87	22.40	-	-	-	-	8.47	9:37	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/28/2015	30.87	22.43	-	-	-	26.69	8.44	10:56	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/04/2015	30.87	22.46	22.45	0.01	TRACE	26.56	8.42	10:35	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/11/2015	30.87	22.50	22.50	TRACE	TRACE	26.61	8.37	10:39	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/18/2015	30.87	22.63	-	-	-	-	8.24	10:46	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/24/2015	30.87	22.69	-	-	-	-	8.18	10:43	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/02/2015	30.87	22.90	22.88	0.02	TRACE	26.62	7.99	9:32	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/09/2015	30.87	22.96	22.95	0.01	-	26.60	7.92	11:17	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	09/17/2015	30.87	23.19	23.18	0.01	-	26.62	7.69	10:58	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	09/23/2015	30.87	23.07	23.06	0.01	TRACE	-	7.81	11:01	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/28/2015	30.87	23.10	23.10	TRACE	-	26.10	7.77	10:08	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	10/05/2015	30.87	23.09	23.09	TRACE	-	26.60	7.78	11:07	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	11/10/2015	30.87	23.59	-	-	-	-	7.28	13:10	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	12/01/2015	30.87	24.05	24.04	0.01	-	26.57	6.83	12:02	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	01/27/2016	30.87	23.98	23.98	TRACE	-	-	6.89	9:54	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	02/15/2016	30.87	23.54	-	-	-	-	7.33	9:40	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	03/14/2016	30.87	23.27	-	-	-	26.60	7.60	11:45	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	03/16/2016	30.87	23.16	-	-	-	26.60	7.71	12:46	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	04/21/2016	30.87	23.48	-	-	-	26.59	7.39	11:05	-	-	-	-	-	-	-	-	-	-	56,000	
MW-01S	05/23/2016	30.87	23.69	23.68	0.01	-	-	7.19	12:00	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/21/2016	30.87	22.93	-	-	-	-	7.94	11:17	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/21/2016	30.87	22.57	-	-	-	-	8.30	10:40	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/24/2016	30.87	22.96	-	-	-	26.67	7.91	11:07	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/25/2016	30.87	23.08	-	-	-	26.75	7.79	10:55	-	-	-	-	-	-	-	-	-	-	140,000	
MW-01S	11/28/2016	30.87	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	11/29/2016	30.87	25.61	25.48	0.13	0.02	26.58	5.37	11:50	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	12/22/2016	30.87	25.78	25.78	TRACE	TRACE	-	5.09	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	01/30/2017	30.87	23.57	-	-	-	-	7.30	10:40	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	02/21/2017	30.87	23.07	-	-	-	26.50	7.80	10:17	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-01S	02/22/2017	30.87	23.27	-	-	-	-	7.60	9:43	-	-	-	-	-	-	-	-	-	-	720,000	Strong odor, oily baile
MW-01S	03/28/2017	30.87	24.23	-	-	-	26.65	6.64	15:00	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	03/29/2017	32.69	26.13	-	-	-	27.90	6.56	12:50	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	07/24/2014	30.86	26.59	-	-	-	-	4.27	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	07/31/2014	30.86	22.08	-	-	-	24.35	8.78	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	08/08/2014	30.86	21.33	-	-	-	24.64	9.53	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	08/11/2014	30.86	21.42	-	-	-	-	9.44	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	08/15/2014	30.86	21.41	-	-	-	-	9.45	-	-	-	-	-	-	-	-	-	-	-	7,540	
MW-08S	08/18/2014	30.86	21.46	-	-	-	-	9.40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	08/25/2014	30.86	21.49	-	-	-	-	9.37	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	09/02/2014	30.86	21.45	-	-	-	-	9.41	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	09/15/2014	30.86	21.58	-	-	-	-	9.28	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	09/22/2014	30.86	21.67	-	-	-	-	9.19	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	09/24/2014	30.86	21.68	-	-	-	-	9.18	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	10/01/2014	30.86	21.67	-	-	-	24.66	9.19	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	10/10/2014	30.86	21.71	-	-	-	-	9.15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	10/13/2014	30.86	21.72	-	-	-	-	9.14	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	10/20/2014	30.86	21.80	-	-	-	24.65	9.06	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	10/22/2014	30.86	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52,000	
MW-08S	10/27/2014	30.86	21.88	-	-	-	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	11/07/2014	30.86	21.84	-	-	-	-	9.02	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	11/12/2014	30.86	21.94	-	-	-	-	8.92	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	11/21/2014	30.86	21.99	-	-	-	-	8.87	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	11/26/2014	30.86	22.01	-	-	-	-	8.85	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	12/05/2014	30.86	22.03	-	-	-	-	8.83	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	12/11/2014	30.86	22.03	-	-	-	-	8.83	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	12/16/2014	30.86	22.04	-	-	-	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	12/23/2014	30.86	22.07	-	-	-	-	8.79	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	12/30/2014	30.86	22.10	-	-	-	-	8.76	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	01/09/2015	30.86	22.12	-	-	-	-	8.74	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	01/16/2015	30.86	22.05	-	-	-	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	01/19/2015	30.86	22.01	-	-	-	-	8.85	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-08S	01/26/2015	30.86	22.08	-	-	-	-	8.78	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	02/03/2015	30.86	22.15	-	-	-	24.72	8.71	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	02/09/2015	30.86	22.14	-	-	-	-	8.72	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	02/18/2015	30.86	22.15	-	-	-	-	8.71	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	02/24/2015	30.86	22.15	-	-	-	24.64	8.71	15:48	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	02/26/2015	30.86	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	22,000	
MW-08S	03/04/2015	30.86	21.34	-	-	-	-	9.52	14:15	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	03/11/2015	30.86	21.80	-	-	-	-	9.06	12:45	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	03/18/2015	30.86	21.88	-	-	-	-	8.98	11:05	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	03/26/2015	30.86	22.05	-	-	-	24.70	8.81	11:40	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	04/02/2015	30.86	22.03	-	-	-	24.60	8.83	11:25	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	04/08/2015	30.86	22.07	-	-	-	24.68	8.79	8:50	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	04/13/2015	30.86	22.08	-	-	-	-	8.78	10:41	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	04/23/2015	30.86	22.08	-	-	-	24.65	8.78	11:55	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	04/29/2015	30.86	22.09	-	-	-	24.60	8.77	14:22	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	05/04/2015	30.86	22.09	-	-	-	-	8.77	11:39	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	05/11/2015	30.86	22.10	-	-	-	24.70	8.76	9:50	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	05/12/2015	30.86	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,000	
MW-08S	05/21/2015	30.86	22.05	-	-	-	24.65	8.81	12:22	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	05/28/2015	30.86	22.11	-	-	-	24.60	8.75	11:45	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	06/02/2015	30.86	22.06	-	-	-	-	8.80	13:04	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	06/09/2015	30.86	22.05	-	-	-	-	8.81	10:30	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	06/16/2015	30.86	22.05	-	-	-	-	8.81	11:24	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	06/26/2015	30.86	21.98	-	-	-	24.50	8.88	10:40	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	07/01/2015	30.86	22.02	-	-	-	-	8.84	12:15	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	07/08/2015	30.86	22.01	-	-	-	-	8.85	11:18	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	07/13/2015	30.86	21.95	-	-	-	-	8.91	9:26	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	07/20/2015	30.86	21.75	-	-	-	-	9.11	9:16	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	07/28/2015	30.86	21.08	-	-	-	24.75	9.78	11:46	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	08/04/2015	30.86	21.05	-	-	-	24.30	9.81	9:39	-	-	-	-	-	-	-	-	-	-	14,000	
MW-08S	08/11/2015	30.86	21.15	-	-	-	24.69	9.71	10:18	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	08/18/2015	30.86	21.24	-	-	-	-	9.62	10:16	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-08S	08/24/2015	30.86	21.32	-	-	-	-	9.54	10:26	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	09/02/2015	30.86	21.32	-	-	-	24.66	9.54	11:10	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	09/09/2015	30.86	21.50	-	-	-	24.71	9.36	10:15	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	09/17/2015	30.86	21.61	-	-	-	24.74	9.25	10:17	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	09/23/2015	30.86	21.63	-	-	-	-	9.23	10:40	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	09/28/2015	30.86	21.68	-	-	-	24.69	9.18	9:22	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	10/05/2015	30.86	21.75	-	-	-	24.70	9.11	9:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	11/10/2015	30.86	21.95	-	-	-	-	8.91	13:13	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	12/01/2015	30.86	22.00	-	-	-	24.66	8.86	10:43	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	12/02/2015	30.86	NR	-	-	-	-	-	-	61	<0.5	5.00	48	-	-	-	-	30	-	15,000	-
MW-08S	01/27/2016	30.86	21.98	-	-	-	-	8.88	10:33	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	02/15/2016	30.86	21.83	-	-	-	-	9.03	10:14	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	03/14/2016	30.86	21.72	-	-	-	25.62	9.14	11:04	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	03/16/2016	30.86	21.72	-	-	-	24.65	9.14	12:42	-	-	-	-	-	-	-	-	-	-	20,000	-
MW-08S	04/21/2016	30.86	22.21	-	-	-	24.65	8.65	12:11	-	-	-	-	-	-	-	-	-	-	11,000	-
MW-08S	05/23/2016	30.86	25.03	-	-	-	25.48	5.83	11:00	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	05/24/2016	30.86	22.05	-	-	-	24.68	8.81	10:11	-	-	-	-	-	-	-	-	-	-	8,500	-
MW-08S	06/21/2016	30.86	22.18	-	-	-	-	8.68	10:56	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	07/21/2016	30.86	21.20	-	-	-	-	9.66	10:55	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	08/24/2016	30.86	21.77	-	-	-	24.65	9.09	11:22	-	-	-	-	-	-	-	-	-	-	7,400	-
MW-08S	11/28/2016	30.86	22.07	-	-	-	24.82	8.79	10:26	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	11/29/2016	30.86	22.07	-	-	-	24.75	8.79	9:36	6	<0.5	<0.5	0.7 J	-	-	-	-	2 J	-	12,000	-
MW-08S	02/21/2017	30.86	22.43	-	-	-	24.70	8.43	11:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	02/22/2017	30.86	22.44	-	-	-	-	8.42	9:54	-	-	-	-	-	-	-	-	-	-	11,000	-
MW/RW-10S	08/08/2014	31.24	22.40	-	-	-	26.51	8.84	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/11/2014	31.24	22.41	-	-	-	-	8.83	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/15/2014	31.24	22.02	-	-	-	-	9.22	-	-	-	-	-	-	-	-	-	-	-	36,000	-
MW/RW-10S	08/18/2014	31.24	22.03	-	-	-	-	9.21	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/25/2014	31.24	22.06	-	-	-	-	9.18	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/02/2014	31.24	22.11	-	-	-	-	9.13	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/15/2014	31.24	22.15	-	-	-	-	9.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/22/2014	31.24	22.18	-	-	-	-	9.06	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-10S	09/24/2014	31.24	22.19	-	-	-	-	9.05	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-10S	10/01/2014	31.24	22.22	-	-	-	26.09	9.02	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	10/10/2014	31.24	22.18	22.18	TRACE	-	-	9.06	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	10/13/2014	31.24	22.21	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	10/20/2014	31.24	22.35	-	-	-	26.10	8.89	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	10/22/2014	31.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100,000	LNAPL NMB
MW/RW-10S	10/27/2014	31.24	22.32	-	-	-	-	8.92	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	11/07/2014	31.24	22.30	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	11/12/2014	31.24	22.32	-	-	-	-	8.92	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	11/21/2014	31.24	22.38	-	-	-	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	11/26/2014	31.24	22.35	-	-	-	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/05/2014	31.24	22.40	22.38	0.02	TRACE	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/11/2014	31.24	22.33	22.33	TRACE	-	-	8.91	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/16/2014	31.24	22.36	22.36	TRACE	-	-	8.88	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/23/2014	31.24	22.37	-	-	-	-	8.87	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/30/2014	31.24	22.42	22.42	TRACE	-	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	01/09/2015	31.24	22.44	22.43	0.01	TRACE	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	01/16/2015	31.24	22.41	22.40	0.01	TRACE	-	8.84	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	01/19/2015	31.24	22.43	22.42	0.01	TRACE	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	01/26/2015	31.24	22.23	22.22	0.01	TRACE	-	9.02	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/03/2015	31.24	22.50	-	-	-	26.11	8.74	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/09/2015	31.24	22.43	22.42	0.01	-	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/18/2015	31.24	22.44	22.43	0.01	-	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/24/2015	31.24	22.50	22.49	0.01	-	26.11	8.75	15:44	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/04/2015	31.24	22.50	22.48	0.02	-	-	8.76	14:28	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/11/2015	31.24	22.51	22.48	0.03	-	-	8.76	12:54	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/18/2015	31.24	22.56	22.52	0.04	-	-	8.72	11:23	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/26/2015	31.24	22.53	22.50	0.03	-	26.10	8.74	11:27	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	04/02/2015	31.24	22.55	22.51	0.04	-	-	26.05	8.73	11:52	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	04/08/2015	31.24	22.53	22.52	0.01	-	26.10	8.72	9:05	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	04/13/2015	31.24	22.56	22.53	0.03	-	-	8.71	10:59	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	04/23/2015	31.24	22.53	22.51	0.02	-	26.05	8.73	12:22	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-10S	04/29/2015	31.24	23.53	23.50	0.03	-	26.00	7.74	14:43	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	05/04/2015	31.24	22.57	22.54	0.03	-	-	8.70	11:59	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	05/11/2015	31.24	22.86	22.84	0.02	-	26.10	8.40	10:00	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	05/21/2015	31.24	22.59	22.56	0.03	-	-	8.68	12:46	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	05/28/2015	31.24	22.60	22.56	0.04	-	26.00	8.68	12:01	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	06/02/2015	31.24	22.60	22.56	0.04	-	-	8.68	13:20	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	06/09/2015	31.24	22.54	22.53	0.01	-	-	8.71	10:40	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	06/19/2015	31.24	22.54	22.53	0.01	-	-	8.71	11:34	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	06/26/2015	31.24	22.61	22.54	0.07	-	26.00	8.69	11:26	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	07/01/2015	31.24	22.58	22.52	0.06	-	-	8.71	12:26	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	07/08/2015	31.24	22.54	22.49	0.05	TRACE	-	8.74	11:57	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	07/13/2015	31.24	21.96	-	-	-	-	9.28	9:44	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	07/20/2015	31.24	21.48	-	-	-	-	9.76	9:13	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	07/28/2015	31.24	21.36	-	-	-	26.11	9.88	10:39	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/05/2015	31.24	21.51	21.42	0.09	-	-	9.81	9:24	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	08/11/2015	31.24	21.49	21.49	TRACE	TRACE	26.15	9.75	10:22	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/18/2015	31.24	21.76	21.59	0.17	0.02	-	9.63	10:40	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/24/2015	31.24	21.80	21.68	0.12	0.01	-	9.55	10:50	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/02/2015	31.24	21.95	21.81	0.14	0.01	26.10	9.41	10:00	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/09/2015	31.24	22.05	21.91	0.14	0.02	26.11	9.31	11:08	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/17/2015	31.24	22.10	22.00	0.10	TRACE	-	9.23	10:35	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/23/2015	31.24	22.06	22.02	0.04	TRACE	-	9.22	11:10	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/28/2015	31.24	22.14	22.07	0.07	TRACE	26.10	9.16	10:00	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	10/05/2015	31.24	22.12	-	-	-	26.10	9.12	9:26	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	11/10/2015	31.24	24.00	24.00	TRACE	-	-	7.24	13:25	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/01/2015	33.02	24.10	-	-	-	27.85	8.92	10:53	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	01/27/2016	33.02	24.18	24.18	TRACE	-	-	8.84	10:52	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/15/2016	33.02	24.37	24.36	0.01	-	-	8.66	10:35	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/14/2016	33.02	24.07	-	-	-	27.87	8.95	12:50	-	-	-	-	-	-	-	-	-	-	29,000	-
MW/RW-10S	04/21/2016	33.02	25.99	25.95	0.04	-	-	7.07	11:27	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	05/23/2016	33.02	25.55	-	-	-	27.90	7.47	11:40	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	05/24/2016	33.02	25.57	-	-	-	27.89	7.45	10:00	-	-	-	-	-	-	-	-	-	-	270,000	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-10S	06/21/2016	33.02	25.62	-	-	-	-	7.40	10:40	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	07/21/2016	33.02	25.57	-	-	-	-	7.45	10:15	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/24/2016	33.02	25.61	-	-	-	27.80	7.41	11:11	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/25/2016	33.02	24.97	-	-	-	-	8.05	11:55	-	-	-	-	-	-	-	-	-	-	25,000	-
MW/RW-10S	09/22/2016	33.02	25.68	-	-	-	27.89	7.34	12:24	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	10/20/2016	33.02	25.68	-	-	-	-	7.34	11:55	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	11/28/2016	33.02	25.68	-	-	-	-	7.34	9:56	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	11/29/2016	33.02	25.71	-	-	-	27.95	7.31	-	<3	<3	<3	<3	-	-	-	-	<3	-	240,000	-
MW/RW-10S	12/22/2016	33.02	25.66	-	-	-	27.72	7.36	10:18	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	01/30/2017	33.02	25.61	-	-	-	27.97	7.41	10:34	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	02/21/2017	33.02	25.55	-	-	-	26.94	7.47	10:09	-	-	-	-	-	-	-	-	-	-	1,200,000	-
MW/RW-10S	03/29/2017	32.11	25.55	-	-	-	26.97	6.56	12:05	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	07/25/2014	30.85	26.90	-	-	-	33.40	3.95	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	08/08/2014	30.85	26.76	-	-	-	34.00	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	08/11/2014	30.85	26.57	-	-	-	-	4.28	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	08/15/2014	30.85	27.15	-	-	-	-	3.70	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	08/16/2014	30.85	26.81	-	-	-	34.00	4.04	-	-	-	-	-	-	-	-	-	-	-	423	-
MW-11	08/18/2014	30.85	26.77	-	-	-	-	4.08	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	08/25/2014	30.85	26.43	-	-	-	-	4.42	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/02/2014	30.85	26.83	-	-	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/15/2014	30.85	26.75	-	-	-	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/22/2014	30.85	26.64	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/24/2014	30.85	27.08	-	-	-	-	3.77	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	10/01/2014	30.85	26.87	-	-	-	34.02	3.98	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	10/13/2014	30.85	26.86	-	-	-	-	3.99	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	10/20/2014	30.85	26.96	-	-	-	33.99	3.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	10/22/2014	30.85	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	840	-
MW-11	02/24/2015	30.85	27.03	-	-	-	-	3.82	13:39	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	02/26/2015	30.85	27.07	-	-	-	34.00	3.78	10:18	-	-	-	-	-	-	-	-	-	-	920	-
MW-11	03/04/2015	30.85	26.95	-	-	-	-	3.90	14:09	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	03/11/2015	30.85	26.58	-	-	-	-	4.27	12:39	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	03/18/2015	30.85	26.74	-	-	-	-	4.11	10:59	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-11	03/26/2015	30.85	26.56	-	-	-	33.90	4.29	11:22	-	-	-	-	-	-	-	-	-	-	-	
MW-11	04/02/2015	30.85	26.69	-	-	-	33.90	4.16	11:12	-	-	-	-	-	-	-	-	-	-	-	
MW-11	04/08/2015	30.85	27.00	-	-	-	33.82	3.85	9:25	-	-	-	-	-	-	-	-	-	-	-	
MW-11	04/13/2015	30.85	26.88	-	-	-	-	3.97	10:32	-	-	-	-	-	-	-	-	-	-	-	
MW-11	04/23/2015	30.85	26.40	-	-	-	33.85	4.45	11:40	-	-	-	-	-	-	-	-	-	-	-	
MW-11	04/29/2015	30.85	26.56	-	-	-	33.80	4.29	14:09	-	-	-	-	-	-	-	-	-	-	-	
MW-11	05/04/2015	30.85	26.39	-	-	-	-	4.46	11:33	-	-	-	-	-	-	-	-	-	-	-	
MW-11	05/11/2015	30.85	26.35	-	-	-	33.80	4.50	15:05	-	-	-	-	-	-	-	-	-	-	-	
MW-11	05/12/2015	30.85	NR	-	-	-	-	-	-	2	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	-	900	
MW-11	05/21/2015	30.85	26.88	-	-	-	33.90	3.97	12:12	-	-	-	-	-	-	-	-	-	-	-	
MW-11	05/28/2015	30.85	26.83	-	-	-	33.80	4.02	11:38	-	-	-	-	-	-	-	-	-	-	-	
MW-11	06/02/2015	30.85	26.50	-	-	-	-	4.35	12:58	-	-	-	-	-	-	-	-	-	-	-	
MW-11	06/09/2015	30.85	26.23	-	-	-	-	4.62	10:24	-	-	-	-	-	-	-	-	-	-	-	
MW-11	06/16/2015	30.85	26.28	-	-	-	-	4.57	11:18	-	-	-	-	-	-	-	-	-	-	-	
MW-11	06/26/2015	30.85	26.22	-	-	-	33.80	4.63	10:32	-	-	-	-	-	-	-	-	-	-	-	
MW-11	07/01/2015	30.85	25.73	-	-	-	-	5.12	12:09	-	-	-	-	-	-	-	-	-	-	-	
MW-11	08/04/2015	30.85	25.94	-	-	-	33.86	4.91	12:13	-	-	-	-	-	-	-	-	-	-	-	
MW-11	08/05/2015	30.85	26.31	-	-	-	33.84	4.54	8:46	-	-	-	-	-	-	-	-	-	-	5,300	
MW-11	09/28/2015	30.85	25.92	25.90	0.02	-	33.92	4.95	9:58	-	-	-	-	-	-	-	-	-	-	-	
MW-11	10/05/2015	30.85	25.72	-	-	-	33.92	5.13	9:29	-	-	-	-	-	-	-	-	-	-	-	
MW-11	11/10/2015	30.85	26.35	-	-	-	-	4.50	13:23	-	-	-	-	-	-	-	-	-	-	-	
MW-11	12/01/2015	30.85	26.48	-	-	-	33.92	4.37	13:38	-	-	-	-	-	-	-	-	-	-	-	
MW-11	12/02/2015	30.85	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,000	
MW-11	01/27/2016	30.85	26.68	-	-	-	-	4.17	10:31	-	-	-	-	-	-	-	-	-	-	-	
MW-11	02/15/2016	30.85	27.03	-	-	-	-	3.82	10:03	-	-	-	-	-	-	-	-	-	-	-	
MW-11	03/14/2016	30.85	26.63	-	-	-	34.06	4.22	8:30	-	-	-	-	-	-	-	-	-	-	-	
MW-11	04/21/2016	30.85	26.97	-	-	-	-	3.88	10:04	-	-	-	-	-	-	-	-	-	-	-	
MW-11	05/23/2016	30.85	27.68	-	-	-	32.83	3.17	9:59	-	-	-	-	-	-	-	-	-	-	-	
MW-11	06/21/2016	30.85	26.03	-	-	-	-	4.82	10:36	-	-	-	-	-	-	-	-	-	-	-	
MW-11	07/21/2016	30.85	25.75	-	-	-	-	5.10	10:18	-	-	-	-	-	-	-	-	-	-	-	
MW-11	08/24/2016	30.85	25.35	-	-	-	30.69	5.50	9:22	-	-	-	-	-	-	-	-	-	-	-	
MW-11	11/28/2016	30.85	26.25	-	-	-	-	4.60	8:10	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-11	11/29/2016	30.85	26.53	-	-	-	29.60	4.32	9:43	-	-	-	-	-	-	-	-	-	-	770	
MW-11	02/21/2017	30.85	26.25	-	-	-	29.40	4.60	12:15	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	07/31/2014	31.22	28.04	-	-	-	38.15	3.18	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/08/2014	31.22	28.21	-	-	-	38.14	3.01	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/11/2014	31.22	27.81	-	-	-	-	3.41	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/15/2014	31.22	27.43	-	-	-	-	3.79	-	-	-	-	-	-	-	-	-	-	-	305	
MW/RW-14	08/18/2014	31.22	27.17	-	-	-	-	4.05	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/25/2014	31.22	26.83	-	-	-	-	4.39	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	09/02/2014	31.22	27.25	-	-	-	-	3.97	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	09/15/2014	31.22	27.15	-	-	-	-	4.07	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	09/22/2014	31.22	27.04	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	10/01/2014	31.22	27.23	-	-	-	37.28	3.99	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	10/13/2014	31.22	27.25	27.25	TRACE	-	-	3.97	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	10/20/2014	31.22	27.32	-	-	-	37.30	3.90	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	10/22/2014	31.22	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,100	
MW/RW-14	02/24/2015	31.22	27.42	-	-	-	37.31	3.80	13:40	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	02/25/2015	31.22	27.46	-	-	-	37.31	3.76	10:47	-	-	-	-	-	-	-	-	-	-	6,000	
MW/RW-14	03/04/2015	31.22	27.39	-	-	-	-	3.83	14:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	03/11/2015	31.22	26.94	-	-	-	-	4.28	12:36	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	03/18/2015	31.22	27.13	-	-	-	-	4.09	10:56	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	03/26/2015	31.22	26.92	-	-	-	37.30	4.30	11:19	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	04/02/2015	31.22	27.04	-	-	-	37.25	4.18	11:08	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	04/08/2015	31.22	27.30	-	-	-	37.21	3.92	9:26	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	04/13/2015	31.22	27.30	-	-	-	-	3.92	10:55	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	04/23/2015	31.22	26.72	-	-	-	37.25	4.50	11:37	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	04/29/2015	31.22	26.94	-	-	-	37.25	4.28	14:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/04/2015	31.22	26.77	-	-	-	-	4.45	11:30	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/11/2015	31.22	26.71	-	-	-	37.37	4.51	14:52	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/12/2015	31.22	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,500	
MW/RW-14	05/21/2015	31.22	26.93	-	-	-	37.33	4.29	12:10	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/28/2015	31.22	27.25	-	-	-	37.25	3.97	11:36	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	06/02/2015	31.22	26.92	-	-	-	-	4.30	12:55	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-14	06/09/2015	31.22	26.67	-	-	-	-	4.55	10:21	-	-	-	-	-	-	-	-	-	-	-	Sheen
MW/RW-14	06/16/2015	31.22	26.73	-	-	-	-	4.49	11:15	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	06/26/2015	31.22	26.65	-	-	-	37.30	4.57	10:30	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	07/01/2015	31.22	26.12	-	-	-	-	5.10	12:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/04/2015	31.22	26.26	-	-	-	37.28	4.96	12:09	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/05/2015	31.22	26.75	-	-	-	37.27	4.47	8:50	-	-	-	-	-	-	-	-	-	-	7,300	
MW/RW-14	12/01/2015	31.22	26.88	-	-	-	37.30	4.34	13:35	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	12/02/2015	31.22	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,600	
MW/RW-14	03/14/2016	31.22	26.93	-	-	-	37.30	4.29	8:55	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	03/15/2016	31.22	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,000	
MW/RW-14	04/21/2016	31.22	28.05	27.42	0.63	0.75	-	3.72	9:33	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/05/2016	31.22	29.03	28.20	0.83	-	-	2.92	13:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/23/2016	31.22	26.82	26.81	0.01	-	-	4.41	11:54	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	06/21/2016	31.22	28.18	27.77	0.41	0.06	-	3.40	10:26	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	07/21/2016	31.22	28.85	27.90	0.95	0.44	-	3.20	11:21	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/04/2016	31.33	28.32	27.75	0.57	0.00	-	3.51	12:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/24/2016	31.33	30.32	-	-	-	-	1.01	10:05	-	-	-	-	-	-	-	-	-	-	-	installed pump & lines & started pump in well pump in well pump in well pump in well pump in well pump in well pump in well pump in well pump in well
MW/RW-14	08/25/2016	31.33	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15,000	
MW/RW-14	09/22/2016	31.33	31.30	-	-	-	-	0.03	13:10	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	10/20/2016	31.33	31.22	-	-	-	-	0.11	11:14	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	11/28/2016	31.33	30.87	-	-	-	-	0.46	10:12	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	11/29/2016	31.33	27.47	-	-	-	-	3.86	12:25	-	-	-	-	-	-	-	-	-	-	110,000	
MW/RW-14	12/22/2016	31.33	30.25	-	-	-	-	1.08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	01/30/2017	31.33	27.67	-	-	-	-	3.66	12:16	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	02/21/2017	31.33	30.20	-	-	-	-	1.13	12:40	-	-	-	-	-	-	-	-	-	-	5,600	
MW/RW-14	03/29/2017	31.33	31.35	-	-	-	-	-0.02	12:27	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	08/08/2014	31.03	26.11	-	-	-	26.20	4.92	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	08/11/2014	31.03	26.11	-	-	-	-	4.92	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	08/15/2014	31.03	24.00	-	-	-	-	7.03	-	-	-	-	-	-	-	-	-	-	-	909	
MW-15S	08/18/2014	31.03	24.67	-	-	-	-	6.36	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	08/25/2014	31.03	24.82	-	-	-	-	6.21	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-15S	09/02/2014	31.03	24.82	-	-	-	-	6.21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	09/15/2014	31.03	24.96	-	-	-	-	6.07	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	09/22/2014	31.03	25.06	-	-	-	-	5.97	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	10/01/2014	31.03	25.20	-	-	-	25.88	5.83	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	10/13/2014	31.03	26.37	-	-	-	-	4.66	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	10/20/2014	31.03	25.45	-	-	-	25.90	5.58	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	10/22/2014	31.03	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,800	
MW-15S	02/26/2015	31.03	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,800	
MW-15S	05/11/2015	31.03	25.33	-	-	-	26.00	5.70	9:10	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	05/12/2015	31.03	25.35	-	-	-	-	5.68	12:10	-	-	-	-	-	-	-	-	-	-	1,800	
MW-15S	08/04/2015	31.03	22.16	-	-	-	25.90	8.87	9:47	-	-	-	-	-	-	-	-	-	-	5,900	
MW-15S	12/01/2015	31.03	25.46	-	-	-	25.88	5.57	11:03	-	-	-	-	-	-	-	-	-	-	4,200	
MW-15S	03/14/2016	31.03	25.58	-	-	-	26.00	5.45	8:55	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	05/23/2016	31.03	25.29	-	-	-	26.00	5.74	11:08	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	07/21/2016	31.03	25.44	-	-	-	-	5.59	11:26	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	08/24/2016	31.03	22.07	-	-	-	25.86	8.96	12:16	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	11/28/2016	31.03	25.15	-	-	-	26.70	5.88	10:34	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	11/29/2016	31.03	25.14	-	-	-	25.94	5.89	9:47	-	-	-	-	-	-	-	-	-	-	160	
MW-15S	02/21/2017	31.03	25.45	-	-	-	25.90	5.58	11:07	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	08/15/2014	31.03	24.13	-	-	-	24.61	6.90	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	08/16/2014	31.03	24.12	-	-	-	24.48	6.91	-	-	-	-	-	-	-	-	-	-	-	1,720	
MW-16S	08/18/2014	31.03	24.13	-	-	-	-	6.90	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	08/25/2014	31.03	24.24	-	-	-	-	6.79	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	09/02/2014	31.03	DRY	-	-	-	24.65	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	09/15/2014	31.03	DRY	-	-	-	24.64	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	09/22/2014	31.03	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	10/01/2014	31.03	DRY	-	-	-	24.64	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	10/10/2014	31.03	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	10/20/2014	31.03	DRY	-	-	-	24.64	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	02/24/2015	31.03	DRY	-	-	-	24.70	-	15:36	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	05/11/2015	31.03	DRY	-	-	-	24.70	-	10:15	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	08/04/2015	31.03	22.63	-	-	-	24.62	8.40	9:54	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-16S	09/09/2015	31.03	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100	
MW-16S	12/01/2015	31.03	DRY	-	-	-	24.64	-	11:07	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	03/14/2016	31.03	DRY	-	-	-	24.70	-	8:45	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	05/23/2016	31.03	DRY	-	-	-	24.82	-	11:15	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	08/24/2016	31.03	DRY	-	-	-	24.65	-	12:18	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	11/28/2016	31.03	DRY	-	-	-	24.68	-	8:21	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	02/21/2017	31.03	DRY	-	-	-	24.67	-	11:10	-	-	-	-	-	-	-	-	-	-	-	
MW-16	08/15/2014	30.97	26.78	-	-	-	35.74	4.19	-	-	-	-	-	-	-	-	-	-	-	<300	
MW-16	08/18/2014	30.97	26.73	-	-	-	-	4.24	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	08/25/2014	30.97	26.55	-	-	-	-	4.42	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	09/02/2014	30.97	26.91	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	09/15/2014	30.97	26.76	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	09/22/2014	30.97	26.80	-	-	-	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/01/2014	30.97	26.95	-	-	-	35.53	4.02	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/10/2014	30.97	26.85	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/20/2014	30.97	27.19	-	-	-	35.61	3.78	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/22/2014	30.97	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	<20	<45	
MW-16	02/24/2015	30.97	27.25	-	-	-	35.61	3.72	13:34	-	-	-	-	-	-	-	-	-	-	-	
MW-16	02/25/2015	30.97	27.23	-	-	-	35.62	3.74	11:14	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	<45	
MW-16	05/11/2015	30.97	26.43	-	-	-	35.60	4.54	14:50	-	-	-	-	-	-	-	-	-	-	-	
MW-16	05/12/2015	30.97	26.90	-	-	-	-	4.07	9:52	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45	
MW-16	08/04/2015	30.97	24.75	-	-	-	35.55	6.22	12:06	-	-	-	-	-	-	-	-	-	-	-	
MW-16	08/05/2015	30.97	25.04	-	-	-	35.53	5.93	9:51	-	-	-	-	-	-	-	-	-	-	<45	
MW-16	12/01/2015	30.97	26.55	-	-	-	27.90	4.42	13:30	-	-	-	-	-	-	-	-	-	-	-	
MW-16	03/14/2016	30.97	26.67	-	-	-	35.55	4.30	9:00	-	-	-	-	-	-	-	-	-	-	-	
MW-16	05/23/2016	30.97	26.65	-	-	-	35.82	4.32	10:35	-	-	-	-	-	-	-	-	-	-	-	
MW-16	08/24/2016	30.97	26.75	-	-	-	35.55	4.22	9:42	-	-	-	-	-	-	-	-	-	-	-	
MW-16	11/28/2016	30.97	27.24	-	-	-	35.49	3.73	8:17	-	-	-	-	-	-	-	-	-	-	-	
MW-16	11/29/2016	30.97	27.05	-	-	-	35.80	3.92	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	<45	
MW-16	02/21/2017	30.97	27.73	-	-	-	35.63	3.24	12:19	-	-	-	-	-	-	-	-	-	-	-	
MW-16	02/22/2017	30.97	27.39	-	-	-	-	3.58	10:00	-	-	-	-	-	-	-	-	-	-	<45	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-25S	08/08/2014	31.07	23.64	-	-	-	25.80	7.43	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	08/11/2014	31.07	22.35	-	-	-	-	8.72	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	08/15/2014	31.07	21.94	-	-	-	-	9.13	-	-	-	-	-	-	-	-	-	-	-	49,000	-
MW-25S	08/18/2014	31.07	21.95	-	-	-	-	9.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	08/25/2014	31.07	21.98	-	-	-	-	9.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	09/02/2014	31.07	21.99	-	-	-	-	9.08	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	09/15/2014	31.07	22.04	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	09/22/2014	31.07	22.50	-	-	-	-	8.57	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	09/24/2014	31.07	22.12	22.12	TRACE	-	-	8.95	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	10/01/2014	31.07	22.07	-	-	-	25.47	9.00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	10/10/2014	31.07	22.09	22.09	TRACE	-	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	10/13/2014	31.07	22.13	22.11	0.02	TRACE	-	8.96	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	10/20/2014	31.07	22.19	22.18	0.01	TRACE	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	10/27/2014	31.07	22.10	22.09	0.01	TRACE	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	10/27/2014	31.07	22.10	22.09	0.01	TRACE	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	11/07/2014	31.07	22.08	22.07	0.01	TRACE	-	9.00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	11/12/2014	31.07	22.28	22.10	0.18	0.06	-	8.95	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	11/21/2014	31.07	22.43	22.18	0.25	0.09	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	11/26/2014	31.07	22.37	22.17	0.20	0.06	-	8.88	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	12/05/2014	31.07	22.57	22.20	0.37	-	25.50	8.82	-	-	-	-	-	-	-	-	-	-	-	840,000	HIT event
MW-25S	12/11/2014	31.07	22.22	22.21	0.01	TRACE	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	12/16/2014	31.07	22.38	22.11	0.27	0.03	-	8.93	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	12/23/2014	31.07	22.43	22.13	0.30	0.05	-	8.90	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	12/30/2014	31.07	22.50	22.20	0.30	0.04	-	8.83	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	01/09/2015	31.07	22.49	22.19	0.30	-	-	8.84	-	-	-	-	-	-	-	-	-	-	-	2,200,000	HIT event
MW-25S	01/16/2015	31.07	22.60	22.48	0.12	0.01	-	8.58	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	01/19/2015	31.07	22.34	22.25	0.09	0.01	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	01/26/2015	31.07	22.30	22.16	0.14	0.02	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	02/03/2015	31.07	22.25	-	-	-	25.50	8.82	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	02/09/2015	31.07	22.31	22.14	0.17	-	-	8.91	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	02/18/2015	31.07	22.37	22.18	0.19	-	-	8.87	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	02/24/2015	31.07	22.59	22.28	0.31	-	-	8.75	14:03	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/04/2015	31.07	22.48	22.30	0.18	-	-	8.75	14:31	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/11/2015	31.07	22.50	22.30	0.20	-	-	8.75	13:04	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/18/2015	31.07	22.46	22.23	0.23	-	-	8.81	11:26	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/26/2015	31.07	22.35	22.17	0.18	-	25.50	8.88	11:59	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/02/2015	31.07	22.40	22.18	0.22	-	25.45	8.86	12:06	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/08/2015	31.07	22.40	22.08	0.32	-	25.47	8.95	9:15	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/13/2015	31.07	22.50	22.22	0.28	-	-	8.82	11:03	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/23/2015	31.07	22.39	22.16	0.23	-	25.50	8.88	12:25	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/29/2015	31.07	22.35	22.12	0.23	-	25.50	8.92	14:48	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/04/2015	31.07	22.47	22.19	0.28	-	-	8.85	12:04	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/11/2015	31.07	22.45	22.20	0.25	-	-	8.84	11:00	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/21/2015	31.07	22.40	22.23	0.17	-	-	8.82	12:53	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/28/2015	31.07	22.60	22.27	0.33	-	25.50	8.76	12:06	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	06/02/2015	31.07	22.53	22.25	0.28	-	-	8.79	13:24	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	06/09/2015	31.07	22.38	22.16	0.22	-	-	8.88	10:46	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	06/16/2015	31.07	22.37	22.13	0.24	-	-	8.91	11:40	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-25S	06/26/2015	31.07	22.35	22.12	0.23	-	25.40	8.92	11:28	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	07/01/2015	31.07	22.23	22.04	0.19	-	-	9.01	12:18	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	07/08/2015	31.07	22.08	21.88	0.20	0.04	-	9.17	12:04	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW-25S	07/13/2015	31.07	21.89	21.74	0.15	-	-	9.31	9:48	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	07/20/2015	31.07	21.37	21.33	0.04	TRACE	-	9.74	9:43	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	07/28/2015	31.07	21.20	-	-	-	25.49	9.87	12:25	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/04/2015	31.07	21.28	21.24	TRACE	TRACE	-	9.79	12:22	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/11/2015	31.07	21.37	21.36	0.01	0.01	25.49	9.71	11:22	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/18/2015	31.07	21.51	21.46	0.05	TRACE	-	9.60	10:50	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/24/2015	31.07	21.60	21.54	0.06	TRACE	-	9.52	10:53	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/02/2015	31.07	21.76	21.69	0.07	0.01	25.47	9.37	10:31	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/09/2015	31.07	21.81	21.77	0.04	0.01	25.49	9.30	10:50	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/17/2015	31.07	21.92	21.89	0.03	0.01	25.52	9.18	10:37	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB strong product odor
MW-25S	09/23/2015	31.07	21.92	21.89	0.03	TRACE	-	9.18	11:14	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/28/2015	31.07	21.96	21.92	0.04	TRACE	25.48	9.15	9:49	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	10/05/2015	31.07	22.01	21.98	0.03	TRACE	25.51	9.09	11:32	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/10/2015	31.07	22.09	22.06	0.03	TRACE	-	9.01	13:27	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	12/01/2015	31.07	22.19	22.16	0.03	-	25.43	8.91	12:10	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	01/27/2016	31.07	22.10	22.08	0.02	-	-	8.99	10:56	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	02/15/2016	31.07	22.10	22.07	0.03	TRACE	-	9.00	10:39	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	03/14/2016	31.07	22.02	-	-	-	25.50	9.05	9:20	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	04/21/2016	31.07	22.38	22.35	0.03	TRACE	-	8.72	12:15	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	05/23/2016	31.07	22.16	22.14	0.02	TRACE	-	8.93	11:45	-	-	-	-	-	-	-	-	-	-	-	Sheen LNAPL NMB
MW-25S	06/21/2016	31.07	22.17	22.13	0.04	TRACE	-	8.94	10:14	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	07/21/2016	31.07	22.02	-	-	-	-	9.05	11:16	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/24/2016	31.07	22.07	-	-	-	25.65	9.00	11:35	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/25/2016	31.07	22.16	-	-	-	25.52	8.91	11:15	-	-	-	-	-	-	-	-	-	-	24,000	
MW-25S	11/28/2016	31.07	22.48	-	-	-	25.49	8.59	9:34	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/29/2016	31.07	22.51	-	-	-	25.51	8.56	-	3	<0.5	4	2	-	-	-	-	9	-	1,200,000	
MW-25S	02/21/2017	31.07	23.62	23.60	0.02	TRACE	25.41	7.47	11:14	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	03/28/2017	31.07	23.83	-	-	-	25.43	7.24	15:10	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	03/29/2017	33.28	25.35	-	-	-	25.57	7.93	12:16	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-25	08/08/2014	31.13	27.97	27.60	0.37	0.08	36.69	3.48	-	-	-	-	-	-	-	-	-	-	-	-	Transducer installed for pump test
MW/RW-25	08/11/2014	31.13	27.61	27.37	0.24	NA	-	3.73	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/13/2014	31.13	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,280	Transducer installed for pump test
MW/RW-25	08/15/2014	31.13	28.11	28.05	0.06	NA	-	3.07	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/16/2014	31.13	27.81	27.75	0.06	NA	-	3.37	-	-	-	-	-	-	-	-	-	-	-	-	Transducer installed for pump test
MW/RW-25	08/18/2014	31.13	27.94	27.71	0.23	NA	-	3.39	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/25/2014	31.13	26.89	26.74	0.15	0.05	-	4.37	-	-	-	-	-	-	-	-	-	-	-	-	Transducer installed for pump test
MW/RW-25	09/02/2014	31.13	27.77	27.03	0.74	0.50	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/15/2014	31.13	27.69	26.87	0.82	NR	-	4.16	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	09/19/2014	31.13	28.10	26.95	1.15	0.93	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/22/2014	31.13	27.53	26.91	0.62	0.38	-	4.14	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	09/24/2014	31.13	27.73	27.23	0.50	NR	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	10/01/2014	31.13	27.47	27.02	0.45	0.19	35.90	4.06	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	10/10/2014	31.13	27.65	26.91	0.74	0.50	-	4.13	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	10/13/2014	31.13	27.60	27.03	0.57	NR	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	10/20/2014	31.13	27.49	27.19	0.30	0.13	-	3.90	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	10/27/2014	31.13	27.87	27.25	0.62	NR	-	3.80	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	11/07/2014	31.13	27.53	27.08	0.45	0.19	-	4.00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	11/12/2014	31.13	27.50	27.07	0.43	0.19	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	11/21/2014	31.13	28.53	27.81	0.72	0.16	-	3.23	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	11/26/2014	31.13	27.70	27.23	0.47	0.19	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	12/05/2014	31.13	27.63	27.15	0.48	-	35.87	3.92	-	-	-	-	-	-	-	-	-	-	-	50,000	
MW/RW-25	12/11/2014	31.13	27.31	26.98	0.33	0.06	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	12/16/2014	31.13	27.27	27.04	0.23	0.03	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	12/23/2014	31.13	27.20	26.95	0.25	0.04	-	4.15	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	12/30/2014	31.13	28.02	27.33	0.69	0.28	-	3.72	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	01/09/2015	31.13	27.80	27.38	0.42	-	-	3.70	-	-	-	-	-	-	-	-	-	-	-	56,000	HIT event
MW/RW-25	01/16/2015	31.13	27.24	27.16	0.08	0.00	-	3.96	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	01/19/2015	31.13	27.28	26.97	0.31	0.06	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	01/26/2015	31.13	27.27	26.98	0.29	0.05	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	02/03/2015	31.13	28.10	27.52	0.58	-	35.86	3.54	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	02/09/2015	31.13	27.43	27.06	0.37	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	02/18/2015	31.13	27.63	27.24	0.39	-	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	02/24/2015	31.13	27.68	27.18	0.50	-	-	3.89	14:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	03/04/2015	31.13	27.85	27.19	0.66	-	-	3.86	14:35	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	03/11/2015	31.13	27.27	26.76	0.51	-	-	4.31	13:08	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	03/18/2015	31.13	27.63	26.93	0.70	-	-	4.11	11:30	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	03/26/2015	31.13	27.31	26.70	0.61	-	35.90	4.36	12:03	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	04/02/2015	31.13	27.60	26.85	0.75	-	35.80	4.19	12:09	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	04/08/2015	31.13	28.00	27.15	0.85	-	35.90	3.88	9:10	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	04/13/2015	31.13	27.98	27.05	0.93	-	-	3.97	11:06	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	04/23/2015	31.13	27.21	26.47	0.74	-	35.90	4.57	12:28	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	04/29/2015	31.13	27.50	26.67	0.83	-	35.90	4.36	14:52	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/04/2015	31.13	27.37	26.57	0.80	-	-	4.46	12:08	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	05/11/2015	31.13	27.50	27.43	0.07	-	-	3.69	15:10	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-25	05/13/2015	31.13	28.31	27.19	1.12	1.50	-	3.80	12:53	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/21/2015	31.13	26.85	26.82	0.03	-	-	4.31	12:50	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/28/2015	31.13	27.55	27.09	0.46	-	35.80	3.98	12:10	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/02/2015	31.13	27.10	26.74	0.36	-	-	4.35	13:28	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/09/2015	31.13	26.91	26.46	0.45	-	-	4.62	10:50	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/16/2015	31.13	26.86	26.56	0.30	-	-	4.53	11:43	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/26/2015	31.13	26.91	26.48	0.43	-	35.80	4.60	11:31	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	07/01/2015	31.13	26.43	25.98	0.45	-	-	5.10	12:22	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	07/08/2015	31.13	26.63	26.13	0.50	0.25	-	4.94	12:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	07/13/2015	31.13	26.13	25.89	0.24	-	-	5.21	9:50	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	07/20/2015	31.13	26.23	26.23	TRACE	TRACE	-	4.90	9:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	07/28/2015	31.13	26.37	26.23	0.14	TRACE	36.00	4.88	12:10	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/04/2015	31.13	26.27	26.20	0.07	0.02	-	4.92	12:25	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/11/2015	31.13	26.05	25.90	0.15	0.03	35.88	5.21	11:19	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/18/2015	31.13	26.52	26.42	0.10	0.01	-	4.70	10:53	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/24/2015	31.13	26.55	26.33	0.22	0.02	-	4.77	10:56	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/02/2015	31.13	26.80	26.62	0.18	0.02	35.92	4.49	10:28	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/09/2015	31.13	26.51	26.45	0.06	0.02	35.93	4.67	10:42	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/17/2015	31.13	26.73	26.53	0.20	0.04	35.95	4.58	10:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/23/2015	31.13	26.82	26.63	0.19	0.02	-	4.48	11:18	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/28/2015	31.13	26.34	26.31	0.03	0.01	35.89	4.82	9:51	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	10/05/2015	31.13	26.21	26.06	0.15	0.05	35.87	5.05	11:18	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	11/10/2015	31.13	26.05	26.02	0.03	-	-	5.11	13:31	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	12/01/2015	30.52	26.19	26.06	0.13	-	-	4.44	13:54	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	01/27/2016	30.52	26.68	26.38	0.30	-	-	4.10	11:00	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	02/15/2016	30.52	26.88	26.59	0.29	-	-	3.89	10:39	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	03/14/2016	30.52	26.42	26.27	0.15	-	-	4.23	10:30	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	03/30/2016	30.52	32.73	-	-	-	-	-2.21	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	04/21/2016	30.52	32.76	-	-	-	-	-2.24	10:18	-	-	-	-	-	-	-	-	-	-	5,800	pump in well
MW/RW-25	05/23/2016	30.52	32.81	-	-	-	33.70	-2.29	11:39	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	05/24/2016	30.52	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,900	pump in well
MW/RW-25	06/21/2016	30.52	32.76	-	-	-	-	-2.24	10:10	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	07/21/2016	30.52	32.75	-	-	-	-	-2.23	11:12	-	-	-	-	-	-	-	-	-	-	-	pump in well

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-25	08/24/2016	30.52	30.20	-	-	-	-	0.32	10:40	-	-	-	-	-	-	-	-	-	-	4,600	pump in well
MW/RW-25	09/22/2016	30.52	32.70	-	-	-	-	-2.18	13:05	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	10/20/2016	30.52	32.85	-	-	-	-	-2.33	11:10	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	11/28/2016	30.52	32.65	-	-	-	-	-2.13	9:30	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	250	pump in well
MW/RW-25	12/22/2016	30.52	32.83	-	-	-	-	-2.31	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	01/30/2017	30.52	26.83	-	-	-	-	3.69	12:11	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	02/21/2017	30.52	32.85	-	-	-	-	-2.33	12:44	-	-	-	-	-	-	-	-	-	-	220	pump in well
MW/RW-25	03/29/2017	31.16	32.87	-	-	-	-	-1.71	12:20	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW-27	07/24/2014	31.44	27.59	-	-	-	-	3.85	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	07/31/2014	31.44	27.58	-	-	-	34.47	3.86	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/08/2014	31.44	27.69	-	-	-	34.46	3.75	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/11/2014	31.44	27.33	-	-	-	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/15/2014	31.44	27.90	-	-	-	-	3.54	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/16/2014	31.44	27.65	-	-	-	34.48	3.79	-	-	-	-	-	-	-	-	-	-	-	1,490	
MW-27	08/18/2014	31.44	27.62	-	-	-	-	3.82	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/25/2014	31.44	27.09	-	-	-	-	4.35	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	09/02/2014	31.44	27.52	-	-	-	-	3.92	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	09/15/2014	31.44	27.38	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	09/22/2014	31.44	27.24	-	-	-	-	4.20	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	10/01/2014	31.44	27.44	-	-	-	34.27	4.00	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	10/10/2014	31.44	27.24	-	-	-	-	4.20	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	10/20/2014	31.44	27.59	-	-	-	34.13	3.85	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	10/23/2014	31.44	NR	-	-	-	-	-	-	0.5	<0.5	2	2	<0.5	2	<0.5	<0.5	6	100	1,900	
MW-27	10/27/2014	31.44	27.66	-	-	-	-	3.78	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	11/07/2014	31.44	27.43	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	11/12/2014	31.44	27.43	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	11/21/2014	31.44	28.23	-	-	-	-	3.21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	11/26/2014	31.44	27.64	-	-	-	-	3.80	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	12/05/2014	31.44	27.50	-	-	-	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	12/11/2014	31.44	27.38	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	12/16/2014	31.44	27.34	-	-	-	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	12/23/2014	31.44	27.22	-	-	-	-	4.22	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-27	12/30/2014	31.44	27.80	-	-	-	-	3.64	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	01/09/2015	31.44	27.59	-	-	-	-	3.85	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	01/16/2015	31.44	27.46	-	-	-	-	3.98	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	01/19/2015	31.44	27.38	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	01/26/2015	31.44	27.40	-	-	-	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	02/03/2015	31.44	28.01	-	-	-	34.05	3.43	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	02/09/2015	31.44	27.43	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	02/18/2015	31.44	27.52	-	-	-	-	3.92	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	02/24/2015	31.44	26.61	-	-	-	-	4.83	13:15	-	-	-	-	-	-	-	-	-	-	-	
MW-27	02/25/2015	31.44	27.45	-	-	-	34.06	3.99	13:38	<0.5	<0.5	1	0.5	<0.5	<2	<0.5	<0.5	8.3	120	1,700	
MW-27	03/04/2015	31.44	27.63	-	-	-	-	3.81	13:59	-	-	-	-	<0.5	-	<0.5	<0.5	-	-	-	
MW-27	03/11/2015	31.44	27.11	-	-	-	-	4.33	12:26	-	-	-	-	-	-	-	-	-	-	-	
MW-27	03/18/2015	31.44	27.36	-	-	-	-	4.08	10:49	-	-	-	-	-	-	-	-	-	-	-	
MW-27	03/26/2015	31.44	27.20	-	-	-	34.00	4.24	10:50	-	-	-	-	-	-	-	-	-	-	-	
MW-27	04/02/2015	31.44	27.28	-	-	-	34.05	4.16	11:15	-	-	-	-	-	-	-	-	-	-	-	
MW-27	04/08/2015	31.44	27.55	-	-	-	34.04	3.89	9:30	-	-	-	-	-	-	-	-	-	-	-	
MW-27	04/13/2015	31.44	27.53	-	-	-	-	3.91	10:14	-	-	-	-	-	-	-	-	-	-	-	
MW-27	04/23/2015	31.44	26.92	-	-	-	34.05	4.52	11:33	-	-	-	-	-	-	-	-	-	-	-	
MW-27	04/29/2015	31.44	27.18	-	-	-	34.05	4.26	13:52	-	-	-	-	-	-	-	-	-	-	-	
MW-27	05/04/2015	31.44	26.96	-	-	-	-	4.48	11:26	-	-	-	-	-	-	-	-	-	-	-	
MW-27	05/11/2015	31.44	26.86	-	-	-	34.04	4.58	15:15	-	-	-	-	-	-	-	-	-	-	-	
MW-27	05/13/2015	31.44	27.55	-	-	-	-	3.89	9:52	<0.5	<0.5	2	1	<0.5	2 J	<0.5	<0.5	30	260	19,000	
MW-27	05/21/2015	31.44	27.12	-	-	-	34.12	4.32	12:02	-	-	-	-	-	-	-	-	-	-	-	
MW-27	05/28/2015	31.44	27.51	-	-	-	34.00	3.93	11:25	-	-	-	-	-	-	-	-	-	-	-	
MW-27	06/02/2015	31.44	27.11	-	-	-	-	4.33	12:45	-	-	-	-	-	-	-	-	-	-	-	
MW-27	06/09/2015	31.44	26.92	-	-	-	-	4.52	10:11	-	-	-	-	-	-	-	-	-	-	-	
MW-27	06/16/2015	31.44	26.86	-	-	-	-	4.58	11:05	-	-	-	-	-	-	-	-	-	-	-	
MW-27	06/26/2015	31.44	26.87	-	-	-	34.00	4.57	10:15	-	-	-	-	-	-	-	-	-	-	-	
MW-27	07/01/2015	31.44	26.38	-	-	-	-	5.06	11:57	-	-	-	-	-	-	-	-	-	-	-	
MW-27	07/08/2015	31.44	26.64	-	-	-	-	4.80	10:45	-	-	-	-	-	-	-	-	-	-	-	
MW-27	07/13/2015	31.44	26.19	-	-	-	-	5.25	9:10	-	-	-	-	-	-	-	-	-	-	-	
MW-27	07/20/2015	31.44	26.51	-	-	-	-	4.93	8:52	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-27	07/28/2015	31.44	26.55	-	-	-	34.13	4.89	9:56	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	08/04/2015	31.44	26.58	-	-	-	34.05	4.86	12:05	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	08/05/2015	31.44	27.06	27.06	TRACE	TRACE	34.07	4.38	8:16	-	-	-	-	-	-	-	-	-	-	2,100	-
MW-27	08/11/2015	31.44	26.16	26.16	TRACE	TRACE	34.03	5.28	9:38	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	08/18/2015	31.44	26.77	-	-	-	-	4.67	10:03	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	08/24/2015	31.44	26.75	-	-	-	-	4.69	10:06	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	09/02/2015	31.44	27.09	27.09	TRACE	TRACE	34.08	4.35	9:08	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	09/09/2015	31.44	26.82	26.82	TRACE	TRACE	34.05	4.62	9:57	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	09/17/2015	31.44	27.16	-	-	-	34.08	4.28	10:07	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	09/23/2015	31.44	27.03	-	-	-	-	4.41	10:24	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	09/28/2015	31.44	26.52	-	-	-	34.09	4.92	9:42	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	10/05/2015	31.44	26.39	-	-	-	34.05	5.05	9:00	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	11/10/2015	31.44	26.97	-	-	-	-	4.47	12:51	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	12/01/2015	31.44	26.98	-	-	-	33.35	4.46	13:39	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	12/03/2015	31.44	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	1.00 J	-	1,700	-
MW-27	01/27/2016	31.44	27.28	-	-	-	-	4.16	10:14	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	02/15/2016	31.44	27.64	-	-	-	-	3.80	9:55	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	03/14/2016	31.44	27.32	-	-	-	34.03	4.12	9:00	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	03/15/2016	31.44	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33,000	-
MW-27	04/21/2016	31.44	27.85	-	-	-	33.80	3.59	10:30	-	-	-	-	-	-	-	-	-	-	8,400	-
MW-27	05/23/2016	31.44	26.84	-	-	-	33.70	4.60	11:14	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	05/25/2016	31.44	28.07	-	-	-	33.81	3.37	-	-	-	-	-	-	-	-	-	-	-	18,000	-
MW-27	06/21/2016	31.44	27.63	-	-	-	-	3.81	9:50	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	07/21/2016	31.44	27.53	-	-	-	-	3.91	9:44	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	08/24/2016	31.44	27.59	-	-	-	33.50	3.85	10:10	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	08/25/2016	31.44	27.62	-	-	-	33.60	3.82	11:10	-	-	-	-	-	-	-	-	-	-	3,100	-
MW-27	09/22/2016	31.44	26.96	-	-	-	-	4.48	14:15	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	11/28/2016	31.44	27.84	-	-	-	34.40	3.60	8:51	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	11/29/2016	31.44	27.31	-	-	-	33.58	4.13	13:00	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	880	-
MW-27	02/21/2017	31.44	28.25	-	-	-	33.78	3.19	12:29	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	02/22/2017	31.44	27.94	-	-	-	33.78	3.50	13:00	-	-	-	-	-	-	-	-	-	-	940	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-30S	08/08/2014	30.67	23.31	-	-	-	25.28	7.36	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	08/11/2014	30.67	23.33	-	-	-	-	7.34	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	08/15/2014	30.67	24.84	-	-	-	-	5.83	-	-	-	-	-	-	-	-	-	-	-	7,040	-
MW-30S	08/18/2014	30.67	24.84	-	-	-	-	5.83	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	08/25/2014	30.67	24.79	-	-	-	-	5.88	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	09/02/2014	30.67	24.83	-	-	-	-	5.84	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	09/15/2014	30.67	24.85	-	-	-	-	5.82	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	09/22/2014	30.67	24.88	-	-	-	-	5.79	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	10/01/2014	30.67	24.88	-	-	-	25.28	5.79	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	10/10/2014	30.67	24.87	-	-	-	-	5.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	10/20/2014	30.67	24.77	-	-	-	25.29	5.90	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	10/23/2014	30.67	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	3	<0.5	<0.5	-	25	2,900	-
MW-30S	10/27/2014	30.67	24.78	-	-	-	-	5.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	11/07/2014	30.67	24.85	-	-	-	-	5.82	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	11/12/2014	30.67	24.87	-	-	-	-	5.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	11/21/2014	30.67	24.94	-	-	-	-	5.73	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	11/26/2014	30.67	24.93	-	-	-	-	5.74	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	12/05/2014	30.67	24.92	-	-	-	-	5.75	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	12/11/2014	30.67	24.72	-	-	-	-	5.95	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	12/16/2014	30.67	24.74	-	-	-	-	5.93	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	12/23/2014	30.67	24.70	-	-	-	-	5.97	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	12/30/2014	30.67	24.68	-	-	-	-	5.99	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	01/09/2015	30.67	24.66	-	-	-	-	6.01	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	01/16/2015	30.67	24.62	-	-	-	-	6.05	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	01/19/2015	30.67	24.60	-	-	-	-	6.07	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	01/26/2015	30.67	24.48	-	-	-	-	6.19	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	02/03/2015	30.67	24.56	-	-	-	25.34	6.11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	02/09/2015	30.67	24.57	-	-	-	-	6.10	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	02/18/2015	30.67	24.63	-	-	-	-	6.04	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	02/24/2015	30.67	24.24	-	-	-	25.31	6.43	15:32	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	02/25/2015	30.67	24.10	-	-	-	25.31	6.57	13:10	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	3.9	22	3,500	-
MW-30S	03/04/2015	30.67	24.20	-	-	-	-	6.47	14:04	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	03/11/2015	30.67	24.20	-	-	-	-	6.47	12:32	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-30S	03/18/2015	30.67	24.22	-	-	-	-	6.45	10:55	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	03/26/2015	30.67	24.32	-	-	-	25.30	6.35	10:42	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	04/02/2015	30.67	24.27	-	-	-	25.30	6.40	11:02	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	04/08/2015	30.67	24.30	-	-	-	25.29	6.37	9:31	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	04/13/2015	30.67	24.31	-	-	-	-	6.36	10:28	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	04/23/2015	30.67	DRY	-	-	-	25.28	DRY	11:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	04/29/2015	30.67	24.27	-	-	-	25.25	6.40	13:38	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	05/04/2015	30.67	24.32	-	-	-	-	6.35	11:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	05/11/2015	30.67	24.41	-	-	-	25.20	6.26	10:50	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	05/13/2015	30.67	24.41	-	-	-	-	6.26	9:50	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	3,200	-
MW-30S	05/21/2015	30.67	24.68	-	-	-	25.15	5.99	12:04	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	05/28/2015	30.67	24.67	-	-	-	25.28	6.00	11:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	06/02/2015	30.67	24.55	-	-	-	-	6.12	12:51	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	06/09/2015	30.67	24.30	-	-	-	-	6.37	10:17	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	06/16/2015	30.67	24.33	-	-	-	-	6.34	11:08	-	-	-	-	-	-	-	-	-	-	-	-
MW-30S	06/22/2015	Destroyed during overdrilling activities; replaced with RW-30S																			
MW/RW-31	08/08/2014	31.23	27.31	-	-	-	36.35	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	08/11/2014	31.23	26.88	-	-	-	-	4.35	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	08/15/2014	31.23	27.00	-	-	-	-	4.23	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	08/16/2014	31.23	26.92	-	-	-	35.00	4.31	-	-	-	-	-	-	-	-	-	-	-	27,200	-
MW/RW-31	08/18/2014	31.23	27.11	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	08/25/2014	31.23	26.90	-	-	-	-	4.33	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	09/02/2014	31.23	27.31	-	-	-	-	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	09/15/2014	31.23	27.18	-	-	-	-	4.05	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	09/22/2014	31.23	27.05	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	10/01/2014	31.23	27.21	-	-	-	35.50	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	10/10/2014	31.23	27.02	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	10/20/2014	31.23	27.40	-	-	-	35.50	3.83	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	10/23/2014	31.23	NR	-	-	-	-	-	-	<0.5	<0.5	0.6	0.6	<0.5	<2	<0.5	<0.5	4	140	7,200	-
MW/RW-31	10/27/2014	31.23	27.43	-	-	-	-	3.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	11/07/2014	31.23	24.23	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-31	11/12/2014	31.23	27.18	-	-	-	-	4.05	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-31	11/21/2014	31.23	28.03	-	-	-	-	3.20	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	11/26/2014	31.23	27.39	-	-	-	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	12/05/2014	31.23	27.33	-	-	-	-	3.90	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	12/11/2014	31.23	27.14	-	-	-	-	4.09	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	12/16/2014	31.23	27.15	-	-	-	-	4.08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	12/23/2014	31.23	27.02	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	12/30/2014	31.23	27.61	-	-	-	-	3.62	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	01/09/2015	31.23	27.42	-	-	-	-	3.81	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	01/16/2015	31.23	27.26	-	-	-	-	3.97	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	01/19/2015	31.23	27.20	-	-	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	01/26/2015	31.23	27.18	-	-	-	-	4.05	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	02/03/2015	31.23	27.81	-	-	-	35.49	3.42	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	02/09/2015	31.23	27.18	-	-	-	-	4.05	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	02/18/2015	31.23	27.34	-	-	-	-	3.89	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	02/24/2015	31.23	27.27	-	-	-	-	3.96	13:09	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	02/25/2015	31.23	27.50	-	-	-	35.52	3.73	10:28	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	2.7	97	1,800	
MW/RW-31	03/04/2015	31.23	27.45	-	-	-	-	3.78	14:02	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	03/11/2015	31.23	26.78	-	-	-	-	4.45	12:29	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	03/18/2015	31.23	27.13	-	-	-	-	4.10	10:52	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	03/26/2015	31.23	26.99	-	-	-	35.50	4.24	10:46	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	04/02/2015	31.23	27.04	-	-	-	35.45	4.19	11:04	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	04/08/2015	31.23	27.27	-	-	-	35.42	3.96	9:32	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	04/13/2015	31.23	27.35	-	-	-	-	3.88	10:25	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	04/23/2015	31.23	26.67	-	-	-	35.45	4.56	11:27	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	04/29/2015	31.23	26.97	-	-	-	35.40	4.26	13:34	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	05/04/2015	31.23	26.75	-	-	-	-	4.48	11:20	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	05/11/2015	31.23	26.65	-	-	-	35.40	4.58	14:55	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	05/13/2015	31.23	27.35	-	-	-	-	3.88	9:47	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	3 J	120	14,000	
MW/RW-31	05/21/2015	31.23	26.87	-	-	-	35.50	4.36	12:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	05/28/2015	31.23	27.31	-	-	-	35.40	3.92	11:23	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	06/02/2015	31.23	26.87	-	-	-	-	4.36	12:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	06/09/2015	31.23	26.71	-	-	-	-	4.52	10:14	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-31	06/16/2015	31.23	26.68	-	-	-	-	4.55	11:11	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	06/26/2015	31.23	26.58	-	-	-	35.20	4.65	9:20	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	07/01/2015	31.23	26.02	-	-	-	-	5.21	12:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	07/08/2015	31.23	26.26	-	-	-	-	4.97	10:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	07/13/2015	31.23	25.88	-	-	-	-	5.35	9:13	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	07/20/2015	31.23	26.22	-	-	-	-	5.01	8:58	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	07/28/2015	31.23	26.31	-	-	-	35.56	4.92	10:22	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	08/04/2015	31.23	29.82	-	-	-	35.42	1.41	12:09	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	08/05/2015	31.23	26.78	-	-	-	35.47	4.45	8:22	-	-	-	-	-	-	-	-	-	-	2,400	
MW/RW-31	08/11/2015	31.23	25.93	-	-	-	35.43	5.30	9:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	08/18/2015	31.23	26.56	-	-	-	-	4.67	9:56	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	08/24/2015	31.23	26.55	-	-	-	-	4.68	10:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	09/02/2015	31.23	26.87	-	-	-	35.42	4.36	9:20	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	09/09/2015	31.23	26.61	-	-	-	35.47	4.62	10:03	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	09/17/2015	31.23	26.96	-	-	-	35.50	4.27	10:01	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	09/23/2015	31.23	26.82	-	-	-	-	4.41	10:18	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	09/28/2015	31.23	26.29	-	-	-	35.44	4.94	9:35	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	10/05/2015	31.23	26.11	-	-	-	35.42	5.12	9:02	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	11/10/2015	31.23	26.61	-	-	-	-	4.62	12:47	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	12/01/2015	31.23	26.27	-	-	-	-	4.96	13:47	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	12/03/2015	31.23	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	
MW/RW-31	01/27/2016	31.23	26.24	-	-	-	-	4.99	10:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	02/15/2016	31.23	27.21	-	-	-	-	4.02	9:49	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	03/14/2016	31.23	26.76	-	-	-	-	4.47	9:33	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	03/15/2016	31.23	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,000	
MW/RW-31	03/30/2016	31.42	32.98	-	-	-	-	-1.56	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	04/21/2016	31.42	33.03	-	-	-	-	-1.61	10:27	-	-	-	-	-	-	-	-	-	-	440	
MW/RW-31	05/23/2016	31.42	NR	-	-	-	-	-	11:13	-	-	-	-	-	-	-	-	-	-	-	
																					pump in well
																					pump in well
																					Pump Obstruction
																					during gauging
																					pump in well
																					pump in well
																					pump in well
MW/RW-31	05/24/2016	31.42	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	
MW/RW-31	06/21/2016	31.42	33.05	-	-	-	-	-1.63	10:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-31	07/21/2016	31.42	33.05	-	-	-	-	-1.63	9:48	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-31	08/24/2016	31.42	27.31	-	-	-	-	4.11	10:05	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	08/25/2016	31.42	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	09/22/2016	31.42	27.60	-	-	-	-	3.82	13:15	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	10/20/2016	31.42	31.47	-	-	-	-	-0.05	10:54	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	11/28/2016	31.42	30.92	-	-	-	-	0.50	8:41	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	12/22/2016	31.42	31.20	-	-	-	-	0.22	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	01/30/2017	31.42	27.74	-	-	-	-	3.68	12:21	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	02/21/2017	31.42	31.60	-	-	-	-	-0.18	12:36	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	03/29/2017	31.42	31.40	-	-	-	-	0.02	12:43	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW-33	08/08/2014	30.88	27.91	-	-	-	35.41	2.97	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	08/11/2014	30.88	27.41	-	-	-	-	3.47	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	08/15/2014	30.88	26.98	-	-	-	34.45	3.90	-	-	-	-	-	-	-	-	-	-	-	-	440
MW-33	08/18/2014	30.88	26.76	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	08/25/2014	30.88	26.47	-	-	-	-	4.41	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	09/02/2014	30.88	26.87	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	09/15/2014	30.88	26.73	-	-	-	-	4.15	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	09/22/2014	30.88	26.59	-	-	-	-	4.29	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	10/01/2014	30.88	26.79	-	-	-	34.47	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	10/10/2014	30.88	26.60	-	-	-	-	4.28	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	10/20/2014	30.88	26.96	-	-	-	34.47	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	10/23/2014	30.88	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	<20	<45	-
MW-33	02/24/2015	30.88	26.99	-	-	-	-	3.89	13:05	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	02/25/2015	30.88	27.03	-	-	-	34.45	3.85	10:08	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	<45	-
MW-33	05/11/2015	30.88	26.22	-	-	-	34.40	4.66	14:54	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	05/13/2015	30.88	26.90	-	-	-	34.40	3.98	9:45	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.1	<20	<45	-
MW-33	08/04/2015	30.88	25.91	-	-	-	34.39	4.97	12:14	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	08/05/2015	30.88	26.43	-	-	-	34.42	4.45	8:26	-	-	-	-	-	-	-	-	-	-	-	<45
MW-33	12/01/2015	30.88	26.37	-	-	-	34.40	4.51	13:35	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	12/03/2015	30.88	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45
MW-33	03/14/2016	30.88	26.59	-	-	-	34.46	4.29	10:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	05/23/2016	30.88	26.58	-	-	-	34.40	4.30	10:49	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	08/24/2016	30.88	26.80	-	-	-	34.40	4.08	9:35	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-33	11/28/2016	30.88	27.11	-	-	-	34.36	3.77	8:25	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	11/29/2016	30.88	26.87	-	-	-	34.40	4.01	11:15	-	-	-	-	-	-	-	-	-	-	-	-
MW-33	02/21/2017	30.88	27.42	-	-	-	34.50	3.46	12:32	-	-	-	-	-	-	-	-	-	-	<45	-
MW-51S	08/08/2014	30.81	21.15	-	-	-	25.27	9.66	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/11/2014	30.81	21.27	-	-	-	-	9.54	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/15/2014	30.81	21.17	-	-	-	25.30	9.64	-	-	-	-	-	-	-	-	-	-	-	1,590	-
MW-51S	08/18/2014	30.81	21.23	-	-	-	-	9.58	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/25/2014	30.81	21.34	-	-	-	-	9.47	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/02/2014	30.81	21.38	-	-	-	-	9.43	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/15/2014	30.81	21.46	-	-	-	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/22/2014	30.81	21.48	-	-	-	-	9.33	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/24/2014	30.81	21.49	-	-	-	-	9.32	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	10/01/2014	30.81	21.32	21.32	TRACE	-	25.30	9.49	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	10/10/2014	30.81	21.53	-	-	-	-	9.28	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	10/13/2014	30.81	21.52	-	-	-	-	9.29	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	10/20/2014	30.81	21.58	-	-	-	25.33	9.23	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	10/22/2014	30.81	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,400	-
MW-51S	10/27/2014	30.81	21.64	-	-	-	-	9.17	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	11/07/2014	30.81	21.53	-	-	-	-	9.28	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	11/12/2014	30.81	21.66	-	-	-	-	9.15	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	11/21/2014	30.81	21.73	-	-	-	-	9.08	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	12/05/2014	30.81	21.64	-	-	-	-	9.17	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	12/11/2014	30.81	21.72	-	-	-	-	9.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	12/16/2014	30.81	21.78	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	12/23/2014	30.81	21.83	-	-	-	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	12/30/2014	30.81	21.87	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	01/09/2015	30.81	21.89	-	-	-	-	8.92	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	01/16/2015	30.81	21.80	-	-	-	-	9.01	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	01/19/2015	30.81	21.87	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	01/26/2015	30.81	21.82	-	-	-	-	8.99	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	02/03/2015	30.81	22.00	-	-	-	25.21	8.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	02/09/2015	30.81	21.92	-	-	-	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-51S	02/18/2015	30.81	21.92	-	-	-	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	02/24/2015	30.81	21.96	-	-	-	25.33	8.85	16:00	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	02/26/2015	30.81	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7,100	-
MW-51S	03/11/2015	30.81	21.67	-	-	-	-	9.14	12:48	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	03/18/2015	30.81	21.71	-	-	-	-	9.10	11:08	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	03/26/2015	30.81	21.76	-	-	-	25.30	9.05	11:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	04/02/2015	30.81	21.80	-	-	-	25.30	9.01	11:27	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	04/08/2015	30.81	21.75	-	-	-	25.19	9.06	8:55	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	04/13/2015	30.81	21.87	-	-	-	-	8.94	10:44	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	04/23/2015	30.81	21.89	-	-	-	25.25	8.92	11:59	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	04/29/2015	30.81	21.88	-	-	-	25.25	8.93	14:26	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	05/04/2015	30.81	21.89	-	-	-	-	8.92	11:43	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	05/11/2015	30.81	21.93	-	-	-	24.50	8.88	10:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	05/13/2015	30.81	21.95	-	-	-	-	8.86	10:00	-	-	-	-	-	-	-	-	-	-	17,000	-
MW-51S	05/21/2015	30.81	21.68	-	-	-	25.35	9.13	12:12	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	05/28/2015	30.81	21.93	-	-	-	25.30	8.88	11:47	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	06/09/2015	30.81	21.85	-	-	-	-	8.96	10:34	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	06/16/2015	30.81	21.79	-	-	-	-	9.02	11:27	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	06/26/2015	30.81	21.62	-	-	-	-	9.19	10:35	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	07/08/2015	30.81	21.33	-	-	-	-	9.48	11:40	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	07/13/2015	30.81	21.62	-	-	-	-	9.19	9:41	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	07/20/2015	30.81	21.57	-	-	-	-	9.24	9:19	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	07/28/2015	30.81	21.37	-	-	-	25.35	9.44	11:29	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/04/2015	30.81	21.21	-	-	-	25.30	9.60	12:02	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/05/2015	30.81	21.25	-	-	-	25.30	9.56	9:12	-	-	-	-	-	-	-	-	-	-	11,000	-
MW-51S	08/11/2015	30.81	21.28	-	-	-	25.31	9.53	10:14	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/18/2015	30.81	21.22	-	-	-	-	9.59	10:19	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/24/2015	30.81	21.27	-	-	-	-	9.54	10:30	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/02/2015	30.81	21.35	-	-	-	25.30	9.46	9:54	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/09/2015	30.81	21.42	-	-	-	25.32	9.39	10:32	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/17/2015	30.81	21.52	-	-	-	25.43	9.29	10:32	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	09/23/2015	30.81	21.48	-	-	-	-	9.33	10:53	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-51S	09/28/2015	30.81	21.56	-	-	-	25.30	9.25	9:44	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	10/05/2015	30.81	21.55	-	-	-	25.61	9.26	9:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	11/10/2015	30.81	21.67	-	-	-	-	9.14	13:14	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	12/01/2015	30.81	21.80	-	-	-	25.30	9.01	10:48	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	12/02/2015	30.81	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,000	-
MW-51S	01/27/2016	30.81	21.95	-	-	-	-	8.86	10:36	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	02/15/2016	30.81	21.31	-	-	-	-	9.50	10:18	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	03/14/2016	30.81	21.23	-	-	-	25.30	9.58	12:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	03/15/2016	30.81	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	67,000	-
MW-51S	04/21/2016	30.81	22.04	-	-	-	25.30	8.77	10:58	-	-	-	-	-	-	-	-	-	-	27,000	-
MW-51S	05/23/2016	30.81	21.93	-	-	-	25.21	8.88	11:20	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	05/24/2016	30.81	21.77	-	-	-	25.28	9.04	10:08	-	-	-	-	-	-	-	-	-	-	11,000	-
MW-51S	06/21/2016	30.81	22.20	-	-	-	-	8.61	11:00	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	07/21/2016	30.81	21.27	-	-	-	-	9.54	11:08	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/24/2016	30.81	21.89	-	-	-	25.30	8.92	10:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/25/2016	30.81	21.60	-	-	-	25.45	9.21	11:05	-	-	-	-	-	-	-	-	-	-	15,000	-
MW-51S	11/28/2016	30.81	22.23	-	-	-	25.25	8.58	9:25	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	11/29/2016	30.81	22.37	-	-	-	25.35	8.44	9:51	-	-	-	-	-	-	-	-	-	-	19,000	-
MW-51S	02/21/2017	30.81	22.51	-	-	-	25.30	8.30	11:25	9	<0.5	12	3	-	-	-	-	1 J	-	68,000	-
MW-51S	03/28/2017	30.81	23.00	-	-	-	25.38	7.81	15:20	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	03/29/2017	32.99	25.53	-	-	-	26.93	7.46	12:13	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-51	07/25/2014	30.97	27.25	-	-	-	35.95	3.72	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-51	08/08/2014	30.97	27.00	27.00	TRACE	-	36.48	3.97	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	08/11/2014	30.97	26.70	-	-	-	-	4.27	-	-	-	-	-	-	-	-	-	-	-	1,180	-
MW/RW-51	08/13/2014	30.97	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,650	-
MW/RW-51	08/15/2014	30.97	27.30	-	-	-	-	3.67	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-51	08/16/2014	30.97	26.99	26.99	TRACE	-	34.65	3.98	-	-	-	-	-	-	-	-	-	-	-	281,000	LNAPL NMB
MW/RW-51	08/18/2014	30.97	26.94	26.94	TRACE	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	08/25/2014	30.97	26.59	26.59	TRACE	-	-	4.38	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	09/02/2014	30.97	26.93	26.93	TRACE	-	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	09/15/2014	30.97	26.88	26.85	0.03	TRACE	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-51	09/22/2014	30.97	26.83	26.80	0.03	TRACE	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-51	09/24/2014	30.97	27.19	27.15	0.04	-	-	3.82	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/01/2014	30.97	26.93	26.93	TRACE	-	36.15	4.04	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/10/2014	30.97	26.84	26.81	0.03	-	-	4.16	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/13/2014	30.97	27.01	26.94	0.07	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/20/2014	30.97	27.05	27.03	0.02	TRACE	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	10/27/2014	30.97	27.16	27.12	0.04	TRACE	-	3.85	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/07/2014	30.97	27.11	27.07	0.04	TRACE	-	3.90	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/12/2014	30.97	26.92	26.90	0.02	TRACE	-	4.07	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/21/2014	30.97	27.57	27.50	0.07	TRACE	-	3.46	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/26/2014	30.97	27.20	27.17	0.03	TRACE	-	3.80	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/05/2014	30.97	26.98	26.96	0.02	TRACE	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/11/2014	30.97	26.88	26.87	0.01	TRACE	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/16/2014	30.97	26.83	26.80	0.03	TRACE	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/23/2014	30.97	26.83	26.83	TRACE	TRACE	-	4.14	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/30/2014	30.97	27.28	27.22	0.06	TRACE	-	3.74	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/09/2015	30.97	27.20	27.15	0.05	TRACE	-	3.81	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/16/2015	30.97	26.95	26.91	0.04	TRACE	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/19/2015	30.97	26.88	26.83	0.05	TRACE	-	4.13	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/26/2015	30.97	26.98	26.92	0.06	TRACE	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	02/03/2015	30.97	27.52	27.45	0.07	-	36.15	3.51	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	02/09/2015	30.97	26.93	26.91	0.02	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	02/18/2015	30.97	27.07	27.02	0.05	-	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	02/24/2015	30.97	27.07	27.06	0.01	TRACE	-	3.91	13:46	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	03/04/2015	30.97	27.24	27.17	0.07	-	-	3.79	14:25	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	03/11/2015	30.97	26.68	26.65	0.03	-	-	4.32	12:51	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	03/18/2015	30.97	26.94	26.84	0.10	-	-	4.12	11:11	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	03/26/2015	30.97	26.74	26.60	0.14	-	36.10	4.35	11:50	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/02/2015	30.97	27.78	27.75	0.03	-	36.05	3.22	11:46	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/08/2015	30.97	27.15	27.02	0.13	-	36.11	3.93	9:00	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/13/2015	30.97	27.09	26.98	0.11	-	-	3.98	10:47	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/23/2015	30.97	26.42	26.35	0.07	-	36.05	4.61	12:17	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/29/2015	30.97	26.71	26.60	0.11	-	36.00	4.36	14:39	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-51	05/04/2015	30.97	26.54	26.48	0.06	-	-	4.48	11:46	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	05/11/2015	30.97	26.44	26.40	0.04	-	-	4.57	15:00	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	05/13/2015	30.97	27.31	27.10	0.21	0.03	-	3.84	12:35	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	05/21/2015	30.97	26.74	26.71	0.03	-	-	4.26	12:10	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	05/28/2015	30.97	27.10	26.95	0.15	-	36.05	4.00	11:58	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/02/2015	30.97	26.85	26.82	0.03	-	-	4.15	13:07	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/09/2015	30.97	26.75	26.72	0.03	-	-	4.25	10:37	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/16/2015	30.97	26.57	26.54	0.03	-	-	4.43	11:30	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/26/2015	30.97	26.44	26.31	0.13	-	36.00	4.64	11:23	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	07/01/2015	30.97	25.86	25.85	0.01	-	-	5.12	12:30	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	07/08/2015	30.97	26.28	26.05	0.23	0.05	-	4.89	11:54	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	07/13/2015	30.97	26.03	25.90	0.13	-	-	5.05	9:46	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-51	07/20/2015	30.97	25.97	25.92	0.05	TRACE	-	5.04	9:52	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	07/28/2015	30.97	26.16	26.10	0.06	TRACE	36.18	4.86	11:55	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/04/2015	30.97	26.11	26.02	0.09	0.01	-	4.94	12:28	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/11/2015	30.97	25.78	25.70	0.08	0.01	36.14	5.26	11:07	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/18/2015	30.97	27.29	27.23	0.06	TRACE	-	3.73	10:43	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/24/2015	30.97	26.18	26.16	0.02	TRACE	-	4.81	10:46	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/02/2015	30.97	26.42	26.40	0.02	0.01	36.10	4.57	10:50	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/09/2015	30.97	26.35	26.27	0.08	0.02	36.12	4.69	10:35	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/17/2015	30.97	26.61	-	-	-	36.14	4.36	10:54	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/23/2015	30.97	26.49	26.47	0.02	TRACE	-	4.50	11:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/28/2015	30.97	26.00	26.00	TRACE	-	36.10	4.97	10:01	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/05/2015	30.97	26.67	-	-	-	36.15	4.30	12:15	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/10/2015	30.97	26.52	26.48	0.04	-	-	4.49	13:42	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	12/01/2015	30.97	26.57	26.55	0.02	-	-	4.42	13:53	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	01/27/2016	31.62	26.86	26.73	0.13	-	-	4.87	10:48	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	02/15/2016	31.62	27.22	27.14	0.08	-	-	4.47	10:23	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	03/14/2016	31.62	26.72	26.63	0.09	-	-	4.98	10:25	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	03/30/2016	31.62	33.60	-	-	-	-	-1.98	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	04/21/2016	31.62	33.00	-	-	-	-	-1.38	10:13	-	-	-	-	-	-	-	-	-	-	2,900	pump in well
MW/RW-51	05/23/2016	31.62	33.31	-	-	-	34.52	-1.69	11:30	-	-	-	-	-	-	-	-	-	-	-	pump in well

Table 3

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Potomac River Generating Station
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Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments	
MW/RW-51	05/24/2016	31.62	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	780	pump in well	
MW/RW-51	06/21/2016	31.62	33.00	-	-	-	-	-1.38	11:05	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	07/21/2016	31.62	33.70	-	-	-	-	-2.08	11:05	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	08/24/2016	31.62	32.95	-	-	-	-	-1.33	11:03	-	-	-	-	-	-	-	-	-	-	-	350	pump in well
MW/RW-51	09/22/2016	31.62	33.35	-	-	-	-	-1.73	13:00	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	10/20/2016	31.62	32.92	-	-	-	-	-1.30	11:50	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	11/28/2016	31.62	30.64	-	-	-	-	0.98	9:19	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	-	110	pump in well
MW/RW-51	12/22/2016	31.62	31.35	-	-	-	-	0.27	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	01/30/2017	31.62	27.30	-	-	-	-	4.32	11:56	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	02/21/2017	31.62	33.80	-	-	-	-	-2.18	12:49	-	-	-	-	-	-	-	-	-	-	-	410	pump in well
MW/RW-51	03/29/2017	31.62	32.55	-	-	-	-	-0.93	12:10	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW-52	08/15/2014	30.17	28.11	-	-	-	35.78	2.06	-	-	-	-	-	-	-	-	-	-	-	-	<600	Manhole flooded
MW-52	08/18/2014	30.17	26.07	-	-	-	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	08/25/2014	30.17	25.76	-	-	-	-	4.41	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	09/02/2014	30.17	26.15	-	-	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	09/15/2014	30.17	25.99	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	09/22/2014	30.17	26.00	-	-	-	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	10/01/2014	30.17	26.03	-	-	-	35.65	4.14	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	10/10/2014	30.17	26.07	-	-	-	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	10/20/2014	30.17	26.24	-	-	-	35.64	3.93	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	10/22/2014	30.17	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	120	
MW-52	05/11/2015	30.17	25.81	-	-	-	35.65	4.36	14:45	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	05/12/2015	30.17	26.10	-	-	-	-	4.07	9:50	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-52	08/04/2015	30.17	25.21	-	-	-	35.55	4.96	12:01	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	08/05/2015	30.17	25.68	-	-	-	35.49	4.49	9:47	-	-	-	-	-	-	-	-	-	-	-	110	
MW-52	12/01/2015	30.17	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	03/14/2016	30.17	26.61	-	-	-	35.30	3.56	9:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	05/23/2016	30.17	26.29	-	-	-	35.22	3.88	10:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	08/24/2016	30.17	26.38	-	-	-	35.30	3.79	9:46	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	11/28/2016	30.17	26.62	-	-	-	35.24	3.55	8:33	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	02/21/2017	30.17	26.78	-	-	-	35.27	3.39	12:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	08/15/2014	30.86	26.63	-	-	-	34.95	4.23	-	-	-	-	-	-	-	-	-	-	-	-	<153	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-70	08/18/2014	30.86	26.61	-	-	-	-	4.25	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	08/25/2014	30.86	26.25	-	-	-	-	4.61	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	09/02/2014	30.86	26.68	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	09/15/2014	30.86	26.63	-	-	-	-	4.23	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	09/22/2014	30.86	26.47	-	-	-	-	4.39	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	10/01/2014	30.86	26.66	-	-	-	34.88	4.20	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	10/10/2014	30.86	26.57	-	-	-	-	4.29	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	10/20/2014	30.86	26.79	-	-	-	34.90	4.07	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	10/21/2014	30.86	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-70	02/24/2015	30.86	26.62	-	-	-	-	4.24	13:00	-	-	-	-	-	-	-	-	-	-	-	
MW-70	02/26/2015	30.86	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,200	
MW-70	05/11/2015	30.86	26.02	-	-	-	35.15	4.84	14:55	-	-	-	-	-	-	-	-	-	-	-	
MW-70	05/12/2015	30.86	26.21	-	-	-	-	4.65	14:05	-	-	-	-	-	-	-	-	-	-	100	
MW-70	08/04/2015	30.86	25.73	-	-	-	35.16	5.13	12:28	-	-	-	-	-	-	-	-	-	-	-	
MW-70	08/05/2015	30.86	26.10	-	-	-	35.05	4.76	9:55	-	-	-	-	-	-	-	-	-	-	<45	
MW-70	12/01/2015	30.86	26.23	-	-	-	35.05	4.63	13:32	-	-	-	-	-	-	-	-	-	-	-	
MW-70	03/14/2016	30.86	26.45	-	-	-	35.11	4.41	9:45	-	-	-	-	-	-	-	-	-	-	-	
MW-70	05/23/2016	30.86	26.71	-	-	-	35.05	4.15	10:22	-	-	-	-	-	-	-	-	-	-	-	
MW-70	08/24/2016	30.86	26.64	-	-	-	35.05	4.22	9:52	-	-	-	-	-	-	-	-	-	-	-	
MW-70	11/28/2016	30.86	26.91	-	-	-	35.04	3.95	8:27	-	-	-	-	-	-	-	-	-	-	-	
MW-70	02/21/2017	30.86	27.08	-	-	-	35.13	3.78	12:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/08/2014	30.63	23.33	-	-	-	25.30	7.30	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/11/2014	30.63	22.85	-	-	-	-	7.78	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/15/2014	30.63	21.35	-	-	-	23.90	9.28	-	-	-	-	-	-	-	-	-	-	-	5,980	
MW/RW-72S	08/18/2014	30.63	21.34	-	-	-	-	9.29	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/25/2014	30.63	21.41	-	-	-	-	9.22	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	09/02/2014	30.63	21.45	-	-	-	-	9.18	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	09/15/2014	30.63	21.54	-	-	-	-	9.09	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	09/22/2014	30.63	21.56	-	-	-	-	9.07	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	10/01/2014	30.63	21.63	-	-	-	23.90	9.00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	10/10/2014	30.63	21.69	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	10/20/2014	30.63	21.73	-	-	-	23.88	8.90	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-72S	10/22/2014	30.63	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,300	
MW/RW-72S	10/27/2014	30.63	21.80	-	-	-	-	8.83	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	11/07/2014	30.63	21.83	-	-	-	-	8.80	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	11/12/2014	30.63	21.88	-	-	-	-	8.75	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	11/21/2014	30.63	22.04	-	-	-	-	8.59	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	11/26/2014	30.63	22.10	-	-	-	-	8.53	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/05/2014	30.63	22.23	-	-	-	-	8.40	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/11/2014	30.63	22.11	-	-	-	-	8.52	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/16/2014	30.63	22.00	-	-	-	-	8.63	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/23/2014	30.63	21.99	-	-	-	-	8.64	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/30/2014	30.63	21.98	-	-	-	-	8.65	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/09/2015	30.63	21.94	-	-	-	-	8.69	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/16/2015	30.63	21.93	-	-	-	-	8.70	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/19/2015	30.63	21.88	-	-	-	-	8.75	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/26/2015	30.63	21.78	-	-	-	-	8.85	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/03/2015	30.63	21.79	-	-	-	23.93	8.84	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/09/2015	30.63	21.77	-	-	-	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/18/2015	30.63	21.85	-	-	-	-	8.78	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/24/2015	30.63	21.90	-	-	-	23.89	8.73	15:53	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/25/2015	30.63	21.87	-	-	-	23.75	8.76	14:10	-	-	-	-	-	-	-	-	-	-	3,400	
MW/RW-72S	03/04/2015	30.63	21.79	-	-	-	-	8.84	13:45	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	03/11/2015	30.63	21.75	-	-	-	-	8.88	12:12	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	03/18/2015	30.63	21.70	-	-	-	-	8.93	10:35	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	03/26/2015	30.63	21.73	-	-	-	23.90	8.90	11:10	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/02/2015	30.63	21.78	-	-	-	23.90	8.85	10:55	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/08/2015	30.63	21.82	-	-	-	23.87	8.81	9:35	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/13/2015	30.63	21.86	-	-	-	-	8.77	10:08	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/23/2015	30.63	21.86	-	-	-	23.87	8.77	11:12	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/29/2015	30.63	21.85	-	-	-	23.85	8.78	13:56	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	05/04/2015	30.63	21.84	-	-	-	-	8.79	11:06	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	05/11/2015	30.63	21.91	-	-	-	23.90	8.72	10:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	05/13/2015	30.63	21.90	-	-	-	-	8.73	9:57	13	<0.5	24	<0.5	<0.5	<2	<0.5	<0.5	16.00	-	4,000	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-72S	05/21/2015	30.63	21.88	-	-	-	23.90	8.75	11:47	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	05/28/2015	30.63	22.04	-	-	-	23.90	8.59	11:27	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	06/02/2015	30.63	22.03	-	-	-	-	8.60	12:30	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	06/09/2015	30.63	21.67	-	-	-	-	8.96	9:56	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	06/16/2015	30.63	21.68	-	-	-	-	8.95	10:50	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	06/26/2015	30.63	21.55	-	-	-	23.80	9.08	10:17	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	07/01/2015	30.63	21.38	-	-	-	-	9.25	11:45	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	08/04/2015	30.63	21.55	-	-	-	23.90	9.08	12:38	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	08/05/2015	30.63	21.51	-	-	-	23.90	9.12	9:25	-	-	-	-	-	-	-	-	-	-	3,700	-
MW/RW-72S	12/01/2015	30.63	24.65	-	-	-	26.17	5.98	11:26	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	12/03/2015	30.63	NR	-	-	-	-	-	-	8	<0.5	15	<0.5	-	-	-	2.00 J	-	-	2,100	-
MW/RW-72S	03/14/2016	30.63	23.71	-	-	-	26.02	6.92	12:25	-	-	-	-	-	-	-	-	-	-	8,200	-
MW/RW-72S	05/23/2016	30.63	25.75	-	-	-	-	4.88	11:43	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	05/25/2016	30.63	24.22	-	-	-	25.85	6.41	-	-	-	-	-	-	-	-	-	-	-	3,800	-
MW/RW-72S	06/21/2016	30.63	26.04	-	-	-	-	4.59	10:17	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	07/21/2016	30.63	26.02	-	-	-	-	4.61	10:04	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	08/24/2016	30.63	25.60	-	-	-	26.15	5.03	11:40	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	08/25/2016	30.63	23.95	-	-	-	-	6.68	13:00	-	-	-	-	-	-	-	-	-	-	5,300	-
MW/RW-72S	09/22/2016	30.63	26.07	-	-	-	26.13	4.56	12:16	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	10/20/2016	30.63	26.02	-	-	-	-	4.61	11:02	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	11/28/2016	30.63	DRY	-	-	-	25.79	-	9:59	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	11/29/2016	30.63	26.04	-	-	-	26.10	4.59	13:30	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	12/07/2016	30.63	26.07	-	-	-	26.13	4.56	12:26	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	12/22/2016	30.63	DRY	-	-	-	26.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	01/30/2017	30.63	26.06	-	-	-	26.23	4.57	10:11	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	02/21/2017	30.63	26.01	-	-	-	26.19	4.62	10:22	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	02/22/2017	30.63	26.03	-	-	-	26.19	4.60	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	03/29/2017	30.63	22.90	-	-	-	23.83	7.73	12:37	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	08/08/2014	31.06	26.97	-	-	-	34.55	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	08/11/2014	31.06	26.85	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	<300	-
MW/RW-72	08/13/2014	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,100	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-72	08/15/2014	31.06	27.43	-	-	-	-	3.63	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	08/16/2014	31.06	27.05	-	-	-	34.43	4.01	-	-	-	-	-	-	-	-	-	-	-	1,340	-
MW/RW-72	08/18/2014	31.06	27.00	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	08/25/2014	31.06	26.66	-	-	-	-	4.40	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	09/02/2014	31.06	27.11	-	-	-	-	3.95	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	09/15/2014	31.06	27.02	-	-	-	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	09/22/2014	31.06	26.88	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	10/01/2014	31.06	27.10	-	-	-	34.48	3.96	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	10/10/2014	31.06	26.94	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	10/20/2014	31.06	27.19	-	-	-	34.43	3.87	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	10/22/2014	31.06	NR	-	-	-	-	-	-	41	<0.5	1	66	0.6	2	<0.5	<0.5	61	480	2,000	-
MW/RW-72	10/27/2014	31.06	27.34	-	-	-	-	3.72	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	11/07/2014	31.06	27.04	-	-	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	11/12/2014	31.06	27.12	-	-	-	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	11/21/2014	31.06	27.82	-	-	-	-	3.24	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	11/26/2014	31.06	27.36	-	-	-	-	3.70	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	12/05/2014	31.06	27.01	-	-	-	-	4.05	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	12/11/2014	31.06	27.03	-	-	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	12/16/2014	31.06	26.91	-	-	-	-	4.15	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	12/23/2014	31.06	26.89	-	-	-	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	12/30/2014	31.06	27.36	-	-	-	-	3.70	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	01/09/2015	31.06	27.27	-	-	-	-	3.79	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	01/16/2015	31.06	27.03	-	-	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	01/19/2015	31.06	26.98	-	-	-	-	4.08	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	01/26/2015	31.06	26.96	-	-	-	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	02/03/2015	31.06	27.65	-	-	-	34.19	3.41	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	02/09/2015	31.06	27.14	-	-	-	-	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	02/18/2015	31.06	27.11	-	-	-	-	3.95	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	02/24/2015	31.06	27.27	-	-	-	-	3.79	13:35	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	02/25/2015	31.06	27.33	-	-	-	34.28	3.73	9:50	8	<0.5	<0.5	3	<0.5	<2	<0.5	<0.5	<0.030	65	590	-
MW/RW-72	03/04/2015	31.06	27.17	-	-	-	-	3.89	13:48	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	03/11/2015	31.06	26.98	-	-	-	-	4.08	12:15	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-72	03/18/2015	31.06	26.94	-	-	-	-	4.12	10:38	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	03/26/2015	31.06	26.78	-	-	-	34.10	4.28	11:13	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	04/02/2015	31.06	26.86	-	-	-	34.15	4.20	10:57	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	04/08/2015	31.06	27.20	-	-	-	33.98	3.86	9:40	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	04/13/2015	31.06	27.11	-	-	-	-	3.95	10:11	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	04/23/2015	31.06	26.61	-	-	-	34.13	4.45	11:15	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	04/29/2015	31.06	26.76	-	-	-	33.95	4.30	14:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	05/04/2015	31.06	26.60	-	-	-	-	4.46	11:09	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	05/11/2015	31.06	26.55	-	-	-	33.90	4.51	14:58	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	05/13/2015	31.06	27.12	-	-	-	-	3.94	9:55	13	<0.5	<0.5	6	<0.5	<2	<0.5	<0.5	13.00	120	630	
MW/RW-72	05/21/2015	31.06	26.81	-	-	-	34.04	4.25	11:49	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	05/28/2015	31.06	27.05	-	-	-	34.00	4.01	11:28	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	06/02/2015	31.06	26.68	-	-	-	-	4.38	12:33	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	06/09/2015	31.06	26.46	-	-	-	-	4.60	10:00	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	06/16/2015	31.06	26.48	-	-	-	-	4.58	10:53	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	06/26/2015	31.06	26.42	-	-	-	34.00	4.64	10:19	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	07/01/2015	31.06	25.91	-	-	-	-	5.15	11:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	08/04/2015	31.06	26.19	-	-	-	34.14	4.87	12:35	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	08/05/2015	31.06	26.61	-	-	-	34.26	4.45	9:22	-	-	-	-	-	-	-	-	-	-	3,900	
MW/RW-72	12/01/2015	31.06	26.68	-	-	-	-	4.38	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	12/03/2015	31.06	NR	-	-	-	-	-	-	20	<0.5	29	100	-	-	-	-	26	-	960	
MW/RW-72	03/14/2016	31.06	26.87	-	-	-	-	4.19	9:05	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	03/15/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	pump in well
MW/RW-72	03/30/2016	31.06	31.47	-	-	-	-	-0.41	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	04/21/2016	31.06	31.45	-	-	-	-	-0.39	10:22	-	-	-	-	-	-	-	-	-	-	350	pump in well
MW/RW-72	05/23/2016	31.06	31.50	-	-	-	-	-0.44	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	05/24/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360	pump in well
MW/RW-72	06/21/2016	31.06	31.50	-	-	-	-	-0.44	10:21	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	07/21/2016	31.06	31.51	-	-	-	-	-0.45	10:01	-	-	-	-	-	-	-	-	-	-	-	pump in well

Table 3

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Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-72	08/04/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Uninstalled pump to use in MW-14 due to increasing LNAPL levels in MW-14
MW/RW-72	08/24/2016	31.06	27.21	-	-	-	33.00	3.85	11:43	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	08/25/2016	31.06	27.42	-	-	-	33.18	3.64	11:06	-	-	-	-	-	-	-	-	-	-	330	-
MW/RW-72	09/22/2016	31.06	26.54	-	-	-	-	4.52	14:10	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	11/28/2016	31.06	26.36	-	-	-	33.69	4.70	8:50	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	11/29/2016	31.06	26.72	-	-	-	33.07	4.34	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	160	-
MW/RW-72	02/21/2017	31.06	27.88	-	-	-	33.03	3.18	12:26	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	02/22/2017	31.06	27.65	-	-	-	33.03	3.41	12:50	-	-	-	-	-	-	-	-	-	-	150	-
MW-100S	08/15/2014	31.06	21.32	-	-	-	24.22	9.74	-	-	-	-	-	-	-	-	-	-	-	<300	-
MW-100S	08/18/2014	31.06	21.28	-	-	-	-	9.78	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	08/25/2014	31.06	21.31	-	-	-	-	9.75	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	09/02/2014	31.06	21.39	-	-	-	-	9.67	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	09/15/2014	31.06	21.39	-	-	-	-	9.67	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	09/22/2014	31.06	21.52	-	-	-	-	9.54	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	10/01/2014	31.06	21.62	-	-	-	24.16	9.44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	10/10/2014	31.06	21.61	-	-	-	-	9.45	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	10/20/2014	31.06	21.67	-	-	-	24.17	9.39	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	10/21/2014	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	-
MW-100S	02/24/2015	31.06	21.75	-	-	-	24.18	9.31	15:18	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	02/26/2015	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	690	-
MW-100S	05/11/2015	31.06	21.55	-	-	-	24.20	9.51	9:55	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	05/12/2015	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	-
MW-100S	08/04/2015	31.06	20.66	-	-	-	24.15	10.40	12:44	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	08/05/2015	31.06	20.70	-	-	-	24.15	10.36	10:03	-	-	-	-	-	-	-	-	-	-	<45	-
MW-100S	12/01/2015	31.06	21.57	-	-	-	24.16	9.49	11:38	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	03/14/2016	31.06	21.41	-	-	-	24.20	9.65	9:40	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	05/23/2016	31.06	21.33	-	-	-	24.31	9.73	10:46	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	08/24/2016	31.06	21.11	-	-	-	24.24	9.95	11:41	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	11/28/2016	31.06	21.73	-	-	-	24.16	9.33	9:08	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-100S	11/29/2016	31.06	21.72	-	-	-	24.15	9.34	9:30	-	-	-	-	-	-	-	-	-	-	<45	
MW-100S	02/21/2017	31.06	21.68	-	-	-	24.17	9.38	10:42	-	-	-	-	-	-	-	-	-	-	-	
MW-100	08/15/2014	30.78	26.80	-	-	-	36.90	3.98	-	-	-	-	-	-	-	-	-	-	-	<152	
MW-100	08/18/2014	30.78	26.66	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	08/25/2014	30.78	26.26	-	-	-	-	4.52	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	09/02/2014	30.78	26.70	-	-	-	-	4.08	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	09/15/2014	30.78	26.65	-	-	-	-	4.13	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	09/22/2014	30.78	26.48	-	-	-	-	4.30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	10/01/2014	30.78	26.69	-	-	-	36.68	4.09	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	10/10/2014	30.78	26.60	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	10/20/2014	30.78	26.86	-	-	-	36.58	3.92	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	10/21/2014	30.78	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	60	
MW-100	02/24/2015	30.78	26.88	-	-	-	36.61	3.90	13:08	-	-	-	-	-	-	-	-	-	-	-	
MW-100	02/25/2015	30.78	26.87	-	-	-	36.62	3.91	11:32	-	-	-	-	-	-	-	-	-	-	300	
MW-100	05/11/2015	30.78	26.17	-	-	-	36.60	4.61	14:57	-	-	-	-	-	-	-	-	-	-	-	
MW-100	05/12/2015	30.78	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-100	08/04/2015	30.78	25.80	-	-	-	36.80	4.98	12:31	-	-	-	-	-	-	-	-	-	-	-	
MW-100	08/05/2015	30.78	26.22	-	-	-	36.61	4.56	9:59	-	-	-	-	-	-	-	-	-	-	<45	
MW-100	12/01/2015	30.78	26.25	-	-	-	36.35	4.53	13:24	-	-	-	-	-	-	-	-	-	-	-	
MW-100	03/14/2016	30.78	26.54	-	-	-	36.46	4.24	9:54	-	-	-	-	-	-	-	-	-	-	-	
MW-100	05/23/2016	30.78	26.74	-	-	-	36.69	4.04	10:28	-	-	-	-	-	-	-	-	-	-	-	
MW-100	08/24/2016	30.78	26.72	-	-	-	36.42	4.06	11:44	-	-	-	-	-	-	-	-	-	-	-	
MW-100	11/28/2016	30.78	26.87	-	-	-	27.44	3.91	9:10	-	-	-	-	-	-	-	-	-	-	-	
MW-100	11/29/2016	30.78	26.66	-	-	-	36.39	4.12	9:35	-	-	-	-	-	-	-	-	-	-	<45	
MW-100	02/21/2017	30.78	27.35	-	-	-	36.30	3.43	12:03	-	-	-	-	-	-	-	-	-	-	-	
MW-102	08/15/2014	29.72	29.91	-	-	-	36.64	-0.19	-	-	-	-	-	-	-	-	-	-	-	<1,500	
MW-102	08/18/2014	29.72	29.81	-	-	-	-	-0.09	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	08/25/2014	29.72	28.40	-	-	-	-	1.32	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	09/02/2014	29.72	27.23	-	-	-	-	2.49	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	09/15/2014	29.72	24.97	-	-	-	-	4.75	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	09/22/2014	29.72	24.83	-	-	-	-	4.89	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	10/01/2014	29.72	24.73	-	-	-	36.45	4.99	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-102	10/10/2014	29.72	24.66	-	-	-	-	5.06	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-102	10/20/2014	29.72	24.78	-	-	-	36.44	4.94	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-102	10/21/2014	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-102	05/11/2015	29.72	24.44	-	-	-	36.40	5.28	15:01	-	-	-	-	-	-	-	-	-	-	<45	-
MW-102	05/12/2015	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	-
MW-102	08/04/2015	29.72	23.39	-	-	-	36.43	6.33	12:35	-	-	-	-	-	-	-	-	-	-	-	-
MW-102	08/05/2015	29.72	23.50	-	-	-	36.42	6.22	10:14	-	-	-	-	-	-	-	-	-	-	<45	-
MW-102	12/01/2015	29.72	22.61	-	-	-	31.80	7.11	13:52	-	-	-	-	-	-	-	-	-	-	-	-
MW-102	03/14/2016	29.72	24.11	-	-	-	36.41	5.61	10:04	-	-	-	-	-	-	-	-	-	-	-	-
MW-102	05/23/2016	29.72	23.33	-	-	-	36.40	6.39	10:15	-	-	-	-	-	-	-	-	-	-	-	-
MW-102	08/24/2016	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VO
MW-102	11/28/2016	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VO
MW-102	02/21/2017	29.72	25.22	-	-	-	36.43	4.50	11:59	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	07/24/2014	11.07	7.87	-	-	-	-	3.20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	08/08/2014	11.07	4.61	-	-	-	15.06	6.46	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	08/11/2014	11.07	4.63	-	-	-	-	6.44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	08/15/2014	11.07	4.26	-	-	-	14.95	6.81	-	-	-	-	-	-	-	-	-	-	-	479	-
MW-103	08/18/2014	11.07	4.48	-	-	-	-	6.59	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	08/25/2014	11.07	4.45	-	-	-	-	6.62	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	09/02/2014	11.07	4.50	-	-	-	-	6.57	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	09/15/2014	11.07	4.63	-	-	-	-	6.44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	09/22/2014	11.07	4.76	-	-	-	-	6.31	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	10/01/2014	11.07	4.85	-	-	-	14.88	6.22	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	10/10/2014	11.07	4.93	-	-	-	-	6.14	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	10/20/2014	11.07	4.70	-	-	-	14.88	6.37	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	10/21/2014	11.07	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	26	54	-
MW-103	02/24/2015	11.07	5.02	-	-	-	-	6.05	15:27	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	02/26/2015	11.07	5.21	-	-	-	14.90	5.86	11:53	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.033	<20	<45	-
MW-103	05/11/2015	11.07	4.67	-	-	-	14.88	6.40	10:20	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	05/12/2015	11.07	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	22 J	<45	-
MW-103	08/04/2015	11.07	3.69	-	-	-	14.88	7.38	10:19	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	08/05/2015	11.07	3.71	-	-	-	14.87	7.36	10:20	-	-	-	-	-	-	-	-	-	-	<45	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-103	12/01/2015	11.07	9.70	-	-	-	-	1.37	11:30	-	-	-	-	-	-	-	-	-	-	-	
MW-103	03/14/2016	11.07	4.15	-	-	-	14.89	6.92	10:08	-	-	-	-	-	-	-	-	-	-	-	
MW-103	05/23/2016	11.07	4.01	-	-	-	14.80	7.06	11:28	-	-	-	-	-	-	-	-	-	-	-	
MW-103	08/24/2016	11.07	4.26	-	-	-	14.98	6.81	11:35	-	-	-	-	-	-	-	-	-	-	-	
MW-103	11/28/2016	11.07	5.15	-	-	-	15.05	5.92	11:36	-	-	-	-	-	-	-	-	-	-	-	
MW-103	02/21/2017	11.07	5.34	-	-	-	14.89	5.73	10:56	-	-	-	-	-	-	-	-	-	-	-	
MW-104	07/24/2014	12.00	5.24	-	-	-	-	6.76	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	08/08/2014	12.00	4.28	-	-	-	12.05	7.72	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	08/11/2014	12.00	4.40	-	-	-	-	7.60	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	08/15/2014	12.00	3.95	-	-	-	12.20	8.05	-	-	-	-	-	-	-	-	-	-	-	1,630	
MW-104	08/18/2014	12.00	4.22	-	-	-	-	7.78	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	08/25/2014	12.00	4.29	-	-	-	-	7.71	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	09/02/2014	12.00	4.38	-	-	-	-	7.62	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	09/15/2014	12.00	4.52	-	-	-	-	7.48	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	09/22/2014	12.00	4.73	-	-	-	-	7.27	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	10/01/2014	12.00	4.73	-	-	-	11.98	7.27	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	10/10/2014	12.00	4.77	-	-	-	-	7.23	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	10/20/2014	12.00	3.98	-	-	-	12.07	8.02	-	-	-	-	-	-	-	-	-	-	-	-	
MW-104	10/21/2014	12.00	NR	-	-	-	-	-	-	<0.5	<0.5	0.7	2	<0.5	<2	<0.5	<0.5	1	59	150	
MW-104	02/24/2015	12.00	5.43	-	-	-	-	6.57	15:38	-	-	-	-	-	-	-	-	-	-	-	
MW-104	02/26/2015	12.00	5.70	-	-	-	12.00	6.30	12:07	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	<45	
MW-104	05/11/2015	12.00	4.51	-	-	-	12.10	7.49	10:25	-	-	-	-	-	-	-	-	-	-	-	
MW-104	05/12/2015	12.00	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45	
MW-104	08/04/2015	12.00	3.82	-	-	-	12.00	8.18	10:08	-	-	-	-	-	-	-	-	-	-	-	
MW-104	08/05/2015	12.00	3.85	-	-	-	12.50	8.15	10:23	-	-	-	-	-	-	-	-	-	-	<45	
MW-104	12/01/2015	12.00	4.29	-	-	-	12.05	7.71	11:42	-	-	-	-	-	-	-	-	-	-	-	
MW-104	03/14/2016	12.00	3.80	-	-	-	11.99	8.20	10:14	-	-	-	-	-	-	-	-	-	-	-	
MW-104	05/23/2016	12.00	3.72	-	-	-	12.00	8.28	11:28	-	-	-	-	-	-	-	-	-	-	-	
MW-104	08/24/2016	12.00	4.17	-	-	-	12.12	7.83	11:28	-	-	-	-	-	-	-	-	-	-	-	
MW-104	11/28/2016	12.00	5.13	-	-	-	12.15	6.87	11:19	-	-	-	-	-	-	-	-	-	-	-	
MW-104	02/21/2017	12.00	5.07	-	-	-	12.05	6.93	10:53	-	-	-	-	-	-	-	-	-	-	-	
MW-105	07/24/2014	10.94	2.34	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Comments	
MW-105	08/08/2014	10.94	2.15	-	-	-	10.06	8.79	-	-	-	-	-	-	-	-	-	-	-	-	-	Manhole flooded
MW-105	08/11/2014	10.94	2.39	-	-	-	-	8.55	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/15/2014	10.94	1.67	-	-	-	9.95	9.27	-	-	-	-	-	-	-	-	-	-	-	<1,500	-	
MW-105	08/18/2014	10.94	2.06	-	-	-	-	8.88	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/25/2014	10.94	2.25	-	-	-	-	8.69	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	09/02/2014	10.94	2.24	-	-	-	-	8.70	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	09/15/2014	10.94	2.32	-	-	-	-	8.62	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	09/22/2014	10.94	2.71	-	-	-	-	8.23	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/01/2014	10.94	2.57	-	-	-	9.88	8.37	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/10/2014	10.94	2.70	-	-	-	-	8.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/20/2014	10.94	1.70	-	-	-	9.93	9.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/21/2014	10.94	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.06	<20	<45	-	
MW-105	05/11/2015	10.94	2.40	-	-	-	9.70	8.54	10:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	05/12/2015	10.94	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45	-	
MW-105	08/04/2015	10.94	1.65	-	-	-	9.62	9.29	10:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/05/2015	10.94	1.67	-	-	-	9.60	9.27	10:26	-	-	-	-	-	-	-	-	-	-	<45	-	
MW-105	12/01/2015	10.94	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	03/14/2016	10.94	0.30	-	-	-	9.24	10.64	10:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	05/23/2016	10.94	0.91	-	-	-	9.50	10.03	11:36	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/24/2016	10.94	1.70	-	-	-	9.22	9.24	11:25	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	11/28/2016	10.94	3.00	-	-	-	9.19	7.94	11:14	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	02/21/2017	10.94	3.11	-	-	-	9.16	7.83	10:47	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/08/2014	11.12	8.30	-	-	-	10.27	2.82	-	-	-	-	-	-	-	-	-	-	-	-	-	89,200
MW-106	08/11/2014	11.12	8.27	-	-	-	-	2.85	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/15/2014	11.12	7.63	-	-	-	9.88	3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/18/2014	11.12	7.58	-	-	-	-	3.54	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/25/2014	11.12	7.52	-	-	-	-	3.60	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	09/02/2014	11.12	7.79	-	-	-	-	3.33	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	09/15/2014	11.12	7.90	-	-	-	-	3.22	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	09/22/2014	11.12	7.87	-	-	-	-	3.25	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	10/01/2014	11.12	7.93	-	-	-	9.88	3.19	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	10/10/2014	11.12	7.71	-	-	-	-	3.41	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-106	10/13/2014	11.12	7.92	-	-	-	-	3.20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	10/20/2014	11.12	7.86	-	-	-	9.88	3.26	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	10/22/2014	11.12	NR	-	-	-	-	-	-	<0.5	<0.5	1	<0.5	<0.5	<2	<0.5	<0.5	23	230	2,000	-
MW-106	10/27/2014	11.12	7.77	-	-	-	-	3.35	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	11/07/2014	11.12	7.83	-	-	-	-	3.29	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	11/12/2014	11.12	7.88	-	-	-	-	3.24	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	11/21/2014	11.12	8.23	-	-	-	-	2.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	11/26/2014	11.12	8.03	-	-	-	-	3.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	12/05/2014	11.12	7.21	-	-	-	-	3.91	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	12/11/2014	11.12	6.95	-	-	-	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	12/16/2014	11.12	7.18	-	-	-	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	12/23/2014	11.12	7.31	-	-	-	-	3.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	12/30/2014	11.12	6.97	-	-	-	-	4.15	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	01/09/2015	11.12	7.34	-	-	-	-	3.78	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	01/16/2015	11.12	6.88	-	-	-	-	4.24	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	01/19/2015	11.12	6.77	-	-	-	-	4.35	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	01/26/2015	11.12	5.79	-	-	-	-	5.33	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	02/03/2015	11.12	7.24	-	-	-	9.90	3.88	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	02/09/2015	11.12	7.42	-	-	-	-	3.70	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	02/18/2015	11.12	7.63	-	-	-	-	3.49	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	02/24/2015	11.12	7.76	-	-	-	9.84	3.36	13:18	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	02/25/2015	11.12	7.80	-	-	-	9.79	3.32	10:20	<0.5	<0.5	2	<0.5	<0.5	<2	<0.5	<0.5	4.1	130	9,500	-
MW-106	03/04/2015	11.12	7.57	-	-	-	-	3.55	13:52	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	03/11/2015	11.12	5.17	-	-	-	-	5.95	12:19	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	03/18/2015	11.12	6.39	-	-	-	-	4.73	10:42	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	03/26/2015	11.12	7.02	-	-	-	9.90	4.10	11:02	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	04/02/2015	11.12	7.15	-	-	-	9.85	3.97	10:47	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	04/08/2015	11.12	7.55	-	-	-	9.87	3.57	9:46	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	04/13/2015	11.12	7.63	-	-	-	-	3.49	10:18	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	04/23/2015	11.12	6.70	-	-	-	9.85	4.42	11:00	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	04/29/2015	11.12	7.15	-	-	-	9.85	3.97	13:34	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	05/04/2015	11.12	7.23	-	-	-	-	3.89	11:17	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-106	05/11/2015	11.12	7.43	-	-	-	9.85	3.69	14:51	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	05/12/2015	11.12	7.50	-	-	-	-	3.62	10:35	<0.5	<0.5	5	<0.5	<0.5	<2	<0.5	<0.5	2.1	75	7,800	-
MW-106	05/28/2015	11.12	7.81	-	-	-	9.80	3.31	11:11	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	06/02/2015	11.12	6.66	-	-	-	-	4.46	12:38	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	06/09/2015	11.12	6.37	-	-	-	-	4.75	10:04	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	06/16/2015	11.12	7.21	-	-	-	-	3.91	11:01	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	06/26/2015	11.12	6.27	-	-	-	9.90	4.85	9:13	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	07/01/2015	11.12	4.77	-	-	-	-	6.35	11:54	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	08/04/2015	11.12	7.42	-	-	-	9.86	3.70	12:19	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	08/05/2015	11.12	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,300	-
MW-106	12/01/2015	11.12	7.65	-	-	-	9.85	3.47	13:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	12/03/2015	11.12	NR	-	-	-	-	-	-	<0.5	<0.5	1	<0.5	-	-	-	-	<1	-	3,300	-
MW-106	03/14/2016	11.12	7.33	-	-	-	9.84	3.79	9:10	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	03/15/2016	11.12	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,900	-
MW-106	04/21/2016	11.12	7.85	-	-	-	9.80	3.27	9:42	-	-	-	-	-	-	-	-	-	-	2,000	-
MW-106	05/05/2016	11.12	6.97	-	-	-	-	4.15	12:17	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	05/23/2016	11.12	6.52	-	-	-	9.80	4.60	10:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	05/24/2016	11.12	6.26	-	-	-	9.60	4.86	13:00	-	-	-	-	-	-	-	-	-	-	1,100	-
MW-106	06/21/2016	11.12	7.90	-	-	-	-	3.22	9:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	07/21/2016	11.12	7.63	-	-	-	-	3.49	9:37	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	08/24/2016	11.12	7.90	-	-	-	9.60	3.22	9:37	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	08/25/2016	11.12	7.80	-	-	-	-	3.32	14:15	-	-	-	-	-	-	-	-	-	-	1,800	-
MW-106	09/22/2016	11.12	7.87	-	-	-	-	3.25	14:20	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	11/28/2016	11.12	8.51	-	-	-	9.50	2.61	8:31	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	11/29/2016	11.12	8.15	-	-	-	9.45	2.97	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	8,800	-
MW-106	02/21/2017	11.12	DRY	-	-	-	9.50	-	12:25	-	-	-	-	-	-	-	-	-	-	-	-
MW-106	02/22/2017	11.12	7.94	-	-	-	9.50	3.18	11:49	-	-	-	-	-	-	-	-	-	-	670	Very muddy
MW-107	08/08/2014	15.74	10.62	-	-	-	11.57	5.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	08/11/2014	15.74	9.02	-	-	-	-	6.72	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	08/15/2014	15.74	8.94	-	-	-	-	6.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	08/16/2014	15.74	8.93	-	-	-	11.57	6.81	-	-	-	-	-	-	-	-	-	-	-	8,540	-
MW-107	08/18/2014	15.74	8.89	-	-	-	-	6.85	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-107	08/25/2014	15.74	8.38	-	-	-	-	7.36	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	09/02/2014	15.74	8.43	-	-	-	-	7.31	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	09/15/2014	15.74	9.39	-	-	-	-	6.35	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	09/22/2014	15.74	9.92	-	-	-	-	5.82	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	10/01/2014	15.74	10.32	-	-	-	11.03	5.42	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	10/10/2014	15.74	10.53	-	-	-	-	5.21	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	10/13/2014	15.74	10.67	-	-	-	-	5.07	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	10/20/2014	15.74	8.43	-	-	-	11.04	7.31	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	10/22/2014	15.74	NR	-	-	-	-	-	-	<0.5	<0.5	2	2	<0.5	<2	<0.5	<0.5	0.9	49	840	-
MW-107	10/27/2014	15.74	7.97	-	-	-	-	7.77	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	11/07/2014	15.74	8.32	-	-	-	-	7.42	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	11/12/2014	15.74	8.63	-	-	-	-	7.11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	11/21/2014	15.74	9.38	-	-	-	-	6.36	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	11/26/2014	15.74	8.93	-	-	-	-	6.81	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	12/05/2014	15.74	7.47	-	-	-	-	8.27	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	12/11/2014	15.74	7.43	-	-	-	-	8.31	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	12/16/2014	15.74	8.28	-	-	-	-	7.46	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	12/23/2014	15.74	8.35	-	-	-	-	7.39	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	12/30/2014	15.74	8.20	-	-	-	-	7.54	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	01/09/2015	15.74	8.03	-	-	-	-	7.71	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	01/16/2015	15.74	7.68	-	-	-	-	8.06	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	01/19/2015	15.74	6.76	-	-	-	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	01/26/2015	15.74	5.84	-	-	-	-	9.90	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	02/03/2015	15.74	8.63	-	-	-	11.04	7.11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	02/09/2015	15.74	8.73	-	-	-	-	7.01	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	02/18/2015	15.74	9.21	-	-	-	-	6.53	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	02/24/2015	15.74	9.78	-	-	-	11.00	5.96	13:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	02/25/2015	15.74	9.64	-	-	-	11.00	6.10	11:40	1	<0.5	0.7	0.7	<0.5	<2	<0.5	<0.5	-	37	480	-
MW-107	03/04/2015	15.74	9.48	-	-	-	-	6.26	13:55	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	03/11/2015	15.74	4.08	-	-	-	-	11.66	12:22	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	03/18/2015	15.74	7.44	-	-	-	-	8.30	10:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	03/26/2015	15.74	8.98	-	-	-	11.00	6.76	11:05	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-107	04/02/2015	15.74	8.63	-	-	-	11.00	7.11	10:49	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	04/08/2015	15.74	9.00	-	-	-	11.00	6.74	9:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	04/13/2015	15.74	9.06	-	-	-	-	6.68	10:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	04/23/2015	15.74	7.18	-	-	-	11.00	8.56	11:04	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	04/29/2015	15.74	9.14	-	-	-	11.00	6.60	13:39	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	05/04/2015	15.74	9.03	-	-	-	-	6.71	11:14	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	05/11/2015	15.74	9.19	-	-	-	11.00	6.55	14:49	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	05/12/2015	15.74	9.25	-	-	-	-	6.49	10:37	<0.5	<0.5	2	3	<0.5	<0.5	<0.5	<0.5	5.00	40 J	150	-
MW-107	05/21/2015	15.74	9.21	-	-	-	11.00	6.53	11:57	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	05/28/2015	15.74	9.27	-	-	-	11.00	6.47	11:13	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	06/02/2015	15.74	3.95	-	-	-	-	11.79	12:41	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	06/09/2015	15.74	6.78	-	-	-	-	8.96	10:07	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	06/16/2015	15.74	9.05	-	-	-	-	6.69	10:58	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	06/26/2015	15.74	6.86	-	-	-	11.00	8.88	9:15	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	07/01/2015	15.74	4.03	-	-	-	-	11.71	11:51	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	08/04/2015	15.74	9.40	-	-	-	11.00	6.34	12:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	08/05/2015	15.74	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	280	-
MW-107	12/01/2015	15.74	8.80	-	-	-	11.01	6.94	13:47	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	12/03/2015	15.74	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	730	-
MW-107	03/14/2016	15.74	8.09	-	-	-	11.03	7.65	9:15	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	05/23/2016	15.74	7.29	-	-	-	10.90	8.45	10:26	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	08/24/2016	15.74	DRY	-	-	-	11.02	-	9:30	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	11/28/2016	15.74	DRY	-	-	-	11.00	-	8:27	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	12/07/2016	15.74	DRY	-	-	-	11.00	-	12:18	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	02/21/2017	15.74	DRY	-	-	-	11.00	-	12:28	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	02/22/2017	15.74	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	08/08/2014	15.61	DRY	-	-	-	9.49	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	08/11/2014	15.61	DRY	-	-	-	9.52	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	08/15/2014	15.61	9.01	-	-	-	9.22	6.60	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-108	08/18/2014	15.61	9.07	-	-	-	-	6.54	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-108	08/25/2014	15.61	DRY	-	-	-	9.23	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	09/02/2014	15.61	DRY	-	-	-	9.23	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-108	09/15/2014	15.61	DRY	-	-	-	9.22	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	09/22/2014	15.61	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	10/01/2014	15.61	DRY	-	-	-	10.48	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	10/10/2014	15.61	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	10/20/2014	15.61	DRY	-	-	-	10.48	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	05/11/2015	15.61	DRY	-	-	-	9.20	-	14:47	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	05/12/2015	15.61	DRY	-	-	-	-	-	10:40	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	08/04/2015	15.61	DRY	-	-	-	9.21	-	12:27	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	12/01/2015	15.61	DRY	-	-	-	9.21	-	13:49	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	03/14/2016	15.61	DRY	-	-	-	9.22	-	9:18	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	05/23/2016	15.61	8.37	-	-	-	9.20	7.24	10:28	-	-	-	-	-	-	-	-	-	-	-	-
MW-108	05/25/2016	15.61	8.34	-	-	-	9.20	7.27	12:13	-	-	-	-	-	-	-	-	-	-	51 J	-
MW-108	08/24/2016	15.61	DRY	-	-	-	9.23	-	9:32	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	08/25/2016	15.61	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	11/28/2016	15.61	9.07	-	-	-	9.25	6.54	8:29	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW-108	12/07/2016	15.61	DRY	-	-	-	9.24	-	12:21	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	02/21/2017	15.61	DRY	-	-	-	9.21	-	12:33	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	02/22/2017	15.61	9.19	-	-	-	9.22	6.42	11:52	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW-109S	08/21/2014	19.27	10.08	-	-	-	13.35	9.19	13:50	-	-	-	-	-	-	-	-	-	-	7,500	-
MW-109S	09/15/2014	19.27	10.19	-	-	-	-	9.08	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	09/22/2014	19.27	10.24	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	10/01/2014	19.27	10.33	-	-	-	13.20	8.94	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	10/10/2014	19.27	10.47	-	-	-	-	8.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	10/13/2014	19.27	10.58	-	-	-	-	8.69	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	10/20/2014	19.27	10.67	-	-	-	13.20	8.60	-	-	-	-	-	-	-	-	-	-	-	12,000	-
MW-109S	10/27/2014	19.27	10.83	-	-	-	-	8.44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	11/07/2014	19.27	10.76	-	-	-	-	8.51	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	11/12/2014	19.27	10.85	-	-	-	-	8.42	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	11/21/2014	19.27	11.04	-	-	-	-	8.23	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	11/26/2014	19.27	11.02	-	-	-	-	8.25	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	02/24/2015	19.27	11.43	-	-	-	13.06	7.84	13:55	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	02/26/2015	19.27	11.36	-	-	-	13.06	7.91	10:40	-	-	-	-	-	-	-	-	-	-	1,800	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-109S	05/11/2015	19.27	11.31	-	-	-	13.20	7.96	15:06	-	-	-	-	-	-	-	-	-	-	-	-
MW-109S	05/12/2015	19.27	11.28	-	-	-	13.20	7.99	10:00	<0.5	<0.5	<0.5	<0.5	<0.5	4 J	<0.5	<0.5	<1	-	180	-
MW-109S	05/21/2015	19.27	11.40	-	-	-	13.06	7.87	12:34	-	-	-	-	-	-	-	-	-	-	2,300	-
MW-109S	11/28/2016	19.27	10.97	-	-	-	13.25	8.30	9:25	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	08/21/2014	19.16	14.82	-	-	-	22.40	4.34	13:55	-	-	-	-	-	-	-	-	-	-	<600	-
MW-109	08/25/2014	19.16	14.59	-	-	-	-	4.57	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	09/15/2014	19.16	14.98	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	09/22/2014	19.16	14.88	-	-	-	-	4.28	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	10/01/2014	19.16	15.07	-	-	-	22.79	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	10/10/2014	19.16	14.96	-	-	-	-	4.20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	10/13/2014	19.16	15.09	-	-	-	-	4.07	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	10/20/2014	19.16	15.22	-	-	-	22.72	3.94	-	-	-	-	-	-	-	-	-	-	-	200	-
MW-109	10/27/2014	19.16	15.27	-	-	-	-	3.89	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	11/07/2014	19.16	15.07	-	-	-	-	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	11/12/2014	19.16	15.13	-	-	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	11/21/2014	19.16	15.81	-	-	-	-	3.35	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	11/26/2014	19.16	15.33	-	-	-	-	3.83	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	02/24/2015	19.16	15.25	-	-	-	22.80	3.91	13:58	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	02/26/2015	19.16	15.25	-	-	-	22.80	3.91	10:44	-	-	-	-	-	-	-	-	-	-	100	-
MW-109	05/11/2015	19.16	14.61	-	-	-	22.84	4.55	15:04	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	05/12/2015	19.16	14.77	-	-	-	22.84	4.39	9:57	-	-	-	-	-	-	-	-	-	-	<45	-
MW-109	05/21/2015	19.16	15.23	-	-	-	22.80	3.93	12:36	-	-	-	-	-	-	-	-	-	-	-	-
MW-109	11/28/2016	19.16	16.95	-	-	-	22.24	2.21	9:29	-	-	-	-	-	-	-	-	-	-	<45	-
MW-110S	08/25/2014	19.13	10.05	-	-	-	12.70	9.08	-	-	-	-	-	-	-	-	-	-	-	6,630	-
MW-110S	09/15/2014	19.13	10.23	-	-	-	-	8.90	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	09/22/2014	19.13	10.28	-	-	-	-	8.85	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	10/01/2014	19.13	10.33	-	-	-	12.65	8.80	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	10/10/2014	19.13	10.41	-	-	-	-	8.72	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	10/20/2014	19.13	10.45	-	-	-	12.66	8.68	-	-	-	-	-	-	-	-	-	-	-	8,500	-
MW-110S	10/27/2014	19.13	10.48	-	-	-	-	8.65	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	11/07/2014	19.13	10.50	-	-	-	-	8.63	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	11/12/2014	19.13	10.53	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-110S	11/21/2014	19.13	10.60	-	-	-	-	8.53	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	11/26/2014	19.13	10.60	-	-	-	-	8.53	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	02/24/2015	19.13	11.53	-	-	-	12.67	7.60	13:49	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	02/26/2015	19.13	11.59	-	-	-	12.67	7.54	10:33	-	-	-	-	-	-	-	-	-	-	6,700	-
MW-110S	05/11/2015	19.13	12.24	-	-	-	12.65	6.89	14:56	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	05/12/2015	19.13	12.24	-	-	-	12.65	6.89	9:47	-	-	-	-	-	-	-	-	-	-	2,300	-
MW-110S	05/21/2015	19.13	11.55	-	-	-	12.67	7.58	12:38	-	-	-	-	-	-	-	-	-	-	-	-
MW-110S	11/28/2016	19.13	11.98	-	-	-	12.70	7.15	9:19	-	-	-	-	-	-	-	-	-	-	5,900	-
MW-110	08/25/2014	19.51	14.70	-	-	-	24.40	4.81	-	-	-	-	-	-	-	-	-	-	-	<153	-
MW-110	09/15/2014	19.51	15.11	-	-	-	-	4.40	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	09/22/2014	19.51	14.98	-	-	-	-	4.53	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	10/01/2014	19.51	15.18	-	-	-	23.33	4.33	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	10/10/2014	19.51	15.07	-	-	-	-	4.44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	10/20/2014	19.51	14.35	-	-	-	23.34	5.16	-	-	-	-	-	-	-	-	-	-	-	<45	-
MW-110	10/27/2014	19.51	14.39	-	-	-	-	5.12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	11/07/2014	19.51	15.18	-	-	-	-	4.33	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	11/12/2014	19.51	15.25	-	-	-	-	4.26	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	11/21/2014	19.51	15.97	-	-	-	-	3.54	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	11/26/2014	19.51	15.45	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	02/24/2015	19.51	15.38	-	-	-	23.36	4.13	13:52	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	02/26/2015	19.51	15.38	-	-	-	23.36	4.13	10:36	-	-	-	-	-	-	-	-	-	-	<45	-
MW-110	05/11/2015	19.51	14.74	-	-	-	23.42	4.77	14:54	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	05/12/2015	19.51	14.91	-	-	-	23.42	4.60	9:44	-	-	-	-	-	-	-	-	-	-	<45	-
MW-110	05/21/2015	19.51	15.40	-	-	-	23.36	4.11	12:40	-	-	-	-	-	-	-	-	-	-	-	-
MW-110	11/28/2016	19.51	15.67	-	-	-	23.52	3.84	9:22	-	-	-	-	-	-	-	-	-	-	<45	-
MW-111	08/21/2014	19.17	14.80	-	-	-	22.00	4.37	14:47	-	-	-	-	-	-	-	-	-	-	<600	-
MW-111	10/10/2014	19.17	14.97	-	-	-	-	4.20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-111	10/20/2014	19.17	14.25	-	-	-	21.97	4.92	-	-	-	-	-	-	-	-	-	-	-	<45	-
MW-111	02/24/2015	19.17	15.30	-	-	-	21.96	3.87	13:43	-	-	-	-	-	-	-	-	-	-	-	-
MW-111	02/26/2015	19.17	15.28	-	-	-	21.96	3.89	10:25	-	-	-	-	-	-	-	-	-	-	260	-
MW-111	05/11/2015	19.17	14.66	-	-	-	21.87	4.51	14:51	-	-	-	-	-	-	-	-	-	-	-	-
MW-111	05/12/2015	19.17	14.78	-	-	-	21.87	4.39	9:41	-	-	-	-	-	-	-	-	-	-	150	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-111	11/28/2016	19.17	15.57	-	-	-	21.62	3.60	9:08	-	-	-	-	-	-	-	-	-	-	<45	
MW-112S	08/15/2014	19.22	10.31	-	-	-	12.40	8.91	-	-	-	-	-	-	-	-	-	-	-	<1,500	
MW-112S	08/18/2014	19.22	10.22	-	-	-	12.45	9.00	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	08/25/2014	19.22	10.29	-	-	-	-	8.93	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	09/15/2014	19.22	10.43	-	-	-	-	8.79	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	09/22/2014	19.22	10.56	-	-	-	-	8.66	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	10/01/2014	19.22	10.58	-	-	-	12.46	8.64	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	10/10/2014	19.22	10.64	-	-	-	-	8.58	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	10/20/2014	19.22	10.75	-	-	-	12.47	8.47	-	-	-	-	-	-	-	-	-	-	-	380	
MW-112S	02/24/2015	19.22	11.30	-	-	-	12.48	7.92	13:37	-	-	-	-	-	-	-	-	-	-	-	-
MW-112S	02/26/2015	19.22	11.34	-	-	-	12.48	7.88	10:19	-	-	-	-	-	-	-	-	-	-	<45	
MW-112S	05/11/2015	19.22	11.21	-	-	-	12.44	8.01	15:01	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	05/12/2015	19.22	11.21	-	-	-	12.44	8.01	9:54	-	-	-	-	-	-	-	-	-	-	<45	
MW-112S	11/28/2016	19.22	11.05	-	-	-	12.50	8.17	9:15	-	-	-	-	-	-	-	-	-	-	73 J	
MW-112	08/15/2014	19.08	15.11	-	-	-	22.55	3.97	-	-	-	-	-	-	-	-	-	-	-	<1,500	
MW-112	08/18/2014	19.08	14.43	-	-	-	22.31	4.65	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	08/25/2014	19.08	14.53	-	-	-	-	4.55	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	09/02/2014	19.08	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Access to Gauge
MW-112	09/15/2014	19.08	14.85	-	-	-	-	4.23	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	09/22/2014	19.08	14.77	-	-	-	-	4.31	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	10/01/2014	19.08	14.92	-	-	-	22.83	4.16	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	10/10/2014	19.08	14.87	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	10/20/2014	19.08	15.15	-	-	-	22.83	3.93	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-112	02/24/2015	19.08	15.19	-	-	-	22.75	3.89	13:40	-	-	-	-	-	-	-	-	-	-	-	
MW-112	02/26/2015	19.08	15.15	-	-	-	22.75	3.93	10:22	-	-	-	-	-	-	-	-	-	-	<45	
MW-112	05/11/2015	19.08	14.52	-	-	-	22.83	4.56	14:59	-	-	-	-	-	-	-	-	-	-	-	
MW-112	05/12/2015	19.08	14.64	-	-	-	22.83	4.44	9:51	-	-	-	-	-	-	-	-	-	-	<45	
MW-112	11/28/2016	19.08	15.50	-	-	-	22.85	3.58	9:12	-	-	-	-	-	-	-	-	-	-	<45	
MW-113	08/25/2014	19.11	14.49	-	-	-	-	4.62	-	-	-	-	-	-	-	-	-	-	-	<600	
MW-113	09/15/2014	19.11	14.96	-	-	-	-	4.15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-113	09/22/2014	19.11	14.83	-	-	-	-	4.28	-	-	-	-	-	-	-	-	-	-	-	-	
MW-113	10/01/2014	19.11	15.04	-	-	-	22.95	4.07	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-113	10/10/2014	19.11	14.84	-	-	-	-	4.27	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-113	10/20/2014	19.11	15.20	-	-	-	22.95	3.91	-	-	-	-	-	-	-	-	-	-	-	61	-
MW-113	02/24/2015	19.11	15.24	-	-	-	22.95	3.87	13:46	-	-	-	-	-	-	-	-	-	-	-	-
MW-113	02/26/2015	19.11	15.27	-	-	-	22.95	3.84	10:29	-	-	-	-	-	-	-	-	-	-	90	-
MW-113	05/11/2015	19.11	14.58	-	-	-	22.77	4.53	14:48	-	-	-	-	-	-	-	-	-	-	-	-
MW-113	05/12/2015	19.11	14.81	-	-	-	22.77	4.30	9:38	-	-	-	-	-	-	-	-	-	-	<45	-
MW-113	11/28/2016	19.11	15.54	-	-	-	22.83	3.57	9:04	-	-	-	-	-	-	-	-	-	-	<45	-
MW-114	08/25/2014	19.26	14.62	-	-	-	22.78	4.64	-	-	-	-	-	-	-	-	-	-	-	<600	-
MW-114	09/15/2014	19.26	14.89	-	-	-	-	4.37	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-114	09/22/2014	19.26	14.87	-	-	-	-	4.39	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-114	10/01/2014	19.26	14.96	-	-	-	22.77	4.30	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-114	10/10/2014	19.26	15.01	-	-	-	-	4.25	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-114	10/20/2014	19.26	15.29	-	-	-	22.77	3.97	-	-	-	-	-	-	-	-	-	-	-	<45	-
MW-114	02/24/2015	19.26	15.25	-	-	-	22.77	4.01	13:34	-	-	-	-	-	-	-	-	-	-	-	-
MW-114	02/26/2015	19.26	15.10	-	-	-	22.77	4.16	10:15	-	-	-	-	-	-	-	-	-	-	<45	-
MW-114	05/11/2015	19.26	14.52	-	-	-	22.75	4.74	14:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-114	05/12/2015	19.26	14.51	-	-	-	22.75	4.75	9:35	-	-	-	-	-	-	-	-	-	-	<45	-
MW-114	11/28/2016	19.26	15.62	-	-	-	22.80	3.64	9:00	-	-	-	-	-	-	-	-	-	-	<45	-
MW-121	07/08/2015	31.43	26.52	-	-	-	-	4.91	11:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	07/13/2015	31.43	26.14	-	-	-	36.93	5.29	9:28	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	07/20/2015	31.43	26.37	-	-	-	-	5.06	9:25	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	07/28/2015	31.43	26.53	-	-	-	37.06	4.90	11:38	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	08/04/2015	31.43	25.91	-	-	-	36.33	5.52	12:22	-	-	-	-	-	-	-	-	-	-	9,400	-
MW-121	08/11/2015	31.43	25.58	-	-	-	36.31	5.85	9:59	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	08/18/2015	31.43	26.12	-	-	-	-	5.31	10:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	08/24/2015	31.43	26.02	-	-	-	-	5.41	10:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	09/02/2015	31.43	26.38	-	-	-	36.31	5.05	9:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	09/09/2015	31.43	26.11	-	-	-	36.29	5.32	10:23	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	09/17/2015	31.43	26.51	-	-	-	36.41	4.92	10:27	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	09/23/2015	31.43	26.32	-	-	-	-	5.11	10:43	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	09/28/2015	31.43	26.18	-	-	-	36.25	5.25	9:24	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	10/05/2015	31.43	26.02	-	-	-	36.25	5.41	9:18	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-121	11/10/2015	31.43	26.62	-	-	-	-	4.81	13:06	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	12/01/2015	31.43	26.48	-	-	-	36.20	4.95	13:56	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	12/02/2015	31.43	NR	-	-	-	-	-	-	2.00	<0.5	8.00	<0.5	-	-	-	-	41.00	-	4,500	-
MW-121	01/27/2016	31.43	26.58	-	-	-	-	4.85	9:44	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	02/15/2016	31.43	27.11	-	-	-	-	4.32	9:30	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	03/14/2016	31.43	26.57	-	-	-	36.28	4.86	8:45	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	03/15/2016	31.43	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5,500	-
MW-121	04/21/2016	31.43	30.48	-	-	-	-	0.95	9:38	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	05/23/2016	31.43	27.26	-	-	-	37.06	4.17	10:10	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	05/25/2016	31.43	29.73	-	-	-	36.60	1.70	-	-	-	-	-	-	-	-	-	-	-	12,000	-
MW-121	06/21/2016	31.43	29.17	-	-	-	-	2.26	11:07	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	07/21/2016	31.43	29.57	-	-	-	-	1.86	10:50	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	08/24/2016	31.43	27.56	-	-	-	36.39	3.87	9:26	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	08/25/2016	31.43	26.90	-	-	-	36.35	4.53	11:02	-	-	-	-	-	-	-	-	-	-	2,400	-
MW-121	09/22/2016	31.43	28.52	-	-	-	-	2.91	14:05	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	11/28/2016	31.43	28.13	-	-	-	37.35	3.30	8:54	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	11/29/2016	31.43	28.75	-	-	-	36.36	2.68	9:33	<0.5	<0.5	0.9 J	<0.5	-	-	-	-	11	-	3,400	-
MW-121	02/21/2017	31.43	27.87	-	-	-	36.37	3.56	12:12	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	02/22/2017	31.43	29.66	-	-	-	-	1.77	9:49	-	-	-	-	-	-	-	-	-	-	720,000	-
MW-121	03/07/2017	31.43	29.10	-	-	-	36.35	2.33	11:13	-	-	-	-	-	-	-	-	<1	-	21,000	-
MW-122	07/08/2015	31.64	25.58	-	-	-	-	6.06	11:32	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	07/13/2015	31.64	25.36	-	-	-	34.72	6.28	9:29	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	07/20/2015	31.64	25.20	-	-	-	-	6.44	9:31	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	07/28/2015	31.64	25.38	-	-	-	34.85	6.26	11:13	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	08/04/2015	31.64	25.54	-	-	-	34.61	6.10	12:24	-	-	-	-	-	-	-	-	-	-	2,000	-
MW-122	08/11/2015	31.64	25.46	-	-	-	34.79	6.18	9:58	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	08/18/2015	31.64	25.98	-	-	-	-	5.66	10:30	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	08/24/2015	31.64	25.83	-	-	-	-	5.81	10:37	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	09/02/2015	31.64	26.21	-	-	-	34.76	5.43	9:41	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	09/09/2015	31.64	26.03	-	-	-	34.78	5.61	10:21	-	-	-	-	-	-	-	-	-	-	-	-
MW-122	09/17/2015	31.64	26.45	-	-	-	34.83	5.19	10:25	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW-122	09/23/2015	31.64	26.18	-	-	-	-	5.46	10:46	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-122	09/28/2015	31.64	25.98	-	-	-	34.72	5.66	9:48	-	-	-	-	-	-	-	-	-	-	-	
MW-122	10/05/2015	31.64	25.50	25.50	TRACE	-	34.72	6.14	9:13	-	-	-	-	-	-	-	-	-	-	-	
MW-122	11/10/2015	31.64	26.32	-	-	-	-	5.32	13:07	-	-	-	-	-	-	-	-	-	-	-	
MW-122	12/01/2015	31.64	26.57	-	-	-	34.72	5.07	13:53	-	-	-	-	-	-	-	-	-	-	-	
MW-122	12/02/2015	31.64	NR	-	-	-	-	-	-	1.00	<0.5	8.00	<0.5	-	-	-	-	<1	-	1,600	
MW-122	01/27/2016	31.64	26.63	-	-	-	-	5.01	9:47	-	-	-	-	-	-	-	-	-	-	-	
MW-122	02/15/2016	31.64	27.05	-	-	-	-	4.59	9:33	-	-	-	-	-	-	-	-	-	-	-	
MW-122	03/14/2016	31.64	26.47	-	-	-	34.77	5.17	8:50	-	-	-	-	-	-	-	-	-	-	-	
MW-122	03/15/2016	31.64	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,800	
MW-122	04/21/2016	31.64	27.32	-	-	-	-	4.32	9:42	-	-	-	-	-	-	-	-	-	-	-	
MW-122	05/23/2016	31.64	27.35	-	-	-	34.82	4.29	10:15	-	-	-	-	-	-	-	-	-	-	-	
MW-122	05/25/2016	31.64	27.51	-	-	-	34.90	4.13	-	-	-	-	-	-	-	-	-	-	-	4,000	
MW-122	06/21/2016	31.64	27.33	-	-	-	-	4.31	11:10	-	-	-	-	-	-	-	-	-	-	-	
MW-122	07/21/2016	31.64	27.22	-	-	-	-	4.42	10:45	-	-	-	-	-	-	-	-	-	-	-	
MW-122	08/24/2016	31.64	27.07	-	-	-	34.80	4.57	9:30	-	-	-	-	-	-	-	-	-	-	-	
MW-122	08/25/2016	31.64	26.93	-	-	-	36.77	4.71	10:58	-	-	-	-	-	-	-	-	-	-	1,900	
MW-122	09/22/2016	31.64	27.03	-	-	-	-	4.61	14:00	-	-	-	-	-	-	-	-	-	-	-	
MW-122	11/28/2016	31.64	27.24	-	-	-	35.80	4.40	8:55	-	-	-	-	-	-	-	-	-	-	-	
MW-122	11/29/2016	31.64	27.28	-	-	-	34.78	4.36	9:30	2	<0.5	<0.5	<0.5	-	-	-	<1	-	-	1,300	
MW-122	02/21/2017	31.64	27.60	-	-	-	34.80	4.04	12:09	-	-	-	-	-	-	-	-	-	-	-	
MW-122	02/22/2017	31.64	27.36	-	-	-	-	4.28	9:46	-	-	-	-	-	-	-	-	-	-	1,900	
MW/RW-123S	07/08/2015	31.09	DRY	-	-	-	24.92	-	11:35	-	-	-	-	-	-	-	-	-	-	-	DRY
MW/RW-123S	07/13/2015	31.09	23.96	-	-	-	24.90	7.13	9:17	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	07/20/2015	31.09	22.37	-	-	-	-	8.72	9:22	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	07/28/2015	31.09	22.15	-	-	-	24.98	8.94	11:05	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/04/2015	31.09	22.04	-	-	-	24.91	9.05	13:08	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/05/2015	31.09	22.07	-	-	-	24.93	9.02	9:16	-	-	-	-	-	-	-	-	-	-	2,400	
MW/RW-123S	08/11/2015	31.09	22.04	-	-	-	24.91	9.05	10:10	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/18/2015	31.09	22.05	-	-	-	-	9.04	9:50	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/24/2015	31.09	22.08	-	-	-	-	9.01	9:53	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	09/02/2015	31.09	22.26	22.25	0.01	TRACE	24.92	8.84	9:28	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-123S	09/09/2015	31.09	22.33	-	-	-	24.92	8.76	10:28	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-123S	09/17/2015	31.09	22.56	-	-	-	24.97	8.53	10:19	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	09/23/2015	31.09	22.57	-	-	-	-	8.52	10:11	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	09/28/2015	31.09	22.59	-	-	-	24.91	8.50	9:30	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	10/05/2015	31.09	22.61	22.61	TRACE	-	24.92	8.48	9:09	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	11/10/2015	31.09	25.31	-	-	-	-	5.78	12:43	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	12/01/2015	33.54	25.53	-	-	-	27.40	8.01	10:55	-	-	-	-	-	-	-	-	-	-	2,500	
MW/RW-123S	01/27/2016	33.54	25.76	-	-	-	-	7.78	9:57	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	02/15/2016	33.54	24.93	-	-	-	-	8.61	9:43	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	03/14/2016	33.54	24.35	-	-	-	27.39	9.19	12:00	-	-	-	-	-	-	-	-	-	-	13,000	
MW/RW-123S	04/21/2016	33.54	25.93	-	-	-	27.16	7.61	10:52	-	-	-	-	-	-	-	-	-	-	150,000	
MW/RW-123S	05/23/2016	33.54	26.06	-	-	-	27.32	7.48	11:33	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	05/24/2016	33.54	25.46	-	-	-	27.50	8.08	8:55	-	-	-	-	-	-	-	-	-	-	100,000	
MW/RW-123S	06/21/2016	33.54	26.05	-	-	-	-	7.49	10:04	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	07/21/2016	33.54	26.03	-	-	-	-	7.51	9:54	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/24/2016	33.54	26.09	-	-	-	27.00	7.45	11:59	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/25/2016	33.54	24.11	-	-	-	-	9.43	9:50	-	-	-	-	-	-	-	-	-	-	1,200,000	
MW/RW-123S	09/22/2016	33.54	26.14	-	-	-	27.02	7.40	12:48	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	10/20/2016	33.54	26.16	-	-	-	-	7.38	11:45	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	11/28/2016	33.54	26.12	-	-	-	27.00	7.42	11:09	-	-	-	-	-	-	-	-	-	-	190,000	
MW/RW-123S	12/22/2016	33.54	26.15	-	-	-	27.05	7.39	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	01/30/2017	33.54	26.13	-	-	-	26.90	7.41	9:58	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	02/21/2017	33.54	26.06	-	-	-	26.85	7.48	10:13	-	-	-	-	-	-	-	-	-	-	530,000	
MW/RW-123S	03/29/2017	33.54	26.10	-	-	-	26.90	7.44	12:57	-	-	-	-	-	-	-	-	-	-	-	
RW-1	10/10/2014	31.19	26.93	-	-	-	-	4.26	-	-	-	-	-	-	-	-	-	-	-	-	30,000
RW-1	10/13/2014	31.19	27.09	-	-	-	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	10/20/2014	31.19	27.27	-	-	-	40.65	3.92	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	10/22/2014	31.19	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	10/27/2014	31.19	27.35	-	-	-	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	11/07/2014	31.19	27.10	-	-	-	-	4.09	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	11/12/2014	31.19	27.15	-	-	-	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	11/21/2014	31.19	27.83	-	-	-	-	3.36	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-1	11/26/2014	31.19	27.42	-	-	-	-	3.77	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	12/05/2014	31.19	27.25	-	-	-	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	12/11/2014	31.19	27.09	-	-	-	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	12/16/2014	31.19	26.98	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	12/23/2014	31.19	26.98	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	12/30/2014	31.19	27.38	-	-	-	-	3.81	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	01/09/2015	31.19	27.37	-	-	-	-	3.82	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	01/16/2015	31.19	27.08	-	-	-	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	01/19/2015	31.19	27.07	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	01/26/2015	31.19	27.03	-	-	-	-	4.16	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/03/2015	31.19	27.80	-	-	-	40.75	3.39	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/09/2015	31.19	27.18	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/18/2015	31.19	27.22	-	-	-	-	3.97	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/24/2015	31.19	27.42	-	-	-	40.35	3.77	13:49	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/26/2015	31.19	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,200	
RW-1	03/04/2015	31.19	27.27	-	-	-	-	3.92	14:12	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/11/2015	31.19	26.90	-	-	-	-	4.29	12:42	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/18/2015	31.19	27.04	-	-	-	-	4.15	11:02	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/26/2015	31.19	26.87	-	-	-	40.70	4.32	11:35	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/02/2015	31.19	27.02	-	-	-	40.60	4.17	11:23	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/08/2015	31.19	27.30	-	-	-	40.55	3.89	8:45	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/13/2015	31.19	27.18	-	-	-	-	4.01	10:38	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/23/2015	31.19	26.67	-	-	-	40.65	4.52	11:52	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/29/2015	31.19	26.87	-	-	-	40.70	4.32	14:19	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/04/2015	31.19	26.72	-	-	-	-	4.47	11:36	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/11/2015	31.19	26.70	-	-	-	40.78	4.49	15:03	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/12/2015	31.19	26.92	-	-	-	40.63	4.27	14:15	-	-	-	-	-	-	-	-	-	-	8,400	
RW-1	05/21/2015	31.19	26.90	-	-	-	40.70	4.29	12:20	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/28/2015	31.19	27.11	-	-	-	40.60	4.08	11:43	-	-	-	-	-	-	-	-	-	-	-	
RW-1	06/02/2015	31.19	26.79	-	-	-	-	4.40	13:01	-	-	-	-	-	-	-	-	-	-	-	
RW-1	06/09/2015	31.19	26.57	-	-	-	-	4.62	10:27	-	-	-	-	-	-	-	-	-	-	-	
RW-1	06/16/2015	31.19	26.60	-	-	-	-	4.59	11:21	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-1	06/26/2015	31.19	26.52	-	-	-	40.50	4.67	10:37	-	-	-	-	-	-	-	-	-	-	-	
RW-1	07/01/2015	31.19	26.07	-	-	-	-	5.12	12:12	-	-	-	-	-	-	-	-	-	-	-	
RW-1	08/04/2015	31.19	26.30	-	-	-	40.66	4.89	12:16	-	-	-	-	-	-	-	-	-	-	-	
RW-1	08/05/2015	31.19	26.67	-	-	-	40.65	4.52	9:08	-	-	-	-	-	-	-	-	-	-	2,500	
RW-1	12/01/2015	31.19	26.77	-	-	-	40.67	4.42	13:41	-	-	-	-	-	-	-	-	-	-	-	
RW-1	12/02/2015	31.19	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,300	
RW-1	03/14/2016	31.19	26.95	-	-	-	40.65	4.24	8:40	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/15/2016	31.19	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,300	
RW-1	04/21/2016	31.19	27.82	-	-	-	40.69	3.37	9:47	-	-	-	-	-	-	-	-	-	-	2,600	
RW-1	05/23/2016	31.19	27.73	-	-	-	41.31	3.46	10:06	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/24/2016	31.19	27.89	-	-	-	40.65	3.30	10:15	-	-	-	-	-	-	-	-	-	-	1,500	
RW-1	06/21/2016	31.19	27.22	-	-	-	-	3.97	10:53	-	-	-	-	-	-	-	-	-	-	-	
RW-1	07/21/2016	31.19	27.08	-	-	-	-	4.11	11:00	-	-	-	-	-	-	-	-	-	-	-	
RW-1	08/24/2016	31.19	27.42	-	-	-	40.70	3.77	10:00	-	-	-	-	-	-	-	-	-	-	1,500	
RW-1	11/28/2016	31.19	27.68	-	-	-	41.93	3.51	8:52	-	-	-	-	-	-	-	-	-	-	-	
RW-1	11/29/2016	31.19	27.45	-	-	-	40.78	3.74	9:40	-	-	-	-	-	-	-	-	-	-	970	
RW-1	02/21/2017	31.19	28.11	-	-	-	40.80	3.08	11:55	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/22/2017	31.19	28.17	-	-	-	-	3.02	9:56	-	-	-	-	-	-	-	-	-	-	4,000	
RW-1	03/29/2017	31.19	26.13	-	-	-	27.90	5.06	-	-	-	-	-	-	-	-	-	-	-	-	Sheen during purge
RW-05S	07/08/2015	31.38	22.72	-	-	-	-	8.66	11:25	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	07/13/2015	31.38	22.57	-	-	-	26.03	8.81	9:34	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	07/20/2015	31.38	21.82	-	-	-	-	9.56	9:28	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	07/28/2015	31.38	21.77	-	-	-	26.07	9.61	11:21	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	08/05/2015	31.38	21.87	-	-	-	26.03	9.51	9:27	-	-	-	-	-	-	-	-	-	-	6,900	
RW-05S	08/11/2015	31.38	21.95	-	-	-	26.06	9.43	10:05	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	08/18/2015	31.38	22.17	-	-	-	-	9.21	10:27	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	08/24/2015	31.38	22.42	-	-	-	-	8.96	10:20	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/02/2015	31.38	22.47	-	-	-	26.05	8.91	9:49	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/09/2015	31.38	22.60	-	-	-	26.07	8.78	10:25	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/17/2015	31.38	22.69	-	-	-	26.07	8.69	10:30	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/23/2015	31.38	22.69	-	-	-	-	8.69	10:37	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/28/2015	31.38	22.78	-	-	-	26.07	8.60	9:26	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-05S	10/05/2015	31.38	22.71	-	-	-	26.20	8.67	9:15	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	11/10/2015	31.38	25.07	-	-	-	-	6.31	13:05	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	12/01/2015	33.47	25.36	-	-	-	28.15	8.11	11:51	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	12/02/2015	33.47	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	17,000	-
RW-05S	01/27/2016	33.47	26.23	-	-	-	-	7.24	10:40	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	02/15/2016	33.47	25.44	-	-	-	-	8.03	10:27	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	03/14/2016	33.47	25.21	-	-	-	28.20	8.26	11:40	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	03/15/2016	33.47	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15,000	-
RW-05S	04/21/2016	33.47	20.05	-	-	-	27.95	13.42	11:13	-	-	-	-	-	-	-	-	-	-	19,000	-
RW-05S	05/23/2016	33.47	25.78	-	-	-	27.97	7.69	11:24	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	05/24/2016	33.47	25.18	-	-	-	28.10	8.29	9:30	-	-	-	-	-	-	-	-	-	-	59,000	-
RW-05S	06/21/2016	33.47	25.83	-	-	-	-	7.64	10:46	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	07/21/2016	33.47	25.91	-	-	-	-	7.56	10:25	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	08/24/2016	33.47	25.77	-	-	-	27.95	7.70	11:05	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	08/25/2016	33.47	24.14	-	-	-	-	9.33	10:05	-	-	-	-	-	-	-	-	-	-	66,000	-
RW-05S	09/22/2016	33.47	23.80	-	-	-	24.48	9.67	12:40	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	10/20/2016	33.47	24.95	-	-	-	-	8.52	11:30	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	11/28/2016	33.47	DRY	-	-	-	23.75	-	9:51	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	11/29/2016	33.47	DRY	-	-	-	23.65	-	12:55	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	12/07/2016	33.47	DRY	-	-	-	23.33	-	12:35	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	12/08/2016	33.47	23.60	-	-	-	26.13	9.87	10:45	-	-	-	-	-	-	-	-	-	-	22,000	-
RW-05S	12/22/2016	33.47	23.28	-	-	-	26.13	10.19	10:25	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	01/30/2017	33.47	25.78	-	-	-	27.98	7.69	10:29	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	02/21/2017	33.47	25.78	-	-	-	27.80	7.69	10:03	-	-	-	-	-	-	-	-	-	-	180,000	-
RW-05S	03/29/2017	33.47	25.87	-	-	-	27.65	7.60	11:50	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/08/2014	31.57	25.41	-	-	-	33.94	6.16	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/11/2014	31.57	25.16	-	-	-	-	6.41	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/15/2014	31.57	24.98	-	-	-	-	6.59	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/16/2014	31.57	24.84	24.80	0.04	NA	-	6.77	-	-	-	-	-	-	-	-	-	-	-	-	-
																					Transducers in well for pump test

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-05	08/18/2014	31.57	24.88	24.80	0.08	NA	-	6.76	-	-	-	-	-	-	-	-	-	-	-	-	Transducers in well for pump test
MW/RW-05	08/25/2014	31.57	23.27	22.99	0.28	0.06	-	8.55	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	09/02/2014	31.57	23.62	23.07	0.55	0.31	-	8.43	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	09/15/2014	31.57	23.63	23.13	0.50	NR	-	8.38	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	09/19/2014	31.57	23.72	23.18	0.54	0.17	-	8.32	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	09/22/2014	31.57	23.25	22.97	0.28	0.06	-	8.57	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	09/24/2014	31.57	23.33	23.13	0.20	NR	-	8.42	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/01/2014	31.57	26.67	26.67	TRACE	TRACE	31.94	4.90	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/10/2014	31.57	26.58	26.57	0.01	TRACE	-	5.00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/13/2014	31.57	26.73	26.71	0.02	TRACE	-	4.86	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/20/2014	31.57	26.91	26.89	0.02	TRACE	-	4.68	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/27/2014	31.57	27.07	27.06	0.01	TRACE	-	4.51	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/07/2014	31.57	26.93	26.88	0.05	TRACE	-	4.68	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/12/2014	31.57	26.96	26.94	0.02	TRACE	-	4.63	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/21/2014	31.57	27.74	27.73	0.01	TRACE	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/26/2014	31.57	27.28	27.25	0.03	TRACE	-	4.32	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/05/2014	31.57	27.18	27.16	0.02	TRACE	-	4.41	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/11/2014	31.57	26.93	-	0.00	TRACE	-	4.64	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/16/2014	31.57	26.87	26.82	0.05	TRACE	-	4.74	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/23/2014	31.57	26.95	26.92	0.03	TRACE	-	4.65	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/30/2014	31.57	27.35	27.32	0.03	TRACE	-	4.25	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/09/2015	31.57	27.36	27.32	0.04	TRACE	-	4.25	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/16/2015	31.57	27.06	27.02	0.04	TRACE	-	4.55	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/19/2015	31.57	27.08	27.03	0.05	TRACE	-	4.53	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/26/2015	31.57	26.99	26.95	0.04	TRACE	-	4.62	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	02/03/2015	31.57	27.73	27.71	0.02	-	32.04	3.86	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	02/09/2015	31.57	27.23	27.17	0.06	-	-	4.39	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	02/18/2015	31.57	27.25	27.21	0.04	-	-	4.36	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	02/24/2015	31.57	27.38	27.37	0.01	TRACE	-	4.20	13:51	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	03/04/2015	31.57	27.25	27.20	0.05	-	-	4.36	14:18	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	03/11/2015	31.57	27.07	26.97	0.10	-	-	4.59	12:57	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-05	03/18/2015	31.57	27.11	27.03	0.08	-	-	4.53	11:15	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	03/26/2015	31.57	26.81	26.73	0.08	-	31.90	4.83	12:06	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	04/02/2015	31.57	27.13	26.97	0.16	-	31.95	4.58	11:37	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	04/08/2015	31.57	27.49	27.20	0.29	-	32.00	4.33	9:20	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	04/13/2015	31.57	27.53	27.07	0.46	-	-	4.44	10:51	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	04/23/2015	31.57	27.41	26.55	0.86	-	32.00	4.92	12:10	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	04/29/2015	31.57	27.78	26.61	1.17	-	31.90	4.82	14:39	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	05/04/2015	31.57	28.03	26.56	1.47	-	-	4.83	11:51	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	05/11/2015	31.57	28.24	26.40	1.84	-	-	4.95	15:10	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	05/13/2015	31.57	28.75	26.84	1.91	1.50	-	4.50	13:20	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	05/21/2015	31.57	26.87	26.78	0.09	-	-	4.78	12:48	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	05/28/2015	31.57	28.45	27.00	1.45	-	32.00	4.39	11:54	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	06/02/2015	31.57	28.52	26.62	1.90	-	-	4.72	13:11	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	06/09/2015	31.57	28.67	26.12	2.55	-	-	5.14	10:55	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	06/16/2015	31.57	29.17	25.86	3.31	-	-	5.31	11:48	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	06/26/2015	31.57	28.51	25.55	2.96	-	32.00	5.66	10:50	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	07/01/2015	31.57	27.93	24.65	3.28	-	-	6.52	12:39	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	07/08/2015	31.57	27.50	23.75	3.75	-	-	7.36	8:00	-	-	-	-	-	-	-	-	-	-	-	Baildown test
MW/RW-05	07/13/2015	31.57	24.16	22.98	1.18	-	-	8.45	8:10	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	07/20/2015	31.57	23.03	22.69	0.34	0.09	-	8.84	9:56	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	07/28/2015	31.57	22.75	22.55	0.20	0.09	32.07	9.00	12:40	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	08/04/2015	31.57	22.92	22.63	0.29	0.06	-	8.90	12:31	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	08/11/2015	31.57	23.57	22.60	0.97	0.09	32.05	8.85	10:43	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	08/18/2015	31.57	23.74	23.02	0.72	0.38	-	8.46	10:56	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	08/21/2015	31.57	23.46	23.15	0.31	-	-	8.38	7:55	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	08/24/2015	31.57	23.88	23.86	0.02	TRACE	-	7.71	11:00	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	09/02/2015	31.57	24.72	24.44	0.28	0.05	32.04	7.10	11:00	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	09/09/2015	31.57	24.60	24.39	0.21	0.06	32.05	7.15	11:20	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	09/17/2015	31.57	24.83	24.36	0.47	0.07	32.08	7.15	11:00	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	09/23/2015	31.57	24.88	24.70	0.18	0.02	-	6.85	11:23	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	09/28/2015	31.57	24.50	24.48	0.02	0.04	31.94	7.09	10:05	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	10/05/2015	31.57	24.41	24.31	0.10	0.05	32.01	7.25	-	-	-	-	-	-	-	-	-	-	-	-	HIT event

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-05	11/10/2015	31.57	25.53	25.38	0.15	-	-	6.17	13:44	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	12/01/2015	32.20	26.16	25.98	0.18	-	-	6.20	13:56	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	01/27/2016	32.20	26.56	26.34	0.22	-	-	5.83	10:44	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	02/15/2016	32.20	26.99	26.98	0.01	-	-	5.22	10:31	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	03/14/2016	32.20	25.65	25.65	TRACE	-	-	6.55	10:20	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	03/24/2016	32.20	29.70	-	-	-	-	2.50	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	03/30/2016	32.20	29.68	-	-	-	-	2.52	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	04/21/2016	32.20	29.65	-	-	-	-	2.55	10:34	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	05/23/2016	32.20	29.80	-	-	-	-	2.40	11:27	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	05/24/2016	32.20	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62,000	pump in well
MW/RW-05	06/21/2016	32.20	29.79	-	-	-	-	2.41	10:50	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	07/21/2016	32.20	23.85	-	-	-	-	8.35	10:30	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	08/24/2016	32.20	21.60	-	-	-	-	10.60	11:11	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	08/25/2016	32.20	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	pump in well
MW/RW-05	09/22/2016	32.20	29.00	-	-	-	-	3.20	11:40	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	10/20/2016	32.20	29.00	-	-	-	-	3.20	11:35	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	11/28/2016	32.20	NR	-	-	-	-	-	9:45	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	7,300	Pump Obstruction at 26.80 ft during gauging
MW/RW-05	12/22/2016	32.20	28.22	-	-	-	-	3.98	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	01/30/2017	32.20	27.88	-	-	-	-	4.32	12:06	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	02/21/2017	32.20	28.70	-	-	-	-	3.50	12:51	-	-	-	-	-	-	-	-	-	-	5,200	pump in well
MW/RW-05	03/29/2017	32.20	27.90	-	-	-	-	4.30	11:55	-	-	-	-	-	-	-	-	-	-	-	pump in well
RW-25S	07/08/2015	30.97	DRY	-	-	-	24.64	-	11:43	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	07/13/2015	30.97	DRY	-	-	-	24.65	-	9:39	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	07/20/2015	30.97	DRY	-	-	-	-	-	9:40	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	07/28/2015	30.97	DRY	-	-	-	24.71	-	10:47	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/04/2015	30.97	DRY	-	-	-	24.64	-	13:06	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/11/2015	30.97	DRY	-	-	-	-	-	11:25	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/18/2015	30.97	24.62	-	-	-	-	6.35	10:36	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/24/2015	30.97	24.56	-	-	-	-	6.41	10:33	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	09/02/2015	30.97	NR	24.51	-	0.01	24.69	-	10:23	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-25S	09/09/2015	30.97	NR	24.50	-	0.01	24.69	-	11:00	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
RW-25S	09/17/2015	30.97	NR	24.54	-	-	24.65	-	10:50	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	09/23/2015	30.97	24.62	24.50	0.12	0.01	24.62	6.46	10:56	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	09/28/2015	30.97	NR	24.57	TRACE	TRACE	24.65	-	9:55	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	10/05/2015	30.97	NR	24.54	-	TRACE	24.59	-	11:27	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	11/10/2015	30.97	NR	26.28	-	-	26.38	-	13:36	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	12/01/2015	32.70	26.34	26.27	0.07	-	26.36	6.42	11:55	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	01/27/2016	32.70	26.30	26.22	0.08	-	-	6.47	11:04	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	02/15/2016	32.70	25.59	25.42	0.17	-	-	7.26	10:44	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	03/14/2016	32.70	24.45	24.44	0.01	-	-	8.26	13:00	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	04/21/2016	32.70	25.51	25.50	0.01	-	-	7.20	11:45	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB
RW-25S	05/23/2016	32.70	25.38	-	-	-	26.28	7.32	11:36	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	05/24/2016	32.70	25.43	25.41	0.02	-	-	7.29	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	06/21/2016	32.70	25.38	-	-	-	-	7.32	10:07	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	07/21/2016	32.70	25.39	-	-	-	-	7.31	9:57	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/24/2016	32.70	25.35	-	-	-	25.62	7.35	10:52	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/25/2016	32.70	24.97	-	-	-	25.61	7.73	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/30/2016	32.70	25.86	-	-	-	27.36	6.84	11:35	-	-	-	-	-	-	-	-	-	-	470,000	
RW-25S	09/22/2016	32.70	26.08	-	-	-	26.38	6.62	12:20	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	10/20/2016	32.70	26.10	-	-	-	-	6.60	11:06	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	11/28/2016	32.70	25.57	-	-	-	-	7.13	9:41	0.7 J	1	2	5	-	-	-	-	4 J	-	1,000,000	DRY
RW-25S	12/22/2016	32.70	26.03	-	-	-	26.27	6.67	9:57	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	01/30/2017	32.70	25.37	-	-	-	25.62	7.33	10:15	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	02/21/2017	32.70	25.35	-	-	-	25.58	7.35	10:11	-	-	-	-	-	-	-	-	-	-	250,000	
RW-25S	03/29/2017	31.92	27.10	-	-	-	27.17	4.82	12:23	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	07/08/2015	31.35	26.40	-	-	-	-	4.95	10:42	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	07/13/2015	31.35	25.20	-	-	-	26.66	6.15	9:11	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	07/20/2015	31.35	24.14	-	-	-	-	7.21	8:55	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	07/28/2015	31.35	23.92	-	-	-	26.73	7.43	10:04	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	08/04/2015	31.35	23.97	-	-	-	26.67	7.38	13:21	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	08/05/2015	31.35	24.98	-	-	-	26.66	6.37	8:18	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	08/05/2015	31.35	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,300	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-28S	08/11/2015	31.35	24.03	-	-	-	26.65	7.32	9:42	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	08/18/2015	31.35	24.13	-	-	-	-	7.22	10:00	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	08/24/2015	31.35	24.18	-	-	-	-	7.17	10:03	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	09/02/2015	31.35	24.31	-	-	-	26.68	7.04	9:10	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	09/09/2015	31.35	24.41	-	-	-	26.65	6.94	9:58	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	09/17/2015	31.35	24.55	-	-	-	26.69	6.80	9:51	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	09/23/2015	31.35	24.58	-	-	-	-	6.77	10:21	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	09/28/2015	31.35	24.65	-	-	-	26.60	6.70	9:40	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	10/05/2015	31.35	24.60	-	-	-	26.68	6.75	8:58	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	11/10/2015	31.35	26.71	-	-	-	-	4.64	12:48	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	12/01/2015	32.99	26.91	-	-	-	28.28	6.08	12:34	-	-	-	-	-	-	-	-	-	-	2,500	-
RW-28S	01/27/2016	32.99	27.09	-	-	-	-	5.90	10:10	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	02/15/2016	32.99	25.86	-	-	-	-	7.13	9:51	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	03/14/2016	32.99	25.74	-	-	-	28.30	7.25	12:15	-	-	-	-	-	-	-	-	-	-	790	-
RW-28S	04/21/2016	32.99	26.84	-	-	-	28.30	6.15	10:40	-	-	-	-	-	-	-	-	-	-	2,300	-
RW-28S	05/05/2016	32.99	25.65	-	-	-	28.32	7.34	12:52	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	05/23/2016	32.99	25.82	-	-	-	28.32	7.17	12:15	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	05/24/2016	32.99	25.82	-	-	-	28.32	7.17	12:15	-	-	-	-	-	-	-	-	-	-	3,300	-
RW-28S	06/21/2016	32.99	25.65	-	-	-	-	7.34	9:53	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	07/21/2016	32.99	25.71	-	-	-	-	7.28	9:41	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	08/24/2016	32.99	25.62	-	-	-	28.65	7.37	11:54	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	08/25/2016	32.99	26.56	-	-	-	-	6.43	10:55	-	-	-	-	-	-	-	-	-	-	2,300	-
RW-28S	09/22/2016	32.99	25.82	-	-	-	28.35	7.17	12:12	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	10/20/2016	32.99	25.79	-	-	-	-	7.20	10:58	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	11/28/2016	32.99	25.80	-	-	-	28.61	7.19	10:51	-	-	-	-	-	-	-	-	-	-	1,400	-
RW-28S	12/22/2016	32.99	26.05	-	-	-	28.37	6.94	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	01/30/2017	32.99	25.97	-	-	-	28.35	7.02	10:07	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	02/21/2017	32.99	26.02	-	-	-	28.30	6.97	10:18	-	-	-	-	-	-	-	-	-	-	39,000	-
RW-28S	03/29/2017	32.99	25.86	-	-	-	28.45	7.13	12:40	-	-	-	-	-	-	-	-	-	-	-	-
RW-30S	06/26/2015	31.32	DRY	-	-	-	28.40	-	9:28	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	07/01/2015	31.32	24.02	-	-	-	-	7.30	12:03	-	-	-	-	-	-	-	-	-	-	-	-
RW-30S	07/08/2015	31.32	25.39	-	-	-	-	5.93	10:51	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-30S	07/13/2015	31.32	26.60	-	-	-	28.40	4.72	9:12	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	07/20/2015	31.32	26.07	-	-	-	-	5.25	9:01	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	07/28/2015	31.32	26.04	-	-	-	28.48	5.28	10:13	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/04/2015	31.32	26.07	-	-	-	28.40	5.25	13:25	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/05/2015	31.32	26.05	-	-	-	28.42	5.27	8:20	-	-	-	-	-	-	-	-	-	-	890	
RW-30S	08/11/2015	31.32	26.42	-	-	-	28.44	4.90	9:44	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/18/2015	31.32	26.31	-	-	-	-	5.01	9:53	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/24/2015	31.32	26.28	-	-	-	-	5.04	9:56	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	09/02/2015	31.32	26.37	26.36	0.01	TRACE	28.45	4.96	9:14	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	09/09/2015	31.32	26.38	-	-	-	28.43	4.94	10:08	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	09/17/2015	31.32	26.52	-	-	-	28.46	4.80	10:05	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	09/23/2015	31.32	26.47	-	-	-	-	4.85	10:15	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	09/28/2015	31.32	26.42	-	-	-	28.41	4.90	9:37	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	10/05/2015	31.32	26.20	-	-	-	28.41	5.12	9:05	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	11/10/2015	31.32	28.73	-	-	-	-	2.59	12:46	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	12/01/2015	33.63	28.99	-	-	-	30.54	4.64	12:36	-	-	-	-	-	-	-	-	-	-	1,300	
RW-30S	01/27/2016	33.63	29.08	-	-	-	-	4.55	10:01	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	02/15/2016	33.63	29.44	-	-	-	-	4.19	9:47	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	03/14/2016	33.63	28.78	-	-	-	30.60	4.85	12:10	-	-	-	-	-	-	-	-	-	-	61,000	
RW-30S	04/21/2016	33.63	28.95	-	-	-	29.03	4.68	10:44	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	04/27/2016	33.63	29.02	-	-	-	29.12	4.61	10:18	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/05/2016	33.63	29.05	-	-	-	29.10	4.58	12:48	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/23/2016	33.63	29.02	-	-	-	29.70	4.61	11:14	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/25/2016	33.63	DRY	-	-	-	29.05	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	06/21/2016	33.63	26.45	-	-	-	-	7.18	9:56	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	07/21/2016	33.63	26.40	-	-	-	-	7.23	9:51	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/24/2016	33.63	24.65	-	-	-	29.37	8.98	11:56	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/25/2016	33.63	28.88	-	-	-	29.20	4.75	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	08/30/2016	33.63	29.65	-	-	-	29.79	3.98	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	09/22/2016	33.63	26.60	-	-	-	29.35	7.03	12:07	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	10/20/2016	33.63	26.80	-	-	-	-	6.83	10:50	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	11/28/2016	33.63	28.64	-	-	-	30.35	4.99	10:48	-	-	-	-	-	-	-	-	-	-	1,700	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-30S	12/22/2016	33.63	27.37	-	-	-	29.75	6.26	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-30S	01/30/2017	33.63	26.58	-	-	-	29.10	7.05	10:03	-	-	-	-	-	-	-	-	-	-	-	-
RW-30S	02/21/2017	33.63	28.99	-	-	-	28.70	4.64	10:15	-	-	-	-	-	-	-	-	-	-	17,000	-
RW-30S	03/29/2017	33.12	26.69	-	-	-	28.95	6.43	12:47	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	07/08/2015	31.80	22.48	-	-	-	-	9.32	11:28	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	07/13/2015	31.80	22.03	-	-	-	26.20	9.77	9:24	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	07/20/2015	31.80	21.77	-	-	-	-	10.03	9:10	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	07/28/2015	31.44	21.46	-	-	-	25.90	9.98	10:31	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/04/2015	31.44	21.55	-	-	-	25.82	9.89	13:11	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/05/2015	31.44	21.57	-	-	-	25.82	9.87	9:05	-	-	-	-	-	-	-	-	-	-	7,000	-
RW-116S	08/11/2015	31.44	21.72	-	-	-	24.88	9.72	10:31	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/18/2015	31.44	21.79	-	-	-	-	9.65	10:13	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/24/2015	31.44	21.90	-	-	-	-	9.54	10:16	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	09/02/2015	31.44	22.06	-	-	-	25.86	9.38	10:05	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	09/09/2015	31.44	22.18	-	-	-	25.89	9.26	10:12	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	09/17/2015	31.44	22.31	-	-	-	25.89	9.13	10:14	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	09/23/2015	31.44	22.35	-	-	-	-	9.09	10:34	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	09/28/2015	31.44	22.42	-	-	-	25.84	9.02	9:20	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	10/05/2015	31.44	22.47	-	-	-	25.84	8.97	9:31	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	11/10/2015	31.44	25.05	-	-	-	-	6.39	13:03	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	12/01/2015	33.78	25.73	-	-	-	28.20	8.05	11:20	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	12/02/2015	33.78	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,000	-
RW-116S	01/27/2016	33.78	26.53	-	-	-	-	7.25	10:29	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	02/15/2016	33.78	26.53	-	-	-	-	7.25	10:10	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	03/14/2016	33.78	26.26	-	-	-	28.18	7.52	11:35	-	-	-	-	-	-	-	-	-	-	7,600	-
RW-116S	04/21/2016	33.78	26.33	-	-	-	28.25	7.45	11:18	-	-	-	-	-	-	-	-	-	-	3,000	-
RW-116S	05/23/2016	33.78	26.03	-	-	-	28.25	7.75	11:20	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	05/24/2016	33.78	26.32	-	-	-	28.90	7.46	9:45	-	-	-	-	-	-	-	-	-	-	230,000	-
RW-116S	06/21/2016	33.78	26.06	-	-	-	-	7.72	10:43	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	07/21/2016	33.78	26.02	-	-	-	-	7.76	10:22	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/24/2016	33.78	26.02	-	-	-	27.76	7.76	11:08	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/25/2016	33.78	25.10	-	-	-	-	8.68	10:15	-	-	-	-	-	-	-	-	-	-	6,200	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-116S	09/22/2016	33.78	26.07	-	-	-	27.82	7.71	12:36	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	10/20/2016	33.78	26.07	-	-	-	-	7.71	11:26	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	11/28/2016	33.78	26.09	-	-	-	28.05	7.69	11:01	-	-	-	-	-	-	-	-	-	-	59,000	-
RW-116S	12/22/2016	33.78	26.06	-	-	-	27.85	7.72	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	01/30/2017	33.78	26.06	-	-	-	27.80	7.72	10:25	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	02/21/2017	33.78	26.06	-	-	-	27.17	7.72	10:05	-	-	-	-	-	-	-	-	-	-	510,000	-
RW-116S	03/28/2017	33.15	26.02	-	-	-	27.05	7.13	12:00	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	07/08/2015	31.81	22.53	-	-	-	-	9.28	11:08	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	07/13/2015	31.81	22.27	-	-	-	24.25	9.54	9:22	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	07/20/2015	31.81	21.97	-	-	-	-	9.84	9:07	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	07/28/2015	31.81	21.86	-	-	-	24.34	9.95	9:30	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	08/04/2015	31.81	21.94	-	-	-	24.23	9.87	13:15	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	08/05/2015	31.81	21.96	-	-	-	24.27	9.85	9:20	-	-	-	-	-	-	-	-	-	-	6,600	-
RW-117S	08/11/2015	31.81	22.06	-	-	-	24.30	9.75	10:28	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	08/18/2015	31.81	22.16	-	-	-	-	9.65	10:10	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	08/24/2015	31.81	22.25	-	-	-	-	9.56	10:13	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	09/02/2015	31.81	22.40	-	-	-	24.30	9.41	10:10	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	09/09/2015	31.81	22.51	22.51	TRACE	TRACE	24.31	9.30	10:10	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	09/17/2015	31.81	22.61	-	-	-	24.31	9.20	10:12	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	09/23/2015	31.81	22.61	-	-	-	-	9.20	10:31	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	09/28/2015	31.81	22.66	-	-	-	24.29	9.15	9:18	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	10/05/2015	31.81	22.76	-	-	-	24.30	9.05	9:34	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	11/10/2015	31.81	25.29	-	-	-	-	6.52	12:59	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	12/01/2015	33.73	25.72	-	-	-	26.13	8.01	11:16	-	-	-	-	-	-	-	-	-	-	13,000	-
RW-117S	01/27/2016	33.73	26.06	-	-	-	-	7.67	10:25	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	02/15/2016	33.73	26.05	-	-	-	-	7.68	10:07	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	03/14/2016	33.73	26.06	-	-	-	26.09	7.67	11:05	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	04/21/2016	33.73	25.74	-	-	-	26.07	7.99	11:38	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	04/27/2016	33.73	25.75	-	-	-	26.08	7.98	10:14	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	05/05/2016	33.73	25.79	-	-	-	26.05	7.94	12:56	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	05/23/2016	33.73	25.70	-	-	-	26.05	8.03	11:16	-	-	-	-	-	-	-	-	-	-	-	-
RW-117S	05/24/2016	33.73	DRY	-	-	-	26.07	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-117S	06/21/2016	33.73	25.70	-	-	-	-	8.03	10:33	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-117S	07/21/2016	33.73	25.67	-	-	-	-	8.06	10:12	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/24/2016	33.73	DRY	-	-	-	26.08	DRY	11:15	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/25/2016	33.73	25.52	-	-	-	26.08	8.21	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/30/2016	33.73	25.97	-	-	-	26.77	7.76	11:10	-	-	-	-	-	-	-	-	-	-	4,400	
RW-117S	09/22/2016	33.73	25.71	-	-	-	26.18	8.02	12:32	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	10/20/2016	33.73	25.72	-	-	-	-	8.01	11:22	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	11/28/2016	33.73	25.75	-	-	-	26.77	7.98	10:57	-	-	-	-	-	-	-	-	-	-	2,800	
RW-117S	12/22/2016	33.73	25.63	-	-	-	26.15	8.10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	01/30/2017	33.73	25.72	-	-	-	26.15	8.01	10:21	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	02/21/2017	33.73	25.71	-	-	-	26.13	8.02	10:07	-	-	-	-	-	-	-	-	-	-	4,300	
RW-117S	03/29/2017	33.16	DRY	-	-	-	25.67	DRY	12:33	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	07/08/2015	31.09	21.79	-	-	-	-	9.30	11:03	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	07/13/2015	31.09	21.64	-	-	-	24.90	9.45	9:20	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	07/20/2015	31.09	21.27	-	-	-	-	9.82	9:04	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	07/28/2015	31.09	21.22	-	-	-	25.00	9.87	9:39	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/04/2015	31.09	21.28	-	-	-	24.93	9.81	13:18	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/05/2015	31.09	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8,200	
RW-118S	08/11/2015	31.09	21.44	-	-	-	24.96	9.65	10:33	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/18/2015	31.09	21.52	-	-	-	-	9.57	10:07	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/24/2015	31.09	21.62	-	-	-	-	9.47	10:10	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	09/02/2015	31.09	21.76	-	-	-	24.97	9.33	10:13	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	09/09/2015	31.09	21.56	-	-	-	24.95	9.53	10:07	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	09/17/2015	31.09	21.96	-	-	-	25.01	9.13	10:10	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	09/23/2015	31.09	21.97	-	-	-	-	9.12	10:28	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	09/28/2015	31.09	22.03	-	-	-	24.95	9.06	9:16	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	10/05/2015	31.09	22.68	-	-	-	25.00	8.41	12:20	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	11/10/2015	31.09	22.35	-	-	-	-	8.74	12:55	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	12/01/2015	31.24	22.84	-	-	-	25.08	8.40	13:09	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	12/02/2015	31.24	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,000	
RW-118S	01/27/2016	31.24	24.02	-	-	-	-	7.22	10:19	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	02/15/2016	31.24	22.23	-	-	-	-	9.01	9:50	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-118S	03/14/2016	31.24	22.26	-	-	-	25.15	8.98	9:05	-	-	-	-	-	-	-	-	-	-	8,200	
RW-118S	04/21/2016	31.24	23.85	-	-	-	25.10	7.39	12:06	-	-	-	-	-	-	-	-	-	-	1,100	
RW-118S	05/23/2016	31.24	23.95	-	-	-	25.15	7.29	11:50	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	05/24/2016	31.24	23.88	-	-	-	25.10	7.36	11:35	-	-	-	-	-	-	-	-	-	-	1,600	
RW-118S	06/21/2016	31.24	23.95	-	-	-	-	7.29	10:30	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	07/21/2016	31.24	23.92	-	-	-	-	7.32	10:08	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/24/2016	31.24	23.91	-	-	-	25.11	7.33	12:05	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/25/2016	31.24	23.94	-	-	-	-	7.30	13:30	-	-	-	-	-	-	-	-	-	-	-	750
RW-118S	09/22/2016	31.24	23.94	-	-	-	25.17	7.30	12:28	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	10/20/2016	31.24	23.97	-	-	-	-	7.27	11:18	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	11/28/2016	31.24	23.95	-	-	-	25.24	7.29	10:38	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	11/29/2016	31.24	24.00	-	-	-	25.15	7.24	-	-	-	-	-	-	-	-	-	-	-	2,000	
RW-118S	12/22/2016	31.24	24.33	-	-	-	25.17	6.91	-	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	01/30/2017	31.24	24.74	-	-	-	25.20	6.50	10:16	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	02/21/2017	31.24	24.41	-	-	-	25.10	6.83	11:35	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	02/22/2017	31.24	24.41	-	-	-	-	6.83	10:04	-	-	-	-	-	-	-	-	-	-	2,200	
RW-118S	03/29/2017	30.81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	07/08/2015	30.38	21.80	-	-	-	-	8.58	11:46	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	07/13/2015	30.38	21.83	-	-	-	26.15	8.55	9:32	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	07/20/2015	30.38	21.53	-	-	-	-	8.85	9:34	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	07/28/2015	30.38	21.51	-	-	-	26.25	8.87	9:48	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/04/2015	30.38	21.50	-	-	-	26.15	8.88	10:37	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/05/2015	30.38	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,700	
RW-119S	08/11/2015	30.38	21.53	-	-	-	26.15	8.85	9:53	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/18/2015	30.38	21.73	-	-	-	-	8.65	10:33	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/24/2015	30.38	21.82	-	-	-	-	8.56	10:40	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	09/02/2015	30.38	22.01	-	-	-	26.17	8.37	9:38	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	09/09/2015	30.38	22.09	-	-	-	26.20	8.29	10:17	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	09/17/2015	30.38	22.34	-	-	-	26.21	8.04	10:22	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	09/23/2015	30.38	22.35	-	-	-	-	8.03	10:49	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	09/28/2015	30.38	22.32	-	-	-	26.20	8.06	9:33	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	10/05/2015	30.38	22.45	-	-	-	26.20	7.93	12:04	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
RW-119S	11/10/2015	30.38	25.50	-	-	-	-	4.88	13:09	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	12/01/2015	33.33	25.65	-	-	-	29.02	7.68	13:03	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	12/02/2015	33.33	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,000	-
RW-119S	01/27/2016	33.33	25.63	-	-	-	-	7.70	9:50	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	02/15/2016	33.33	26.89	-	-	-	-	6.44	9:36	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	03/14/2016	33.33	25.85	-	-	-	29.20	7.48	9:28	-	-	-	-	-	-	-	-	-	-	4,400	-
RW-119S	04/21/2016	33.33	25.40	-	-	-	29.17	7.93	11:03	-	-	-	-	-	-	-	-	-	-	3,300	-
RW-119S	05/23/2016	33.33	26.20	-	-	-	29.18	7.13	11:30	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	05/24/2016	33.33	25.05	-	-	-	29.50	8.28	9:10	-	-	-	-	-	-	-	-	-	-	2,100	-
RW-119S	06/21/2016	33.33	26.28	-	-	-	-	7.05	11:13	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	07/21/2016	33.33	26.24	-	-	-	-	7.09	10:35	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	08/24/2016	33.33	26.30	-	-	-	29.70	7.03	12:00	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	08/25/2016	33.33	24.82	-	-	-	-	8.51	9:40	-	-	-	-	-	-	-	-	-	-	1,200	-
RW-119S	09/22/2016	33.33	26.28	-	-	-	29.28	7.05	12:44	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	10/20/2016	33.33	26.24	-	-	-	-	7.09	11:40	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	11/28/2016	33.33	NR	-	-	-	-	-	11:06	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	11/29/2016	33.33	26.31	-	-	-	28.96	7.02	-	-	-	-	-	-	-	-	-	-	-	24,000	-
RW-119S	12/22/2016	33.33	26.30	-	-	-	28.95	7.03	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	01/30/2017	33.33	26.35	-	-	-	29.05	6.98	9:55	-	-	-	-	-	-	-	-	-	-	-	-
RW-119S	02/21/2017	33.33	26.30	-	-	-	28.90	7.03	10:00	-	-	-	-	-	-	-	-	-	-	4,200	-
RW-119S	03/29/2017	33.28	26.14	-	-	-	28.95	7.14	12:53	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	12/16/2013	38.31	NR	-	-	-	-	-	-	14.3	ND	13.1	63.5	1.55	-	-	-	119	-	14,100	-
TW-01	12/18/2013	38.31	31.38	-	-	-	-	6.93	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	01/08/2014	38.31	31.80	31.79	0.01	-	-	6.52	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	03/07/2014	38.31	30.41	-	-	-	-	7.90	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	03/13/2014	38.31	31.13	-	-	-	-	7.18	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	03/20/2014	38.31	30.36	-	-	-	-	7.95	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	03/27/2014	38.31	31.22	-	-	-	-	7.09	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	04/03/2014	38.31	30.36	-	-	-	-	7.95	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	04/08/2014	38.31	30.21	-	-	-	-	8.10	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	04/17/2014	38.31	31.02	-	-	-	-	7.29	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-01	04/22/2014	38.31	30.18	-	-	-	-	8.13	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	04/29/2014	38.31	30.22	-	-	-	-	8.09	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	05/05/2014	38.31	30.29	-	-	-	-	8.02	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	05/12/2014	38.31	30.28	-	-	-	-	8.03	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	05/19/2014	38.31	30.16	-	-	-	-	8.15	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	06/02/2014	38.31	30.17	-	-	-	-	8.14	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	06/09/2014	38.31	30.08	-	-	-	-	8.23	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	06/16/2014	38.31	30.23	-	-	-	-	8.08	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	06/23/2014	38.31	30.02	-	-	-	-	8.29	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	07/02/2014	38.31	29.98	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	07/07/2014	38.31	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,400	-
TW-01	07/14/2014	38.31	29.89	-	-	-	-	8.42	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	07/31/2014	38.31	30.26	-	-	-	34.50	8.05	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-01	08/01/2014	Overdrilled and replaced with MW-05																			
TW-02	12/16/2013	20.60	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	0.791	-	-	-	ND	-	584	-
TW-02	12/18/2013	20.60	15.52	-	-	-	-	5.08	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	01/08/2014	20.60	15.08	-	-	-	-	5.52	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	03/07/2014	20.60	14.81	-	-	-	-	5.79	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	03/13/2014	20.60	14.22	-	-	-	-	6.38	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	03/20/2014	20.60	13.39	-	-	-	-	7.21	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	03/27/2014	20.60	14.31	-	-	-	-	6.29	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	04/03/2014	20.60	13.25	-	-	-	-	7.35	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	04/08/2014	20.60	13.74	-	-	-	-	6.86	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	04/17/2014	20.60	13.70	-	-	-	-	6.90	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	04/22/2014	20.60	13.62	-	-	-	-	6.98	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	04/29/2014	20.60	13.96	-	-	-	-	6.64	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	05/05/2014	20.60	13.55	-	-	-	-	7.05	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	05/12/2014	20.60	14.25	-	-	-	-	6.35	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	05/19/2014	20.60	13.63	-	-	-	-	6.97	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	05/27/2014	20.60	14.31	-	-	-	-	6.29	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	06/02/2014	20.60	14.34	-	-	-	-	6.26	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	06/09/2014	20.60	14.71	-	-	-	-	5.89	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-02	06/16/2014	20.60	14.30	-	-	-	-	6.30	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	06/23/2014	20.60	14.48	-	-	-	-	6.12	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	07/02/2014	20.60	14.77	-	-	-	-	5.83	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	07/07/2014	20.60	15.08	-	-	-	21.28	5.52	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	07/14/2014	20.60	15.02	-	-	-	-	5.58	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	07/31/2014	20.60	15.40	-	-	-	21.22	5.20	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	08/08/2014	20.60	15.40	-	-	-	-	5.20	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	08/11/2014	20.60	15.28	-	-	-	-	5.32	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	08/15/2014	20.60	14.84	-	-	-	21.15	5.76	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	08/18/2014	20.60	15.06	-	-	-	-	5.54	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	08/25/2014	NR	14.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	09/02/2014	NR	15.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	09/15/2014	NR	14.90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	09/22/2014	NR	15.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	10/01/2014	NR	15.22	-	-	-	21.12	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	10/13/2014	NR	14.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	10/20/2014	NR	15.10	-	-	-	20.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	10/23/2014	NR	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	-	<20	60	-
TW-02	02/24/2015	16.11	14.34	-	-	-	-	1.77	15:01	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	03/04/2015	16.11	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.20	<20	<45	-
TW-02	05/11/2015	16.11	14.38	-	-	-	20.80	1.73	15:18	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	05/13/2015	16.11	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45	-
TW-02	08/04/2015	16.11	15.08	-	-	-	20.87	1.03	12:15	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	08/05/2015	16.11	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.20	<20	<45	-
TW-02	12/01/2015	16.11	15.08	-	-	-	20.88	1.03	13:28	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	12/03/2015	16.11	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.07	<20	81 J	-
TW-02	03/14/2016	16.11	14.32	-	-	-	20.97	1.79	9:40	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	03/16/2016	16.11	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	<45	-
TW-02	05/23/2016	16.11	13.26	-	-	-	-	2.85	10:37	-	-	-	-	-	-	-	-	-	-	-	-
TW-02	05/25/2016	16.11	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	<45	-
TW-02	08/24/2016	16.11	14.83	-	-	-	21.20	1.28	10:50	-	-	-	-	-	-	-	-	-	-	<45	-
TW-02	11/28/2016	16.11	15.50	-	-	-	21.83	0.61	8:49	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-02	02/21/2017	16.11	15.41	-	-	-	21.34	0.70	12:20	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	12/16/2013	14.87	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	ND	-	351	-
TW-03	12/18/2013	14.87	9.08	-	-	-	-	5.79	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	01/08/2014	14.87	9.42	-	-	-	-	5.45	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	03/07/2014	14.87	7.66	-	-	-	-	7.21	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	03/13/2014	14.87	8.09	-	-	-	-	6.78	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	03/20/2014	14.87	7.50	-	-	-	-	7.37	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	03/27/2014	14.87	8.47	-	-	-	-	6.40	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	04/03/2014	14.87	6.99	-	-	-	-	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	04/08/2014	14.87	7.64	-	-	-	-	7.23	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	04/17/2014	14.87	7.33	-	-	-	-	7.54	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	04/22/2014	14.87	7.64	-	-	-	-	7.23	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	04/29/2014	14.87	7.36	-	-	-	-	7.51	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	05/05/2014	14.87	7.58	-	-	-	-	7.29	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	05/12/2014	14.87	7.93	-	-	-	-	6.94	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	05/19/2014	14.87	8.42	-	-	-	-	6.45	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	05/27/2014	14.87	7.69	-	-	-	-	7.18	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	06/02/2014	14.87	8.00	-	-	-	-	6.87	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	06/09/2014	14.87	7.77	-	-	-	-	7.10	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	06/16/2014	14.87	7.60	-	-	-	-	7.27	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	06/23/2014	14.87	7.68	-	-	-	-	7.19	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	07/02/2014	14.87	7.97	-	-	-	-	6.90	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	07/07/2014	14.87	8.31	-	-	-	13.45	6.56	-	-	-	-	-	-	-	-	-	-	-	<1,160	-
TW-03	07/14/2014	14.87	7.55	-	-	-	-	7.32	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	07/25/2014	14.87	8.45	-	-	-	13.30	6.42	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	07/31/2014	14.87	8.14	-	-	-	13.35	6.73	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	08/08/2014	14.87	8.39	-	-	-	-	6.48	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	08/11/2014	14.87	8.12	-	-	-	-	6.75	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	08/15/2014	14.87	8.10	-	-	-	13.40	6.77	-	-	-	-	-	-	-	-	-	-	-	<1,500	-
TW-03	08/18/2014	14.87	8.25	-	-	-	-	6.62	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	08/25/2014	10.40	7.85	-	-	-	-	2.55	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	09/02/2014	10.40	8.52	-	-	-	-	1.88	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Comments	
TW-03	09/15/2014	10.40	8.33	-	-	-	-	2.07	-	-	-	-	-	-	-	-	-	-	-	-	-	Geosyntec sampling, could not gauge
TW-03	09/22/2014	10.40	8.26	-	-	-	-	2.14	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	10/01/2014	10.40	8.35	-	-	-	13.15	2.05	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	10/13/2014	10.40	8.18	-	-	-	-	2.22	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	10/20/2014	10.40	8.50	-	-	-	13.14	1.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	10/23/2014	10.40	NR	-	-	-	-	-	-	0.7	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	-	<20	49	-	
TW-03	02/24/2015	10.40	8.57	-	-	-	-	1.83	14:49	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	03/04/2015	10.40	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	180	-	
TW-03	05/11/2015	10.40	7.74	-	-	-	13.10	2.66	15:23	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	05/13/2015	10.40	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	21 J	200	-	
TW-03	08/04/2015	10.40	7.82	-	-	-	13.14	2.58	12:13	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	08/05/2015	10.40	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.20	<20	150	-	
TW-03	12/01/2015	10.40	7.64	-	-	-	13.12	2.76	13:26	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	12/02/2015	10.40	NR	-	-	-	-	-	-	0.7 J	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	<20	56 J	-	
TW-03	03/14/2016	10.40	7.95	-	-	-	13.10	2.45	9:45	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	03/16/2016	10.40	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.1 J	32 J	150	-	
TW-03	05/05/2016	10.40	7.53	-	-	-	-	2.87	12:21	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	5/23/2016 ^H	10.40	8.68	-	-	-	-	1.72	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.1 J	31 J	190	-	
TW-03	5/23/2016 ^L	10.40	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.1 J	27 J	180	-	
TW-03	08/24/2016	10.40	8.70	-	-	-	13.22	1.70	10:45	-	-	-	-	-	-	-	-	-	-	100	-	
TW-03	08/25/2016	10.40	8.09	-	-	-	-	2.31	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	09/22/2016	10.40	8.18	-	-	-	-	2.22	14:25	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	11/28/2016	10.40	8.83	-	-	-	13.10	1.57	8:46	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	54 J	-	
TW-03	02/21/2017	10.40	9.02	-	-	-	13.07	1.38	12:17	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	02/22/2017	10.40	8.69	-	-	-	13.10	1.71	10:09	-	-	-	-	-	-	-	-	-	-	61 J	-	
TW-04	12/16/2013	13.26	NR	-	-	-	-	-	-	2.2	<0.5	3.45	7.11	<0.5	-	-	-	27.7	-	2,000	-	
TW-04	12/18/2013	13.26	6.25	-	-	-	-	7.01	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	01/08/2014	13.26	6.71	-	-	-	-	6.55	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/07/2014	13.26	6.06	-	-	-	-	7.20	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/13/2014	13.26	6.26	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/20/2014	13.26	6.17	-	-	-	-	7.09	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-04	03/27/2014	13.26	6.55	-	-	-	-	6.71	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/03/2014	13.26	4.64	-	-	-	-	8.62	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/08/2014	13.26	5.38	-	-	-	-	7.88	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/17/2014	13.26	5.60	-	-	-	-	7.66	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/22/2014	13.26	5.56	-	-	-	-	7.70	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/29/2014	13.26	5.91	-	-	-	-	7.35	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/05/2014	13.26	5.06	-	-	-	-	8.20	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/12/2014	13.26	5.82	-	-	-	-	7.44	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/19/2014	13.26	4.61	-	-	-	-	8.65	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/27/2014	13.26	5.66	-	-	-	-	7.60	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/02/2014	13.26	5.83	-	-	-	-	7.43	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/09/2014	13.26	5.87	-	-	-	-	7.39	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/16/2014	13.26	5.21	-	-	-	-	8.05	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/23/2014	13.26	5.68	-	-	-	-	7.58	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/02/2014	13.26	5.96	-	-	-	-	7.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/07/2014	13.26	6.18	-	-	-	13.77	7.08	-	-	-	-	-	-	-	-	-	-	-	1,270	
TW-04	07/14/2014	13.26	5.80	-	-	-	-	7.46	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/25/2014	13.26	6.20	-	-	-	13.70	7.06	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/31/2014	13.26	6.08	-	-	-	13.76	7.18	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/08/2014	13.26	6.21	-	-	-	-	7.05	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/11/2014	13.26	6.19	-	-	-	-	7.07	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/15/2014	13.26	5.99	-	-	-	13.75	7.27	-	-	-	-	-	-	-	-	-	-	-	1,610	
TW-04	08/18/2014	13.26	5.92	-	-	-	-	7.34	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/25/2014	9.49	5.87	-	-	-	-	3.62	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/02/2014	9.49	6.25	-	-	-	-	3.24	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/15/2014	9.49	6.17	-	-	-	-	3.32	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/22/2014	9.49	6.20	-	-	-	-	3.29	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/01/2014	9.49	6.23	-	-	-	13.55	3.26	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/10/2014	9.49	6.18	-	-	-	-	3.31	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/13/2014	9.49	6.19	-	-	-	-	3.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/20/2014	9.49	6.28	-	-	-	13.40	3.21	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/23/2014	9.49	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.3	<20	160	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-04	10/27/2014	9.49	6.04	-	-	-	-	3.45	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/07/2014	9.49	6.27	-	-	-	-	3.22	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/12/2014	9.49	6.19	-	-	-	-	3.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/21/2014	9.49	6.78	-	-	-	-	2.71	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/26/2014	9.49	6.33	-	-	-	-	3.16	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/05/2014	9.49	5.75	-	-	-	-	3.74	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/11/2014	9.49	5.60	-	-	-	-	3.89	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/16/2014	9.49	5.83	-	-	-	-	3.66	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/23/2014	9.49	5.82	-	-	-	-	3.67	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/30/2014	9.49	5.73	-	-	-	-	3.76	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	01/09/2015	9.49	6.06	-	-	-	-	3.43	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	01/16/2015	9.49	5.64	-	-	-	-	3.85	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	01/19/2015	9.49	5.37	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	01/26/2015	9.49	4.78	-	-	-	-	4.71	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/03/2015	9.49	6.06	-	-	-	13.21	3.43	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/09/2015	9.49	6.08	-	-	-	-	3.41	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/18/2015	9.49	6.19	-	-	-	-	3.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/24/2015	9.49	6.21	-	-	-	-	3.28	15:00	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/04/2015	9.49	6.11	-	-	-	-	3.38	11:45	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	1	27 J	940	
TW-04	03/11/2015	9.49	3.93	-	-	-	-	5.56	12:00	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/18/2015	9.49	5.40	-	-	-	-	4.09	10:23	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/26/2015	9.49	5.75	-	-	-	13.20	3.74	12:21	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/02/2015	9.49	5.85	-	-	-	13.25	3.64	10:28	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/08/2015	9.49	6.20	-	-	-	13.25	3.29	10:00	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/13/2015	9.49	6.28	-	-	-	-	3.21	9:55	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/23/2015	9.49	5.44	-	-	-	13.25	4.05	10:43	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/29/2015	9.49	5.85	-	-	-	13.25	3.64	13:15	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/04/2015	9.49	5.75	-	-	-	-	3.74	10:50	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/11/2015	9.49	5.83	-	-	-	13.20	3.66	15:33	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/13/2015	9.49	NR	-	-	-	-	-	-	1 J	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	33 J	700	
TW-04	05/21/2015	9.49	5.89	-	-	-	13.27	3.60	13:05	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/28/2015	9.49	6.28	-	-	-	13.25	3.21	10:55	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-04	06/02/2015	9.49	5.01	-	-	-	-	4.48	12:15	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/09/2015	9.49	5.17	-	-	-	-	4.32	9:45	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/16/2015	9.49	5.67	-	-	-	-	3.82	10:35	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/26/2015	9.49	4.98	-	-	-	13.20	4.51	8:45	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/01/2015	9.49	3.57	-	-	-	-	5.92	11:35	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/08/2015	9.49	4.57	-	-	-	-	4.92	10:20	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/13/2015	9.49	4.28	-	-	-	-	5.21	8:53	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/20/2015	9.49	5.32	-	-	-	-	4.17	8:40	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/04/2015	9.49	5.62	-	-	-	13.70	3.87	12:02	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/06/2015	9.49	NR	-	-	-	-	-	-	0.6 J	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.6	38 J	1,000	
TW-04	08/18/2015	9.49	5.88	-	-	-	-	3.61	9:20	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/24/2015	9.49	5.76	-	-	-	-	3.73	9:40	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/02/2015	9.49	5.92	-	-	-	13.20	3.57	11:36	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/09/2015	9.49	6.06	-	-	-	13.18	3.43	14:09	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/17/2015	9.49	6.11	-	-	-	13.21	3.38	11:48	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/23/2015	9.49	6.08	-	-	-	-	3.41	10:00	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/28/2015	9.49	5.61	-	-	-	13.08	3.88	10:36	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/05/2015	9.49	5.22	-	-	-	13.13	4.27	10:20	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/10/2015	9.49	5.92	-	-	-	-	3.57	12:29	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/01/2015	9.49	5.78	-	-	-	13.10	3.71	13:20	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/02/2015	9.49	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	22 J	280	
TW-04	02/15/2016	9.49	6.07	-	-	-	-	3.42	9:05	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/14/2016	9.49	5.93	-	-	-	13.11	3.56	9:55	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.2	31 J	980	
TW-04	04/21/2016	9.49	6.23	-	-	-	-	3.26	9:17	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/05/2016	9.49	5.50	-	-	-	-	3.99	12:27	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/23/2016	9.49	4.83	-	-	-	-	4.66	10:49	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/24/2016	9.49	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.5	50 J	1,100	
TW-04	06/21/2016	9.49	6.30	-	-	-	-	3.19	9:35	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/21/2016	9.49	5.91	-	-	-	-	3.58	9:25	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/24/2016	9.49	6.35	-	-	-	13.15	3.14	9:44	-	-	-	-	-	-	-	-	-	-	430	
TW-04	09/22/2016	9.49	6.20	-	-	-	-	3.29	14:45	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/28/2016	9.49	6.69	-	-	-	10.07	2.80	8:35	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-04	11/29/2016	9.49	NR	-	-	-	-	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	220	
TW-04	02/21/2017	9.49	6.70	-	-	-	13.07	2.79	12:07	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/22/2017	9.49	6.52	-	-	-	13.08	2.97	10:39	-	-	-	-	-	-	-	-	-	-	410	
TW-05	12/16/2013	13.73	NR	-	-	-	-	-	-	7.68	<0.5	62.8	40.3	<0.5	-	-	-	-	-	136,000	
TW-05	12/18/2013	13.73	6.45	-	-	-	-	7.28	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	01/08/2014	13.73	6.98	-	-	-	-	6.75	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/07/2014	13.73	6.34	-	-	-	-	7.39	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/13/2014	13.73	6.49	-	-	-	-	7.24	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/20/2014	13.73	6.04	-	-	-	-	7.69	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/27/2014	13.73	6.68	-	-	-	-	7.05	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/03/2014	13.73	4.29	-	-	-	-	9.44	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/08/2014	13.73	5.36	-	-	-	-	8.37	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/17/2014	13.73	5.33	-	-	-	-	8.40	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/22/2014	13.73	5.65	-	-	-	-	8.08	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/29/2014	13.73	6.06	-	-	-	-	7.67	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/05/2014	13.73	4.91	-	-	-	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/12/2014	13.73	6.01	-	-	-	-	7.72	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/19/2014	13.73	4.65	-	-	-	-	9.08	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/27/2014	13.73	5.91	-	-	-	-	7.82	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/02/2014	13.73	6.07	-	-	-	-	7.66	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/09/2014	13.73	6.11	-	-	-	-	7.62	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/16/2014	13.73	5.28	-	-	-	-	8.45	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/23/2014	13.73	5.95	-	-	-	-	7.78	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/02/2014	13.73	6.28	-	-	-	-	7.45	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/07/2014	13.73	6.49	-	-	-	12.06	7.24	-	-	-	-	-	-	-	-	-	-	-	66,300	
TW-05	07/14/2014	13.73	6.06	-	-	-	-	7.67	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/25/2014	13.73	5.43	-	-	-	12.08	8.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/31/2014	13.73	6.50	-	-	-	12.10	7.23	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/08/2014	13.73	6.56	-	-	-	-	7.17	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/11/2014	13.73	6.51	-	-	-	-	7.22	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/15/2014	13.73	5.91	-	-	-	11.95	7.82	-	-	-	-	-	-	-	-	-	-	-	271,000	
TW-05	08/18/2014	13.73	6.14	-	-	-	-	7.59	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-05	08/25/2014	9.64	6.13	-	-	-	-	3.51	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/02/2014	9.64	6.59	-	-	-	-	3.05	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/15/2014	9.64	6.57	-	-	-	-	3.07	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/22/2014	9.64	6.58	-	-	-	-	3.06	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	10/01/2014	9.64	6.63	-	-	-	11.74	3.01	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	10/10/2014	9.64	6.52	-	-	-	-	3.12	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	10/13/2014	9.64	6.58	-	-	-	-	3.06	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	10/20/2014	9.64	6.60	-	-	-	12.63	3.04	-	4	<0.5	14	<0.5	<0.5	<2	<0.5	<0.5	21	140	29,000	-
TW-05	10/27/2014	9.64	6.23	-	-	-	-	3.41	-	-	-	-	-	<0.5	-	-	-	-	-	-	-
TW-05	11/07/2014	9.64	6.58	-	-	-	-	3.06	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	11/12/2014	9.64	6.56	-	-	-	-	3.08	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	11/21/2014	9.64	7.07	-	-	-	-	2.57	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	11/26/2014	9.64	6.67	-	-	-	-	2.97	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	12/05/2014	9.64	5.57	-	-	-	-	4.07	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	12/11/2014	9.64	5.38	-	-	-	-	4.26	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	12/16/2014	9.64	5.86	-	-	-	-	3.78	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	12/23/2014	9.64	6.08	-	-	-	-	3.56	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	12/30/2014	9.64	5.50	-	-	-	-	4.14	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	01/09/2015	9.64	6.27	-	-	-	-	3.37	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	01/16/2015	9.64	5.48	-	-	-	-	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	01/19/2015	9.64	5.08	-	-	-	-	4.56	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	01/26/2015	9.64	4.30	-	-	-	-	5.34	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	02/03/2015	9.64	6.20	-	-	-	11.88	3.44	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	02/09/2015	9.64	6.38	-	-	-	-	3.26	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	02/18/2015	9.64	6.64	-	-	-	-	3.00	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	02/24/2015	9.64	6.61	-	-	-	-	3.03	14:57	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	03/04/2015	9.64	6.27	-	-	-	-	3.37	12:15	2	<0.50	1	<0.5	<0.5	<2	<0.5	<0.5	3	130	2,200	-
TW-05	03/11/2015	9.64	3.15	-	-	-	-	6.49	12:03	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	03/18/2015	9.64	4.61	-	-	-	-	5.03	10:26	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	03/26/2015	9.64	5.94	-	-	-	12.10	3.70	12:25	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	04/02/2015	9.64	6.00	-	-	-	12.10	3.64	10:30	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	04/08/2015	9.64	6.41	-	-	-	12.14	3.23	10:05	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-05	04/13/2015	9.64	6.53	-	-	-	-	3.11	9:58	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	04/23/2015	9.64	5.48	-	-	-	12.20	4.16	10:45	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	04/29/2015	9.64	5.99	-	-	-	12.20	3.65	13:17	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	05/04/2015	9.64	5.94	-	-	-	-	3.70	10:53	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	05/11/2015	9.64	6.12	-	-	-	12.30	3.52	15:39	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	05/13/2015	9.64	NR	-	-	-	-	-	-	3	<0.50	<0.50	<0.5	<0.5	<2	<0.5	<0.5	1 J	44 J	1,100	-
TW-05	05/21/2015	9.64	6.15	-	-	-	12.48	3.49	13:07	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	05/28/2015	9.64	6.56	-	-	-	12.50	3.08	10:57	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	06/02/2015	9.64	4.05	-	-	-	-	5.59	12:18	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	06/09/2015	9.64	4.63	-	-	-	-	5.01	9:48	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	06/16/2015	9.64	5.99	-	-	-	-	3.65	10:38	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	06/26/2015	9.64	4.52	-	-	-	12.80	5.12	8:47	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	07/01/2015	9.64	1.82	-	-	-	-	7.82	11:38	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	07/08/2015	9.64	4.22	-	-	-	-	5.42	10:23	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	07/13/2015	9.64	4.24	-	-	-	-	5.40	8:55	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	07/20/2015	9.64	5.64	-	-	-	-	4.00	8:43	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	07/28/2015	9.64	6.01	-	-	-	12.42	3.63	13:15	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	08/04/2015	9.64	6.07	-	-	-	12.32	3.57	12:05	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	08/06/2015	9.64	NR	-	-	-	-	-	-	2	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.8	37 J	790	-
TW-05	08/11/2015	9.64	5.56	-	-	-	12.54	4.08	12:30	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	08/18/2015	9.64	6.28	-	-	-	-	3.36	9:23	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	08/24/2015	9.64	6.23	-	-	-	-	3.41	9:43	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/02/2015	9.64	6.32	-	-	-	12.53	3.32	11:33	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/09/2015	9.64	6.73	-	-	-	12.55	2.91	14:06	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/17/2015	9.64	6.54	-	-	-	12.53	3.10	11:45	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/23/2015	9.64	6.41	-	-	-	-	3.23	10:03	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/28/2015	9.64	6.01	-	-	-	12.51	3.63	10:38	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	10/05/2015	9.64	5.43	-	-	-	12.54	4.21	10:17	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	11/10/2015	9.64	6.31	-	-	-	-	3.33	12:31	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	12/01/2015	9.64	5.99	-	-	-	12.38	3.65	13:10	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	30 J	330	-
TW-05	02/15/2016	9.64	6.34	-	-	-	-	3.30	9:09	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	03/14/2016	9.64	6.22	-	-	-	12.43	3.42	10:00	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.3	<20	960	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-05	04/21/2016	9.64	6.92	-	-	-	-	2.72	9:21	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	05/05/2016	9.64	5.40	-	-	-	-	4.24	12:30	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	05/23/2016	9.64	5.46	-	-	-	-	4.18	10:55	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	06/21/2016	9.64	7.02	-	-	-	-	2.62	9:38	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	07/21/2016	9.64	6.37	-	-	-	-	3.27	9:28	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	08/24/2016	9.64	6.80	-	-	-	12.85	2.84	9:49	-	-	-	-	-	-	-	-	-	-	890	-
TW-05	08/25/2016	9.64	6.20	-	-	-	-	3.44	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	09/22/2016	9.64	6.75	-	-	-	-	2.89	14:40	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	11/28/2016	9.64	7.07	-	-	-	13.02	2.57	8:41	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	11/29/2016	9.64	NR	-	-	-	-	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	430	-
TW-05	02/21/2017	9.64	7.20	-	-	-	13.32	2.44	12:05	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	02/22/2017	9.64	7.10	-	-	-	13.30	2.54	10:56	-	-	-	-	-	-	-	-	-	-	2,800	-
TW-06	12/16/2013	13.97	NR	-	-	-	-	-	-	1.09	ND	20.3	7.86	ND	-	-	-	174	-	47,000	-
TW-06	12/18/2013	13.97	6.21	-	-	-	-	7.76	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	01/08/2014	13.97	6.98	-	-	-	-	6.99	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	03/07/2014	13.97	6.40	-	-	-	-	7.57	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	03/13/2014	13.97	6.62	-	-	-	-	7.35	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	03/20/2014	13.97	6.26	-	-	-	-	7.71	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	03/27/2014	13.97	6.88	-	-	-	-	7.09	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	04/03/2014	13.97	4.81	-	-	-	-	9.16	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	04/08/2014	13.97	5.82	-	-	-	-	8.15	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	04/17/2014	13.97	5.41	-	-	-	-	8.56	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	04/22/2014	13.97	5.90	-	-	-	-	8.07	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	04/29/2014	13.97	6.30	-	-	-	-	7.67	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	05/05/2014	13.97	4.98	-	-	-	-	8.99	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	05/12/2014	13.97	6.18	-	-	-	-	7.79	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	05/19/2014	13.97	4.63	-	-	-	-	9.34	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	05/27/2014	13.97	6.79	-	-	-	-	7.18	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	06/02/2014	13.97	6.24	-	-	-	-	7.73	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	06/09/2014	13.97	6.31	-	-	-	-	7.66	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	06/16/2014	13.97	5.33	-	-	-	-	8.64	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	06/23/2014	13.97	6.12	-	-	-	-	7.85	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-06	07/02/2014	13.97	6.52	-	-	-	-	7.45	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	07/07/2014	13.97	6.70	-	-	-	12.60	7.27	-	-	-	-	-	-	-	-	-	-	-	113,000	-
TW-06	07/14/2014	13.97	6.24	-	-	-	-	7.73	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	07/25/2014	13.97	6.65	-	-	-	12.60	7.32	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	08/08/2014	13.97	6.81	-	-	-	-	7.16	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	08/11/2014	13.97	6.71	-	-	-	-	7.26	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	08/15/2014	13.97	6.01	-	-	-	12.70	7.96	-	-	-	-	-	-	-	-	-	-	-	147,000	-
TW-06	08/18/2014	13.97	6.33	-	-	-	-	7.64	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	08/25/2014	9.86	6.37	-	-	-	-	3.49	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	09/02/2014	9.86	6.80	-	-	-	-	3.06	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	09/15/2014	9.86	6.79	-	-	-	-	3.07	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	09/22/2014	9.86	6.77	-	-	-	-	3.09	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	10/01/2014	9.86	6.88	-	-	-	12.60	2.98	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	10/10/2014	9.86	6.77	-	-	-	-	3.09	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	10/13/2014	9.86	6.85	-	-	-	-	3.01	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	10/20/2014	9.86	6.76	-	-	-	12.63	3.10	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	10/23/2014	9.86	NR	-	-	-	-	-	-	0.8	<0.5	11	1	<0.5	<2	<0.5	<0.5	5	230	16,000	-
TW-06	10/27/2014	9.86	6.39	-	-	-	-	3.47	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	11/07/2014	9.86	6.83	-	-	-	-	3.03	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	11/12/2014	9.86	6.85	-	-	-	-	3.01	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	11/21/2014	9.86	7.28	-	-	-	-	2.58	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	11/26/2014	9.86	7.02	-	-	-	-	2.84	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	12/05/2014	9.86	5.85	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	12/11/2014	9.86	5.75	-	-	-	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	12/16/2014	9.86	6.18	-	-	-	-	3.68	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	12/23/2014	9.86	6.36	-	-	-	-	3.50	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	12/30/2014	9.86	5.85	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	01/09/2015	9.86	6.52	-	-	-	-	3.34	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	01/16/2015	9.86	5.77	-	-	-	-	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	01/19/2015	9.86	5.46	-	-	-	-	4.40	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	01/26/2015	9.86	4.69	-	-	-	-	5.17	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	02/03/2015	9.86	6.39	-	-	-	12.58	3.47	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-06	02/09/2015	9.86	6.62	-	-	-	-	3.24	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	02/18/2015	9.86	6.89	-	-	-	-	2.97	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	02/24/2015	9.86	6.90	-	-	-	-	2.96	14:54	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/04/2015	9.86	6.43	-	-	-	-	3.43	13:00	2	<0.5	6	<0.5	<0.5	<2	<0.5	<0.5	<0.030	170	2,200	
TW-06	03/11/2015	9.86	4.47	-	-	-	-	5.39	12:06	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/18/2015	9.86	5.33	-	-	-	-	4.53	10:29	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/26/2015	9.86	6.13	-	-	-	12.60	3.73	12:27	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/02/2015	9.86	6.20	-	-	-	12.65	3.66	10:32	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/08/2015	9.86	6.66	-	-	-	12.62	3.20	10:15	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/13/2015	9.86	6.76	-	-	-	-	3.10	10:01	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/23/2015	9.86	5.62	-	-	-	12.60	4.24	10:47	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/29/2015	9.86	6.22	-	-	-	12.65	3.64	13:19	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/04/2015	9.86	6.14	-	-	-	-	3.72	10:56	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/11/2015	9.86	6.38	-	-	-	12.70	3.48	15:40	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/13/2015	9.86	NR	-	-	-	-	-	-	2	<0.5	4	<0.5	<0.5	<2	<0.5	<0.5	4	130	2,300	
TW-06	05/21/2015	9.86	6.24	-	-	-	12.65	3.62	13:09	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/28/2015	9.86	6.79	-	-	-	12.60	3.07	10:59	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/02/2015	9.86	4.41	-	-	-	-	5.45	12:21	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/09/2015	9.86	5.28	-	-	-	-	4.58	9:51	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/16/2015	9.86	6.24	-	-	-	-	3.62	10:41	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/26/2015	9.86	5.08	-	-	-	12.70	4.78	8:49	-	-	-	-	-	-	-	-	-	-	-	
TW-06	07/01/2015	9.86	3.55	-	-	-	-	6.31	11:41	-	-	-	-	-	-	-	-	-	-	-	
TW-06	07/08/2015	9.86	4.88	-	-	-	-	4.98	10:26	-	-	-	-	-	-	-	-	-	-	-	
TW-06	07/13/2015	9.86	4.78	-	-	-	-	5.08	8:55	-	-	-	-	-	-	-	-	-	-	-	
TW-06	07/20/2015	9.86	5.93	-	-	-	-	3.93	8:46	-	-	-	-	-	-	-	-	-	-	-	
TW-06	07/28/2015	9.86	6.31	-	-	-	12.61	3.55	12:55	-	-	-	-	-	-	-	-	-	-	-	
TW-06	08/04/2015	9.86	6.34	-	-	-	12.64	3.52	12:07	-	-	-	-	-	-	-	-	-	-	-	
TW-06	08/06/2015	9.86	NR	-	-	-	-	-	-	2	<0.5	1	<0.5	<0.5	<2	<0.5	<0.5	2	81	1,400	
TW-06	08/11/2015	9.86	6.15	-	-	-	12.64	3.71	12:35	-	-	-	-	-	-	-	-	-	-	-	
TW-06	08/18/2015	9.86	6.58	-	-	-	-	3.28	9:26	-	-	-	-	-	-	-	-	-	-	-	
TW-06	08/24/2015	9.86	6.51	-	-	-	-	3.35	9:46	-	-	-	-	-	-	-	-	-	-	-	
TW-06	09/02/2015	9.86	6.65	-	-	-	12.06	3.21	11:30	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-06	09/09/2015	9.86	6.02	-	-	-	12.66	3.84	14:03	-	-	-	-	-	-	-	-	-	-	-	Sheen; Elevation change due to well being disturbed during construction activities
TW-06	09/17/2015	9.86	6.85	-	-	-	12.69	3.01	11:40	-	-	-	-	-	-	-	-	-	-	-	
TW-06	09/23/2015	9.86	6.69	-	-	-	-	3.17	10:06	-	-	-	-	-	-	-	-	-	-	-	
TW-06	09/28/2015	9.86	6.27	-	-	-	12.61	3.59	10:41	-	-	-	-	-	-	-	-	-	-	-	
TW-06	10/05/2015	9.86	5.70	-	-	-	12.63	4.16	10:13	-	-	-	-	-	-	-	-	-	-	-	
TW-06	11/10/2015	9.86	6.65	-	-	-	-	3.21	12:32	-	-	-	-	-	-	-	-	-	-	-	
TW-06	12/01/2015	9.86	6.55	-	-	-	12.62	3.31	13:22	0.8 J	<0.5	1	<0.5	<0.5	<2	<0.5	<0.5	0.8	92	1,300	
TW-06	02/15/2016	9.86	6.60	-	-	-	-	3.26	9:15	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/14/2016	9.86	6.57	-	-	-	12.63	3.29	10:05	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/15/2016	9.86	NR	-	-	-	-	-	-	0.8 J	<0.5	3	<0.5	<0.5	<2	<0.5	<0.5	1	110	43,000	
TW-06	04/21/2016	9.99	6.70	-	-	-	12.40	3.29	9:28	-	-	-	-	-	-	-	-	-	-	32,000	
TW-06	05/05/2016	9.99	5.52	-	-	-	-	4.47	12:35	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/23/2016	9.99	4.77	-	-	-	-	5.22	11:00	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/24/2016	9.99	NR	-	-	-	-	-	-	<0.5	<0.5	4	<0.5	<0.5	<2	<0.5	<0.5	1	120	1,800	Sheen
TW-06	06/21/2016	9.99	6.93	-	-	-	-	3.06	11:17	-	-	-	-	-	-	-	-	-	-	-	
TW-06	07/21/2016	9.99	6.12	-	-	-	-	3.87	9:33	-	-	-	-	-	-	-	-	-	-	-	
TW-06	08/24/2016	9.99	6.88	-	-	-	12.88	3.11	9:54	-	-	-	-	-	-	-	-	-	-	-	
TW-06	08/25/2016	9.99	6.13	-	-	-	-	3.86	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	09/22/2016	9.99	6.89	-	-	-	-	3.10	14:35	-	-	-	-	-	-	-	-	-	-	-	
TW-06	11/28/2016	9.99	7.42	-	-	-	12.45	2.57	8:43	-	-	-	-	-	-	-	-	-	-	-	
TW-06	11/29/2016	9.99	NR	-	-	-	-	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	1,200	
TW-06	02/21/2017	9.99	7.00	-	-	-	12.46	2.99	12:09	-	-	-	-	-	-	-	-	-	-	-	
TW-06	02/22/2017	9.99	7.03	-	-	-	12.50	2.96	11:13	-	-	-	-	-	-	-	-	-	-	49,000	
TW-06	03/29/2017	9.99	6.65	-	-	-	12.45	3.34	13:15	-	-	-	-	-	-	-	-	-	-	10,000	
TW-07	12/16/2013	14.00	NR	-	-	-	-	-	-	2.38	ND	0.97	ND	ND	-	-	-	34.00	-	3290.00	
TW-07	12/18/2013	14.00	7.56	-	-	-	-	6.44	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	01/08/2014	14.00	7.91	-	-	-	-	6.09	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	03/07/2014	14.00	6.91	-	-	-	-	7.09	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-07	03/13/2014	14.00	7.40	-	-	-	-	6.60	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	03/20/2014	14.00	6.78	-	-	-	-	7.22	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	03/27/2014	14.00	7.56	-	-	-	-	6.44	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/03/2014	14.00	5.67	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/08/2014	14.00	6.77	-	-	-	-	7.23	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/17/2014	14.00	5.51	-	-	-	-	8.49	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/22/2014	14.00	6.75	-	-	-	-	7.25	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/29/2014	14.00	6.60	-	-	-	-	7.40	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/05/2014	14.00	5.41	-	-	-	-	8.59	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/12/2014	14.00	6.89	-	-	-	-	7.11	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/19/2014	14.00	6.16	-	-	-	-	7.84	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/27/2014	14.00	6.70	-	-	-	-	7.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/02/2014	14.00	6.94	-	-	-	-	7.06	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/09/2014	14.00	7.81	-	-	-	-	6.19	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/16/2014	14.00	6.47	-	-	-	-	7.53	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/23/2014	14.00	6.69	-	-	-	-	7.31	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/02/2014	14.00	7.00	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/07/2014	14.00	7.27	-	-	-	13.42	6.73	-	-	-	-	-	-	-	-	-	-	-	41500.00	
TW-07	07/14/2014	14.00	6.70	-	-	-	-	7.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/25/2014	14.00	7.33	-	-	-	13.30	6.67	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/31/2014	14.00	7.22	-	-	-	13.30	6.78	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	08/08/2014	14.00	7.39	-	-	-	-	6.61	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	08/11/2014	14.00	7.17	-	-	-	13.20	6.83	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	08/15/2014	14.00	7.05	-	-	-	-	6.95	-	-	-	-	-	-	-	-	-	-	-	19600.00	
TW-07	08/18/2014	14.00	7.14	-	-	-	-	6.86	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	08/25/2014	9.88	6.87	-	-	-	-	3.01	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	09/02/2014	9.88	7.43	-	-	-	-	2.45	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	09/15/2014	9.88	7.33	-	-	-	-	2.55	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	09/22/2014	9.88	7.28	-	-	-	-	2.60	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	10/01/2014	9.88	7.38	-	-	-	12.98	2.50	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	10/13/2014	9.88	7.30	-	-	-	-	2.58	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	10/20/2014	9.88	7.49	-	-	-	12.97	2.39	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-07	10/23/2014	9.88	NR	-	-	-	-	-	-	2.00	<0.5	0.60	<0.5	<0.5	<2	<0.5	<0.5	6.00	0:00	4700.00	-
TW-07	02/24/2015	9.88	7.45	-	-	-	-	2.43	14:52	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	03/04/2015	9.88	NR	-	-	-	-	-	-	9.00	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	2.20	46 J	670.00	-
TW-07	05/11/2015	9.88	6.92	-	-	-	12.70	2.96	15:27	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	05/13/2015	9.88	NR	-	-	-	-	-	-	10.00	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	3 J	36 J	320.00	-
TW-07	08/04/2015	9.88	6.88	-	-	-	12.74	3.00	12:10	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	08/05/2015	9.88	NR	-	-	-	-	-	-	7.00	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	2.00	0:00	220.00	-
TW-07	12/01/2015	9.88	5.97	-	-	-	12.99	3.91	13:24	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	12/02/2015	9.88	NR	-	-	-	-	-	-	3.00	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	1.00	<20	110.00	-
TW-07	03/14/2016	9.88	7.13	-	-	-	13.05	2.75	9:50	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	03/15/2016	9.88	NR	-	-	-	-	-	-	3.00	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	160.00	-
TW-07	05/05/2016	9.88	6.53	-	-	-	-	3.35	12:24	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	05/23/2016	9.88	5.13	-	-	-	-	4.75	10:46	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	05/24/2016	9.88	NR	-	-	-	-	-	-	3.00	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	20 J	160*	-
TW-07	05/25/2016	9.88	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45*	-
TW-07	08/24/2016	9.88	7.52	-	-	-	13.20	2.36	10:40	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	08/25/2016	9.88	7.19	-	-	-	-	2.69	-	-	-	-	-	-	-	-	-	-	-	340.00	-
TW-07	09/22/2016	9.88	7.30	-	-	-	-	2.58	14:30	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	11/28/2016	9.88	7.87	-	-	-	13.45	2.01	8:44	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	11/30/2016	9.88	NR	-	-	-	-	-	-	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	59 J	-
TW-07	02/21/2017	9.88	7.87	-	-	-	13.45	2.01	12:15	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	02/22/2017	9.88	7.71	-	-	-	13.51	2.17	10:36	-	-	-	-	-	-	-	-	-	-	820	-
TW-08S	12/18/2013	36.75	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	01/08/2014	36.75	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	03/07/2014	36.75	24.14	-	-	-	-	12.61	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	03/13/2014	36.75	24.06	-	-	-	-	12.69	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	03/20/2014	36.75	24.37	-	-	-	-	12.38	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	03/27/2014	36.75	24.54	-	-	-	-	12.21	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	04/03/2014	36.75	24.26	-	-	-	-	12.49	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	04/08/2014	36.75	23.85	-	-	-	-	12.90	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	04/17/2014	36.75	24.13	-	-	-	-	12.62	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	04/22/2014	36.75	23.92	-	-	-	-	12.83	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-08S	04/29/2014	36.75	23.91	-	-	-	-	12.84	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	05/05/2014	36.75	22.89	-	-	-	-	13.86	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	05/12/2014	36.75	23.02	-	-	-	-	13.73	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	05/19/2014	36.75	22.90	-	-	-	-	13.85	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	06/02/2014	36.75	23.24	-	-	-	-	13.51	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	06/09/2014	36.75	23.21	-	-	-	-	13.54	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	06/16/2014	36.75	22.40	-	-	-	-	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	06/23/2014	36.75	22.41	-	-	-	-	14.34	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	07/02/2014	36.75	22.40	-	-	-	-	14.35	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	07/07/2014	36.75	22.65	-	-	-	25.85	14.10	-	-	-	-	-	-	-	-	-	-	-	29,500	-
TW-08S	07/14/2014	36.75	23.23	-	-	-	-	13.52	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	07/24/2014	36.75	23.09	-	-	-	-	13.66	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	07/31/2014	36.75	23.26	-	-	-	25.82	13.49	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-08S	08/07/2014	Overdrilled and replaced with MW-72S																			
TW-09S	12/18/2013	36.65	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	01/08/2014	36.65	DRY	25.54	0.46	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	03/07/2014	36.65	24.71	24.70	0.01	-	-	11.95	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	03/13/2014	36.65	25.78	24.71	1.07	0.10	-	11.81	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	03/20/2014	36.65	DRY	25.65	0.50	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	03/27/2014	36.65	DRY	25.58	0.54	0.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	04/03/2014	36.65	23.37	23.18	0.19	0.10	-	13.45	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	04/08/2014	36.65	23.39	23.23	0.16	0.10	-	13.40	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	04/17/2014	36.65	23.72	23.66	0.06	-	-	12.99	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	04/22/2014	36.65	23.53	23.40	0.13	0.10	-	13.24	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	04/29/2014	36.65	23.76	23.68	0.08	-	-	12.96	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	05/05/2014	36.65	23.23	23.17	0.06	-	-	13.48	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	05/12/2014	36.65	23.25	23.23	0.02	-	-	13.42	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	05/19/2014	36.65	23.17	23.16	0.01	-	-	13.49	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	06/02/2014	36.65	23.19	-	-	-	-	13.46	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	06/09/2014	36.65	23.17	-	-	-	-	13.48	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	06/16/2014	36.65	23.13	-	-	-	-	13.52	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	06/23/2014	36.65	23.11	-	-	-	-	13.54	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-09S	07/02/2014	36.65	23.03	23.03	TRACE	TRACE	-	13.62	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	07/07/2014	36.65	23.01	-	-	-	26.15	13.64	-	-	-	-	-	-	-	-	-	-	-	2,330,000	-
TW-09S	07/14/2014	36.65	23.02	-	-	-	-	13.63	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-09S	07/23/2014								Overdrilled and replaced with MW-08S												
TW-10	12/18/2013	37.28	30.31	-	-	-	-	6.97	-	2.51	ND	19.7	4.99	ND	-	-	-	131	-	3,040	-
TW-10	01/08/2014	37.28	30.56	-	-	-	-	6.72	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	03/07/2014	37.28	29.70	-	-	-	-	7.58	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	03/13/2014	37.28	30.08	-	-	-	-	7.20	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	03/20/2014	37.28	29.22	-	-	-	-	8.06	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	03/27/2014	37.28	30.13	-	-	-	-	7.15	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	04/03/2014	37.28	29.08	-	-	-	-	8.20	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	04/08/2014	37.28	29.14	-	-	-	-	8.14	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	04/17/2014	37.28	29.66	-	-	-	-	7.62	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	04/22/2014	37.28	29.12	-	-	-	-	8.16	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	04/29/2014	37.28	28.96	-	-	-	-	8.32	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	05/05/2014	37.28	29.22	-	-	-	-	8.06	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	05/12/2014	37.28	29.06	-	-	-	-	8.22	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	05/19/2014	37.28	29.02	-	-	-	-	8.26	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	06/02/2014	37.28	28.99	-	-	-	-	8.29	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	06/09/2014	37.28	28.89	-	-	-	-	8.39	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	06/16/2014	37.28	29.02	-	-	-	-	8.26	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	06/23/2014	37.28	28.86	-	-	-	-	8.42	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	07/02/2014	37.28	28.87	-	-	-	-	8.41	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	07/07/2014	37.28	29.12	-	-	-	36.47	8.16	-	-	-	-	-	-	-	-	-	-	-	23,400	-
TW-10	07/14/2014	37.28	28.68	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-10	07/21/2014								Overdrilled and replaced with MW-27												
TW-11	12/18/2013	37.39	26.40	-	-	-	-	10.99	-	1.55	0.664	8.3	9.67	0.578	-	-	-	263	-	170,000	-
TW-11	01/08/2014	37.39	27.73	-	-	-	-	9.66	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	03/07/2014	37.39	29.17	-	-	-	-	8.22	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	03/13/2014	37.39	27.56	-	-	-	-	9.83	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	03/20/2014	37.39	27.15	-	-	-	-	10.24	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	03/27/2014	37.39	27.40	-	-	-	-	9.99	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-11	04/03/2014	37.39	26.28	26.26	0.02	0.10	-	11.12	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	04/08/2014	37.39	26.52	-	-	-	-	10.87	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	04/17/2014	37.39	26.85	-	-	-	-	10.54	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	04/22/2014	37.39	27.09	-	-	-	-	10.30	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	04/29/2014	37.39	27.39	-	-	-	-	10.00	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	05/05/2014	37.39	26.26	26.24	0.02	-	-	11.14	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	05/12/2014	37.39	26.97	-	-	-	-	10.42	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	05/19/2014	37.39	25.91	25.90	0.01	-	-	11.49	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	06/02/2014	37.39	26.32	26.31	0.01	-	-	11.08	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	06/09/2014	37.39	25.23	-	-	-	-	12.16	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	06/16/2014	37.39	25.35	25.36	0.01	-	-	12.05	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	06/23/2014	37.39	26.55	-	-	-	-	10.84	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	07/02/2014	37.39	26.91	26.91	TRACE	-	-	10.48	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
TW-11	07/07/2014	37.39	27.08	-	-	-	37.10	10.31	-	-	-	-	-	-	-	-	-	-	-	117,000	LNAPL NMB
TW-11	07/14/2014	37.39	26.95	26.95	TRACE	-	-	10.44	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	07/24/2014	37.39	26.88	-	-	-	-	10.51	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	07/31/2014	37.39	27.10	-	-	-	37.02	10.29	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	08/05/2014	Overdrilled and replaced with MW-31																			
TW-12S	12/18/2013	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	01/08/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	03/07/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	03/13/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	03/20/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	03/27/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	04/03/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	04/08/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	04/17/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	04/22/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	04/29/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	05/05/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	05/12/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-12S	05/19/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-12S	06/02/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	06/09/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	06/16/2014	38.01	26.37	-	-	-	-	11.64	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	06/23/2014	38.01	26.37	-	-	-	-	11.64	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	07/02/2014	38.01	26.40	-	-	-	-	11.61	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	07/07/2014	38.01	26.40	-	-	-	26.60	11.61	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	07/14/2014	38.01	26.48	-	-	-	-	11.53	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	07/24/2014	38.01	26.48	-	-	-	-	11.53	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	07/31/2014	38.01	26.48	-	-	-	26.56	11.53	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/08/2014	38.01	26.49	-	-	-	26.60	11.52	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/11/2014	38.01	26.47	-	-	-	-	11.54	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/15/2014	38.01	26.47	-	-	-	26.58	11.54	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/18/2014	38.01	26.47	-	-	-	-	11.54	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/25/2014	38.01	26.47	-	-	-	-	11.54	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	09/02/2014	31.33	24.84	-	-	-	24.97	6.49	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	09/15/2014	31.33	24.82	-	-	-	-	6.51	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	09/22/2014	31.33	24.83	-	-	-	-	6.50	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	10/01/2014	31.33	24.81	-	-	-	24.91	6.52	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	10/10/2014	31.33	24.82	-	-	-	-	6.51	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	10/20/2014	31.33	24.82	-	-	-	24.92	6.51	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	02/24/2015	31.33	24.81	-	-	-	-	6.52	15:47	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	05/11/2015	31.33	24.82	-	-	-	24.90	6.51	10:40	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/04/2015	31.33	24.78	-	-	-	25.00	6.55	10:25	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	12/01/2015	31.33	24.82	-	-	-	24.92	6.51	11:32	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	03/14/2016	31.33	24.76	-	-	-	25.00	6.57	9:34	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	05/23/2016	31.33	24.75	-	-	-	24.90	6.58	11:19	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	05/25/2016	31.33	24.69	-	-	-	24.91	6.64	12:08	-	-	-	-	-	-	-	-	-	-	-	DRY
TW-12S	08/24/2016	31.33	24.71	-	-	-	24.94	6.62	12:11	-	-	-	-	-	-	-	-	-	-	-	DRY
TW-12S	08/25/2016	31.33	24.72	-	-	-	24.94	6.61	-	-	-	-	-	-	-	-	-	-	-	-	DRY
TW-12S	08/30/2016	31.33	24.73	-	-	-	24.93	6.60	-	-	-	-	-	-	-	-	-	-	-	-	DRY
TW-12S	11/28/2016	31.33	24.75	-	-	-	25.04	6.58	10:43	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	11/29/2016	31.33	DRY	-	-	-	24.92	-	11:10	-	-	-	-	-	-	-	-	-	-	-	DRY

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-12S	12/07/2016	31.33	24.77	-	-	-	24.93	6.56	12:14	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	02/21/2017	31.33	24.72	-	-	-	24.94	6.61	11:50	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	02/22/2017	31.33	24.76	-	-	-	24.94	6.57	12:46	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-13	12/18/2013	36.99	NR	-	-	-	-	-	-	6.06	ND	44.5	137	ND	-	-	-	239	-	3,580	
TW-13	01/08/2014	36.99	30.45	-	-	-	-	6.54	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/07/2014	36.99	29.11	-	-	-	-	7.88	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/13/2014	36.99	29.91	-	-	-	-	7.08	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/20/2014	36.99	29.09	-	-	-	-	7.90	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/27/2014	36.99	29.98	-	-	-	-	7.01	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/03/2014	36.99	29.05	-	-	-	-	7.94	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/08/2014	36.99	29.98	-	-	-	-	7.01	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/17/2014	36.99	29.62	-	-	-	-	7.37	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/22/2014	36.99	28.93	-	-	-	-	8.06	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/29/2014	36.99	28.90	-	-	-	-	8.09	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	05/05/2014	36.99	29.95	-	-	-	-	7.04	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	05/12/2014	36.99	28.91	-	-	-	-	8.08	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	05/19/2014	36.99	28.87	-	-	-	-	8.12	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/02/2014	36.99	28.86	-	-	-	-	8.13	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/09/2014	36.99	28.73	-	-	-	-	8.26	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/16/2014	36.99	28.88	-	-	-	-	8.11	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/23/2014	36.99	28.65	-	-	-	-	8.34	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	07/02/2014	36.99	28.69	-	-	-	-	8.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	07/07/2014	36.99	28.91	-	-	-	35.02	8.08	-	-	-	-	-	-	-	-	-	-	-	17,500	
TW-13	07/14/2014	36.99	28.58	-	-	-	-	8.41	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	07/29/2014	Overdrilled and replaced with MW-14																			
TW-14	01/17/2014	15.55	2.48	-	-	-	-	13.07	-	<0.5	<0.5	<0.5	<0.5	0.536	-	-	-	ND	-	2,290	
TW-14	03/07/2014	15.55	2.29	-	-	-	-	13.26	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	03/13/2014	15.55	2.55	-	-	-	-	13.00	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	03/20/2014	15.55	2.25	-	-	-	-	13.30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	03/27/2014	15.55	2.42	-	-	-	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	04/03/2014	15.55	2.31	-	-	-	-	13.24	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	04/08/2014	15.55	2.27	-	-	-	-	13.28	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-CRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-14	04/17/2014	15.55	2.26	-	-	-	-	13.29	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	04/22/2014	15.55	2.48	-	-	-	-	13.07	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	04/29/2014	15.55	2.66	-	-	-	-	12.89	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	05/05/2014	15.55	2.56	-	-	-	-	12.99	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	05/12/2014	15.55	2.58	-	-	-	-	12.97	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	05/19/2014	15.55	2.38	-	-	-	-	13.17	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	06/02/2014	15.55	2.52	-	-	-	-	13.03	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	06/09/2014	15.55	2.50	-	-	-	-	13.05	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	06/16/2014	15.55	2.31	-	-	-	-	13.24	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	06/23/2014	15.55	2.44	-	-	-	-	13.11	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	07/02/2014	15.55	4.63	-	-	-	-	10.92	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	07/07/2014	15.55	4.65	-	-	-	7.27	10.90	-	-	-	-	-	-	-	-	-	-	-	16,000	-
TW-14	07/14/2014	15.55	4.40	-	-	-	-	11.15	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	07/24/2014	15.55	4.46	-	-	-	-	11.09	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	07/31/2014	15.55	4.63	-	-	-	7.39	10.92	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	08/08/2014	15.55	4.43	-	-	-	7.39	11.12	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	08/11/2014	15.55	4.57	-	-	-	-	10.98	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	08/15/2014	15.55	4.36	-	-	-	7.39	11.19	-	-	-	-	-	-	-	-	-	-	-	3,900	-
TW-14	08/18/2014	15.55	4.49	-	-	-	-	11.06	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	08/25/2014	11.61	3.01	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	09/02/2014	11.61	3.03	-	-	-	-	8.58	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	09/15/2014	11.61	3.19	-	-	-	-	8.42	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	09/22/2014	11.61	3.38	-	-	-	-	8.23	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	10/01/2014	11.61	3.50	-	-	-	5.90	8.11	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	10/10/2014	11.61	3.67	-	-	-	-	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	10/20/2014	11.61	3.02	-	-	-	5.90	8.59	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	10/21/2014	11.61	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	-	100	670	-
TW-14	02/24/2015	11.61	2.67	-	-	-	-	8.94	15:29	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	02/26/2015	11.61	2.68	-	-	-	5.90	8.93	12:00	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	73	120	-
TW-14	05/11/2015	11.61	3.28	-	-	-	6.90	8.33	10:30	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	05/12/2015	11.61	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	7.00	<0.5	<0.5	<1	220	2,000	-
TW-14	08/04/2015	11.61	3.37	-	-	-	5.98	8.24	10:31	-	-	-	-	-	-	-	-	-	-	-	-

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromochloroethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)	Comments
TW-14	08/11/2015	11.61	3.65	-	-	-	6.00	7.96	12:00	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	08/13/2015	11.61	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	9	<0.5	<0.5	<0.08	130	3,700	-
TW-14	08/18/2015	11.61	3.83	-	-	-	-	7.78	9:15	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	12/01/2015	11.61	2.76	-	-	-	-	8.85	9:15	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	<20	<45	-
TW-14	03/14/2016	11.61	2.80	-	-	-	6.02	8.81	10:11	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	54 J	-
TW-14	05/23/2016	11.61	2.71	-	-	-	6.00	8.90	11:24	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	22 J	45 J	-
TW-14	08/24/2016	11.61	3.05	-	-	-	-	8.56	-	-	-	-	-	-	-	-	-	-	-	<45	-
TW-14	11/28/2016	11.61	4.07	-	-	-	6.03	7.54	11:24	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	12/01/2016	11.61	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	NT	NT	NT	NT	<0.08	<20	480	-
TW-14	02/21/2017	11.61	3.31	-	-	-	6.03	8.30	11:45	-	-	-	-	-	-	-	-	-	-	-	-
TW-14	02/22/2017	11.61	3.33	-	-	-	6.04	8.28	12:03	-	-	-	-	-	-	-	-	-	-	220	-

Notes:

Specific gravity was tested at MW-05 and MW-25, and the average specific gravity (0.878) is used for groundwater elevation adjustments.

Active P&T Wells: RW-05, RW-14, RW-25, RW-31, and RW-51

Active TPE Wells: RW-05S, MW-10S, RW-25S, RW-28S, RW-30S, RW-72S, RW-116S, RW-117S, RW-118S, RW-119S, and RW-123S

- = No data available

<# = Result less than the method detection limit (#), i.e. non-detect

µg/L = Micrograms per liter

J = Result detected between the Method Detection Limit and the Reporting Limit; therefore, result is an estimated value.

ND = Non-detect

TPH-GRO = Total Petroleum Hydrocarbons, Gasoline Range Organics (C6-C10)

TPH-DRO = Total Petroleum Hydrocarbons, Diesel Range Organics C10-C28

(Date)^H = Well sampled during the Potomac River's high tide.

(Date)^L = Well sampled during the Potomac River's low tide.

ft = feet

gal = gallons

DRY = No water for sampling.

Vol. = Insufficient Groundwater (GW) Volume (Vol.) for sampling

GW = Groundwater

LNAPL = Light Non-Aqueous Phase Liquid

NR = Not recorded

TRACE = LNAPL thickness is less than 0.01 feet

VO = Vegetation Overgrowth (could not locate well to gauge and/or sample).

NMB = Not Manually Bailed

NT = Not Tabulated, laboratory data results available.

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-01S	10/10/2014	10.2	6.3	-	-	0.53	6.68	17.69	-95.0	880	-
MW-01S	10/20/2014	1.0	6.3	10.1	10.3	-	-	-	-	-	-
MW-01S	10/22/2014	-	-	-	-	0.80	6.63	17.81	-91.6	369	-
MW-01S	02/24/2015	8.4	3.0	12.2	26.6	0.10	6.53	16.31	-172.6	724	-
MW-01S	05/11/2015	64.8	1.6	10.8	27.8	PRODUCT					
MW-01S	08/04/2015	11.4	8.9	7.2	9.2	PRODUCT					
MW-01S	03/14/2016	78.8	3.5	10.8	2.2	0.13	6.65	16.46	-104.0	860	-
MW-01S	04/21/2016	14.8	20.8	0.3	0.1	0.11	6.62	16.14	-57.6	970	-
MW-01S	05/23/2016	0.0	20.9	0.0	0.0	PRODUCT					
MW-01S	08/24/2016	1.8	-	-	-	0.76	6.61	16.50	-127.8	1,040	-
MW-01S	08/30/2016	64.3	22.6	0.1	0.1	-	-	-	-	-	-
MW-01S	11/28/2016	-	-	-	-	1.47	7.12	17.44	-84.0	1,017	-
MW-01S	12/08/2016	0.3	20.9	0.0	0.0	-	-	-	-	-	-
MW-01S	02/21/2017	1.2	20.9	0.9	0.0	0.12	6.70	17.36	-23.3	1,000	-
MW/RW-05	10/13/2014	15.9	13.0	-	-	PRODUCT					
MW/RW-05	10/15/2014	137.0	9.6	-	-	PRODUCT					
MW/RW-05	02/24/2015	11.4	1.0	15.9	25.3	PRODUCT					
MW/RW-05	05/11/2015	90.2	5.8	11.1	19.6	PRODUCT					
MW/RW-05	08/04/2015	71.9	18.2	1.9	2.1	PRODUCT					
MW/RW-05	12/01/2015	12.8	2.6	15.1	26.6	PRODUCT					
MW/RW-05	03/14/2016	98.8	19.8	0.7	0.4	PRODUCT					
MW/RW-05	05/23/2016	0.2	20.8	0.0	0.0	8.46	3.48	16.03	385.0	3,150	-
MW/RW-05	08/24/2016	6.4	-	-	-	2.69	6.53	19.98	15.2	640	-
MW/RW-05	08/30/2016	47.4	21.6	0.1	10.0	-	-	-	-	-	-
MW/RW-05	11/28/2016	0.7	20.9	0.2	0.0	-	4.35	17.10	229.5	1,280	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW/RW-05	02/21/2017	1.3	20.9	0.0	0.0	11.84	5.34	13.18	60.0	950	-
MW-08S	10/13/2014	21.0	14.5	-	-	0.89	6.68	18.18	-123.6	1,488	-
MW-08S	10/13/2014	-	-	-	-	0.81	6.70	18.26	-108.0	1,386	-
MW-08S	10/14/2014	-	-	-	-	0.16	6.77	18.18	-129.0	1,424	-
MW-08S	10/15/2014	8.7	20.4	-	-	0.83	6.68	18.29	-105.8	1,325	-
MW-08S	10/15/2014	-	-	-	-	0.28	6.66	18.23	-113.1	1,408	-
MW-08S	10/20/2014	15.9	10.9	6.2	1.9	-	-	-	-	-	-
MW-08S	10/22/2014	-	-	-	-	1.24	6.59	18.27	-98.8	1,276	-
MW-08S	02/24/2015	49.3	0.4	13.8	15.4	-	-	-	-	-	-
MW-08S	02/25/2015	-	-	-	-	0.09	6.69	16.81	-137.5	1,236	-
MW/RW-10S	10/13/2014	23.1	17.0	-	-	0.75	6.59	18.17	-117.6	1,202	-
MW/RW-10S	10/13/2014	-	-	-	-	0.60	6.60	18.20	-113.0	1,185	-
MW/RW-10S	10/15/2014	8.3	20.4	-	-	0.41	6.54	18.23	-118.5	1,185	-
MW/RW-10S	10/15/2014	-	-	-	-	0.60	6.56	18.30	-104.5	1,189	-
MW/RW-10S	10/16/2014	18.5	20.9	-	-	-	-	-	-	-	-
MW/RW-10S	10/20/2014	25.2	15.2	3.7	0.2	-	-	-	-	-	-
MW/RW-10S	10/22/2014	-	-	-	-	1.30	6.48	18.44	-72.7	1,002	-
MW/RW-10S	02/24/2015	54.5	1.0	14.7	3.4	-	-	-	-	-	-
MW/RW-10S	05/11/2015	22.6	6.5	9.2	7.6	-	-	-	-	-	-
MW/RW-10S	08/04/2015	53.6	4.2	10.6	7.6	0.02	6.73	16.52	-90.0	1,440	-
MW/RW-10S	03/14/2016	134.2	19.4	1.2	0.4	0.14	6.59	15.38	-121.4	1,350	-
MW/RW-10S	04/21/2016	190.3	17.5	2.5	0.5	-	-	-	-	-	-
MW/RW-10S	05/23/2016	44.3	20.9	0.3	0.0	6.87	3.93	15.87	114.8	1,570	-
MW/RW-10S	08/24/2016	45.8	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/30/2016	208.1	20.1	1.2	0.1	6.09	6.45	20.54	65.4	1,410	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW/RW-10S	11/28/2016	0.2	20.9	0.0	0.0	6.68	6.75	14.12	218.1	1,300	-
MW/RW-10S	02/21/2017	19.3	20.9	0.0	0.0	0.16	6.91	14.17	20.0	1,480	-
MW-11	10/13/2014	5.4	19.0	-	-	2.30	6.27	18.16	56.2	324	-
MW-11	10/13/2014	-	-	-	-	3.23	6.14	18.29	48.6	349	-
MW-11	10/15/2014	23.6	15.3	-	-	-	-	-	-	-	-
MW-11	10/20/2014	22.0	11.6	6.3	1.9	-	-	-	-	-	-
MW-11	10/22/2014	-	-	-	-	0.38	5.73	18.38	160.2	323	-
MW-11	02/24/2015	3.2	19.3	3.7	0.1	-	-	-	-	-	-
MW-11	02/25/2015	-	-	-	-	0.12	5.60	17.83	62.6	370	-
MW-11	05/11/2015	0.6	20.6	0.2	0.1	0.07	5.66	17.27	91.2	390	-
MW-11	08/04/2015	4.3	2.5	15.0	26.8	0.09	6.66	18.45	-39.8	1,150	-
MW/RW-14	10/13/2014	15.9	17.2	-	-	2.79	6.00	18.13	68.0	368	-
MW/RW-14	10/20/2014	82.4	14.4	3.7	1.3	-	-	-	-	-	-
MW/RW-14	10/22/2014	-	-	-	-	0.26	5.79	18.43	216.2	310	-
MW/RW-14	02/24/2015	188.0	14.4	0.9	0.4	-	-	-	-	-	-
MW/RW-14	02/25/2015	-	-	-	-	0.84	6.25	17.90	-98.6	460	-
MW/RW-14	05/11/2015	166.8	18.4	2.4	0.2	0.07	6.22	17.30	-69.6	420	-
MW/RW-14	08/04/2015	11.9	17.8	3.2	0.3	0.07	6.72	17.10	-69.4	1,100	-
MW/RW-14	03/14/2016	143.4	13.6	5.9	0.8	0.10	6.35	16.95	-84.7	490	-
MW/RW-14	04/21/2016	503.7	20.4	1.5	0.8	PRODUCT					
MW/RW-14	05/23/2016	132.0	20.8	0.3	0.2	PRODUCT					
MW/RW-14	08/24/2016	550.3	-	-	-	7.06	5.76	18.95	103.60	190	-
MW/RW-14	08/30/2016	101.8	21.7	0.0	0.1	-	-	-	-	-	-
MW/RW-14	11/28/2016	0.8	20.9	0.2	0.0	11.69	5.94	14.91	87.9	209	-
MW/RW-14	02/21/2017	61.3	20.9	0.0	0.0	11.32	6.02	15.48	41.6	190	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-15S	10/13/2014	34.0	12.4	-	-	0.84	6.32	18.03	-17.1	647	-
MW-15S	10/20/2014	18.2	2.2	11.6	0.0	-	-	-	-	-	-
MW-15S	10/22/2014	-	-	-	-	0.88	6.48	17.61	-37.4	989	-
MW-16S	10/10/2014	9.0	7.2	-	-	-	-	-	-	-	-
MW-16S	02/24/2015	0.0	5.5	12.4	0.1	1.54	6.11	14.50	60.2	1,600	-
MW-16	10/10/2014	11.1	6.9	-	-	0.46	5.88	17.50	162.4	707	-
MW-16	10/22/2014	-	-	-	-	0.87	5.79	17.75	211.0	681	30,200
MW-16	02/24/2015	0.0	20.9	0.3	0.1	2.62	5.92	17.57	101.8	1,010	-
MW-16	05/11/2015	-	-	-	-	0.49	5.83	17.05	112.4	830	-
MW-25S	10/13/2014	-	-	-	-	0.96	6.46	18.51	-84.0	914	-
MW-25S	10/13/2014	13.0	20.3	-	-	-	-	-	-	-	-
MW-25S	10/15/2014	192.0	19.3	-	-	-	-	-	-	-	-
MW-25S	10/16/2014	34.4	20.9	-	-	-	-	-	-	-	-
MW-25S	10/20/2014	30.2	16.6	3.4	0.3	-	-	-	-	-	-
MW-25S	02/24/2015	127.0	3.6	12.7	2.3	-	-	-	-	-	-
MW-25S	05/11/2015	51.8	6.5	8.3	6.4	-	-	-	-	-	-
MW-25S	08/04/2015	70.5	4.4	9.5	4.6	-	-	-	-	-	-
MW/RW-25	10/13/2014	139.0	19.2	-	-	-	-	-	-	-	-
MW/RW-25	10/14/2014	79.0	17.5	-	-	-	-	-	-	-	-
MW/RW-25	10/15/2014	8.4	20.9	-	-	-	-	-	-	-	-
MW/RW-25	10/16/2014	28.2	14.3	-	-	-	-	-	-	-	-
MW/RW-25	02/24/2015	121.0	15.4	5.5	1.3	-	-	-	-	-	-
MW/RW-25	05/11/2015	263.0	11.6	6.7	0.6	-	-	-	-	-	-
MW/RW-25	08/04/2015	118.4	15.8	3.7	0.4	-	-	-	-	-	-
MW/RW-25	12/01/2015	79.5	14.7	5.4	1.1	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW/RW-25	03/14/2016	6.2	10.9	8.9	3.2	-	-	-	-	-	-
MW/RW-25	04/21/2016	50.2	20.9	0.2	0.2	8.30	5.45	16.77	154.2	310	-
MW/RW-25	05/23/2016	23.1	20.7	0.1	0.0	6.45	5.54	17.26	142.1	340	-
MW/RW-25	08/24/2016	54.8	-	-	-	2.58	5.56	18.78	101.8	300	-
MW/RW-25	08/30/2016	79.8	21.7	0.0	0.0	-	-	-	-	-	-
MW/RW-25	11/28/2016	17.8	20.9	0.2	0.0	12.82	5.81	15.46	100.3	332	-
MW/RW-25	02/21/2017	19.4	20.9	0.0	0.0	11.89	5.96	15.66	48.6	330	-
MW-27	10/10/2014	41.5	17.7	-	-	0.28	6.55	17.74	-79.8	1,075	-
MW-27	10/15/2014	7.3	20.9	-	-	0.02	6.51	17.97	-36.3	1,057	-
MW-27	10/15/2014	21.9	16.1	-	-	1.67	6.37	18.18	44.5	831	-
MW-27	10/16/2014	21.9	16.1	-	-	-	-	-	-	-	-
MW-27	10/20/2014	25.3	14.3	6.5	8.6	-	-	-	-	-	-
MW-27	10/23/2014	-	-	-	-	0.54	6.46	17.97	743.0	153	1,540
MW-27	02/24/2015	21.1	2.3	12.2	13.6	-	-	-	-	-	-
MW-27	02/25/2015	-	-	-	-	0.06	6.61	15.83	-85.6	1,228	-
MW-27	05/11/2015	127.3	8.1	7.9	0.0	0.08	6.54	14.84	-110.0	1,300	-
MW-27	08/04/2015	28.5	1.3	13.2	16.6	0.03	6.68	15.93	-49.3	1,260	-
MW-27	12/01/2015	67.4	2.2	16.9	31.9	0.06	6.57	17.28	-51.5	1,190	-
MW-27	03/14/2016	70.8	1.0	15.5	0.6	0.08	6.54	14.77	-142.5	1,390	-
MW-27	04/21/2016	123.2	20.3	1.0	0.3	10.15	6.80	14.65	90.9	740	-
MW-27	05/23/2016	11.4	20.7	0.3	0.0	4.96	6.79	14.39	30.5	780	-
MW-27	08/24/2016	0.8	20.5	0.4	0.0	7.37	6.46	16.42	46.7	1,220	-
MW-27	11/28/2016	0.1	20.9	0.4	0.0	6.38	6.70	18.04	11.3	719	-
MW-27	02/21/2017	1.6	20.9	0.0	0.0	10.14	7.37	16.19	22.0	790	-
MW/RW-31	10/10/2014	120.5	6.2	-	-	0.39	6.97	18.62	-119.7	899	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW/RW-31	10/15/2014	62.5	15.0	-	-	0.59	6.83	19.04	-119.9	848	-
MW/RW-31	10/15/2014	0.0	20.9	-	-	0.90	6.61	19.57	-47.6	541	-
MW/RW-31	10/20/2014	11.8	17.4	1.1	0.3	-	-	-	-	-	-
MW/RW-31	10/23/2014	-	-	-	-	0.41	6.98	18.69	-15.9	791	728
MW/RW-31	02/24/2015	179.0	2.1	0.2	0.3	0.02	7.08	14.47	-164.3	927	-
MW/RW-31	05/11/2015	36.9	5.8	4.1	0.1	0.00	7.06	12.74	-129.3	1,010	-
MW/RW-31	08/04/2015	41.3	3.9	5.4	1.7	0.02	7.18	15.92	-13.7	1,010	-
MW/RW-31	05/23/2016	-	-	-	-	7.34	6.69	15.56	82.4	620	-
MW-33	10/10/2014	1.4	9.7	-	-	0.68	5.81	17.97	157.4	654	-
MW-33	10/15/2014	0.5	19.0	-	-	0.09	5.84	18.30	64.9	633	-
MW-33	10/15/2014	0.0	20.9	-	-	0.42	5.86	18.30	92.6	658	-
MW-33	10/20/2014	1.0	12.0	5.4	0.0	-	-	-	-	-	-
MW-33	10/23/2014	-	-	-	-	2.37	6.05	18.24	186.7	698	1,120
MW-33	02/24/2015	0.0	20.6	0.1	0.1	2.35	5.51	15.51	88.7	648	-
MW-33	05/11/2015	21.4	19.0	1.0	0.0	0.47	5.69	14.03	88.0	720	-
MW-33	08/04/2015	1.4	3.3	8.6	0.0	0.05	6.29	15.84	48.5	780	-
MW-51S	10/13/2014	23.0	5.7	-	-	0.64	6.72	18.32	-120.0	1,457	-
MW-51S	10/13/2014	1.0	-	-	-	0.75	6.65	18.35	-78.8	1,000	-
MW-51S	10/14/2014	-	-	-	-	0.33	6.64	18.46	-71.8	1,047	-
MW-51S	10/15/2014	1.2	20.0	-	-	1.62	6.60	18.43	1.5	566	-
MW-51S	10/15/2014	-	-	-	-	0.74	6.62	18.45	-84.6	1,122	-
MW-51S	10/20/2014	22.3	10.6	6.3	1.5	-	-	-	-	-	-
MW-51S	10/22/2014	-	-	-	-	0.81	6.67	18.47	-93.7	1,153	-
MW-51S	02/24/2015	9.9	0.9	13.5	27.2	-	-	-	-	-	-
MW-51S	02/25/2015	-	-	-	-	0.08	6.70	16.75	-110.9	1,968	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-51S	05/11/2015	40.8	1.2	12.1	28.3	0.02	6.74	16.21	-113.3	1,830	-
MW-51S	08/04/2015	15.2	0.7	13.2	27.5	0.04	6.82	16.33	-96.0	1,440	-
MW-51S	03/14/2016	62.4	4.8	10.6	0.6	0.27	6.63	16.10	-129.3	2,250	-
MW-51S	04/21/2016	12.4	13.2	1.6	0.3	0.06	6.65	16.57	-79.9	1,760	-
MW-51S	05/23/2016	0.0	20.9	0.0	0.0	0.59	6.83	16.74	-96.6	2,290	-
MW-51S	08/24/2016	1.1	-	-	-	0.70	6.74	18.60	-113.7	2,390	-
MW-51S	08/30/2016	153.7	21.7	0.1	0.0	-	-	-	-	-	-
MW-51S	11/28/2016	-	-	-	-	2.26	7.14	19.36	-131.0	1,448	-
MW-51S	12/08/2016	0.2	20.9	0.0	0.0	-	-	-	-	-	-
MW-51S	02/21/2017	20.4	20.9	0.5	0.0	0.06	7.11	17.81	-23.3	1,870	-
MW/RW-51	10/13/2014	135.0	18.0	-	-	-	-	-	-	-	-
MW/RW-51	10/15/2014	100.8	14.0	-	-	0.33	6.60	18.57	-86.9	1,014	-
MW/RW-51	10/20/2014	31.5	11.6	4.9	3.2	-	-	-	-	-	-
MW/RW-51	02/24/2015	35.1	4.7	11.4	6.0	-	-	-	-	-	-
MW/RW-51	05/11/2015	100.3	1.2	12.6	5.1	-	-	-	-	-	-
MW/RW-51	08/04/2015	104.3	19.6	1.0	1.6	-	-	-	-	-	-
MW/RW-51	12/01/2015	18.5	17.8	2.4	1.2	-	-	-	-	-	-
MW/RW-51	03/14/2016	30.0	19.0	1.7	0.2	-	-	-	-	-	-
MW/RW-51	04/21/2016	59.9	20.9	0.3	0.2	5.13	6.43	16.38	46.7	740	-
MW/RW-51	05/23/2016	33.1	20.6	0.3	0.0	5.43	6.57	17.44	19.6	700	-
MW/RW-51	08/24/2016	47.0	-	-	-	2.22	6.69	18.70	-44.8	650	-
MW/RW-51	08/30/2016	74.9	21.1	0.0	0.0	-	-	-	-	-	-
MW/RW-51	11/28/2016	0.0	20.9	0.3	0.0	12.39	6.80	15.87	-47.0	715	-
MW/RW-51	02/21/2017	26.4	20.9	0.7	0.0	9.58	6.53	15.86	47.6	790	-
MW-52	10/10/2014	5.4	16.3	-	-	1.15	5.87	17.51	45.9	465	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-70	10/10/2014	0.3	16.2	-	-	2.12	5.76	17.30	98.7	843	-
MW-70	02/24/2015	0.0	17.8	1.3	0.2	1.02	5.53	16.71	-36.2	900	-
MW-70	05/11/2015	-	-	-	-	0.40	5.49	16.51	120.7	790	-
MW-70	08/04/2015	-	-	-	-	0.46	5.72	16.24	77.5	820	-
MW/RW-72S	10/10/2014	21.7	5.8	-	-	0.55	6.42	18.41	-98.2	1,331	-
MW/RW-72S	10/15/2014	14.5	14.0	-	-	0.04	6.40	18.56	-85.4	1,340	-
MW/RW-72S	10/15/2014	-	-	-	-	1.70	6.47	18.70	-53.0	1,246	-
MW/RW-72S	10/16/2014	95.0	7.8	-	-	-	-	-	-	-	-
MW/RW-72S	10/20/2014	38.8	9.3	7.4	4.2	-	-	-	-	-	-
MW/RW-72S	10/22/2014	-	-	-	-	1.92	6.39	17.99	-21.2	904	-
MW/RW-72S	02/24/2015	30.6	5.4	11.5	1.6	0.09	6.54	16.13	-101.9	1,325	-
MW/RW-72S	05/11/2015	65.0	6.5	9.4	3.3	0.02	6.49	14.58	-110.6	1,340	-
MW/RW-72S	08/04/2015	8.0	8.2	6.9	0.4	0.11	6.71	16.20	-56.9	1,710	-
MW/RW-72S	03/14/2016	21.4	15.6	4.1	0.1	2.16	6.59	15.02	-101.1	1,960	-
MW/RW-72S	05/23/2016	0.0	20.9	0.2	0.0	NO MEASUREMENTS - BAILER CAUGHT IN WELL (RELEASED NEXT SAMPLE DAY)					
MW/RW-72S	08/24/2016	28.2	-	-	-	-	-	-	-	-	-
MW/RW-72S	08/30/2016	13.8	20.8	0.1	0.0	3.09	4.48	25.13	250.70	1,600	-
MW/RW-72S	11/28/2016	0.2	20.9	0.0	0.0	DRY					
MW/RW-72S	02/21/2017	22.6	20.9	0.0	0.0	DRY					
MW/RW-72	10/10/2014	12.2	6.6	-	-	0.48	5.47	17.86	32.6	743	-
MW/RW-72	10/15/2014	14.8	16.8	-	-	0.14	5.41	18.04	110.3	733	-
MW/RW-72	10/15/2014	-	-	-	-	2.99	5.75	18.09	108.9	739	-
MW/RW-72	10/16/2014	6.9	5.2	-	-	-	-	-	-	-	-
MW/RW-72	10/20/2014	10.5	2.0	16.8	13.0	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW/RW-72	10/22/2014	-	-	-	-	1.77	5.86	17.73	146.2	533	29,800
MW/RW-72	02/24/2015	13.3	14.2	6.9	0.1	0.58	5.48	17.43	82.8	877	-
MW/RW-72	05/11/2015	64.5	20.6	0.2	0.0	0.03	5.82	15.99	-21.9	1,080	-
MW/RW-72	08/04/2015	6.9	12.7	5.0	3.2	0.02	6.68	16.31	-57.3	1,880	-
MW/RW-72	03/14/2016	42.8	19.8	1.0	0.1	0.04	6.62	16.93	-121.3	1,970	-
MW/RW-72	04/21/2016	79.2	20.7	0.6	0.2	10.41	5.98	16.45	143.7	660	-
MW/RW-72	05/23/2016	0.0	20.9	0.0	0.0	7.92	6.42	16.99	112.8	710	-
MW/RW-72	08/24/2016	0.9	20.9	0.1	0.0	4.85	6.63	16.86	72.9	830	-
MW/RW-72	11/28/2016	0.0	20.9	0.0	0.0	8.07	5.36	17.27	103.7	848	-
MW/RW-72	02/21/2017	57.9	20.9	0.0	0.0	9.05	5.61	16.21	55.6	850	-
MW-100S	10/10/2014	6.5	6.8	-	-	0.40	5.62	18.36	11.8	915	-
MW-100S	02/24/2015	0.0	17.2	3.5	0.2	4.78	5.79	16.07	25.5	160	-
MW-100S	11/28/2016	0.7	8.5	3.9	0.1	0.44	6.24	18.03	-14.6	1,116	-
MW-100	10/10/2014	0.3	20.4	-	-	2.23	5.38	17.60	148.8	531	-
MW-100	02/24/2015	0.0	20.4	0.6	0.2	1.02	5.53	16.80	27.5	309	-
MW-100	11/28/2016	0.2	19.0	2.5	0.0	2.26	5.74	16.96	49.6	262	-
MW-102	10/10/2014	0.6	17.7	-	-	2.44	6.10	17.15	68.2	295	-
MW-103	10/10/2014	8.5	19.4	-	-	1.72	6.41	19.90	71.6	610	-
MW-103	10/23/2014	-	-	-	-	7.32	6.15	19.14	149.3	598	-
MW-103	02/24/2015	0.0	19.5	2.4	0.3	-	-	-	-	-	-
MW-103	02/25/2015	-	-	-	-	5.27	6.17	5.08	85.9	720	-
MW-103	05/11/2015	-	-	-	-	0.13	5.95	12.40	82.3	680	-
MW-104	10/10/2014	5.8	18.9	-	-	1.98	6.90	19.47	6.1	452	-
MW-104	10/21/2014	-	-	-	-	2.17	6.93	18.83	102.6	526	3,250
MW-104	02/24/2015	0.0	15.1	1.1	0.3	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-104	02/25/2015	-	-	-	-	3.75	7.07	9.30	50.4	496	-
MW-104	05/11/2015	-	-	-	-	1.24	6.89	12.25	54.8	740	-
MW-105	10/10/2014	11.5	19.0	-	-	3.96	6.90	19.03	56.8	427	-
MW-105	10/21/2014	-	-	-	-	4.47	6.89	19.20	155.1	393	2,520
MW-105	05/11/2015	-	-	-	-	0.42	5.38	11.11	98.1	27,900	-
MW-106	10/10/2014	9.2	17.1	-	-	1.20	4.66	18.99	122.5	2,231	-
MW-106	10/14/2014	4.3	18.3	-	-	-	-	-	-	-	-
MW-106	10/20/2014	0.2	15.5	3.8	0.0	-	-	-	-	-	-
MW-106	10/23/2014	-	-	-	-	1.29	5.20	18.35	97.7	1,529	-
MW-106	02/24/2015	0.0	7.1	5.4	0.1	1.03	4.63	9.81	62.0	2,156	-
MW-106	05/11/2015	0.7	0.2	7.6	0.2	0.03	5.00	11.73	100.8	2,010	-
MW-106	08/04/2015	1.0	12.6	4.5	0.0	0.09	5.66	17.62	31.8	2,080	-
MW-106	03/14/2016	0.5	19.2	0.7	0.0	0.06	4.76	10.70	113.8	1,740	-
MW-106	04/21/2016	24.7	0.1	8.8	2.9	0.06	6.05	12.10	34.8	1,830	-
MW-106	05/23/2016	120.4	19.2	0.7	0.3	1.29	3.88	13.24	319.2	1,430	-
MW-106	08/24/2016	430.0	20.2	0.2	0.0	5.38	3.93	19.45	192.5	1,680	-
MW-106	11/28/2016	38.3	20.9	0.1	0.0	9.19	4.42	16.70	150.5	2,259	-
MW-106	02/21/2017	35.8	20.9	0.0	0.0	4.40	4.08	12.30	68.0	1,480	-
MW-107	10/10/2014	10.5	11.8	-	-	0.62	3.51	18.90	348.4	2,063	-
MW-107	10/15/2014	7.3	13.7	-	-	1.51	3.63	19.54	393.0	1,047	-
MW-107	10/15/2014	-	-	-	-	2.52	3.76	19.36	428.9	1,117	-
MW-107	10/20/2014	0.3	7.3	9.4	0.0	-	-	-	-	-	-
MW-107	10/23/2014	-	-	-	-	3.40	2.90	19.05	480.1	1,462	-
MW-107	02/24/2015	0.0	19.3	1.5	0.1	7.33	3.01	11.73	338.5	15,400	-
MW-107	05/11/2015	0.8	9.1	6.7	0.0	0.40	3.36	12.51	425.7	2,010	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-107	08/04/2015	0.5	7.9	8.2	0.0	0.31	3.69	18.19	347.8	2,360	-
MW-108	10/10/2014	9.5	11.6	-	-	-	-	-	-	-	-
MW-109S	10/10/2014	50.0	11.3	-	-	1.43	6.35	18.20	-83.5	827	-
MW-109S	10/20/2014	13.8	3.9	13.2	0.0	-	-	-	-	-	-
MW-109S	10/21/2014	-	-	-	-	0.35	6.03	18.29	59.2	769	-
MW-109S	02/24/2015	12.9	1.3	14.9	0.3	-	-	-	-	-	-
MW-109S	02/25/2015	-	-	-	-	1.35	6.19	13.93	36.7	607	-
MW-109S	05/11/2015	4.0	13.8	4.8	0.0	0.33	5.96	12.89	124.7	460	-
MW-109	10/10/2014	11.8	19.1	-	-	1.65	6.03	17.98	35.0	247	-
MW-109	10/20/2014	0.2	20.8	0.6	0.0	-	-	-	-	-	-
MW-109	10/21/2014	-	-	-	-	0.86	5.81	18.04	133.5	261	-
MW-109	02/24/2015	6.2	18.5	3.2	0.3	-	-	-	-	-	-
MW-109	02/25/2015	-	-	-	-	0.71	5.74	15.75	137.9	248	-
MW-110S	10/10/2014	9.9	14.4	-	-	0.50	6.32	18.38	-87.8	651	-
MW-110S	02/24/2015	12.7	4.3	12.8	0.3	-	-	-	-	-	-
MW-110S	02/25/2015	-	-	-	-	1.65	6.39	13.79	-19.5	849	-
MW-110	10/10/2014	13.1	16.4	-	-	1.30	5.39	17.98	117.8	215	-
MW-110	02/24/2015	5.8	19.4	1.0	0.4	-	-	-	-	-	-
MW-110	02/25/2015	-	-	-	-	1.70	5.48	15.49	168.1	245	-
MW-111	10/10/2014	7.3	16.9	-	-	1.70	5.82	17.98	75.9	247	-
MW-111	02/24/2015	0.0	18.7	1.7	0.2	-	-	-	-	-	-
MW-111	02/25/2015	-	-	-	-	1.21	6.05	15.24	122.6	368	-
MW-112S	10/10/2014	25.0	14.7	-	-	1.95	5.46	18.26	148.5	369	-
MW-112S	10/20/2014	0.0	12.0	7.9	0.0	-	-	-	-	-	-
MW-112S	10/21/2014	-	-	-	-	2.50	5.38	18.27	172.9	333	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-112S	02/24/2015	16.8	6.6	9.7	0.3	-	-	-	-	-	-
MW-112S	02/25/2015	-	-	-	-	3.92	5.41	13.06	207.5	347	-
MW-112S	05/11/2015	2.1	16.3	3.3	0.0	3.37	5.21	13.22	197.2	360	-
MW-112	10/10/2014	14.8	16.3	-	-	2.14	5.56	17.93	157.3	162	-
MW-112	02/24/2015	12.3	19.2	1.3	0.3	-	-	-	-	-	-
MW-112	02/25/2015	-	-	-	-	4.34	5.54	15.13	203.8	171	-
MW-113	10/10/2014	6.3	19.2	-	-	6.17	6.35	17.97	83.2	352	-
MW-113	02/24/2015	0.0	19.9	1.6	0.2	-	-	-	-	-	-
MW-113	02/25/2015	-	-	-	-	5.96	6.73	14.72	73.5	428	-
MW-114	10/10/2014	9.0	6.3	-	-	1.50	5.83	17.65	78.0	310	-
MW-114	10/20/2014	0.1	16.0	2.1	0.1	-	-	-	-	-	-
MW-114	10/21/2014	-	-	-	-	1.23	6.04	17.81	154.1	262	-
MW-114	02/24/2015	0.0	20.6	0.3	0.3	-	-	-	-	-	-
MW-114	02/25/2015	-	-	-	-	8.72	6.10	12.05	113.7	326	-
MW-114	05/11/2015	0.0	19.4	1.0	0.0	3.99	5.99	15.33	199.7	300	-
MW-121	08/04/2015	-	-	-	-	0.02	7.00	17.04	-13.1	890	-
MW-121	12/01/2015	14.8	14.8	3.6	15.2	0.04	6.72	17.44	-91.7	880	-
MW-121	03/14/2016	7.0	13.0	4.5	17.6	0.02	6.84	17.13	-159.0	850	-
MW-121	05/23/2016	251.2	17.6	4.4	0.7	1.54	6.77	17.35	-50.8	1,230	-
MW-121	08/24/2016	1,070.0	2.6	14.6	0.6	0.49	6.80	17.89	-126.4	1,300	-
MW-121	11/28/2016	378.4	5.0	10.0	0.1	0.26	6.72	18.08	-106.2	1,298	-
MW-121	02/21/2017	238.3	15.5	3.5	0.0	0.32	6.72	18.03	-46.1	930	-
MW-122	08/04/2015	-	-	-	-	0.06	7.04	16.73	-6.3	1,020	-
MW-122	12/01/2015	2.2	11.2	4.8	4.8	0.27	6.81	17.06	-86.8	1,130	-
MW-122	03/14/2016	5.7	16.2	2.7	1.1	0.11	7.04	16.50	-127.1	1,000	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-122	05/23/2016	8.4	20.9	0.1	0.0	0.97	6.81	16.84	-77.1	1,090	-
MW-122	08/24/2016	0.4	20.9	0.0	0.0	0.53	6.89	16.99	-127.7	1,040	-
MW-122	11/28/2016	4.5	20.9	4.6	0.0	0.12	6.80	17.29	-105.9	1,090	-
MW-122	02/21/2017	3.5	20.6	1.7	0.0	0.84	7.00	17.62	-23.4	1,000	-
MW/RW-123S	08/04/2015	-	-	-	-	2.66	12.52	16.99	-53.2	15,080	-
MW/RW-123S	12/01/2015	0.2	17.8	2.0	10.5	0.13	6.63	17.68	-46.3	810	-
MW/RW-123S	03/14/2016	73.7	16.8	2.9	3.1	0.86	6.50	15.31	-69.7	770	-
MW/RW-123S	04/21/2016	247.0	16.9	2.5	0.3	7.78	7.21	15.96	21.5	480	-
MW/RW-123S	05/23/2016	0.5	19.9	0.5	0.2	6.87	7.28	16.23	65.1	520	-
MW/RW-123S	08/24/2016	56.2	-	-	-	-	-	-	-	-	-
MW/RW-123S	08/30/2016	167.5	21.6	0.0	0.1	5.25	7.39	20.83	0.6	590	-
MW/RW-123S	11/28/2016	-	-	-	-	1.67	8.21	13.95	-7.7	584	-
MW/RW-123S	12/08/2016	54.4	20.9	0.3	0.0	-	-	-	-	-	-
MW/RW-123S	02/21/2017	19.4	20.9	0.0	0.0	0.64	7.34	12.50	40.2	550	-
RW-1	10/13/2014	130.0	19.0	-	-	1.34	6.92	18.45	136.4	495	-
RW-1	10/13/2014	79.0	18.9	-	-	3.41	6.41	18.31	158.0	473	-
RW-1	10/14/2014	55.0	18.9	-	-	0.53	6.49	18.46	129.6	475	-
RW-1	10/15/2014	80.7	19.3	-	-	1.99	6.29	18.43	60.4	292	-
RW-1	10/15/2014	-	-	-	-	1.06	6.31	18.49	96.9	314	-
RW-1	10/20/2014	29.2	16.4	3.2	2.4	-	-	-	-	-	-
RW-1	10/22/2014	-	-	-	-	2.14	6.50	18.07	85.5	311	-
RW-1	02/24/2015	178.0	3.2	4.2	0.2	-	-	-	-	-	-
RW-1	02/25/2015	-	-	-	-	0.03	6.76	17.88	-86.4	900	-
RW-1	12/01/2015	6.9	3.1	8.5	9.5	0.07	6.68	17.28	-57.6	760	-
RW-1	03/14/2016	0.1	15.3	3.8	0.0	0.16	6.50	17.06	-89.0	730	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
RW-1	04/21/2016	197.4	20.7	0.3	0.2	4.04	6.08	16.83	134.6	240	-
RW-1	05/23/2016	0.0	20.9	0.0	0.0	2.36	6.35	17.17	56.0	230	-
RW-1	08/24/2016	2.4	20.9	0.1	0.0	2.60	6.38	17.35	28.8	220	-
RW-1	11/28/2016	-	-	-	-	0.13	6.37	17.76	19.6	209	-
RW-1	12/08/2016	1.8	20.9	0.1	0.0	-	-	-	-	-	-
RW-1	02/21/2017	96.5	20.9	0.1	0.0	4.16	7.17	17.68	44.4	240	-
RW-05S	08/04/2015	-	-	-	-	0.00	8.88	15.65	-469.6	1,960	-
RW-05S	12/01/2015	193.7	19.2	1.3	3.5	0.04	6.59	17.01	-89.7	1,560	-
RW-05S	03/14/2016	44.2	20.3	0.6	0.3	1.78	6.63	14.38	-98.0	1,260	-
RW-05S	04/21/2016	264.4	19.6	1.2	0.3	6.62	7.09	14.94	-27.4	500	-
RW-05S	05/23/2016	46.1	20.9	0.2	0.0	3.75	6.11	14.74	39.9	710	-
RW-05S	08/24/2016	48.8	-	-	-	-	-	-	-	-	-
RW-05S	08/30/2016	11.2	21.3	0.1	0.1	3.47	6.16	21.27	60.9	940	-
RW-05S	11/28/2016	0.3	20.9	0.0	0.0	DRY					
RW-05S	02/21/2017	21.4	20.9	0.0	0.0	0.10	6.18	13.58	34.80	1,840	-
RW-25S	08/04/2015	3.9	2.1	14.7	59.9	DRY					
RW-25S	12/01/2015	111.1	13.1	6.5	9.7	-	-	-	-	-	-
RW-25S	03/14/2016	55.5	18.8	1.4	0.5	-	-	-	-	-	-
RW-25S	04/21/2016	117.1	13.3	2.8	0.8	-	-	-	-	-	-
RW-25S	05/23/2016	72.1	20.9	0.3	0.0	DRY					
RW-25S	08/24/2016	66.5	-	-	-	-	-	-	-	-	-
RW-25S	08/30/2016	399.2	19.3	1.2	0.1	2.02	6.70	21.67	-52.6	1,310	-
RW-25S	11/28/2016	-	-	-	-	0.15	7.54	15.77	-141.8	847	-
RW-25S	12/08/2016	37.3	20.9	0.1	0.0	-	-	-	-	-	-
RW-25S	02/21/2017	17.6	20.9	0.0	0.0	DRY					

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
RW-28S	08/04/2015	48.5	13.8	1.4	0.3	0.17	6.22	16.59	-12.0	1,610	-
RW-28S	12/01/2015	31.8	17.6	1.6	0.1	0.24	6.50	17.31	-48.20	1,590	-
RW-28S	03/14/2016	68.8	17.6	2.1	0.2	2.25	6.75	12.79	-86.50	1,330	-
RW-28S	04/21/2016	9.6	20.8	0.1	0.1	8.47	7.12	15.50	92.30	1,450	-
RW-28S	05/23/2016	7.4	20.9	0.1	0.0	6.93	7.18	15.77	85.4	1,360	-
RW-28S	08/24/2016	13.6	-	-	-	-	-	-	-	-	-
RW-28S	08/30/2016	20.1	21.8	0.0	0.1	5.80	7.10	21.31	45.0	1,400	-
RW-28S	11/28/2016	-	-	-	-	7.37	7.62	13.91	32.4	1,793	-
RW-28S	12/08/2016	0.4	20.9	0.0	0.0	-	-	-	-	-	-
RW-28S	02/21/2017	10.8	20.9	0.0	0.0	9.50	7.13	10.78	49.7	1,710	-
RW-30S	10/10/2014	6.8	7.6	-	-	0.31	6.64	18.50	-59.9	1,155	-
RW-30S	10/15/2014	15.5	17.2	-	-	-	6.69	19.02	-114.8	1,084	-
RW-30S	10/15/2014	74.4	10.5	-	-	0.69	6.61	19.43	-60.0	1,030	-
RW-30S	10/20/2014	2.8	11.5	4.0	0.0	-	-	-	-	-	-
RW-30S	02/24/2015	16.5	12.8	0.3	0.2	0.40	6.74	14.15	-51.7	742	-
RW-30S	05/11/2015	49.6	13.4	2.9	0.0	0.81	6.7	13.04	7.0	680	-
RW-30S	08/04/2015	18.3	16.0	0.5	1.1	1.96	7.12	16.90	-93.7	780	-
RW-30S	12/01/2015	32.1	15.7	2.6	0.1	0.27	6.75	17.86	-68.4	1,040	-
RW-30S	03/14/2016	16.4	18.4	2.1	0.3	-	-	-	DRY	-	-
RW-30S	04/21/2016	122.4	20.2	0.6	0.2	-	-	-	-	-	-
RW-30S	05/23/2016	36.4	20.6	0.4	0.0	-	-	-	DRY	-	-
RW-30S	08/24/2016	86.5	-	-	-	-	-	-	-	-	-
RW-30S	08/30/2016	134.3	21.2	0.3	0.0	-	-	-	DRY	-	-
RW-30S	11/28/2016	-	-	-	-	7.59	8.02	14.77	-22.00	875	-
RW-30S	12/08/2016	0.3	20.9	0.0	0.0	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
RW-30S	02/21/2017	13.4	20.9	0.0	0.0	8.68	7.90	11.57	50.5	1,140	-
RW-116S	08/04/2015	3.8	13.8	3.9	0.6	0.07	6.68	16.35	-77.4	1,710	-
RW-116S	12/01/2015	50.7	18.8	0.6	1.2	0.06	6.62	16.97	-78.7	1,350	-
RW-116S	03/14/2016	25.1	20.2	0.8	0.2	0.65	6.59	14.49	-92.3	1,150	-
RW-116S	04/21/2016	157.5	17.9	1.6	0.3	6.24	6.71	14.11	18.4	700	-
RW-116S	05/23/2016	29.5	20.9	0.1	0.0	7.89	6.56	14.51	55.8	620	-
RW-116S	08/24/2016	45.7	-	-	-	6.47	3.15	19.33	427.7	1,560	-
RW-116S	08/30/2016	110.3	22.0	0.0	0.0	-	-	-	-	-	-
RW-116S	11/28/2016	-	-	-	-	8.59	3.09	13.74	212.4	1,157	-
RW-116S	12/08/2016	12.2	20.9	0.1	0.0	-	-	-	-	-	-
RW-116S	02/21/2017	8.5	20.9	0.0	0.0	4.30	6.57	12.84	31.8	680	-
RW-117S	08/04/2015	3.2	20.5	0.0	0.0	0.27	6.92	16.29	-76.5	1,740	-
RW-117S	12/01/2015	422.3	17.3	3.1	2.1	0.06	6.64	17.06	-100.6	1,420	-
RW-117S	03/14/2016	84.0	19.6	1.2	0.2	DRY					
RW-117S	04/21/2016	74.5	20.8	0.1	0.2	DRY					
RW-117S	05/23/2016	54.0	20.9	0.2	0.0	DRY					
RW-117S	08/24/2016	52.0	-	-	-	DRY					
RW-117S	08/30/2016	290.6	21.2	0.3	0.0	6.21	5.62	21.90	131.90	1,320	-
RW-117S	11/28/2016	-	-	-	-	2.83	7.19	15.87	-59.60	1,124	-
RW-117S	12/08/2016	16.9	20.9	0.1	0.0	-	-	-	-	-	-
RW-117S	02/21/2017	9.1	20.9	0.0	0.0	DRY					
RW-118S	08/04/2015	19.6	6.4	7.3	0.1	0.14	6.78	16.32	-59.8	1,350	-
RW-119S	08/04/2015	2.4	12.8	3.4	2.1	0.03	6.69	16.60	-15.9	1,020	-
TW-02	10/13/2014	0.3	17.4	-	-	1.01	6.43	18.32	-	523	-
TW-02	10/23/2014	-	-	-	-	0.65	6.70	17.24	-63.8	1,189	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
TW-02	02/24/2015	0.0	19.9	0.3	0.3	-	-	-	-	-	-
TW-02	02/25/2015	-	-	-	-	1.56	6.24	8.82	96.2	991	-
TW-02	05/11/2015	-	-	-	-	1.62	6.60	21.64	-49.5	1,230	-
TW-02	08/05/2015	-	-	-	-	0.27	6.82	18.28	-68.9	792	31.9
TW-02	08/24/2016	-	-	-	-	0.34	7.10	17.85	-133.2	849	4.0
TW-03	10/13/2014	0.3	19.5	-	-	1.86	5.73	19.23	-	503	-
TW-03	10/23/2014	-	-	-	-	0.71	6.12	18.54	38.1	489	-
TW-03	02/24/2015	0.0	3.1	10.4	0.3	-	-	-	-	-	-
TW-03	02/25/2015	-	-	-	-	0.75	6.21	8.92	64.8	609	-
TW-03	05/11/2015	0.0	8.5	10.2	0.0	2.03	5.77	20.61	110.5	480	-
TW-03	08/04/2015	0.0	7.8	14.3	0.0	0.26	5.40	21.76	80.4	602	70.6
TW-03	03/14/2016	0.0	9.2	8.0	0.1	-	-	-	-	-	-
TW-03	05/23/2016	WELL OPEN & BEING SAMPLED UPON ARRIVAL & NEVER RECEIVED LOW-FLOW SAMPLING DATA									
TW-03	08/24/2016	164.4	-	-	-	-	-	-	-	-	-
TW-03	08/25/2016	-	-	-	-	0.24	5.33	22.34	92.4	762	5.87
TW-03	08/30/2016	132.6	21.8	0.1	0.0	-	-	-	-	-	-
TW-03	11/28/2016	5.7	19.0	1.8	0.0	0.93	5.68	18.07	98.1	629	4.42
TW-03	02/21/2017	0.4	19.4	0.9	0.0	3.39	5.84	12.94	48.5	470	-
TW-04	10/13/2014	2.0	19.2	-	-	1.67	5.73	19.08	-	1,344	-
TW-04	10/23/2014	-	-	-	-	0.70	5.76	18.95	35.0	1,232	-
TW-04	02/24/2015	1.2	15.7	4.4	0.3	-	-	-	-	-	-
TW-04	02/25/2015	-	-	-	-	2.36	5.86	6.96	65.1	1,862	-
TW-04	05/11/2015	-	-	-	-	1.92	6.19	19.77	-22.7	1,390	-
TW-04	08/04/2015	-	-	-	-	0.16	6.23	19.04	-35.7	1,203	210
TW-04	08/24/2016	-	-	-	-	0.75	6.17	20.20	-23.4	1,534	6.96

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
TW-04	08/30/2016	77.1	21.6	0.0	0.0	-	-	-	-	-	-
TW-05	10/13/2014	129.3	17.0	-	-	1.26	5.23	18.64	61.2	1,204	-
TW-05	10/15/2014	8.7	20.5	-	-	-	-	-	-	-	-
TW-05	10/20/2014	16.0	20.6	0.1	0.0	-	-	-	-	-	-
TW-05	10/23/2014	-	-	-	-	0.85	5.73	19.04	49.2	1,121	-
TW-05	02/24/2015	16.0	11.1	8.6	0.7	-	-	-	-	-	-
TW-05	02/25/2015	-	-	-	-	0.85	6.19	7.42	37.1	992	-
TW-05	05/11/2015	22.1	4.6	12.9	0.0	0.15	5.60	18.61	54.0	800	-
TW-05	08/04/2015	8.2	7.2	13.3	0.0	0.38	5.86	19.61	21.5	901	87.0
TW-05	03/14/2016	0.3	12.3	6.5	0.0	-	-	-	-	-	-
TW-05	05/23/2016	31.7	20.8	0.2	0.0	DID NOT RECEIVE LOW-FLOW SAMPLING DATA					
TW-05	08/25/2016	21.2	20.1	0.3	0.0	6.97	6.15	22.25	-1.1	1,303	171
TW-05	11/28/2016	0.8	20.9	0.0	0.0	-	-	-	-	-	-
TW-05	11/29/2016	-	-	-	-	5.11	6.06	17.85	21.0	1,076	36.5
TW-05	02/21/2017	3.1	20.9	0.0	0.0	2.75	6.17	12.44	27.0	1,040	-
TW-06	10/13/2014	39.8	14.4	-	-	1.31	6.42	18.99	-	983	-
TW-06	10/15/2014	78.9	11.0	-	-	1.33	6.54	21.65	-65.0	873	-
TW-06	10/15/2014	-	-	-	-	0.31	6.28	19.79	-46.8	986	-
TW-06	10/20/2014	0.8	5.4	12.0	0.0	-	-	-	-	-	-
TW-06	10/23/2014	-	-	-	-	0.84	6.51	18.95	-68.8	823	-
TW-06	02/24/2015	0.7	5.0	8.9	0.3	-	-	-	-	-	-
TW-06	02/25/2015	-	-	-	-	0.84	6.75	7.20	-32.9	882	-
TW-06	05/11/2015	-	-	-	-	1.33	6.49	18.61	-69.1	710	-
TW-06	08/04/2015	-	-	-	-	0.22	6.17	19.07	-36.8	975	30.5
TW-06	12/01/2015	4.7	1.1	14.5	0.0	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
TW-06	03/14/2016	0.0	11.6	4.1	0.1	-	-	-	-	-	-
TW-06	04/21/2016	0.6	10.3	5.6	0.2	1.45	6.32	16.91	-24.4	620	-
TW-06	05/23/2016	0.0	20.8	0.1	0.0	-	-	-	-	-	-
TW-06	05/24/2016	-	-	-	-	0.08	6.62	15.82	-17.3	921	-
TW-06	08/24/2016	0.5	16.8	2.4	0.0	-	-	-	-	-	-
TW-06	08/25/2016	-	-	-	-	0.17	6.02	21.24	-51.9	1,713	6.70
TW-06	11/28/2016	29.5	16.7	1.3	0.1	-	-	-	-	-	-
TW-06	11/29/2016	-	-	-	-	0.86	5.81	18.29	-13.5	1,708	3.21
TW-06	02/21/2017	1.5	19.8	0.6	0.0	1.69	6.48	12.81	18.0	1,320	-
TW-07	10/13/2014	33.5	16.4	-	-	1.40	4.96	19.08	-	580	-
TW-07	10/15/2014	15.6	15.4	-	-	0.40	4.94	20.81	97.9	569	-
TW-07	10/20/2014	0.0	14.6	5.0	0.0	-	-	-	-	-	-
TW-07	10/23/2014	-	-	-	-	0.41	4.99	19.04	139.5	415	-
TW-07	02/24/2015	0.0	14.4	7.2	0.3	-	-	-	-	-	-
TW-07	02/25/2015	-	-	-	-	1.53	5.07	7.15	244.8	640	-
TW-07	05/11/2015	0.0	9.0	11.0	0.0	2.02	4.70	20.64	202.2	660	-
TW-07	08/04/2015	0.0	7.2	16.9	0.0	0.20	4.39	22.88	150.0	629	65.8
TW-07	03/14/2016	0.0	18.8	2.3	0.1	-	-	-	-	-	-
TW-07	05/23/2016	2.3	19.9	0.7	0.0	-	-	-	-	-	-
TW-07	05/24/2016	-	-	-	-	0.90	4.85	15.88	206.9	653	-
TW-07	08/24/2016	1.6	-	-	-	-	-	-	-	-	-
TW-07	08/25/2016	-	-	-	-	6.99	4.58	24.52	223.9	722	45
TW-07	08/30/2016	98.2	21.7	0.0	0.0	-	-	-	-	-	-
TW-07	11/28/2016	0.5	20.9	1.0	0.0	-	-	-	-	-	-
TW-07	11/30/2016	-	-	-	-	6.66	4.60	15.79	172.6	524	3.92

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
TW-07	02/21/2017	0.2	20.0	0.5	0.0	2.27	4.90	11.29	56.2	580	-
TW-12S	10/10/2014	0.8	18.5	-	-	-	-	-	-	-	-
TW-12S	02/24/2015	0.0	15.0	2.8	0.3	-	-	-	-	-	-
TW-14	10/10/2014	2.3	19.5	-	-	-	-	-	-	-	-
TW-14	10/20/2014	0.0	20.0	0.7	0.0	-	-	-	-	-	-
TW-14	10/23/2014	-	-	-	-	1.99	7.48	19.13	-47.2	562	-
TW-14	02/24/2015	0.0	20.3	0.3	0.3	-	-	-	-	-	-
TW-14	02/25/2015	-	-	-	-	3.80	7.18	3.96	-6.1	465	-
TW-14	05/11/2015	-	-	-	-	1.16	7.14	22.53	-114.6	760	-
TW-14	08/06/2015	-	-	-	-	0.73	6.88	24.20	-107.8	828	-
TW-14	08/24/2016	-	-	-	-	1.20	7.20	24.48	-58.7	517	1.17

Notes:

-	= Not available	mV	= Millivolts
%	= Percent	ORP	= Oxidation-Reduction Potential
µS/cm	= Microsiemens per centimeter	ppm	= Parts per million
deg C	= Degrees Celsius	NTU	= Nephelometric Turbidity Unit
mg/L	= Milligrams per liter	DRY	= Not enough water in well to take measurements.
(cont.)	= continued	PRODUCT	= No measurements taken due to product in the well.

AU = Attenuation Unit. The light is measured at 180 degrees to incident beam, versus and unlike NTU, which is measured at 90 degrees to incident beam.

Table 5

HISTORICAL GROUNDWATER BIOSTIMULATION ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Methane (µg/L)	Sulfate as SO ₄ (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO ₃)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-01S	10/22/2014	4,200	130	0.044 J	0.037 J	306	31.4	-
MW-01S	3/16/2016	4,500	27.9	<0.040	0.017 J	367	9.3	14.5
MW-01S	8/25/2016	1,200	257	<0.040	<0.015	226	15.1	10.4
MW-01S	2/22/2017	500	312	<0.040	0.030 J	138	33.5	8.49
MW/RW-10S	10/22/2014	1,100	33.1	<0.040	0.037 J	461	62.8	-
MW/RW-10S	3/14/2016	1,800	193	<0.040	0.088	427	129	4.04
MW/RW-10S	5/24/2016	11	716	<0.040	<0.015	0.7 J	31.2	4.85
MW/RW-10S	8/25/2016	<3.0	824	0.076 J	<0.015	25.5	5.1	3.6
MW/RW-10S	11/29/2016	<3.0	488	0.21	<0.015	128	206	2.83
MW-11	10/22/2014	120	71.9	<0.040	<0.015	55	0.059	-
MW-11	2/26/2015	200	79.8	<0.040	<0.015	39	0.37	1.64
MW-11	5/12/2015	280	70.5	<0.040	<0.015	40.8	0.75	1.73
MW-11	8/6/2015	450	118	<0.040	0.049 J	356	21.9	5.67
MW/RW-14	2/25/2015	230	51.4	0.7	<0.015	63	2.5	8.66
MW/RW-14	5/12/2015	660	44.3	0.6	0.023 J	76.8	6.3	8.54
MW/RW-14	8/6/2015	1,800	45.9	0.15	0.11	304	18	15.1
MW/RW-14	3/15/2016	5,800	23.8	<0.040	0.050 J	171	22.2	6.81
MW/RW-14	8/25/2016	<3.0	42.5	1.8	<0.015	10.9	0.12	0.485
MW/RW-14	11/29/2016	<3.0	37.9	1.60	<0.015	8.8	0.029 J	0.107
MW/RW-14	2/22/2017	6	40.3	1.50	<0.015	9.1	0.20	0.190
MW-27	12/3/2015	2,500	112	<0.040	<0.015	424	33.4	10.9
MW-27	3/15/2016	6,100	214	<0.040	0.022 J	439	34	10.3
MW-27	5/25/2016	<3.0	452	<0.040	<0.015	44.3	4.4	6.85
MW-27	8/25/2016	<3.0	604	<0.040	<0.015	16.3	1.3	12.4
MW-27	11/29/2016	<3.0	293	0.16	<0.015	33.4	0.8	5.84
MW-27	2/22/2017	<3.0	322	<0.040	<0.015	15.4	0.53	5.51
MW/RW-31	10/23/2014	4,300	57.2	<0.040	<0.015	416	2.6	-
MW/RW-31	2/25/2015	5,000	69.7	<0.040	<0.015	487	9.3	9.84
MW/RW-31	5/13/2015	5,700	70.1	<0.040	<0.015	510	15.4	10.8
MW/RW-31	8/5/2015	5,400	85.3	<0.040	<0.015	482	10	5.52
MW-33	10/23/2014	43	253	1.9	<0.015	119	0.068	-
MW-33	2/25/2015	9.8	235	2.5	<0.015	55.6	0.030 J	1.23
MW-33	5/13/2015	7.3	254	2	<0.015	81.7	0.075	0.975
MW-33	8/5/2015	17	253	1.8	<0.015	97.7	<0.010	0.605
MW-51S	10/22/2014	7,100	36.3	0.047 J	<0.015	564	28.7	-
MW-51S	2/26/2015	8,900	6.2	<0.040	0.12	518	82.4	4.49
MW-51S	5/13/2015	11,000	<1.5	<0.040	0.2	676	77.3	1.74
MW-51S	8/6/2015	10,000	26.1	<0.040	0.046	480	48.3	1.03



Table 5

HISTORICAL GROUNDWATER BIOSTIMULATION ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Methane (µg/L)	Sulfate as SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-51S	3/15/2016	13,000	535	<0.040	0.049 J	585	69	4.64
MW-51S	5/24/2016	3,800	884	<0.040	0.039 J	335	32	3.46
MW-51S	8/25/2016	1,700	895	<0.040	0.11	354	22	10.3
MW-51S	11/29/2016	4,800	138	<0.040	0.039 J	617	6.5	2.11
MW-51S	2/21/2017	2,400	60	<0.40	<0.15	477	2.4	4.08
MW-70	2/26/2015	<3.0	361	0.71	<0.015	35.1	0.048 J	2.62
MW-70	5/12/2015	3.4 J	357	0.7	<0.015	40.7	<0.50	6.13
MW-70	8/6/2015	<3.0	365	0.73	<0.015	29.6	0.089	1.29
MW/RW-72S	10/22/2014	4,400	80.3	0.093 J	0.019 J	328	9.1	-
MW/RW-72S	2/25/2015	3,600	64.5	<0.040	<0.015	615	16.7	8.49
MW/RW-72S	5/13/2015	4,100	130	<0.040	0.097	597	24.6	8.46
MW/RW-72S	8/5/2015	2,300	207	<0.040	0.067	697	30.7	11.7
MW/RW-72S	3/14/2016	310	508	<0.040	0.054	543	71.4	16.7
MW/RW-72S	5/25/2016	20	1,500	<0.040	<0.015	<0.7	51.9	34.8
MW/RW-72S	8/25/2016	15	982	<0.040	<0.015	<1.7	78.9	24.5
MW/RW-72	10/22/2014	2,200	389	<0.040	<0.015	65.5	0.33	-
MW/RW-72	2/25/2015	490	396	<0.040	<0.015	72.7	4.8	18.8
MW/RW-72	5/13/2015	540	434	<0.040	0.057	101	10.8	17.5
MW/RW-72	8/5/2015	1,400	393	<0.040	<0.015	548	14.3	13.5
MW/RW-72	5/24/2016	<3.0	246	0.25	<0.015	24	0.073	1.72
MW/RW-72	8/25/2016	<3.0	351	0.12	<0.015	25.1	0.085	3.6
MW/RW-72	11/29/2016	<3.0	438	0.14	0.025 J	4 J	0.5	14.6
MW/RW-72	2/22/2017	<3.0	372	0.42	<0.015	2.8 J	0.017 J	1.88
MW-100S	11/29/2016	25	353	<0.040	0.20 J	37.5	71.6	11.5
MW-100	11/29/2016	12	56.3	2.60	0.061	29.2	0.19	0.902
MW-106	2/25/2015	260	1600	<0.040	0.021 J	<7.0	122	2.23
MW-106	5/12/2015	960	1160	<0.040	0.15	<0.70	50.1	1.49
MW-106	8/5/2015	2,100	1,010	<0.040	<0.015	35.1	32.7	1.38
MW-106	3/15/2016	1,600	1,250	<0.040	0.016 J	<0.70	25.1	1.67
MW-106	5/24/2016	3 J	1,310	<0.040	<0.015	<0.7	4.4	2.69
MW-106	8/25/2016	<3.0	1,270	<0.040	<0.015	<1.7	3.3	1.42
MW-106	11/29/2016	6.9	1,410	<0.040	<0.015	<1.7	9.6	1.55
MW-106	2/22/2017	4.3 J	1,310	<0.040	<0.015	<1.7	3.4	1.78
MW-109S	10/20/2014	1,000	18.8	<0.040	0.037 J	368	8	-
MW-109S	2/26/2015	140	55.4	<0.040	<0.015	196	3.1	2.64
MW-109S	5/12/2015	11	62.7	<0.040	<0.015	126	0.5	2.34
MW-112S	10/20/2014	4.1 J	99	0.71	<0.015	25	0.13	-
MW-112S	2/26/2015	<3.0	86.7	2.3	<0.015	13.3	0.029 J	0.649



Table 5

HISTORICAL GROUNDWATER BIOSTIMULATION ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Methane (µg/L)	Sulfate as SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-112S	5/12/2015	<3.0	98.9	2.5	<0.015	13.8	<0.010	0.597
MW-114	10/20/2014	16	40.5	1.5	0.16	66.7	0.066	-
MW-114	2/26/2015	<3.0	42.7	1.7	<0.015	68	0.016 J	0.102
MW-114	5/12/2015	<3.0	42.4	1.7	<0.015	68.2	0.035 J	0.0465
MW-121	12/2/2015	12,000	38.7	<0.040	0.033 J	353	66.7	28
MW-121	5/25/2016	3,300	115	<0.040	<0.015	374	81.4	22
MW-121	8/25/2016	100	186	<0.040	<0.015	331	14.5	12.6
MW-121	11/29/2016	1,500	227	<0.040	<0.015	302	24.7	10.3
MW-121	2/22/2017	490	297	<0.040	0.045 J	262	15.9	12.5
MW-122	12/2/2015	1,000	94.3	<0.040	<0.015	451	7.2	13.1
MW-122	5/25/2016	450	188	0.048 J	<0.015	300	90.8	16.3
MW-122	8/25/2016	280	182	<0.040	<0.015	272	9.1	4.12
MW-122	11/29/2016	450	180	<0.040	<0.015	284	11.1	3.64
MW-122	2/22/2017	350	190	<0.040	<0.015	291	2.8	4.87
TW-03	3/4/2015	2,500	269	<0.040	0.083	49.7	29.7	5.24
TW-03	5/13/2015	2,200	298	<0.040	0.13	39	24.6	4.32
TW-03	8/6/2015	1,800	289	<0.040	0.07	<0.70	32.3	4.61
TW-03	3/16/2016	1,600	345	<0.040	0.029 J	24.7	21.9	4.99
TW-03	5/23/2016	410	365	<0.040	0.043 J	31.2	29.1	7.88
TW-03	8/25/2016	220	276	<0.040	<0.015	16.7	40.7	6.86
TW-03	11/29/2016	130	269	<0.040	0.015 J	41.2	38	7.19
TW-03	2/22/2017	75	255	<0.040	0.047 J	10.5	37.9	5.46
TW-05	3/4/2015	2,800	367	<0.040	0.13	89.4	72.6	5.28
TW-05	5/13/2015	1,300	463	0.052 J	0.18	66.2	58.6	4.77
TW-05	8/6/2015	3,000	388	-	-	-	-	-
TW-05	8/13/2015	-	-	<0.040	0.091	16.1	84.5	3.55
TW-05	3/14/2016	460	410	0.12	0.042 J	114	41.5	3.05
TW-05	8/25/2016	NA	515	<0.040	<0.015	68.7	54.5	4.91
TW-05	11/29/2016	400	524	<0.040	0.020 J	105	90.5	7.04
TW-05	2/22/2017	2,100	631	<0.040	0.084	73.4	151	10.9
TW-06	12/2/2015	7,000	279	<0.040	0.027 J	194	58.4	1.93
TW-06	3/15/2016	3,600	224	<0.040	0.039 J	128	53.9	1.46
TW-06	5/24/2016	3,400	402	<0.040	0.036 J	72	46	2.1
TW-06	8/25/2016	NA	931	<0.040	0.017 J	36	144	6.32
TW-06	11/29/2016	1,100	1,160	<0.040	0.041 J	27.1	249	8.28
TW-06	2/22/2017	630	794	<0.040	0.059	<1.7	121	7.46
TW-07	3/4/2015	1,300	258	<0.040	0.034 J	1.6 J	14.1	4.3
TW-07	5/13/2015	800	323	<0.040	0.046 J	1.1 J	9.5	5.62



Table 5

HISTORICAL GROUNDWATER BIOSTIMULATION ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Methane (µg/L)	Sulfate as SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
TW-07	8/6/2015	2,700	304	<0.040	0.018 J	2.7	8.7	4.51

Notes:

J = Detected between the Method Detection Limit and the Reporting Limit; therefore, the result is an estimated value.

- = No Data

NA = Not Analyzed

<# = Less than the method detection limit of #

µg/L = Micrograms per liter

mg/L = Milligrams per liter

Table 6

TOTAL PHASE EXTRACTION OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation			Vapor Recovery							Groundwater Recovery		
	Period (days)	Operating Days	Operating Hours	Applied Vacuum	Vapor Flow Rate	PID Reading	Influent C1-C10 Hydrocarbon Concentration	Hydrocarbon Recovery Per Day	Hydrocarbon Recovery Per Period	Cumulative Hydrocarbon Recovery	Average Groundwater Flow Rate	Monthly Groundwater Recovery	Cumulative Groundwater Recovery
				(in. Hg)	(scfm)	(ppm-v)	(mg/m ³)	(lbs/day)	(lbs)	(lbs)	(gpm)	(gal)	(gal)
March 14, 2016	-	-	-	15.8	325	-	830	-	-	-	-	2,572	539
March 15, 2016	0.1	0.1	2	14.5	340	-		25.4	2.1	2	0.7		627
March 16, 2016	0.3	0.3	10	14.0	340	150		25.4	8.5	11	0.5		875
March 17, 2016	0.4	0.4	19	13.7	360	313		26.9	10.1	21	0.2		993
March 21, 2016	1.3	1.3	49	15.1	320	189		23.9	29.8	50	0.2		1,358
March 24, 2016	3	2.5	108	-	-	-		-	-	-	0.2		1,920
March 30, 2016	6	5.4	238	15.1	360	210		26.9	212	262	0.1		2,572
Q1 2016	11	10		14.7	341	216			262		0.2	2,572	
April 7, 2016	8.0	7.8	426	14.7	350	120	135	4.2	33	295	0.1	4,671	4,207
April 13, 2016	6.0	5.9	568	13.7	380	71	-	21.7	129	424	0.1		5,375
April 20, 2016	7.0	6.3	718	14.7	360	63	-	18.0	113	537	0.1		6,431
April 27, 2016	7.0	5.5	851	15.1	330	59	-	15.7	87	624	0.1		7,243
May 5, 2016	8.0	7.7	1035	15.7	330	105	74	2.2	17	640	0.1	4,121	8,530
May 18, 2016	13.0	8.9	1248	14.4	350	48	-	13.4	119	759	0.1		10,084
May 25, 2016	7.0	4.8	1362	15.3	340	-	-	2.3	11	770	0.2		11,364
June 8, 2016	14.0	8.8	1573	16.5	340	37	0	0.0	0	770	0.2	5,196	13,273
June 21, 2016	13.0	12.6	1876	15.2	360	24.4	-	7.0	89	859	0.2		16,560
Q2 2016	83	68		15.0	349	66			597		0.1	13,988	
July 12, 2016	21.0	21.0	2379	15.8	350	44.0	<53	12.3	259	1118	0.2	9,218	23,064
July 21, 2016	9.0	8.8	2589	16.3	330	80.2	-	21.2	186	1303	0.2		25,778
August 4, 2016	14.0	14.0	2926	16.5	350	26.4	70	2.2	31	1334	0.3	10,131	31,745
August 15, 2016	11.0	7.4	3103	16.0	350	-	-	2.2	16	1350	0.4		35,795
August 17, 2016	2.0	0.2	3108	14.5	325	46.4	-	12.1	3	1353	0.4		35,909
September 1, 2016	15.0	10.7	3365	15.8	340	34.2	71	2.2	23	1376	0.2	11,516	39,684
September 22, 2016	21.0	20.8	3865	16.6	345	23.7	-	6.6	136	1513	0.2		45,749
September 30, 2016	8.0	8.0	4056	-	345	-	-	2.2	18	1530	0.1		47,425
Q3 2016	101	91		15.9	342	42			671		0.2	30,865	

Table 6

TOTAL PHASE EXTRACTION OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation			Vapor Recovery							Groundwater Recovery		
	Period (days)	Operating Days	Operating Hours	Applied Vacuum	Vapor Flow Rate	PID Reading	Influent C1-C10 Hydrocarbon Concentration	Hydrocarbon Recovery Per Day	Hydrocarbon Recovery Per Period	Cumulative Hydrocarbon Recovery	Average Groundwater Flow Rate	Monthly Groundwater Recovery	Cumulative Groundwater Recovery
				(in. Hg)	(scfm)	(ppm-v)	(mg/m ³)	(lbs/day)	(lbs)	(lbs)	(gpm)	(gal)	(gal)
October 5, 2016	5.0	4.9	4173	16.9	360	13.2	<53	3.8	19	1549	0.2	4,062	48,699
October 20, 2016	15.0	13.8	4505	17.2	340	16.9	-	4.6	64	1612	0.1		51,487
November 3, 2016	14.0	13.0	4817	16.8	360	17.6	29	0.9	12	1625	0.1	4,897	53,850
November 22, 2016	19.0	19.0	5273	17.2	365	28.9	-	8.5	161	1785	0.1		56,384
December 7, 2016	15.0	14.8	5627	16.6	370	31.6	<53	9.4	138	1923	0.1	2,753	57,895
December 22, 2016	15.0	9.1	5845	16.6	345	42.7	-	11.8	107	2031	0.1		59,137
Q4 2016	83	75		16.9	357	25			500		0.1	11,712	
January 9, 2017	18.0	17.2	6257	17	350	31.0	<53	8.7	149	2180	0.1	8,266	62,275
January 30, 2017	21.0	20.4	6747	16.2	360	31.6	-	9.1	186	2366	0.2		67,403
February 6, 2017	7.0	6.9	6913	15.9	370	32.0	<53	9.5	66	2432	0.1	2,619	68,680
February 22, 2017	16.0	15.9	7295	15.9	380	17.7	-	5.4	86	2517	0.1		70,022
March 7, 2017	13.0	12.1	7585	15.7	360	33.3	<53	9.6	116	2633	0.1	3,230	71,195
March 29, 2017	22.0	21.8	8107	15.9	350	13.4	-	3.8	82	2715	0.1		73,252
Q1 2017	97	94		16.1	362	27			685		0.1	14,115	

Notes:

PID - photoionization detector

ppm-v - parts per million by volume

gal - gallons

in. Hg - inches of mercury

mg/m³ - milligrams per cubic meter

gpm - gallons per minute

scfm - standard cubic feet per minute

lbs - pounds

Bold hydrocarbon recovery per day values indicate the result is from analytical results (sum of C1-C4 and >C4-C10 hydrocarbons). Other a PID reading is used.Estimate of TPE vapor >C4-C10 hydrocarbon recovery using analytical results in units of mg/m³:Pounds = Vapor Flow Rate (scfm) x Influent >C4-C10 Hydrocarbons (mg/m³) x Period (days) x cc = conversion factors, 1440 min/day, 0.02832 m³/ft³, 2.2046E-6 lb/mgEstimate of hydrocarbon recovery per day using PID reading:

Pounds = VOC concentration (ppm) x MW (g/mol) / MV (mol/L)] x vapor flow rate (scfm) x c

MW = molecular weight, assumed at 200 grams/mol for diesel

MV = molar volume, 22.4 at standard temperature and pressure (25 deg. Celsius, 1 atm)

c = conversion factors, 1440 min/day, 2.2E-6 lb/mg, 1 m³ /35.3 ft³Estimate of recovery using analytical results in units of mg/L:

Pounds = Total Monthly Flow (gal) x Concentration (mg/L) x c

c = conversion factors, 3.7854 L/gal, 2.2046E-6 lb/mg



Table 7

PUMP AND TREAT OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation			Groundwater Recovery			Recovery Wells											
	Period (days)	Operating Days	Operating Hours	Average Groundwater Flow Rate	Monthly Groundwater Recovery	Cumulative Groundwater Recovery	RW-05		RW-25		RW-31		RW-51		RW-72		RW-14	
				(gpm)	(gal)	(gal)	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute
March 14, 2016	-	-	-	-	43,907	536	692	-	6,213	-	3,309	-	5,987	-	4,157	-		
March 15, 2016	0.2	0.2	6	0.5		729	1,120	1.8	10,090	16	9,063	24	10,880	20	7,307	13		
March 16, 2016	0.4	0.4	15	4.6		3,220	1,299	0.3	14,530	8	11,994	5	15,925	9	8,755	3		
March 17, 2016	0.3	0.3	22	3.3		4,595	1,436	0.3	21,226	16	16,785	11	23,056	17	9,825	3		
March 21, 2016	1.3	1.3	54	1.1		6,677	1,505	0.0	31,176	5	18,124	1	29,238	3	16,073	3		
March 24, 2016	3.0	2.3	108	1.8		12,539	1,625	0.0	-	-	-	-	-	-	-	-		
March 30, 2016	6.0	5.2	232	4.2	43,907	11,823	1.4	212,345	17	151,623	12	205,395	16	39,882	2			
Q1 2016	11	10		3.2	43,907		11,823	0.9	212,345	15	151,623	11	205,395	15	39,882	3		
April 7, 2016	8	7.8	418	3.3	117,175	81,177	17,696	0.5	430,776	20	244,598	8	431,044	20	51,551	1.0		
April 13, 2016	6	5.5	551	3.6		109,780	26,045	1.0	589,447	20	347,559	13	591,420	20	62,240	1.3		
April 20, 2016	7	6.3	701	3.1		137,844	34,325	0.9	773,123	20	355,229	1	775,119	20	69,772	0.8		
April 27, 2016	7	5.1	824	3.1		161,082	37,883	0.5	918,471	20	407,031	7	921,715	20	80,116	1.4		
May 5, 2016	8	7.5	1,005	3.0		193,885	39,826	0.2	1,138,059	20	471,149	6	1,136,789	20	90,455	1.0		
May 10, 2016	5	1.1	1,031	3.1		198,662	40,882	0.7	1,168,873	20	500,383	19	1,167,296	20	91,887	0.9		
May 18, 2016	8	7.2	1,204	2.7	87,572	226,298	60,355	1.9	1,387,605	21	525,551	2	1,381,275	21	97,943	0.6		
May 25, 2016	7	6.5	1,360	2.4		248,654	-	-	-	-	-	-	-	-	-	-		
June 2, 2016	8	5.5	1,493	2.1		265,336	90,911	1.8	1,760,840	22	777,780	15	1,743,745	21	112,951	0.0		
June 8, 2016	6	3.3	1,571	2.1		275,335	97,569	1.4	1,861,909	22	844,068	14	1,841,688	21	117,805	1.0		
June 14, 2016	6.0	6.0	1,714	1.9		291,227	110,555	1.5	2,069,338	24	948,955	12	2,035,824	23	127,548	1.1		
June 21, 2016	7.0	6.8	1,877	1.9		310,118	143,720	3.4	2,299,257	24	1,075,182	13	2,259,050	23	137,772	1.0		
Q2 2016	83	69		2.7	266,211		131,897	1.3	2,086,912	21	923,559	9	2,053,655	21	97,890	1		
July 12, 2016	21	21.0	2,380	2.2	90,967	375,524	621,945	15.8	3,046,598	25	1,501,331	14	2,963,874	23	163,265	0.8		
July 21, 2016	9	8.8	2,591	2.0		401,085	965,118	27.1	3,336,362	23	1,703,585	16	3,245,984	22	172,720	0.7		
August 4, 2016	14	14.0	2,927	2.0		441,884	1,504,724	26.8	3,784,552	22	2,035,460	16	3,692,700	22	188,936	0.8	188,936	-
August 15, 2016	11	8.0	3,118	2.2		466,850	1,780,380	24.1	3,986,072	18	2,200,705	14	3,916,870	20			274,167	7.4
August 17, 2016	2	0.2	3,123	2.9	66,632	467,717	1,784,800	14.7	3,991,637	19	2,204,352	12	3,922,639	19			276,953	9.3
September 1, 2016	15	12.3	3,418	1.8		499,541	2,110,116	18.4	4,141,750	8	2,252,093	3	4,205,454	16			456,696	10.2
September 22, 2016	21	21.0	3,921	1.6		547,172	2,402,720	9.7	4,809,103	22	2,252,895	0	4,833,693	21			700,754	8.1
September 30, 2016	8	7.8	4,108	1.6		565,221	2,404,744	0.2	-	-	2,253,087	0	-				-	-
Q3 2016	101	93		1.9	255,103		2,261,024	16.9	2,509,846	20	1,177,905	9	2,574,643	21	51,164	1	511,818	9
October 5, 2016	5	4.9	4,226	2.5	62,337	583,206	2,406,092	0.2	4,985,425	9.6	2,380,012	18	5,204,070	20			897,581	11
October 20, 2016	15	13.8	4,558	2.2		627,558	2,410,677	0.2	5,430,437	22.3	2,759,561	19	5,620,685	21			1,074,660	9
November 3, 2016	14	13.0	4,870	2.0		665,013	2,414,200	0.2	5,830,392	21.4	3,089,438	18	5,999,578	20			1,245,397	9
November 22, 2016	19	19.0	5,326	1.3		701,919	2,421,950	0.3	6,450,887	22.7	3,309,768	8	6,423,209	15			1,401,129	6
December 7, 2016	15	14.6	5,677	1.7	55,598	738,594	2,445,294	1.1	6,928,011	22.7	3,587,633	13	6,740,188	15			1,656,410	12
December 22, 2016	15	9.3	5,900	1.4		757,517	2,478,549	2.5	7,242,904	23.5	3,696,939	8	6,946,164	15			1,690,554	3
Q4 2016	83	75		1.8	192,296		73,805	0.7	2,433,801	22.6	1,443,852	13	2,112,471	20	0	0	989,800	9

Table 7

PUMP AND TREAT OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation			Groundwater Recovery			Recovery Wells											
	Period (days)	Operating Days	Operating Hours	Average Groundwater Flow Rate	Monthly Groundwater Recovery	Cumulative Groundwater Recovery	RW-05		RW-25		RW-31		RW-51		RW-72		RW-14	
				(gpm)	(gal)	(gal)	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute
January 9, 2017	18	17.2	6,312	1.1	27,603	784,463	2,494,287	0.6	7,829,388	23.7	3,815,194	5	7,211,328	12			1,853,106	5
January 19, 2017	10	0.7	6,328	0.7		785,120	2,494,860	0.6	7,851,610	23.1	3,828,163	14	7,230,971	20			1,856,756	4
February 6, 2017	18	6.7	6,489	1.7	45,008	801,393	2,495,498	0.1	8,070,030	22.6	3,933,692	11	7,421,271	20			1,884,884	3
February 22, 2017	16	15.9	6,871	1.3		830,128	2,496,043	0.02	8,623,835	24.2	4,141,969	9	7,558,931	6			2,114,207	10
March 7, 2017	13	12.1	7,161	1.3	63,709	851,954	2,496,525	0.03	9,020,300	22.8	4,241,925	6	7,838,994	16			2,219,822	6
March 29, 2017	22	21.9	7,686	1.3		893,837	2,506,402	0.3	9,393,785	11.9	4,746,021	16	8,681,479	27			2,286,621	2
Q1 2017	97	74		1.3	136,320		27,853	0.3	2,150,881	20.1	1,049,082	10	1,735,315	16	0	0	596,067	6

Notes:

gal - gallons

gpm - gallons per minute

Pump Cycles - Cycle counters at each pneumatic well pump are used as relative measurements to estimate proportion of total flow and evaluate changes in flow rates over time.

Table 8

BIOSPARGE OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation		Biosparge Injection Points														
	Period (days)	Operating Days	SP-01	SP-02	SP-03	SP-04	SP-05	SP-06	SP-07	SP-08	SP-09	SP-10	SP-11	SP-12	SP-13	SP-14	SP-15
			Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
			(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)
March 15, 2016	0.0	0.0	0.8	0.7	0.6	0.8	0.8	0.6	0.8	0.7							
March 16, 2016	0.4	0.4	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7							
March 17, 2016	0.9	0.9	0.7	0.75	0.7	0.7	0.7	0.7	0.75	0.75							
March 21, 2016	1.3	1.3	1.0	1.0	1.0	1.0	1.2	1.1	1.0	1.0							
March 30, 2016	9.0	8.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8							
Q1 2016	12	11	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8							
April-16	28	27.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8							
May-16	28	23.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
June-16	27	22.7	0.8	0.75	0.8	0.8	0.8	0.75	0.75	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Q2 2016	83	73	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
July-16	30	30.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
August-16	27	22.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
September-16	44	42.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0	0
Q3 2016	101	95	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.3
October-16	20	18.9	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0	0
November-16	33	32.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0	0
December-16	30	24.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0	0
Q4 2016	83	75	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.0	0.0
January-17	39	18.0	0.5	0.5	0.5	0.5	0.5	0.75	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3
February-17	23	22.6	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.5	0.5	0.5	0.5	0.3	0.3	0.3
March-17	35	35.0	0.75	0.75	0.75	0.75	0.75	0.3	0.75	0.75	0.5	0.5	0.5	0.5	0.5	0.3	0.3
Q1 2017	97	76	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7	0.5	0.4	0.4	0.4	0.4	0.3	0.3

Notes:

scfm - standard cubic feet per minute

Table 9

HYDROCARBON RECOVERY SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	TPE			P&T			LNAPL		Cumulative Hydrocarbon Recovery						
	Monthly Groundwater Recovery	Dissolved-Phase TPH-DRO Concentration	Monthly TPH-DRO Recovery	Monthly Groundwater Recovery	Dissolved-Phase TPH-DRO Concentration	Monthly TPH-DRO Recovery	LNAPL Thickness in Drum ¹	Monthly Recovered LNAPL	Dissolved-Phase		Liquid-Phase	Vapor-Phase ²	Total		
									TPE	P&T					
									(gal)	(mg/L)					(lbs)
March-16	2,572	250	5.4	43,907	56	20.5	0.39	56.8	5	21	57	262	345	47	
Q1 2016			5.4			20.5		56.8							
April-16	4,671	10	0.4	117,175	2.4	2.3	0.41	2.9	6	23	60	624	712	97	
May-16	4,121	69	2.4	87,572	2.8	2.0	0.43	21.2	8	25	81	770	884	121	
June-16	5,196	18	0.8	61,464	0.7	0.3	0.43	0.0	9	25	81	859	974	133	
Q2 2016			3.5			4.7		24.1							
July-16	9,218	73	5.6	90,967	23	17.5	0.46	4.4	15	43	85	1303	1446	197	
August-16	10,131	83	7.0	66,632	6.7	3.7	0.46	0.0	22	46	85	1353	1506	206	
September-16	11,516	100	9.6	97,504	5.4	4.4	0.46	0.0	31	51	85	1530	1697	232	
Q3 2016			22.2			25.6		4.4							
October-16	4,062	36	1.2	62,337	11	5.7	0.46	0.0	32	57	85	1612	1787	244	
November-16	4,897	68	2.8	74,361	1.2	0.7	0.46	0.0	35	57	85	1785	1963	268	
December-16	2,753	81	1.9	55,598	0.42	0.2	0.46	0.0	37	57	85	2031	2210	302	
Q4 2016			5.9			6.7		0.0							
January-17	8,266	51	3.5	27,603	0.32	0.1	0.00*	0.0	41	58	85	2366	2549	348	
February-17	2,619	8.3	0.2	45,008	0.46	0.2		0.0	0.0	41	58	85	2517	2701	369
March-17	3,230	5	0.1	63,709	0.56	0.3		0.00	0.0	41	58	85	2715	2899	396
Q1 2017			3.8			0.5		0.0							

Notes:

TPE - total phase extraction

P&T - pump & treat

TPH-DRO - total petroleum hydrocarbons - diesel range organics

¹ - LNAPL drum includes LNAPL bailed previously during well gauge and bail events² - Vapor-Phase recovery values are calculated withing the Total Phase Extraction Operational Summary Table

* - The LNAPL drum was emptied during an oil/water separator cleaning event.

Italics - May LNAPL recovery includes LNAPL removed from the oil/water separator during a cleaning event.Estimate of dissolved-phase recovery using analytical results in units of mg/L:

Pounds = Total Monthly Flow (gal) x Concentration (mg/L) x c

c = conversion factors, 3.7854 L/gal, 2.2046E-6 lb/mg

Estimate of recovered LNAPL in drum using product thickness in units of ft:Pounds = LNAPL Thickness (ft) x Drum Radius² (ft²) x π x LNAPL Density (lb/ft³)

drum diameter = 1.875 feet

Density of LNAPL (#2 fuel oil) is 54.81 lb/ft³ based on an average from LNAPL samples from MW-05 and MW-25Conversion of recovered hydrocarbons from pounds to gallons:Gallons = Total Hydrocarbons (lbs) / Denisty of LNAPL (54.8 lb/ft³) x 7.48 gal/ft³)

LNAPL - light non-aqueous phase liquid

gal - gallon

mg/L - milligrams per liter

lbs - pounds

ft - feet



ATTACHMENT A

WASTE DOCUMENTATION

TRIUMVIRATE ENVIRONMENTAL BILL OF LADING

Page 1 of 1

STRAIGHT BILL OF LADING ORIGINAL - NOT NEGOTIABLE

BOL Document Number: BOL332559A

TRANSPORTER:

1 Triumvirate Environmental, Inc.
2

US EPA ID Number:

MAC300016672

Phone:

800-966-9282

GENERATOR:

NRG - Virginia
1400 North Royal Street
Alexandria, VA 22314

US EPA ID Number:

VAD000731588

Phone:

FACILITY:

Triumvirate Environmental - Baltimore, LLC
1500 Carbon Avenue
Baltimore, MD 21226

US EPA ID Number:

MDD093002384

Phone:

(410) 636-3700

Received:

(Print Name)

(Signature)

(Date)

HM	Description of Articles or Proper Shipping Name	Containers			Weight	Unit
		No.	Size	Type		
	Non-RCRA, Non-DOT Regulated Materials - Liquids (Petroleum Impacted Water) 13920-20020A	001	x	Tanker TT	572	G

This is to certify that the above-named materials are properly classified, described, packaged, marked, and labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation:

GENERATOR:

NRG - Virginia

Print Name

Signature

Date

X MIKE KEMMEL X *Mike Kemmel* 3.6.17

TRANSPORTER:

1 Triumvirate Environmental, Inc.
2

Andulose *Andulose* 3.6.17

ER #: (800) 966-9282

ERIP: Triumvirate Environmental

Monitored at all times the Hazardous Materials is in transportation including storage to transportation. (172.604)



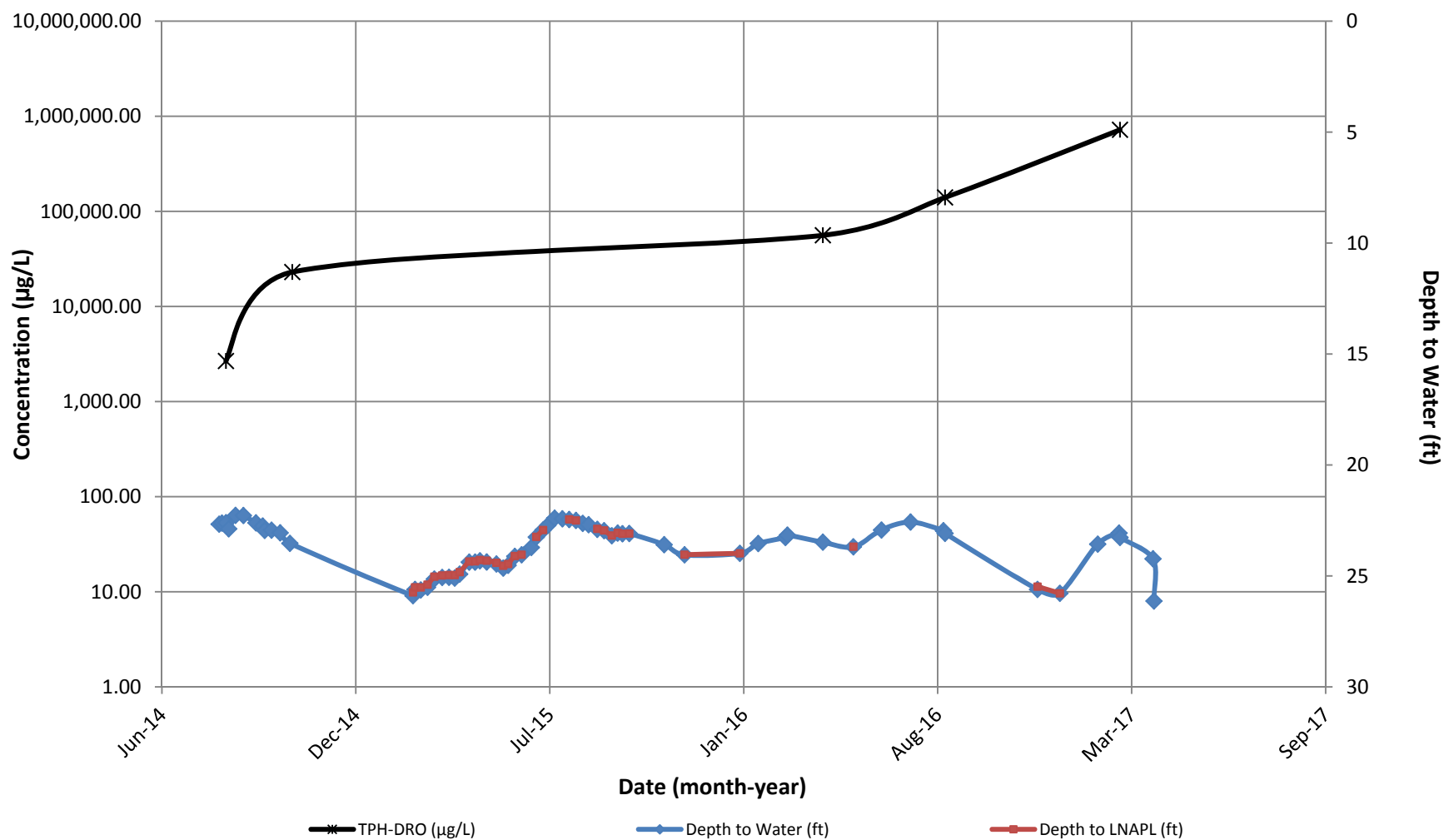
ATTACHMENT B

CONCENTRATION TREND GRAPHS

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-01S

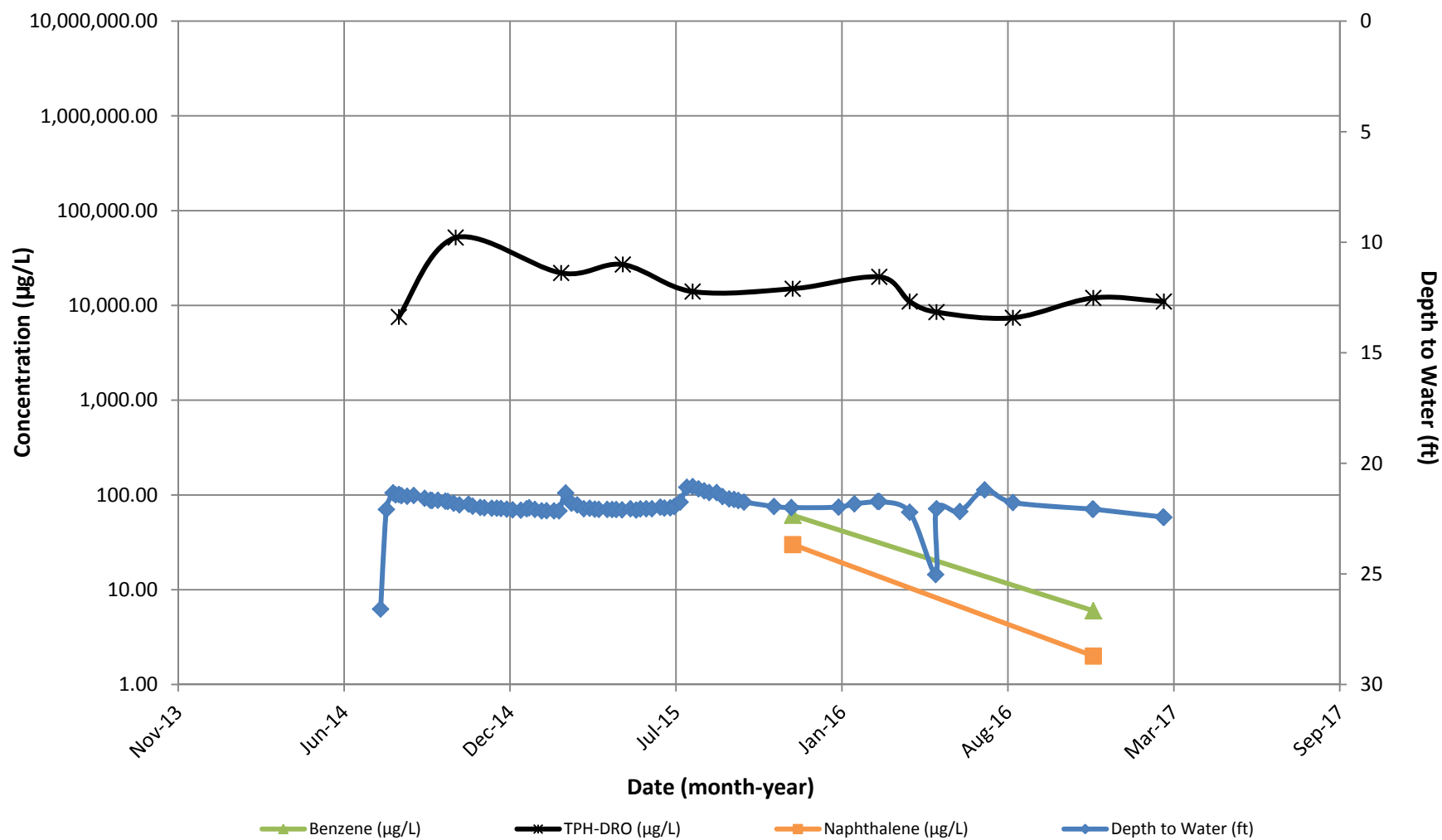


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-08S

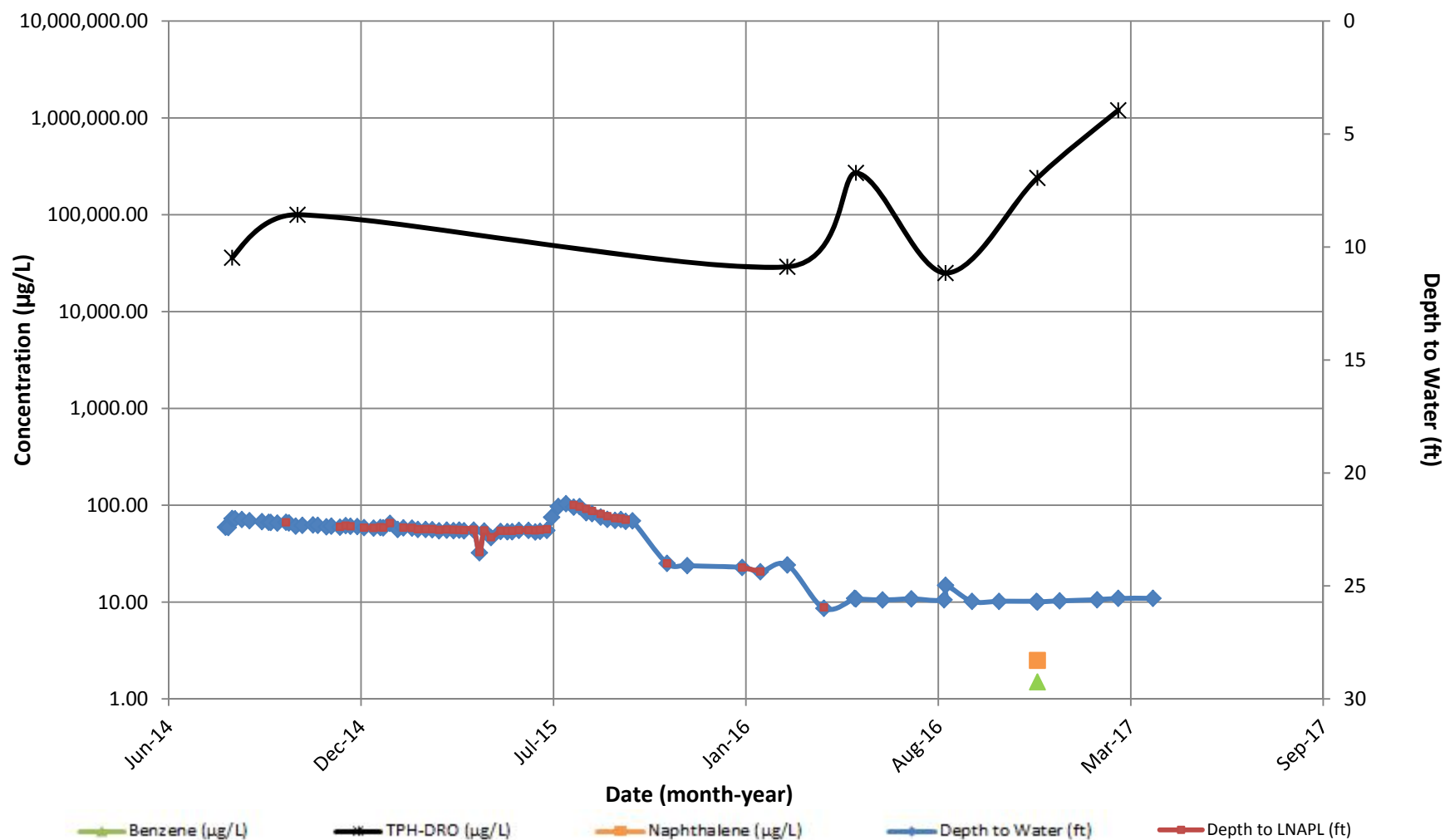


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-10S

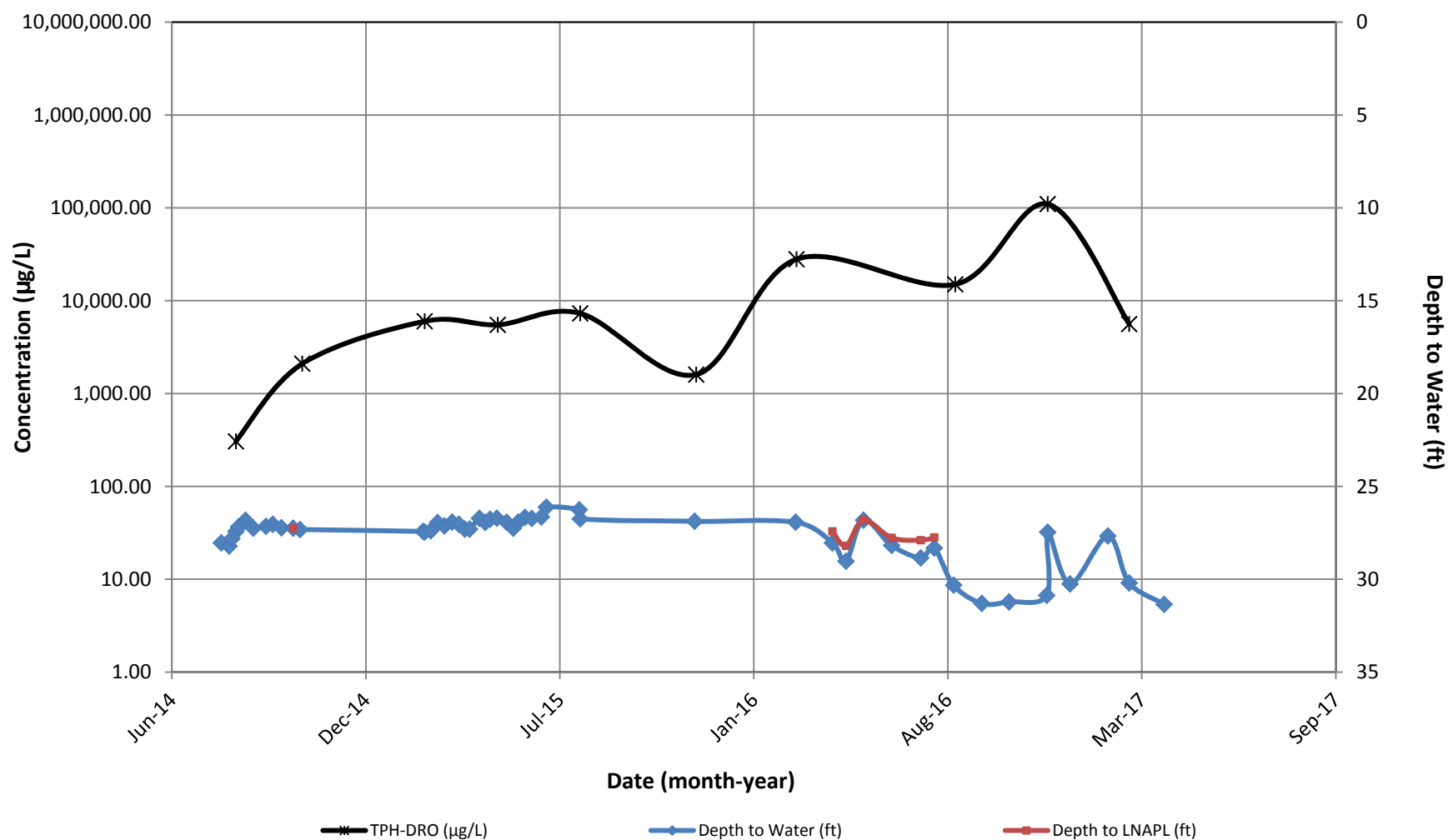


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-14

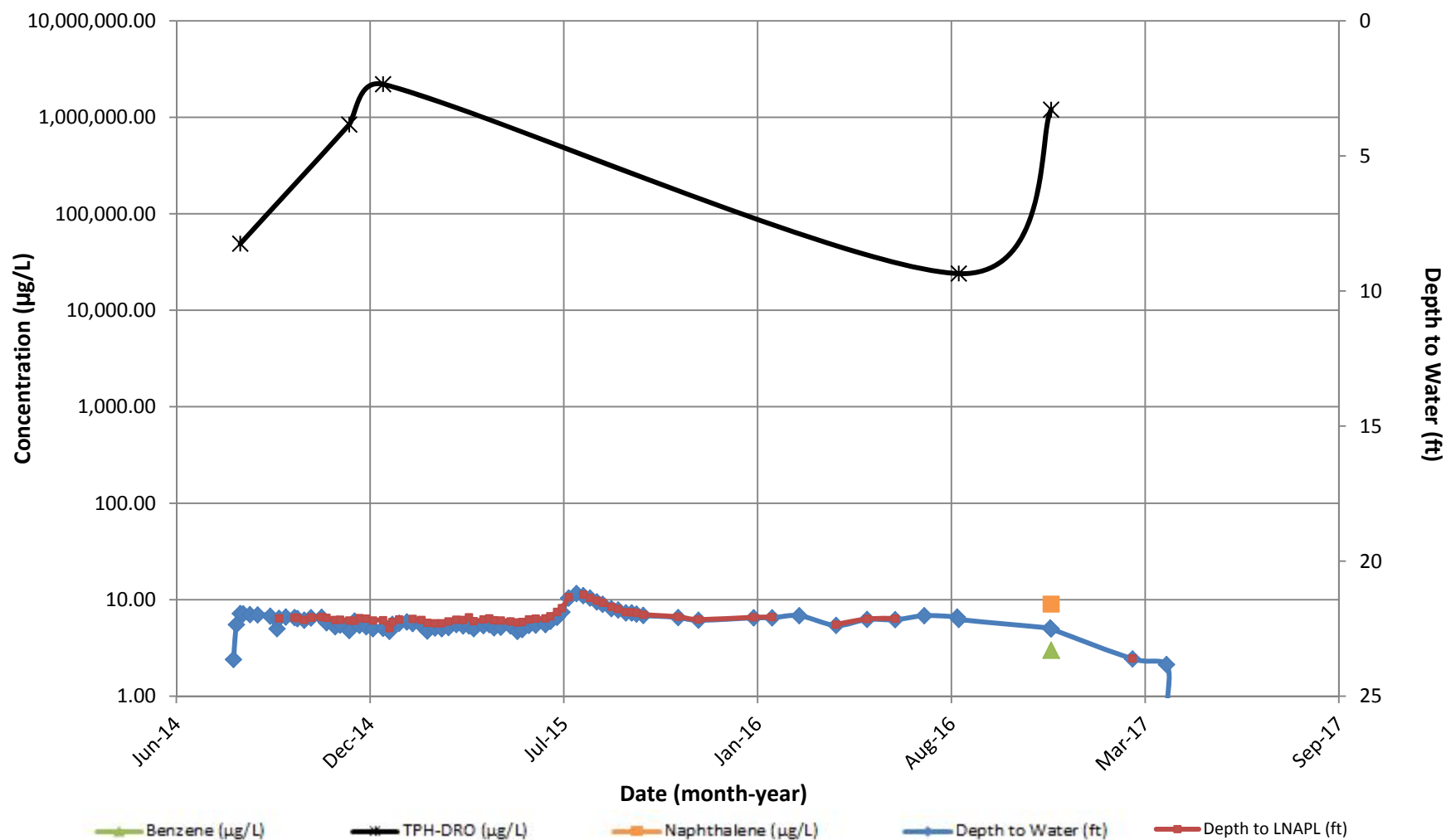


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-25S

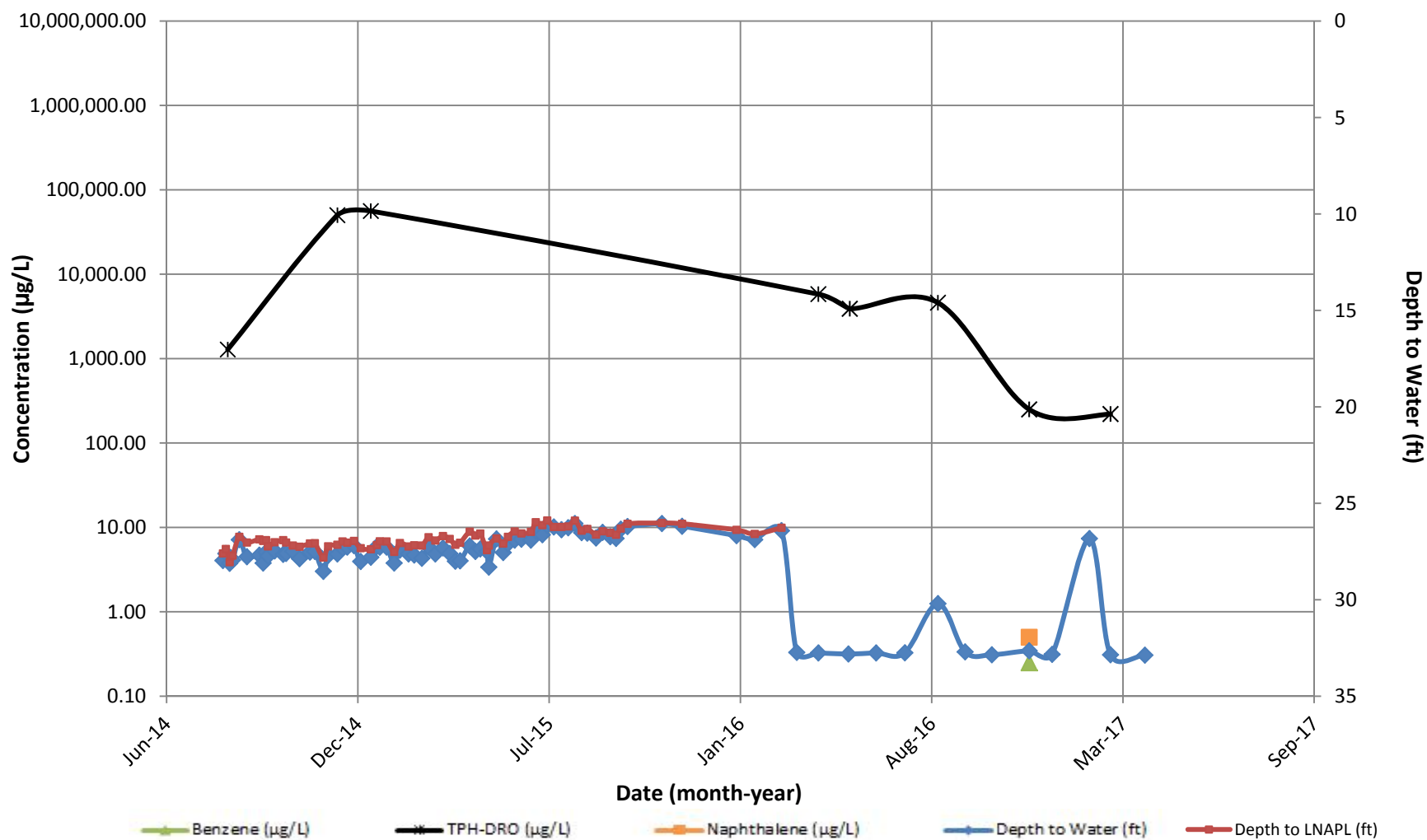


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-25

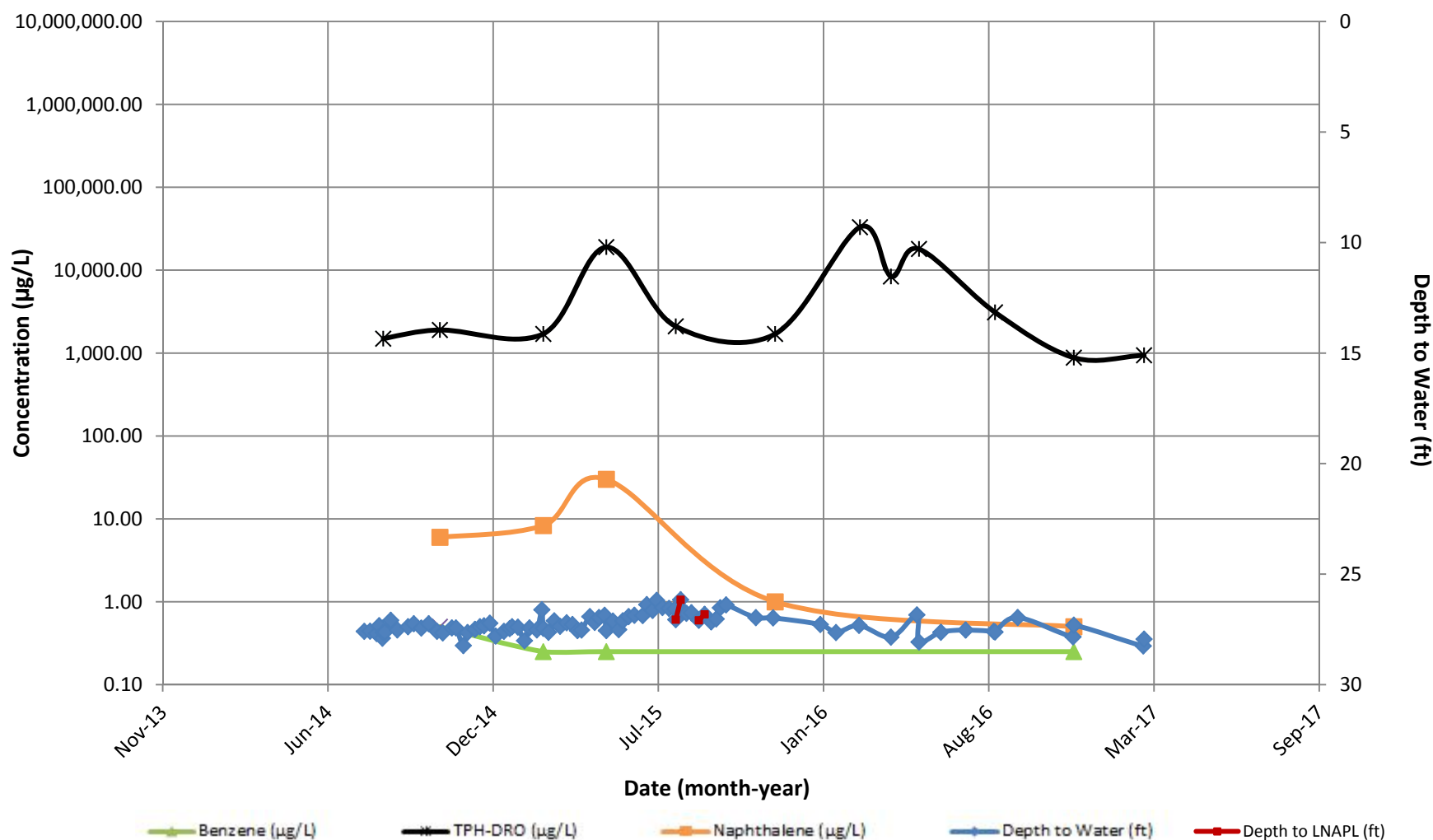


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-27

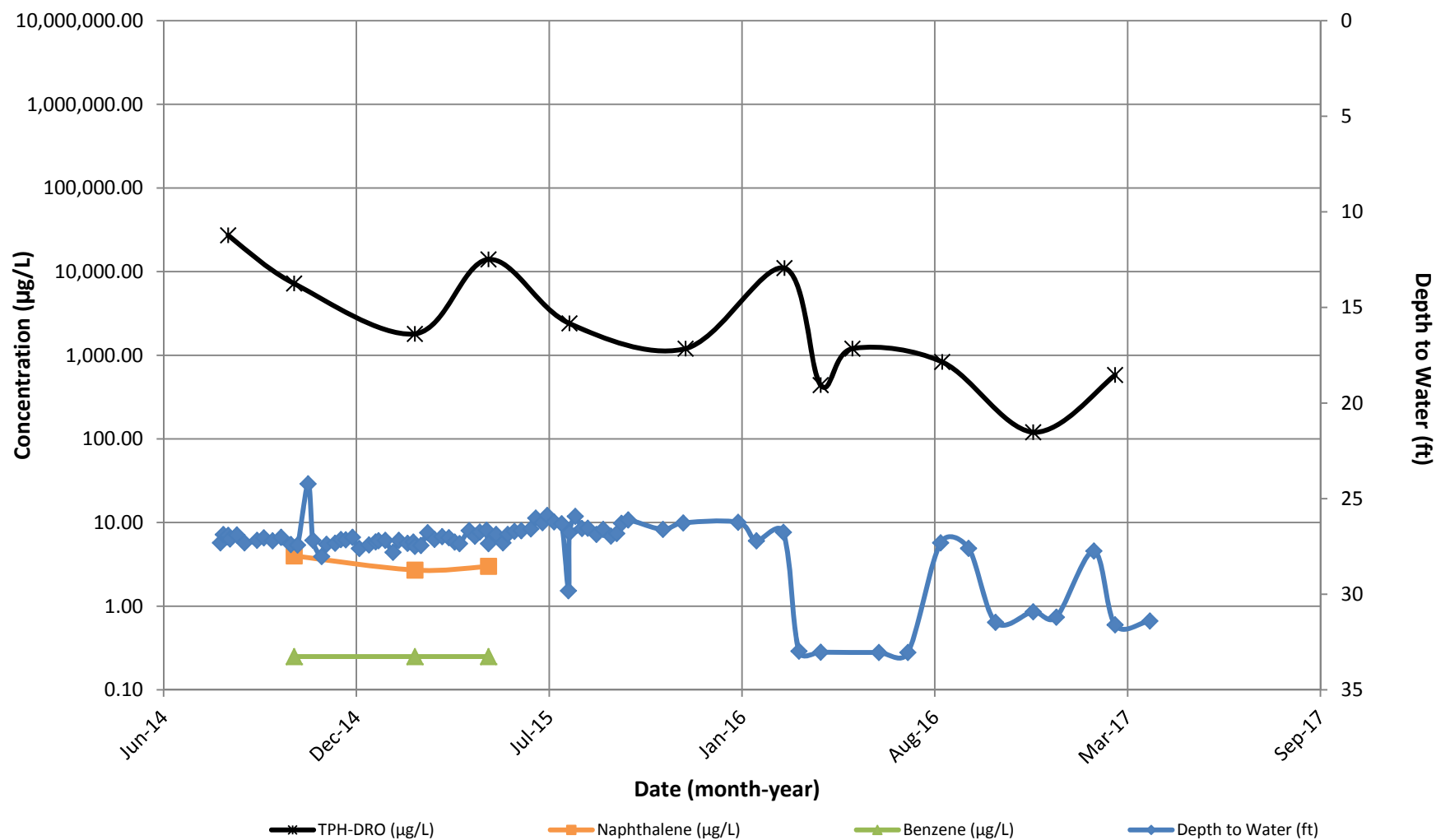


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-31

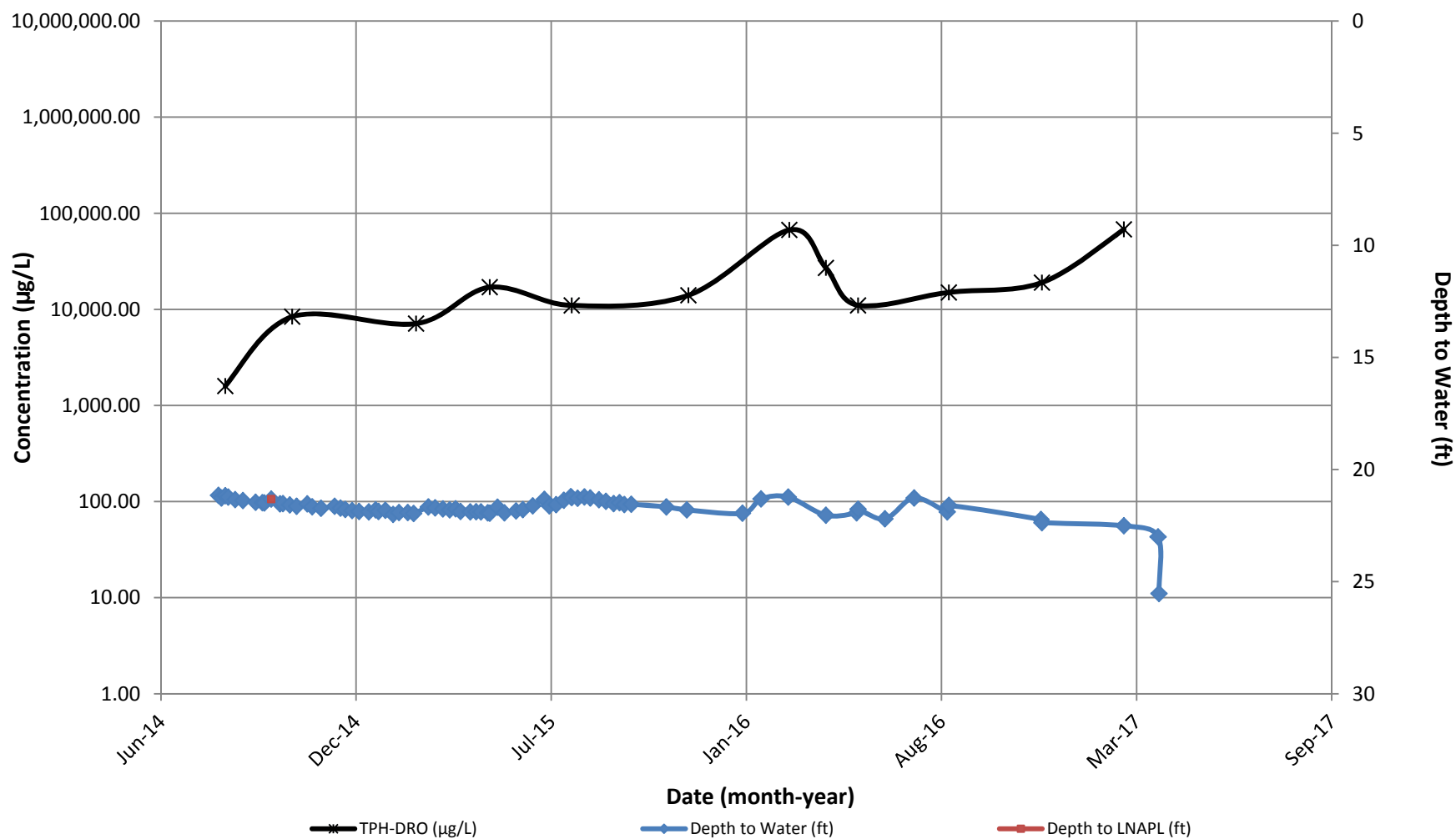


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-51S

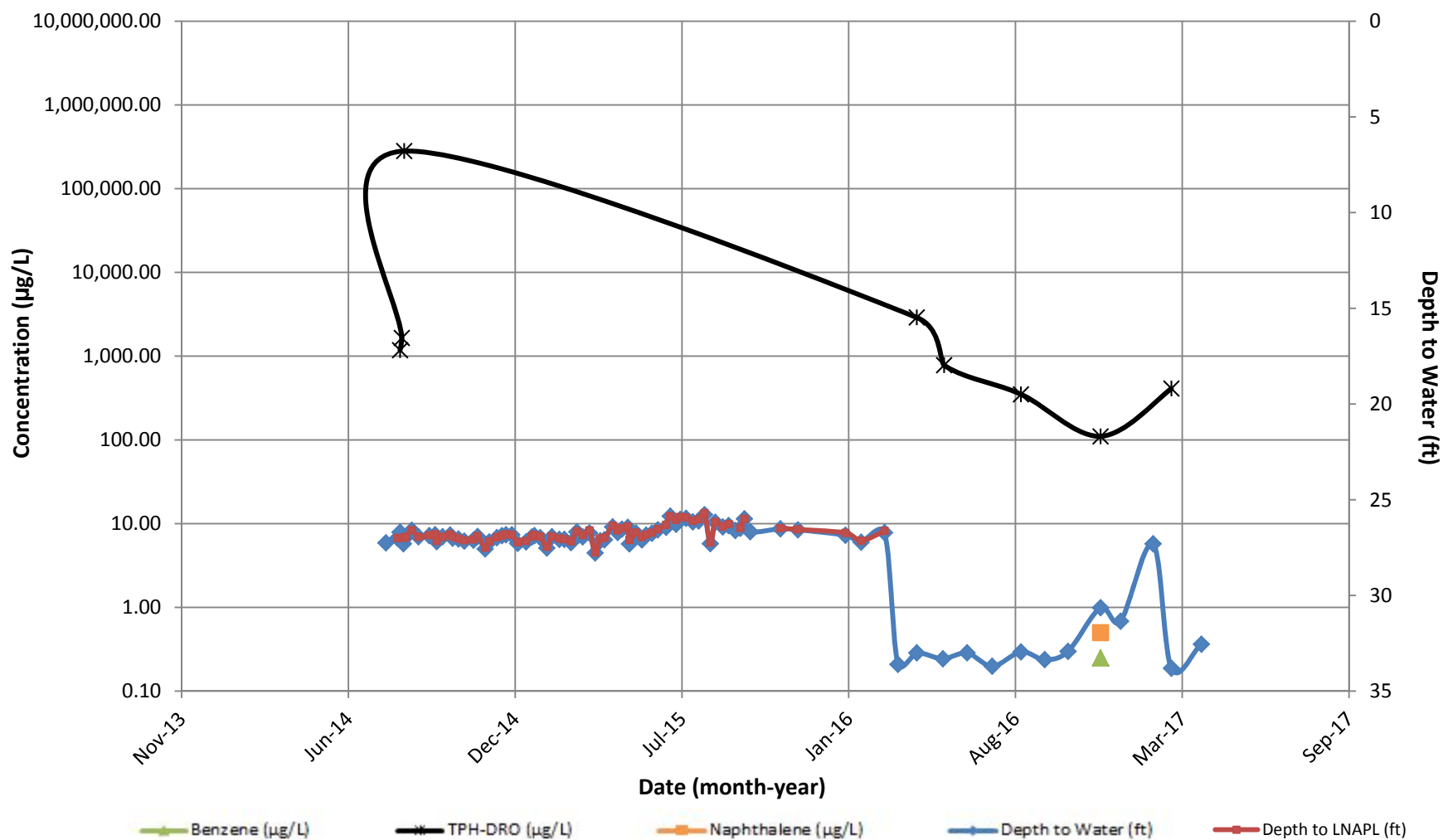


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-51

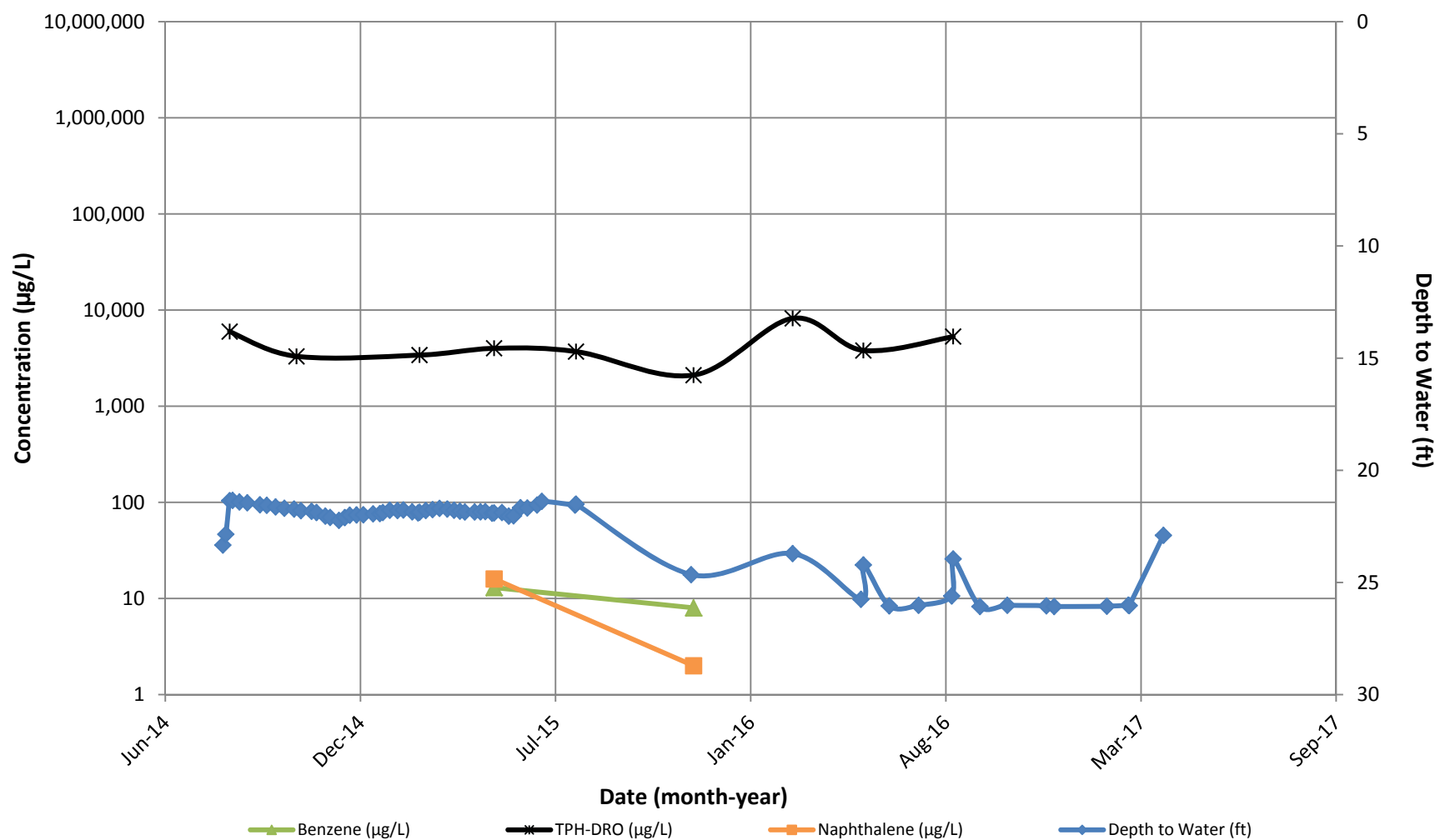


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-72S

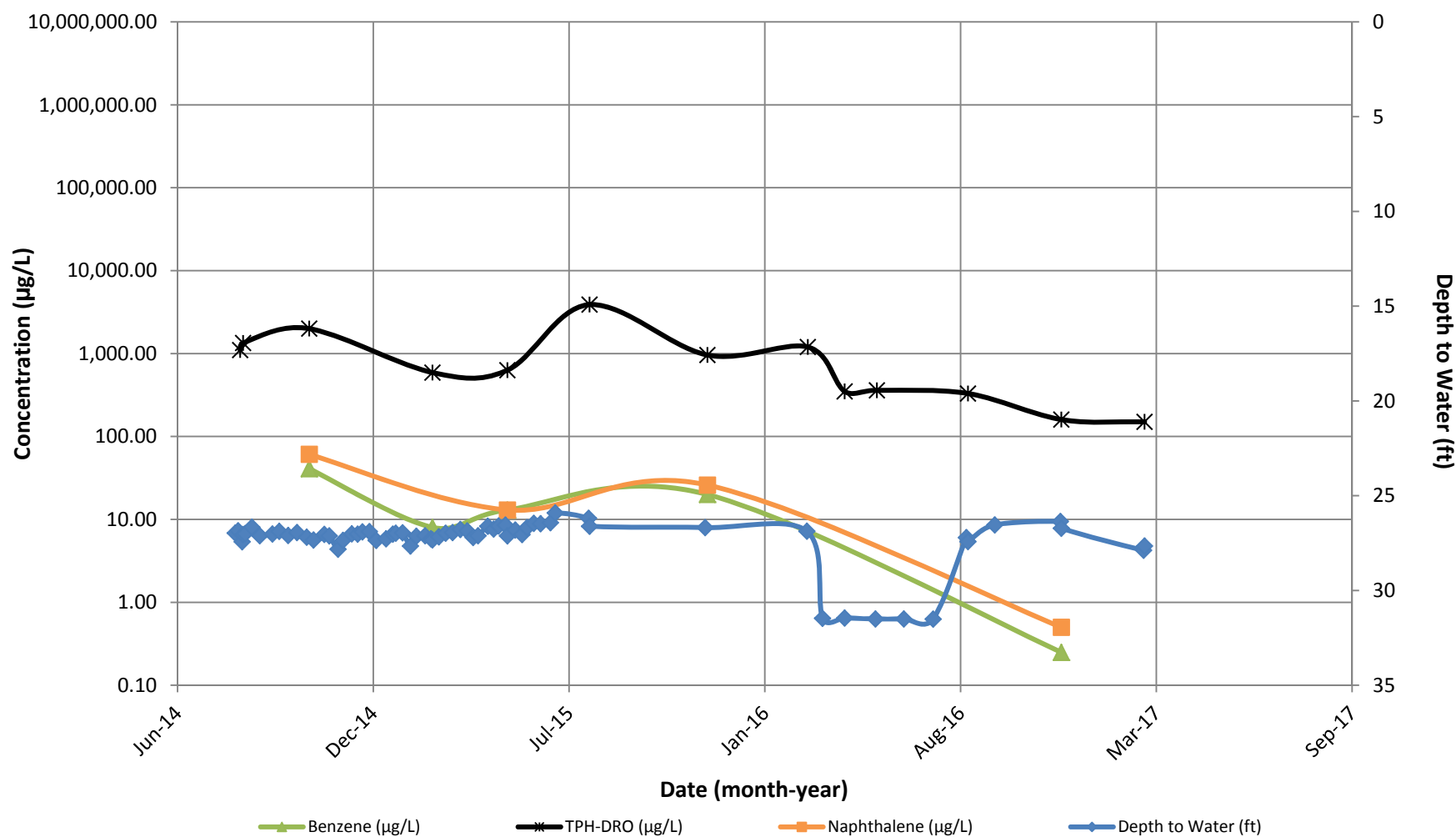


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-72

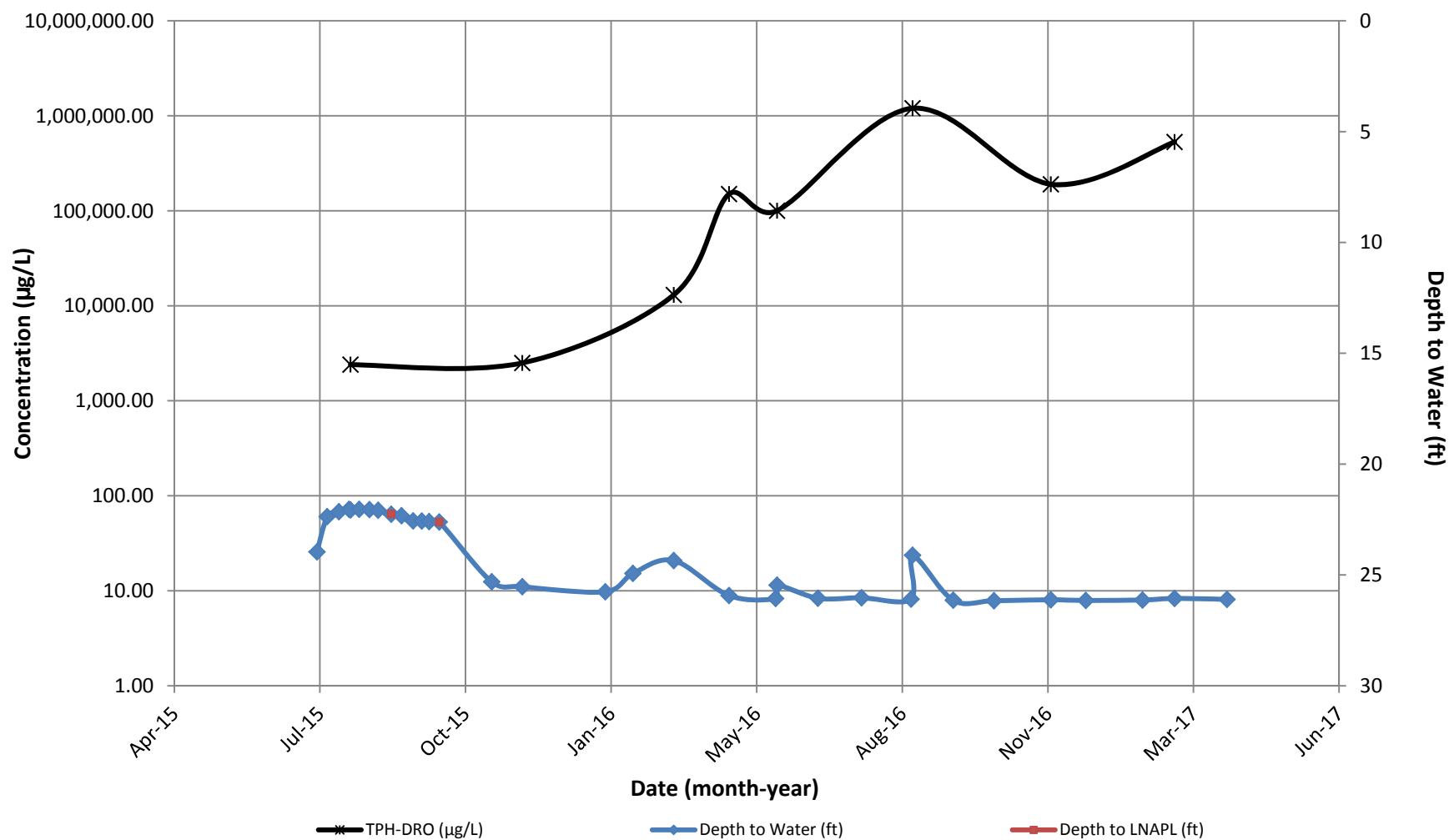


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-123S

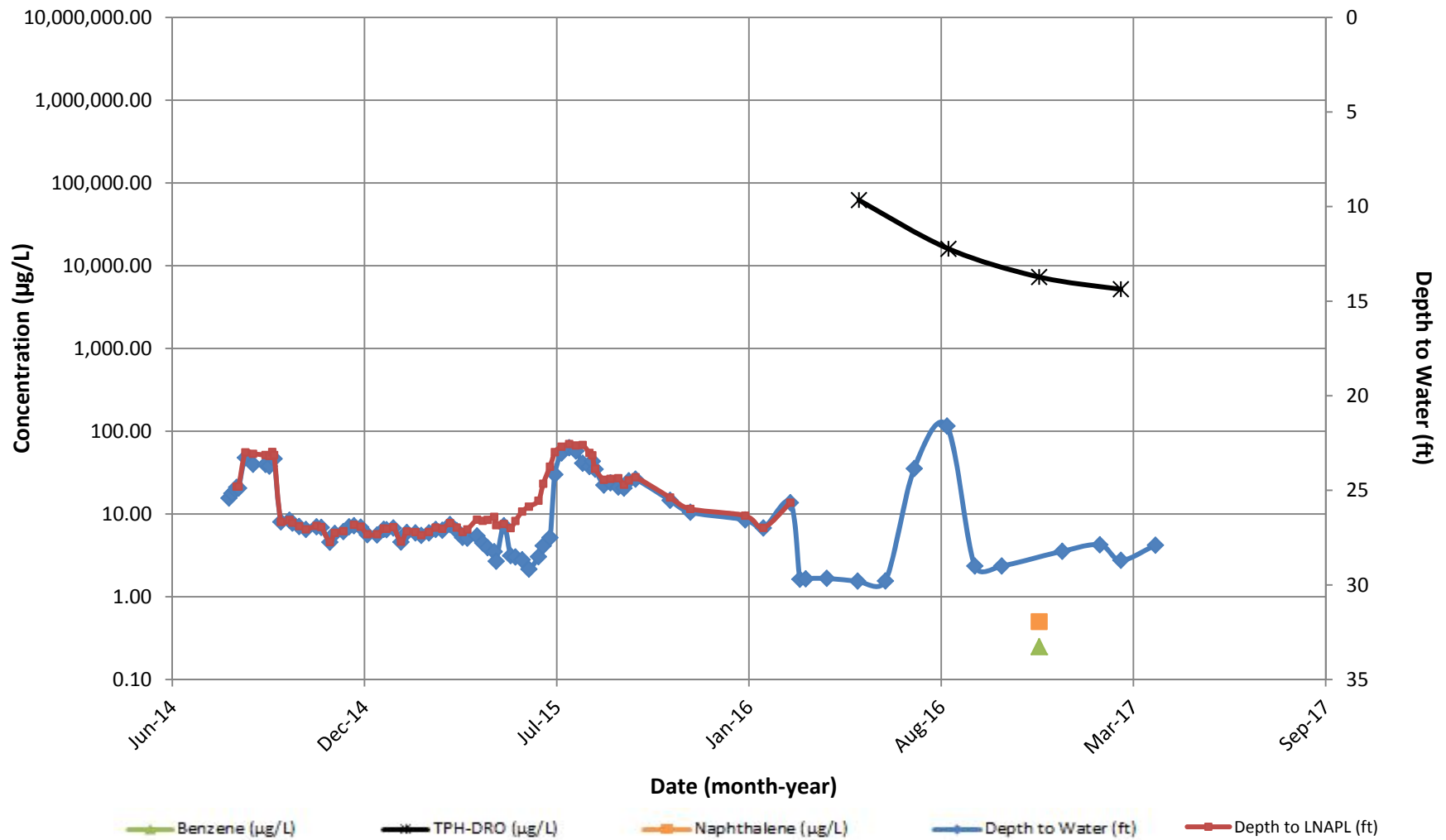


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-05

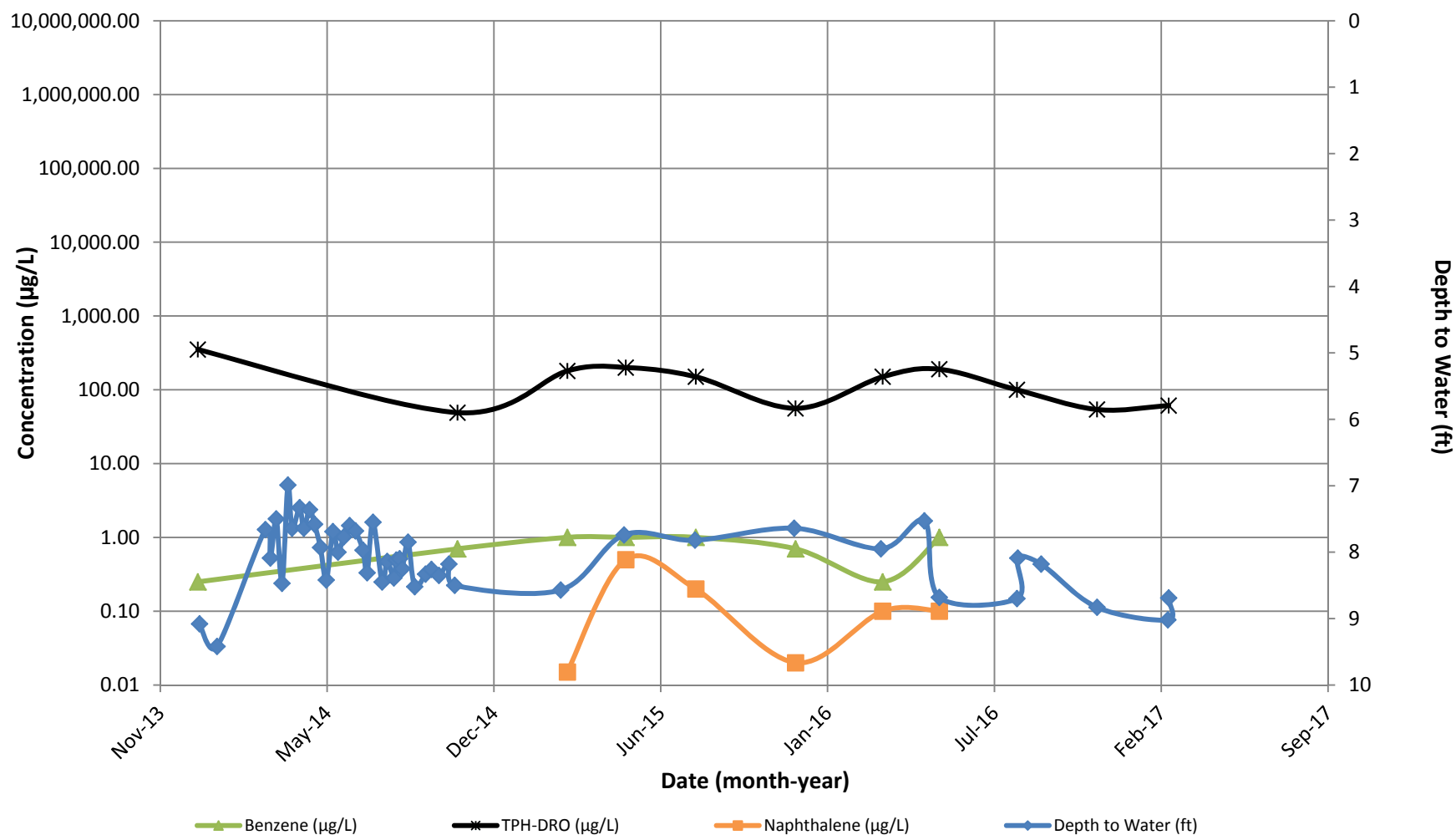


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-03

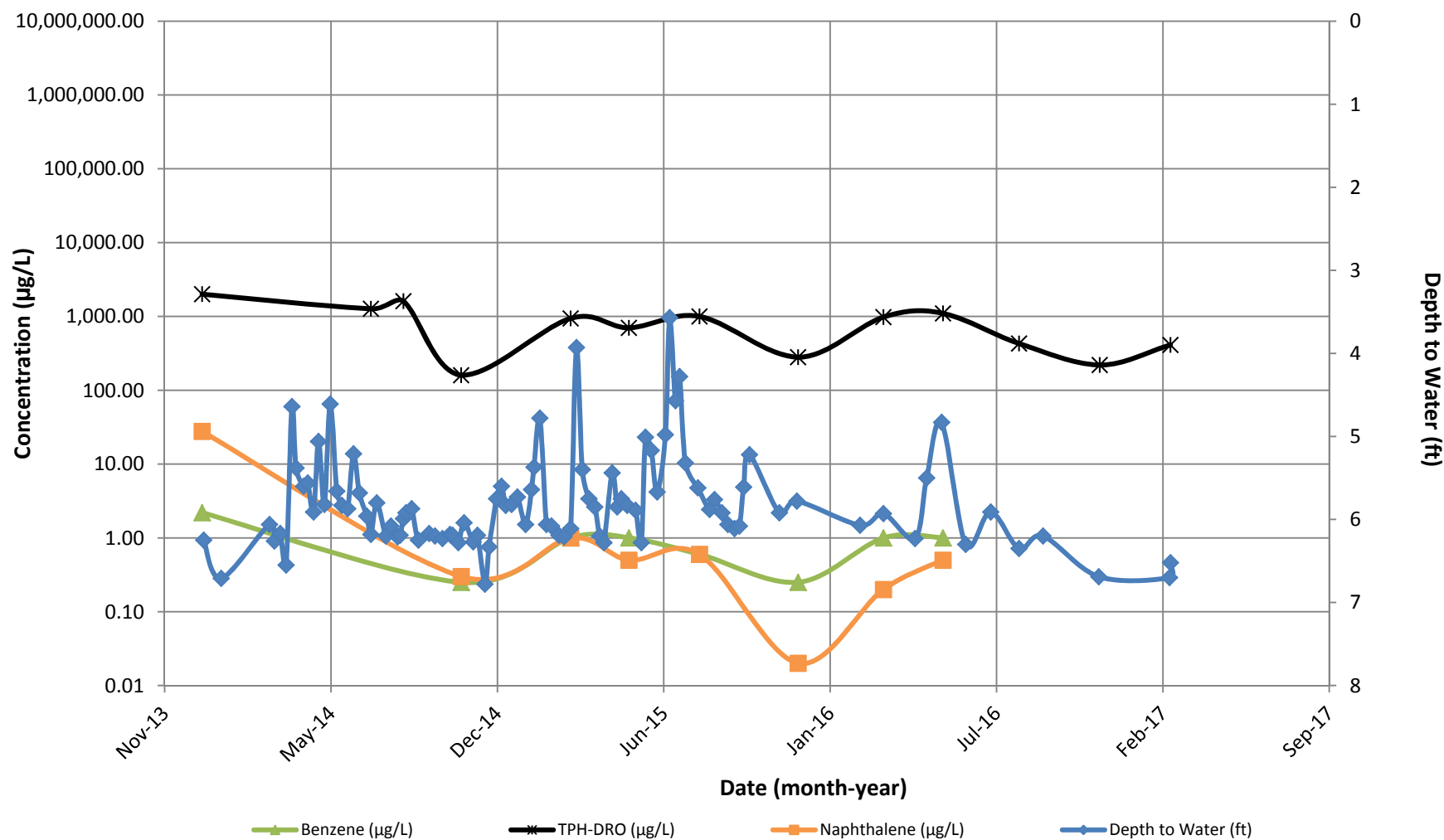


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-04

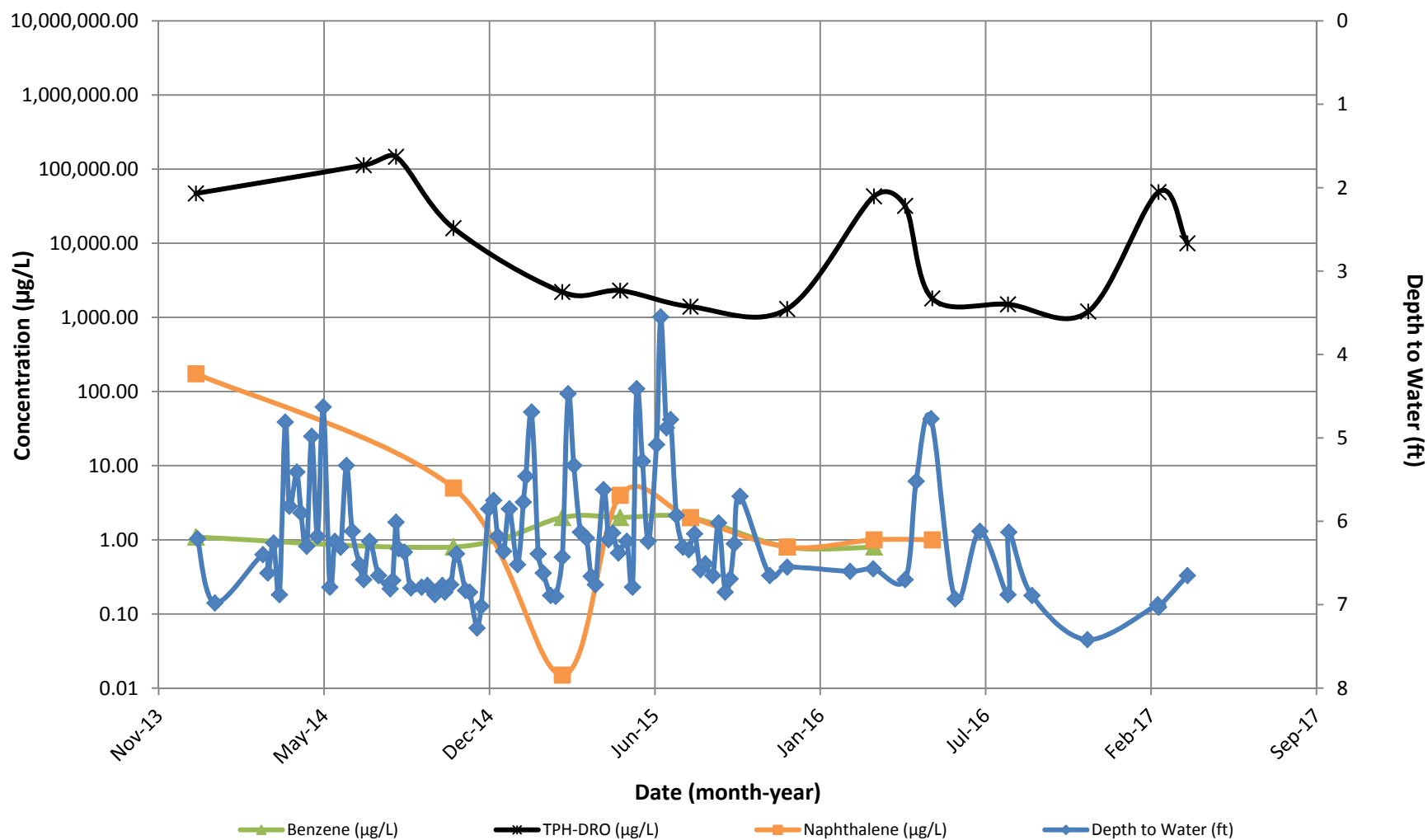


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-06

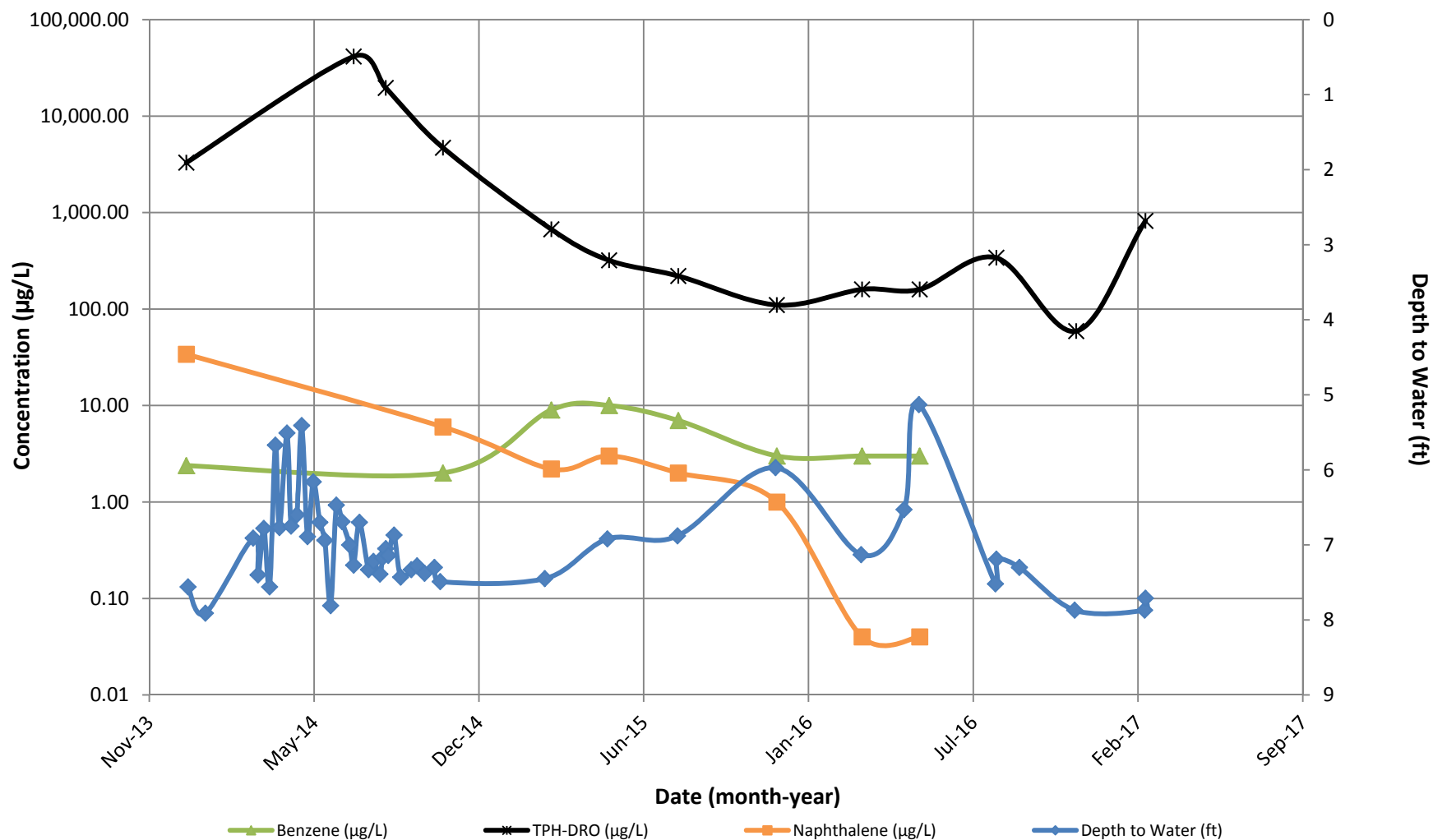


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-07

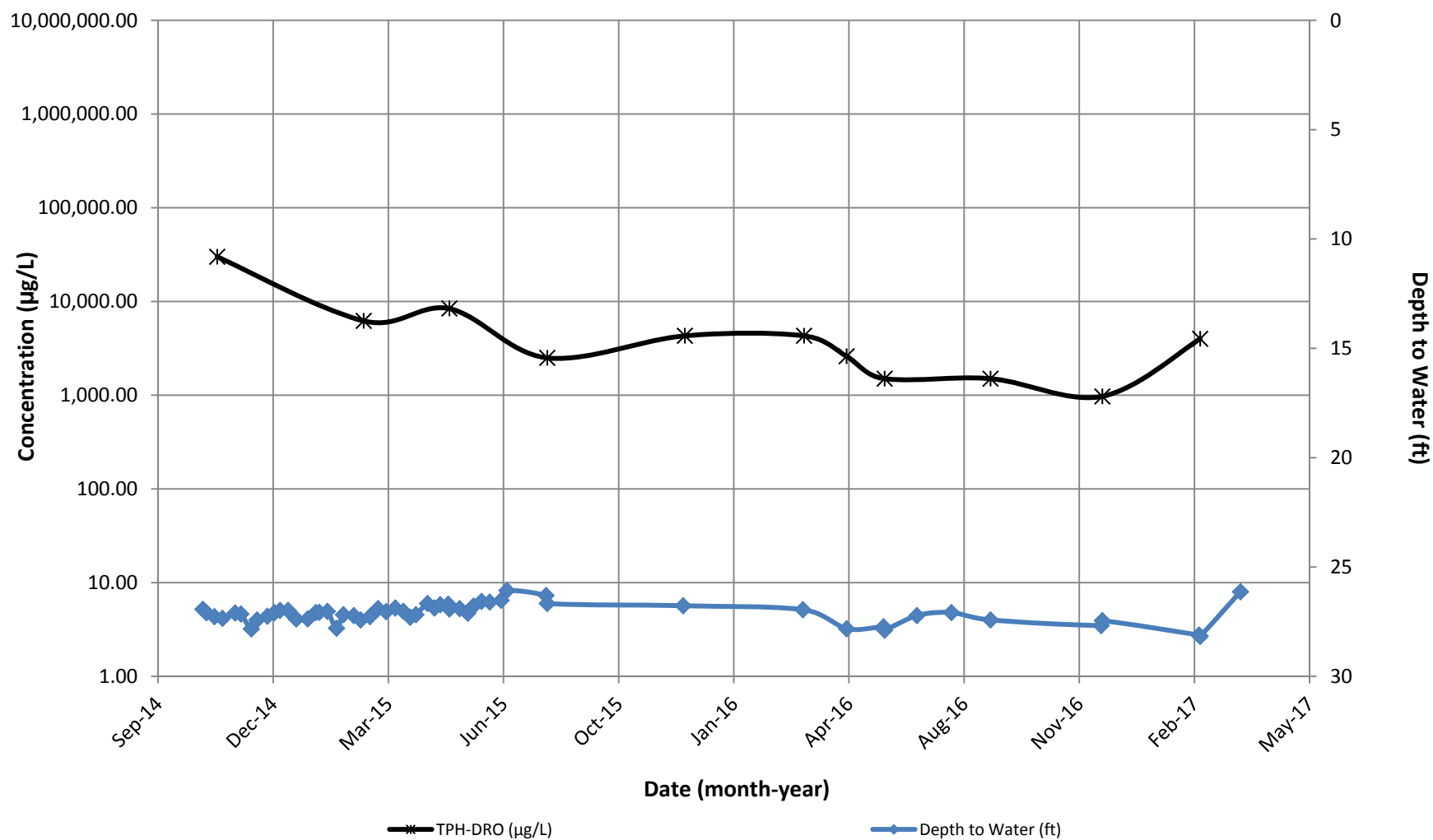


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-1

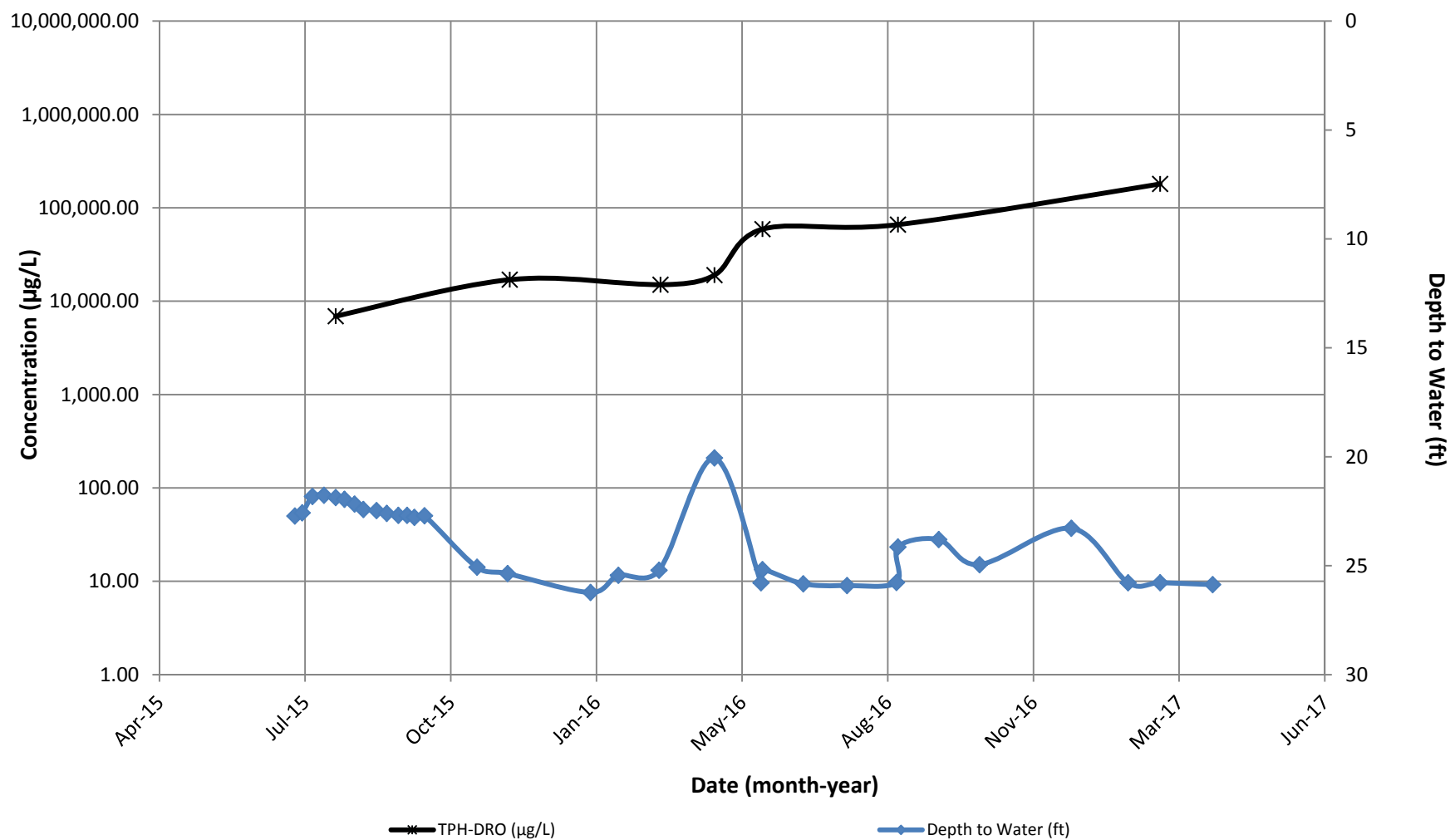


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-05S

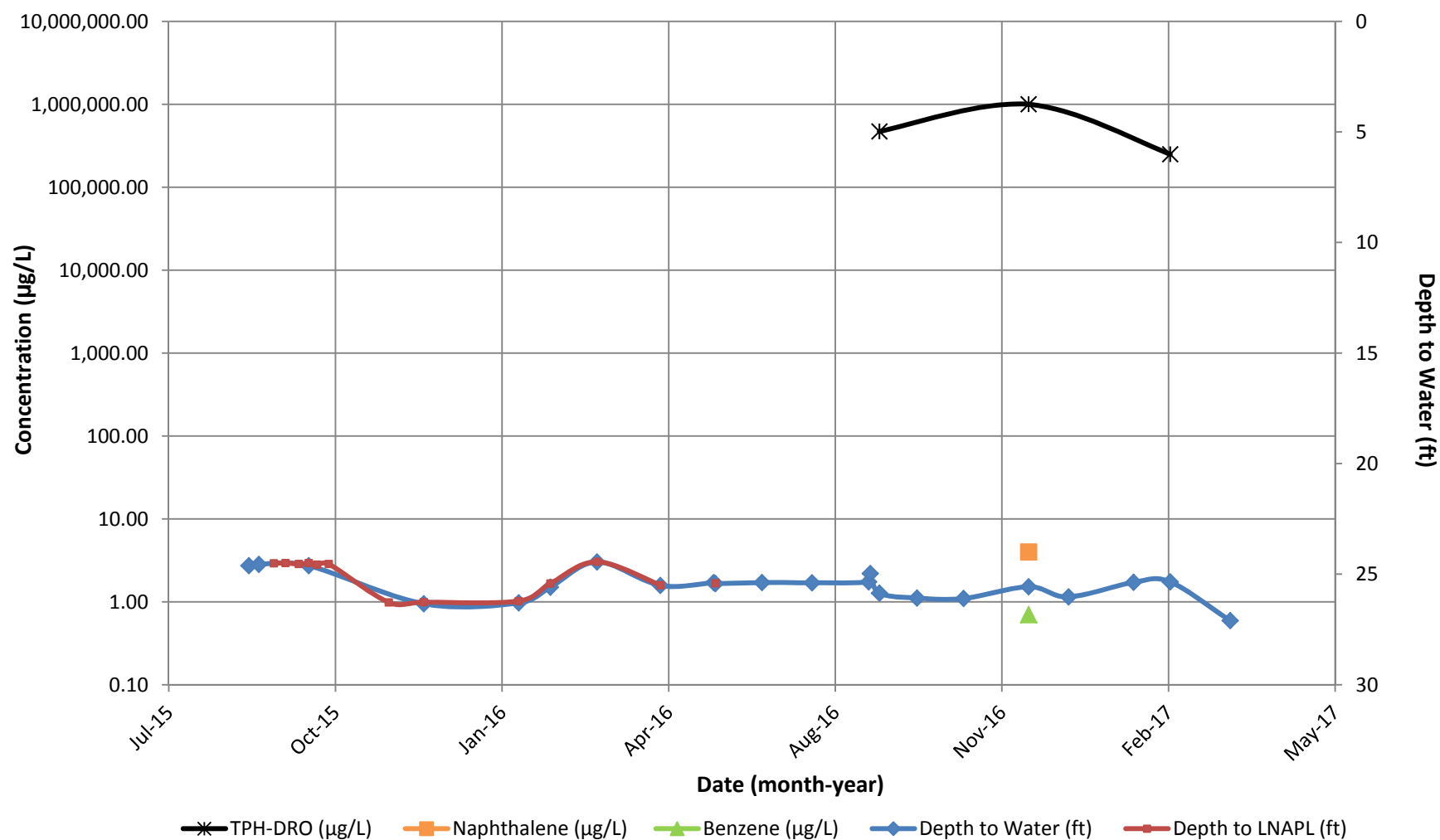


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-25S

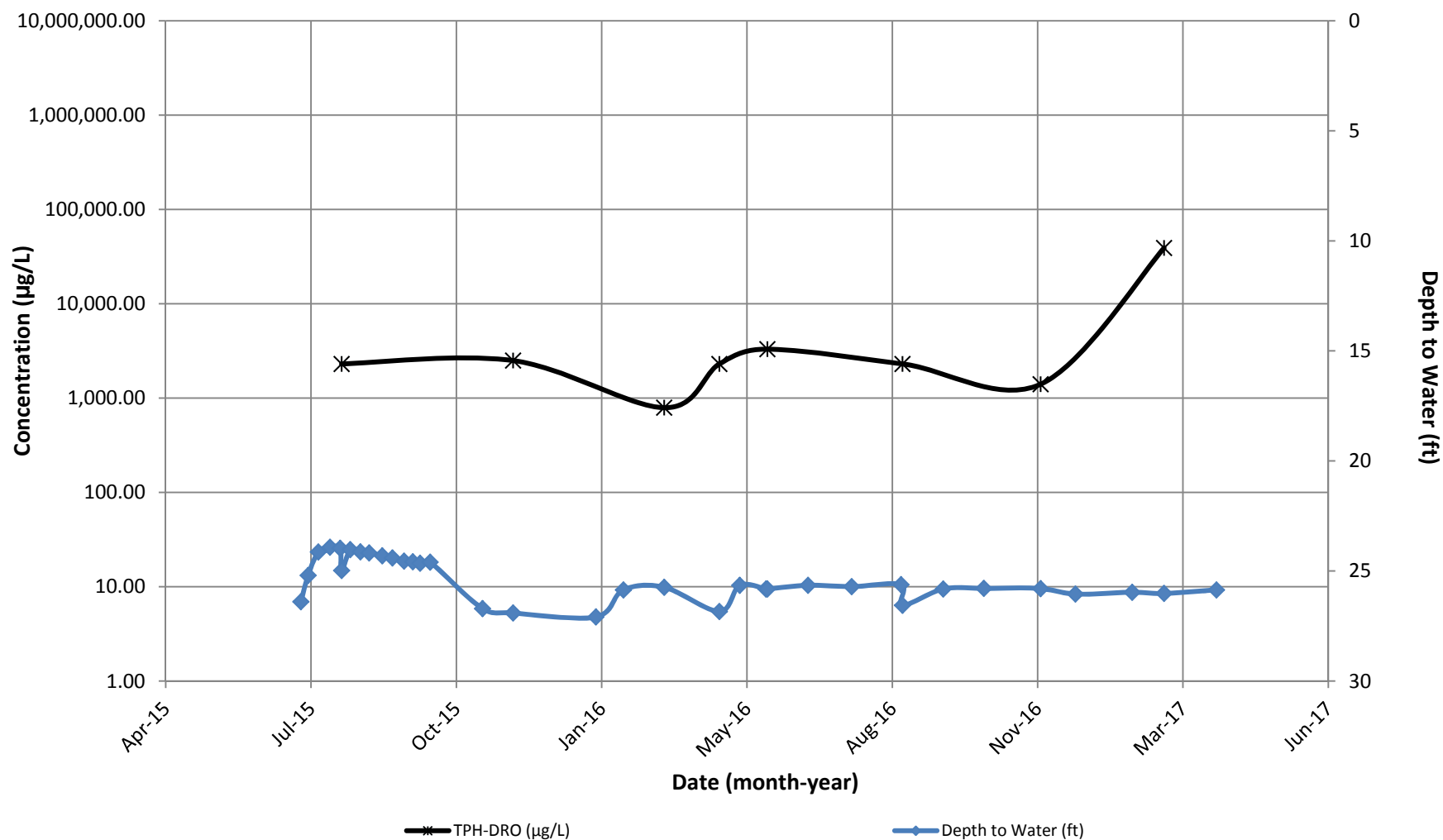


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-28S

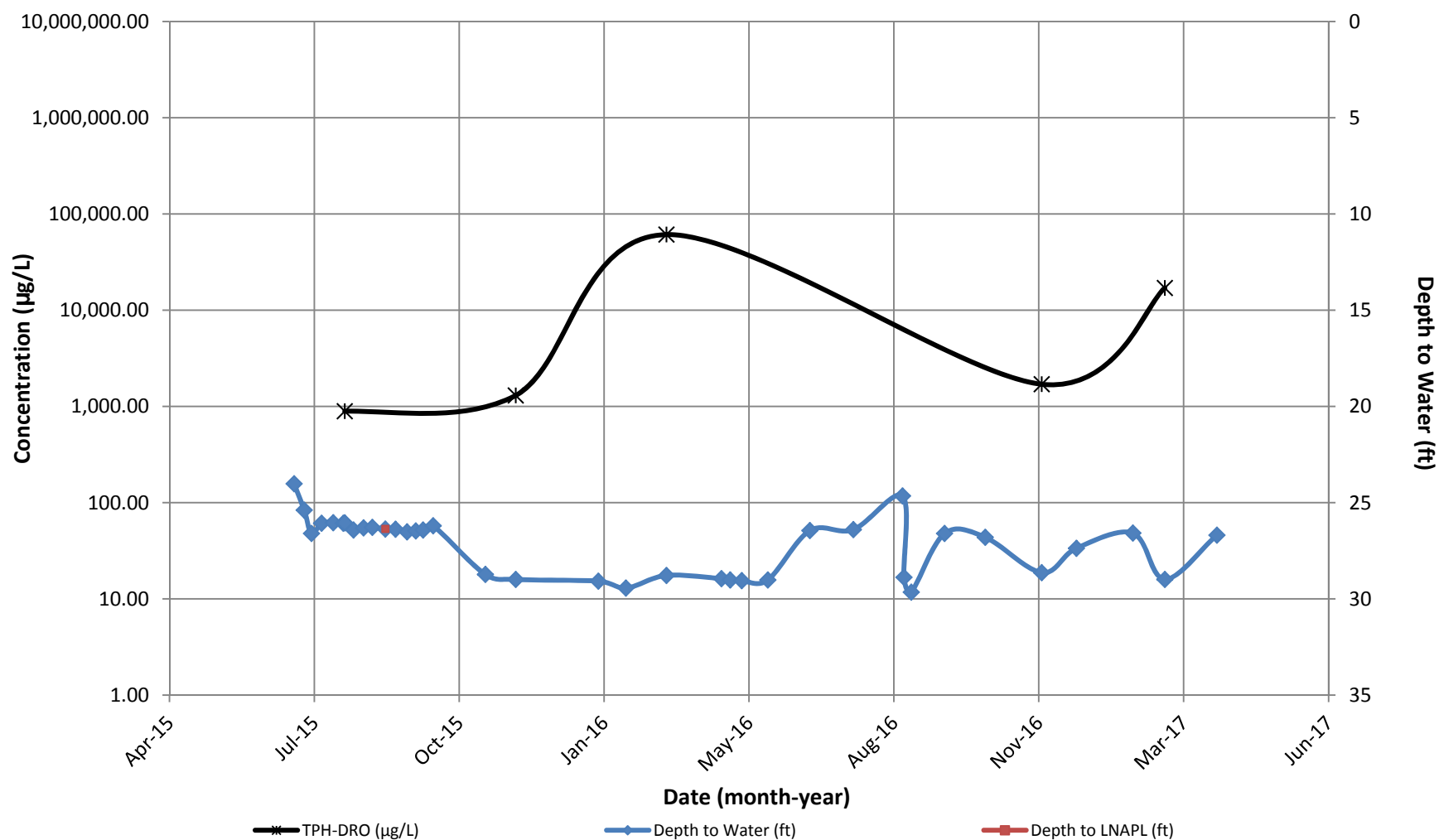


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-30S

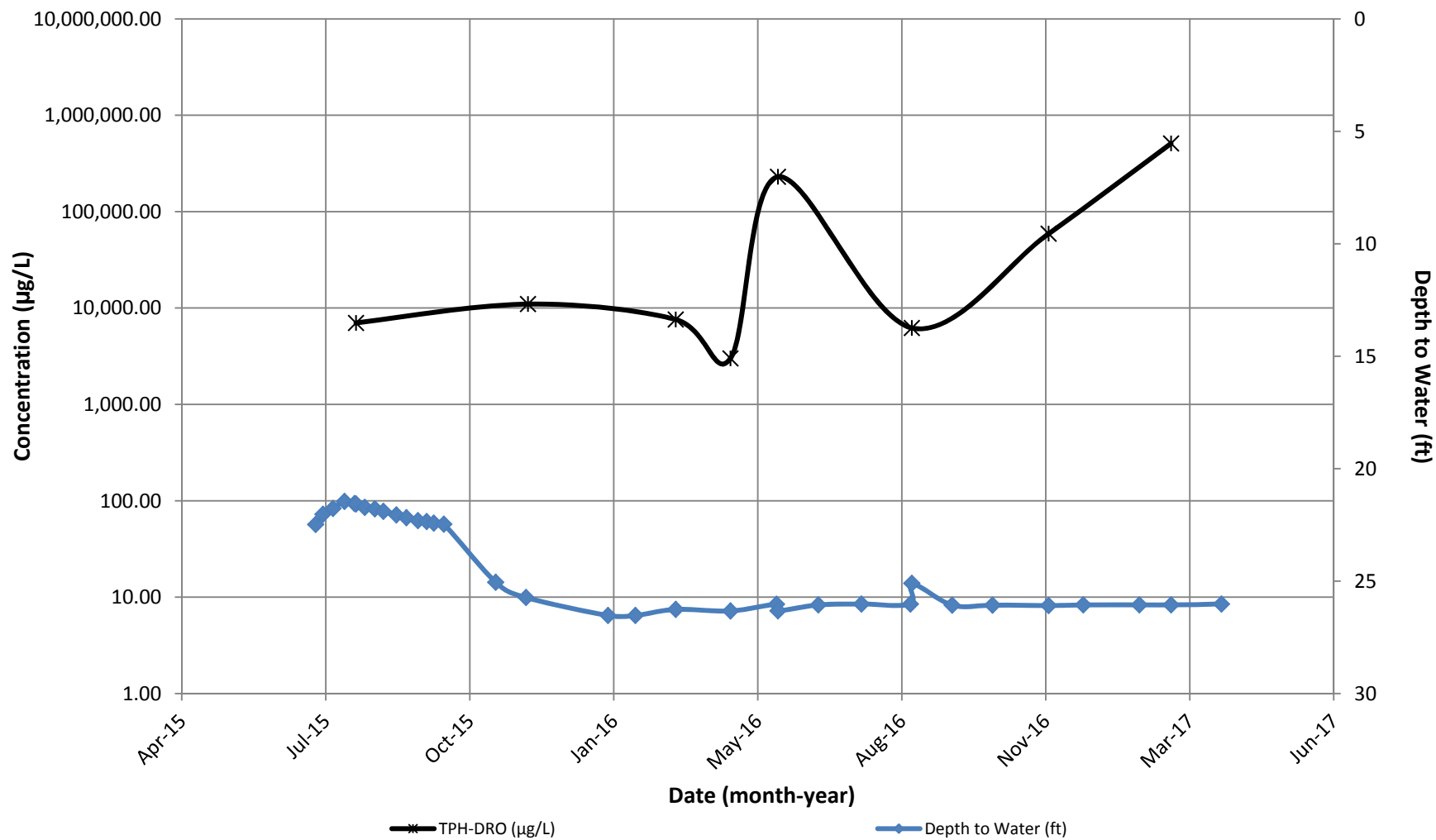


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-116S

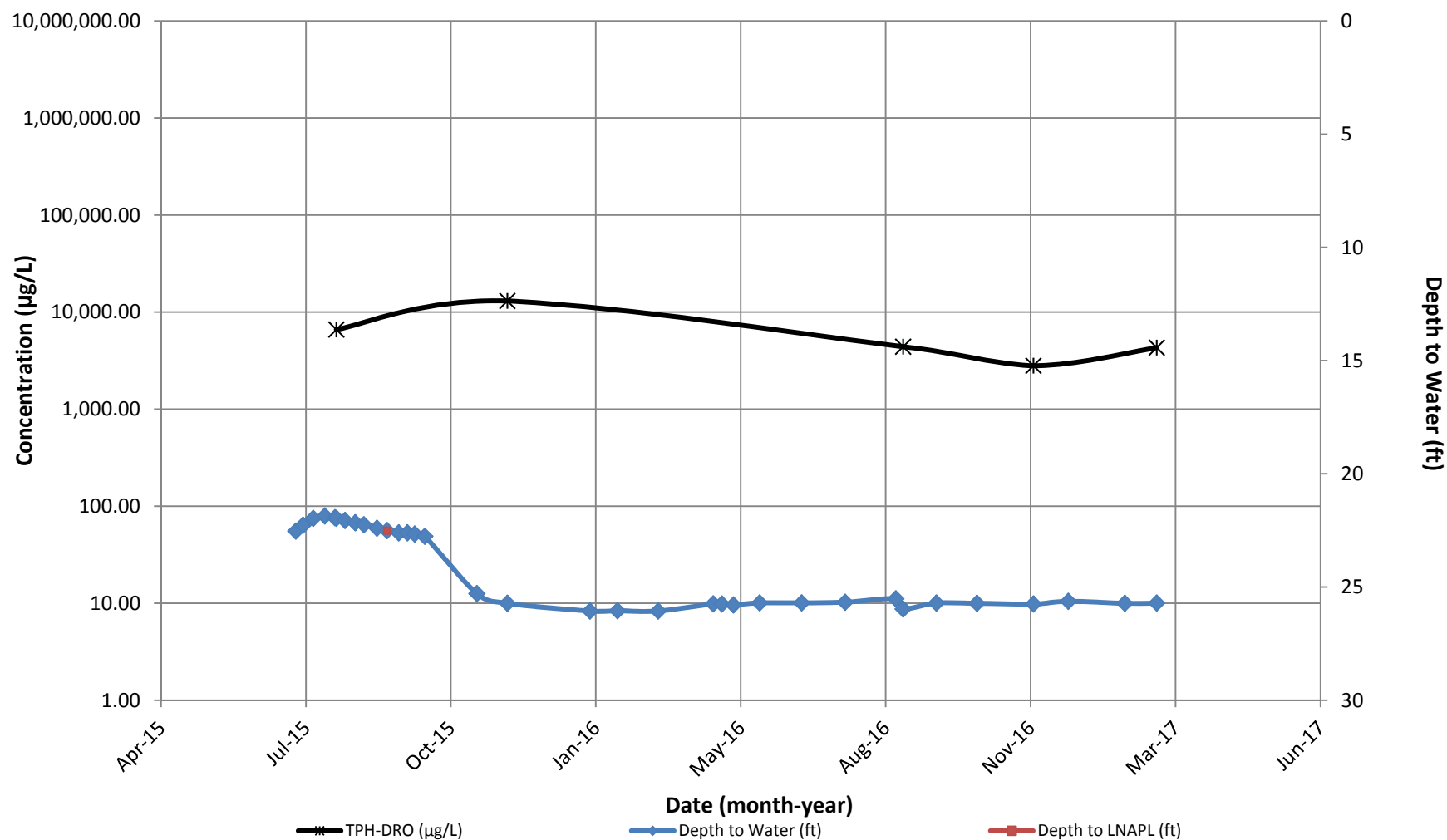


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-117S

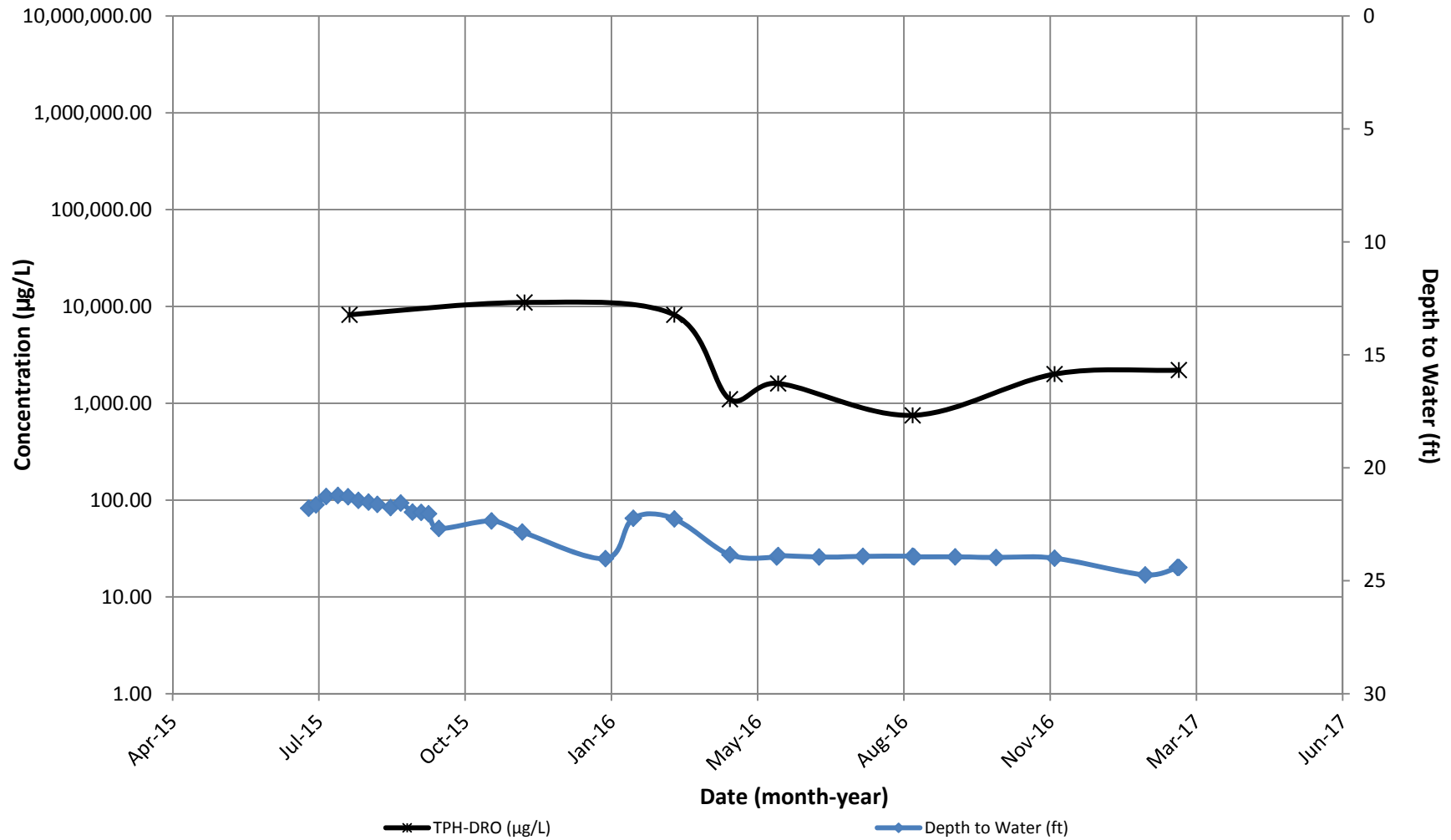


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-118S

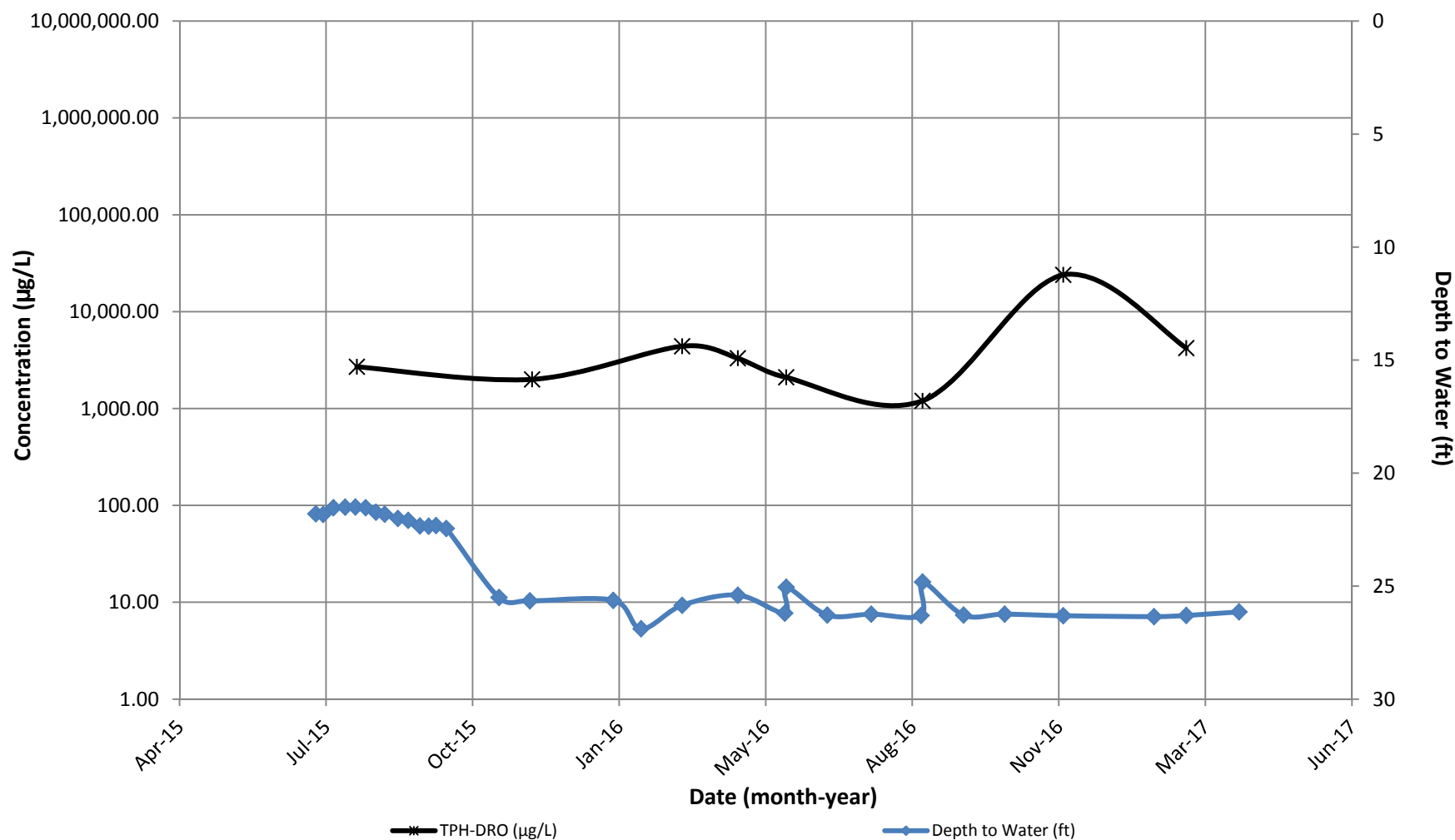


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-119S



Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).



ATTACHMENT C

**LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION –
FEBRUARY 21-22, 2017 & MARCH 29, 2017 GROUNDWATER MONITORING EVENT**

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 06, 2017

Project: NRG PRGSSubmittal Date: 02/22/2017
Group Number: 1768721
PO Number: 0402919-26-206
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample DescriptionMW/RW-51 Grab Groundwater
MW/RW-25 Grab Groundwater
RW-119S Grab Groundwater
RW-05S Grab Groundwater
RW-116S Grab Groundwater
RW-10S Grab Groundwater
RW-28S Grab Groundwater
RW-30S Grab Groundwater
RW-123S Grab Groundwater
MW-51S Grab Groundwater

Lancaster Labs

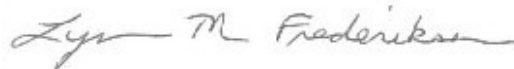
(LL) #8848738
8848739
8848740
8848741
8848742
8848743
8848744
8848745
8848746
8848747

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW/RW-51 Grab Groundwater
NRG PRGS

LL Sample # WW 8848738
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 13:05 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	410	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 18:26	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: MW/RW-25 Grab Groundwater
NRG PRGS

LL Sample # WW 8848739
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 13:10 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	220	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 18:49	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-119S Grab Groundwater
NRG PRGS

LL Sample # WW 8848740
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 13:20 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	4,200	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 19:12	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-05S Grab Groundwater
NRG PRGS

LL Sample # WW 8848741
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 13:30 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	180,000	230	5

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 16:36	Amy Lehr	5
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-116S Grab Groundwater
NRG PRGS

LL Sample # WW 8848742
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 13:35 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	510,000	900	20

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 17:23	Amy Lehr	20
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-10S Grab Groundwater
NRG PRGS

LL Sample # WW 8848743
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 13:45 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	1,200,000	1,100	25

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 18:10	Amy Lehr	25
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-28S Grab Groundwater
NRG PRGS

LL Sample # WW 8848744
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 13:55 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG07

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	39,000	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 20:22	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-30S Grab Groundwater
NRG PRGS

LL Sample # WW 8848745
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 14:30 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG08

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	17,000	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 20:45	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-123S Grab Groundwater
NRG PRGS

LL Sample # WW 8848746
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 14:10 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG09

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	530,000	900	20

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 17:46	Amy Lehr	20
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: MW-51S Grab Groundwater
NRG PRGS

LL Sample # WW 8848747
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 14:20 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles					
10945	Benzene	SW-846 8260B 71-43-2	ug/l 9	ug/l 0.5	1
10945	Ethylbenzene	100-41-4	12	0.5	1
10945	Naphthalene	91-20-3	1 J	1	1
10945	Toluene	108-88-3	N.D.	0.5	1
10945	Xylene (Total)	1330-20-7	3	0.5	1
GC Miscellaneous					
07105	Methane	RSKSOP-175 modified 74-82-8	ug/l 2,400	ug/l 60	20
GC Petroleum Hydrocarbons					
12858	DRO C10-C28	SW-846 8015B n.a.	ug/l 68,000	ug/l 230	5
Metals					
07058	Manganese	SW-846 6010B 7439-96-5	mg/l 4.08	mg/l 0.0018	1
Wet Chemistry					
00228	Sulfate	EPA 300.0 14808-79-8	mg/l 483	mg/l 60.0	200
00220	Nitrate Nitrogen	EPA 353.2 14797-55-8	mg/l N.D.	mg/l 0.40	10
00219	Nitrite Nitrogen	14797-65-0	0.18 J	0.15	10
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997 n.a.	mg/l as CaCO3 477	mg/l as CaCO3 1.7	1
08344	Ferrous Iron	SM 3500-Fe B 1997 n.a.	mg/l 2.4	mg/l 0.075	5

Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	BTEX,Naph	SW-846 8260B	1	Z170591AA	02/28/2017 10:02	Anita M Dale	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	Z170591AA	02/28/2017 10:02	Anita M Dale	1

Sample Description: MW-51S Grab Groundwater
NRG PRGS

LL Sample # WW 8848747
LL Group # 1768721
Account # 08390

Project Name: NRG PRGS

Collected: 02/21/2017 14:20 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/22/2017 16:39

Exton PA 19341

Reported: 03/06/2017 08:35

NRG10

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170540004A	02/24/2017 21:01	Johanna C Kennedy	20
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 16:59	Amy Lehr	5
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170551848001	02/24/2017 23:45	Matthew R Machtinger	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848001	02/24/2017 16:20	JoElla L Rice	1
00228	Sulfate	EPA 300.0	1	17055120131A	02/24/2017 15:26	Hallie A Burnett	200
00220	Nitrate Nitrogen	EPA 353.2	1	17054106109A	02/23/2017 07:06	Joseph E McKenzie	10
00219	Nitrite Nitrogen	EPA 353.2	1	17054105109A	02/23/2017 07:06	Joseph E McKenzie	10
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17055003103A	02/25/2017 04:43	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	5

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 08:35

Group Number: 1768721

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: Z170591AA	Sample number(s): 8848747	
Benzene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Naphthalene	N.D.	1
Toluene	N.D.	0.5
Xylene (Total)	N.D.	0.5
Batch number: 170540004A	Sample number(s): 8848747	
Methane	N.D.	3.0
Batch number: 170590008A	Sample number(s): 8848738-8848747	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 170551848001	Sample number(s): 8848747	
Manganese	N.D.	0.0018
Batch number: 17054105109A	Sample number(s): 8848747	
Nitrite Nitrogen	N.D.	0.015
Batch number: 17054106109A	Sample number(s): 8848747	
Nitrate Nitrogen	N.D.	0.040
Batch number: 17055120131A	Sample number(s): 8848747	
Sulfate	N.D.	0.30
Batch number: 17058834401A	Sample number(s): 8848747	
Ferrous Iron	N.D.	0.015
	mg/l as CaCO3	mg/l as CaCO3
Batch number: 17055003103A	Sample number(s): 8848747	
Total Alkalinity to pH 4.5	2.1 J	1.7

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: Z170591AA	Sample number(s): 8848747								
Benzene	20	21.17			106		78-120		

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 08:35

Group Number: 1768721

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Ethylbenzene	20	19.8			99		78-120		
Naphthalene	20	14.59			73		59-120		
Toluene	20	21.23			106		80-120		
Xylene (Total)	60	61.69			103		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170540004A	Sample number(s): 8848747								
Methane	59.8	61.39	59.8	61	103	102	85-115	1	20
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170590008A	Sample number(s): 8848738-8848747								
DRO C10-C28	2660	2166.79	2650	2005.72	81	76	69-115	8	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 170551848001	Sample number(s): 8848747								
Manganese	0.500	0.510			102		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17054105109A	Sample number(s): 8848747								
Nitrite Nitrogen	0.700	0.706			101		90-110		
Batch number: 17054106109A	Sample number(s): 8848747								
Nitrate Nitrogen	2.50	2.46			98		90-110		
Batch number: 17055120131A	Sample number(s): 8848747								
Sulfate	7.50	7.31			97		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17058834401A	Sample number(s): 8848747								
Ferrous Iron	0.400	0.401			100		93-105		
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 17055003103A	Sample number(s): 8848747								
Total Alkalinity to pH 4.5	188	180.15			96		84-110		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: Z170591AA	Sample number(s): 8848747 UNSPK: P850981									

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 08:35

Group Number: 1768721

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Benzene	N.D.	20	21.45	20	22.71	107	114	78-120	6	30
Ethylbenzene	N.D.	20	19.94	20	20.94	100	105	78-120	5	30
Naphthalene	N.D.	20	15.16	20	15.52	76	78	59-120	2	30
Toluene	N.D.	20	20.82	20	21.99	104	110	80-120	5	30
Xylene (Total)	12.17	60	74.81	60	77.5	104	109	80-120	4	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170551848001 Manganese	Sample number(s): 8848747 UNSPK: P850112									
	0.220	0.500	0.678	0.500	0.677	92	91	75-125	0	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17054105109A Nitrite Nitrogen	Sample number(s): 8848747 UNSPK: P848521									
	0.0860	1.00	1.13			105		90-110		
Batch number: 17054106109A Nitrate Nitrogen	Sample number(s): 8848747 UNSPK: P848521									
	6.86	5.00	12.91			121*		90-110		
Batch number: 17055120131A Sulfate	Sample number(s): 8848747 UNSPK: P848398									
	7.49	25	30.31			91		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8848747 UNSPK: P850240									
	56.68	40	86.81	40	89.11	75*	81*	93-105	3	6
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 17055003103A Total Alkalinity to pH 4.5	Sample number(s): 8848747 UNSPK: P850370									
	154.44	188	319.06			88		10-148		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170551848001 Manganese	Sample number(s): 8848747 BKG: P850112			
	0.220	0.211	4	20
	mg/l	mg/l		
Batch number: 17054105109A Nitrite Nitrogen	Sample number(s): 8848747 BKG: P848521			
	0.0860	0.0758	13 (1)	20

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 08:35

Group Number: 1768721

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 17054106109A Nitrate Nitrogen	Sample number(s): 8848747 BKG: P848521 6.86	6.65	3	10
Batch number: 17055120131A Sulfate	Sample number(s): 8848747 BKG: P848398 7.49	7.47	0 (1)	15
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8848747 BKG: P850240 56.68	56.88	0	5
Batch number: 17055003103A Total Alkalinity to pH 4.5	Sample number(s): 8848747 BKG: P850370 154.44	158.83	3	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: BTEX,Naph
Batch number: Z170591AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8848747	100	99	99	103
Blank	99	99	101	97
LCS	96	101	101	101
MS	99	102	101	102
MSD	98	102	101	101
Limits:	80-116	77-113	80-113	78-113

Analysis Name: Methane
Batch number: 170540004A
Propene

8848747	83
Blank	108
LCS	108
LCSD	108
Limits:	44-123

Analysis Name: DRO micro-ext 8015B
Batch number: 170590008A

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control SummaryClient Name: GES, Inc.
Reported: 03/06/2017 08:35

Group Number: 1768721

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: DRO micro-ext 8015B

Batch number: 170590008A

	Orthoterphenyl
8848738	104
8848739	104
8848740	108
8848741	195*
8848742	358*
8848743	835*
8848744	45
8848745	145
8848746	374*
8848747	240*
Blank	96
LCS	104
LCSD	102
Limits:	42-160

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 8390 Group # 1768721 Sample # 8848738-47

Client: Groundwater & Env. Services, Inc.				Matrix		Analyses Requested												For Lab Use Only							
Project Name/#: NRG PRGS		Site ID #: NRG PRGS		<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface		Preservation Codes												SF #:							
Project Manager: Ashley Bell		P.O. #: 0402919-26-206		<input type="checkbox"/> Potable <input type="checkbox"/> NPDES														SCR #:							
Sampler: <u>Brendan Haffey</u>		Project #: 0402919-26-206		<input type="checkbox"/> Water <input type="checkbox"/> Other:																					
Phone #: 800-220-3606 x 3704		Organization #: 0404																							
State where sample(s) were collected: 1400 North Royal St., Alexandria, VA																									
Sample Identification		Collection		Grab	Composite	Soil	Water	Other	Total # of Containers	TPH-DRO C10-C28 (SW-846 8015B)												Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other			
		Date	Time							BTEX, Naphthalene (SW-846 8260B) Alkalinity (SM 2320B) Nitrate NO ₃ -1 & Nitrite NO ₂ - (EPA 353.2) Manganese Mn2+ (EPA 8010B) Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997) Sulfate SO ₄ 2- (EPA 300.0) Methane (RSKSOP-175 modified)															
MW/BW-51		2/21/17	1305	X			X		2	X															Remarks
MW/BW-25			1310							X															Send invoice to:
BW-114s			1320							X															ges-invoices@
RW-05s			1330							X															gesonline.com &
RW-116s			1335							X															include PO, Proj.,
RW-10s			1345							X															& Org. #s
RW-28s			1355							X															
BW-30s			1430							X															
RW-123s			1410							X															
MW-51s		✓	1420	✓			✓		11	X	X	X	X	X	X	X	X								
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Relinquished by: <u>[Signature]</u>				Date		Time		Received by: <u>Denise Woodring</u>				Date		Time							
(Rush TAT is subject to laboratory approval and surcharges.)								2/21/17		1630						2/21/17		1630							
Date results are needed:				Relinquished by: <u>Denise Woodring</u>				Date		Time		Received by: <u>[Signature]</u>				Date		Time							
Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>								2-22-17		1352						2-22-17		13:52							
E-mail Address: <u>mdlabs@gesonline.com & ges@equisonline.com</u>				Relinquished by: <u>[Signature]</u>				Date		Time		Received by:				Date		Time							
Phone:								2-22-17		1639															
Data Package Options (please check if required)				Relinquished by:				Date		Time		Received by:				Date		Time							
Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>																									
Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>																									
Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>																									
NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B				Relinquished by Commercial Carrier:				Date		Time		Received by: <u>[Signature]</u>				Date		Time							
																2-22-17		1639							
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: <u>GES EQEDD</u>				UPS _____ FedEx _____ Other _____																					
EQEDD Name: NRG PRGS.Lab report # .25800.EQEDD.zip																		Temperature upon receipt <u>1.0</u> °C							

Client: GES**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>02/22/2017 16:39</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Cory Jeremiah (10469) at 17:15 on 02/22/2017***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT121	1.0	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 06, 2017

Project: NRG PRGS

Submittal Date: 02/23/2017
Group Number: 1769257
PO Number: 0402919-26-206
Release Number: ORG # 0404
State of Sample Origin: VA

Client Sample Description

MW-72 Grab Groundwater
MW-27 Grab Groundwater

Lancaster Labs

(LL) #

8851110

8851111

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MD

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW-72 Grab Groundwater
NRG PRGS

LL Sample # WW 8851110
LL Group # 1769257
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 10:03

01NRG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	150	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	1.88	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	372	15.0	50
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	0.42	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	2.8 J	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	0.017 J	0.015	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170550006A	02/27/2017 19:00	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 21:32	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170551848002	02/26/2017 21:51	Matthew R Machtinger	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848002	02/26/2017 05:26	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 04:02	Zachary W Enck	50
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:05	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:34	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012104A	02/28/2017 03:16	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	1

Sample Description: MW-27 Grab Groundwater
NRG PRGS

LL Sample # WW 8851111
LL Group # 1769257
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:50 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 10:03

02NRG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	940	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	5.51	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	322	15.0	50
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	15.4	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	0.53	0.030	2

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170550006A	02/24/2017 18:38	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 22:41	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170551848002	02/26/2017 23:18	Matthew R Machtinger	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848002	02/26/2017 05:26	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 04:16	Zachary W Enck	50
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:10	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:33	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012104A	02/28/2017 01:39	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	2

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 10:03

Group Number: 1769257

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 170550006A	Sample number(s): 8851110-8851111	
Methane	N.D.	3.0
Batch number: 170590008A	Sample number(s): 8851110-8851111	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 170551848002	Sample number(s): 8851110-8851111	
Manganese	N.D.	0.0018
Batch number: 17054105105A	Sample number(s): 8851110-8851111	
Nitrite Nitrogen	N.D.	0.015
Batch number: 17054249601B	Sample number(s): 8851110-8851111	
Sulfate	N.D.	0.30
Batch number: 17060106102B	Sample number(s): 8851110-8851111	
Nitrate Nitrogen	N.D.	0.040
Batch number: 17058834401A	Sample number(s): 8851110-8851111	
Ferrous Iron	N.D.	0.015
	mg/l as CaCO3	mg/l as CaCO3
Batch number: 17058012104A	Sample number(s): 8851110-8851111	
Total Alkalinity to pH 4.5	1.9 J	1.7

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170550006A	Sample number(s): 8851110-8851111								
Methane	59.8	59.46			99		85-115		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170590008A	Sample number(s): 8851110-8851111								
DRO C10-C28	2660	2166.79	2650	2005.72	81	76	69-115	8	20
	mg/l	mg/l	mg/l	mg/l					

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 10:03

Group Number: 1769257

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 170551848002 Manganese	Sample number(s): 8851110-8851111 0.500 0.504				101		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851110-8851111 0.700 0.714				102		90-110		
Batch number: 17054249601B Sulfate	Sample number(s): 8851110-8851111 7.50 7.37				98		90-110		
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851110-8851111 2.50 2.49				100		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851110-8851111 0.400 0.401				100		93-105		
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851110-8851111 188 179.34				95		84-110		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 170550006A Methane	Sample number(s): 8851110-8851111 UNSPK: P851863 N.D. 59.8 62.78 59.8 62.12					105	104	73-125	1	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170551848002 Manganese	Sample number(s): 8851110-8851111 UNSPK: 8851110 1.88 0.500 2.46 0.500 2.38					115	99	75-125	3	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851110-8851111 UNSPK: P851127 N.D. 0.200 0.219					109		90-110		
Batch number: 17054249601B Sulfate	Sample number(s): 8851110-8851111 UNSPK: P851039 N.D. 25 27.7					111*		90-110		
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851110-8851111 UNSPK: 8851110 0.416 1.00 1.55					113*		90-110		

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 10:03

Group Number: 1769257

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851110-8851111 56.68	UNSPK: P850240 40	86.81	40	89.11	75*	81*	93-105	3	6
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851110-8851111 97.94	UNSPK: P853439 188	227.54	188	240.44	69	76	10-148	6*	5

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170551848002 Manganese	Sample number(s): 8851110-8851111 1.88	BKG: 8851110 1.91	2	20
	mg/l	mg/l		
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851110-8851111 N.D.	BKG: P851127 N.D.	0 (1)	20
Batch number: 17054249601B Sulfate	Sample number(s): 8851110-8851111 N.D.	BKG: P851039 1.50	200* (1)	15
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851110-8851111 0.416	BKG: 8851110 0.414	0 (1)	10
	mg/l	mg/l		
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851110-8851111 56.68	BKG: P850240 56.88	0	5
	mg/l as CaCO3	mg/l as CaCO3		
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851110-8851111 97.94	BKG: P853439 100.59	3	5

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 10:03

Group Number: 1769257

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Methane
Batch number: 170550006A

	Propene
8851110	97
8851111	93
Blank	97
LCS	99
MS	96
MSD	95

Limits: 44-123

Analysis Name: DRO micro-ext 8015B
Batch number: 170590008A

	Orthoterphenyl
8851110	102
8851111	102
Blank	96
LCS	104
LCSD	102

Limits: 42-160

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Environmental Analysis Request/Chain of Custody

Acct. # 8390 Group # 1769257 Sample # 88S1110 -11

[illegible]

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>02/23/2017 15:30</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 16:32 on 02/23/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	0.9	DT	Wet	Y	Bagged	N
2	DT146	1.2	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 06, 2017

Project: NRG PRGSSubmittal Date: 02/23/2017
Group Number: 1769258
PO Number: 0402919-26-206
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample Description

	Lancaster Labs (LL) #
TW-03 Grab Groundwater	8851112
TW-04 Grab Groundwater	8851113
TW-05 Grab Groundwater	8851114
TW-06 Grab Groundwater	8851115
TW-07 Grab Groundwater	8851116
TW-14 Grab Groundwater	8851117
MW-106 Grab Groundwater	8851118
RW-117S Grab Groundwater	8851119
RW-25S Grab Groundwater	8851120

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: TW-03 Grab Groundwater
NRG PRGS

LL Sample # WW 8851112
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 10:00 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	75	3.0	1
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	61 J	45	1
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	5.46	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	255	15.0	50
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	0.047 J	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	10.5	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	37.9	0.75	50

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170550006A	02/24/2017 18:54	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 23:05	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170551848002	02/26/2017 23:21	Matthew R Machtinger	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848002	02/26/2017 05:26	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 04:30	Zachary W Enck	50
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:12	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:32	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012106A	02/28/2017 09:32	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	50

Sample Description: TW-04 Grab Groundwater
NRG PRGS

LL Sample # WW 8851113
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 10:10 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	410	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 23:28	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: TW-05 Grab Groundwater
NRG PRGS

LL Sample # WW 8851114
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 10:20 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	2,100	30	10
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	2,800	45	1
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	10.9	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	631	60.0	200
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	0.084	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	73.4	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	151	3.0	200

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170550006A	02/27/2017 22:56	Johanna C Kennedy	10
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/01/2017 23:51	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170581848001	03/01/2017 05:27	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848003	02/26/2017 05:39	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	2	170581848001	02/28/2017 05:35	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 05:13	Zachary W Enck	200
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:14	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:27	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012104B	02/28/2017 01:16	Brandon P Costik	1

Sample Description: TW-05 Grab Groundwater
NRG PRGS

LL Sample # WW 8851114
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 10:20 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-05

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	200

Sample Description: TW-06 Grab Groundwater
NRG PRGS

LL Sample # WW 8851115
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 10:30 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	630	15	5
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	49,000	45	1
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	7.46	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	794	60.0	200
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	0.059	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	N.D.	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	121	3.0	200

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170550006A	02/27/2017 23:13	Johanna C Kennedy	5
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 00:15	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170581848001	03/01/2017 05:30	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848003	02/26/2017 05:39	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	2	170581848001	02/28/2017 05:35	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 05:27	Zachary W Enck	200
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:16	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:25	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012106A	02/28/2017 09:37	Brandon P Costik	1

Sample Description: TW-06 Grab Groundwater
NRG PRGS

LL Sample # WW 8851115
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 10:30 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-06

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	200

Sample Description: TW-07 Grab Groundwater
NRG PRGS

LL Sample # WW 8851116
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 10:40 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-07

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	820	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 00:38	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: TW-14 Grab Groundwater
NRG PRGS

LL Sample # WW 8851117
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 11:00 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

TW-14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	220	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 01:01	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: MW-106 Grab Groundwater
NRG PRGS

LL Sample # WW 8851118
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 12:30 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

MW106

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	4.3 J	3.0	1
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	670	45	1
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	1.78	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	1,310	150	500
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	N.D.	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	3.4	0.15	10

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170580003A	02/27/2017 13:47	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 01:25	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170581848001	03/01/2017 05:39	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848003	02/26/2017 05:39	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	2	170581848001	02/28/2017 05:35	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 05:41	Zachary W Enck	500
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:17	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:30	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012104A	02/28/2017 01:44	Brandon P Costik	1

Sample Description: MW-106 Grab Groundwater
NRG PRGS

LL Sample # WW 8851118
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 12:30 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

MW106

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	10

Sample Description: RW-117S Grab Groundwater
NRG PRGS

LL Sample # WW 8851119
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:00 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

RW117

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	4,300	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590008A	03/02/2017 01:48	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590008A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-25S Grab Groundwater
NRG PRGS

LL Sample # WW 8851120
LL Group # 1769258
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:30 by LK

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:38

RW25S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	250,000	450	10

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 18:34	Amy Lehr	10
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:38

Group Number: 1769258

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 170550006A	Sample number(s): 8851112,8851114-8851115	
Methane	N.D.	3.0
Batch number: 170580003A	Sample number(s): 8851118	
Methane	N.D.	3.0
Batch number: 170590008A	Sample number(s): 8851112-8851119	
DRO C10-C28	N.D.	45
Batch number: 170590009A	Sample number(s): 8851120	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 170551848002	Sample number(s): 8851112	
Manganese	N.D.	0.0018
Batch number: 170581848001	Sample number(s): 8851114-8851115,8851118	
Manganese	N.D.	0.0018
Batch number: 17054105105A	Sample number(s): 8851112,8851114-8851115,8851118	
Nitrite Nitrogen	N.D.	0.015
Batch number: 17054249601B	Sample number(s): 8851112,8851114-8851115,8851118	
Sulfate	N.D.	0.30
Batch number: 17060106102B	Sample number(s): 8851112,8851114-8851115,8851118	
Nitrate Nitrogen	N.D.	0.040
Batch number: 17058834401A	Sample number(s): 8851112,8851114-8851115,8851118	
Ferrous Iron	N.D.	0.015
	mg/l as CaCO3	mg/l as CaCO3
Batch number: 17058012104A	Sample number(s): 8851118	
Total Alkalinity to pH 4.5	1.9 J	1.7
Batch number: 17058012104B	Sample number(s): 8851114	
Total Alkalinity to pH 4.5	1.9 J	1.7
Batch number: 17058012106A	Sample number(s): 8851112,8851115	
Total Alkalinity to pH 4.5	2.3 J	1.7

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:38

Group Number: 1769258

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 170550006A Methane	Sample number(s): 8851112, 8851114-8851115 59.8 59.46				99		85-115		
Batch number: 170580003A Methane	Sample number(s): 8851118 59.8 64.37				108		85-115		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170590008A DRO C10-C28	Sample number(s): 8851112-8851119 2660 2166.79 2650 2005.72				81	76	69-115	8	20
Batch number: 170590009A DRO C10-C28	Sample number(s): 8851120 2670 2118.18 2630 2232.6				79	85	69-115	5	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 170551848002 Manganese	Sample number(s): 8851112 0.500 0.504				101		80-120		
Batch number: 170581848001 Manganese	Sample number(s): 8851114-8851115, 8851118 0.500 0.525				105		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851112, 8851114-8851115, 8851118 0.700 0.714				102		90-110		
Batch number: 17054249601B Sulfate	Sample number(s): 8851112, 8851114-8851115, 8851118 7.50 7.37				98		90-110		
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851112, 8851114-8851115, 8851118 2.50 2.49				100		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851112, 8851114-8851115, 8851118 0.400 0.401				100		93-105		
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851118 188 179.34				95		84-110		
Batch number: 17058012104B Total Alkalinity to pH 4.5	Sample number(s): 8851114 188 179.34				95		84-110		
Batch number: 17058012106A Total Alkalinity to pH 4.5	Sample number(s): 8851112, 8851115 188 179.68				96		84-110		

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:38

Group Number: 1769258

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 170550006A Methane	Sample number(s): 8851112,8851114-8851115 N.D.	59.8	62.78	59.8	62.12	105	104	73-125	1	30
Batch number: 170580003A Methane	Sample number(s): 8851118 9749.93	59.8	7183.83	59.8	6943.57	-4290 (2)	-4692 (2)	73-125	3	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170551848002 Manganese	Sample number(s): 8851112 1.88	0.500	2.46	0.500	2.38	115	99	75-125	3	20
Batch number: 170581848001 Manganese	Sample number(s): 8851114-8851115,8851118 0.0637	0.500	0.574	0.500	0.575	102	102	75-125	0	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851112,8851114-8851115,8851118 N.D.	0.200	0.219			109		90-110		
Batch number: 17054249601B Sulfate	Sample number(s): 8851112,8851114-8851115,8851118 N.D.	25	27.7			111*		90-110		
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851112,8851114-8851115,8851118 0.416	1.00	1.55			113*		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851112,8851114-8851115,8851118 56.68	40	86.81	40	89.11	75*	81*	93-105	3	6
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851118 97.94	188	227.54	188	240.44	69	76	10-148	6*	5
Batch number: 17058012104B Total Alkalinity to pH 4.5	Sample number(s): 8851114 97.94	188	227.54	188	240.44	69	76	10-148	6*	5
Batch number: 17058012106A Total Alkalinity to pH 4.5	Sample number(s): 8851112,8851115 117.81	188	314.24			104		10-148		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
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*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:38

Group Number: 1769258

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170551848002 Manganese	Sample number(s): 8851112 BKG: P851110 1.88	1.91	2	20
Batch number: 170581848001 Manganese	Sample number(s): 8851114-8851115, 8851118 BKG: P851857 0.0637	0.0621	3	20
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851112, 8851114-8851115, 8851118 BKG: P851127 N.D.	N.D.	0 (1)	20
Batch number: 17054249601B Sulfate	Sample number(s): 8851112, 8851114-8851115, 8851118 BKG: P851039 N.D.	1.50	200* (1)	15
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851112, 8851114-8851115, 8851118 BKG: P851110 0.416	0.414	0 (1)	10
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851112, 8851114-8851115, 8851118 BKG: P850240 56.68	56.88	0	5
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851118 BKG: P853439 97.94	100.59	3	5
Batch number: 17058012104B Total Alkalinity to pH 4.5	Sample number(s): 8851114 BKG: 8851114 73.43	64.5	13*	5
Batch number: 17058012106A Total Alkalinity to pH 4.5	Sample number(s): 8851112, 8851115 BKG: P851863 117.81	121.18	3	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Methane
Batch number: 170550006A

Propene	
8851112	94
8851114	93
8851115	91
Blank	97
LCS	99
MS	96
MSD	95

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:38

Group Number: 1769258

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Methane
Batch number: 170550006A

Limits: 44-123

Analysis Name: Methane
Batch number: 170580003A

Propene

8851118	99
Blank	94
LCS	94
MS	86
MSD	87

Limits: 44-123

Analysis Name: DRO micro-ext 8015B
Batch number: 170590008A

Orthoterphenyl

8851112	98
8851113	93
8851114	94
8851115	104
8851116	84
8851117	102
8851118	86
8851119	62
Blank	96
LCS	104
LCSD	102

Limits: 42-160

Analysis Name: DRO micro-ext 8015B
Batch number: 170590009A

Orthoterphenyl

8851120	148
Blank	105
LCS	107
LCSD	110

Limits: 42-160

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Client: GES**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>02/23/2017 15:30</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Karen Diem (3060) at 16:32 on 02/23/2017***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT146	0.9	DT	Wet	Y	Bagged	N
2	DT146	1.2	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 06, 2017

Project: NRG PRGSSubmittal Date: 02/23/2017
Group Number: 1769259
PO Number: 0402919-26-206
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample DescriptionMW-01S Grab Groundwater
MW-122 Grab Groundwater
RW-05 Grab Groundwater
MW-121 Grab Groundwater
MW-08S Grab Groundwater
RW-1 Grab Groundwater
MW/RW-14 Grab Groundwater
RW-118S Grab Groundwater
MW-16 Grab Groundwater
MW/RW-31 Grab Groundwater

Lancaster Labs

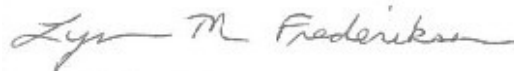
(LL) #8851121
8851122
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8851126
8851127
8851128
8851129
8851130

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW-01S Grab Groundwater
NRG PRGS

LL Sample # WW 8851121
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:00 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW01S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	500	15	5
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	720,000	900	20
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	8.49	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	312	30.0	100
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	0.030 J	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	138	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	33.5	1.5	100

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170580003A	03/01/2017 11:47	Johanna C Kennedy	5
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 18:57	Amy Lehr	20
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170581848001	03/01/2017 05:42	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848003	02/26/2017 05:39	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	2	170581848001	02/28/2017 05:35	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 05:56	Zachary W Enck	100
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:19	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:24	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012104A	02/28/2017 02:19	Brandon P Costik	1

Sample Description: MW-01S Grab Groundwater
NRG PRGS

LL Sample # WW 8851121
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:00 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW01S

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834401A	02/27/2017 18:50	Daniel S Smith	100

Sample Description: MW-122 Grab Groundwater
NRG PRGS

LL Sample # WW 8851122
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:15 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW122

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	350	3.0	1
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	1,900	45	1
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	4.87	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	190	15.0	50
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	291	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	2.8	0.38	25

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170580003A	02/27/2017 14:18	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 05:41	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170581848001	03/01/2017 05:46	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848003	02/26/2017 05:39	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	2	170581848001	02/28/2017 05:35	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 06:10	Zachary W Enck	50
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:21	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:23	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012103A	02/27/2017 23:31	Brandon P Costik	1

Sample Description: MW-122 Grab Groundwater
NRG PRGS

LL Sample # WW 8851122
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:15 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW122

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834402A	02/27/2017 20:50	Daniel S Smith	25

Sample Description: RW-05 Grab Groundwater
NRG PRGS

LL Sample # WW 8851123
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 09:25 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

RW-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	5,200	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 06:04	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: MW-121 Grab Groundwater
NRG PRGS

LL Sample # WW 8851124
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:45 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW121

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	490	15	5
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	21,000	45	1
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	12.5	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	297	15.0	50
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	0.045 J	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	262	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	15.9	1.5	100

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170580003A	03/01/2017 12:02	Johanna C Kennedy	5
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 06:27	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170581848001	03/01/2017 05:49	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848003	02/26/2017 05:39	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	2	170581848001	02/28/2017 05:35	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17054249601B	02/24/2017 06:24	Zachary W Enck	50
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:26	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:22	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012104A	02/28/2017 02:12	Brandon P Costik	1

Sample Description: MW-121 Grab Groundwater
NRG PRGS

LL Sample # WW 8851124
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 13:45 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW121

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834402A	02/27/2017 20:50	Daniel S Smith	100

Sample Description: MW-08S Grab Groundwater
NRG PRGS

LL Sample # WW 8851125
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 11:40 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW08S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	11,000	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 07:36	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: RW-1 Grab Groundwater
NRG PRGS

LL Sample # WW 8851126
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 11:50 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

RW--1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	4,000	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 08:00	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: MW/RW-14 Grab Groundwater
NRG PRGS

LL Sample # WW 8851127
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 11:10 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

RW-14

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	6.4	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	5,600	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	0.190	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	40.3	1.5	5
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	1.5	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	9.1	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	0.20	0.015	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	170580003A	02/27/2017 12:30	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 08:23	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1
07058	Manganese	SW-846 6010B	1	170581848001	03/01/2017 05:52	Joanne M Gates	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170551848003	02/26/2017 05:39	James L Mertz	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	2	170581848001	02/28/2017 05:35	James L Mertz	1
00228	Sulfate	EPA 300.0	1	17055120152A	02/24/2017 20:59	Hallie A Burnett	5
00220	Nitrate Nitrogen	EPA 353.2	1	17060106102B	03/02/2017 04:28	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	2	17054105105A	02/23/2017 23:18	Samuel J Weaver	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	17058012104A	02/28/2017 01:52	Brandon P Costik	1

Sample Description: MW/RW-14 Grab Groundwater
NRG PRGS

LL Sample # WW 8851127
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 11:10 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

RW-14

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08344	Ferrous Iron	SM 3500-Fe B 1997	1	17058834402A	02/27/2017 20:50	Daniel S Smith	1

Sample Description: RW-118S Grab Groundwater
NRG PRGS

LL Sample # WW 8851128
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 12:00 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

RW118

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	2,200	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 08:46	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: MW-16 Grab Groundwater
NRG PRGS

LL Sample # WW 8851129
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 12:10 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

MW-16

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	N.D.	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 09:09	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1

Sample Description: MW/RW-31 Grab Groundwater
NRG PRGS

LL Sample # WW 8851130
LL Group # 1769259
Account # 08390

Project Name: NRG PRGS

Collected: 02/22/2017 11:15 by BH

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/23/2017 15:30

Exton PA 19341

Reported: 03/06/2017 11:39

RW-31

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	580	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170590009A	03/02/2017 09:33	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170590009A	02/28/2017 17:15	Shawn J McMullen	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:39

Group Number: 1769259

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 170580003A	Sample number(s): 8851121-8851122,8851124,8851127	
Methane	N.D.	3.0
Batch number: 170590009A	Sample number(s): 8851121-8851130	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 170581848001	Sample number(s): 8851121-8851122,8851124,8851127	
Manganese	N.D.	0.0018
Batch number: 17054105105A	Sample number(s): 8851121-8851122,8851124,8851127	
Nitrite Nitrogen	N.D.	0.015
Batch number: 17054249601B	Sample number(s): 8851121-8851122,8851124	
Sulfate	N.D.	0.30
Batch number: 17055120152A	Sample number(s): 8851127	
Sulfate	N.D.	0.30
Batch number: 17060106102B	Sample number(s): 8851121-8851122,8851124,8851127	
Nitrate Nitrogen	N.D.	0.040
Batch number: 17058834401A	Sample number(s): 8851121	
Ferrous Iron	N.D.	0.015
Batch number: 17058834402A	Sample number(s): 8851122,8851124,8851127	
Ferrous Iron	N.D.	0.015
	mg/l as CaCO3	mg/l as CaCO3
Batch number: 17058012103A	Sample number(s): 8851122	
Total Alkalinity to pH 4.5	2.4 J	1.7
Batch number: 17058012104A	Sample number(s): 8851121,8851124,8851127	
Total Alkalinity to pH 4.5	1.9 J	1.7

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:39

Group Number: 1769259

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max				
Batch number: 170580003A Methane	Sample number(s): 8851121-8851122,8851124,8851127				59.8	64.37	108	85-115					
	ug/l	ug/l	ug/l	ug/l									
Batch number: 170590009A DRO C10-C28	Sample number(s): 8851121-8851130				2670	2118.18	2630	2232.6	79	85	69-115	5	20
	mg/l	mg/l	mg/l	mg/l									
Batch number: 170581848001 Manganese	Sample number(s): 8851121-8851122,8851124,8851127				0.500	0.525	105		80-120				
	mg/l	mg/l	mg/l	mg/l									
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851121-8851122,8851124,8851127				0.700	0.714	102		90-110				
Batch number: 17054249601B Sulfate	Sample number(s): 8851121-8851122,8851124				7.50	7.37	98		90-110				
Batch number: 17055120152A Sulfate	Sample number(s): 8851127				7.50	7.19	96		90-110				
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851121-8851122,8851124,8851127				2.50	2.49	100		90-110				
	mg/l	mg/l	mg/l	mg/l									
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851121				0.400	0.401	100		93-105				
Batch number: 17058834402A Ferrous Iron	Sample number(s): 8851122,8851124,8851127				0.400	0.407	102		93-105				
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3									
Batch number: 17058012103A Total Alkalinity to pH 4.5	Sample number(s): 8851122				188	177.56	94		84-110				
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851121,8851124,8851127				188	179.34	95		84-110				

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc	MS Spike Added	MS Conc	MSD Spike Added	MSD Conc	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
---------------	---------------	----------------	---------	-----------------	----------	---------	----------	---------------	-----	---------

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:39

Group Number: 1769259

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 170580003A Methane	Sample number(s): 8851121-8851122, 8851124, 8851127 9749.93	59.8	7183.83	59.8	6943.57	UNSPK: P850240 -4290 (2)	-4692 (2)	73-125	3	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170581848001 Manganese	Sample number(s): 8851121-8851122, 8851124, 8851127 0.0637	0.500	0.574	0.500	0.575	UNSPK: P851857 102	102	75-125	0	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851121-8851122, 8851124, 8851127 N.D.	0.200	0.219			UNSPK: 8851127 109		90-110		
Batch number: 17054249601B Sulfate	Sample number(s): 8851121-8851122, 8851124 N.D.	25	27.7			UNSPK: P851039 111*		90-110		
Batch number: 17055120152A Sulfate	Sample number(s): 8851127 33.13	25	59.01			UNSPK: P850862 103		90-110		
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851121-8851122, 8851124, 8851127 0.416	1.00	1.55			UNSPK: P851110 113*		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851121 56.68	40	86.81	40	89.11	UNSPK: P850240 75*	81*	93-105	3	6
Batch number: 17058834402A Ferrous Iron	Sample number(s): 8851122, 8851124, 8851127 19.53	40	58.48	40	56.98	UNSPK: P852681 97	94	93-105	3	6
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 17058012103A Total Alkalinity to pH 4.5	Sample number(s): 8851122 228.97	188	364.75			UNSPK: P851853 72		10-148		
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851121, 8851124, 8851127 97.94	188	227.54	188	240.44	UNSPK: P853439 69	76	10-148	6*	5

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170581848001	Sample number(s): 8851121-8851122, 8851124, 8851127	BKG: P851857		

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/06/2017 11:39

Group Number: 1769259

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Manganese	0.0637	0.0621	3	20
Batch number: 17054105105A Nitrite Nitrogen	Sample number(s): 8851121-8851122,8851124,8851127 BKG: 8851127 N.D.	N.D.	0 (1)	20
Batch number: 17054249601B Sulfate	Sample number(s): 8851121-8851122,8851124 BKG: P851039 N.D.	1.50	200* (1)	15
Batch number: 17055120152A Sulfate	Sample number(s): 8851127 BKG: P850862 33.13	32.9	1	15
Batch number: 17060106102B Nitrate Nitrogen	Sample number(s): 8851121-8851122,8851124,8851127 BKG: P851110 0.416	0.414	0 (1)	10
Batch number: 17058834401A Ferrous Iron	Sample number(s): 8851121 BKG: P850240 56.68	56.88	0	5
Batch number: 17058834402A Ferrous Iron	Sample number(s): 8851122,8851124,8851127 BKG: P852681 19.53	20.13	3 (1)	5
Batch number: 17058012103A Total Alkalinity to pH 4.5	Sample number(s): 8851122 BKG: P851853 228.97	232.59	2	5
Batch number: 17058012104A Total Alkalinity to pH 4.5	Sample number(s): 8851121,8851124,8851127 BKG: P853439 97.94	100.59	3	5

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Methane
Batch number: 170580003A

Propene	
8851121	91
8851122	92
8851124	87
8851127	98
Blank	94
LCS	94
MS	86
MSD	87

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control SummaryClient Name: GES, Inc.
Reported: 03/06/2017 11:39

Group Number: 1769259

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed
unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Methane
Batch number: 170580003A

Limits: 44-123

Analysis Name: DRO micro-ext 8015B
Batch number: 170590009A

	Orthoterphenyl
8851121	1208*
8851122	109
8851123	116
8851124	97
8851125	120
8851126	112
8851127	102
8851128	112
8851129	102
8851130	104
Blank	105
LCS	107
LCSD	110

Limits: 42-160

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1769259 Sample # 8851121-30

Environmental Analysis Request/Chain of Custody

Client: Groundwater & Env. Services, Inc.			Matrix			Analyses Requested													For Lab Use Only		
Project Name/#: NRG PRGS			Site ID #: NRG PRGS			Preservation Codes													SF #:		
Project Manager: Ashley Bell			P.O. #: 0402919-26-206																SCR #:		
Sampler: Brendan Haffey			Project #: 0402919-26-206																Preservation Codes		
Phone #: 800-220-3606 x 3704			Organization #: 0404																H = HCl T = Thiosulfate		
State where sample(s) were collected: 1400 North Royal St., Alexandria, VA																			N = HNO ₃ B = NaOH		
																			S = H ₂ SO ₄ P = H ₃ PO ₄		
																			O = Other		
Sample Identification																			Remarks		
Date		Time		Grab	Composite	Soil	Water	Other:	Total # of Containers	TPH-DRO C10-C28 (SW-846 8015B)	BTEX, Naphthalene (SWI-846 8260B)	Alkalinity (SM 2320B)	Nitrate NO ₃ -1 & Nitrite NO ₂ - (EPA 353.2)	Manganese Mn2+ (EPA 6010B)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO ₄ 2- (EPA 300.0)	Methane (RSKSOP-175 modified)				
2/22/17		1300		X			X		11	X		X	X	X	X	X	X		Send invoice to:		
		1315							11	X		X	X	X	X	X	X		ges-invoices@		
		0925							2	X									gesonline.com &		
		1345							11	X		X	X	X	X	X	X		include PO, Proj		
		1140							2	X									& Org. #s		
		1150							2	X											
		1110							11	X		X	X	X	X	X	X				
		1200							2	X											
		1210							2	X											
V		1115		V			V		2	X											
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>						Relinquished by:						Date		Time		Received by:		Date		Time	
(Rush TAT is subject to laboratory approval and surcharges.)						Denise Woodring						2/22/17		1600		Denise Woodring		2-22-17		1600	
Date results are needed:						Relinquished by:						Date		Time		Received by:		Date		Time	
Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>						Denise Woodring						2/23/17		1215		Denise Woodring		2-23-17		1215	
E-mail Address: mdlabs@gesonline.com & ges@equisonline.com						Relinquished by:						Date		Time		Received by:		Date		Time	
Phone:						Denise Woodring						2-23-17		1530		Denise Woodring		2-23-17		1530	
Data Package Options (please check if required)						Relinquished by:						Date		Time		Received by:		Date		Time	
Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>																					
Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>																					
Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>																					
NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B																					
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: GES EQEDD						Relinquished by:						Date		Time		Received by:		Date		Time	
EQEDD Name: NRG PRGS.Lab report #.25800.EQEDD.zip						Relinquished by Commercial Carrier:						Date		Time		Received by:		Date		Time	
UPS _____ FedEx _____ Other _____																					
Temperature upon receipt 09-12°C																					

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>02/23/2017 15:30</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 16:32 on 02/23/2017

Samples Chilled Details*Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT146	0.9	DT	Wet	Y	Bagged	N
2	DT146	1.2	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 15, 2017

Project: NRG PRGSSubmittal Date: 03/08/2017
Group Number: 1774810
PO Number: 0402919-51-206
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample Description

MW-121 Grab Groundwater

Lancaster Labs

(LL) #


8875432

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW-121 Grab Groundwater
NRG PRGS

LL Sample # WW 8875432
LL Group # 1774810
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 11:45 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/15/2017 14:24

NR121

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS Volatiles	SW-846 8260B		ug/l	ug/l	
10945 Naphthalene	91-20-3		N.D.	1	1

Sample Comments

Trip blank vials were not received by the laboratory for this sample group.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10945	Naphthalene	SW-846 8260B	1	D170723AA	03/14/2017 02:15	Hu Yang	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	D170723AA	03/14/2017 02:15	Hu Yang	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/15/2017 14:24

Group Number: 1774810

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: D170723AA	Sample number(s): 8875432	
Naphthalene	N.D.	1

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: D170723AA	Sample number(s): 8875432								
Naphthalene	20	18.57			93		59-120		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc	MS Spike Added	MS Conc	MSD Spike Added	MSD Conc	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: D170723AA	Sample number(s): 8875432 UNSPK: P871142									
Naphthalene	N.D.	20	17.17	20	16.49	86	82	59-120	4	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Naphthalene
Batch number: D170723AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
8875432	100	101	102	101
Blank	99	101	102	98
LCS	98	99	101	104

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/15/2017 14:24

Group Number: 1774810

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Naphthalene

Batch number: D170723AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
MS	99	100	102	105
MSD	97	101	103	105
Limits:	80-116	77-113	80-113	78-113

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Environmental Analysis Request/Chain of Custody

Acct. # 8390 Group # 1774810 Sample # 8875432 -

[illegible]

Client: GES**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>03/08/2017 19:38</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Patrick Engle (3472) at 20:55 on 03/08/2017***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT131	3.6	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: April 12, 2017

Project: NRG PRGS

Submittal Date: 03/30/2017
Group Number: 1783073
PO Number: 0402919-51-206
Release Number: ORG # 0404
State of Sample Origin: VA

Client Sample Description

TW-06 Grab Groundwater

Lancaster Labs

(LL) #

8911600

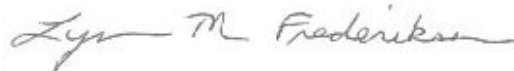
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MD

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: TW-06 Grab Groundwater
NRG PRGS

LL Sample # WW 8911600
LL Group # 1783073
Account # 08390

Project Name: NRG PRGS

Collected: 03/29/2017 13:45 by SA

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/30/2017 15:29

Exton PA 19341

Reported: 04/12/2017 10:37

TW-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	10,000	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170950004A	04/06/2017 18:49	Thomas C Wildermuth	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170950004A	04/05/2017 21:10	Shawn J McMullen	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 04/12/2017 10:37

Group Number: 1783073

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 170950004A	Sample number(s): 8911600	
DRO C10-C28	N.D.	45

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 170950004A	Sample number(s): 8911600								
DRO C10-C28	2670	1905.53	2650	1980.23	71	75	69-115	4	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: DRO micro-ext 8015B
Batch number: 170950004A

	Orthoterphenyl
8911600	92
Blank	95
LCS	98
LCSD	97

Limits: 42-160

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Acct. # 8390 Group # 1783073 Sample # 8911600

[illegible]

Sample Administration
Receipt Documentation Log

Doc Log ID: 179438



Group Number(s): 1783073

Client: GES**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>03/30/2017 15:29</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Simon Nies (25112) at 16:09 on 03/30/2017***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT121	0.8	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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ATTACHMENT D

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION – SYSTEM SAMPLING

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: January 16, 2017

Project: NRG PRGSSubmittal Date: 01/10/2017
Group Number: 1752537
PO Number: 0402919-25-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample Description

TPE Vapor Grab Air

Lancaster Labs

(LL) #

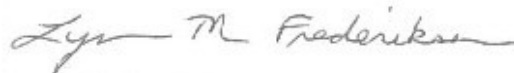
8779965

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: TPE Vapor Grab Air
NRG PRGS

LL Sample # AQ 8779965
LL Group # 1752537
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 12:20 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/16/2017 11:27

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Volatiles in Air		EPA 18 mod/EPA 25 mod	mg/m3	mg/m3	
07090	Benzene	71-43-2	< 3	3	1
07090	C1-C4 Hydrocarbons as propane	n.a.	< 18	18	1
07090	>C4-C10 Hydrocarbons hexane	n.a.	< 35	35	1
07090	Ethylbenzene	100-41-4	< 4	4	1
07090	Toluene	108-88-3	< 4	4	1
07090	Xylene (total)	1330-20-7	< 9	9	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/C1-C4/>C4-C10	EPA 18 mod/EPA 25 mod	1	M1701130AA	01/11/2017 21:34	Alexander D Sechrist	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/16/2017 11:27

Group Number: 1752537

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ
	mg/m3	mg/m3
Batch number: M1701130AA	Sample number(s): 8779965	
Benzene	< 3	3
C1-C4 Hydrocarbons as propane	< 18	18
>C4-C10 Hydrocarbons hexane	< 35	35
Ethylbenzene	< 4	4
Toluene	< 4	4
Xylene (total)	< 9	9

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/m3	mg/m3	mg/m3	mg/m3					
Batch number: M1701130AA	Sample number(s): 8779965								
Benzene	31.95	31.23	31.95	30.69	98	96	65-118	2	30
Ethylbenzene	43.42	43.04	43.42	44.61	99	103	62-123	4	30
Toluene	37.69	46.4	37.69	44.86	123	119	79-149	3	30
Xylene (total)	130.27	132.67	130.27	138.46	102	106	58-125	4	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1752537 Sample # 8779965

[illegible]

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>01/10/2017 16:40</u>
Number of Packages:	<u>3</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	Yes
Missing Samples:	No	Air Quality Flow Controllers Present:	No
Extra Samples:	No	Air Quality Returns:	No
Discrepancy in Container Qty on COC:	No		

Unpacked by Cory Jeremiah (10469) at 17:14 on 01/10/2017

Samples Chilled Details*Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT146	1.2	DT	Wet	Y	Bagged	N
2	DT146	1.0	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

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CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: January 20, 2017

Project: NRG PRGSSubmittal Date: 01/10/2017
Group Number: 1752540
PO Number: 0402919-25-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample DescriptionEffluent Grab Groundwater
Post OWS Grab Groundwater
P&T Influent Grab Groundwater
TPE Influent Grab Groundwater

Lancaster Labs

(LL) #

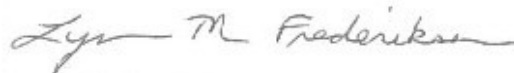
8779970
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8779973

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Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8779970
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-E

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Volatiles	EPA 624	ug/l	ug/l	
10371	Acrolein	107-02-8	N.D.	5	1
10371	Acrylonitrile	107-13-1	N.D.	0.5	1
10371	Benzene	71-43-2	N.D.	0.5	1
10371	Bromodichloromethane	75-27-4	N.D.	0.5	1
10371	Bromoform	75-25-2	N.D.	0.5	1
10371	Bromomethane	74-83-9	N.D.	0.5	1
10371	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10371	Chlorobenzene	108-90-7	N.D.	0.5	1
10371	Chloroethane	75-00-3	N.D.	0.5	1
10371	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.5	1
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10371	Chloroform	67-66-3	N.D.	0.5	1
10371	Chloromethane	74-87-3	N.D.	0.5	1
10371	Dibromochloromethane	124-48-1	N.D.	0.5	1
10371	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10371	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10371	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10371	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10371	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10371	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10371	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10371	Ethylbenzene	100-41-4	N.D.	0.5	1
10371	Methylene Chloride	75-09-2	N.D.	0.5	1
10371	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10371	Tetrachloroethene	127-18-4	2	0.5	1
10371	Toluene	108-88-3	N.D.	0.5	1
10371	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10371	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10371	Trichloroethene	79-01-6	N.D.	0.5	1
10371	Vinyl Chloride	75-01-4	N.D.	0.5	1
GC/MS	Semivolatiles	EPA 625	ug/l	ug/l	
10334	Acenaphthene	83-32-9	N.D.	0.3	1
10334	Acenaphthylene	208-96-8	N.D.	0.3	1
10334	Anthracene	120-12-7	N.D.	0.2	1
10334	Benzidine	92-87-5	N.D.	19	1
10334	Benzo(a)anthracene	56-55-3	N.D.	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
10334	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl)ether	39638-32-9	N.D.	0.3	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8779970
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-E

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles EPA 625		ug/l	ug/l	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	N.D.	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	1	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	10	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	1,2-Diphenylhydrazine	122-66-7	N.D.	0.2	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	1 J	1	1
10334	Fluoranthene	206-44-0	N.D.	0.3	1
10334	Fluorene	86-73-7	N.D.	0.3	1
10334	Hexachlorobenzene	118-74-1	N.D.	1	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitrosodimethylamine	62-75-9	N.D.	2	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	0.3 J	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	1

The recovery for the sample surrogate(s) and a target analyte(s) in the Laboratory Control Spike(s) are outside the QC acceptance limits

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8779970
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-E

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
as noted on the QC Summary. Sufficient sample was not available to repeat the analysis.					
Pesticides/PCBs EPA 608					
07572	Aldrin	309-00-2	N.D.	0.0019	1
07572	Alpha BHC	319-84-6	N.D.	0.0031	1
07572	Beta BHC	319-85-7	0.0087 J	0.0047	1
07572	Gamma BHC - Lindane	58-89-9	0.0089 J	0.0024	1
07572	Chlordane	57-74-9	N.D.	0.077	1
07572	p,p-DDD	72-54-8	N.D.	0.0051	1
07572	p,p-DDE	72-55-9	0.0049 J	0.0048	1
07572	p,p-DDT	50-29-3	N.D.	0.0050	1
07572	Delta BHC	319-86-8	N.D.	0.0037	1
07572	Dieldrin	60-57-1	N.D.	0.0049	1
07572	Endosulfan I	959-98-8	N.D.	0.0049	1
07572	Endosulfan II	33213-65-9	N.D.	0.011	1
07572	Endosulfan Sulfate	1031-07-8	N.D.	0.0048	1
07572	Endrin	72-20-8	N.D.	0.0068	1
07572	Endrin Aldehyde	7421-93-4	N.D.	0.019	1
07572	Heptachlor	76-44-8	0.0050 J	0.0025	1
07572	Heptachlor Epoxide	1024-57-3	N.D.	0.0025	1
06030	PCB-1016	12674-11-2	N.D.	0.097	1
06030	PCB-1221	11104-28-2	N.D.	0.097	1
06030	PCB-1232	11141-16-5	N.D.	0.097	1
06030	PCB-1242	53469-21-9	N.D.	0.097	1
06030	PCB-1248	12672-29-6	N.D.	0.097	1
06030	PCB-1254	11097-69-1	N.D.	0.097	1
06030	PCB-1260	11096-82-5	N.D.	0.15	1
06030	Total PCBs	1336-36-3	N.D.	0.097	1
07572	Toxaphene	8001-35-2	N.D.	0.29	1
GC Petroleum SW-846 8015B					
Hydrocarbons					
12858	DRO C10-C28	n.a.	2,800	45	1
Metals SW-846 6010B					
07035	Arsenic	7440-38-2	N.D.	0.0097	1
07049	Cadmium	7440-43-9	N.D.	0.00049	1
07051	Chromium	7440-47-3	N.D.	0.0018	1
07053	Copper	7440-50-8	0.0092 J	0.0041	1
07055	Lead	7439-92-1	N.D.	0.0062	1
07060	Molybdenum	7439-98-7	N.D.	0.0017	1
07061	Nickel	7440-02-0	0.0220	0.0028	1
07066	Silver	7440-22-4	N.D.	0.0019	1
07072	Zinc	7440-66-6	0.0516	0.0054	1
SW-846 7470A					
00259	Mercury	7439-97-6	N.D.	0.000050	1
Wet Chemistry EPA 1664A					

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8779970
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-E

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry					
08079	HEM (oil & grease)	n.a.	N.D.	1.4	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8779970
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-E

CAT No.	Analysis Name	CAS Number	Result	EDL	Dilution Factor
Dioxins/Furans					
	EPA 1613B October 1994		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	N.D.	0.259	1
Labeled Compounds					
	%Rec	Windows			
13C12-2378-TCDD	66	25 - 164			

Dioxins/Furans Data Qualifiers:

<i>B</i>	<i>Detected in Method Blank</i>
<i>U</i>	<i>Undetected</i>
<i>J</i>	<i>Estimated concentration between Estimated Detection Limit and Minimum Reporting Level</i>
<i>E</i>	<i>Exceeds calibration range</i>
<i>C</i>	<i>Confirmed quantitation on secondary GC column</i>
<i>Q</i>	<i>EMPC - Estimated Maximum Possible Concentration</i>
<i>F</i>	<i>Interference is present</i>
<i>S</i>	<i>Saturation of detection signal</i>

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8779970
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-E

Sample Comments

Total Cyanide will not be reported for this sample as discussed with GES.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10371	TTO VOCs 624	EPA 624	1	U170111AA	01/12/2017 01:12	Hu Yang	1
10334	Method 625	EPA 625	1	17012WAE625	01/13/2017 15:04	Catherine E Bachman	1
08108	625 Water Extraction	EPA 625	1	17012WAE625	01/12/2017 20:45	Karen L Beyer	1
06030	PCBs w/ OC Pests 608	EPA 608	1	170110010A	01/16/2017 04:53	Kirby B Turner	1
07572	Pests (Charged with PCBs 608)	EPA 608	1	170110026A	01/12/2017 22:56	Anita M Dale	1
11960	Method 608 PCB Water Ext.	EPA 608	1	170110010A	01/11/2017 22:50	Karen L Beyer	1
10241	Method 608 Water Extraction	EPA 608	1	170110026A	01/11/2017 22:50	Karen L Beyer	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170110038A	01/13/2017 03:55	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170110038A	01/12/2017 09:30	Kerrie A Freeburn	1
10915	Dioxins/Furans in Water - 1613	EPA 1613B October 1994	1	17017001	01/18/2017 19:51	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B October 1994	1	17017001	01/17/2017 08:30	Deborah M Zimmerman	1
07035	Arsenic	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07049	Cadmium	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07051	Chromium	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07053	Copper	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07055	Lead	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07060	Molybdenum	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07061	Nickel	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07066	Silver	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
07072	Zinc	SW-846 6010B	1	170111848002	01/12/2017 22:39	Matthew R Machtinger	1
00259	Mercury	SW-846 7470A	1	170115713003	01/12/2017 12:21	Damary Valentin	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170111848002	01/12/2017 06:50	Lisa J Cooke	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	170115713003	01/12/2017 07:55	Lisa J Cooke	1
08079	HEM (oil & grease)	EPA 1664A	1	17012807903A	01/12/2017 15:41	Huyen Dao-Kendig	1

EDL = Estimated Detection Limit

Sample Description: Post OWS Grab Groundwater
NRG PRGS

LL Sample # WW 8779971
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-O

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons					
12858	DRO C10-C28	n.a.	640	45	1
Wet Chemistry					
08079	HEM (oil & grease)	n.a.	2.9 J	1.4	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170110038A	01/13/2017 04:18	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170110038A	01/12/2017 09:30	Kerrie A Freeburn	1
08079	HEM (oil & grease)	EPA 1664A	1	17012807903A	01/12/2017 15:41	Huyen Dao-Kendig	1

Sample Description: P&T Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8779972
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 11:45 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-P

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	320	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170110038A	01/13/2017 04:42	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170110038A	01/12/2017 09:30	Kerrie A Freeburn	1

Sample Description: TPE Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8779973
LL Group # 1752540
Account # 08390

Project Name: NRG PRGS

Collected: 01/09/2017 12:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/10/2017 16:40

Exton PA 19341

Reported: 01/20/2017 13:32

NRG-T

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	51,000	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170110038A	01/13/2017 05:05	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170110038A	01/12/2017 09:30	Kerrie A Freeburn	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: U170111AA	Sample number(s): 8779970	
Acrolein	N.D.	5
Acrylonitrile	N.D.	0.5
Benzene	N.D.	0.5
Bromodichloromethane	N.D.	0.5
Bromoform	N.D.	0.5
Bromomethane	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
Chlorobenzene	N.D.	0.5
Chloroethane	N.D.	0.5
2-Chloroethyl Vinyl Ether	N.D.	0.5
Chloroform	N.D.	0.5
Chloromethane	N.D.	0.5
Dibromochloromethane	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
1,1-Dichloroethene	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Methylene Chloride	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Toluene	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Trichloroethene	N.D.	0.5
Vinyl Chloride	N.D.	0.5
Batch number: 17012WAE625	Sample number(s): 8779970	
Acenaphthene	N.D.	0.3
Acenaphthylene	N.D.	0.3
Anthracene	N.D.	0.2
Benzidine	N.D.	20
Benzo(a)anthracene	N.D.	0.2
Benzo(a)pyrene	N.D.	0.3
Benzo(b)fluoranthene	N.D.	0.3
Benzo(g,h,i)perylene	N.D.	0.2
Benzo(k)fluoranthene	N.D.	0.3
4-Bromophenyl-phenylether	N.D.	0.3

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Butylbenzylphthalate	N.D.	0.8
Di-n-butylphthalate	N.D.	0.5
4-Chloro-3-methylphenol	N.D.	0.3
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.4
bis(2-Chloroisopropyl)ether	N.D.	0.3
2-Chloronaphthalene	N.D.	0.2
2-Chlorophenol	N.D.	0.3
4-Chlorophenyl-phenylether	N.D.	0.3
Chrysene	N.D.	0.2
Dibenz(a,h)anthracene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.3
1,3-Dichlorobenzene	N.D.	0.3
1,4-Dichlorobenzene	N.D.	0.3
3,3'-Dichlorobenzidine	N.D.	0.8
2,4-Dichlorophenol	N.D.	0.3
Diethylphthalate	N.D.	0.3
2,4-Dimethylphenol	N.D.	0.3
Dimethylphthalate	N.D.	1
4,6-Dinitro-2-methylphenol	N.D.	4
2,4-Dinitrophenol	N.D.	10
2,4-Dinitrotoluene	N.D.	0.4
2,6-Dinitrotoluene	N.D.	0.3
1,2-Diphenylhydrazine	N.D.	0.2
bis(2-Ethylhexyl)phthalate	N.D.	1
Fluoranthene	N.D.	0.3
Fluorene	N.D.	0.3
Hexachlorobenzene	N.D.	1
Hexachlorobutadiene	N.D.	0.8
Hexachlorocyclopentadiene	N.D.	2
Hexachloroethane	N.D.	0.4
Indeno(1,2,3-cd)pyrene	N.D.	0.3
Isophorone	N.D.	0.3
Naphthalene	N.D.	0.2
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	0.4
4-Nitrophenol	N.D.	5
N-Nitrosodimethylamine	N.D.	2
N-Nitroso-di-n-propylamine	N.D.	0.4
N-Nitrosodiphenylamine	N.D.	0.3
Di-n-octylphthalate	N.D.	0.5
Pentachlorophenol	N.D.	3
Phenanthrene	N.D.	0.2
Phenol	N.D.	0.4
Pyrene	N.D.	0.2
1,2,4-Trichlorobenzene	N.D.	0.3
2,4,6-Trichlorophenol	N.D.	0.7
Batch number: 170110010A	Sample number(s): 8779970	

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
PCB-1016	N.D.	0.10
PCB-1221	N.D.	0.10
PCB-1232	N.D.	0.10
PCB-1242	N.D.	0.10
PCB-1248	N.D.	0.10
PCB-1254	N.D.	0.10
PCB-1260	N.D.	0.15
Total PCBs	N.D.	0.10
Batch number: 170110026A	Sample number(s): 8779970	
Aldrin	N.D.	0.0020
Alpha BHC	N.D.	0.0032
Beta BHC	N.D.	0.0049
Gamma BHC - Lindane	N.D.	0.0025
Chlordane	N.D.	0.080
p,p-DDD	N.D.	0.0053
p,p-DDE	N.D.	0.0050
p,p-DDT	N.D.	0.0052
Delta BHC	N.D.	0.0038
Dieldrin	N.D.	0.0051
Endosulfan I	N.D.	0.0051
Endosulfan II	N.D.	0.011
Endosulfan Sulfate	N.D.	0.0050
Endrin	N.D.	0.0070
Endrin Aldehyde	N.D.	0.020
Heptachlor	N.D.	0.0026
Heptachlor Epoxide	N.D.	0.0026
Toxaphene	N.D.	0.30
Batch number: 170110038A	Sample number(s): 8779970-8779973	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 170111848002	Sample number(s): 8779970	
Arsenic	N.D.	0.0097
Cadmium	N.D.	0.00049
Chromium	N.D.	0.0018
Copper	N.D.	0.0041
Lead	N.D.	0.0062
Molybdenum	N.D.	0.0017
Nickel	N.D.	0.0028
Silver	N.D.	0.0019
Zinc	N.D.	0.0054
Batch number: 170115713003	Sample number(s): 8779970	
Mercury	N.D.	0.000050
Batch number: 17012807903A	Sample number(s): 8779970-8779971	
HEM (oil & grease)	N.D.	1.4
Analysis Name	Result	EDL

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

Method Blank (continued)

Analysis Name	Result	EDL
	pg/l	pg/l
Batch number: 17017001	Sample number(s): 8779970	
2378-TCDD	N.D.	0.373

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: U170111AA Sample number(s): 8779970									
Acrolein	150	167.74			112		60-120		
Acrylonitrile	100	110.06			110		61-120		
Benzene	20	21.76			109		80-120		
Bromodichloromethane	20	19.7			99		77-120		
Bromoform	20	17.57			88		66-125		
Bromomethane	20	17.32			87		69-120		
Carbon Tetrachloride	20	20.31			102		72-128		
Chlorobenzene	20	20.41			102		80-120		
Chloroethane	20	16.04			80		65-120		
2-Chloroethyl Vinyl Ether	20	19.21			96		54-133		
Chloroform	20	21.72			109		80-120		
Chloromethane	20	17.2			86		64-120		
Dibromochloromethane	20	18.82			94		78-120		
1,1-Dichloroethane	20	22.38			112		75-123		
1,2-Dichloroethane	20	21.56			108		74-120		
1,1-Dichloroethene	20	20.95			105		69-122		
trans-1,2-Dichloroethene	20	21.47			107		80-125		
1,2-Dichloropropane	20	21.77			109		80-120		
cis-1,3-Dichloropropene	20	18.74			94		80-120		
trans-1,3-Dichloropropene	20	18.56			93		80-120		
Ethylbenzene	20	20.68			103		80-120		
Methylene Chloride	20	21.52			108		75-120		
1,1,2,2-Tetrachloroethane	20	20.89			104		80-120		
Tetrachloroethene	20	20.35			102		77-122		
Toluene	20	20.07			100		80-120		
1,1,1-Trichloroethane	20	20.24			101		72-120		
1,1,2-Trichloroethane	20	20.46			102		80-120		
Trichloroethene	20	21.2			106		80-120		
Vinyl Chloride	20	16.12			81		68-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 17012WAE625 Sample number(s): 8779970									
Acenaphthene	50	50.8	50	48.94	102	98	71-118	4	30
Acenaphthylene	50	50.96	50	49.82	102	100	70-121	2	30
Anthracene	50	49.04	50	49.71	98	99	80-114	1	30
Benzidine	250	175.43	250	204.14	70	82	21-107	15	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

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P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(a)anthracene	50	49.38	50	49.41	99	99	76-117	0	30
Benzo(a)pyrene	50	46.02	50	47.24	92	94	76-112	3	30
Benzo(b)fluoranthene	50	46.47	50	46.39	93	93	80-120	0	30
Benzo(g,h,i)perylene	50	49.41	50	50.64	99	101	76-120	2	30
Benzo(k)fluoranthene	50	48.85	50	49.82	98	100	75-121	2	30
4-Bromophenyl-phenylether	50	47	50	48.48	94	97	75-118	3	30
Butylbenzylphthalate	50	48.81	50	49.6	98	99	80-125	2	30
Di-n-butylphthalate	50	48.28	50	49.14	97	98	77-116	2	30
4-Chloro-3-methylphenol	50	50.9	50	50.92	102	102	72-116	0	30
bis(2-Chloroethoxy)methane	50	47.93	50	48.67	96	97	67-122	2	30
bis(2-Chloroethyl)ether	50	45.78	50	49.12	92	98	74-111	7	30
bis(2-Chloroisopropyl)ether	50	43.11	50	47.26	86	95	74-116	9	30
2-Chloronaphthalene	50	57.58	50	60.74	115	121*	60-118	5	30
2-Chlorophenol	50	49.09	50	48.87	98	98	68-117	0	30
4-Chlorophenyl-phenylether	50	47.67	50	39.13	95	78	76-115	20	30
Chrysene	50	52.61	50	52.73	105	105	81-118	0	30
Dibenz(a,h)anthracene	50	50.09	50	51.84	100	104	77-119	3	30
1,2-Dichlorobenzene	50	38.82	50	39.56	78	79	32-111	2	30
1,3-Dichlorobenzene	50	36.5	50	36.42	73	73	24-107	0	30
1,4-Dichlorobenzene	50	38.3	50	38.58	77	77	26-108	1	30
3,3'-Dichlorobenzidine	50	18.94	50	26.14	38	52	10-103	32*	30
2,4-Dichlorophenol	50	51.68	50	51.59	103	103	79-114	0	30
Diethylphthalate	50	35.72	50	31.61	71	63	39-114	12	30
2,4-Dimethylphenol	50	44.26	50	44.44	89	89	72-110	0	30
Dimethylphthalate	50	12.46	50	21.34	25*	43	33-112	53*	30
4,6-Dinitro-2-methylphenol	50	53.94	50	49.65	108	99	74-120	8	30
2,4-Dinitrophenol	100	116.73	100	61.26	117	61	50-128	62*	30
2,4-Dinitrotoluene	50	51.32	50	49.28	103	99	85-117	4	30
2,6-Dinitrotoluene	50	48.58	50	48.48	97	97	80-115	0	30
1,2-Diphenylhydrazine	50	49.28	50	47.86	99	96	73-119	3	30
bis(2-Ethylhexyl)phthalate	50	47.68	50	48.15	95	96	77-118	1	30
Fluoranthene	50	47.56	50	48.74	95	97	77-111	2	30
Fluorene	50	48.72	50	39	97	78*	80-116	22	30
Hexachlorobenzene	50	50.31	50	50.62	101	101	75-116	1	30
Hexachlorobutadiene	50	36.63	50	36.2	73	72	11-113	1	30
Hexachlorocyclopentadiene	100	72.16	100	75.39	72	75	24-128	4	30
Hexachloroethane	50	33.03	50	34.37	66	69	11-105	4	30
Indeno(1,2,3-cd)pyrene	50	47.91	50	50.8	96	102	76-115	6	30
Isophorone	50	46.7	50	49.49	93	99	78-120	6	30
Naphthalene	50	42.35	50	43.8	85	88	52-115	3	30
Nitrobenzene	50	46.07	50	47.99	92	96	73-113	4	30
2-Nitrophenol	50	49.34	50	49.84	99	100	83-109	1	30
4-Nitrophenol	50	23.15	50	17.98	46	36	10-83	25	30
N-Nitrosodimethylamine	50	33.82	50	23.6	68	47	28-81	36*	30
N-Nitroso-di-n-propylamine	50	46.93	50	49.79	94	100	78-110	6	30
N-Nitrosodiphenylamine	50	48.54	50	47.13	97	94	77-116	3	30
Di-n-octylphthalate	50	45.02	50	45.22	90	90	79-125	0	30
Pentachlorophenol	50	58.04	50	56.78	116	114	57-116	2	30

*- Outside of specification

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Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Phenanthrene	50	47.47	50	47.79	95	96	78-112	1	30
Phenol	50	20.29	50	17.52	41	35	14-69	15	30
Pyrene	50	47.51	50	48.71	95	97	52-115	2	30
1,2,4-Trichlorobenzene	50	39.91	50	40.78	80	82	44-142	2	30
2,4,6-Trichlorophenol	50	52.53	50	54.61	105	109	83-120	4	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170110010A	Sample number(s): 8779970								
PCB-1016	5.04	4.20	5.04	4.23	83	84	60-117	1	30
PCB-1260	5.02	4.86	5.02	4.88	97	97	57-134	0	30
Batch number: 170110026A	Sample number(s): 8779970								
Aldrin	0.102	0.0871	0.102	0.0947	85	93	28-119	8	30
Alpha BHC	0.100	0.0959	0.100	0.101	96	101	47-132	5	30
Beta BHC	0.102	0.0903	0.102	0.0926	88	91	56-125	3	30
Gamma BHC - Lindane	0.100	0.0955	0.100	0.101	95	101	51-132	6	30
p,p-DDD	0.198	0.203	0.198	0.212	102	107	53-131	4	30
p,p-DDE	0.204	0.195	0.204	0.210	95	103	51-129	8	30
p,p-DDT	0.198	0.195	0.198	0.208	98	105	42-136	6	30
Delta BHC	0.102	0.0957	0.102	0.101	94	99	57-131	5	30
Dieldrin	0.198	0.194	0.198	0.205	98	104	54-126	6	30
Endosulfan I	0.100	0.0903	0.100	0.0982	90	98	51-118	8	30
Endosulfan II	0.203	0.186	0.203	0.201	92	99	54-124	8	30
Endosulfan Sulfate	0.201	0.192	0.201	0.205	96	102	41-133	7	30
Endrin	0.200	0.211	0.200	0.229	106	115	35-143	8	30
Endrin Aldehyde	0.207	0.188	0.207	0.204	91	98	40-135	8	30
Heptachlor	0.100	0.0890	0.100	0.0946	89	95	38-111	6	30
Heptachlor Epoxide	0.102	0.0989	0.102	0.106	97	103	56-132	7	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170110038A	Sample number(s): 8779970-8779973								
DRO C10-C28	2640	2281.51			86		69-115		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 170111848002	Sample number(s): 8779970								
Arsenic	0.150	0.152			101		80-120		
Cadmium	0.0500	0.0522			104		80-120		
Chromium	0.200	0.206			103		80-120		
Copper	0.250	0.260			104		80-120		
Lead	0.150	0.156			104		80-120		
Molybdenum	2.00	2.08			104		80-120		
Nickel	0.500	0.527			105		80-120		
Silver	0.0500	0.0505			101		80-120		
Zinc	0.500	0.514			103		80-120		
Batch number: 170115713003	Sample number(s): 8779970								
Mercury	0.00100	0.000879			88		80-120		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 17012807903A HEM (oil & grease)	Sample number(s): 8779970-8779971								
	40	38.7	40	37.9	97	95	78-114	2	11
Analysis Name	OPR Spike Added pg/l	OPR Conc pg/l	OPRD Spike Added pg/l	OPRD Conc pg/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 17017001 2378-TCDD	Sample number(s): 8779970								
	200	185.96			93		67-158		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: U170111AA	Sample number(s): 8779970 UNSPK: P779201									
Acrolein	N.D.	150	174.56	150	166.87	116	111	60-120	5	30
Acrylonitrile	N.D.	100	115.72	100	110.22	116	110	61-120	5	30
Benzene	N.D.	20	24.1	20	22.68	121*	113	80-120	6	30
Bromodichloromethane	5.44	20	26.84	20	25.07	107	98	77-120	7	30
Bromoform	N.D.	20	18.08	20	16.98	90	85	66-125	6	30
Bromomethane	N.D.	20	24.11	20	23.78	121*	119	69-120	1	30
Carbon Tetrachloride	N.D.	20	24.03	20	23.11	120	116	72-128	4	30
Chlorobenzene	N.D.	20	21.61	20	20.6	108	103	80-120	5	30
Chloroethane	N.D.	20	23.71	20	22.51	119	113	65-120	5	30
2-Chloroethyl Vinyl Ether	N.D.	20	19.83	20	18.94	99	95	54-133	5	30
Chloroform	15.74	20	38.65	20	37.04	115	107	80-120	4	30
Chloromethane	N.D.	20	24.18	20	22.95	121*	115	64-120	5	30
Dibromochloromethane	1.46	20	20.82	20	19.66	97	91	78-120	6	30
1,1-Dichloroethane	N.D.	20	25.13	20	23.4	126*	117	75-123	7	30
1,2-Dichloroethane	N.D.	20	23.34	20	21.57	117	108	74-120	8	30
1,1-Dichloroethene	N.D.	20	24.84	20	23.57	124*	118	69-122	5	30
trans-1,2-Dichloroethene	N.D.	20	24.5	20	23.29	122	116	80-125	5	30
1,2-Dichloropropane	N.D.	20	23.76	20	22.53	119	113	80-120	5	30
cis-1,3-Dichloropropene	N.D.	20	20.28	20	19.22	101	96	80-120	5	30
trans-1,3-Dichloropropene	N.D.	20	19.85	20	18.57	99	93	80-120	7	30
Ethylbenzene	N.D.	20	21.97	20	21.27	110	106	80-120	3	30
Methylene Chloride	N.D.	20	23.61	20	22.31	118	112	75-120	6	30
1,1,2,2-Tetrachloroethane	N.D.	20	21.11	20	19.98	106	100	80-120	6	30
Tetrachloroethene	N.D.	20	22.34	20	21.63	112	108	77-122	3	30
Toluene	N.D.	20	21.89	20	20.95	109	105	80-120	4	30
1,1,1-Trichloroethane	N.D.	20	23.36	20	22.39	117	112	72-120	4	30
1,1,2-Trichloroethane	N.D.	20	21.17	20	20.05	106	100	80-120	5	30

*- Outside of specification

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Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Trichloroethene	N.D.	20	23.74	20	22.42	119	112	80-120	6	30
Vinyl Chloride	N.D.	20	24.92	20	24.04	125*	120	68-120	4	30
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 170110038A	Sample number(s): 8779970-8779973 UNSPK: P750177									
DRO C10-C28	904.62	2690	2911.7	2710	3016.67	75	78	69-115	4	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170111848002	Sample number(s): 8779970 UNSPK: P773182									
Arsenic	N.D.	0.150	0.169	0.150	0.165	112	110	75-125	2	20
Cadmium	N.D.	0.0500	0.0503	0.0500	0.0495	101	99	75-125	2	20
Chromium	N.D.	0.200	0.205	0.200	0.202	103	101	75-125	1	20
Copper	N.D.	0.250	0.274	0.250	0.268	110	107	75-125	2	20
Lead	0.0966	0.150	0.241	0.150	0.240	96	95	75-125	1	20
Molybdenum	0.00915	2.00	2.14	2.00	2.11	106	105	75-125	1	20
Nickel	2.06	0.500	2.57	0.500	2.52	101 (2)	92 (2)	75-125	2	20
Silver	N.D.	0.0500	0.0543	0.0500	0.0533	109	107	75-125	2	20
Zinc	0.0158	0.500	0.550	0.500	0.542	107	105	75-125	1	20
Batch number: 170115713003	Sample number(s): 8779970 UNSPK: P776299									
Mercury	N.D.	0.00100	0.000873	0.00100	0.000856	87	86	80-120	2	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17012807903A	Sample number(s): 8779970-8779971 UNSPK: P777143									
HEM (oil & grease)	1.43	40.8	36.84			87		78-114		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170111848002	Sample number(s): 8779970 BKG: P773182			
Arsenic	N.D.	N.D.	0 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	N.D.	N.D.	0 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Lead	0.0966	0.0957	1	20
Molybdenum	0.00915	0.00811	12 (1)	20
Nickel	2.06	2.07	0	20
Silver	N.D.	N.D.	0 (1)	20
Zinc	0.0158	0.0159	0 (1)	20

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

Laboratory Duplicate (continued)

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170115713003 Mercury	Sample number(s): 8779970 BKG: P776299 N.D.	N.D.	0 (1)	20

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TTO VOCs 624
Batch number: U170111AA

	1,2-Dichloroethane-d4	Fluorobenzene	4-Bromofluorobenzene
8779970	108	97	97
Blank	105	98	96
LCS	104	100	98
MS	104	99	98
MSD	106	100	99
Limits:	78-118	88-107	80-118

Analysis Name: Method 625
Batch number: 17012WAE625

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol
8779970	108	87	94	2*	4*	43
Blank	89	104	94	36	57	105
LCS	87	89	95	43	71	107
LCSD	91	91	95	36	55	84
Limits:	60-119	62-116	55-124	10-75	10-105	11-154

Analysis Name: PCBs w/ OC Pests 608
Batch number: 170110010A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8779970	71	113
Blank	86	93
LCS	89	95
LCSD	88	102
Limits:	33-137	10-148

Analysis Name: Pests (Charged with PCBs 608)
Batch number: 170110026A

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/20/2017 13:32

Group Number: 1752540

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Pests (Charged with PCBs 608)

Batch number: 170110026A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8779970	60	84
Blank	59	89
LCS	63	101
LCSD	67	107
Limits:	29-129	32-149

Analysis Name: DRO micro-ext 8015B

Batch number: 170110038A

	Orthoterphenyl
8779970	105
8779971	104
8779972	103
8779973	82
Blank	101
LCS	99
MS	90
MSD	91
Limits:	42-160

Analysis Name: Dioxins/Furans in Water - 1613

Batch number: 17017001

	13C12-2378-TCDD
8779970	66
Blank	75
OPR	65
Limits:	25-164

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1752540 Sample # 0779970 -73

Environmental Analysis Request/Chain of Custody

Client: Groundwater & Env. Services, Inc.				Matrix				Analyses Requested												For Lab Use Only																			
Project Name/ #: NRG PRGS				Site ID #: NRG PRGS				Preservation Codes												SF #: _____																			
Project Manager: Anne Ashley Bell				P.O. #: 0402919-25-220				H - - - - N N B H -												SCR #: _____																			
Sampler: Jeff Plummer				Proj. #: 0402919-25-220				Oil & Grease (EPA 1664A) VOCs (EPA 624) SVOCs (EPA 625, PPL list) Pesticides & PCBs (EPA 608) 2,3,7,8-Tetrachlorodibenzo-p-dioxin Analysis (EPA 1613) Metals (6010B) (Arsenic, Cadmium, Chromium, Copper, Lead, Molybdenum, Nickel, Silver, Zinc) Mercury (7470A) Total Cyanide (EPA 335.4) TPH-DRO (EPA 8015B)												Preservation Codes H = HCl T = Thiosulfate N = HNO ₃ B = NaOH S = H ₂ SO ₄ P = H ₃ PO ₄ O = Other																			
Phone #: 800-220-3606 x 3704				Org. #: 0404																																			
State where sample(s) were collected: 1400 North Royal St, Alexandria, VA																																							
Sample Identification				Collection		Grab	Composite	Soil	Sediment	Potable	Ground	Surface	Water	NPDES	Other:	Total # of Containers																							
				Date	Time																																		
Effluent				1-9-17	1100	X							X			15	X	X	X	X	X	X	X	X	X	X		Send invoice to:											
Post OWS				1-9-17	1130	X						X				4	X									X		ges-invoices@											
P&T Influent				1-9-17	1145	X						X				2									X		gesonline.com &												
TPE Influent				1-9-17	1200	X						X				2									X		include PO, Proj, &												
																											Org #s.												
																											* Cyanide will												
																											not be reported due												
																											to pH issue.												
																											LF 1/11/17												
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Relinquished by: Jeff Plummer				Date: 1-10-17				Time: 0730				Received by: Denise Woodring				Date: 1-10-17				Time: 0730															
(Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by: Denise Woodring				Date: 1-10-17				Time: 13:06				Received by: C. Shih				Date: 1/10/17				Time: 1306															
Date results are needed:				Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>				Relinquished by:				Date:				Time:				Received by:				Date:				Time:											
E-mail Address: mdlabs@gesonline.com & ges@equisonline.com				Phone:				Relinquished by:				Date:				Time:				Received by:				Date:				Time:											
Data Package Options (please check if required)				Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>				Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>				Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>				Relinquished by: C. Shih				Date: 1/10/17				Time: 1640				Received by: C. Shih				Date: 1-10-17				Time: 1640			
NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B				Relinquished by Commercial Carrier:																																			
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: GES EQEDD				EQEDD Name: NRG PRGS.Lab report #.25800.EQEDD.zip				UPS _____ FedEx _____ Other _____																Temperature upon receipt 1.2 °C															

Sample Administration Receipt Documentation Log

Doc Log ID: 172616

Group Number(s): 1752540

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>01/10/2017 16:40</u>
Number of Packages:	<u>3</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	Yes
Missing Samples:	No	Air Quality Flow Controllers Present:	No
Extra Samples:	No	Air Quality Returns:	No
Discrepancy in Container Qty on COC:	No		

Unpacked by Cory Jeremiah (10469) at 17:14 on 01/10/2017

Samples Chilled Details

Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	1.2	DT	Wet	Y	Bagged	N
2	DT146	1.0	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: January 25, 2017

Project: NRG PRGSSubmittal Date: 01/17/2017
Group Number: 1755185
PO Number: 0402919-25-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample Description

Effluent Grab Water

Lancaster Labs

(LL) #

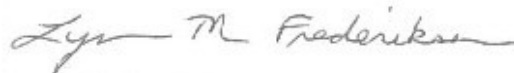
8790972

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: Effluent Grab Water
NRG - PRGS

LL Sample # WW 8790972
LL Group # 1755185
Account # 08390

Project Name: NRG PRGS

Collected: 01/16/2017 08:35 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 01/17/2017 19:30

Exton PA 19341

Reported: 01/25/2017 16:53

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry					
	EPA 335.4		mg/l	mg/l	
00237	Total Cyanide (water)	57-12-5	N.D.	0.0050	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00237	Total Cyanide (water)	EPA 335.4	1	17024102101A	01/25/2017 14:05	Dein K Bernot	1
00492	Cyanide Water Distillation	EPA 335.4	1	17024102101A	01/24/2017 18:00	Barbara A Washington	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 01/25/2017 16:53

Group Number: 1755185

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	mg/l	mg/l
Batch number: 17024102101A		Sample number(s): 8790972
Total Cyanide (water)	N.D.	0.0050

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17024102101A									
Total Cyanide (water)	0.200	0.205			103		90-110		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc	MS Spike Added	MS Conc	MSD Spike Added	MSD Conc	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17024102101A										
Total Cyanide (water)	0.0659	0.200	0.277			105		90-110		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc	DUP Conc	DUP RPD	DUP RPD Max
	mg/l	mg/l		
Batch number: 17024102101A				
Total Cyanide (water)	0.0659	0.109	49*	20

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1755185 Sample # 8790972

Environmental Analysis Request/Chain of Custody

[illegible]

Client: Groundwater & Environmental**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>01/17/2017 19:30</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Cory Jeremiah (10469) at 21:23 on 01/17/2017***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT146	1.0	DT	Wet	Y	Loose	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

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F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
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Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

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- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 02, 2017

Project: NRG PRGSSubmittal Date: 02/07/2017
Group Number: 1763051
PO Number: 0402919-25-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample DescriptionEffluent Grab Groundwater
Post OWS Grab Groundwater
P&T Influent Grab Groundwater
TPE Influent Grab Groundwater

Lancaster Labs

(LL) #
8824478
8824479
8824480
8824481

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8824478
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Volatiles	EPA 624	ug/l	ug/l	
10371	Acrolein	107-02-8	N.D.	5	1
10371	Acrylonitrile	107-13-1	N.D.	0.5	1
10371	Benzene	71-43-2	N.D.	0.5	1
10371	Bromodichloromethane	75-27-4	N.D.	0.5	1
10371	Bromoform	75-25-2	N.D.	0.5	1
10371	Bromomethane	74-83-9	N.D.	0.5	1
10371	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10371	Chlorobenzene	108-90-7	N.D.	0.5	1
10371	Chloroethane	75-00-3	N.D.	0.5	1
10371	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.5	1
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10371	Chloroform	67-66-3	N.D.	0.5	1
10371	Chloromethane	74-87-3	N.D.	0.5	1
10371	Dibromochloromethane	124-48-1	N.D.	0.5	1
10371	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10371	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10371	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10371	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10371	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10371	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10371	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10371	Ethylbenzene	100-41-4	N.D.	0.5	1
10371	Methylene Chloride	75-09-2	N.D.	0.5	1
10371	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10371	Tetrachloroethene	127-18-4	2	0.5	1
10371	Toluene	108-88-3	N.D.	0.5	1
10371	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10371	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10371	Trichloroethene	79-01-6	N.D.	0.5	1
10371	Vinyl Chloride	75-01-4	N.D.	0.5	1
GC/MS	Semivolatiles	EPA 625	ug/l	ug/l	
10334	Acenaphthene	83-32-9	N.D.	0.3	1
10334	Acenaphthylene	208-96-8	N.D.	0.3	1
10334	Anthracene	120-12-7	N.D.	0.2	1
10334	Benzidine	92-87-5	N.D.	19	1
10334	Benzo(a)anthracene	56-55-3	N.D.	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
10334	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl)ether	39638-32-9	N.D.	0.3	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8824478
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles EPA 625		ug/l	ug/l	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	N.D.	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	1	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	10	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	1,2-Diphenylhydrazine	122-66-7	N.D.	0.2	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	2 J	1	1
10334	Fluoranthene	206-44-0	N.D.	0.3	1
10334	Fluorene	86-73-7	N.D.	0.3	1
10334	Hexachlorobenzene	118-74-1	N.D.	1	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitrosodimethylamine	62-75-9	N.D.	2	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	0.4 J	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8824478
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.					
Pesticides/PCBs		EPA 608	ug/l	ug/l	
07572	Aldrin	309-00-2	0.0020 J	0.0016	1
07572	Alpha BHC	319-84-6	0.0066 J	0.0026	1
07572	Beta BHC	319-85-7	N.D.	0.0040	1
07572	Gamma BHC - Lindane	58-89-9	0.0067 J	0.0021	1
07572	Chlordane	57-74-9	N.D.	0.066	1
07572	p,p-DDD	72-54-8	N.D.	0.0044	1
07572	p,p-DDE	72-55-9	0.0056 J	0.0041	1
07572	p,p-DDT	50-29-3	N.D.	0.0043	1
07572	Delta BHC	319-86-8	0.0046 J	0.0031	1
07572	Dieldrin	60-57-1	N.D.	0.0042	1
07572	Endosulfan I	959-98-8	N.D.	0.0042	1
07572	Endosulfan II	33213-65-9	N.D.	0.0091	1
07572	Endosulfan Sulfate	1031-07-8	N.D.	0.0041	1
07572	Endrin	72-20-8	N.D.	0.0058	1
07572	Endrin Aldehyde	7421-93-4	N.D.	0.016	1
07572	Heptachlor	76-44-8	N.D.	0.0021	1
07572	Heptachlor Epoxide	1024-57-3	N.D.	0.0021	1
06030	PCB-1016	12674-11-2	N.D.	0.082	1
06030	PCB-1221	11104-28-2	N.D.	0.082	1
06030	PCB-1232	11141-16-5	N.D.	0.082	1
06030	PCB-1242	53469-21-9	N.D.	0.082	1
06030	PCB-1248	12672-29-6	N.D.	0.082	1
06030	PCB-1254	11097-69-1	N.D.	0.082	1
06030	PCB-1260	11096-82-5	N.D.	0.12	1
06030	Total PCBs	1336-36-3	N.D.	0.082	1
07572	Toxaphene	8001-35-2	N.D.	0.25	1

The recovery for a target analyte(s) in the Laboratory Control Spike(s) is outside the QC acceptance limits as noted on the QC Summary. Since this compound's recovery is within the method limits, the data is reported.

GC Petroleum		SW-846 8015B	ug/l	ug/l	
Hydrocarbons					
12858	DRO C10-C28	n.a.	2,800	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07035	Arsenic	7440-38-2	0.0131 J	0.0097	1
07049	Cadmium	7440-43-9	N.D.	0.00049	1
07051	Chromium	7440-47-3	0.0112 J	0.0018	1
07053	Copper	7440-50-8	0.0239	0.0041	1
07055	Lead	7439-92-1	0.0063 J	0.0062	1
07060	Molybdenum	7439-98-7	N.D.	0.0017	1
07061	Nickel	7440-02-0	0.0455	0.0028	1
07066	Silver	7440-22-4	0.0027 J	0.0019	1
07072	Zinc	7440-66-6	0.103	0.0054	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8824478
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals					
00259	Mercury	SW-846 7470A 7439-97-6	mg/l N.D.	mg/l 0.000050	1
Wet Chemistry					
00237	Total Cyanide (water)	EPA 335.4 57-12-5	mg/l N.D.	mg/l 0.0050	1
08079	HEM (oil & grease)	EPA 1664A n.a.	mg/l 2.5 J	mg/l 1.4	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8824478
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-1

CAT No.	Analysis Name	CAS Number	Result	EDL	Dilution Factor
Dioxins/Furans					
	EPA 1613B October 1994		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	N.D.	0.163	1
Labeled Compounds					
	%Rec	Windows			
13C12-2378-TCDD	87	25 - 164			

Dioxins/Furans Data Qualifiers:

<i>B</i>	<i>Detected in Method Blank</i>
<i>U</i>	<i>Undetected</i>
<i>J</i>	<i>Estimated concentration between Estimated Detection Limit and Minimum Reporting Level</i>
<i>E</i>	<i>Exceeds calibration range</i>
<i>C</i>	<i>Confirmed quantitation on secondary GC column</i>
<i>Q</i>	<i>EMPC - Estimated Maximum Possible Concentration</i>
<i>F</i>	<i>Interference is present</i>
<i>S</i>	<i>Saturation of detection signal</i>

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8824478
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10371	TTO VOCs 624	EPA 624	1	M170391AA	02/09/2017 00:30	Joshua S Hess	1
10334	Method 625	EPA 625	1	17041WAF625	02/14/2017 00:17	Linda M Hartenstine	1
08108	625 Water Extraction	EPA 625	1	17041WAF625	02/12/2017 18:00	Nicholas W Shroyer	1
06030	PCBs w/ OC Pests 608	EPA 608	1	170390006A	02/09/2017 18:48	Kirby B Turner	1
07572	Pests (Charged with PCBs 608)	EPA 608	1	170390005A	02/22/2017 05:15	Anita M Dale	1
11960	Method 608 PCB Water Ext.	EPA 608	1	170390006A	02/08/2017 17:30	Kate E Lutte	1
10241	Method 608 Water Extraction	EPA 608	1	170390005A	02/08/2017 17:30	Kate E Lutte	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170400004A	02/10/2017 20:24	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170400004A	02/09/2017 20:00	Shawn J McMullen	1
10915	Dioxins/Furans in Water - 1613	EPA 1613B October 1994	1	170400005	02/11/2017 08:35	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B October 1994	1	170400005	02/09/2017 08:15	Deborah M Zimmerman	1
07035	Arsenic	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07049	Cadmium	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07051	Chromium	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07053	Copper	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07055	Lead	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07060	Molybdenum	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07061	Nickel	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07066	Silver	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
07072	Zinc	SW-846 6010B	1	170411848001	02/13/2017 06:01	Joanne M Gates	1
00259	Mercury	SW-846 7470A	1	170415713001	02/13/2017 18:47	Parker D Lindstrom	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170411848001	02/10/2017 16:40	Barbara A Kane	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	170415713001	02/10/2017 19:45	Barbara A Kane	1
00237	Total Cyanide (water)	EPA 335.4	1	17044102101A	02/14/2017 13:59	Drew M Gerhart	1
00492	Cyanide Water Distillation	EPA 335.4	1	17044102101A	02/13/2017 16:45	Barbara A Washington	1
08079	HEM (oil & grease)	EPA 1664A	1	17041807901A	02/10/2017 00:54	Nicole Hogg	1

EDL = Estimated Detection Limit

Sample Description: Post OWS Grab Groundwater
NRG PRGS

LL Sample # WW 8824479
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 11:45 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-2

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons					
12858	DRO C10-C28	n.a.	1,800	45	1
Wet Chemistry					
08079	HEM (oil & grease)	n.a.	2.6 J	1.4	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170400004A	02/10/2017 20:47	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170400004A	02/09/2017 20:00	Shawn J McMullen	1
08079	HEM (oil & grease)	EPA 1664A	1	17041807901A	02/10/2017 00:54	Nicole Hogg	1

Sample Description: P&T Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8824480
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 12:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	460	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170400004A	02/10/2017 21:11	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170400004A	02/09/2017 20:00	Shawn J McMullen	1

Sample Description: TPE Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8824481
LL Group # 1763051
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 12:05 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 03/02/2017 12:46

NRG-4

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	8,300	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170400004A	02/10/2017 21:34	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	170400004A	02/09/2017 20:00	Shawn J McMullen	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: M170391AA	Sample number(s): 8824478	
Acrolein	N.D.	5
Acrylonitrile	N.D.	0.5
Benzene	N.D.	0.5
Bromodichloromethane	N.D.	0.5
Bromoform	N.D.	0.5
Bromomethane	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
Chlorobenzene	N.D.	0.5
Chloroethane	N.D.	0.5
2-Chloroethyl Vinyl Ether	N.D.	0.5
Chloroform	N.D.	0.5
Chloromethane	N.D.	0.5
Dibromochloromethane	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
1,1-Dichloroethene	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Methylene Chloride	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Toluene	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Trichloroethene	N.D.	0.5
Vinyl Chloride	N.D.	0.5
Batch number: 17041WAF625	Sample number(s): 8824478	
Acenaphthene	N.D.	0.3
Acenaphthylene	N.D.	0.3
Anthracene	N.D.	0.2
Benzidine	N.D.	20
Benzo(a)anthracene	N.D.	0.2
Benzo(a)pyrene	N.D.	0.3
Benzo(b)fluoranthene	N.D.	0.3
Benzo(g,h,i)perylene	N.D.	0.2
Benzo(k)fluoranthene	N.D.	0.3
4-Bromophenyl-phenylether	N.D.	0.3

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Butylbenzylphthalate	N.D.	0.8
Di-n-butylphthalate	N.D.	0.5
4-Chloro-3-methylphenol	N.D.	0.3
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.4
bis(2-Chloroisopropyl)ether	N.D.	0.3
2-Chloronaphthalene	N.D.	0.2
2-Chlorophenol	N.D.	0.3
4-Chlorophenyl-phenylether	N.D.	0.3
Chrysene	N.D.	0.2
Dibenz(a,h)anthracene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.3
1,3-Dichlorobenzene	N.D.	0.3
1,4-Dichlorobenzene	N.D.	0.3
3,3'-Dichlorobenzidine	N.D.	0.8
2,4-Dichlorophenol	N.D.	0.3
Diethylphthalate	N.D.	0.3
2,4-Dimethylphenol	N.D.	0.3
Dimethylphthalate	N.D.	1
4,6-Dinitro-2-methylphenol	N.D.	4
2,4-Dinitrophenol	N.D.	10
2,4-Dinitrotoluene	N.D.	0.4
2,6-Dinitrotoluene	N.D.	0.3
1,2-Diphenylhydrazine	N.D.	0.2
bis(2-Ethylhexyl)phthalate	N.D.	1
Fluoranthene	N.D.	0.3
Fluorene	N.D.	0.3
Hexachlorobenzene	N.D.	1
Hexachlorobutadiene	N.D.	0.8
Hexachlorocyclopentadiene	N.D.	2
Hexachloroethane	N.D.	0.4
Indeno(1,2,3-cd)pyrene	N.D.	0.3
Isophorone	N.D.	0.3
Naphthalene	N.D.	0.2
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	0.4
4-Nitrophenol	N.D.	5
N-Nitrosodimethylamine	N.D.	2
N-Nitroso-di-n-propylamine	N.D.	0.4
N-Nitrosodiphenylamine	N.D.	0.3
Di-n-octylphthalate	N.D.	0.5
Pentachlorophenol	N.D.	3
Phenanthrene	N.D.	0.2
Phenol	N.D.	0.4
Pyrene	N.D.	0.2
1,2,4-Trichlorobenzene	N.D.	0.3
2,4,6-Trichlorophenol	N.D.	0.7
Batch number: 170390005A	Sample number(s): 8824478	

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Aldrin	N.D.	0.0016
Alpha BHC	N.D.	0.0026
Beta BHC	N.D.	0.0039
Gamma BHC - Lindane	N.D.	0.0020
Chlordane	N.D.	0.064
p,p-DDD	N.D.	0.0042
p,p-DDE	N.D.	0.0040
p,p-DDT	N.D.	0.0042
Delta BHC	N.D.	0.0030
Dieldrin	N.D.	0.0041
Endosulfan I	N.D.	0.0041
Endosulfan II	N.D.	0.0088
Endosulfan Sulfate	N.D.	0.0040
Endrin	N.D.	0.0056
Endrin Aldehyde	N.D.	0.016
Heptachlor	N.D.	0.0021
Heptachlor Epoxide	N.D.	0.0021
Toxaphene	N.D.	0.24
Batch number: 170390006A	Sample number(s): 8824478	
PCB-1016	N.D.	0.080
PCB-1221	N.D.	0.080
PCB-1232	N.D.	0.080
PCB-1242	N.D.	0.080
PCB-1248	N.D.	0.080
PCB-1254	N.D.	0.080
PCB-1260	N.D.	0.12
Total PCBs	N.D.	0.080
Batch number: 170400004A	Sample number(s): 8824478-8824481	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 170411848001	Sample number(s): 8824478	
Arsenic	N.D.	0.0097
Cadmium	N.D.	0.00049
Chromium	N.D.	0.0018
Copper	N.D.	0.0041
Lead	N.D.	0.0062
Molybdenum	N.D.	0.0017
Nickel	N.D.	0.0028
Silver	N.D.	0.0019
Zinc	N.D.	0.0054
Batch number: 170415713001	Sample number(s): 8824478	
Mercury	N.D.	0.000050
Batch number: 17044102101A	Sample number(s): 8824478	
Total Cyanide (water)	N.D.	0.0050
Batch number: 17041807901A	Sample number(s): 8824478-8824479	

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

Method Blank (continued)

Analysis Name	Result	MDL
	mg/l	mg/l
HEM (oil & grease)	N.D.	1.4
Analysis Name	Result	EDL
	pg/l	pg/l
Batch number: 17040005	Sample number(s): 8824478	
2378-TCDD	N.D.	0.248

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: M170391AA	Sample number(s): 8824478								
Acrolein	150	157.09			105		60-120		
Acrylonitrile	100	83.13			83		61-120		
Benzene	20	19.04			95		80-120		
Bromodichloromethane	20	18.59			93		77-120		
Bromoform	20	16.16			81		66-125		
Bromomethane	20	19.61			98		69-120		
Carbon Tetrachloride	20	19.78			99		72-128		
Chlorobenzene	20	18.36			92		80-120		
Chloroethane	20	19.78			99		65-120		
2-Chloroethyl Vinyl Ether	20	18.95			95		54-133		
Chloroform	20	19.2			96		80-120		
Chloromethane	20	18.43			92		64-120		
Dibromochloromethane	20	17.18			86		78-120		
1,1-Dichloroethane	20	19.89			99		75-123		
1,2-Dichloroethane	20	18.9			94		74-120		
1,1-Dichloroethene	20	20.02			100		69-122		
trans-1,2-Dichloroethene	20	20.23			101		80-125		
1,2-Dichloropropane	20	19.3			97		80-120		
cis-1,3-Dichloropropene	20	18.13			91		80-120		
trans-1,3-Dichloropropene	20	18.42			92		80-120		
Ethylbenzene	20	18.83			94		80-120		
Methylene Chloride	20	19.45			97		75-120		
1,1,2,2-Tetrachloroethane	20	17.34			87		80-120		
Tetrachloroethene	20	18.58			93		77-122		
Toluene	20	19.08			95		80-120		
1,1,1-Trichloroethane	20	19.61			98		72-120		
1,1,2-Trichloroethane	20	18			90		80-120		
Trichloroethene	20	19.31			97		80-120		
Vinyl Chloride	20	20.1			101		68-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 17041WAF625	Sample number(s): 8824478								

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Acenaphthene	50	46.75	50	45.94	94	92	71-118	2	30
Acenaphthylene	50	42.41	50	41.6	85	83	65-116	2	30
Anthracene	50	47.17	50	47.08	94	94	80-114	0	30
Benzidine	250	130.82	250	123.15	52	49	12-97	6	30
Benzo(a)anthracene	50	48.84	50	49.58	98	99	76-117	2	30
Benzo(a)pyrene	50	46.98	50	46.16	94	92	76-112	2	30
Benzo(b)fluoranthene	50	50.58	50	50.25	101	101	73-116	1	30
Benzo(g,h,i)perylene	50	49.6	50	48.8	99	98	76-120	2	30
Benzo(k)fluoranthene	50	47.55	50	46.31	95	93	75-121	3	30
4-Bromophenyl-phenylether	50	49.11	50	49.55	98	99	75-118	1	30
Butylbenzylphthalate	50	48.72	50	48.95	97	98	78-120	0	30
Di-n-butylphthalate	50	48.22	50	47.91	96	96	77-116	1	30
4-Chloro-3-methylphenol	50	42.97	50	40.12	86	80	72-116	7	30
bis(2-Chloroethoxy)methane	50	48.34	50	46.65	97	93	76-120	4	30
bis(2-Chloroethyl)ether	50	46.47	50	43.95	93	88	74-111	6	30
bis(2-Chloroisopropyl)ether	50	41.74	50	39.15	83	78	73-110	6	30
2-Chloronaphthalene	50	40.53	50	39.49	81	79	40-155	3	30
2-Chlorophenol	50	43.57	50	39.82	87	80	74-114	9	30
4-Chlorophenyl-phenylether	50	46.59	50	45.98	93	92	70-116	1	30
Chrysene	50	49.7	50	49.81	99	100	81-118	0	30
Dibenz(a,h)anthracene	50	51.72	50	50.06	103	100	77-119	3	30
1,2-Dichlorobenzene	50	27.88	50	26.15	56	52	26-111	6	30
1,3-Dichlorobenzene	50	25.86	50	23.87	52	48	24-107	8	30
1,4-Dichlorobenzene	50	26.68	50	24.37	53	49	21-108	9	30
3,3'-Dichlorobenzidine	50	45.96	50	46.33	92	93	14-124	1	30
2,4-Dichlorophenol	50	46.44	50	45.23	93	90	79-114	3	30
Diethylphthalate	50	45.45	50	44.33	91	89	63-119	2	30
2,4-Dimethylphenol	50	33.56	50	31.4	67	63	55-106	7	30
Dimethylphthalate	50	39.07	50	39.71	78	79	26-134	2	30
4,6-Dinitro-2-methylphenol	50	44.48	50	45.18	89	90	69-117	2	30
2,4-Dinitrophenol	100	71.99	100	69.28	72	69	34-129	4	30
2,4-Dinitrotoluene	50	46.69	50	46.39	93	93	80-120	1	30
2,6-Dinitrotoluene	50	47.15	50	46.66	94	93	80-115	1	30
1,2-Diphenylhydrazine	50	48.88	50	48.22	98	96	77-124	1	30
bis(2-Ethylhexyl)phthalate	50	47.99	50	48.87	96	98	77-118	2	30
Fluoranthene	50	46.93	50	46.11	94	92	77-111	2	30
Fluorene	50	46.09	50	45.17	92	90	73-115	2	30
Hexachlorobenzene	50	48.55	50	48.47	97	97	75-116	0	30
Hexachlorobutadiene	50	24.8	50	24.07	50	48	10-113	3	30
Hexachlorocyclopentadiene	100	4.62	100	4.09	5*	4*	24-128	12	30
Hexachloroethane	50	21.59	50	19.36	43	39	11-105	11	30
Indeno(1,2,3-cd)pyrene	50	49.96	50	47.97	100	96	71-116	4	30
Isophorone	50	45.86	50	44.18	92	88	77-110	4	30
Naphthalene	50	37.98	50	36.16	76	72	52-115	5	30
Nitrobenzene	50	46.27	50	44.7	93	89	73-113	3	30
2-Nitrophenol	50	46.28	50	45.75	93	91	83-109	1	30
4-Nitrophenol	50	20.13	50	15.94	40	32	19-80	23	30
N-Nitrosodimethylamine	50	21.92	50	19.9	44	40	28-81	10	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
N-Nitroso-di-n-propylamine	50	44.71	50	42.48	89	85	78-110	5	30
N-Nitrosodiphenylamine	50	48.68	50	48.63	97	97	77-116	0	30
Di-n-octylphthalate	50	48.07	50	47.45	96	95	79-125	1	30
Pentachlorophenol	50	44.61	50	41.62	89	83	45-134	7	30
Phenanthrene	50	46.03	50	45.27	92	91	78-112	2	30
Phenol	50	19.96	50	17.56	40	35	21-71	13	30
Pyrene	50	48.64	50	49.45	97	99	75-121	2	30
1,2,4-Trichlorobenzene	50	30.07	50	28.74	60	57	23-117	4	30
2,4,6-Trichlorophenol	50	49.71	50	49.5	99	99	80-120	0	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170390005A	Sample number(s): 8824478								
Aldrin	0.102	0.0508			50		28-119		
Alpha BHC	0.100	0.0578			58		47-132		
Beta BHC	0.102	0.0588			58		56-125		
Gamma BHC - Lindane	0.100	0.0571			57		51-132		
p,p-DDD	0.198	0.133			67		53-131		
p,p-DDE	0.204	0.120			59		51-129		
p,p-DDT	0.198	0.123			62		42-136		
Delta BHC	0.102	0.0601			59		57-131		
Dieldrin	0.198	0.117			59		54-126		
Endosulfan I	0.100	0.0529			53		51-118		
Endosulfan II	0.203	0.106			52*		54-124		
Endosulfan Sulfate	0.201	0.116			58		41-133		
Endrin	0.200	0.118			59		35-143		
Endrin Aldehyde	0.207	0.108			52		40-135		
Heptachlor	0.100	0.0539			54		38-111		
Heptachlor Epoxide	0.102	0.0592			58		56-132		
Batch number: 170390006A	Sample number(s): 8824478								
PCB-1016	5.04	3.95			78		60-117		
PCB-1260	5.02	3.86			77		57-134		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170400004A	Sample number(s): 8824478-8824481								
DRO C10-C28	2660	1970.26	2650	2032.17	74	77	69-115	3	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 170411848001	Sample number(s): 8824478								
Arsenic	0.150	0.149			99		80-120		
Cadmium	0.0500	0.0502			100		80-120		
Chromium	0.200	0.201			101		80-120		
Copper	0.250	0.256			103		80-120		
Lead	0.150	0.153			102		80-120		
Molybdenum	2.00	1.99			100		80-120		
Nickel	0.500	0.513			103		80-120		
Silver	0.0500	0.0504			101		80-120		

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Zinc	0.500	0.497			99		80-120		
Batch number: 170415713001	Sample number(s): 8824478								
Mercury	0.00100	0.000930			93		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17044102101A	Sample number(s): 8824478								
Total Cyanide (water)	0.200	0.213	0.200	0.219	107	109	90-110	3	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 17041807901A	Sample number(s): 8824478-8824479								
HEM (oil & grease)	40	37.4	40	36.8	94	92	78-114	2	11
Analysis Name	OPR Spike Added pg/l	OPR Conc pg/l	OPRD Spike Added pg/l	OPRD Conc pg/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 17040005	Sample number(s): 8824478								
2378-TCDD	200	201.57			101		67-158		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: M170391AA	Sample number(s): 8824478 UNSPK: P821252									
Acrolein	N.D.	150	130.46	150	133.67	87	89	60-120	2	30
Acrylonitrile	N.D.	100	79.01	100	84.49	79	84	61-120	7	30
Benzene	N.D.	20	19.19	20	19.93	96	100	80-120	4	30
Bromodichloromethane	N.D.	20	17.75	20	18.77	89	94	77-120	6	30
Bromoform	N.D.	20	14.28	20	14.87	71	74	66-125	4	30
Bromomethane	N.D.	20	22.33	20	23.82	112	119	69-120	6	30
Carbon Tetrachloride	N.D.	20	19.45	20	21.06	97	105	72-128	8	30
Chlorobenzene	N.D.	20	17.91	20	18.57	90	93	80-120	4	30
Chloroethane	N.D.	20	20.96	20	22.43	105	112	65-120	7	30
2-Chloroethyl Vinyl Ether	N.D.	20	5.06	20	4.62	25*	23*	54-133	9	30
Chloroform	N.D.	20	19.39	20	20.29	97	101	80-120	5	30
Chloromethane	N.D.	20	17.92	20	18.75	90	94	64-120	5	30
Dibromochloromethane	N.D.	20	15.76	20	16.84	79	84	78-120	7	30
1,1-Dichloroethane	N.D.	20	20.01	20	21.12	100	106	75-123	5	30
1,2-Dichloroethane	N.D.	20	18.95	20	19.43	95	97	74-120	2	30
1,1-Dichloroethene	N.D.	20	19.91	20	20.91	100	105	69-122	5	30
trans-1,2-Dichloroethene	N.D.	20	20.13	20	21.37	101	107	80-125	6	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
1,2-Dichloropropane	N.D.	20	19.12	20	19.82	96	99	80-120	4	30
cis-1,3-Dichloropropene	N.D.	20	17.49	20	18.09	87	90	80-120	3	30
trans-1,3-Dichloropropene	N.D.	20	17.18	20	18.06	86	90	80-120	5	30
Ethylbenzene	N.D.	20	18.87	20	19.43	94	97	80-120	3	30
Methylene Chloride	N.D.	20	19.08	20	20.01	95	100	75-120	5	30
1,1,2,2-Tetrachloroethane	N.D.	20	15.92	20	17.08	80	85	80-120	7	30
Tetrachloroethene	N.D.	20	18.58	20	19.22	93	96	77-122	3	30
Toluene	N.D.	20	19.01	20	19.51	95	98	80-120	3	30
1,1,1-Trichloroethane	N.D.	20	19.33	20	20.35	97	102	72-120	5	30
1,1,2-Trichloroethane	N.D.	20	17.15	20	18.04	86	90	80-120	5	30
Trichloroethene	N.D.	20	19.74	20	20.01	99	100	80-120	1	30
Vinyl Chloride	N.D.	20	18.59	20	20.1	93	100	68-120	8	30
	ug/l	ug/l	ug/l	ug/l	ug/l					
Batch number: 170390005A	Sample number(s): 8824478 UNSPK: P822650									
Aldrin	N.D.	0.0971	0.0598	0.106	0.0776	62	73	28-119	26	30
Alpha BHC	N.D.	0.0950	0.0585	0.103	0.0714	62	69	47-132	20	30
Beta BHC	N.D.	0.0966	0.0664	0.105	0.0809	69	77	56-125	20	30
Gamma BHC - Lindane	N.D.	0.0950	0.0658	0.103	0.0797	69	77	51-132	19	30
p,p-DDD	N.D.	0.188	0.167	0.204	0.212	89	104	53-131	24	30
p,p-DDE	N.D.	0.194	0.138	0.211	0.180	71	85	51-129	26	30
p,p-DDT	N.D.	0.188	0.129	0.204	0.169	69	83	42-136	26	30
Delta BHC	N.D.	0.0975	0.0749	0.106	0.0919	77	87	57-131	20	30
Dieldrin	N.D.	0.188	0.135	0.204	0.172	72	84	54-126	24	30
Endosulfan I	N.D.	0.0950	0.0619	0.103	0.0804	65	78	51-118	26	30
Endosulfan II	N.D.	0.193	0.123	0.210	0.155	64	74	54-124	23	30
Endosulfan Sulfate	N.D.	0.191	0.135	0.208	0.174	71	83	41-133	25	30
Endrin	N.D.	0.190	0.132	0.207	0.162	70	78	35-143	20	30
Endrin Aldehyde	N.D.	0.196	0.128	0.214	0.168	65	78	40-135	27	30
Heptachlor	N.D.	0.0950	0.0629	0.103	0.0792	66	77	38-111	23	30
Heptachlor Epoxide	N.D.	0.0970	0.0661	0.105	0.0828	68	79	56-132	22	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170390006A	Sample number(s): 8824478 UNSPK: P822650									
PCB-1016	N.D.	4.74	3.74	4.81	4.28	79	89	60-117	13	30
PCB-1260	N.D.	4.72	3.70	4.79	3.53	78	74	57-134	5	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170411848001	Sample number(s): 8824478 UNSPK: P826578									
Arsenic	N.D.	0.150	0.149	0.150	0.147	99	98	75-125	1	20
Cadmium	N.D.	0.0500	0.0499	0.0500	0.0476	100	95	75-125	5	20
Chromium	N.D.	0.200	0.202	0.200	0.192	101	96	75-125	5	20
Copper	0.00436	0.250	0.259	0.250	0.245	102	96	75-125	6	20
Lead	N.D.	0.150	0.149	0.150	0.140	99	93	75-125	6	20
Molybdenum	0.00211	2.00	2.05	2.00	2.00	103	100	75-125	3	20
Nickel	N.D.	0.500	0.512	0.500	0.484	102	97	75-125	6	20
Silver	N.D.	0.0500	0.0574	0.0500	0.0508	115	102	75-125	12	20

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Zinc	N.D.	0.500	0.498	0.500	0.470	100	94	75-125	6	20
Batch number: 170415713001	Sample number(s): 8824478 UNSPK: P826578									
Mercury	N.D.	0.00100	0.000851	0.00100	0.000902	85	90	80-120	6	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17044102101A	Sample number(s): 8824478 UNSPK: P828419									
Total Cyanide (water)	N.D.	0.200	0.210			105		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17041807901A	Sample number(s): 8824478-8824479 UNSPK: 8824479									
HEM (oil & grease)	2.58	43	18.06			36*		78-114		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170411848001	Sample number(s): 8824478 BKG: P826578			
Arsenic	N.D.	N.D.	0 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	N.D.	N.D.	0 (1)	20
Copper	0.00436	N.D.	200* (1)	20
Lead	N.D.	N.D.	0 (1)	20
Molybdenum	0.00211	N.D.	200* (1)	20
Nickel	N.D.	N.D.	0 (1)	20
Silver	N.D.	0.00214	200* (1)	20
Zinc	N.D.	N.D.	0 (1)	20
Batch number: 170415713001	Sample number(s): 8824478 BKG: P826578			
Mercury	N.D.	N.D.	0 (1)	20
	mg/l	mg/l		
Batch number: 17044102101A	Sample number(s): 8824478 BKG: P828419			
Total Cyanide (water)	N.D.	N.D.	0 (1)	20

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TTO VOCs 624

Batch number: M170391AA

	1,2-Dichloroethane-d4	Fluorobenzene	4-Bromofluorobenzene
8824478	105	99	98
Blank	103	99	98
LCS	103	100	101
MS	103	100	100
MSD	104	99	100
Limits:	78-118	88-107	80-118

Analysis Name: Method 625

Batch number: 17041WAF625

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol
8824478	91	90	70	2*	5*	34
Blank	86	75	90	27	40	99
LCS	87	85	91	36	52	90
LCSD	86	87	94	32	47	93
Limits:	60-119	62-116	55-124	10-76	10-105	27-142

Analysis Name: Pests (Charged with PCBs 608)

Batch number: 170390005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8824478	42	48
Blank	32	42
LCS	38	45
MS	47	45
MSD	55	68
Limits:	29-129	32-149

Analysis Name: PCBs w/ OC Pests 608

Batch number: 170390006A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8824478	50	57
Blank	74	62
LCS	83	52
MS	88	79
MSD	98	68
Limits:	33-137	10-148

Analysis Name: DRO micro-ext 8015B

Batch number: 170400004A

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/02/2017 12:46

Group Number: 1763051

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: DRO micro-ext 8015B
Batch number: 170400004A

	Orthoterphenyl
8824478	102
8824479	95
8824480	93
8824481	58
Blank	89
LCS	88
LCSD	90

Limits: 42-160

Analysis Name: Dioxins/Furans in Water - 1613
Batch number: 170400005

	13C12-2378-TCDD
8824478	87
Blank	88
OPR	91

Limits: 25-164

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ / MRL.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1763051 Sample # 8824478-81

Environmental Analysis Request/Chain of Custody

[illegible]

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>02/07/2017 16:45</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 17:40 on 02/07/2017

Samples Chilled Details*Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT146	1.1	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: February 14, 2017

Project: NRG PRGSSubmittal Date: 02/07/2017
Group Number: 1763043
PO Number: 0402919-25-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample Description

TPE Vapor Grab Air

Lancaster Labs

(LL) #

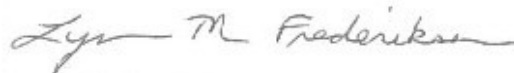
8824413

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: TPE Vapor Grab Air
NRG PRGS - Alexandria, VA

LL Sample # AQ 8824413
LL Group # 1763043
Account # 08390

Project Name: NRG PRGS

Collected: 02/06/2017 12:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 02/07/2017 16:45

Exton PA 19341

Reported: 02/14/2017 10:50

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Volatiles in Air		EPA 18 mod/EPA 25 mod	mg/m3	mg/m3	
07090	Benzene	71-43-2	< 3	3	1
07090	C1-C4 Hydrocarbons as propane	n.a.	< 18	18	1
07090	>C4-C10 Hydrocarbons hexane	n.a.	< 35	35	1
07090	Ethylbenzene	100-41-4	< 4	4	1
07090	Toluene	108-88-3	< 4	4	1
07090	Xylene (total)	1330-20-7	< 9	9	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/C1-C4/>C4-C10	EPA 18 mod/EPA 25 mod	1	M1704130AA	02/10/2017 15:29	Alexander D Sechrist	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 02/14/2017 10:50

Group Number: 1763043

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ
	mg/m3	mg/m3
Batch number: M1704130AA	Sample number(s): 8824413	
Benzene	< 3	3
C1-C4 Hydrocarbons as propane	< 18	18
>C4-C10 Hydrocarbons hexane	< 35	35
Ethylbenzene	< 4	4
Toluene	< 4	4
Xylene (total)	< 9	9

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/m3	mg/m3	mg/m3	mg/m3					
Batch number: M1704130AA	Sample number(s): 8824413								
Benzene	31.95	27.8	31.95	27.76	87	87	65-118	0	30
Ethylbenzene	43.42	40.11	43.42	39.41	92	91	62-123	2	30
Toluene	37.69	42.43	37.69	41.18	113	109	79-149	3	30
Xylene (total)	130.27	122.9	130.27	119.61	94	92	58-125	3	30

*- Outside of specification

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**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1763043 Sample # 8824413

Environmental Analysis Request/Chain of Custody

[illegible]

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>02/07/2017 16:45</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	N/A	VOA Vial Headspace \geq 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	Yes
Missing Samples:	No	Air Quality Flow Controllers Present:	No
Extra Samples:	No	Air Quality Returns:	No
Discrepancy in Container Qty on COC:	No		

Unpacked by Karen Diem (3060) at 17:40 on 02/07/2017

Explanation of Symbols and Abbreviations

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ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 24, 2017

Project: NRG PRGSSubmittal Date: 03/08/2017
Group Number: 1774824
PO Number: 0402919-53-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample DescriptionEffluent Grab Groundwater
Post OWS Grab Groundwater
P&T Influent Grab Groundwater
TPE Influent Grab Groundwater

Lancaster Labs

(LL) #

8875484
8875485
8875486
8875487

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8875484
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/24/2017 08:25

N08-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Volatiles	EPA 624	ug/l	ug/l	
10371	Acrolein	107-02-8	N.D.	5	1
10371	Acrylonitrile	107-13-1	N.D.	0.5	1
10371	Benzene	71-43-2	N.D.	0.5	1
10371	Bromodichloromethane	75-27-4	N.D.	0.5	1
10371	Bromoform	75-25-2	N.D.	0.5	1
10371	Bromomethane	74-83-9	N.D.	0.5	1
10371	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10371	Chlorobenzene	108-90-7	N.D.	0.5	1
10371	Chloroethane	75-00-3	N.D.	0.5	1
10371	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.5	1
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10371	Chloroform	67-66-3	N.D.	0.5	1
10371	Chloromethane	74-87-3	N.D.	0.5	1
10371	Dibromochloromethane	124-48-1	N.D.	0.5	1
10371	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10371	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10371	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10371	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10371	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10371	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10371	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10371	Ethylbenzene	100-41-4	N.D.	0.5	1
10371	Methylene Chloride	75-09-2	N.D.	0.5	1
10371	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10371	Tetrachloroethene	127-18-4	2	0.5	1
10371	Toluene	108-88-3	N.D.	0.5	1
10371	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10371	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10371	Trichloroethene	79-01-6	0.6 J	0.5	1
10371	Vinyl Chloride	75-01-4	N.D.	0.5	1
GC/MS	Semivolatiles	EPA 625	ug/l	ug/l	
10334	Acenaphthene	83-32-9	N.D.	0.3	1
10334	Acenaphthylene	208-96-8	N.D.	0.3	1
10334	Anthracene	120-12-7	N.D.	0.2	1
10334	Benzidine	92-87-5	N.D.	19	1
10334	Benzo(a)anthracene	56-55-3	N.D.	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
10334	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl)ether	39638-32-9	N.D.	0.3	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8875484
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/24/2017 08:25

N08-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles EPA 625		ug/l	ug/l	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	N.D.	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	1	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	10	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	1,2-Diphenylhydrazine	122-66-7	N.D.	0.2	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	5	1	1
10334	Fluoranthene	206-44-0	N.D.	0.3	1
10334	Fluorene	86-73-7	N.D.	0.3	1
10334	Hexachlorobenzene	118-74-1	N.D.	1	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitrosodimethylamine	62-75-9	N.D.	2	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	0.3 J	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8875484
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/24/2017 08:25

N08-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.					
The LCS and/or LCSD recoveries are outside the stated QC window but within the marginal exceedance allowance of +/- 4 standard deviations as defined in the NELAC/DoD Standards. The following analytes are accepted based on this allowance: Hexachlorocyclopentadiene					
Pesticides/PCBs	EPA 608		ug/l	ug/l	
07572	Aldrin	309-00-2	N.D.	0.0016	1
07572	Alpha BHC	319-84-6	N.D.	0.0026	1
07572	Beta BHC	319-85-7	0.016	0.0039	1
07572	Gamma BHC - Lindane	58-89-9	0.010	0.0020	1
07572	Chlordane	57-74-9	N.D.	0.064	1
07572	p,p-DDD	72-54-8	N.D.	0.0058	1
07572	p,p-DDE	72-55-9	0.021	0.0040	1
07572	p,p-DDT	50-29-3	0.016	0.0042	1
07572	Delta BHC	319-86-8	0.0096	0.0031	1
07572	Dieldrin	60-57-1	0.014 J	0.0041	1
07572	Endosulfan I	959-98-8	0.014	0.0041	1
07572	Endosulfan II	33213-65-9	N.D.	0.0088	1
07572	Endosulfan Sulfate	1031-07-8	N.D.	0.0040	1
07572	Endrin	72-20-8	0.017	0.0056	1
07572	Endrin Aldehyde	7421-93-4	N.D.	0.016	1
07572	Heptachlor	76-44-8	N.D.	0.0021	1
07572	Heptachlor Epoxide	1024-57-3	0.0035 J	0.0021	1
06030	PCB-1016	12674-11-2	N.D.	0.082	1
06030	PCB-1221	11104-28-2	N.D.	0.082	1
06030	PCB-1232	11141-16-5	N.D.	0.082	1
06030	PCB-1242	53469-21-9	N.D.	0.082	1
06030	PCB-1248	12672-29-6	N.D.	0.082	1
06030	PCB-1254	11097-69-1	N.D.	0.082	1
06030	PCB-1260	11096-82-5	N.D.	0.12	1
06030	Total PCBs	1336-36-3	N.D.	0.082	1
07572	Toxaphene	8001-35-2	N.D.	0.24	1

Reporting limits were raised due to interference from the sample matrix.

The recovery for the sample surrogate(s) is outside the QC acceptance limits for the original extraction. The following corrective action was taken:
The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the second trial per client request.

GC Petroleum	SW-846 8015B	ug/l	ug/l	
Hydrocarbons				
12858 DRO C10-C28	n.a.	580	45	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8875484
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:00 by JP

GES, Inc.

Submitted: 03/08/2017 19:38

440 Creamery Way, Suite 500

Reported: 03/24/2017 08:25

Exton PA 19341

N08-1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals					
		SW-846 6010B	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0097	1
07049	Cadmium	7440-43-9	0.0010 J	0.00049	1
07051	Chromium	7440-47-3	N.D.	0.0018	1
07053	Copper	7440-50-8	0.0154	0.0041	1
07055	Lead	7439-92-1	N.D.	0.0062	1
07060	Molybdenum	7439-98-7	N.D.	0.0017	1
07061	Nickel	7440-02-0	0.0509	0.0028	1
07066	Silver	7440-22-4	N.D.	0.0019	1
07072	Zinc	7440-66-6	0.139	0.0054	1
SW-846 7470A					
			mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000050	1
Wet Chemistry					
		EPA 335.4	mg/l	mg/l	
00237	Total Cyanide (water)	57-12-5	N.D.	0.0050	1
EPA 1664A					
			mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8875484
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:00 by JP

GES, Inc.

Submitted: 03/08/2017 19:38

440 Creamery Way, Suite 500

Reported: 03/24/2017 08:25

Exton PA 19341

N08-1

CAT No.	Analysis Name	CAS Number	Result	EDL	Dilution Factor
Dioxins/Furans					
	EPA 1613B October 1994		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	0.132 JBQ	0.0806	1
Labeled Compounds					
	%Rec	Windows			
13C12-2378-TCDD	86	25 - 164			

Dioxins/Furans Data Qualifiers:

<i>B</i>	<i>Detected in Method Blank</i>
<i>U</i>	<i>Undetected</i>
<i>J</i>	<i>Estimated concentration between Estimated Detection Limit and Minimum Reporting Level</i>
<i>E</i>	<i>Exceeds calibration range</i>
<i>C</i>	<i>Confirmed quantitation on secondary GC column</i>
<i>Q</i>	<i>EMPC - Estimated Maximum Possible Concentration</i>
<i>F</i>	<i>Interference is present</i>
<i>S</i>	<i>Saturation of detection signal</i>

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8875484
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/24/2017 08:25

N08-1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10371	TTO VOCs 624	EPA 624	1	M170691AA	03/10/2017 13:23	Jason M Long	1
10334	Method 625	EPA 625	1	17072WAA625	03/15/2017 15:54	Linda M Hartenstine	1
08108	625 Water Extraction	EPA 625	1	17072WAA625	03/13/2017 19:45	Nicholas W Shroyer	1
06030	PCBs w/ OC Pests 608	EPA 608	1	170720012A	03/15/2017 15:01	Jessica L Miller	1
07572	Pests (Charged with PCBs 608)	EPA 608	1	170790008A	03/21/2017 11:27	Lisa A Reinert	1
11960	Method 608 PCB Water Ext.	EPA 608	1	170720012A	03/13/2017 15:45	Kate E Lutte	1
10241	Method 608 Water Extraction	EPA 608	2	170790008A	03/20/2017 17:30	Kailah L Ortiz	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	170800010A	03/23/2017 00:22	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170800010A	03/21/2017 16:20	Shawn J McMullen	1
10915	Dioxins/Furans in Water - 1613	EPA 1613B October 1994	1	17070002	03/17/2017 20:23	Michael A Ziegler	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B October 1994	1	17070002	03/13/2017 08:45	Alex L Barton	1
07035	Arsenic	SW-846 6010B	1	170761848001	03/19/2017 19:42	Elaine F Stoltzfus	1
07049	Cadmium	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
07051	Chromium	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
07053	Copper	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
07055	Lead	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
07060	Molybdenum	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
07061	Nickel	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
07066	Silver	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
07072	Zinc	SW-846 6010B	1	170761848001	03/18/2017 11:48	Cindy M Gehman	1
00259	Mercury	SW-846 7470A	1	170705713002	03/13/2017 17:37	Damary Valentin	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	170761848001	03/18/2017 01:00	Denise L Trimby	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	170705713002	03/13/2017 07:50	James L Mertz	1
00237	Total Cyanide (water)	EPA 335.4	1	17075102102A	03/17/2017 08:12	Dein K Bernot	1
00492	Cyanide Water Distillation	EPA 335.4	1	17075102102A	03/16/2017 16:15	Barbara A Washington	1
08079	HEM (oil & grease)	EPA 1664A	1	17075807901A	03/16/2017 02:59	Nicole Hogg	1

EDL = Estimated Detection Limit

Sample Description: Post OWS Grab Groundwater
NRG PRGS

LL Sample # WW 8875485
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/24/2017 08:25

N08-2

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	2,300	45	1
	Wet Chemistry	EPA 1664A	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	N.D.	1.4	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170800010A	03/23/2017 00:45	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170800010A	03/21/2017 16:20	Shawn J McMullen	1
08079	HEM (oil & grease)	EPA 1664A	1	17075807901A	03/16/2017 02:59	Nicole Hogg	1

Sample Description: P&T Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8875486
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 10:45 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/24/2017 08:25

N08-3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	560	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170800010A	03/23/2017 01:09	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170800010A	03/21/2017 16:20	Shawn J McMullen	1

Sample Description: TPE Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8875487
LL Group # 1774824
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 11:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/24/2017 08:25

N08-4

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	5,000	45	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	170800010A	03/23/2017 01:32	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	2	170800010A	03/21/2017 16:20	Shawn J McMullen	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: M170691AA	Sample number(s): 8875484	
Acrolein	N.D.	5
Acrylonitrile	N.D.	0.5
Benzene	N.D.	0.5
Bromodichloromethane	N.D.	0.5
Bromoform	N.D.	0.5
Bromomethane	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
Chlorobenzene	N.D.	0.5
Chloroethane	N.D.	0.5
2-Chloroethyl Vinyl Ether	N.D.	0.5
Chloroform	N.D.	0.5
Chloromethane	N.D.	0.5
Dibromochloromethane	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
1,1-Dichloroethene	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Methylene Chloride	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Toluene	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Trichloroethene	N.D.	0.5
Vinyl Chloride	N.D.	0.5
Batch number: 17072WAA625	Sample number(s): 8875484	
Acenaphthene	N.D.	0.3
Acenaphthylene	N.D.	0.3
Anthracene	N.D.	0.2
Benzidine	N.D.	20
Benzo(a)anthracene	N.D.	0.2
Benzo(a)pyrene	N.D.	0.3
Benzo(b)fluoranthene	N.D.	0.3
Benzo(g,h,i)perylene	N.D.	0.2
Benzo(k)fluoranthene	N.D.	0.3
4-Bromophenyl-phenylether	N.D.	0.3

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
Butylbenzylphthalate	N.D.	0.8
Di-n-butylphthalate	N.D.	0.5
4-Chloro-3-methylphenol	N.D.	0.3
bis(2-Chloroethoxy)methane	N.D.	0.5
bis(2-Chloroethyl)ether	N.D.	0.4
bis(2-Chloroisopropyl)ether	N.D.	0.3
2-Chloronaphthalene	N.D.	0.2
2-Chlorophenol	N.D.	0.3
4-Chlorophenyl-phenylether	N.D.	0.3
Chrysene	N.D.	0.2
Dibenz(a,h)anthracene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.3
1,3-Dichlorobenzene	N.D.	0.3
1,4-Dichlorobenzene	N.D.	0.3
3,3'-Dichlorobenzidine	N.D.	0.8
2,4-Dichlorophenol	N.D.	0.3
Diethylphthalate	N.D.	0.3
2,4-Dimethylphenol	N.D.	0.3
Dimethylphthalate	N.D.	1
4,6-Dinitro-2-methylphenol	N.D.	4
2,4-Dinitrophenol	N.D.	10
2,4-Dinitrotoluene	N.D.	0.4
2,6-Dinitrotoluene	N.D.	0.3
1,2-Diphenylhydrazine	N.D.	0.2
bis(2-Ethylhexyl)phthalate	N.D.	1
Fluoranthene	N.D.	0.3
Fluorene	N.D.	0.3
Hexachlorobenzene	N.D.	1
Hexachlorobutadiene	N.D.	0.8
Hexachlorocyclopentadiene	N.D.	2
Hexachloroethane	N.D.	0.4
Indeno(1,2,3-cd)pyrene	N.D.	0.3
Isophorone	N.D.	0.3
Naphthalene	N.D.	0.2
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	0.4
4-Nitrophenol	N.D.	5
N-Nitrosodimethylamine	N.D.	2
N-Nitroso-di-n-propylamine	N.D.	0.4
N-Nitrosodiphenylamine	N.D.	0.3
Di-n-octylphthalate	N.D.	0.5
Pentachlorophenol	N.D.	3
Phenanthrene	N.D.	0.2
Phenol	N.D.	0.4
Pyrene	N.D.	0.2
1,2,4-Trichlorobenzene	N.D.	0.3
2,4,6-Trichlorophenol	N.D.	0.7
Batch number: 170720012A	Sample number(s): 8875484	

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
PCB-1016	N.D.	0.080
PCB-1221	N.D.	0.080
PCB-1232	N.D.	0.080
PCB-1242	N.D.	0.080
PCB-1248	N.D.	0.080
PCB-1254	N.D.	0.080
PCB-1260	N.D.	0.12
Total PCBs	N.D.	0.080
Batch number: 170790008A	Sample number(s): 8875484	
Aldrin	N.D.	0.0016
Alpha BHC	N.D.	0.0026
Beta BHC	N.D.	0.0039
Gamma BHC - Lindane	N.D.	0.0020
Chlordane	N.D.	0.064
p,p-DDD	N.D.	0.0042
p,p-DDE	N.D.	0.0040
p,p-DDT	N.D.	0.0042
Delta BHC	N.D.	0.0030
Dieldrin	N.D.	0.0041
Endosulfan I	N.D.	0.0041
Endosulfan II	N.D.	0.0088
Endosulfan Sulfate	N.D.	0.0040
Endrin	N.D.	0.0056
Endrin Aldehyde	N.D.	0.016
Heptachlor	N.D.	0.0021
Heptachlor Epoxide	N.D.	0.0021
Toxaphene	N.D.	0.24
Batch number: 170800010A	Sample number(s): 8875484-8875487	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 170705713002	Sample number(s): 8875484	
Mercury	N.D.	0.000050
Batch number: 170761848001	Sample number(s): 8875484	
Arsenic	N.D.	0.0097
Cadmium	N.D.	0.00049
Chromium	N.D.	0.0018
Copper	0.0045 J	0.0041
Lead	N.D.	0.0062
Molybdenum	N.D.	0.0017
Nickel	N.D.	0.0028
Silver	N.D.	0.0019
Zinc	N.D.	0.0054
Batch number: 17075102102A	Sample number(s): 8875484	
Total Cyanide (water)	N.D.	0.0050
Batch number: 17075807901A	Sample number(s): 8875484-8875485	

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

Method Blank (continued)

Analysis Name	Result	MDL
	mg/l	mg/l
HEM (oil & grease)	N.D.	1.4
Analysis Name	Result	EDL
	pg/l	pg/l
Batch number: 17070002	Sample number(s): 8875484	
2378-TCDD	0.0830 J	0.0814

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: M170691AA	Sample number(s): 8875484								
Acrolein	150	86.81	150	89.15	58	59	50-127	3	30
Acrylonitrile	100	82.8	100	82.72	83	83	56-120	0	30
Benzene	20	18.86	20	18.88	94	94	80-120	0	30
Bromodichloromethane	20	18.88	20	18.66	94	93	80-120	1	30
Bromoform	20	18.98	20	18.71	95	94	66-125	1	30
Bromomethane	20	22.04	20	22.43	110	112	61-137	2	30
Carbon Tetrachloride	20	20.74	20	20.85	104	104	72-128	1	30
Chlorobenzene	20	20.25	20	20.45	101	102	80-120	1	30
Chloroethane	20	20.04	20	20.34	100	102	60-136	1	30
2-Chloroethyl Vinyl Ether	20	17.93	20	18.3	90	92	65-120	2	30
Chloroform	20	19.49	20	19.27	97	96	80-120	1	30
Chloromethane	20	16.87	20	17.11	84	86	57-124	1	30
Dibromochloromethane	20	20.15	20	19.98	101	100	78-120	1	30
1,1-Dichloroethane	20	19.78	20	19.71	99	99	70-128	0	30
1,2-Dichloroethane	20	18.63	20	18.17	93	91	80-120	3	30
1,1-Dichloroethene	20	21.97	20	22.28	110	111	69-122	1	30
trans-1,2-Dichloroethene	20	21.18	20	21.04	106	105	73-124	1	30
1,2-Dichloropropane	20	18.32	20	18.35	92	92	80-120	0	30
cis-1,3-Dichloropropene	20	19.37	20	19.32	97	97	80-120	0	30
trans-1,3-Dichloropropene	20	19.64	20	19.83	98	99	80-120	1	30
Ethylbenzene	20	20.81	20	20.82	104	104	80-120	0	30
Methylene Chloride	20	21.11	20	21.02	106	105	69-120	0	30
1,1,2,2-Tetrachloroethane	20	18.88	20	19.03	94	95	80-120	1	30
Tetrachloroethene	20	19.32	20	19.53	97	98	77-122	1	30
Toluene	20	20.27	20	20.32	101	102	80-120	0	30
1,1,1-Trichloroethane	20	19.43	20	19.47	97	97	77-123	0	30
1,1,2-Trichloroethane	20	20.09	20	19.76	100	99	80-120	2	30
Trichloroethene	20	19.99	20	19.58	100	98	80-120	2	30
Vinyl Chloride	20	19.67	20	19.9	98	100	59-127	1	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 17072WAA625	Sample number(s): 8875484								

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Acenaphthene	50	48.24			96		71-118		
Acenaphthylene	50	43.69			87		65-116		
Anthracene	50	49.2			98		80-114		
Benzidine	250	143.15			57		12-97		
Benzo(a)anthracene	50	50.36			101		76-117		
Benzo(a)pyrene	50	47.84			96		76-112		
Benzo(b)fluoranthene	50	47.61			95		73-116		
Benzo(g,h,i)perylene	50	46.75			94		76-120		
Benzo(k)fluoranthene	50	52.21			104		75-121		
4-Bromophenyl-phenylether	50	50.78			102		75-118		
Butylbenzylphthalate	50	51.67			103		78-120		
Di-n-butylphthalate	50	52.84			106		77-116		
4-Chloro-3-methylphenol	50	45.42			91		72-116		
bis(2-Chloroethoxy)methane	50	49.3			99		76-120		
bis(2-Chloroethyl)ether	50	46.77			94		74-111		
bis(2-Chloroisopropyl)ether	50	44.69			89		73-110		
2-Chloronaphthalene	50	39.58			79		40-155		
2-Chlorophenol	50	41.99			84		74-114		
4-Chlorophenyl-phenylether	50	49.02			98		70-116		
Chrysene	50	52.73			105		81-118		
Dibenz(a,h)anthracene	50	49.31			99		77-119		
1,2-Dichlorobenzene	50	32.21			64		26-111		
1,3-Dichlorobenzene	50	29.68			59		24-107		
1,4-Dichlorobenzene	50	29.98			60		21-108		
3,3'-Dichlorobenzidine	50	26.27			53		14-124		
2,4-Dichlorophenol	50	47.86			96		79-114		
Diethylphthalate	50	49.23			98		63-119		
2,4-Dimethylphenol	50	35.12			70		55-106		
Dimethylphthalate	50	43.13			86		26-134		
4,6-Dinitro-2-methylphenol	50	49.19			98		69-117		
2,4-Dinitrophenol	100	99.72			100		34-129		
2,4-Dinitrotoluene	50	51.43			103		80-120		
2,6-Dinitrotoluene	50	51.21			102		80-115		
1,2-Diphenylhydrazine	50	50.63			101		77-124		
bis(2-Ethylhexyl)phthalate	50	52.66			105		77-118		
Fluoranthene	50	48.8			98		77-111		
Fluorene	50	48.63			97		73-115		
Hexachlorobenzene	50	48.91			98		75-116		
Hexachlorobutadiene	50	28.69			57		10-113		
Hexachlorocyclopentadiene	100	12.6			13*		24-128		
Hexachloroethane	50	25.55			51		11-105		
Indeno(1,2,3-cd)pyrene	50	47.85			96		71-116		
Isophorone	50	48.3			97		77-110		
Naphthalene	50	40.73			81		52-115		
Nitrobenzene	50	46.63			93		73-113		
2-Nitrophenol	50	48.81			98		83-109		
4-Nitrophenol	50	17.89			36		19-80		
N-Nitrosodimethylamine	50	22.88			46		28-81		

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
N-Nitroso-di-n-propylamine	50	48.89			98		78-110		
N-Nitrosodiphenylamine	50	49.82			100		77-116		
Di-n-octylphthalate	50	55.04			110		79-125		
Pentachlorophenol	50	46.79			94		45-134		
Phenanthrene	50	49.26			99		78-112		
Phenol	50	18.23			36		21-71		
Pyrene	50	51.39			103		75-121		
1,2,4-Trichlorobenzene	50	33.6			67		23-117		
2,4,6-Trichlorophenol	50	51.25			102		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170720012A	Sample number(s): 8875484								
PCB-1016	5.04	4.46	5.04	3.22	88	64	60-117	32*	30
PCB-1260	5.02	4.73	5.02	3.19	94	64	57-134	39*	30
Batch number: 170790008A	Sample number(s): 8875484								
Aldrin	0.100	0.0589	0.100	0.0583	59	58	28-119	1	30
Alpha BHC	0.100	0.0792	0.100	0.0776	79	78	47-132	2	30
Beta BHC	0.0980	0.0832	0.0980	0.0840	85	86	56-125	1	30
Gamma BHC - Lindane	0.100	0.0811	0.100	0.0795	81	79	51-132	2	30
p,p-DDD	0.198	0.194	0.198	0.187	98	94	53-131	4	30
p,p-DDE	0.198	0.170	0.198	0.167	86	84	51-129	2	30
p,p-DDT	0.198	0.180	0.198	0.178	91	90	42-136	1	30
Delta BHC	0.0980	0.0850	0.0980	0.0839	87	86	57-131	1	30
Dieldrin	0.198	0.168	0.198	0.163	85	82	54-126	3	30
Endosulfan I	0.100	0.0889	0.100	0.0862	89	86	51-118	3	30
Endosulfan II	0.200	0.174	0.200	0.168	87	84	54-124	4	30
Endosulfan Sulfate	0.198	0.185	0.198	0.172	93	87	41-133	7	30
Endrin	0.200	0.174	0.200	0.147	87	74	35-143	17	30
Endrin Aldehyde	0.198	0.181	0.198	0.173	92	87	40-135	5	30
Heptachlor	0.100	0.0809	0.100	0.0786	81	79	38-111	3	30
Heptachlor Epoxide	0.100	0.0881	0.100	0.0884	88	88	56-132	0	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170800010A	Sample number(s): 8875484-8875487								
DRO C10-C28	2660	2124.59	2650	2097.46	80	79	69-115	1	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 170705713002	Sample number(s): 8875484								
Mercury	0.00100	0.000903			90		80-120		
Batch number: 170761848001	Sample number(s): 8875484								
Arsenic	0.150	0.149			99		80-120		
Cadmium	0.0500	0.0514			103		80-120		
Chromium	0.200	0.191			96		80-120		
Copper	0.250	0.260			104		80-120		
Lead	0.150	0.147			98		80-120		
Molybdenum	2.00	1.95			97		80-120		

*- Outside of specification

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(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Nickel	0.500	0.513			103		80-120		
Silver	0.0500	0.0516			103		80-120		
Zinc	0.500	0.500			100		80-120		

Batch number: 17075102102A	Sample number(s): 8875484								
Total Cyanide (water)	0.200	0.208			104		90-110		
Batch number: 17075807901A	Sample number(s): 8875484-8875485								
HEM (oil & grease)	40	33.6	40	36.4	84	91	78-114	8	11

Analysis Name	OPR Spike Added pg/l	OPR Conc pg/l	OPRD Spike Added pg/l	OPRD Conc pg/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 17070002	Sample number(s): 8875484								
2378-TCDD	200	182.01			91		67-158		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 17072WAA625	Sample number(s): 8875484 UNSPK: P876337									
Acenaphthene	N.D.	47.44	46.93	47.57	46.49	99	98	71-118	1	30
Acenaphthylene	N.D.	47.44	44.68	47.57	43.46	94	91	65-116	3	30
Anthracene	N.D.	47.44	45.04	47.57	45.51	95	96	80-114	1	30
Benzidine	N.D.	237.19	188.36	237.87	159.07	79	67	12-97	17	30
Benzo(a)anthracene	N.D.	47.44	47.23	47.57	47.7	100	100	76-117	1	30
Benzo(a)pyrene	N.D.	47.44	45.11	47.57	45.3	95	95	76-112	0	30
Benzo(b)fluoranthene	N.D.	47.44	46.19	47.57	46.43	97	98	73-116	1	30
Benzo(g,h,i)perylene	N.D.	47.44	44.85	47.57	44.16	95	93	76-120	2	30
Benzo(k)fluoranthene	N.D.	47.44	47.79	47.57	47.14	101	99	75-121	1	30
4-Bromophenyl-phenylether	N.D.	47.44	48.23	47.57	49.2	102	103	75-118	2	30
Butylbenzylphthalate	N.D.	47.44	48.75	47.57	49.5	103	104	78-120	2	30
Di-n-butylphthalate	N.D.	47.44	48.01	47.57	48.41	101	102	77-116	1	30
4-Chloro-3-methylphenol	N.D.	47.44	38.8	47.57	40.03	82	84	72-116	3	30
bis(2-Chloroethoxy)methane	N.D.	47.44	45.81	47.57	45.49	97	96	76-120	1	30
bis(2-Chloroethyl)ether	N.D.	47.44	45.75	47.57	44.2	96	93	74-111	3	30
bis(2-Chloroisopropyl)ether	N.D.	47.44	44.85	47.57	42.9	95	90	73-110	4	30
2-Chloronaphthalene	N.D.	47.44	40.82	47.57	39.35	86	83	40-155	4	30
2-Chlorophenol	N.D.	47.44	38.75	47.57	39.73	82	84	74-114	2	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
4-Chlorophenyl-phenylether	N.D.	47.44	46.4	47.57	45.73	98	96	70-116	1	30
Chrysene	N.D.	47.44	48.75	47.57	49.54	103	104	81-118	2	30
Dibenz(a,h)anthracene	N.D.	47.44	46.01	47.57	45.59	97	96	77-119	1	30
1,2-Dichlorobenzene	N.D.	47.44	37.82	47.57	36.53	80	77	26-111	3	30
1,3-Dichlorobenzene	N.D.	47.44	34.97	47.57	33.99	74	71	24-107	3	30
1,4-Dichlorobenzene	N.D.	47.44	35.27	47.57	35.1	74	74	21-108	1	30
3,3'-Dichlorobenzidine	N.D.	47.44	34.9	47.57	23.13	74	49	14-124	41*	30
2,4-Dichlorophenol	N.D.	47.44	43.53	47.57	43.23	92	91	79-114	1	30
Diethylphthalate	N.D.	47.44	46.1	47.57	43.87	97	92	63-119	5	30
2,4-Dimethylphenol	N.D.	47.44	22.11	47.57	22.52	47*	47*	55-106	2	30
Dimethylphthalate	N.D.	47.44	39.9	47.57	38.53	84	81	26-134	4	30
4,6-Dinitro-2-methylphenol	N.D.	47.44	39.95	47.57	43.74	84	92	69-117	9	30
2,4-Dinitrophenol	N.D.	94.88	58.8	95.15	74.55	62	78	34-129	24	30
2,4-Dinitrotoluene	N.D.	47.44	47.79	47.57	47	101	99	80-120	2	30
2,6-Dinitrotoluene	N.D.	47.44	47.85	47.57	46.09	101	97	80-115	4	30
1,2-Diphenylhydrazine	N.D.	47.44	47.22	47.57	49.01	100	103	77-124	4	30
bis(2-Ethylhexyl)phthalate	N.D.	47.44	48.54	47.57	50.66	102	106	77-118	4	30
Fluoranthene	N.D.	47.44	44.25	47.57	44.76	93	94	77-111	1	30
Fluorene	N.D.	47.44	46.01	47.57	44.75	97	94	73-115	3	30
Hexachlorobenzene	N.D.	47.44	46.2	47.57	45.77	97	96	75-116	1	30
Hexachlorobutadiene	N.D.	47.44	34.95	47.57	35.86	74	75	10-113	3	30
Hexachlorocyclopentadiene	N.D.	94.88	45.95	95.15	51.13	48	54	24-128	11	30
Hexachloroethane	N.D.	47.44	31.77	47.57	31.35	67	66	11-105	1	30
Indeno(1,2,3-cd)pyrene	N.D.	47.44	45.81	47.57	45.66	97	96	71-116	0	30
Isophorone	N.D.	47.44	44.78	47.57	44.43	94	93	77-110	1	30
Naphthalene	N.D.	47.44	41.27	47.57	41.3	87	87	52-115	0	30
Nitrobenzene	N.D.	47.44	44.15	47.57	43.93	93	92	73-113	0	30
2-Nitrophenol	3.17	47.44	49.15	47.57	49.68	97	98	83-109	1	30
4-Nitrophenol	N.D.	47.44	15.4	47.57	17.08	32	36	19-80	10	30
N-Nitrosodimethylamine	N.D.	47.44	21.12	47.57	21.42	45	45	28-81	1	30
N-Nitroso-di-n-propylamine	N.D.	47.44	46.57	47.57	44.45	98	93	78-110	5	30
N-Nitrosodiphenylamine	N.D.	47.44	46.96	47.57	47.92	99	101	77-116	2	30
Di-n-octylphthalate	N.D.	47.44	50.67	47.57	51.81	107	109	79-125	2	30
Pentachlorophenol	N.D.	47.44	25.59	47.57	29.75	54	63	45-134	15	30
Phenanthrene	N.D.	47.44	45.68	47.57	45.99	96	97	78-112	1	30
Phenol	N.D.	47.44	16.56	47.57	16.52	35	35	21-71	0	30
Pyrene	N.D.	47.44	48.03	47.57	49.74	101	105	75-121	4	30
1,2,4-Trichlorobenzene	N.D.	47.44	37.6	47.57	38.04	79	80	23-117	1	30
2,4,6-Trichlorophenol	N.D.	47.44	46.72	47.57	45.43	98	95	80-120	3	30
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 170705713002	Sample number(s): 8875484 UNSPK: P877914									
Mercury	N.D.	0.00100	0.000980	0.00100	0.000954	98	95	80-120	3	20
Batch number: 170761848001	Sample number(s): 8875484 UNSPK: P876034									
Arsenic	0.0527	0.150	0.199	0.150	0.202	97	100	75-125	2	20

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Cadmium	N.D.	0.0500	0.0518	0.0500	0.0513	104	103	75-125	1	20
Chromium	N.D.	0.200	0.195	0.200	0.194	98	97	75-125	1	20
Copper	N.D.	0.250	0.267	0.250	0.263	107	105	75-125	2	20
Lead	N.D.	0.150	0.153	0.150	0.151	102	101	75-125	1	20
Molybdenum	0.00816	2.00	2.02	2.00	1.99	101	99	75-125	1	20
Nickel	N.D.	0.500	0.523	0.500	0.514	105	103	75-125	2	20
Silver	N.D.	0.0500	0.0519	0.0500	0.0523	104	105	75-125	1	20
Zinc	N.D.	0.500	0.515	0.500	0.512	103	102	75-125	1	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17075102102A	Sample number(s): 8875484 UNSPK: P875398									
Total Cyanide (water)	N.D.	0.200	0.182			91		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 17075807901A	Sample number(s): 8875484-8875485 UNSPK: P878858									
HEM (oil & grease)	N.D.	41.7	34.48			83		78-114		

Laboratory Duplicate

Background (BKG) = the sample used in conjunction with the duplicate

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 170705713002	Sample number(s): 8875484 BKG: P877914			
Mercury	N.D.	N.D.	0 (1)	20
Batch number: 170761848001	Sample number(s): 8875484 BKG: P876034			
Arsenic	0.0527	0.0500	5 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	N.D.	N.D.	0 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Lead	N.D.	N.D.	0 (1)	20
Molybdenum	0.00816	0.00788	3 (1)	20
Nickel	N.D.	N.D.	0 (1)	20
Silver	N.D.	N.D.	0 (1)	20
Zinc	N.D.	N.D.	0 (1)	20
	mg/l	mg/l		
Batch number: 17075102102A	Sample number(s): 8875484 BKG: P875398			
Total Cyanide (water)	N.D.	N.D.	0 (1)	20

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: TTO VOCs 624

Batch number: M170691AA

	1,2-Dichloroethane-d4	Fluorobenzene	4-Bromofluorobenzene
8875484	102	94	94
Blank	104	92	96
LCS	99	98	107
LCSD	101	98	106
Limits:	78-118	88-107	80-118

Analysis Name: Method 625

Batch number: 17072WAA625

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol
8875484	97	94	91	4*	8*	43
Blank	93	76	97	30	46	101
LCS	94	92	98	33	49	103
MS	92	93	91	31	47	91
MSD	93	90	95	31	49	91
Limits:	60-119	62-116	55-124	10-76	10-105	27-142

Analysis Name: PCBs w/ OC Pests 608

Batch number: 170720012A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8875484	71	68
Blank	78	75
LCS	90	61
LCSD	68	32
Limits:	33-137	10-148

Analysis Name: Pests (Charged with PCBs 608)

Batch number: 170790008A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8875484	62	73
Blank	52	61
LCS	72	85
LCSD	74	80
Limits:	29-129	32-149

Analysis Name: DRO micro-ext 8015B

Batch number: 170800010A

	Orthoterphenyl
8875484	104
8875485	114

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/24/2017 08:25

Group Number: 1774824

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: DRO micro-ext 8015B
Batch number: 170800010A

Orthoterphenyl	
8875486	99
8875487	65
Blank	95
LCS	93
LCSD	94

Limits: 42-160

Analysis Name: Dioxins/Furans in Water - 1613
Batch number: 17070002

13C12-2378-TCDD	
8875484	86
Blank	87
OPR	85

Limits: 25-164

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ / MRL.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1774824 Sample # 8875484-87

Environmental Analysis Request/Chain of Custody

[illegible]

Sample Administration
Receipt Documentation Log

Doc Log ID: 177507



Group Number(s): 1774824

Client: GES**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>03/08/2017 19:38</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	No
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Patrick Engle (3472) at 20:59 on 03/08/2017***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT131	3.6	DT	Wet	Y	Bagged	N
2	DT131	0.5	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: March 16, 2017

Project: NRG PRGSSubmittal Date: 03/08/2017
Group Number: 1774429
PO Number: 0402919-53-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample Description

TPE Vapor Grab Air

Lancaster Labs

(LL) #

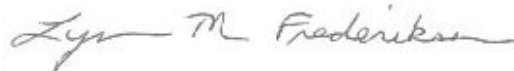
8873785

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: TPE Vapor Grab Air
NRG PRGS - Alexandria, VA

LL Sample # AQ 8873785
LL Group # 1774429
Account # 08390

Project Name: NRG PRGS

Collected: 03/07/2017 11:30 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/08/2017 19:38

Exton PA 19341

Reported: 03/16/2017 12:10

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Volatiles in Air		EPA 18 mod/EPA 25 mod	mg/m3	mg/m3	
07090	Benzene	71-43-2	< 3	3	1
07090	C1-C4 Hydrocarbons as propane	n.a.	< 18	18	1
07090	>C4-C10 Hydrocarbons hexane	n.a.	< 35	35	1
07090	Ethylbenzene	100-41-4	< 4	4	1
07090	Toluene	108-88-3	< 4	4	1
07090	Xylene (total)	1330-20-7	< 9	9	1

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/C1-C4/>C4-C10	EPA 18 mod/EPA 25 mod	1	M1706930AA	03/10/2017 16:08	Alexander D Sechrist	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 03/16/2017 12:10

Group Number: 1774429

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	LOQ
	mg/m3	mg/m3
Batch number: M1706930AA	Sample number(s): 8873785	
Benzene	< 3	3
C1-C4 Hydrocarbons as propane	< 18	18
>C4-C10 Hydrocarbons hexane	< 35	35
Ethylbenzene	< 4	4
Toluene	< 4	4
Xylene (total)	< 9	9

LCS/LCSD

Analysis Name	LCS Spike Added mg/m3	LCS Conc mg/m3	LCSD Spike Added mg/m3	LCSD Conc mg/m3	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: M1706930AA	Sample number(s): 8873785								
Benzene	31.95	26.15	31.95	25.51	82	80	65-118	2	30
Ethylbenzene	43.42	40.43	43.42	39.91	93	92	62-123	1	30
Toluene	37.69	42.6	37.69	41.73	113	111	79-149	2	30
Xylene (total)	130.27	129.24	130.27	123.23	99	95	58-125	5	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.



**Lancaster Laboratories
Environmental**

Acct. # 8340 Group # 1774429 Sample # 8673785

Environmental Analysis Request/Chain of Custody

[illegible]

Sample Administration
Receipt Documentation Log

Doc Log ID: 177503



Group Number(s): 1774429

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>03/08/2017 19:38</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	N/A	VOA Vial Headspace \geq 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	Yes
Missing Samples:	No	Air Quality Flow Controllers Present:	No
Extra Samples:	No	Air Quality Returns:	No
Discrepancy in Container Qty on COC:	No		

Unpacked by Patrick Engle (3472) at 20:49 on 03/08/2017

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

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Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

WARRANTY AND LIMITS OF LIABILITY - In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. THE FOREGOING EXPRESS WARRANTY IS EXCLUSIVE AND IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. WE DISCLAIM ANY OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING A WARRANTY OF FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF MERCHANTABILITY. IN NO EVENT SHALL EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL, LLC BE LIABLE FOR INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR LOSS OF PROFIT OR GOODWILL REGARDLESS OF (A) THE NEGLIGENCE (EITHER SOLE OR CONCURRENT) OF EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL AND (B) WHETHER EUROFINS LANCASTER LABORATORIES ENVIRONMENTAL HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by Eurofins Lancaster Laboratories Environmental which includes any conditions that vary from the Standard Terms and Conditions, and Eurofins Lancaster Laboratories Environmental hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

ANALYTICAL RESULTS

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

GES, Inc.
440 Creamery Way, Suite 500
Exton PA 19341

Report Date: April 03, 2017

Project: NRG PRGSSubmittal Date: 03/29/2017
Group Number: 1782447
PO Number: 0402919-53-220
Release Number: ORG # 0404
State of Sample Origin: VAClient Sample Description

Effluent Grab Groundwater

Lancaster Labs

(LL) #

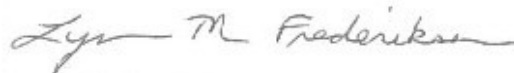
8909231

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

Regulatory agencies do not accredit laboratories for all methods, analytes, and matrices. Our current scopes of accreditation can be viewed at <http://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/resources/certifications/>. To request copies of prior scopes of accreditation, contact your project manager.

Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MDAttn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8909231
LL Group # 1782447
Account # 08390

Project Name: NRG PRGS

Collected: 03/28/2017 14:00 by JP

GES, Inc.

440 Creamery Way, Suite 500

Submitted: 03/29/2017 17:09

Exton PA 19341

Reported: 04/03/2017 09:52

EFNRG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Pesticides/PCBs		EPA 608	ug/l	ug/l	
07572	Aldrin	309-00-2	N.D.	0.0016	1
07572	Alpha BHC	319-84-6	0.0063 J	0.0026	1
07572	Beta BHC	319-85-7	0.026	0.0039	1
07572	Gamma BHC - Lindane	58-89-9	0.012	0.0020	1
07572	Chlordane	57-74-9	N.D.	0.064	1
07572	p,p-DDD	72-54-8	N.D.	0.013	1
07572	p,p-DDE	72-55-9	0.019	0.0040	1
07572	p,p-DDT	50-29-3	N.D.	0.0042	1
07572	Delta BHC	319-86-8	N.D.	0.0030	1
07572	Dieldrin	60-57-1	N.D.	0.0095	1
07572	Endosulfan I	959-98-8	0.014	0.0041	1
07572	Endosulfan II	33213-65-9	N.D.	0.0088	1
07572	Endosulfan Sulfate	1031-07-8	N.D.	0.0040	1
07572	Endrin	72-20-8	0.0070 J	0.0056	1
07572	Endrin Aldehyde	7421-93-4	N.D.	0.016	1
07572	Heptachlor	76-44-8	N.D.	0.0021	1
07572	Heptachlor Epoxide	1024-57-3	N.D.	0.0021	1
07572	Toxaphene	8001-35-2	N.D.	0.24	1

Reporting limits were raised due to interference from the sample matrix.

Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07572	Pests (Charged with PCBs 608)	EPA 608	1	170880027A	03/30/2017 18:43	Amanda L Zittle	1
10241	Method 608 Water Extraction	EPA 608	1	170880027A	03/30/2017 03:30	Sherry L Morrow	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 04/03/2017 09:52

Group Number: 1782447

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 170880027A	Sample number(s): 8909231	
Aldrin	N.D.	0.0016
Alpha BHC	N.D.	0.0026
Beta BHC	N.D.	0.0039
Gamma BHC - Lindane	N.D.	0.0020
Chlordane	N.D.	0.064
p,p-DDD	N.D.	0.0042
p,p-DDE	N.D.	0.0040
p,p-DDT	N.D.	0.0042
Delta BHC	N.D.	0.0030
Dieldrin	N.D.	0.0041
Endosulfan I	N.D.	0.0041
Endosulfan II	N.D.	0.0088
Endosulfan Sulfate	N.D.	0.0040
Endrin	N.D.	0.0056
Endrin Aldehyde	N.D.	0.016
Heptachlor	N.D.	0.0021
Heptachlor Epoxide	N.D.	0.0021
Toxaphene	N.D.	0.24

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: 170880027A	Sample number(s): 8909231								
Aldrin	0.100	0.0690	0.100	0.0697	69	70	28-119	1	30
Alpha BHC	0.100	0.0701	0.100	0.0731	70	73	47-132	4	30
Beta BHC	0.0980	0.0743	0.0980	0.0743	76	76	56-125	0	30
Gamma BHC - Lindane	0.100	0.0718	0.100	0.0741	72	74	51-132	3	30
p,p-DDD	0.198	0.179	0.198	0.171	90	86	53-131	5	30
p,p-DDE	0.198	0.177	0.198	0.166	89	84	51-129	6	30
p,p-DDT	0.198	0.191	0.198	0.178	96	90	42-136	7	30
Delta BHC	0.0980	0.0779	0.0980	0.0771	79	79	57-131	1	30
Dieldrin	0.198	0.162	0.198	0.156	82	79	54-126	4	30
Endosulfan I	0.100	0.0804	0.100	0.0771	80	77	51-118	4	30
Endosulfan II	0.200	0.158	0.200	0.157	79	78	54-124	1	30
Endosulfan Sulfate	0.198	0.145	0.198	0.150	73	76	41-133	4	30

*- Outside of specification

(1) The result for one or both determinations was less than five times the LOQ.

(2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Quality Control Summary

Client Name: GES, Inc.
Reported: 04/03/2017 09:52

Group Number: 1782447

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Endrin	0.200	0.144	0.200	0.158	72	79	35-143	9	30
Endrin Aldehyde	0.198	0.171	0.198	0.169	86	85	40-135	1	30
Heptachlor	0.100	0.0754	0.100	0.0817	75	82	38-111	8	30
Heptachlor Epoxide	0.100	0.0782	0.100	0.0778	78	78	56-132	1	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: Pests (Charged with PCBs 608)
Batch number: 170880027A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8909231	61	41
Blank	73	65
LCS	66	41
LCSD	69	43
Limits:	29-129	32-149

*- Outside of specification

- (1) The result for one or both determinations was less than five times the LOQ.
- (2) The unspiked result was more than four times the spike added.

P##### is indicative of a Background or Unspiked sample that is batch matrix QC and was not performed using a sample from this submission group.

Environmental Analysis Request/Chain of Custody



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1782447 Sample # 8909231

[illegible]

Client: GES**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>03/29/2017 17:09</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

Shipping Container Sealed:	No	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	No	Sample Date/Times match COC:	Yes
Samples Chilled:	Yes	VOA Vial Headspace \geq 6mm:	N/A
Paperwork Enclosed:	Yes	Total Trip Blank Qty:	0
Samples Intact:	Yes	Air Quality Samples Present:	No
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

*Unpacked by Karen Diem (3060) at 17:25 on 03/29/2017***Samples Chilled Details***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT121	0.6	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	mg	milligram(s)
C	degrees Celsius	mL	milliliter(s)
cfu	colony forming units	MPN	Most Probable Number
CP Units	cobalt-chloroplatinate units	N.D.	none detected
F	degrees Fahrenheit	ng	nanogram(s)
g	gram(s)	NTU	nephelometric turbidity units
IU	International Units	pg/L	picogram/liter
kg	kilogram(s)	RL	Reporting Limit
L	liter(s)	TNTC	Too Numerous To Count
lb.	pound(s)	µg	microgram(s)
m3	cubic meter(s)	µL	microliter(s)
meq	milliequivalents	umhos/cm	micromhos/cm
<	less than		
>	greater than		
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.		
ppb	parts per billion		
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.		

Laboratory Data Qualifiers:

- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
- V - Concentration difference between the primary and confirmation column $>100\%$. The reporting limit is raised due to this disparity and evident interference...
- W - The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as "analyze immediately" are not performed within 15 minutes.

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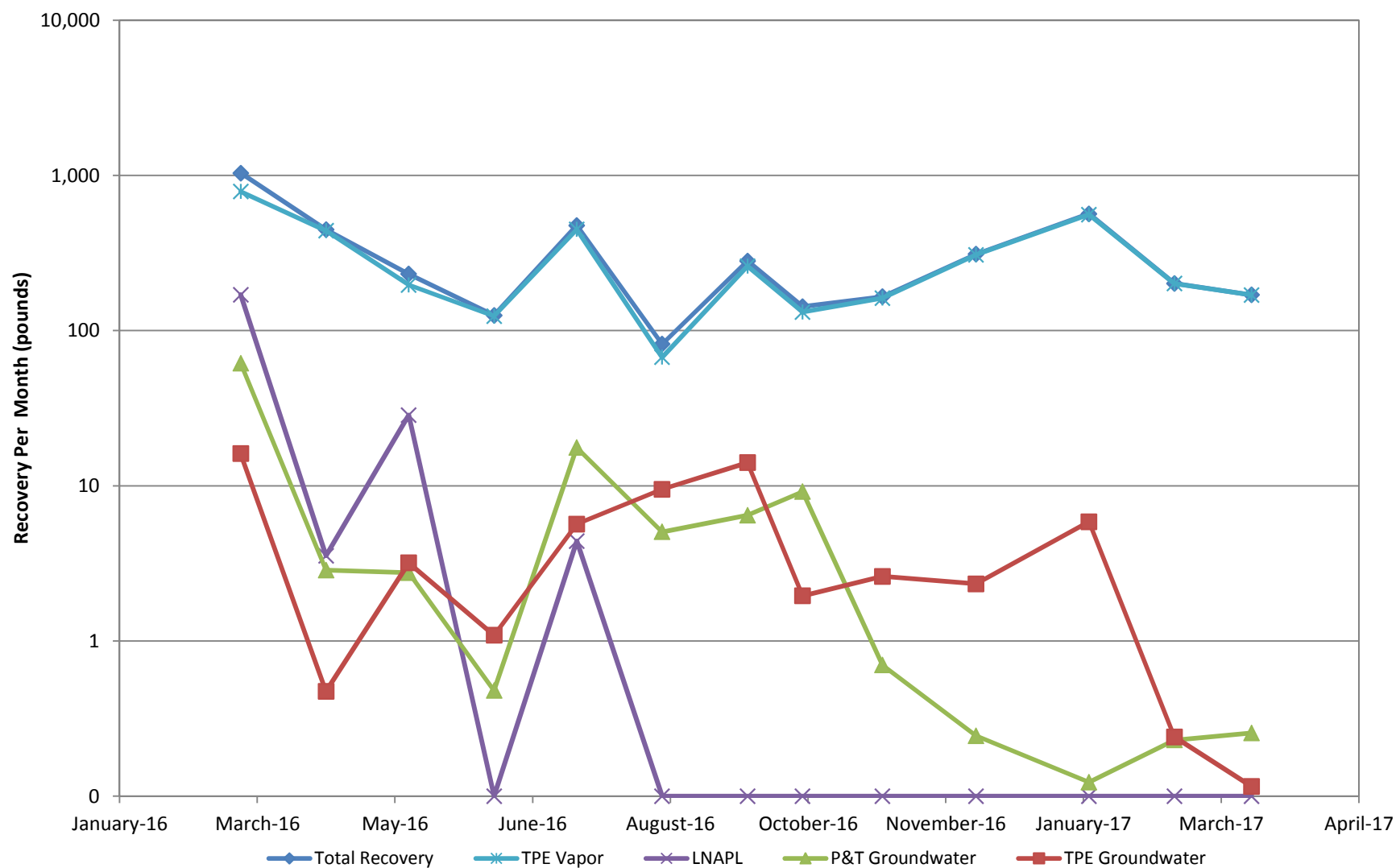
ATTACHMENT E

REMEDIATION SYSTEM PERFORMANCE GRAPHS

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NRG Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Hydrocarbon Recovery Rate



Note: The recovery rate is normalized to a 30 day monthly operation period.

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