

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

November 13, 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 Third Quarter of 2017:

- Twice 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 August 28, 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 August 28, 2017;
- Down-well water quality measurements recorded on August 28, 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 monitoring and sampling plan, on August 28-31, 2017;
- Collection of additional samples for analysis of sulfur, sulfate, and sulfide as well as TPH-DRO using a silica gel cleanup and Massachusetts Extractable Petroleum Hydrocarbons (MA EPH);

- Continued semi-monthly operation and maintenance (O&M) field events of the remediation system from July to September, 2017; and
- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises.

The total phase extraction (TPE) system was shut down on July 28, 2017 and remained off during the remainder of the third quarter 2017 due to a significant drop in pH and loss of alkalinity in select recovery wells. The frequency of gauging of the wells associated with the TPE system was increased to twice per month to ensure that no LNAPL returned; none was observed. Select biosparge wells were also kept off during the quarter.

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,

A handwritten signature in blue ink, appearing to read 'M. Nitz', is positioned below the 'Sincerely,' text.

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**

NOVEMBER 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**

NOVEMBER 13, 2017



SITE NAME: Potomac River Generating Station

SITE LOCATION: 1400 North Royal Street, Alexandria, VA

VDEQ PC# 2013-3154

DATE OF REPORT: November 13, 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 Third 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 3rd Quarter 2017:

- Shut down of the total phase extraction (TPE) system on July 28, 2017;
- Monthly liquid level gauging and manual bailing of light non-aqueous phase liquid (LNAPL), if present, from select site groundwater wells in July, and twice per month gauging of select wells following shutdown of the TPE system;
- Comprehensive gauging of all accessible site groundwater wells on August 28, 2017;
- Down-well water quality measurements recorded on August 28, 2017, of select site groundwater wells to monitor dissolved oxygen, pH, temperature, oxidation reduction potential (ORP) and conductivity;
- Quarterly groundwater sampling on August 28-31, 2017, from select site groundwater wells for total petroleum hydrocarbons – diesel range organics (TPH-DRO), TPH-DRO C10-C28 (SW-846 8015B) with silica gel cleanup (Method 3630C), Massachusetts Extractable Petroleum Hydrocarbons (MA EPH) with fractionation, as well as from select wells for biological indicator parameters including Alkalinity (SM 2320B), Nitrate NO₃⁻¹ & Nitrite NO₂⁻² (EPA 353.2), Manganese (Mn²⁺), Ferrous Iron Fe²⁺ (SM 3500-Fe B modified-1997), Sulfur (6010B), Sulfide (4500 S₂-F-11), Sulfate SO₄²⁻ (EPA 300.0) and Methane (RSKSOP-175 modified);
- Headspace vapor measurements recorded on August 28, 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 July through September, including groundwater and vapor sampling of the system;
- Remediation system repair, restart, and maintenance activities in addition to the bi-monthly visits;
- Active P&T Wells: RW-05, RW-14, RW-25, RW-31, and RW-51;
- Active TPE Wells: MW-25S, RW-25S, RW-28S, RW-30S, RW-117S, RW-119S, RW-123S – (until July 28, 2017)



- Active Biosparge Wells: SP-01 through SP-05, SP-06 (turned off July 19, 2017), SP-07, SP-08 (turned off July 19, 2017), and SP-09 through SP-15;
- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises (AlexRenew); and
- Submittal of a discharge permit renewal and sample reduction request to 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 routine quarterly

and annual monitoring and sampling schedule of monitoring and recovery wells. The following site characterization and monitoring activities were conducted during the 3rd Quarter 2017:

- July 2017:
 - Monthly gauging of select groundwater wells.
- August – September 2017:
 - Twice per month gauging of select groundwater wells.
- August 28, 2017:
 - Site-wide gauging and headspace vapor monitoring and collection of down-well field parameters of select groundwater wells.
- August 28-31, 2017:
 - Gauging and groundwater sampling of accessible site groundwater wells in accordance with the Groundwater Monitoring and Sampling Plan. Additional samples were collected for the measurement of sulfur, sulfate, sulfide, as well as TPH-DRO using a silica gel cleanup and MA EPH.

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 3rd Quarter 2017, all accessible site groundwater wells, with the exception of wells in the basement, were gauged during a comprehensive gauging event on August 28, 2017. Select groundwater wells that historically exhibited measureable LNAPL or elevated dissolved phase hydrocarbon concentrations were also gauged on a monthly or twice per month basis (following TPE system shutdown). Gauging events conducted during the 3rd Quarter 2017 are summarized below:

- Gauging of select wells:
 - July 19, 2017
 - August 21, 2017
 - August 28, 2017
 - September 5, 2017
 - September 20, 2017
- Site-wide gauging of all accessible wells:
 - August 28, 2017

Historical and 3rd Quarter 2017 groundwater and LNAPL elevation data is presented in **Table 3 – Historical Groundwater Monitoring and Analytical Data Summary**. LNAPL was not detected in any groundwater monitoring well during the 3rd Quarter 2017. During comprehensive gauging on August 28, 2017 monitoring wells MW-11, MW-16S, MW-106, and RW-30S were dry. Prior to the quarterly monitoring event, the remediation system was shut down for 4 days and remained off during the event to allow for stable measurements and to ensure adequate groundwater for sampling.

Measured groundwater depths ranged from 1.32 feet below ground surface (bgs) in MW-105 to 33.15 feet bgs in MW-27 during the 3rd quarter 2017. Groundwater depth in various monitoring wells appear to be decreasing below historical levels in the following locations: MW/RW-14, MW-16, MW-27, MW-33, MW-52, MW-70, MW/RW-72, MW-100, MW-102, MW-106, MW-121, MW-122, RW-1, RW-28S, TW-03, TW-04, TW-05, TW-06 and TW-07. These locations are generally 2-4 feet below historic groundwater elevations.

Site-wide gauging was conducted on August 28, 2017, in accordance with the tidal cycle of the Potomac River. On August 28, 2017, low tide at the site occurred at 10:06 am. Multiple personnel gauged the site wells as quickly as possible bracketing the river's low 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 August 28, 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 northeast, towards the Potomac River. Mounding was observed around RW-123S and MW-51S. The deep zone groundwater contour map indicates that groundwater flow is predominantly to the east northeast towards the Potomac River, with a slight depression in the central portion of the site. The calculated hydraulic gradient at the site ranged from approximately 0.05 feet per foot in the shallow zone to approximately 0.08 feet per foot in the deep zone during the August 2017 monitoring event.

2.2 HEADSPACE VAPOR MONITORING

Monitoring well vapor headspace readings were collected at select groundwater wells on August 28, 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 VOCs, 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 August 28 to 31, 2017, groundwater samples were collected from 28 groundwater monitoring/recovery wells (MW-01S, MW-08S, MW/RW-10S, MW/RW-14, MW-15S, MW-16, MW-25S, MW/RW-25, MW-27, MW/RW-31, MW-33, MW-51S, MW/RW-51, MW/RW-72S, MW/RW-72, MW-121, MW-122, MW/RW-123S, RW-1, RW-05S, MW/RW-05, RW-25S, RW-28S, RW-116S, RW-117S, RW-118S, and RW-119S, RW-123S) and 7 temporary wells (TW-02, TW-03, TW-04, TW-05,

TW-06, TW-07, and TW-14) using disposable bailers or dedicated sampling ports. Wells MW-106, MW-108, and TW-12S, were not sampled during the 3rd Quarter 2017 sampling event due to insufficient water. The groundwater monitoring and sampling plan used this quarter, which includes the additional parameters that were analyzed, is presented in **Table 2**. Due to limited water, not all wells could be sampled for all parameters noted 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. Groundwater pumping wells were sampled using sampling ports at the well heads. TPE recovery wells were sampled after partial removal of the drop tubes to allow for direct sampling of the wells in an effort to ensure that there was no cross-contamination from the drop tubes during sampling.

Select wells containing minimal volumes of water were not purged, and grab samples were immediately collected. Purge water was stored in drums onsite to be removed by Triumvirate Environmental for treatment and disposal. Groundwater samples were collected directly in laboratory provided bottleware, packaged on ice in coolers, and transported under proper chain of custody to SGS Accutest (Accutest) in Dayton, NJ. Samples were requested to be analyzed for the following:

- Quarterly parameters (select wells)
 - Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO)
 - 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-}) – increased the wells sampled for sulfate this quarter
 - Methane
- Additional parameters analyzed this quarter
 - TPH-DRO C10-C28 (SW-846 8015B) with silica gel cleanup (Method 3630C)
 - MA EPH with fractionation
 - Sulfur
 - Sulfide

TPH-DRO, TPH-DRO C10-C28 (SW-846 8015B) with silica gel cleanup (Method 3630C), 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 A** 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**. A MA EPH with fractionation Analytical Data summary is included as **Table 6** and is discussed further in **Section 2.4**.

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

2.4 GROUNDWATER ANALYTICAL FINDINGS

During the 3rd Quarter 2017, 28 monitoring, recovery and temporary wells were sampled for TPH-DRO during the quarterly groundwater sampling event in August. 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 the 3rd Quarter 2017 sampling event, are presented as **Figure 6** and **Figure 7**. Sixteen monitoring wells were sampled for TPH-DRO C10-C28 (SW-846 8015B) with a silica gel cleanup (Method 3630C) and are included in **Table 3**. Two maps, providing TPH-DRO results with the silica gel cleanup, are presented showing the shallow and deep zone concentrations, as **Figure 8** and **Figure 9**. The results from the collection and analysis of groundwater samples during the 3rd Quarter 2017 are presented below:

- TPH-DRO was detected in 24 of the 25 groundwater monitoring wells sampled during the quarterly sampling event in August, with a maximum concentration of 54,300 micrograms per liter ($\mu\text{g/L}$) in monitoring/recovery well MW/RW-105S. TPH-DRO was detected in five of six temporary wells sampled (TW-04, TW-05, TW-06, TW-07 and TW-14), with a maximum concentration of 24,000 $\mu\text{g/L}$ in temporary well TW-05.
- Naphthalene was not detected during the August sampling event.

Concentration trend graphs are presented in **Attachment A**, showing historical and current benzene, naphthalene, and TPH-DRO concentrations, depths to water, and depths to LNAPL for select monitoring, recovery, and temporary wells. TPH-DRO trends are based solely on the standard TPH-DRO analysis without the silica gel cleanup. Trends observed as of 3rd Quarter 2017 are presented below:

- TPH-DRO concentrations have an overall increasing trend in wells MW/RW-10S, MW/RW-14, MW-51S, MW/RW-72S, MW/RW-123S, RW-05S, RW-28S, RW-116S, RW-117S, and RW-119S. However, there is a recent decreasing trend in wells MW/RW/10S, MW-51S, MW/RW-123S, RW-28S, and RW-116S. TPH-DRO concentrations have an overall decreasing trend in wells MW/RW-05, MW-25S, MW/RW-25, MW/RW-31, MW/RW-51, TW-03, TW-06, TW-07, RW-1, RW-25S. TPH-DRO concentrations are relatively stable in wells MW-01S, MW-08S, MW-27, MW/RW-72, RW-30S, RW-118S, and TW-04.
- 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-04, TW-06, and TW-07. A relatively stable trend is observed in well TW-03.
- In wells that have been sampled for benzene enough times to establish a trend, an overall decreasing trend is observed in MW-27 and MW/RW-72. Wells TW-03, TW-04, 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 SO₄²⁻, 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:

Background

- 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.

DO

- 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 3rd Quarter 2017, DO concentrations were considered aerobic (> 1.0 mg/L) in 6 of the 8 measured shallow zone aquifer wells (MW-01S, MW/RW-10S, MW-51S, MW/RW-123S, RW-05S, and RW-117S) and in 10 of the 13 measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-51, MW/RW-72, TW-03, TW-05, TW-06 and

TW-07). DO concentrations were considered anaerobic in five wells during the quarterly sampling event (RW-28S, MW/RW-72S, MW-121, MW-122, and RW-1).

ORP

- ORP values were positive in all 8 of the measured shallow aquifer zone wells (MW-01S, MW/RW-10S, MW-51S, MW/RW-72S, MW/RW-123S, RW-05S, RW-28S, and RW-117S) and in 10 of the 13 measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-51, MW/RW-72, TW-03, TW-05, TW-06, and TW-07) during the quarterly groundwater monitoring event in August. Positive ORP values are indicative of aerobic conditions. Wells with negative ORP readings included MW-121, MW-122, and RW-1 in the deep zone aquifer.

Alkalinity

- Alkalinity generally shows a decreasing trend at a majority of monitoring wells where a trend can be established. Alkalinity did not decrease significantly during the 3rd Quarter 2017, although it was not detected at 7 of the 28 wells where it was measured (MW/RW-10S, MW/RW-72S, TW-03, TW-04, TW-05, TW-06, TW-07). Loss of alkalinity is indicative of acid production in the subsurface. As the buffering capacity of the aquifer is lost, significant decreases in pH can occur.

pH

- In the shallow zone, pH levels declined significantly from the 1st quarter 2017 through July 2017 in select wells, but overall pH levels began to rebound following shutdown of the TPE system. In monitoring conducted in the 3rd quarter, pH has been observed below 6.0 at 14 of the 39 wells where it was measured and below 5.0 at 6 of the monitoring wells (MW/RW-05, MW/RW-72, MW/RW-72S, RW-05S, and RW-117S). The lowest pH level was again measured in RW-05S (3.70). However, the pH had increased from 2.71 in May 2017. Low pH levels in select areas are creating unfavorable conditions for biodegradation.

Nitrate

- Nitrate was detected in one of the 4 shallow zone aquifer wells where it was measured (MW/RW-10S) and in none of the 4 deep zone aquifer wells where it was measured.

Nitrite

- Nitrite, an intermediate in denitrification, was not detected in any of the 4 shallow zone aquifer wells or 4 deep zone aquifer wells where it was measured.

Manganese

- Manganese concentrations have decreased in a majority of wells across the site since system start-up. However, select wells have shown recent increases in dissolved manganese, including MW/RW-10S, MW-51S, MW/RW-72, MW/RW-72S, MW-106, and TW-05. Because oxidizing conditions exist and acidification is occurring in many of these wells, the increases may indicate an abiotic change and not biologically induced manganese reduction. Manganese reduction formerly occurring at the site has largely diminished with operation of the remediation system.

Ferrous Iron

- 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. Increases in ferrous iron concentrations have been observed in monitoring wells

MW/RW-10S, MW-11, MW/RW-31 MW-51S, MW/RW-72S, TW-03, TW-05, and TW-06. However, as with the similar manganese increases, the changes are likely abiotic, given the oxidizing conditions and acidification that is occurring due to system operation.

Sulfate

- 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. The high concentrations of sulfur in the system are likely contributing to the low pH conditions by conversion to sulfuric acid and/or sulfurous acid.

Methane

- Methane concentrations across the site remain low compared to pre-system startup levels. Low or decreasing methane concentrations are consistent with the introduction of oxygen into the subsurface and a reduction in contaminant mass.

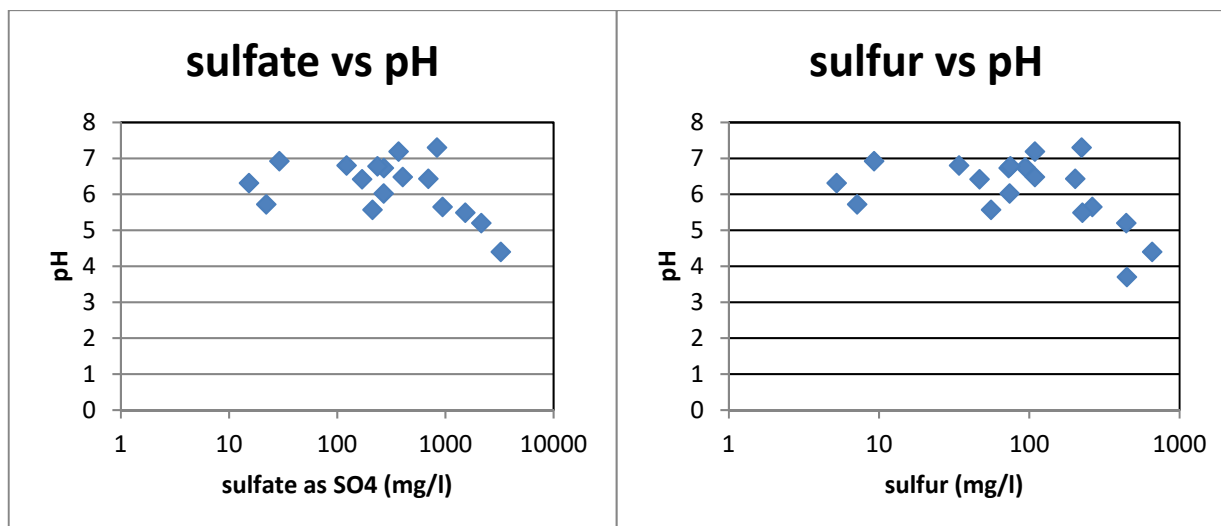
Overall, while dissolved oxygen is successfully being introduced into the subsurface, loss of alkalinity and declining pH have caused unfavorable conditions to develop, particularly in the shallow zone recovery wells. These declines, along with increasing sulfate and metals in solution and an increased specific conductance, suggests there is sulfur in the aquifer that is being oxidized, creating a more acidic environment through the production of sulfuric acid and sulfurous acid. These changes are being caused by the elevated levels of oxygen in the subsurface from the remediation system. As discussed below, limiting oxygen introduction into the shallow zone through a temporary shutdown of the TPE system, as well as select biosparge wells, is recommended to prevent further declines in pH and to assess the geochemical conditions at the site.

In shallow zone recovery wells that have exhibited a low pH (e.g., RW-05S, RW-10S, and RW-116S), significant increases in TPH-DRO concentrations have also been observed. Because high levels of acid can cause precipitation reactions in organics, elevated TPH-DRO concentrations may be due to the generation of oxygenated chains, rather than petroleum based hydrocarbons.

2.5 SULFUR pH RELATIONSHIP

In an effort to understand the significant decline in pH that has been observed this year, the relationship between sulfur concentrations and pH has been examined in more depth. The sulfur and sulfate in the system is being converted to sulfuric and/or sulfurous acid in the presence of oxygen, lowering the pH of the system. The wells with the highest sulfur/sulfate concentrations are also the ones with the lowest pH. The concentrations of sulfur and sulfate in the shallow zone are shown in **Figures 10 and 11**, respectively. These show higher concentrations towards the center of the site. This can be compared to the shallow zone pH map (**Figure 12**), which also shows generally lower pH at the center of the site. In the deep zone, the sulfur and sulfate concentrations are generally highest to the east near the river (**Figures 13 and 14**). This is also where the pH is lowest in wells sampled for all three parameters (**Figure 15**).

Comparing the sulfate, sulfur and pH values for wells where the data is available, it appears the pH is lower in areas where the sulfate and sulfur concentration are significantly elevated. The plots below show the pH of specific monitoring wells compared with the sulfate and sulfur values.



The cutoff point where sulfur and sulfate concentrations are associated with a drop in pH could be associated with alkalinity. The presence of sulfate and sulfur in the groundwater is acidifying the system as oxygen is introduced. As the alkalinity is running out in different locations, the pH drops. Areas with more sulfate and sulfur experience more acidification so the alkalinity runs out there first, creating the cut off in sulfur concentration where the pH drops significantly. Alkalinity could also explain variations of pH between wells with similar sulfur and sulfate concentrations. For example, wells MW-16 and RW-123S have similar sulfate and sulfur concentrations but RW-123S has a pH near 7 and MW-16's pH is 5.57. The alkalinity at MW-16 is an order of magnitude lower than the alkalinity at RW-123S. The greater alkalinity in well RW-123S buffers it better against the acidification of the sulfur and sulfate keeping its pH higher.

2.6 SILICA GEL CLEANUP SAMPLING FOR TPH-DRO

As noted above, increases in the TPH-DRO concentrations may be due to the production of oxygenated chains in acidic conditions rather than the presence of petroleum based hydrocarbons. The extraction and quantification methods used in the TPH-DRO analysis include non-hydrocarbons, therefore potentially increasing the concentration measured.

One method to rectify this is to introduce a silica gel cleanup before the sample is analyzed. The non-hydrocarbons in the sample have some molecule other than carbon and hydrogen. This makes them polar in molecular structure. Thus, when the polar silica gel is used, the polar non-hydrocarbons stay in the gel and the hydrocarbons remain in the sample. Therefore, this method should provide a TPH-DRO result that is more indicative of the actual DRO concentration (i.e. diesel-range petroleum hydrocarbons).

The silica gel cleanup process (Method 3630C) was used for 16 of the 25 wells sampled during the quarterly sampling event in August. Using this method prior to running Method 8015, the maximum

TPH-DRO concentration was 11,300 micrograms per liter ($\mu\text{g/L}$) in recovery well RW-1. This is about a fifth of the maximum of 54,300 micrograms per liter ($\mu\text{g/L}$) measured using the traditional method. All but one of the monitoring wells (MW-121, in the deep zone) saw decreases when the silica gel cleanup was applied (concentrations in MW-121 were relatively stable between the two process suggesting the TPH-DRO in this well is largely associated with petroleum hydrocarbons). The decreases ranged from a 30% reduction (from 15,300 to 11,300 $\mu\text{g/L}$ at RW-1, also in the deep zone) to a 98% reduction (from 25,600 $\mu\text{g/L}$ to 448 $\mu\text{g/L}$ at MW-51S). On average, the measured TPH-DRO concentration with the silica gel cleanup was only 19% of the measured concentration without the cleanup. The TPH-DRO with the silica gel cleanup and the standard TPH-DRO data are presented for select wells in the Historical Groundwater Monitoring and Analytical Data Table (**Table 3**).

These results would show that nearly 80% of the material being measured in the standard TPH-DRO analysis consists of some sort of polar non-hydrocarbon compounds being created by the low pH, as opposed to petroleum based hydrocarbons. This could explain the increasing TPH-DRO trend in many wells.

2.7 MA EPH FINDINGS

Diesel consists of aromatic and aliphatic hydrocarbons in the C10-C28 range. The MA EPH analysis that was run on 15 wells provided the concentrations of different hydrocarbons in the groundwater samples. From this data, presented in **Table 6**, the last 3 columns comprise the ranges of aromatic and aliphatic hydrocarbons. The sums of these are much more in line with the results of the TPH-DRO analysis using the silica gel cleanup method. Except for one well, they are in the same order of magnitude, and the average percent difference between the sum of these hydrocarbon ranges and those measured using the TPH-DRO with silica gel cleanup method is only 6.5%, compared to 77.8% for the traditional TPH-DRO results.

The MA EPH analysis also measured 17 semi-volatile organic compounds (SVOCs). Of the individual SVOCs analyzed, detections were only observed in 11 of the 15 wells sampled, and none of the concentrations exceeded 5 $\mu\text{g/L}$. The highest observed concentration was 4.8 $\mu\text{g/L}$ of fluorene in well RW-05S. The highest number of compounds detected in a single well was eight, in RW-1. The most common compound detected was phenanthrene, which was found in nine wells.

3.0 REMEDIATION SYSTEM OPERATION

The remediation system operated during the 3rd 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 16**). The TPE, P&T, and biosparge systems all operated during a portion or all of the 3rd Quarter 2017, with specifics provided below. The reporting period for the 3rd Quarter 2017 was from June 22, 2017 to September 20, 2017, and was controlled by the O&M schedule. Activities of note completed during the 3rd Quarter 2017 included:

- Bi-monthly system operations and/or maintenance (O&M) visits were performed on July 10 and

26, August 9 and 21, and September 5 and 20, 2017 including monthly system sampling and gauging of select wells.

- Monthly Self-Monitoring Reports (SMRs) for 3rd Quarter 2017 were submitted to AlexRenew by August 10, 2017, September 10, 2017 and October 10, 2017.
- On July 6, 2017, the remediation system was down due to a power outage. All systems were restarted and operational on departure.
- On July 19, 2017, the TPE system was off on arrival in order to collect pH readings. All systems were restarted and operational on departure. Biosparge points SP-06 and SP-08 were turned off.
- On July 26, 2017, all systems were down due to an air compressor problem. The compressor was repaired and all systems were restarted and operational on departure.
- On July 28, the TPE system was deactivated with approval of the VDEQ due to low pH conditions.
- On August 25, 2017, the air compressor was found to have broken belts that required repair.
- From August 25, 2017 to September 5, 2017, the remediation system was not operated to allow conditions to stabilize for the groundwater sampling event and for the air compressor repair to occur.
- On September 20, 2017, the pumps in RW-05 and RW-14 were removed, repaired, and cleaned.

The TPE system operated for approximately 25 days out of 90 days during the reporting period, and was deactivated on July 28, 2017. The average vapor flow rate for the reporting period was 317 standard cubic feet per minute (scfm). The total groundwater recovered for the reporting period was 4,696 gallons (gal) with an average flow rate of 0.13 gallons per minute (gpm). The cumulative groundwater flow was 86,566 gallons by the end of the reporting period. The estimated vapor C1-C10 hydrocarbon recovery for the reporting period was 44 pounds (lbs), and the estimated groundwater TPH-DRO recovery for the reporting period was 0.7 lbs. A TPE Operational Summary is included as **Table 7**, TPE recovery data is included in **Table 10**, system sampling analytical reports are included in **Attachment C**, and system performance graphs are included in **Attachment D**.

The P&T system operated for approximately 70 days out of 90 days during the reporting period, with a system uptime of 78%. The total groundwater flow for the reporting period was 23,808 gallons, with an average flow rate of 0.2 gpm. The cumulative groundwater recovery since system startup was 1,058,010 gallons. The estimated groundwater TPH-DRO recovery for the reporting period was 0.2 lbs. No additional LNAPL was recovered by the oil/water separator or manual bailing. A P&T Operational Summary is included as **Table 8**, P&T recovery data is included in **Table 10**, system sampling analytical reports are included in **Attachment C**, and system performance graphs are included in **Attachment D**.

The biosparge system operated for approximately 73 days out of 90 days during the reporting period, with a system uptime of 81%. The average flow for each of the biosparge wells on the first leg (SP-01 through SP-08) was 0.8 scfm, with the exception of SP-06, which was 0.3 scfm. The average flow for the wells on



the second leg (SP-09 through SP-13) was 0.5 scfm, with the exceptions of SP-14 and SP-15, which was 0.3 scfm. A Biosparge Operational Summary is included as **Table 9**.

The total estimated hydrocarbon recovery to date is 3,132 lbs (428 gallons). This includes 134 lbs of dissolved-phase, 2,913 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 10**.

Hydrocarbon Recovery:

Dissolved-Phase Hydrocarbons (Period/Cumulative): **0.9 lbs / 134 lbs**

Vapor-Phase Hydrocarbons (Period/Cumulative): **44 lbs / 2,913 lbs**

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

Total Hydrocarbon Recovery (Period/Cumulative): **44.9 lbs /3,132 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 3rd Quarter 2017. An application to renew the permit was submitted to AlexRenew on October 10, 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 (4TH QUARTER 2017)

- Monthly gauging (during system O&M) of wells that have historically shown the presence of LNAPL;

- Twice monthly system O&M field events, including system sampling;
- Submittal of a quarterly CMR; and
- Submittal of monthly SMRs to AlexRenew.

5.0 REMEDIAL STRATEGY EVALUATION & RECOMMENDATIONS

TPE System Operation:

The TPE system was shut down in July because oxygen introduction into the subsurface appeared to be causing a loss of alkalinity and declining pH, which were causing unfavorable conditions to develop for biodegradation, a risk of equipment corrosion within the remediation system, and a risk of a permit violation (i.e., an effluent pH below 6.0). Following the additional monitoring that was conducted in the 3rd quarter, GES recommends the TPE system remain off. The reasons for this are presented below:

- No LNAPL was being recovered by the system during recent operation;
- LNAPL has not returned to the monitoring or recovery wells since the TPE system has been shut down, so the remedial goal of reducing the presence of LNAPL to a thickness of 0.01 ft or less has been achieved;
- When considering the TPH-DRO concentrations using a silica gel cleanup method (3630C) prior to analysis, the remedial goal of TPH-DRO being below 15 mg/L has been achieved;
- The remedial goal of naphthalene being below 10 µg/L has been achieved;
- Hydrocarbon recovery by the TPE system has significantly declined since system operation began;
- The remedial strategy of the TPE system, as described in the Corrective Action Plan (CAP), involved a transition from TPE to monitored natural attenuation, and further TPE operation would serve to undermine future natural attenuation by further decreasing the pH;
- Given the limited extent of the shallow zone, the potential for unacceptable risks to human health or environmental resources will be mitigated through ongoing deep zone remediation that will address any impacts that may migrate into the deep zone; and
- Biological activity has been demonstrated to be occurring in the shallow zone. If the pH is allowed time to neutralize, further natural attenuation can occur.

Future TPH DRO Analyses:

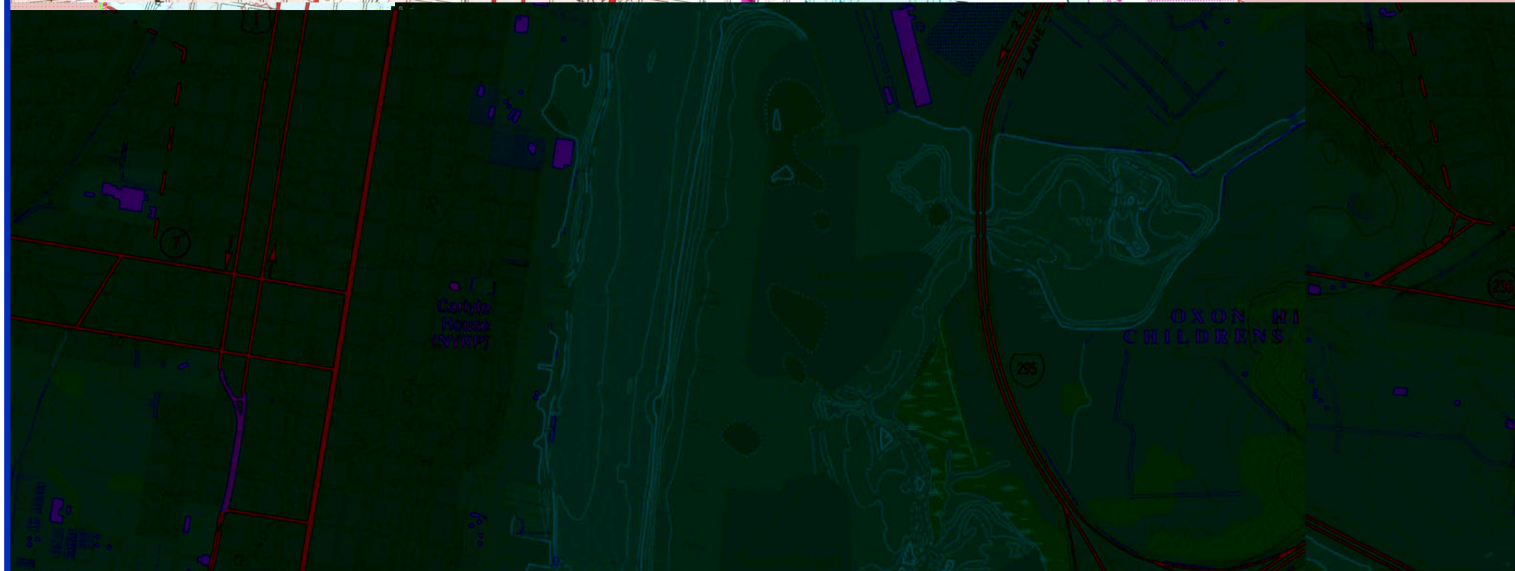
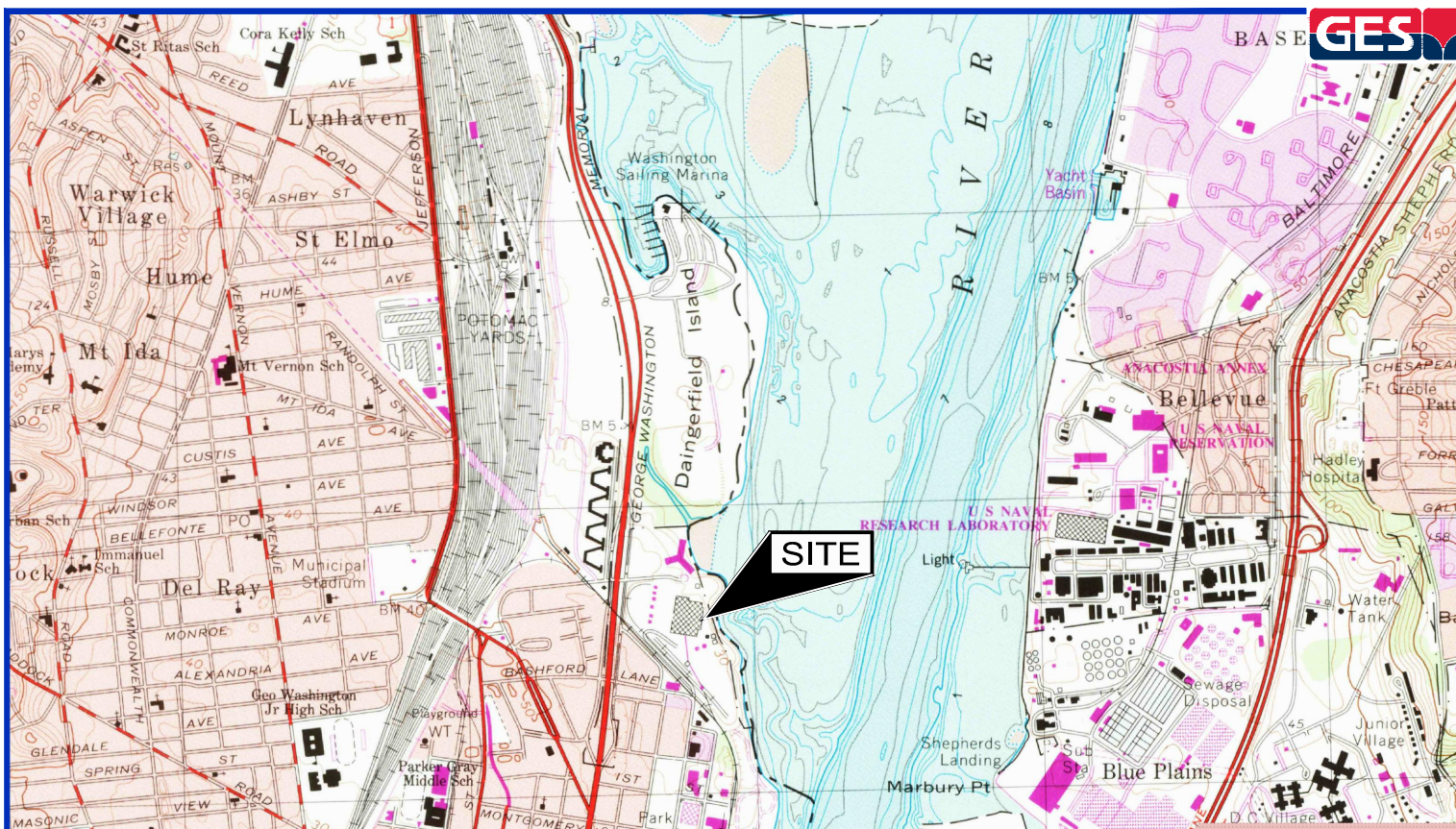
During the 3rd quarter 2017, at monitoring wells with historically elevated TPH-DRO concentrations, duplicate TPH-DRO analyses were conducted, with the second analysis being conducted following use of a silica gel cleanup (Method 3630C). The results indicated that there is generally a significant difference in concentrations reported between the two methods, and therefore, that the majority of what is being reported in the standard DRO analysis are polar non-hydrocarbons. We recommend repeating the duplicate analyses during the 4th quarter 2017, for any sample that had a TPH-DRO result greater than 15 mg/L during the 3rd quarter 2017. This will provide additional data to support or negate the conclusion that polar non-hydrocarbons are contributing to the TPH-DRO concentrations being reported using the



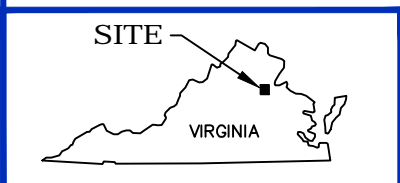
standard method and will allow for a better determination as to whether the goals for system shut down have been met, as was indicated by the results obtained this quarter.

LNAPL Gauging:

Based on the absence of LNAPL in the 3rd quarter, it is planned to return to a monthly gauging frequency and discontinue the twice per month gauging of select, historically LNAPL bearing wells that was implemented following shutdown of the TPE system.



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



QUADRANGLE LOCATION
NO SCALE

DRAFTED BY:

JW

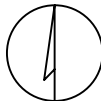
CHECKED BY:

NG

REVIEWED BY:

AC

NORTH

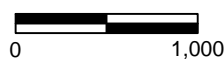


SITE LOCATION MAP

FORMER POTOMAC RIVER GENERATING STATION ALEXANDRIA, VIRGINIA

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

SCALE IN FEET



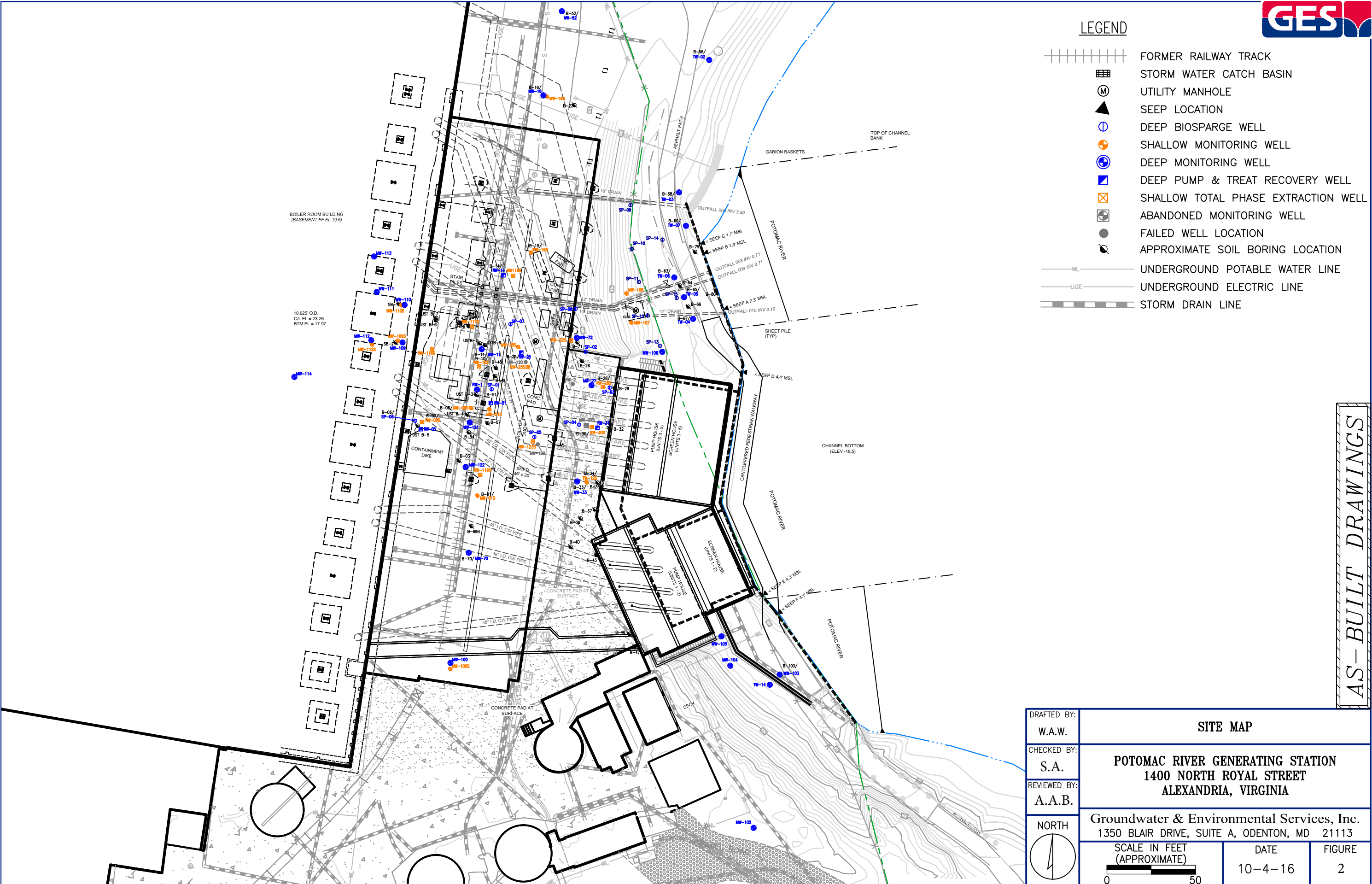
DATE

7-17-15

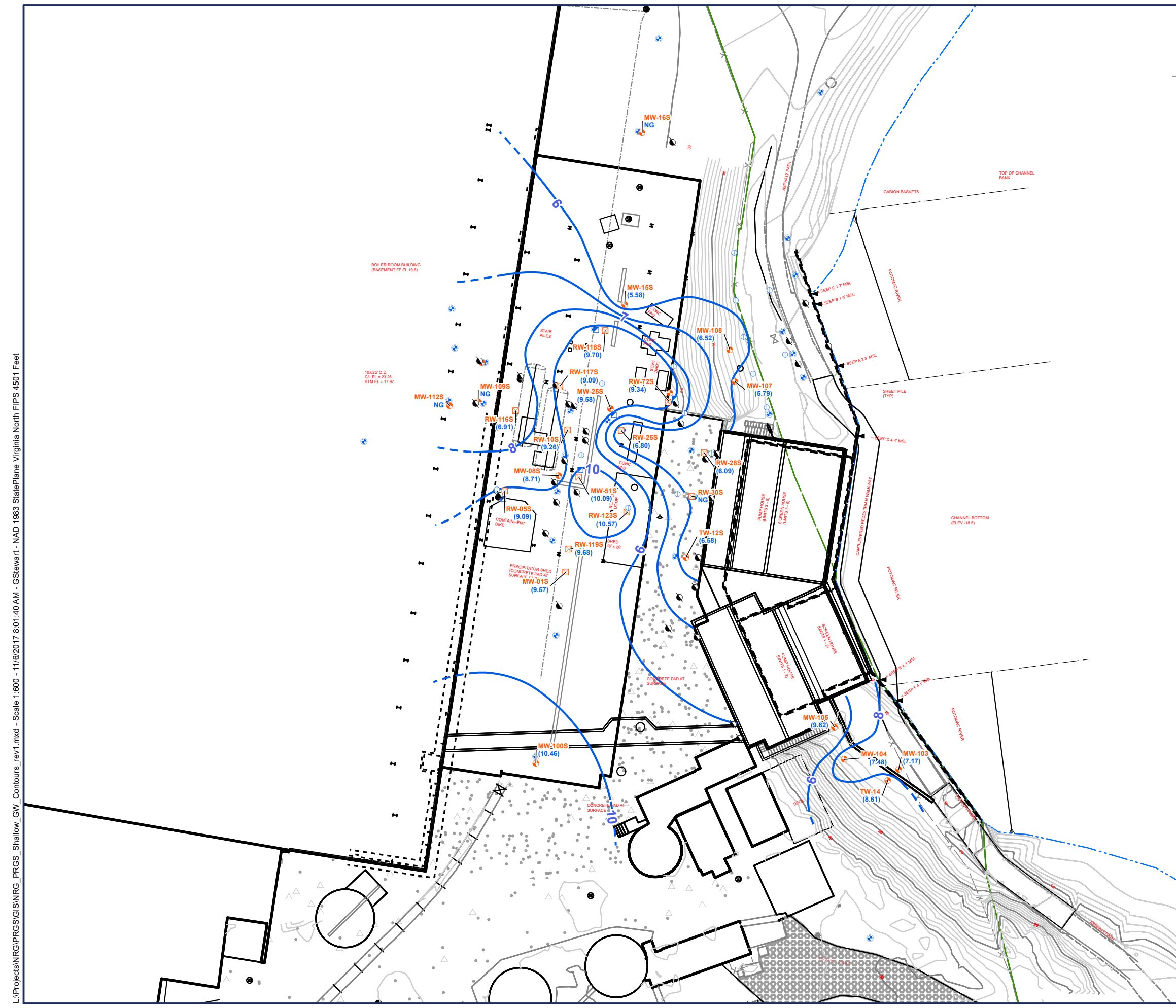
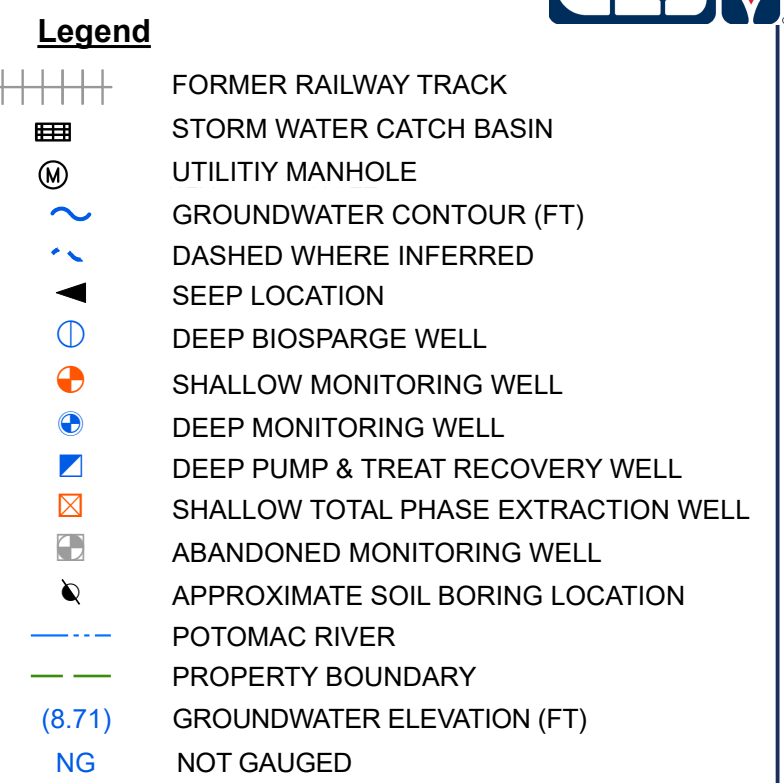
FIGURE



1

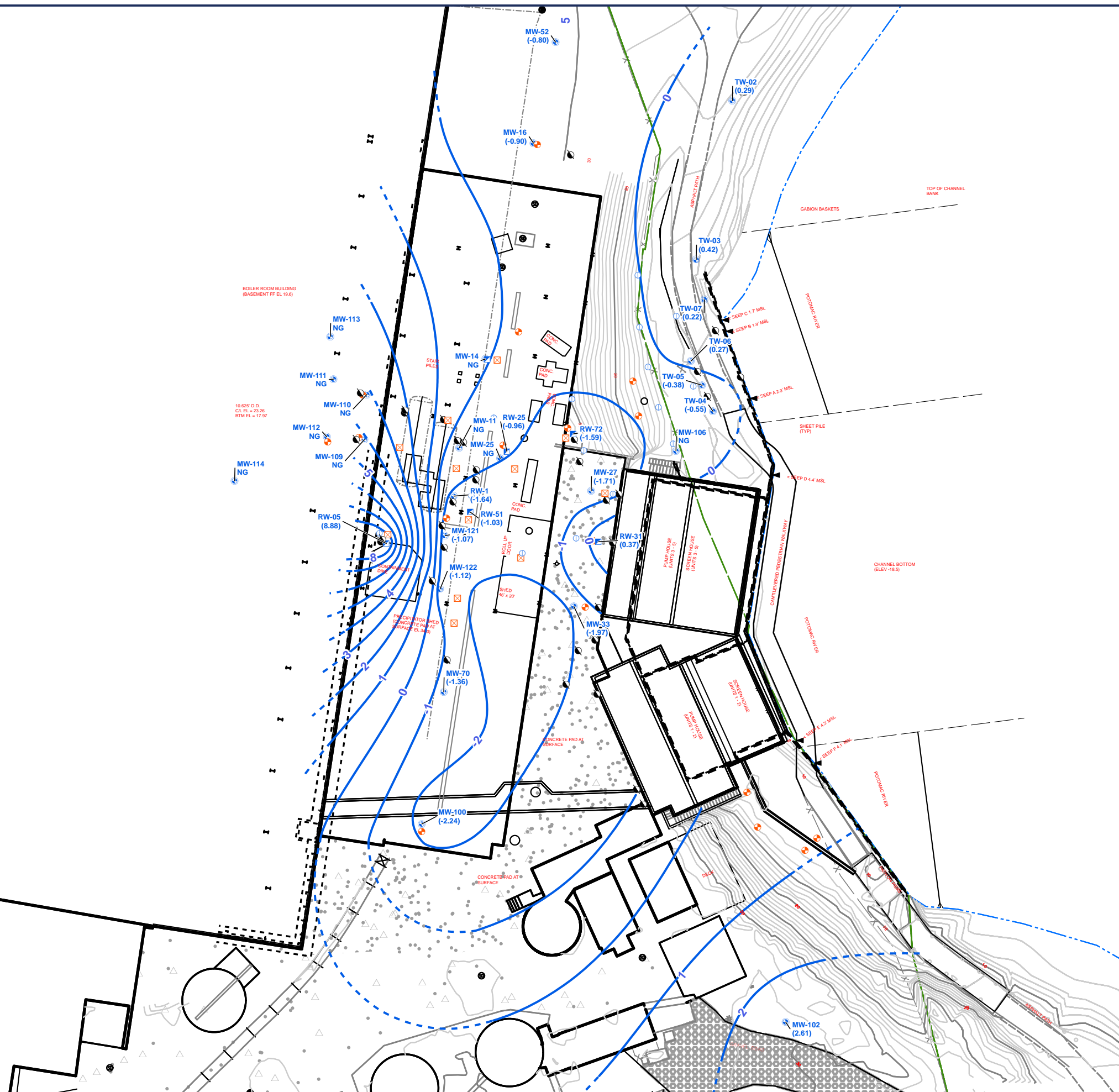
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DRAFTED BY: GKS	POTENTIOMETRIC SURFACE SHALLOW ZONE AQUIFER – AUGUST 28, 2017		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY: AAB	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
NORTH 	SCALE IN FEET 	DATE 11-6-17	FIGURE 4



- | | |
|---|-------------------------------------|
|  | 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 |
|  | GROUNDWATER CONTOUR (FT) |
|  | DASHED WHERE INFERRED |
|  | POTOMAC RIVER |
|  | PROPERTY BOUNDARY |
| (8.88) | GROUNDWATER ELEVATION (FT) |
| NG | NOT GAUGED |

DRAFTED BY: GKS	POTENTIOMETRIC SURFACE DEEP ZONE AQUIFER - AUGUST 28, 2017		
	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
CHECKED BY: DMC			
REVIEWED BY: AAB			
NORTH 	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
SCALE IN FEET 		DATE 10-26-17	FIGURE 5

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Shallow_TPHDRO_3Q2017.mxd - Scale 1:600 - 11/3/2017 10:40:47 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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 (µg/L)
- DASHED WHERE INFERRED
- TPH-DRO CONCENTRATION (µg/L)
- NOT SAMPLED

Note:
1) TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics
2) µg/L: Micrograms per liter

DRAFTED BY: GKS	TPH-DRO CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER - THIRD 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 11-3-17	FIGURE 6

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Deep_TPHDRO_3Q2017.mxd - Scale 1:600 - 10/26/2017 11:32:13 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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
- TPH-DRO CONCENTRATION ($\mu\text{g/L}$)
- NOT SAMPLED

Note:
1) TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics
2) $\mu\text{g/L}$: Micrograms per liter

DRAFTED BY: GKS	TPH-DRO CONCENTRATION CONTOURS DEEP ZONE AQUIFER - THIRD 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 		FIGURE 7
	DATE 10-26-17		

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Shallow_TPHDRO_Silica_3Q2017.mxd - Scale 1:600 - 11/3/2017 12:20:41 PM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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
- TPH-DRO CONCENTRATION ($\mu\text{g/L}$)
- NOT SAMPLED

- Note:
- Results determine via Silica Gel Cleanup Method 3630C
 - TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics
 - $\mu\text{g/L}$: Micrograms per liter
 - TW-12S, MW-107, and MW-108 could not be sampled due to an insufficient amount of water.
 - MW-16S, MW-103, MW-104, and MW-105 were not sampled since they are currently not in the sampling plan.

DRAFTED BY:	TPH-DRO CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER - THIRD QUARTER 2017		
GKS			
CHECKED BY:	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
DMC			
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
AAB			
NORTH			
	SCALE IN FEET	DATE	FIGURE
		11-3-17	8

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Deep_TPHDRO_Silica_3Q2017.mxd - Scale 1:600 - 11/3/2017 12:19:41 PM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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 (µg/L)
- DASHED WHERE INFERRED
- (1,000) TPH-DRO CONCENTRATION (µg/L)
- (NS) NOT SAMPLED

Note:
1) Results determined via Silica Gel Cleanup Method 3630C
2) TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics
3) µg/L: Micrograms per liter

DRAFTED BY: GKS	TPH-DRO CONCENTRATION MAP DEEP ZONE AQUIFER - THIRD 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 11-3-17	FIGURE 9

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Shallow_Sulfur_302017.mxd - 11/3/2017 10:43:13 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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

SULFUR CONCENTRATION (mg/L)

- > 10,000
- 1,000 - 10,000
- 100 - 1,000
- 10 - 100
- < 10

- (657) SULFUR CONCENTRATION (mg/L)
- (NS) NOT SAMPLED

Note:
mg/L: Milligrams per liter.

DRAFTED BY: GKS	SULFUR CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER – THIRD 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 		FIGURE 10
	DATE 11-3-17		

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Shallow_Sulfate_3Q2017.mxd - Scale 1:600 - 11/3/2017 10:42:07 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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

SULFATE CONCENTRATION (mg/L)

- > 10,000
- 1,000 - 10,000
- 100 - 1,000
- 10 - 100
- < 10

- (190) SULFATE CONCENTRATION (mg/L)
- (NS) NOT SAMPLED

Note:
mg/L: Milligrams per liter

DRAFTED BY: GKS	SULFATE CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER - THIRD 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 11-3-17	FIGURE 11

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_pH_Shallow_3Q2017.mxd - Scale 1:600 - 11/3/2017 10:57:10 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- DEEP BIOSPARGE WELL
- ABANDONED MONITORING WELL
- DEEP MONITORING WELL
- SHALLOW MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- APPROXIMATE SOIL BORING LOCATION
- SEEP LOCATION
- SHALLOW TOTAL PHASE EXTRACTION WELL

pH OBSERVATIONS (S.U.)

- > 7.0
- 6.0 - 7.0
- 5.0 - 6.0
- 4.0 - 5.0
- < 4.0

- (6.78) pH OBSERVATION (S.U.)
- (NS) NOT SAMPLED

Note:
S.U.: Standard Units

DRAFTED BY: GKS	PH CONTOURS SHALLOW ZONE AQUIFER THIRD QUARTER 2017		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY: AAB			
NORTH	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
	SCALE IN FEET	DATE	FIGURE
		11-3-17	12

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Deep_Sulfur_302017.mxd - Scale 1:500 - 11/3/2017 10:44:09 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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

SULFUR CONCENTRATION (mg/L)

- > 10,000
- 1,000 - 10,000
- 100 - 1,000
- 10 - 100
- < 10
- (226) SULFUR CONCENTRATION (mg/L)
- (NS) NOT SAMPLED

Note:
mg/L: Milligrams per liter

DRAFTED BY: GKS	SULFUR CONCENTRATION CONTOURS DEEP ZONE AQUIFER – THIRD 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 0 50	DATE 11-3-17	FIGURE 13

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Deep_Sulfate_3Q2017.mxd - Scale 1:600 - 11/3/2017 10:46:41 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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

SULFATE CONCENTRATION (mg/L)

- > 10,000
- 1,000 - 10,000
- 100 - 1,000
- 10 - 100
- < 10

- (1,530) SULFATE CONCENTRATION (mg/L)
- (NS) NOT SAMPLED

Note:
mg/L: Milligrams per liter

DRAFTED BY: GKS	SULFATE CONCENTRATION CONTOURS DEEP ZONE AQUIFER – THIRD 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 11-3-17	FIGURE 14

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_pH_Deep_302017.mxd - 11/3/2017 11:09:05 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- DEEP BIOSPARGE WELL
- ABANDONED MONITORING WELL
- DEEP MONITORING WELL
- SHALLOW MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- APPROXIMATE SOIL BORING LOCATION
- SEEP LOCATION
- SHALLOW TOTAL PHASE EXTRACTION WELL

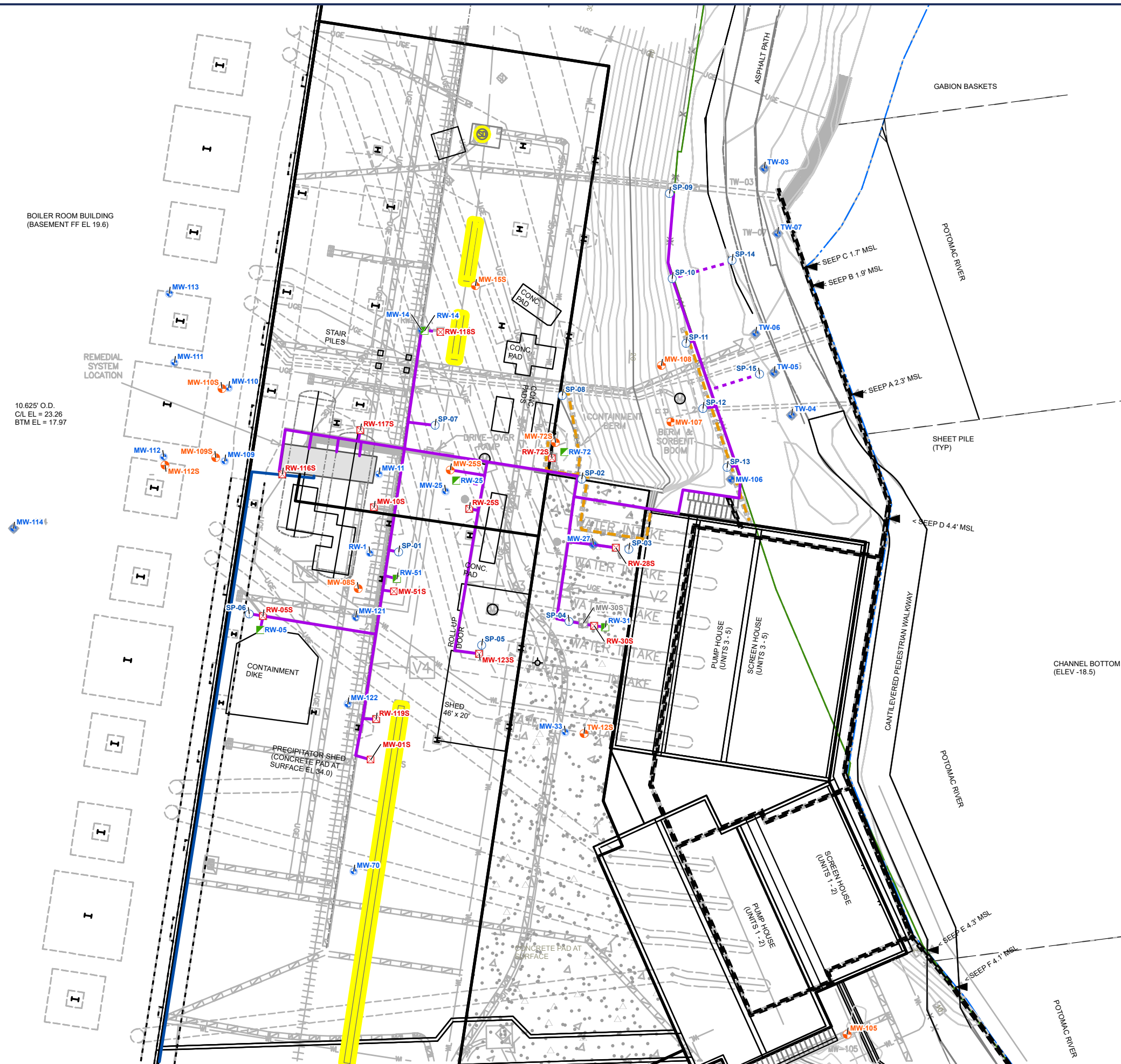
pH OBSERVATIONS (S.U.)

- > 7.0
- 6.0 - 7.0
- 5.0 - 6.0
- 4.0 - 5.0
- < 4.0
- (5.49) pH OBSERVATION (S.U.)
- (NS) NOT SAMPLED

Note:
S.U.: Standard Units

DRAFTED BY: GKS	PH CONTOURS DEEP ZONE AQUIFER THIRD QUARTER 2017		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY: AAB			
NORTH	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
	SCALE IN FEET	DATE	FIGURE
		11-3-17	15

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_Remediation_System.mxd - Scale 1:360 - 7/20/2017 12:19:45 PM - DCleland - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



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
- CONTAINMENT BERM
- REMEDATION PIPING (ABOVE GROUND)
- REMEDATION PIPING (BELOW GROUND)
- AIR DISCHARGE LINE
- WATER DISCHARGE LINE
- POTOMAC RIVER
- PROPERTY BOUNDARY
- SURFACE DRAIN INLETS

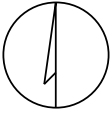

DRAFTED BY: GKS	REMEDATION SYSTEM LAYOUT MAP		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY: AAB	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
NORTH 	SCALE IN FEET 	DATE 7-20-17	FIGURE 16

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)	TPH-DRO C10-C28 (SW-846 8015B) with silica gel cleanup (Method 3630C)	NJ EPH with fractionation	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ₂ ⁻² (EPA 353.2)	Manganese (Mn 2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfur (6010B)	Sulfide (4500 S2-F-11)	Sulfate SO ₄ ²⁻ (EPA 300.0)	Methane (RSKSOP-175 modified)		
MW-01S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	P&S	
MW-05 / RW-05	Deep	X	X	X	X	X	X	X	X	X				X								P&S	
MW-08S	Shallow	X								X	X	X		X				X	X	X		P&S	
RW-10S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	P&S	
MW-11	Deep	X												X								P&S	
MW-14 / RW-14	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
MW-15S	Shallow	X												X				X	X	X		P&S	
MW-16S	Shallow	X												X				X	X	X		P&S	
MW-16	Deep	X								X				X				X	X	X		P&S	
MW-25S	Shallow	X								X	X	X		X				X	X	X		P&S	
MW-25 / RW-25	Deep	X	X	X	X	X	X	X	X	X				X				X	X	X		P&S	
MW-27	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
MW-31 / RW-31	Deep	X								X				X								P&S	
MW-33	Deep	X												X								P&S	
MW-51S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	P&S	
MW-51 / RW-51	Deep	X	X	X	X	X	X	X	X	X				X				X	X	X		P&S	
MW-52	Deep	X												X								P&S	
MW-70	Deep	X												X								P&S	
MW-72S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	P&S	
MW-72 / RW-72	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
MW-100S	Shallow	X												X				X	X	X		P&S	
MW-100	Deep	X												X				X	X	X		P&S	
MW-102	Deep	X												X								P&S	
MW-103	Shallow	X												X								P&S	
MW-104	Shallow	X												X				X	X	X		P&S	
MW-105	Shallow	X												X								P&S	
MW-106	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
MW-107	Deep	X												X								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 CO2 concentration	Headspace VOC concentration	Headspace O2	TPH-DRO C10-C28 (SW-846 8015B)	TPH-DRO C10-C28 (SW-846 8015B) with silica gel cleanup (Method 3630C)	NJ EPH with fractionation	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ₂ ⁻² (EPA 353.2)	Manganese (Mn 2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfur (6010B)	Sulfide (4500 S2-F-11)	Sulfate SO ₄ ²⁻ (EPA 300.0)	Methane (RSKSOP-175 modified)		
MW-108	Deep	X								X				X								P&S	basement wells
MW-109S	Shallow																					P&S	
MW-109	Deep																					P&S	
MW-110S	Shallow																					P&S	
MW-110	Deep																					P&S	
MW-111	Deep																					P&S	
MW-112S	Shallow																					P&S	
MW-112	Deep																					P&S	
MW-113	Deep																					P&S	
MW-114	Deep																					P&S	
MW-121	Deep	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	P&S	
MW-122	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
RW-123S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X		P&S	
TW-02	Deep	X												X								P&S	
TW-03	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
TW-04	Deep	X								X				X								P&S	
TW-05	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
TW-06	Deep	X	X	X	X	X	X	X	X	X				X	X	X	X	X	X	X	X	P&S	
TW-07	Deep	X	X	X	X	X	X	X	X	X				X								P&S	
TW-12S	Shallow	X								X				X								P&S	
TW-14	Shallow	X								X				X								P&S	
RW-1	Deep	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X		P&S	
RW-05S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X		P&S	
RW-25S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X		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 CO2 concentration	Headspace VOC concentration	Headspace O2	TPH-DRO C10-C28 (SW-846 8015B)	TPH-DRO C10-C28 (SW-846 8015B) with silica gel cleanup (Method 3630C)	NJ EPH with fractionation	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ⁻² (EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfur (6010B)			Sulfide (4500 S2-F-11)	Sulfate SO ₄ ²⁻ (EPA 300.0)
RW-28S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X		P&S	
RW-30S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X								P&S	
RW-116S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X				X	X	X		P&S	
RW-117S	Shallow	X	X	X	X	X	X	X	X	X	X	X		X								P&S	
RW-118S	Shallow									X	X	X		X								P&S	
RW-119S	Shallow									X	X	X		X				X	X	X		P&S	

Notes:

P&S - Purge and Sample

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
MW-01S	08/08/2014	30.78	22.67	-	-	-	26.58	8.11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	02/22/2017	30.87	23.27	-	-	-	-	7.60	9:43	-	-	-	-	-	-	-	-	-	-	-	720,000	Strong odor, oily bailer
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-01S	04/18/2017	32.69	27.50	-	-	-	27.89	5.19	11:20	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	05/22/2017	32.69	24.07	-	-	-	24.87	8.62	10:13	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	05/24/2017	32.69	22.22	-	-	-	27.90	10.47	9:03	-	-	-	-	-	-	-	-	-	-	-	72,600	
MW-01S	06/22/2017	32.69	27.90	-	-	-	27.90	4.79	11:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/19/2017	32.69	27.62	-	-	-	27.87	5.07	11:15	-	-	-	-	-	-	-	-	-	-	-	-	

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments
MW-01S	08/21/2017	32.69	22.73	-	-	-	27.90	9.96	9:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	08/28/2017	32.69	23.12	-	-	-	27.87	9.57	10:43	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	08/29/2017	32.69	23.17	-	-	-	-	9.52	10:20	-	-	-	-	-	-	-	-	<2.0	-	422	-	6,780
MW-01S	09/05/2017	32.69	23.18	-	-	-	-	9.51	13:43	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-01S	09/20/2017	32.69	23.70	-	-	-	-	8.99	9:50	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	01/26/2015	30.86	22.08	-	-	-	-	8.78	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	02/03/2015	30.86	22.15	-	-	-	24.72	8.71	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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-08S	05/22/2017	30.86	21.92	-	-	-	24.70	8.94	10:57	-	-	-	-	-	-	-	-	-	-	-	15,300	-
MW-08S	08/28/2017	30.86	22.15	-	-	-	24.45	8.71	10:53	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-08S	08/29/2017	30.86	21.40	-	-	-	24.70	9.46	10:53	-	-	-	-	-	-	-	-	<0.66	-	1,650	48,000	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/24/2014	31.24	22.19	-	-	-	-	9.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	10/01/2014	31.24	22.22	-	-	-	26.09	9.02	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	10/10/2014	31.24	22.18	22.18	TRACE	-	-	9.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	10/13/2014	31.24	22.21	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	10/20/2014	31.24	22.35	-	-	-	26.10	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	10/22/2014	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100,000	-
MW/RW-10S	10/27/2014	31.24	22.32	-	-	-	-	8.92	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
MW/RW-10S	11/07/2014	31.24	22.30	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	11/12/2014	31.24	22.32	-	-	-	-	8.92	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	11/21/2014	31.24	22.38	-	-	-	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	11/26/2014	31.24	22.35	-	-	-	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	12/05/2014	31.24	22.40	22.38	0.02	TRACE	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB	
MW/RW-10S	12/11/2014	31.24	22.33	22.33	TRACE	-	-	8.91	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	12/16/2014	31.24	22.36	22.36	TRACE	-	-	8.88	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	12/23/2014	31.24	22.37	-	-	-	-	8.87	-	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	01/16/2015	31.24	22.41	22.40	0.01	TRACE	-	8.84	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	01/19/2015	31.24	22.43	22.42	0.01	TRACE	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	01/26/2015	31.24	22.23	22.22	0.01	TRACE	-	9.02	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	02/03/2015	31.24	22.50	-	-	-	26.11	8.74	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	02/09/2015	31.24	22.43	22.42	0.01	-	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	02/18/2015	31.24	22.44	22.43	0.01	-	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-10S	02/24/2015	31.24	22.50	22.49	0.01	-	26.11	8.75	15:44	-	-	-	-	-	-	-	-	-	-	-	-		
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	
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	-	-	-	-	-	-	-	-	-	-	-	-	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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-10S	07/13/2015	31.24	21.96	-	-	-	-	9.28	9:44	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	11/10/2015	31.24	24.00	24.00	TRACE	-	-	7.24	13:25	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	04/21/2016	33.02	25.99	25.95	0.04	-	-	7.07	11:27	-	-	-	-	-	-	-	-	-	-	-	29,000	
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
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	-	-	-	-	<5	-	-	-	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/RW-10S	04/18/2017	32.11	25.77	-	-	-	27.10	6.34	11:10	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	05/22/2017	32.11	25.81	-	-	-	27.00	6.30	10:25	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	05/23/2017	32.11	24.84	-	-	-	27.00	7.27	12:15	-	-	-	-	-	-	-	-	-	-	-	-	474,000

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-10S	06/22/2017	32.11	26.02	-	-	-	27.05	6.09	12:12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/21/2017	32.11	22.82	-	-	-	26.86	9.29	9:52	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/28/2017	32.11	22.85	-	-	-	27.00	9.26	10:37	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/29/2017	32.11	22.88	-	-	-	-	9.23	12:45	-	-	-	-	-	-	-	-	<2.0	-	2,400	54,300	-
MW/RW-10S	09/05/2017	32.11	22.87	-	-	-	-	9.24	14:04	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-10S	09/20/2017	32.11	22.95	-	-	-	-	9.16	10:38	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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-11	05/22/2017	30.85	26.88	-	-	-	-	3.97	12:59	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	08/28/2017	30.85	DRY	-	-	-	29.21	-	9:40	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/05/2017	30.85	DRY	-	-	-	29.03	-	14:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-11	09/20/2017	30.85	DRY	-	-	-	29.03	-	10:34	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-14	09/22/2014	31.22	27.04	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	06/09/2015	31.22	26.67	-	-	-	-	4.55	10:21	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-14	07/21/2016	31.22	28.85	27.90	0.95	0.44	-	3.20	11:21	-	-	-	-	-	-	-	-	-	-	-	-	installed pump & lines & started pump in well
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	-	-	-	-	-	-	-	-	-	-	-	-	
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/RW-14	04/18/2017	31.33	31.35	-	-	-	-	-0.02	12:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/18/2017	31.33	31.40	-	-	-	-	-0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/22/2017	31.33	27.11	-	-	-	-	4.22	12:57	-	-	-	-	-	-	-	-	-	-	-	1,390	
MW/RW-14	06/22/2017	31.33	31.45	-	-	-	-	-0.12	12:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	07/06/2017	31.33	31.10	-	-	-	-	0.23	13:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/21/2017	31.33	32.20	-	-	-	-	-0.87	9:48	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/28/2017	31.33	32.20	-	-	-	-	-0.87	9:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/31/2017	31.33	32.50	-	-	-	36.48	-1.17	9:15	-	-	-	-	-	-	-	-	-	-	-	7,380	
MW/RW-14	09/20/2017	31.33	32.18	-	-	-	-	-0.85	10:25	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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-15S	05/22/2017	31.03	24.60	-	-	-	25.90	6.43	11:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	08/28/2017	31.03	25.45	-	-	-	25.91	5.58	11:02	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	08/29/2017	31.03	25.33	-	-	-	25.96	5.70	13:43	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	
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-16S	05/22/2017	31.03	DRY	-	-	-	24.55	-	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	08/28/2017	31.03	DRY	-	-	-	24.69	-	11:05	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	08/15/2014	30.97	26.78	-	-	-	35.74	4.19	-	-	-	-	-	-	-	-	-	-	-	-	<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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	<0.03	<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	-
MW-16	05/22/2017	30.97	26.64	-	-	-	-	4.33	12:51	-	-	-	-	-	-	-	-	-	-	-	<64	-
MW-16	08/28/2017	30.97	31.87	-	-	-	35.05	-0.90	9:30	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-16	08/30/2017	30.97	31.69	-	-	-	35.57	-0.72	12:44	-	-	-	-	-	-	-	-	-	-	-	<83	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments
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

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	01/27/2016	31.07	22.10	22.08	0.02	-	-	8.99	10:56	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	strong product odor
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	04/18/2017	33.28	27.08	-	-	-	27.17	6.20	11:43	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-25S	05/22/2017	33.28	23.67	-	-	-	27.16	9.61	10:37	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW-25S	05/23/2017	33.28	22.03	-	-	-	27.20	11.25	13:10	-	-	-	-	-	-	-	-	-	-	-	42,500	
MW-25S	06/22/2017	33.28	27.05	-	-	-	27.19	6.23	11:52	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	07/19/2017	33.28	27.08	-	-	-	27.15	6.20	11:47	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/21/2017	33.28	23.56	-	-	-	27.32	9.72	9:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/28/2017	33.28	23.70	-	-	-	27.35	9.58	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/31/2017	33.28	23.68	-	-	-	27.34	9.60	9:23	-	-	-	-	-	-	-	-	-	-	1,640	32,200	
MW-25S	09/05/2017	33.28	23.63	-	-	-	-	9.65	13:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/20/2017	33.28	23.74	-	-	-	-	9.54	10:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/08/2014	31.13	27.97	27.60	0.37	0.08	36.69	3.48	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/11/2014	31.13	27.61	27.37	0.24	NA	-	3.73	-	-	-	-	-	-	-	-	-	-	-	-	-	Transducer installed for pump test
MW/RW-25	08/13/2014	31.13	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,280	
MW/RW-25	08/15/2014	31.13	28.11	28.05	0.06	NA	-	3.07	-	-	-	-	-	-	-	-	-	-	-	-	-	Transducer installed for pump test
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	-	-	-	-	-	-	-	-	-	-	-	-	-	Transducer installed for pump test
MW/RW-25	08/25/2014	31.13	26.89	26.74	0.15	0.05	-	4.37	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/24/2014	31.13	27.73	27.23	0.50	NR	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	10/01/2014	31.13	27.47	27.02	0.45	0.19	35.90	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	12/05/2014	31.13	27.63	27.15	0.48	-	35.87	3.92	-	-	-	-	-	-	-	-	-	-	-	-	50,000	HIT event
MW/RW-25	12/11/2014	31.13	27.31	26.98	0.33	0.06	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	12/16/2014	31.13	27.27	27.04	0.23	0.03	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments	
MW/RW-25	12/23/2014	31.13	27.20	26.95	0.25	0.04	-	4.15	-	-	-	-	-	-	-	-	-	-	-	-	-	56,000	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	-	-	-	-	-	-	-	-	-	-	-	-	-		
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 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	-	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-25	05/13/2015	31.13	28.31	27.19	1.12	1.50	-	3.80	12:53	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-25	05/21/2015	31.13	26.85	26.82	0.03	-	-	4.31	12:50	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-25	05/28/2015	31.13	27.55	27.09	0.46	-	35.80	3.98	12:10	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-25	06/02/2015	31.13	27.10	26.74	0.36	-	-	4.35	13:28	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-25	06/09/2015	31.13	26.91	26.46	0.45	-	-	4.62	10:50	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-25	06/16/2015	31.13	26.86	26.56	0.30	-	-	4.53	11:43	-	-	-	-	-	-	-	-	-	-	-	-		
MW/RW-25	06/26/2015	31.13	26.91	26.48	0.43	-	35.80	4.60	11:31	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-		

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	12/01/2015	30.52	26.19	26.06	0.13	-	-	4.44	13:54	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	01/27/2016	30.52	26.68	26.38	0.30	-	-	4.10	11:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	02/15/2016	30.52	26.88	26.59	0.29	-	-	3.89	10:39	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	03/14/2016	30.52	26.42	26.27	0.15	-	-	4.23	10:30	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	03/30/2016	30.52	32.73	-	-	-	-	-2.21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	04/21/2016	30.52	32.76	-	-	-	-	-2.24	10:18	-	-	-	-	-	-	-	-	-	-	-	5,800	-
MW/RW-25	05/23/2016	30.52	32.81	-	-	-	33.70	-2.29	11:39	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	05/24/2016	30.52	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,900	-
MW/RW-25	06/21/2016	30.52	32.76	-	-	-	-	-2.24	10:10	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	07/21/2016	30.52	32.75	-	-	-	-	-2.23	11:12	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	08/24/2016	30.52	30.20	-	-	-	-	0.32	10:40	-	-	-	-	-	-	-	-	-	-	-	4,600	-
MW/RW-25	09/22/2016	30.52	32.70	-	-	-	-	-2.18	13:05	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	10/20/2016	30.52	32.85	-	-	-	-	-2.33	11:10	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	11/28/2016	30.52	32.65	-	-	-	-	-2.13	9:30	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	-	250	-
MW/RW-25	12/22/2016	30.52	32.83	-	-	-	-	-2.31	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	01/30/2017	30.52	26.83	-	-	-	-	3.69	12:11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	02/21/2017	30.52	32.85	-	-	-	-	-2.33	12:44	-	-	-	-	-	-	-	-	-	-	-	220	-
MW/RW-25	03/29/2017	31.16	32.87	-	-	-	-	-1.71	12:20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	04/18/2017	31.16	32.85	-	-	-	-	-1.69	11:50	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	05/18/2017	31.16	32.85	-	-	-	-	-1.69	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	05/22/2017	31.16	26.60	-	-	-	-	4.56	13:09	-	-	-	-	-	-	-	-	-	-	-	685	-
MW/RW-25	06/22/2017	31.16	32.90	-	-	-	-	-1.74	12:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	07/06/2017	31.16	32.62	-	-	-	-	-1.46	12:38	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	07/19/2017	31.16	32.25	-	-	-	-	-1.09	12:01	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	08/21/2017	31.16	32.95	-	-	-	-	-1.79	9:36	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	08/28/2017	31.16	32.12	-	-	-	-	-0.96	9:40	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-25	08/31/2017	31.16	31.91	-	-	-	35.14	-0.75	9:50	-	-	-	-	-	-	-	-	-	-	-	20,000	-
MW/RW-25	09/20/2017	31.16	32.95	-	-	-	-	-1.79	10:20	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-27	03/11/2015	31.44	27.11	-	-	-	-	4.33	12:26	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	Sheen

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW-27	02/15/2016	31.44	27.64	-	-	-	-	3.80	9:55	-	-	-	-	-	-	-	-	-	-	-	-	Sheen
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	
MW-27	05/22/2017	31.44	27.18	-	-	-	33.71	4.26	13:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	05/23/2017	31.44	27.39	-	-	-	33.75	4.05	13:50	-	-	-	-	-	-	-	-	-	-	-	3,130	
MW-27	08/28/2017	31.44	33.15	-	-	-	33.63	-1.71	9:55	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/30/2017	31.44	32.96	-	-	-	33.64	-1.52	15:03	-	-	-	-	-	-	-	-	-	-	-	11,900	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-

pump in well
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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-31	05/23/2016	31.42	NR	-	-	-	-	-	11:13	-	-	-	-	-	-	-	-	-	-	-	-	Pump Obstruction during gauging
MW/RW-31	05/24/2016	31.42	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	pump in well
MW/RW-31	06/21/2016	31.42	33.05	-	-	-	-	-1.63	10:00	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	07/21/2016	31.42	33.05	-	-	-	-	-1.63	9:48	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	830	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	-	-	-	-	-	-	-	-	-	-	-	120	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	-	-	-	-	-	-	-	-	-	-	-	580	pump in well
MW/RW-31	03/29/2017	31.42	31.40	-	-	-	-	0.02	12:43	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	04/18/2017	31.42	31.52	-	-	-	-	-0.10	11:57	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	05/18/2017	31.42	31.60	-	-	-	-	-0.18	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	05/22/2017	31.42	26.76	-	-	-	-	4.66	10:55	-	-	-	-	-	-	-	-	-	-	-	655	pump in well
MW/RW-31	06/22/2017	31.42	31.10	-	-	-	-	0.32	11:47	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	07/06/2017	31.42	31.12	-	-	-	-	0.30	12:55	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	07/19/2017	31.42	31.45	-	-	-	-	-0.03	11:35	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	08/21/2017	31.42	31.30	-	-	-	-	0.12	9:24	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	08/28/2017	31.42	31.05	-	-	-	31.05	0.37	9:41	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	08/31/2017	31.42	33.02	-	-	-	33.73	-1.60	9:05	-	-	-	-	-	-	-	-	-	-	-	3,770	pump in well
MW/RW-31	09/20/2017	31.42	31.42	-	-	-	-	0.00	10:00	-	-	-	-	-	-	-	-	-	-	-	-	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	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
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	<0.03	<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	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	<45		
MW-33	02/21/2017	30.88	27.42	-	-	-	34.50	3.46	12:32	-	-	-	-	-	-	-	-	-	-	-	-		
MW-33	05/22/2017	30.88	26.30	-	-	-	34.40	4.58	13:08	-	-	-	-	-	-	-	-	-	-	-	-		
MW-33	08/28/2017	30.88	32.85	-	-	-	34.42	-1.97	9:46	-	-	-	-	-	-	-	-	-	-	-	-		
MW-33	08/30/2017	30.88	32.54	-	-	-	34.45	-1.66	14:58	-	-	-	-	-	-	-	-	-	-	-	-		
MW-51S	08/08/2014	30.81	21.15	-	-	-	25.27	9.66	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB	
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	-	-	-	-	-	-	-	-	-	-	-	-	-		

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromooethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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-51S	04/18/2017	32.99	26.83	-	-	-	26.92	6.16	11:26	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	05/22/2017	32.99	23.05	-	-	-	26.90	9.94	10:21	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	05/24/2017	32.99	21.37	-	-	-	26.92	11.62	9:12	-	-	-	-	-	-	-	-	-	-	-	36,000	-	-
MW-51S	06/22/2017	32.99	26.82	-	-	-	27.67	6.17	11:36	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	07/19/2017	32.99	26.83	-	-	-	27.07	6.16	11:23	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/21/2017	32.99	22.67	-	-	-	27.22	10.32	9:08	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/28/2017	32.99	22.90	-	-	-	27.25	10.09	11:35	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-51S	08/29/2017	32.99	22.91	-	-	-	-	10.08	11:40	-	-	-	-	-	-	-	-	<2.0	-	448	25,600	-	-
MW-51S	09/20/2017	32.99	23.12	-	-	-	-	9.87	9:43	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-51	07/25/2014	30.97	27.25	-	-	-	35.95	3.72	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	08/08/2014	30.97	27.00	27.00	TRACE	-	36.48	3.97	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB
MW/RW-51	08/16/2014	30.97	26.99	26.99	TRACE	-	34.65	3.98	-	-	-	-	-	-	-	-	-	-	-	-	281,000	
MW/RW-51	08/18/2014	30.97	26.94	26.94	TRACE	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/25/2014	30.97	26.59	26.59	TRACE	-	-	4.38	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/02/2014	30.97	26.93	26.93	TRACE	-	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB 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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/24/2014	30.97	27.19	27.15	0.04	-	-	3.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	10/01/2014	30.97	26.93	26.93	TRACE	-	36.15	4.04	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB
MW/RW-51	10/10/2014	30.97	26.84	26.81	0.03	-	-	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	10/13/2014	30.97	27.01	26.94	0.07	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	02/09/2015	30.97	26.93	26.91	0.02	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	02/18/2015	30.97	27.07	27.02	0.05	-	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB LNAPL NMB LNAPL NMB 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	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	03/11/2015	30.97	26.68	26.65	0.03	-	-	4.32	12:51	-	-	-	-	-	-	-	-	-	-	-	-	

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments	
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
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/RW-51	04/18/2017	31.62	33.45	-	-	-	-	-1.83	12:05	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	05/18/2017	31.62	33.80	-	-	-	-	-2.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	05/22/2017	31.62	26.79	-	-	-	-	4.83	13:11	-	-	-	-	-	-	-	-	-	-	-	1,140	-	pump in well
MW/RW-51	06/22/2017	31.62	33.80	-	-	-	-	-2.18	12:35	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	07/06/2017	31.62	33.50	-	-	-	-	-1.88	13:00	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	07/19/2017	31.62	33.80	-	-	-	-	-2.18	12:05	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	08/21/2017	31.62	33.80	-	-	-	-	-2.18	9:12	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	08/28/2017	31.62	32.65	-	-	-	-	-1.03	9:35	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	08/31/2017	31.62	32.42	-	-	-	36.18	-0.80	9:31	-	-	-	-	-	-	-	-	-	-	-	2,500	-	pump in well
MW/RW-51	09/20/2017	31.62	33.80	-	-	-	-	-2.18	9:40	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW-52	08/15/2014	30.17	28.11	-	-	-	35.78	2.06	-	-	-	-	-	-	-	-	-	-	-	-	<600	-	
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	-	

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-Dibromooethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW-52	08/04/2015	30.17	25.21	-	-	-	35.55	4.96	12:01	-	-	-	-	-	-	-	-	-	-	-	-	Manhole flooded
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-52	05/22/2017	30.17	24.98	-	-	-	-	5.19	13:19	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	08/28/2017	30.17	30.97	-	-	-	35.04	-0.80	9:33	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	08/15/2014	30.86	26.63	-	-	-	34.95	4.23	-	-	-	-	-	-	-	-	-	-	-	-	<153	
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-70	05/22/2017	30.86	25.92	-	-	-	33.05	4.94	12:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW-70	08/28/2017	30.86	32.22	-	-	-	35.05	-1.36	9:23	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
MW/RW-72S	04/23/2015	30.63	21.86	-	-	-	23.87	8.77	11:12	-	-	-	-	-	-	-	-	-	-	-	-	-	Obstruction during gauging
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	-	
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-72S	05/22/2017	30.63	21.23	-	-	-	21.23	9.40	11:23	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	05/23/2017	30.63	21.30	-	-	-	23.90	9.33	13:00	-	-	-	-	-	-	-	-	-	-	-	55,500	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-72S	08/28/2017	30.63	21.29	-	-	-	23.98	9.34	11:47	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72S	08/30/2017	30.63	21.22	-	-	-	23.93	9.41	12:53	-	-	-	-	-	-	-	-	<0.66	-	4,870	15,800	
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	-
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	<0.03	65	-	590	-
MW/RW-72	03/04/2015	31.06	27.17	-	-	-	-	3.89	13:48	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
MW/RW-72	03/11/2015	31.06	26.98	-	-	-	-	4.08	12:15	-	-	-	-	-	-	-	-	-	-	-	-	-	Uninstalled pump to use in MW-14 due to increasing LNAPL levels in MW-14
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	-	
MW/RW-72	03/30/2016	31.06	31.47	-	-	-	-	-0.41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	04/21/2016	31.06	31.45	-	-	-	-	-0.39	10:22	-	-	-	-	-	-	-	-	-	-	-	350	-	
MW/RW-72	05/23/2016	31.06	31.50	-	-	-	-	-0.44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	05/24/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360	-	
MW/RW-72	06/21/2016	31.06	31.50	-	-	-	-	-0.44	10:21	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	07/21/2016	31.06	31.51	-	-	-	-	-0.45	10:01	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	08/04/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	

pump in well
 pump in well
 pump in well
 pump in well
 pump in well
 pump in well
 pump in well
 pump in well
 Uninstalled pump to
 use in MW-14 due to
 increasing LNAPL
 levels in MW-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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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/RW-72	05/22/2017	31.03	26.79	-	-	-	33.10	4.24	13:20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	05/23/2017	31.03	26.83	-	-	-	33.15	4.20	13:30	-	-	-	-	-	-	-	-	-	-	-	2,410	-
MW/RW-72	08/28/2017	31.03	32.62	-	-	-	33.02	-1.59	9:50	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-72	08/30/2017	31.03	32.51	-	-	-	33.10	-1.48	12:56	-	-	-	-	-	-	-	-	-	-	-	2,080	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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-100S	05/22/2017	31.03	21.06	-	-	-	24.21	9.97	12:30	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	08/28/2017	31.03	20.57	-	-	-	24.12	10.46	11:16	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100S	08/30/2017	31.03	20.70	-	-	-	24.20	10.33	10:08	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100	08/15/2014	30.78	26.80	-	-	-	36.90	3.98	-	-	-	-	-	-	-	-	-	-	-	-	<152	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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-100	05/22/2017	30.78	26.34	-	-	-	36.40	4.44	12:58	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100	08/28/2017	30.78	33.02	-	-	-	36.23	-2.24	9:11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-100	08/30/2017	30.78	32.94	-	-	-	36.28	-2.16	10:04	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	-
MW-102	05/11/2015	29.72	24.44	-	-	-	36.40	5.28	15:01	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW-102	05/12/2015	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-102	08/04/2015	29.72	23.39	-	-	-	36.43	6.33	12:35	-	-	-	-	-	-	-	-	-	-	-	<45	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	11/28/2016	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	02/21/2017	29.72	25.22	-	-	-	36.43	4.50	11:59	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	05/22/2017	29.72	23.65	-	-	-	36.46	6.07	13:03	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	08/28/2017	29.72	27.11	-	-	-	36.40	2.61	11:58	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	08/30/2017	29.72	27.20	-	-	-	36.48	2.52	10:28	-	-	-	-	-	-	-	-	-	-	-	-	
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	<0.03	<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	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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-103	05/22/2017	11.07	4.26	-	-	-	14.90	6.81	11:44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	08/28/2017	11.07	3.90	-	-	-	14.90	7.17	11:25	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-103	08/30/2017	11.07	3.93	-	-	-	14.92	7.14	10:20	-	-	-	-	-	-	-	-	-	-	-	-	-
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	<0.03	<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-104	05/22/2017	12.00	4.21	-	-	-	12.08	7.79	11:46	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-104	08/28/2017	12.00	4.52	-	-	-	12.00	7.48	10:33	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-104	08/30/2017	12.00	3.53	-	-	-	12.08	8.47	10:16	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-105	07/24/2014	10.94	2.34	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-105	08/08/2014	10.94	2.15	-	-	-	10.06	8.79	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-105	08/11/2014	10.94	2.39	-	-	-	-	8.55	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW-105	08/15/2014	10.94	1.67	-	-	-	9.95	9.27	-	-	-	-	-	-	-	-	-	-	-	-	<1,500	Manhole flooded
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-105	05/22/2017	10.94	0.10	-	-	-	9.20	10.84	11:48	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/28/2017	10.94	1.32	-	-	-	9.14	9.62	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/30/2017	10.94	0.95	-	-	-	9.03	9.99	10:13	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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 J	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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
MW-106	07/01/2015	11.12	4.77	-	-	-	-	6.35	11:54	-	-	-	-	-	-	-	-	-	-	-	-	-	Very muddy
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		
MW-106	05/22/2017	11.12	6.81	-	-	-	8.98	4.31	13:25	-	-	-	-	-	-	-	-	-	-	-	-		
MW-106	05/23/2017	11.12	6.86	-	-	-	8.89	4.26	13:40	-	-	-	-	-	-	-	-	-	-	-	414		
MW-106	08/28/2017	11.12	DRY	-	-	-	8.73	-	10:00	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-	-		
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	-	-	-	-	-	-	-	-	-	-	-	-	-		

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	
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	<2	<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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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-107	05/22/2017	15.74	7.42	-	-	-	11.02	8.32	11:29	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-107	08/28/2017	15.74	9.95	-	-	-	10.96	5.79	10:01	-	-	-	-	-	-	-	-	-	-	-	-	-
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
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

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments	
MW-108	11/28/2016	15.61	9.07	-	-	-	9.25	6.54	8:29	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol. DRY DRY Insufficient GW Vol.	
MW-108	12/07/2016	15.61	DRY	-	-	-	9.24	-	12:21	-	-	-	-	-	-	-	-	-	-	-	-		
MW-108	02/21/2017	15.61	DRY	-	-	-	9.21	-	12:33	-	-	-	-	-	-	-	-	-	-	-	-		
MW-108	02/22/2017	15.61	9.19	-	-	-	9.22	6.42	11:52	-	-	-	-	-	-	-	-	-	-	-	-		
MW-108	05/22/2017	15.61	DRY	-	-	-	9.21	-	11:31	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol. Insufficient GW Vol.	
MW-108	05/23/2017	15.61	DRY	-	-	-	9.20	-	13:45	-	-	-	-	-	-	-	-	-	-	-	-		
MW-108	08/28/2017	15.61	9.09	-	-	-	9.20	6.52	10:05	-	-	-	-	-	-	-	-	-	-	-	-		
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	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109S	11/28/2016	19.27	10.97	-	-	-	13.25	8.30	9:25	-	-	-	-	-	-	-	-	-	-	-	-	2,300	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-

No Access to Gauge

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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-121	05/22/2017	31.43	26.60	-	-	-	-	4.83	13:04	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	05/24/2017	31.43	26.17	-	-	-	36.35	5.26	9:55	0.38	<1	0.81	<1	-	-	-	-	12.50	-	-	-	57,100
MW-121	08/28/2017	31.43	32.50	-	-	-	36.35	-1.07	9:22	-	-	-	-	-	-	-	-	-	-	-	-	-
MW-121	08/29/2017	31.43	32.40	-	-	-	36.35	-0.97	10:56	-	-	-	-	-	-	-	-	<0.66	-	5,030	-	4,600
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromooethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW-122	08/24/2015	31.64	25.83	-	-	-	-	5.81	10:37	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	09/23/2015	31.64	26.18	-	-	-	-	5.46	10:46	-	-	-	-	-	-	-	-	-	-	-	-	
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-122	05/22/2017	31.64	26.61	-	-	-	-	5.03	13:06	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	05/24/2017	31.64	25.52	-	-	-	34.70	6.12	9:50	-	-	-	-	-	-	-	-	-	-	-	5,340	
MW-122	08/28/2017	31.64	32.76	-	-	-	34.80	-1.12	9:27	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	08/29/2017	31.64	32.72	-	-	-	34.80	-1.08	11:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	08/30/2017	31.64	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,780	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-123S	08/05/2015	31.09	22.07	-	-	-	24.93	9.02	9:16	-	-	-	-	-	-	-	-	-	-	-	2,400	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	09/09/2015	31.09	22.33	-	-	-	24.92	8.76	10:28	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	04/18/2017	33.54	26.10	-	-	-	26.84	7.44	11:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	05/22/2017	33.54	23.25	-	-	-	26.90	10.29	10:18	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	05/23/2017	33.54	21.93	-	-	-	26.90	11.61	10:25	-	-	-	-	-	-	-	-	-	-	-	50,800	
MW/RW-123S	06/22/2017	33.54	26.04	-	-	-	26.65	7.50	11:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	07/19/2017	33.54	26.07	-	-	-	26.60	7.47	11:27	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/21/2017	33.54	22.48	-	-	-	26.62	11.06	9:16	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/28/2017	33.54	22.97	-	-	-	26.60	10.57	11:26	-	-	-	-	-	-	-	-	-	-	-	-	

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-123S	08/29/2017	33.54	23.05	-	-	-	-	10.49	15:15	-	-	-	-	-	-	-	-	<2.0	-	266	11,500	
MW/RW-123S	09/05/2017	33.54	22.80	-	-	-	-	10.74	13:46	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	09/20/2017	33.54	23.18	-	-	-	-	10.36	9:53	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	10/10/2014	31.19	26.93	-	-	-	-	4.26	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30,000	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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-Dibromooethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
RW-1	05/11/2015	31.19	26.70	-	-	-	40.78	4.49	15:03	-	-	-	-	-	-	-	-	-	-	-	-	-	Sheen during purge
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/14/2016	31.19	26.95	-	-	-	40.65	4.24	8:40	-	-	-	-	-	-	-	-	-	-	-	4,300	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/22/2017	31.19	26.81	-	-	-	-	4.38	13:00	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/24/2017	31.19	26.50	-	-	-	46.65	4.69	10:00	-	-	-	-	-	-	-	-	-	-	-	36,100	-	
RW-1	08/28/2017	31.19	32.83	-	-	-	40.71	-1.64	9:17	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	08/29/2017	31.19	32.73	-	-	-	40.70	-1.54	10:50	-	-	-	-	-	-	-	-	<0.66	-	11,300	15,300	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	Clogged drop-tube
RW-05S	11/29/2016	33.47	DRY	-	-	-	23.65	-	12:55	-	-	-	-	-	-	-	-	-	-	-	-	-	Clogged drop-tube
RW-05S	12/07/2016	33.47	DRY	-	-	-	23.33	-	12:35	-	-	-	-	-	-	-	-	-	-	-	-	-	Clogged drop-tube
RW-05S	12/08/2016	33.47	23.60	-	-	-	26.13	9.87	10:45	-	-	-	-	-	-	-	-	-	-	-	-	22,000	Pulled & cleaned drop-tube
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	04/18/2017	33.47	25.78	-	-	-	27.67	7.69	11:16	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	05/22/2017	33.47	24.55	-	-	-	27.55	8.92	10:32	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	05/23/2017	33.47	24.46	-	-	-	27.65	9.01	9:30	-	-	-	-	-	-	-	-	-	-	-	-	497,000	

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
RW-05S	06/22/2017	33.47	26.03	-	-	-	27.70	7.44	12:19	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	08/21/2017	33.47	24.40	-	-	-	27.65	9.07	10:00	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	08/28/2017	33.47	24.38	-	-	-	27.68	9.09	11:15	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-05S	08/29/2017	33.47	23.83	-	-	-	-	9.64	14:15	-	-	-	-	-	-	-	-	<2.0	-	1,250	32,400	-
RW-05S	09/20/2017	33.47	24.50	-	-	-	-	8.97	10:46	-	-	-	-	-	-	-	-	-	-	-	-	-
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
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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
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	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	07/28/2015	31.57	22.75	22.55	0.20	0.09	32.07	9.00	12:40	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/04/2015	31.57	22.92	22.63	0.29	0.06	-	8.90	12:31	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/11/2015	31.57	23.57	22.60	0.97	0.09	32.05	8.85	10:43	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/18/2015	31.57	23.74	23.02	0.72	0.38	-	8.46	10:56	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/21/2015	31.57	23.46	23.15	0.31	-	-	8.38	7:55	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/24/2015	31.57	23.88	23.86	0.02	TRACE	-	7.71	11:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	09/02/2015	31.57	24.72	24.44	0.28	-	32.04	7.10	11:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	09/09/2015	31.57	24.60	24.39	0.21	0.06	32.05	7.15	11:20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	09/17/2015	31.57	24.83	24.36	0.47	0.07	32.08	7.15	11:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	09/23/2015	31.57	24.88	24.70	0.18	0.02	-	6.85	11:23	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
MW/RW-05	09/28/2015	31.57	24.50	24.48	0.02	0.04	31.94	7.09	10:05	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	10/05/2015	31.57	24.41	24.31	0.10	0.05	32.01	7.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	11/10/2015	31.57	25.53	25.38	0.15	-	-	6.17	13:44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	12/01/2015	32.20	26.16	25.98	0.18	-	-	6.20	13:56	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	01/27/2016	32.20	26.56	26.34	0.22	-	-	5.83	10:44	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	02/15/2016	32.20	26.99	26.98	0.01	-	-	5.22	10:31	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	03/14/2016	32.20	25.65	25.65	TRACE	-	-	6.55	10:20	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	03/24/2016	32.20	29.70	-	-	-	-	2.50	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	03/30/2016	32.20	29.68	-	-	-	-	2.52	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	04/21/2016	32.20	29.65	-	-	-	-	2.55	10:34	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	05/23/2016	32.20	29.80	-	-	-	-	2.40	11:27	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	05/24/2016	32.20	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62,000	-
MW/RW-05	06/21/2016	32.20	29.79	-	-	-	-	2.41	10:50	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	07/21/2016	32.20	23.85	-	-	-	-	8.35	10:30	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/24/2016	32.20	21.60	-	-	-	-	10.60	11:11	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/25/2016	32.20	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	-
MW/RW-05	09/22/2016	32.20	29.00	-	-	-	-	3.20	11:40	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	10/20/2016	32.20	29.00	-	-	-	-	3.20	11:35	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	11/28/2016	32.20	NR	-	-	-	-	-	9:45	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	-	7,300	-
MW/RW-05	12/22/2016	32.20	28.22	-	-	-	-	3.98	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	01/30/2017	32.20	27.88	-	-	-	-	4.32	12:06	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	02/21/2017	32.20	28.70	-	-	-	-	3.50	12:51	-	-	-	-	-	-	-	-	-	-	-	5,200	-
MW/RW-05	03/29/2017	32.20	27.90	-	-	-	-	4.30	11:55	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	04/18/2017	32.20	28.50	-	-	-	-	3.70	12:00	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	05/18/2017	32.20	18.95	-	-	-	-	13.25	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	05/22/2017	32.20	23.24	-	-	-	-	8.96	13:02	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	05/23/2017	32.20	23.93	-	-	-	-	8.27	9:45	-	-	-	-	-	-	-	-	-	-	-	981	-
MW/RW-05	06/22/2017	32.20	28.50	-	-	-	-	3.70	12:28	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	07/06/2017	32.20	28.50	-	-	-	-	3.70	13:05	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	07/19/2017	32.20	28.30	-	-	-	-	3.90	12:15	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/21/2017	32.20	28.35	-	-	-	-	3.85	10:05	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/28/2017	32.20	23.32	-	-	-	-	8.88	9:30	-	-	-	-	-	-	-	-	-	-	-	-	-
MW/RW-05	08/31/2017	32.20	23.60	-	-	-	31.33	8.60	9:36	-	-	-	-	-	-	-	-	-	-	-	31,800	-
MW/RW-05	09/20/2017	32.20	28.10	-	-	-	-	4.10	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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
RW-25S	07/08/2015	30.97	DRY	-	-	-	24.64	-	11:43	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	09/09/2015	30.97	NR	24.50	-	0.01	24.69	-	11:00	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	
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	
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-25S	04/18/2017	31.92	25.37	-	-	-	25.55	6.55	11:46	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	05/22/2017	31.92	23.15	-	-	-	25.60	8.77	10:39	-	-	-	-	-	-	-	-	-	-	-	-	

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-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
RW-25S	05/23/2017	31.92	22.44	-	-	-	25.60	9.48	11:25	-	-	-	-	-	-	-	-	-	-	-	147,000	
RW-25S	07/19/2017	31.92	25.34	-	-	-	25.43	6.58	11:51	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/21/2017	31.92	24.38	-	-	-	25.45	7.54	9:32	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/28/2017	31.92	25.12	-	-	-	25.42	6.80	12:00	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/31/2017	31.92	25.34	-	-	-	25.43	6.58	9:26	-	-	-	-	-	-	-	-	<0.66	-	1,640	32,200	
RW-25S	09/20/2017	31.92	DRY	-	-	-	25.33	-	10:12	-	-	-	-	-	-	-	-	-	-	-	-	
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	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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-28S	04/18/2017	32.99	26.58	-	-	-	28.33	6.41	11:36	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	05/22/2017	32.99	25.85	-	-	-	28.35	7.14	11:16	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	05/23/2017	32.99	24.24	-	-	-	28.30	8.75	11:05	-	-	-	-	-	-	-	-	-	-	-	24,400	-
RW-28S	06/22/2017	32.99	27.10	-	-	-	28.20	5.89	11:50	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	07/19/2017	32.99	27.00	-	-	-	28.12	5.99	11:39	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	08/21/2017	32.99	25.88	-	-	-	27.94	7.11	9:23	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	08/28/2017	32.99	26.90	-	-	-	27.95	6.09	11:37	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-28S	08/31/2017	32.99	26.59	-	-	-	28.00	6.40	9:10	-	-	-	-	-	-	-	-	<0.66	-	1,650	8,370	-
RW-28S	09/20/2017	32.99	27.03	-	-	-	-	5.96	10:04	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-30S	06/26/2015	31.32	DRY	-	-	-	28.40	-	9:28	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
RW-30S	03/14/2016	33.63	28.78	-	-	-	30.60	4.85	12:10	-	-	-	-	-	-	-	-	-	-	-	61,000	DRY
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	
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-30S	04/18/2017	33.12	27.39	-	-	-	28.97	5.73	11:33	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/22/2017	33.12	28.24	-	-	-	28.81	4.88	11:18	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/23/2017	33.12	28.28	-	-	-	28.87	4.84	10:45	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	06/07/2017	33.12	24.47	-	-	-	28.88	8.65	12:55	-	-	-	-	-	-	-	-	-	-	-	3,780	
RW-30S	06/22/2017	33.12	26.45	-	-	-	28.80	6.67	11:43	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	07/19/2017	33.12	28.18	-	-	-	28.90	4.94	11:31	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/21/2017	33.12	DRY	-	-	-	28.83	-	9:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/28/2017	33.12	DRY	-	-	-	28.75	-	11:31	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/31/2017	33.12	DRY	-	-	-	28.80	-	9:00	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	09/05/2017	33.12	DRY	-	-	-	28.78	-	13:49	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	09/20/2017	33.12	DRY	-	-	-	28.78	-	9:56	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-
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-116S	04/18/2017	33.15	26.02	-	-	-	27.08	7.13	11:13	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	05/22/2017	33.15	25.60	-	-	-	27.10	7.55	10:28	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	05/23/2017	33.15	24.45	-	-	-	27.07	8.70	11:55	-	-	-	-	-	-	-	-	-	-	-	323,000	-
RW-116S	06/22/2017	33.15	26.02	-	-	-	27.05	7.13	12:15	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/21/2017	33.15	26.20	-	-	-	27.07	6.95	9:56	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/28/2017	33.15	26.24	-	-	-	27.06	6.91	11:10	-	-	-	-	-	-	-	-	-	-	-	-	-
RW-116S	08/31/2017	33.15	26.19	-	-	-	27.07	6.96	9:55	-	-	-	-	-	-	-	-	<0.66	-	3,110	29,900	-
RW-116S	09/20/2017	33.15	26.18	-	-	-	-	6.97	10:42	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromooethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments	
RW-117S	07/08/2015	31.81	22.53	-	-	-	-	9.28	11:08	-	-	-	-	-	-	-	-	-	-	-	-	-	6,600
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	-	-	-	-	-	-	-	-	-	-	-	-	-	13,000
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/11/2015	31.81	22.06	-	-	-	24.30	9.75	10:28	-	-	-	-	-	-	-	-	-	-	-	-	-	4,400
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	-	-	-	-	-	-	-	-	-	-	-	-	-	2,800
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	-	-	-	-	-	-	-	-	-	-	-	-	-	4,300
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	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-117S	12/01/2015	33.73	25.72	-	-	-	26.13	8.01	11:16	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	4,400
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	-	-	-	-	-	-	-	-	-	-	-	-	-	2,800
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,400
RW-117S	06/21/2016	33.73	25.70	-	-	-	-	8.03	10:33	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	4,400
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	09/22/2016	33.73	25.71	-	-	-	26.18	8.02	12:32	-	-	-	-	-	-	-	-	-	-	-	-	-	2,800
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	12/22/2016	33.73	25.63	-	-	-	26.15	8.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,300
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
RW-117S	03/29/2017	33.16	DRY	-	-	-	25.67	-	12:33	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
RW-117S	04/18/2017	33.16	DRY	-	-	-	25.67	-	11:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	05/22/2017	33.16	DRY	-	-	-	25.64	-	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	06/22/2017	33.16	DRY	-	-	-	25.68	-	12:03	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	07/19/2017	33.16	DRY	-	-	-	25.67	-	11:43	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/21/2017	33.16	25.56	-	-	-	25.69	7.60	9:44	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/28/2017	33.16	24.07	-	-	-	25.68	9.09	11:54	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/31/2017	33.16	24.08	-	-	-	25.68	9.08	9:20	-	-	-	-	-	-	-	-	<0.66	-	3,260	39,200	
RW-117S	09/20/2017	33.16	24.15	-	-	-	-	9.01	10:29	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	750	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
RW-118S	08/25/2016	31.24	23.94	-	-	-	-	7.30	13:30	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
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	23.95	-	-	-	24.23	6.86	12:30	-	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	05/22/2017	30.81	24.10	-	-	-	24.20	6.71	10:44	-	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/28/2017	30.81	21.11	-	-	-	24.19	9.70	12:05	-	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	08/29/2017	30.81	21.16	-	-	-	24.27	9.65	13:40	-	-	-	-	-	-	-	-	<0.66	-	1,960	31,300	
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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
RW-119S	05/24/2016	33.33	25.05	-	-	-	29.50	8.28	9:10	-	-	-	-	-	-	-	-	-	-	-	2,100	Obstruction at 12.63 ft during gauging
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	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	04/18/2017	33.28	26.20	-	-	-	28.98	7.08	11:23	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	05/22/2017	33.28	24.21	-	-	-	28.95	9.07	10:16	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	05/23/2017	33.28	21.50	-	-	-	28.95	11.78	10:05	-	-	-	-	-	-	-	-	-	-	-	18,500	
RW-119S	06/22/2017	33.28	26.19	-	-	-	28.98	7.09	11:33	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	07/19/2017	33.28	26.23	-	-	-	29.15	7.05	11:19	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/21/2017	33.28	23.20	-	-	-	28.90	10.08	9:09	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/28/2017	33.28	23.60	-	-	-	28.90	9.68	10:41	-	-	-	-	-	-	-	-	<2.0	-	1,410	17,500	
RW-119S	09/20/2017	33.28	24.42	-	-	-	-	8.86	9:46	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	<1,160	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
TW-02	08/15/2014	20.60	14.84	-	-	-	21.15	5.76	-	-	-	-	-	-	-	-	-	-	-	-	<600	
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	-	-	-	-	-	-	-	-	-	-	-	-	
TW-02	02/21/2017	16.11	15.41	-	-	-	21.34	0.70	12:20	-	-	-	-	-	-	-	-	-	-	-	-	
TW-02	05/22/2017	16.11	14.30	-	-	-	21.33	1.81	12:55	-	-	-	-	-	-	-	-	-	-	-	-	
TW-02	05/23/2017	16.11	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.09	<20	-	<45	
TW-02	08/28/2017	16.11	15.82	-	-	-	21.30	0.29	10:10	-	-	-	-	-	-	-	-	-	-	-	-	
TW-02	08/30/2017	16.11	15.35	-	-	-	21.30	0.76	10:08	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-03	09/15/2014	10.40	8.33	-	-	-	-	2.07	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	<0.03	<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	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
TW-03	12/01/2015	10.40	7.64	-	-	-	13.12	2.76	13:26	-	-	-	-	-	-	-	-	-	-	-	-	Geosyntec sampling, could not gauge
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	-	-	-	-	-	<2	<0.5	<0.5	0.1 J	27 J	-	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-03	05/22/2017	10.40	7.92	-	-	-	13.15	2.48	12:59	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	05/23/2017	10.40	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.09	<20	-	75 J	
TW-03	08/28/2017	10.40	9.98	-	-	-	13.10	0.42	10:15	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	08/30/2017	10.40	9.95	-	-	-	13.10	0.45	10:19	-	-	-	-	-	-	-	-	-	-	-	<83	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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-04	05/22/2017	9.49	5.44	-	-	-	13.08	4.05	13:07	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.5	27 J	-	770	-
TW-04	08/28/2017	9.49	10.04	-	-	-	13.11	-0.55	10:05	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-04	08/30/2017	9.49	9.70	-	-	-	13.10	-0.21	12:25	-	-	-	-	-	-	-	-	-	-	-	5,700	-
TW-05	12/16/2013	13.73	NR	-	-	-	-	-	-	7.68	<0.5	62.8	40.3	<0.5	-	-	-	240	-	-	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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-
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-05	05/22/2017	9.64	5.61	-	-	-	13.40	4.03	13:15	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.09 J	30 J	-	650	-
TW-05	08/28/2017	9.64	10.02	-	-	-	13.45	-0.38	10:25	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-05	08/30/2017	9.64	9.71	-	-	-	13.48	-0.07	11:39	-	-	-	-	-	-	-	-	-	-	-	24,000	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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-Dibromooethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	02/09/2015	9.86	6.62	-	-	-	-	3.24	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	<0.03	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	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-06	09/09/2015	9.86	6.02	-	-	-	12.66	3.84	14:03	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
TW-06	11/10/2015	9.86	6.65	-	-	-	-	3.21	12:32	-	-	-	-	-	-	-	-	-	-	-	-	Sheen; Elevation change due to well being disturbed during construction activities
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	
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	-	-	-	-	-	-	-	-	-	-	-	1,500	
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-06	05/22/2017	9.99	5.82	-	-	-	12.48	4.17	13:11	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/23/2017	9.99	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.70	<20	-	1,500	
TW-06	08/28/2017	9.99	9.72	-	-	-	12.54	0.27	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	08/30/2017	9.99	9.64	-	-	-	12.51	0.35	11:17	-	-	-	-	-	-	-	-	-	-	-	9,540	
TW-07	12/16/2013	14.00	NR	-	-	-	-	-	-	2.38	ND	0.97	ND	ND	-	-	-	34.00	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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-07	05/22/2017	9.88	6.68	-	-	-	13.53	3.20	13:03	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	05/23/2017	9.88	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	-	86 J	
TW-07	08/28/2017	9.88	9.66	-	-	-	13.48	0.22	0:43	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-07	08/30/2017	9.88	9.63	-	-	-	13.48	0.25	10:55	-	-	-	-	-	-	-	-	-	-	-	16,300	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TW-11	07/07/2014	37.39	27.08	-	-	-	37.10	10.31	-	-	-	-	-	-	-	-	-	-	-	-	117,000	-
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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 (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes, Total (ug/L)	Methyl tert-butyl ether (ug/L)	tert-Butyl alcohol (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichloroethane (ug/L)	Naphthalene (ug/L)	TPH-GRO (ug/L)	TPH-DRO - Silica Gel (ug/L)	TPH-DRO (ug/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
TW-12S	02/24/2015	31.33	24.81	-	-	-	-	6.52	15:47	-	-	-	-	-	-	-	-	-	-	-	-	DRY DRY DRY Insufficient GW Vol. DRY Insufficient GW Vol. Insufficient GW Vol. Insufficient GW Vol. Insufficient GW Vol. Insufficient GW Vol.
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	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/24/2016	31.33	24.71	-	-	-	24.94	6.62	12:11	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/25/2016	31.33	24.72	-	-	-	24.94	6.61	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/30/2016	31.33	24.73	-	-	-	24.93	6.60	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	11/28/2016	31.33	24.75	-	-	-	25.04	6.58	10:43	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	11/29/2016	31.33	DRY	-	-	-	24.92	-	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	12/07/2016	31.33	24.77	-	-	-	24.93	6.56	12:14	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	02/21/2017	31.33	24.72	-	-	-	24.94	6.61	11:50	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	02/22/2017	31.33	24.76	-	-	-	24.94	6.57	12:46	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	05/22/2017	31.33	DRY	-	-	-	24.93	-	11:36	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/28/2017	31.33	24.75	-	-	-	24.95	6.58	12:10	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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	<0.03	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	-	-	-	-	-	-	-	-	-	-	-	-	
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	
TW-14	05/22/2017	11.61	3.16	-	-	-	-	8.45	9:45	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	-	<45	
TW-14	08/28/2017	11.61	3.00	-	-	-	6.05	8.61	11:23	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	08/30/2017	11.61	2.69	-	-	-	6.05	8.92	10:23	-	-	-	-	-	-	-	-	-	-	-	902	

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

TPH-DRO - Silica Gel = Total Petroleum Hydrocarbons, Diesel Range Organics C10-C28 (SW-896 8015B) with Silica Gel Cleanup (3630C)

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

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

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 - Silica Gel (µg/L)	TPH-DRO (µg/L)	Comments
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ft = feet

gal = gallons

DRY = No water for sampling.

Insufficient GW = 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-01S	05/22/2017	1.7	20.9	0.0	0.0	4.25	6.85	16.69	-88.9	969.5	-
MW-01S	07/10/2017	-	-	-	-	-	6.77	-	-	-	-
MW-01S	08/28/2017	7.4	20.9	0.0	0.0	3.8	6.42	18.43	32.7	453.1	-
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	-	-	-	-	-	-

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	11/28/2016	0.7	20.9	0.2	0.0		4.35	17.10	229.5	1,280	-
MW/RW-05	02/21/2017	1.3	20.9	0.0	0.0	11.84	5.34	13.18	60.0	950	-
MW/RW-05	05/22/2017	0.8	20.9	0.1	0.0	9.70	6.55	16.62	11.2	612.3	-
MW/RW-05	08/28/2017	11.4	20.9	0.1	0.0	3.40	3.77	18.84	137.5	2,369.8	-
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-08S	08/29/2017	-	-	-	-	-	6.43	18.9	-	-	-
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	-	-	-	-	-	-

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	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	-
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/RW-10S	05/22/2017	8.8	19.6	0.2	0.0	1.28	5.66	18.14	-4.9	1,667	-
MW/RW-10S	07/10/2017	-	-	-	-	-	4.99	-	-	-	-
MW/RW-10S	07/19/2017	-	-	-	-	-	5.15	-	-	-	-
MW/RW-10S	08/28/2017	1.3	20.4	0.1	0.0	2.01	5.20	18.69	91.7	2785.9	-
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	-

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-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	-
MW/RW-14	05/22/2017	58.0	20.5	0.2	0.0	7.60	6.20	17.65	128.7	171	-
MW/RW-14	08/28/2017	10.0	20.9	0.0	0.0	3.99	7.19	18.43	69.1	415.8	-
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-15S	08/29/2017	-	-	-	-	-	6.73	18.6	-	-	-
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-16	08/30/2017	-	-	-	-	-	5.57	18.6	-	-	-
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	-	-	-	-	-	-

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-25S	08/04/2015	70.5	4.4	9.5	4.6	-	-	-	-	-	-
MW-25S	07/19/2017	-	-	-	-	-	3.77	-	-	-	-
MW-25S	08/31/2017	-	-	-	-	-	6.15	22.6	-	-	-
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	-	-	-	-	-	-
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/RW-25	05/22/2017	25.6	20.9	0.3	0.0	9.18	6.03	17.50	105.3	308	-
MW/RW-25	08/28/2017	3.6	20.9	0.0	0.0	3.86	6.26	20.44	67.3	230	-
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

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-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-27	05/22/2017	6.6	20.9	0.3	0.0	1.35	6.10	16.00	88.1	643	-
MW-27	08/28/2017	0.0	20.9	0.0	0.0	1.50	6.67	17.10	66.3	847.7	-
MW/RW-31	10/10/2014	120.5	6.2	-	-	0.39	6.97	18.62	-119.7	899	-
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/RW-31	08/31/2017	-	-	-	-	-	6.71	20.1	-	-	-
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	-

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-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-33	08/30/2017	-	-	-	-	-	6.08	18.4	-	-	-
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	-
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-51S	05/22/2017	2.1	20.9	0.1	0.0	4.99	6.72	16.76	-40.0	2,207	-

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	07/19/2017	-	-	-	-	-	6.88	-	-	-	-
MW-51S	08/28/2017	0.4	19.7	0.2	0.0	1.9	7.30	20.12	45.1	2,169.1	-
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/RW-51	05/22/2017	33.5	17.0	0.1	0.0	7.03	6.25	18.23	11.4	546	-
MW/RW-51	08/28/2017	7.3	20.9	0.0	0.0	2.70	6.21	19.81	62.9	327.1	-
MW-52	10/10/2014	5.4	16.3	-	-	1.15	5.87	17.51	45.9	465	-
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-70	08/30/2017	-	-	-	-	-	5.25	19.2	-	-	-
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	-

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-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-72S	05/22/2017	4.4	20.2	0.7	0.0	2.96	4.79	15.87	291.50	2,088.9	-
MW/RW-72S	07/19/2017	-	-	-	-	-	4.3	-	-	-	-
MW/RW-72S	08/28/2017	0.1	15.5	1.1	0.0	0.2	4.3	17.4	93.8	3636.2	-
MW/RW-72S	08/30/2017	-	-	-	-	-	4.40	18.1	-	-	-
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	-	-	-	-	-	-
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	-

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	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/RW-72	05/22/2017	2.0	19.3	1.0	0.0	0.19	4.37	15.56	176.8	3,591	-
MW/RW-72	08/28/2017	0.2	20.9	0.0	0.0	3.84	4.41	17.36	94.5	2,113.3	-
MW/RW-72	08/30/2017	-	-	-	-	-	4.32	19.6	-	-	-
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-100S	08/30/2017	-	-	-	-	-	6.02	18.7	-	-	-
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-100	08/30/2017	-	-	-	-	-	5.72	18.6	-	-	-
MW-102	10/10/2014	0.6	17.7	-	-	2.44	6.10	17.15	68.2	295	-
MW-102	08/30/2017	-	-	-	-	-	6.21	19.1	-	-	-
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-103	08/30/2017	-	-	-	-	-	6.05	22.6	-	-	-

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	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	-	-	-	-	-	-
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-104	08/30/2017	-	-	-	-	-	6.92	22.8	-	-	-
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-105	08/30/2017	-	-	-	-	-	6.94	22.8	-	-	-
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-106	05/22/2017	8.3	20.7	0.6	0.0	3.23	3.27	14.92	383.1	2,334	-
MW-106	08/28/2017	9.5	20.1	0.1	0.0	DRY					
MW-107	10/10/2014	10.5	11.8	-	-	0.62	3.51	18.90	348.4	2,063	-

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	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	-
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	-

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-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	-
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	-

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-121	02/21/2017	238.3	15.5	3.5	0.0	0.32	6.72	18.03	-46.1	930	-
MW-121	05/22/2017	4.3	13.4	1.3	0.0	0.15	6.53	17.86	-105.7	1,291	-
MW-121	08/28/2017	0.7	17.8	1.5	0.0	0.03	7.02	18.33	-47.6	796.2	-
MW-121	08/29/2017	-	-	-	-	-	6.80	18.7	-	-	-
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	-
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-122	05/22/2017	4.7	10.5	1.8	0.0	0.17	6.72	17.52	-61.3	988	-
MW-122	08/28/2017	0.8	20.7	0.2	0.0	0.04	6.93	18.09	-28.3	1,129	-
MW-122	08/30/2017	-	-	-	-	-	6.75	18.6	-	-	-
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	-
MW/RW-123S	05/22/2017	0.1	20.9	0.0	0.0	4.08	6.97	16.72	-147.2	862	-
MW/RW-123S	07/10/2017	-	-	-	-	-	7.04	-	-	-	-

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-123S	08/28/2017	0.3	15.8	0.7	0.0	2.3	6.78	19.01	24.2	1,063	-
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	-
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-1	05/22/2017	1.0	20.3	0.1	0.0	0.74	6.08	17.64	-17.3	211.8	-
RW-1	08/28/2017	0.5	20.4	0.1	0.0	-0.06	7.26	17.93	-25.7	265.4	-
RW-1	08/29/2017	-	-	-	-	-	6.31	18.2	-	-	-
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	-

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-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-05S	05/22/2017	0.0	20.9	0.1	0.0	1.70	2.71	15.46	422.80	4,568	-
RW-05S	07/10/2017	-	-	-	-	-	3.03	-	-	-	-
RW-05S	07/19/2017	-	-	-	-	-	3.28	-	-	-	-
RW-05S	08/28/2017	1.7	20.9	0.1	0.0	2.7	3.70	18.46	112.1	2,270.7	-
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					
RW-25S	05/22/2017	1.8	20.9	0.2	0.0	2.30	6.46	16.30	-40.90	2,781	-
RW-25S	08/28/2017	1.1	20.1	0.1	0.0	DRY					
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	-	-	-	-	-	-	-	-	-

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	08/30/2016	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-28S	05/22/2017	7.6	20.8	0.2	0.0	0.33	6.21	14.56	-64.9	1,763	-
RW-28S	07/10/2017	-	-	-	-	-	6.70	-	-	-	-
RW-28S	08/28/2017	1.2	19.8	0.5	0.0	0.12	6.69	20.26	68.6	1,591.4	-
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	-	-	-	-	-	-
RW-30S	02/21/2017	13.4	20.9	0.0	0.0	8.68	7.90	11.57	50.5	1,140	-
RW-30S	05/22/2017	15.9	20.9	0.1	0.0	-	-	-	DRY	-	-
RW-30S	07/10/2017	-	-	-	-	-	6.90	-	-	-	-
RW-30S	08/28/2017	0.3	19.9	0.2	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-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-116S	05/22/2017	0.0	20.7	0.4	0.0	4.62	6.95	15.24	-6.3	603	-
RW-116S	07/10/2017	-	-	-	-	-	4.33	-	-	-	-
RW-116S	07/19/2017	-	-	-	-	-	4.42	-	-	-	-
RW-116S	08/28/2017	9.4	20.9	0.1	0.0	DRY					
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-117S	05/22/2017	0.0	20.3	0.3	0.0	DRY					
RW-117S	08/28/2017	0.0	20.9	0.0	0.0	2.85	7.08	18.97	65.9	2,806.7	-

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-117S	08/31/2017	-	-	-	-	-	4.97	21.6	-	-	-
RW-118S	08/04/2015	19.6	6.4	7.3	0.1	0.14	6.78	16.32	-59.8	1,350	-
RW-118S	08/29/2017	-	-	-	-	-	6.12	18.1	-	-	-
RW-119S	08/04/2015	2.4	12.8	3.4	2.1	0.03	6.69	16.60	-15.9	1,020	-
RW-119S	07/10/2017	-	-	-	-	-	6.48	-	-	-	-
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	-
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-03	05/22/2017	1.0	14.5	1.3	0.0	0.56	5.43	15.99	105.6	971	10.0

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-03	08/28/2017	0.9	10.1	6.1	0.0	1.07	7.19	19.79	60.2	589.9	-
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
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-05	05/22/2017	0.8	20.9	0.2	0.1	0.47	6.03	15.39	32.1	1,423	50.8
TW-05	08/28/2017	13.9	19.9	0.1	0.0	1.50	5.65	21.33	75.7	1,329	-
TW-06	10/13/2014	39.8	14.4	-	-	1.31	6.42	18.99	-	983	-

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	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	-	-	-	-	-	-
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-06	05/22/2017	1.7	19.4	0.3	0.0	0.45	6.13	15.77	-12.6	1,386	1.41
TW-06	08/28/2017	4.5	16.3	1.3	0.0	1.62	5.49	21.06	77.0	1,567.1	-
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	-

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	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
TW-07	02/21/2017	0.2	20.0	0.5	0.0	2.27	4.90	11.29	56.2	580	-
TW-07	05/22/2017	0.8	18.9	0.9	0.0	0.89	4.89	17.01	149.0	788	20.0
TW-07	08/28/2017	0.1	20.0	0.3	0.0	1.92	5.97	21.69	74.2	1,011.5	-
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
TW-14	08/30/2017	-	-	-	-	-	6.52	21.9	-	-	-

Notes:

- = Not available

mV = Millivolts

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)
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% = Percent
 µS/cm = Microsiemens per centimeter
 deg C = Degrees Celsius
 mg/L = Milligrams per liter
 (cont.) = continued
 ORP = Oxidation-Reduction Potential
 ppm = Parts per million
 NTU = Nephelometric Turbidity Unit
 DRY = Not enough water in well to take measurements.
 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)	Sulfur (mg/L)	Sulfide (mg/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-01S	5/24/2017	528	-	-	174	<0.11	<0.010	221	17.4	7.79
MW-01S	8/29/2017	2,730	46.6	-	170	<0.11	<0.01	292	2.3	10.1
MW-08S	8/29/2017	-	202	-	696	-	-	122	-	-
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/RW-10S	8/29/2017	3.9	442	-	2150	0.64	<0.01	<5	199	8.89
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/RW-14	5/22/2017	1.5	-	-	37.7	1.80	<0.010	8.8	<0.20	0.044
MW-15S	8/29/2017	-	72.9	-	270	-	-	487	-	-
MW-16	8/30/2017	-	55.6	<0.2	212	-	-	39.5	-	-
MW-27	12/3/2015	2,500	-	-	112	<0.040	<0.015	424	33.4	10.9
MW-27	3/15/2016	-	-	-	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-27	5/23/2017	1.4	-	-	352	<0.11	<0.010	42.0	0.61	8.12
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-33	8/30/2017	-	-	-	-	-	-	41.5	-	-
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

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)	Sulfur (mg/L)	Sulfide (mg/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-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
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-51S	5/24/2017	20.4	-	-	1,160	0.12	<0.010	52.5	80.8	14.1
MW-51S	8/29/2017	29.3	223	-	836	<0.11	<0.01	169	90.1	10.9
MW-52	8/28/2017	-	-	-	-	-	-	93.8	-	-
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-70	8/28/2017	-	-	-	-	-	-	24.6	-	-
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-72S	5/23/2017	14	-	-	2,320	<0.11	<0.010	<5.0	238	56.6
MW/RW-72S	8/30/2017	16.1	657	-	3,260	<0.11	<0.01	<5	120	50.2
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/RW-72	5/23/2017	0.90	-	-	1,450	<0.11	<0.010	<5.0	0.58	34.9
MW-100S	11/29/2016	25	-	-	353	<0.040	0.20 J	37.5	71.6	11.5
MW-100S	8/30/2017	-	74	<0.2	269	-	-	116	-	-
MW-100	11/29/2016	12	-	-	56.3	2.60	0.061	29.2	0.19	0.902
MW-100	8/30/2017	-	7.15	<0.2	22.1	-	-	38.5	-	-
MW-102	8/30/2017	-	-	-	-	-	-	44.6	-	-
MW-103	8/30/2017	-	-	-	-	-	-	55.4	-	-
MW-104	8/30/2017	-	9.28	-	29.2	-	-	256	-	-
MW-105	8/30/2017	-	-	-	-	-	-	117	-	-
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

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)	Sulfur (mg/L)	Sulfide (mg/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-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-106	5/23/2017	11.3	-	-	1,690	0.38	0.013	<5.0	5.2	4.28
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
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-121	5/24/2017	452	-	-	163	<0.11	<0.010	288	3.2	7.06
MW-121	8/29/2017	35.5	34.1	-	122	<0.11	<0.01	158	0.52	4.4
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
MW-122	5/24/2017	6.2	-	-	239	<0.11	<0.010	257	<0.20	3.71
MW-122	8/30/2017	-	94	<0.20	-	-	-	-	-	-
RW-123S	8/29/2017	-	74.9	-	236	-	-	165	-	-
RW-1	8/29/2017	-	5.22	-	15.3	-	-	50.8	-	-
RW-05S	8/29/2017	-	446	-	-	-	-	-	-	-
RW-118S	8/29/2017	-	-	-	-	-	-	57.9	-	-
RW-119S	8/28/2017	-	109	<0.2	403	-	-	117	-	-
TW-02	8/30/2017	-	-	-	-	-	-	146	-	-
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-03	5/23/2017	87	-	-	402	<0.11	<0.010	7.7	41.7	6.08
TW-03	8/30/2017	13.1	109	<0.2	370	<0.11	<0.01	<5	42.9	6.51
TW-04	8/30/2017	-	-	-	-	-	-	<5	-	-
TW-05	3/4/2015	2,800	-	-	367	<0.040	0.13	89.4	72.6	5.28

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)	Sulfur (mg/L)	Sulfide (mg/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)
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-05	5/22/2017	583	-	-	860	<0.11	<0.010	16.6	63.8	10.2
TW-05	8/30/2017	32.8	263	<0.2	943	<0.11	<0.01	<5	122	31.6
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-06	5/23/2017	372	-	-	535	<0.11	<0.010	<5	97.9	4.44
TW-06	8/30/2017	39.4	226	<0.2	1530	<0.11	<0.01	<5	247	6.68
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
TW-07	8/6/2015	2,700	-	-	304	<0.040	0.018 J	2.7	8.7	4.51
TW-07	8/30/2017	-	-	-	-	-	-	<5	-	-
TW-14	8/30/2017	-	-	-	-	-	-	217	-	-

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

MA EXTRACTABLE PETROLEUM HYDROCARBON ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Acenaphthene (µg/L)	Acenaphthylene (µg/L)	Anthracene (µg/L)	Benzo(a)anthracene (µg/L)	Benzo(a)pyrene (µg/L)	Benzo(b)fluoranthene (µg/L)	Benzo(g,h,i)perylene (µg/L)	Benzo(k)fluoranthene (µg/L)	Chrysene (µg/L)	Dibenzo(a,h)anthracene (µg/L)	Fluoranthene (µg/L)	Fluorene (µg/L)	Indeno(1,2,3-cd)pyrene (µg/L)	2-Methylnaphthalene (µg/L)	Naphthalene (µg/L)	Phenanthrene (µg/L)	Pyrene (µg/L)	C11-C22 Aromatics (Unadj.) (µg/L)	C9-C18 Aliphatics (µg/L)	C19-C36 Aliphatics (µg/L)
MW-01S	08/28/2017	<0.83	<0.89	<0.96	<0.83	<1.4	<0.88	<2.0	<0.82	<0.81	<2.0	<0.86	<1.5	<2.0	<2.0	<2.0	<0.88	<2.0	391	<50	<50
MW-08S	08/29/2017	2.9	<0.76	<0.52	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	<0.52	2.9	<1.5	<0.67	<0.66	1.2	<0.61	850	471	269
MW/RW-10S	08/29/2017	4.60	<0.89	<0.96	<0.83	<1.4	<0.88	<2.0	<0.83	<0.81	<2.0	<0.86	<1.5	<2.0	<2.0	<2.0	1.4	2.4	1,740	1,540	716
MW-25S	08/31/2017	3.4	3.9	<0.52	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	<0.52	<0.72	<1.5	<0.67	<0.66	0.8	1.7	1,290	674	302
MW-51S	08/29/2017	<0.83	2.6	<0.96	<0.83	<1.4	<0.88	<2.0	<0.82	<0.81	<2.0	<0.86	<1.5	<2.0	<2.0	<2.0	<0.88	<2.0	498	69	<50
MW/RW-72S	08/30/2017	<0.72	<0.76	<0.52	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	1.2	<0.72	<1.5	<0.67	<0.66	2.2	0.7	1,710	1,900	1,340
MW-121	08/29/2017	<0.72	1.6	3.1	<0.37	<0.68	0.4	<0.45	<0.57	<0.37	<2.2	<0.52	<0.72	<1.5	<0.67	<0.66	2.2	0.7	1,840	3,830	864
MW/RW-123S	08/29/2017	<0.83	<0.89	<0.96	<0.83	<1.4	<0.88	<2.0	<0.82	<0.81	<2.0	<0.86	<1.5	<2.0	<2.0	<2.0	<0.88	<2.0	292	<50	<50
RW-1	08/29/2017	<0.72	3.9	4.7	0.5	<0.68	0.6	<0.45	<0.57	<0.37	<2.2	2.3	1.6	<1.5	<0.67	<0.66	4.0	2.5	3,830	7,170	1,850
RW-05S	08/29/2017	3.5	2.2	<0.96	<0.83	<1.4	<0.88	<2.0	<0.82	<0.81	<2.0	<0.86	4.8	<2.0	<2.0	<2.0	1.8	<2.0	<50	532	298
RW-28S	08/31/2017	<0.72	<0.76	<0.52	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	<0.52	<0.72	<1.5	<0.67	<0.66	<0.60	<0.61	450	477	279
RW-116S	08/31/2017	<0.72	<0.76	1.5	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	<0.52	<0.72	<1.5	<0.67	<0.66	1.1	0.9	1,150	1,400	624
RW-117S	08/31/2017	2.5	0.98	0.92	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	<0.52	<0.72	<1.5	<0.67	<0.66	1.3	1.4	1,620	1,180	570
RW-118S	08/29/2017	<0.72	<0.76	<0.52	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	<0.52	<0.72	<1.5	<0.67	<0.66	<0.60	0.72	996	936	463
RW-119S	08/28/2017	<0.83	<0.89	<0.96	<0.83	<1.4	<0.88	<2.0	<0.82	<0.81	<2.0	<0.86	<1.5	<2.0	<2.0	<2.0	<0.88	<2.0	285	<50	<50

Notes:

- = No data available

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

µg/L = Micrograms per liter

Table 7

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	0.73		627
March 16, 2016	0.3	0.3	10	14.0	340	150		25.4	8.5	11	0.52		875
March 17, 2016	0.4	0.4	19	13.7	360	313		26.9	10.1	21	0.22		993
March 21, 2016	1.3	1.3	49	15.1	320	189		23.9	29.8	50	0.20		1,358
March 24, 2016	3	2.5	108	-	-	-		-	-	-	0.16		1,920
March 30, 2016	6	5.4	238	15.1	360	210		26.9	212	262	0.08		2,572
Q1 2016	11	10		14.7	341	216			262		0.18	2,572	
April 7, 2016	8	7.8	426	14.7	350	120	135	4.2	33	295	0.14	4,671	4,207
April 13, 2016	6	5.9	568	13.7	380	71	-	21.7	129	424	0.14		5,375
April 20, 2016	7	6.3	718	14.7	360	63	-	18.0	113	537	0.12		6,431
April 27, 2016	7	5.5	851	15.1	330	59	-	15.7	87	624	0.10		7,243
May 5, 2016	8	7.7	1035	15.7	330	105	74	2.2	17	640	0.12	4,121	8,530
May 18, 2016	13	8.9	1248	14.4	350	48	-	13.4	119	759	0.12		10,084
May 25, 2016	7	4.8	1362	15.3	340	-	-	2.3	11	770	0.19		11,364
June 8, 2016	14	8.8	1573	16.5	340	37	0	0.0	0	770	0.15	5,196	13,273
June 21, 2016	13	12.6	1876	15.2	360	24.4	-	7.0	89	859	0.18		16,560
Q2 2016	83	68		15.0	349	66			597		0.14	13,988	
July 12, 2016	21	21.0	2379	15.8	350	44.0	<53	12.3	259	1118	0.22	9,218	23,064
July 21, 2016	9	8.8	2589	16.3	330	80.2	-	21.2	186	1303	0.22		25,778
August 4, 2016	14	14.0	2926	16.5	350	26.4	70	2.2	31	1334	0.30	10,131	31,745
August 15, 2016	11	7.4	3103	16.0	350	-	-	2.2	16	1350	0.38		35,795
August 17, 2016	2	0.2	3108	14.5	325	46.4	-	12.1	3	1353	0.38		35,909
September 1, 2016	15	10.7	3365	15.8	340	34.2	71	2.2	23	1376	0.24	11,516	39,684
September 22, 2016	21	20.8	3865	16.6	345	23.7	-	6.6	136	1513	0.20		45,749
September 30, 2016	8	8.0	4056	-	345	-	-	2.2	18	1530	0.15		47,425
Q3 2016	101	91		15.9	342	42			671		0.24	30,865	

Table 7

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	4.9	4173	16.9	360	13.2	<53	3.8	19	1549	0.18	4,062	48,699
October 20, 2016	15	13.8	4505	17.2	340	16.9	-	4.6	64	1612	0.14		51,487
November 3, 2016	14	13.0	4817	16.8	360	17.6	29	0.9	12	1625	0.13	4,897	53,850
November 22, 2016	19	19.0	5273	17.2	365	28.9	-	8.5	161	1785	0.09		56,384
December 7, 2016	15	14.8	5627	16.6	370	31.6	<53	9.4	138	1923	0.07	2,753	57,895
December 22, 2016	15	9.1	5845	16.6	345	42.7	-	11.8	107	2031	0.09		59,137
Q4 2016	83	75		16.9	357	25			500		0.11	11,712	
January 9, 2017	18	17.2	6257	17.0	350	31.0	<53	8.7	149	2180	0.13	8,266	62,275
January 30, 2017	21	20.4	6747	16.2	360	31.6	-	9.1	186	2366	0.17		67,403
February 6, 2017	7	6.9	6913	15.9	370	32.0	<53	9.5	66	2432	0.13	2,619	68,680
February 22, 2017	16	15.9	7295	15.9	380	17.7	-	5.4	86	2517	0.06		70,022
March 7, 2017	13	12.1	7585	15.7	360	33.3	<53	9.6	116	2633	0.07	3,230	71,195
March 29, 2017	22	21.8	8107	15.9	350	13.4	-	3.8	82	2715	0.07		73,252
Q1 2017	97	94		16.1	362	27			685		0.10	14,115	
April 10, 2017	12	5.5	8240	14.2	370	10.4	140	4.7	26	2741	0.08	1,351	73,890
April 18, 2017	8	2.9	8310	14.1	370	14.6	-	4.3	13	2754	0.17		74,603
May 2, 2017	14	14.0	8645	14.2	370	11.3	22.4	3.4	47	2800	0.07	2,673	75,985
May 18, 2017	16	16.0	9030	16.0	325	2.0	-	0.5	8	2809	0.06		77,276
June 7, 2017	14*	5.7	9167	15.3	360	27.4	35.3	7.9	45	2854	0.24	4,594	79,285
June 22, 2017	15	12.1	9457	14.8	375	4.2	-	1.3	15	2869	0.15		81,870
Q2 2017	79	56		14.8	362	12			154		0.11	8,618	
July 6, 2017	14	9.1	9675	13.25	400	17.3	34.5	1.2	11	2880	0.13	4,696	83,603
July 19, 2017	13	11.9	9960	15.9	275	9.6	-	2.1	25	2905	0.11		85,484
July 28, 2017	9	3.6	10047	16.0	275	NR	-	2.1	8	2913	0.21		86,566
August-17	System Off												
September-17	System Off												
Q3 2017	36	25		15.1	317	13			44		0.13	4,696	

Notes:

PID - photoionization detector

in. Hg - inches of mercury

scfm - standard cubic feet per minute

ppm-v - parts per million by volume

mg/m³ - milligrams per cubic meter

lbs - pounds

gal - gallons

gpm - gallons per minute

NR - not recorded

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.

Table 7

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)

* The remediation system was shut for 6 days prior to and during the groundwater sampling event.

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 c

c = conversion factors, 1440 min/day, 0.02832 m³/ft³, 2.2046E-6 lb/mg

Estimate 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 ft³

Estimate 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 8

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	87,572	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		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	61,464	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 8

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
April 10, 2017	12	11.7	7,967	1.4	33,068	918,041	2,514,214	0.5	10,125,850	22.9	4,947,186	12	9,556,777	36			2,438,043	5
April 18, 2017	8	4.2	8,067	1.5		926,905	2,523,654	1.6	10,260,855	22.5	5,041,960	16	9,659,267	17			2,452,180	2
May 2, 2017	14	13.5	8,390	1.5	67,507	955,134	2,558,928	1.8	10,700,135	22.7	5,358,699	16	9,976,314	16			2,488,966	2
May 18, 2017	16	16.0	8,775	1.7		994,412	2,773,700	9.3	11,201,156	21.7	5,742,876	17	10,340,804	16			2,912,156	18
June 7, 2017	15*	14.1	9,114	1.5	39,790	1,025,509	2,948,465	8.6	11,639,850	21.6	6,037,220	14	10,619,527	14			3,425,060	25
June 22, 2017	15	11.6	9,392	0.5		1,034,202	2,948,771	0.0	12,064,871	25.5	6,114,629	5	10,747,764	8			3,733,091	18
Q2 2017	80	71		1.4	140,365		442,369	4.3	2,671,086	26.1	1,368,608	13	2,066,285	20	0	0	1,446,470	14
July 7, 2017	15	10.5	9,644	0.2	7,329	1,037,554	2,948,828	0.0	12,236,542	18.8	6,117,984	0.2	10,816,747	6			3,733,091	10
July 19, 2017	12	12.5	9,943	0.2		1,041,531	2,948,856	0.0	12,376,875	7.8	6,121,005	0.2	10,902,614	5			3,733,091	0
August 9, 2017	21	17.8	10,371	0.2	8,959	1,046,508	2,948,878	0.0	12,602,437	8.8	6,126,678	0.2	11,037,287	5			3,733,095	0
August 21, 2017	12	11.5	10,646	0.2		1,050,490	2,960,235	0.7	12,798,127	11.9	6,128,644	0.1	11,140,402	6			3,865,276	8
September 5, 2017	15	3.2	10,723	0.1	7,520	1,051,027	2,963,181	0.6	12,831,995	7.3	6,129,433	0.2	11,156,633	4			3,895,853	7
September 20, 2017	15	14.8	11,078	0.3		1,058,010	3,099,965	6.4	12,887,393	2.6	6,141,855	0.6	11,267,437	5			4,115,111	10
Q3 2017	90	70		0.2	23,808		151,194	1.5	822,522	8.1	27,226	0.3	519,673	5	0	0	382,020	4

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.

* - The remediation system was shut for 5 days prior to and during the groundwater sampling event.

Table 9

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	0.75	0.3	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
April-17	20	16.4	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
May-17	36*	36.0	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
June-17	23	20.1	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
Q2 2017	79	73	0.8	0.8	0.8	0.8	0.8	0.3	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.3	0.3
July-17	34	29.0	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
August-17	30	29.0	OFF								0.5	0.5	0.5	0.5	0.5	0.3	0.3
September-17	26	14.9	0.75	0.75	0.75	0.75	0.75	OFF	0.75	OFF	0.5	0.5	0.5	0.5	0.5	0.3	0.3
Q3 2017	90	73	0.8	0.8	0.8	0.8	0.8	0.3	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.3	0.3

Table 9

BIOSPARGE OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Notes:

scfm - standard cubic feet per minute

* - The remediation system was shut for 6 days prior to and during the groundwater sampling event.

Table 10

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)	(gal)
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	0.00	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						
April-17	1,351	1.3	0.01	33,068	55	15.2	0.00	0.0	41	73	85	2754	2953	403
May-17	2,673	25.3	0.6	67,507	31.6	17.8	0.00	0.0	41	91	85	2809	3026	413
June-17	4,594	11.8	0.5	39,790	0.83	0.3	0.00	0.0	42	91	85	2869	3087	421
Q2 2017			1.0			33.3		0.0						
July-17	4,696	17.4	0.68	7,329	0.832	0.1	0.00	0.0	43	91	85	2913	3132	428
August-17	0	0	0.0	8,959	0.20	0.0	0.00	0.0	43	91	85	2913	3132	428
September-17	0	0	0.0	7,520	1.59	0.1	0.00	0.0	43	91	85	2913	3132	428
Q3 2017			0.7			0.2		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 within 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.

LNAPL - light non-aqueous phase liquid

gal - gallon

mg/L - milligrams per liter

lbs - pounds

ft - feet

Table 10

HYDROCARBON RECOVERY SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

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-25

Conversion of recovered hydrocarbons from pounds to gallons:

Gallons = Total Hydrocarbons (lbs) / Density of LNAPL (54.8 lb/ft³) x 7.48 gal/ft³



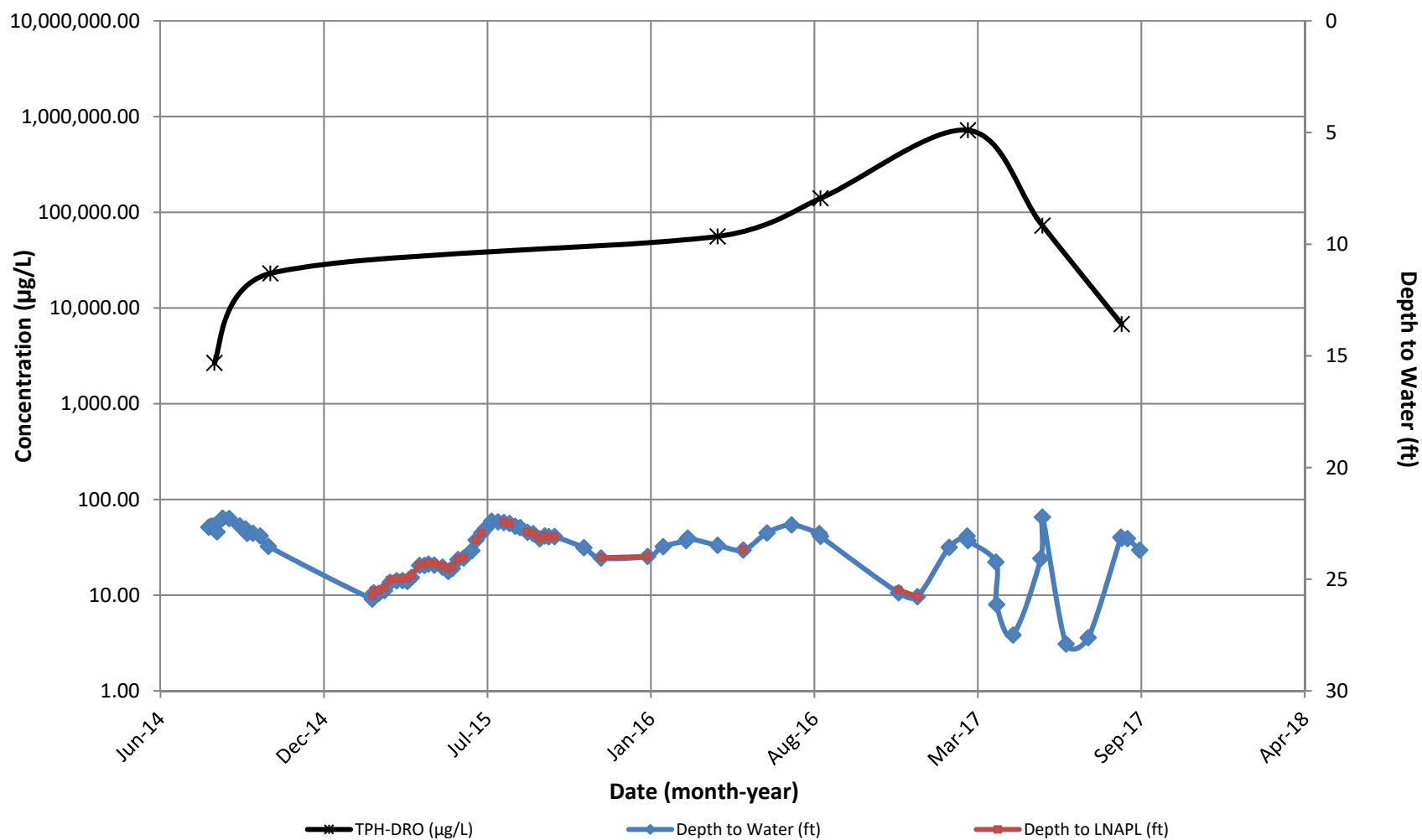
ATTACHMENT A

CONCENTRATION TREND GRAPHS

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-01S

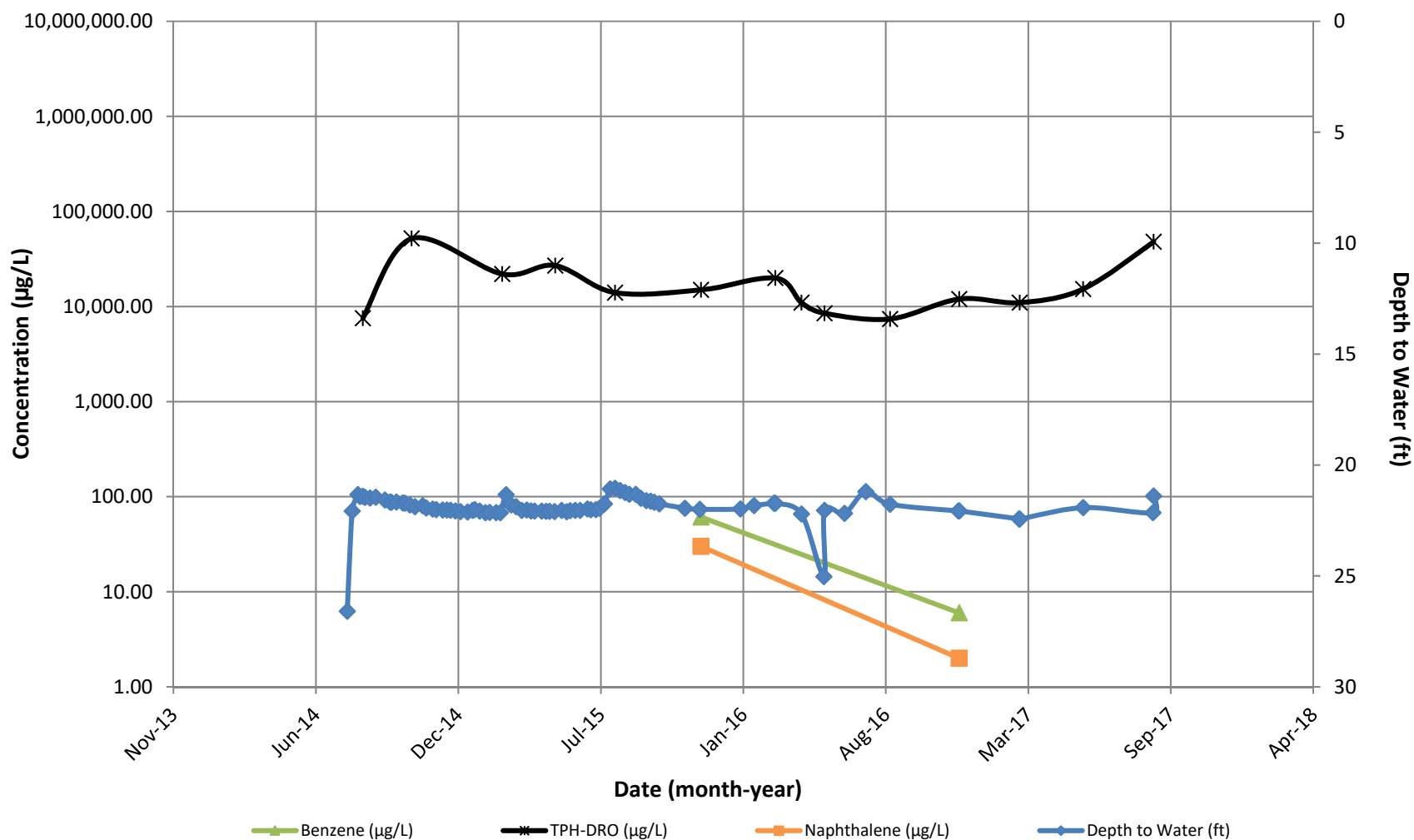


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-08S

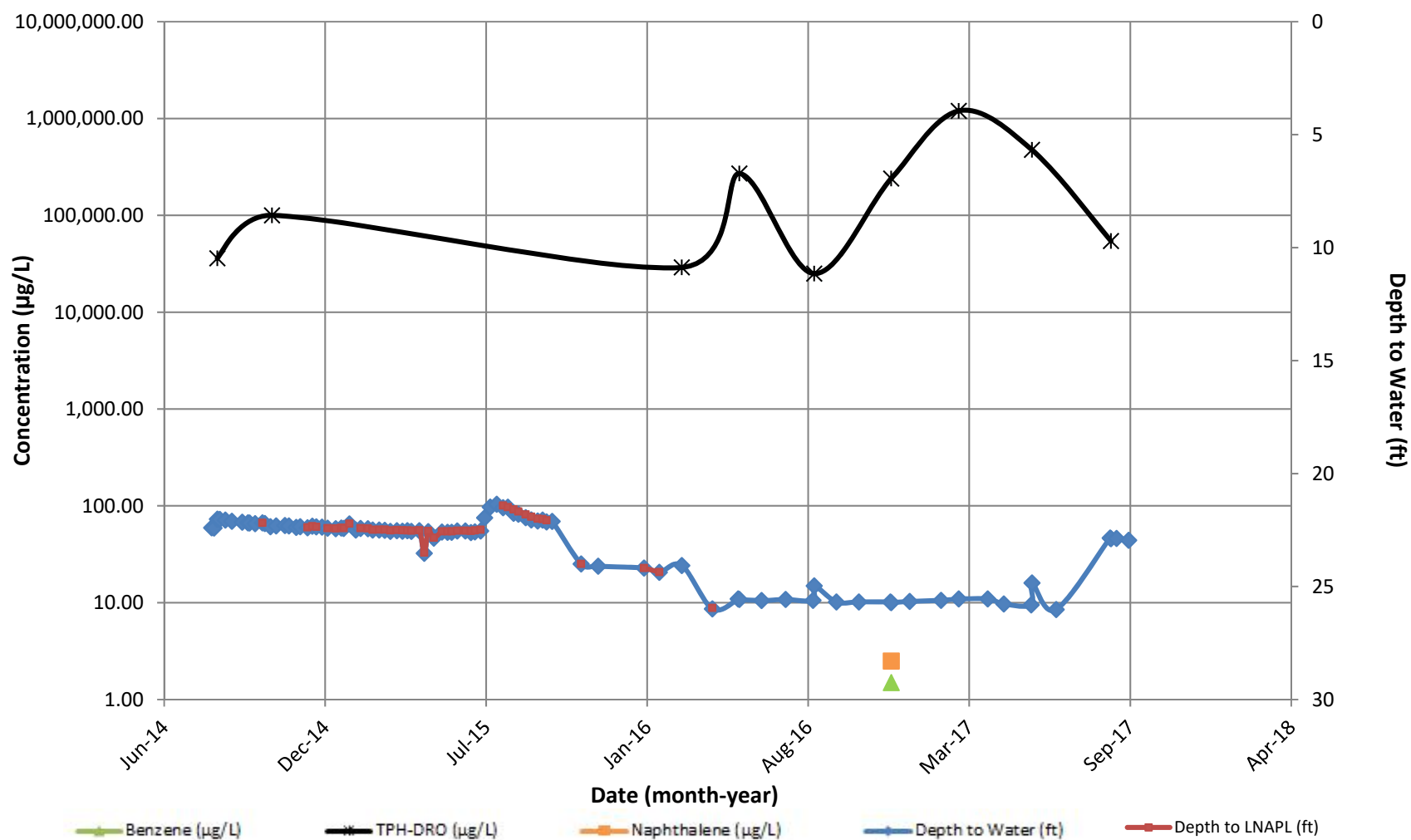


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-10S

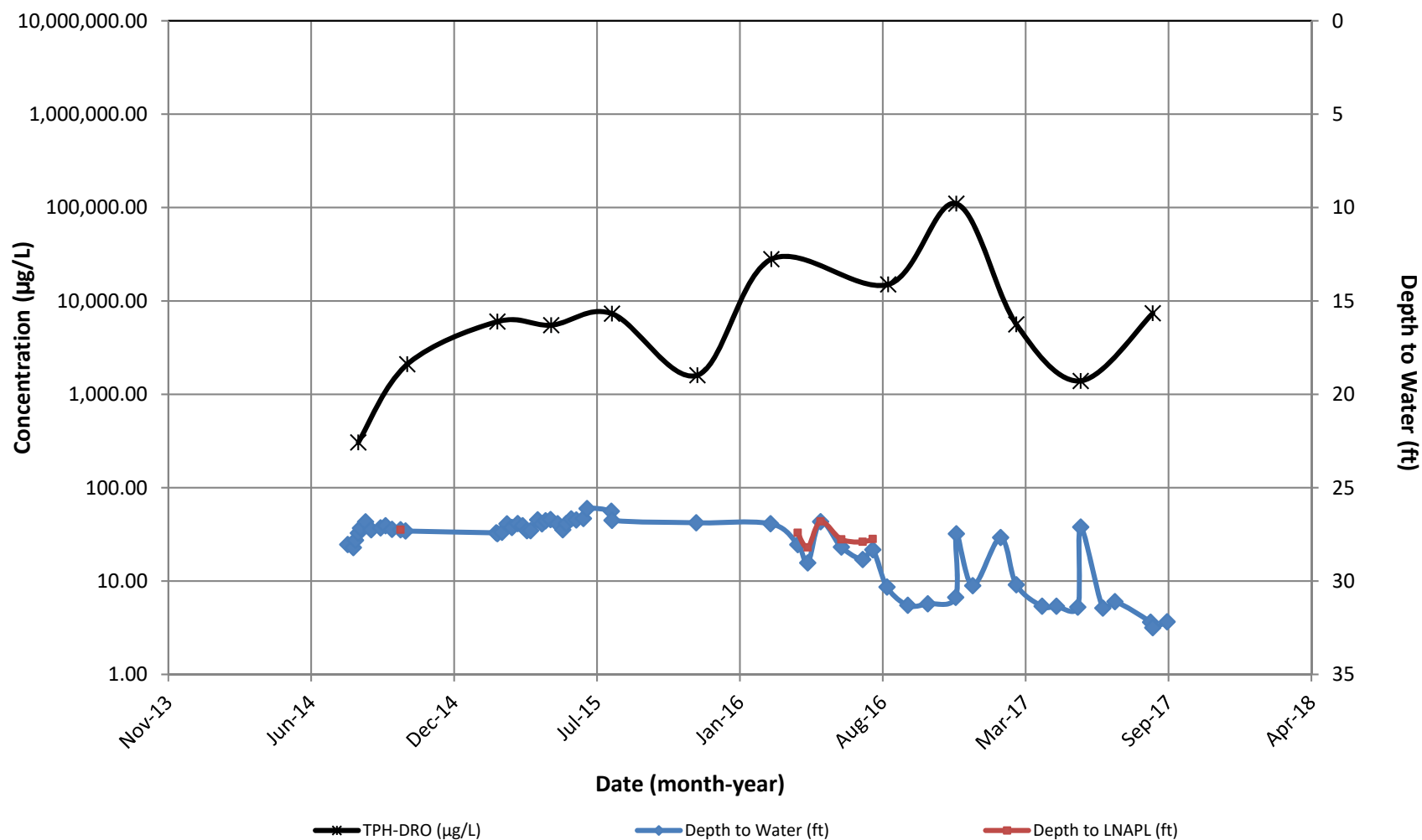


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-14

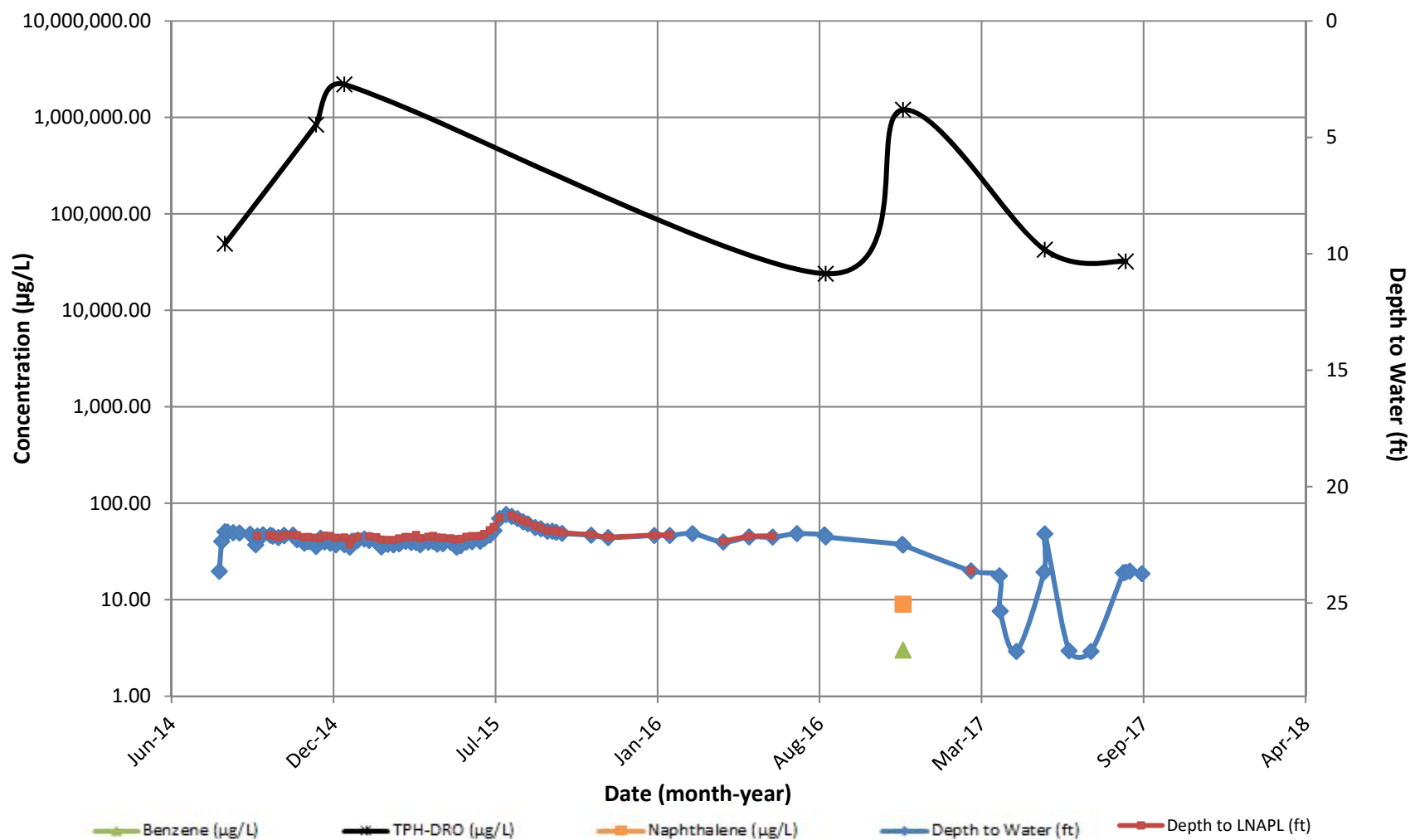


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-25S

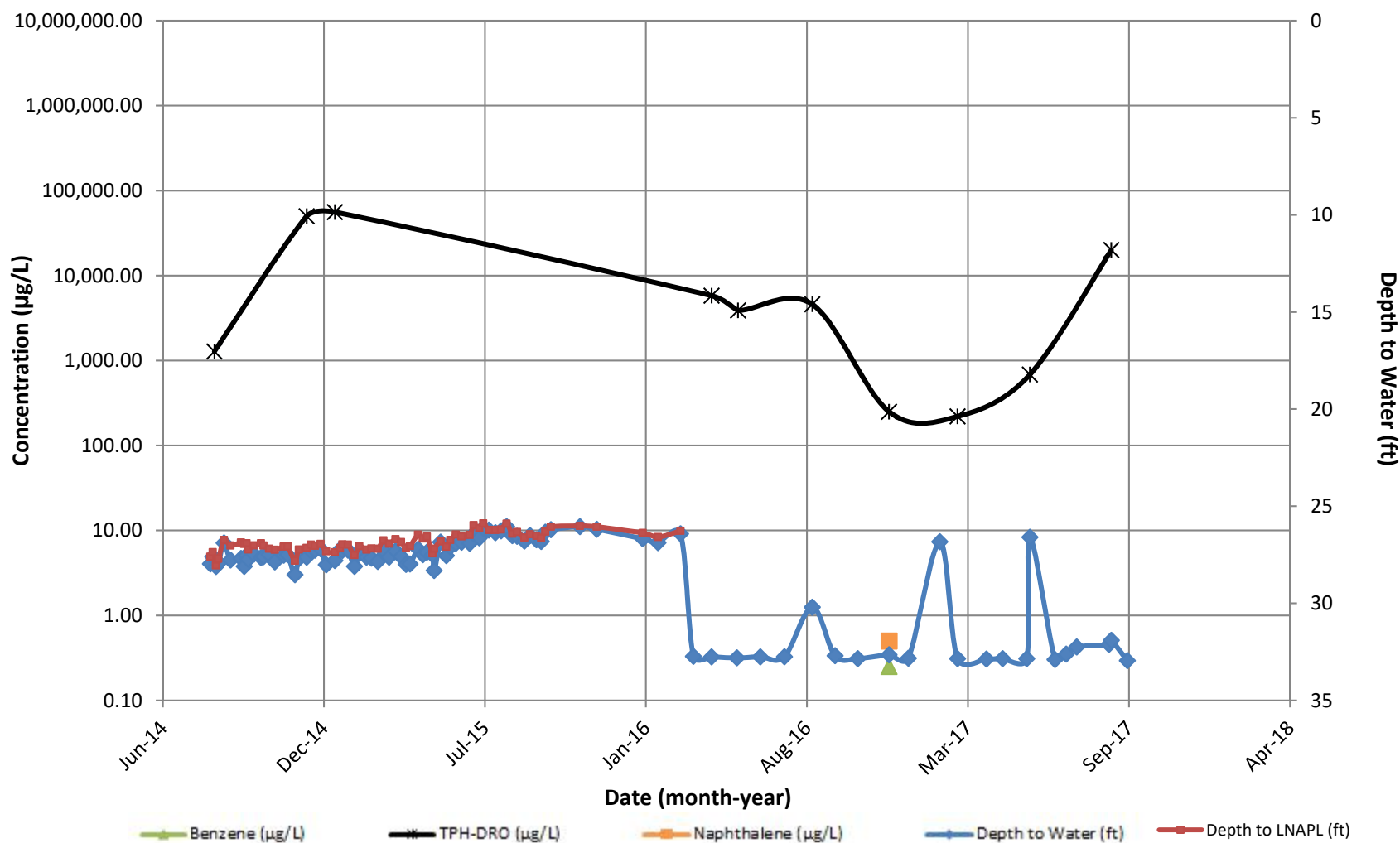


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-25

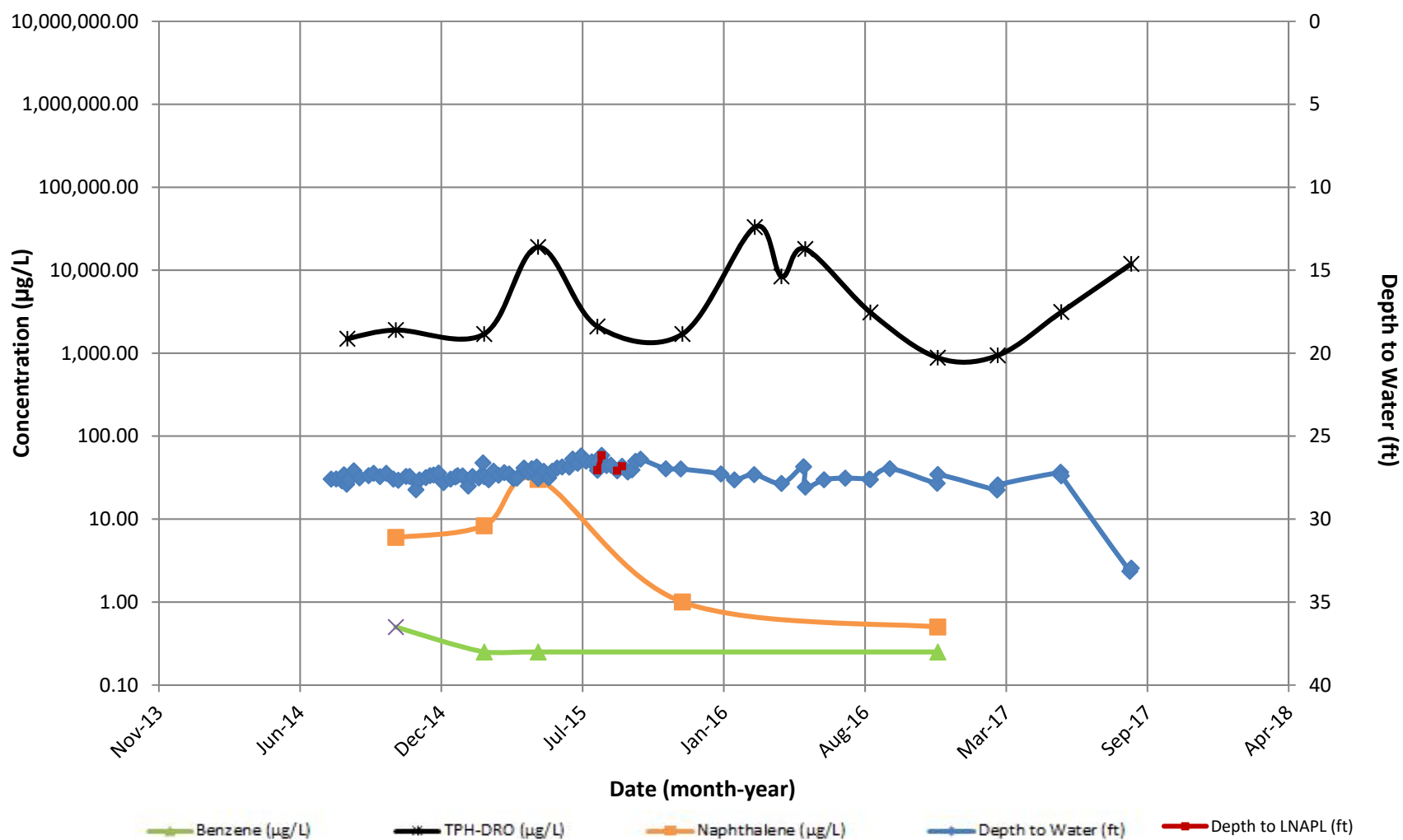


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-27

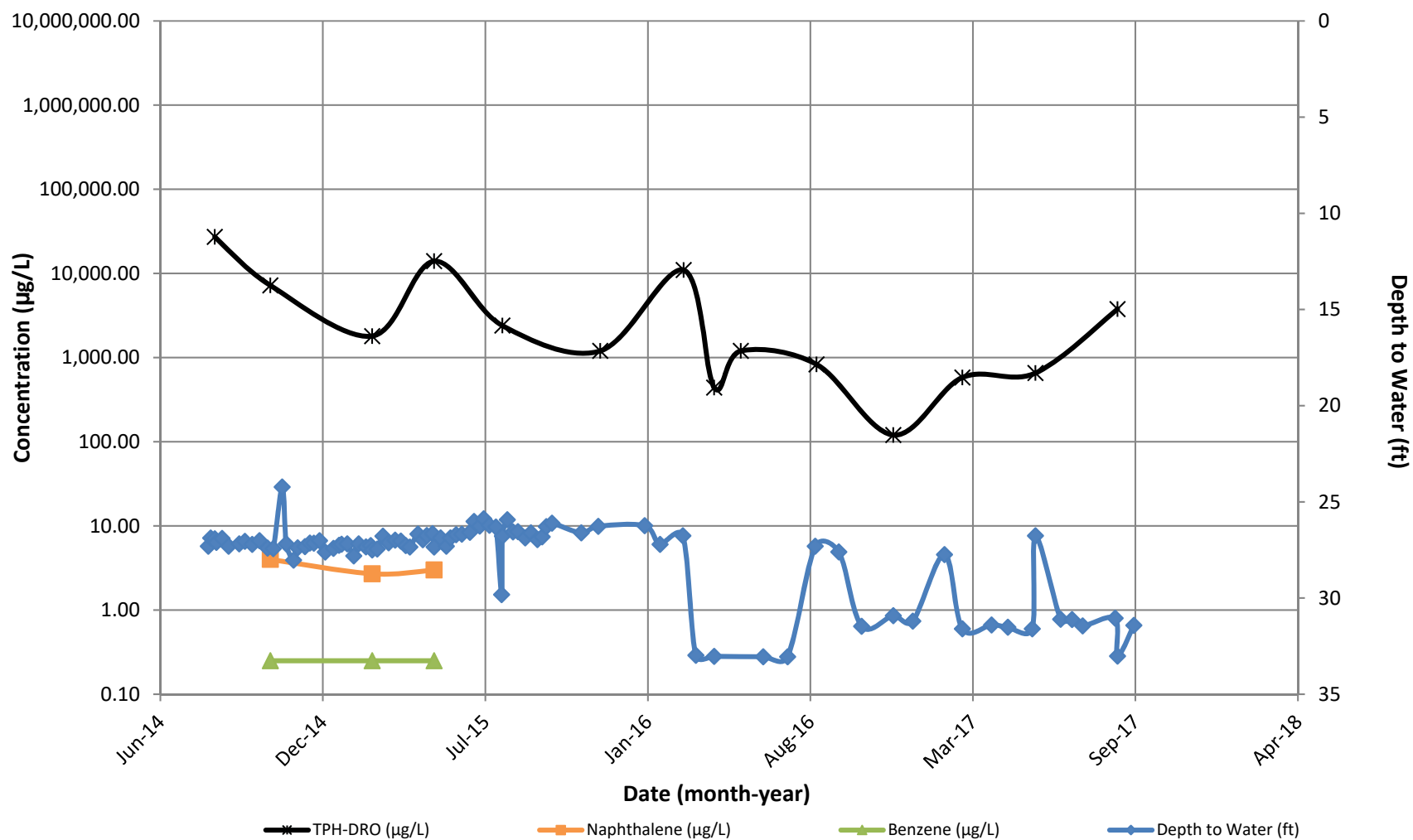


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-31

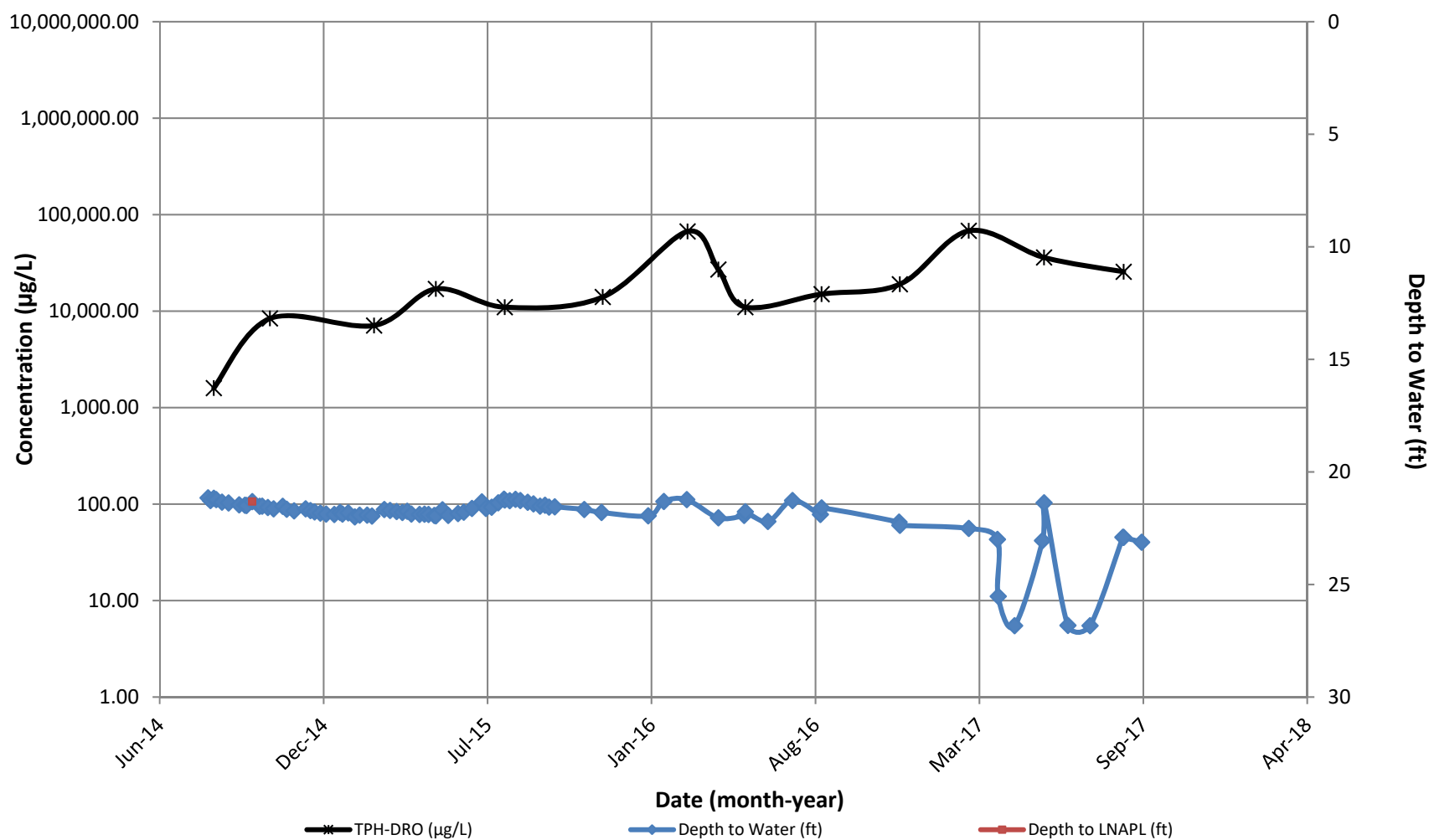


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW-51S

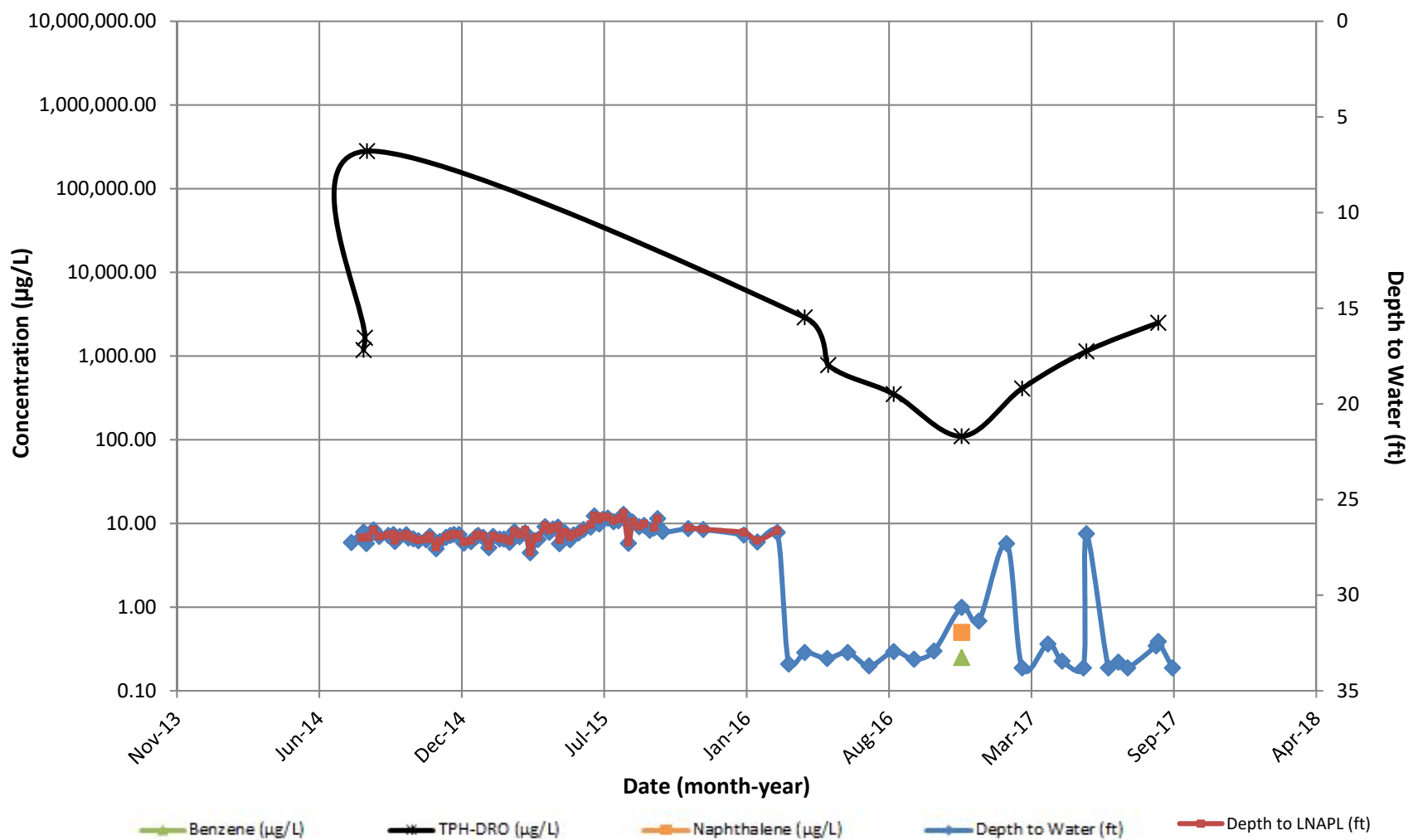


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-51

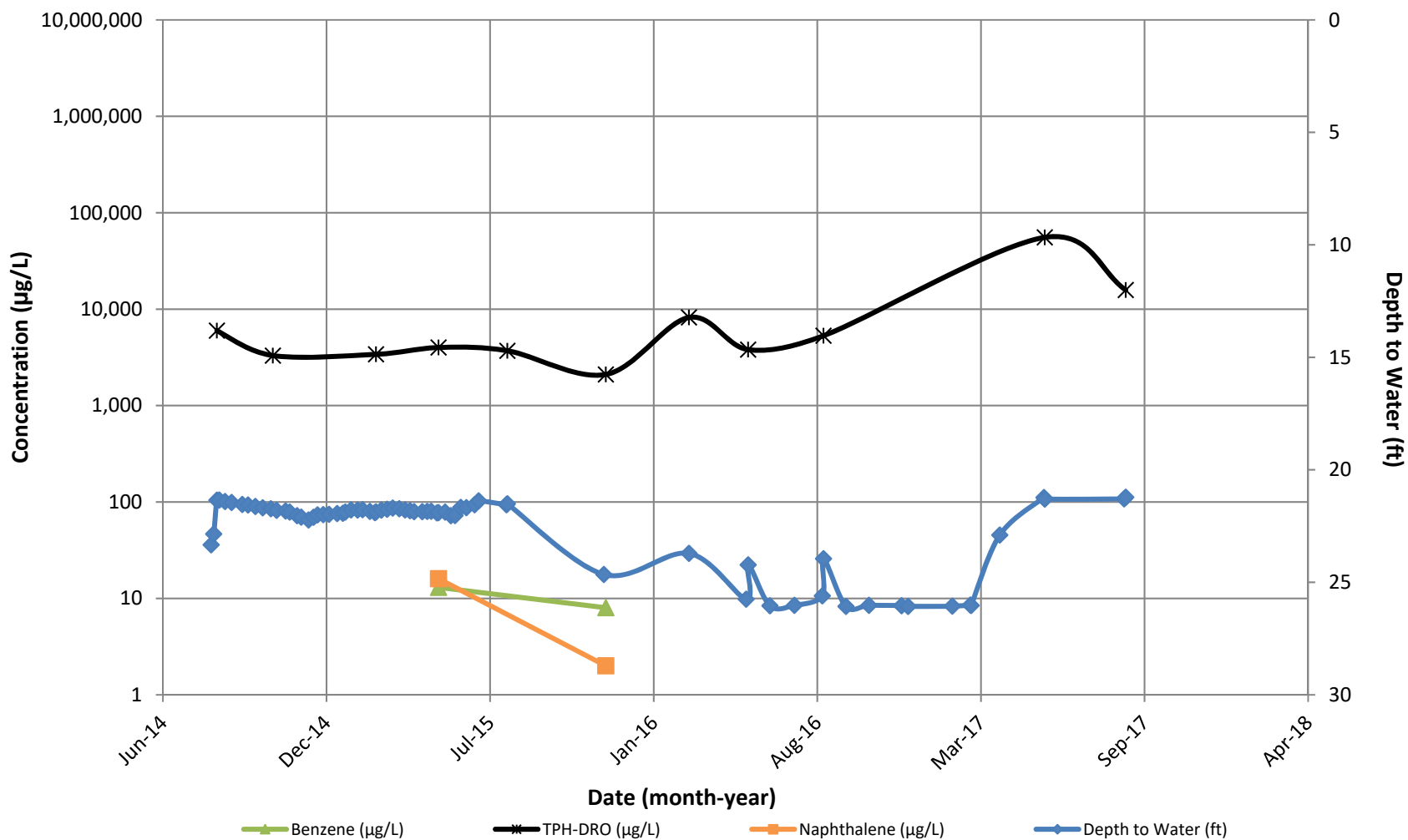


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-72S

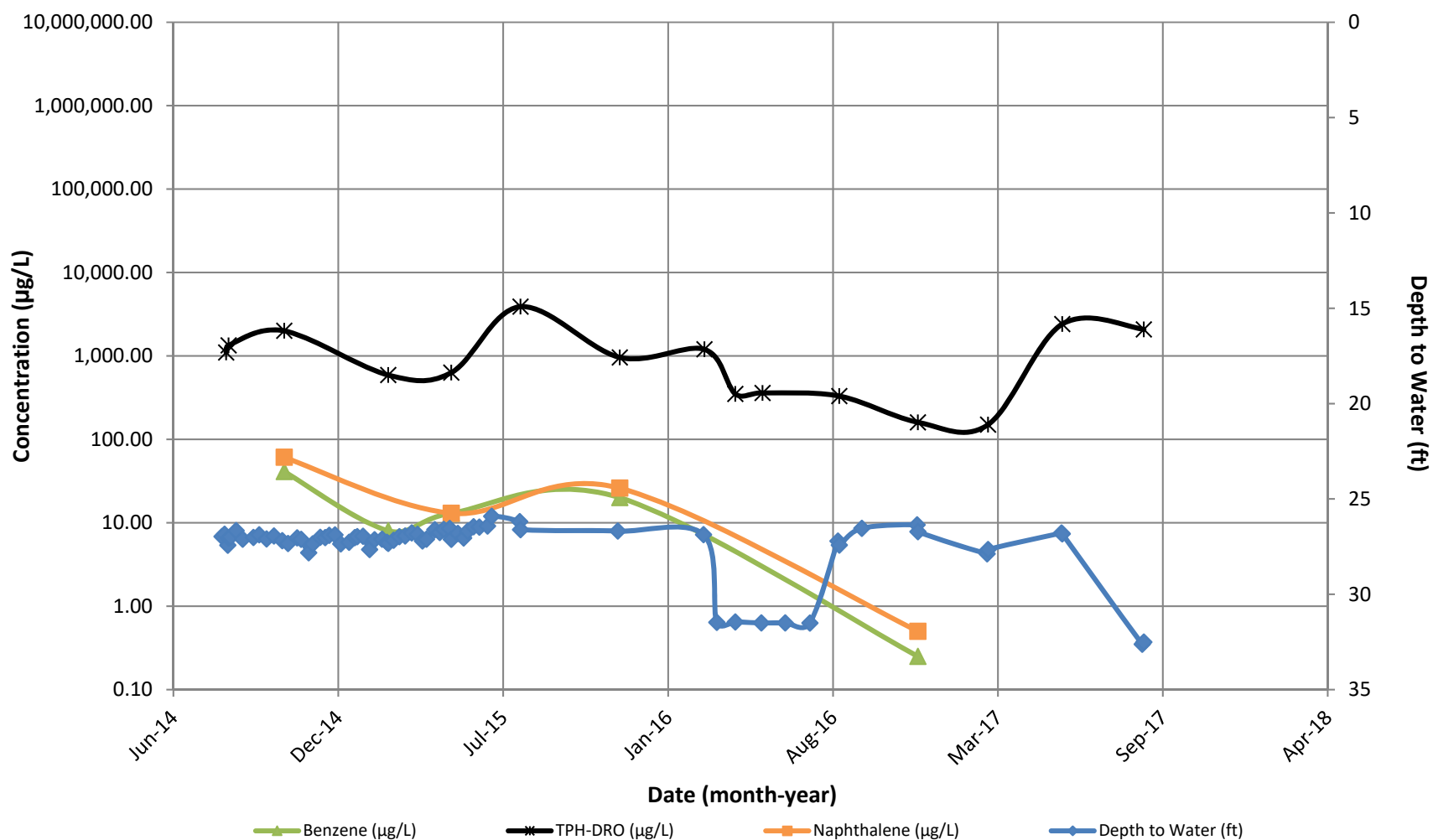


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-72

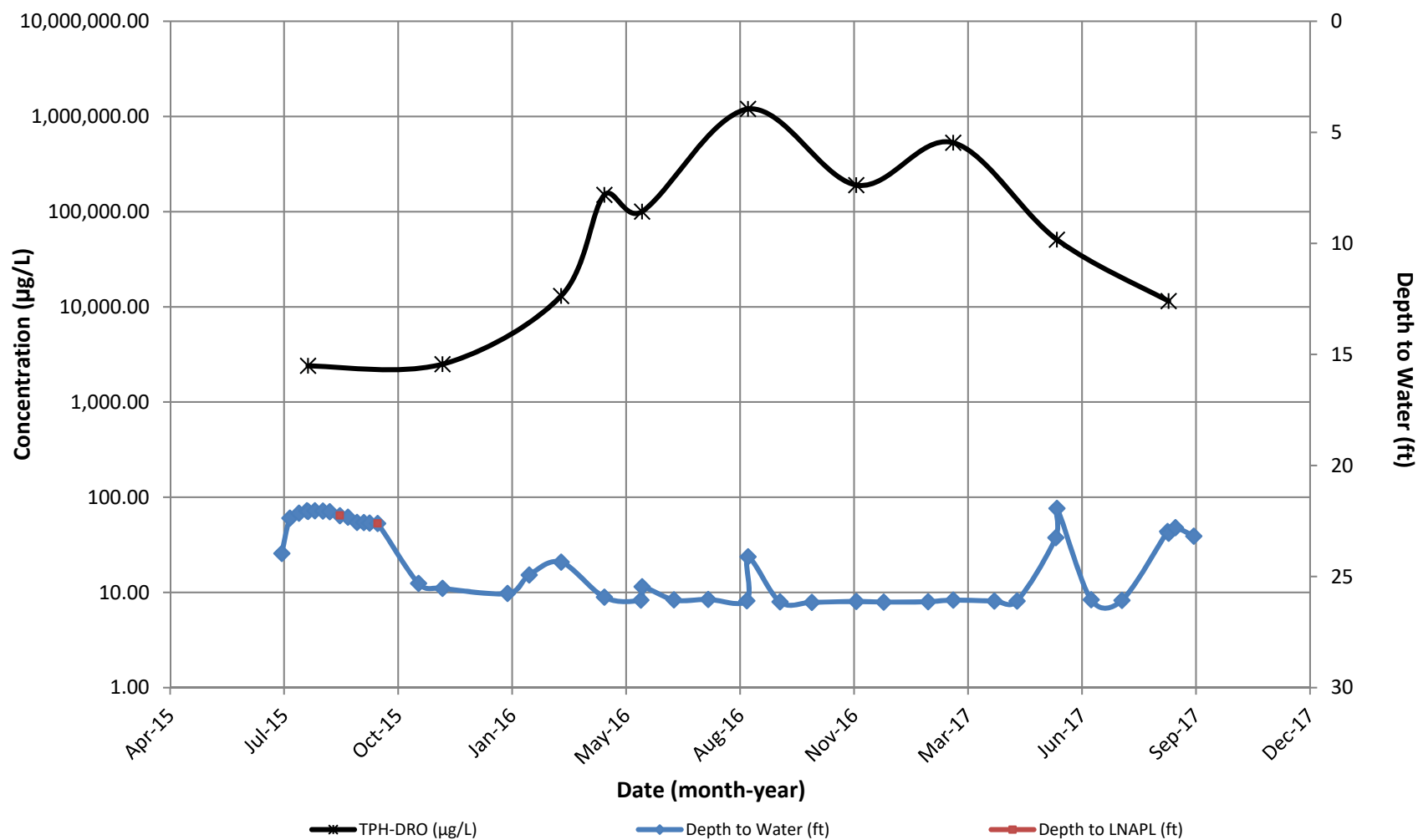


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-123S

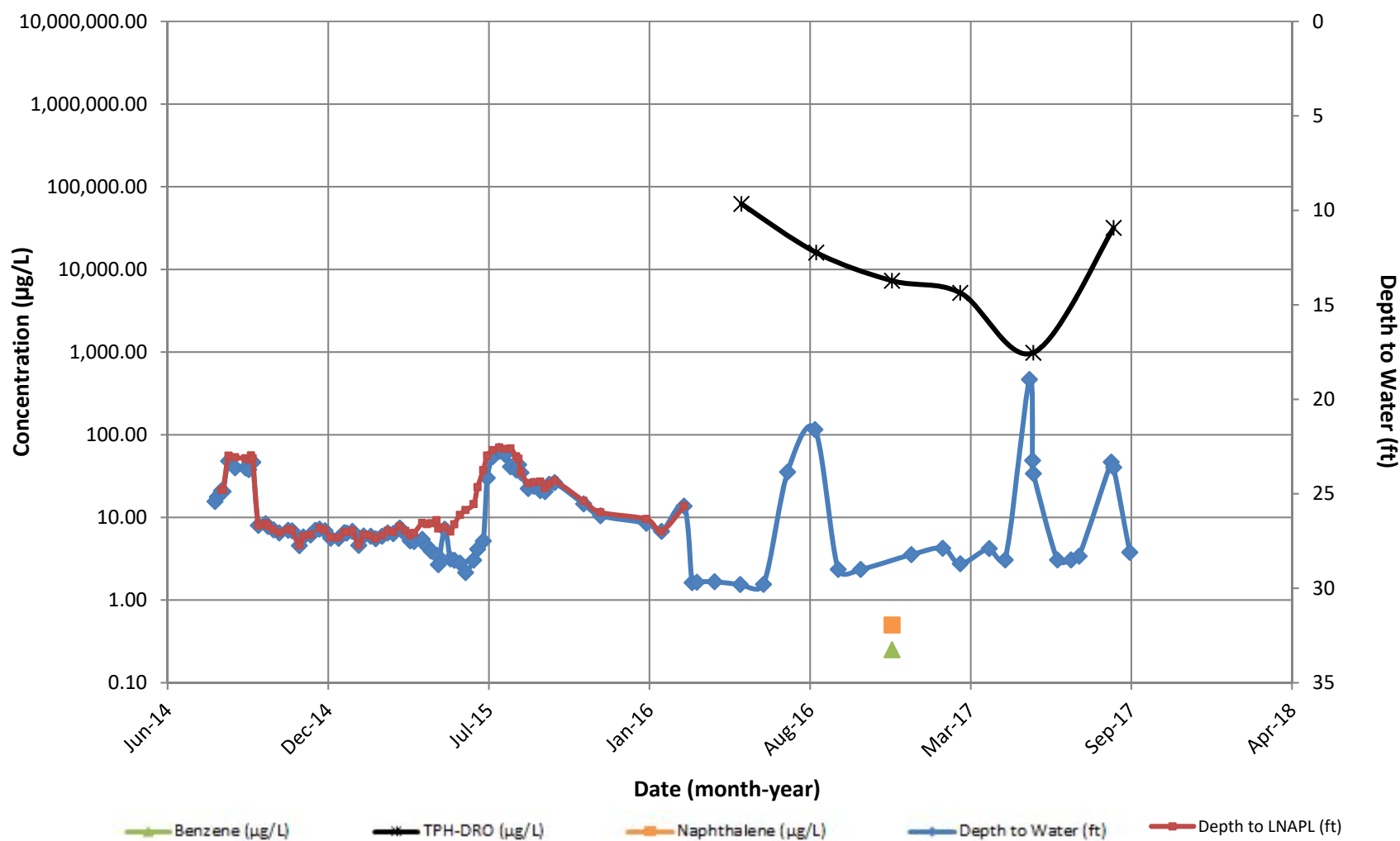


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

MW/RW-05

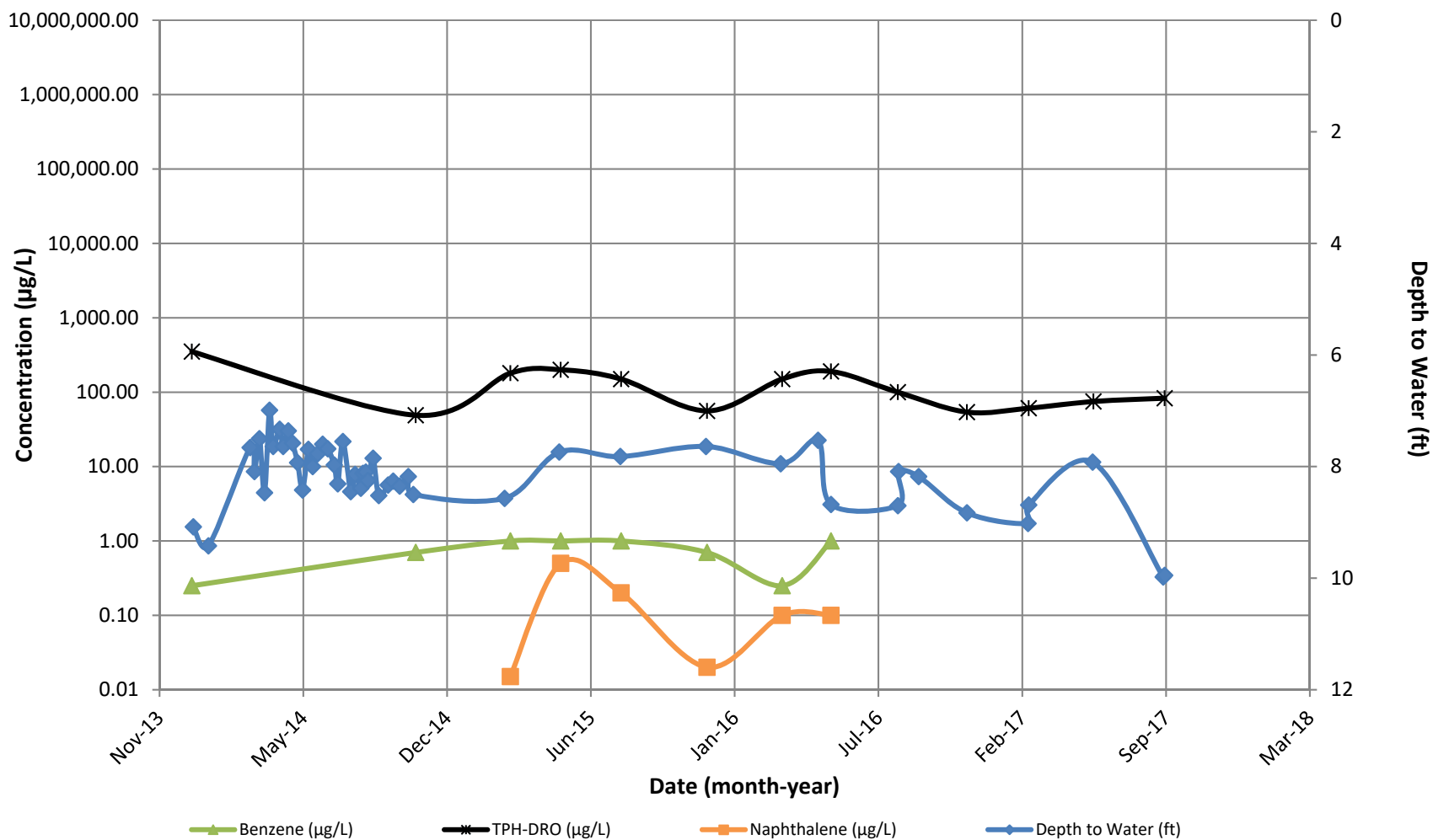


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-03

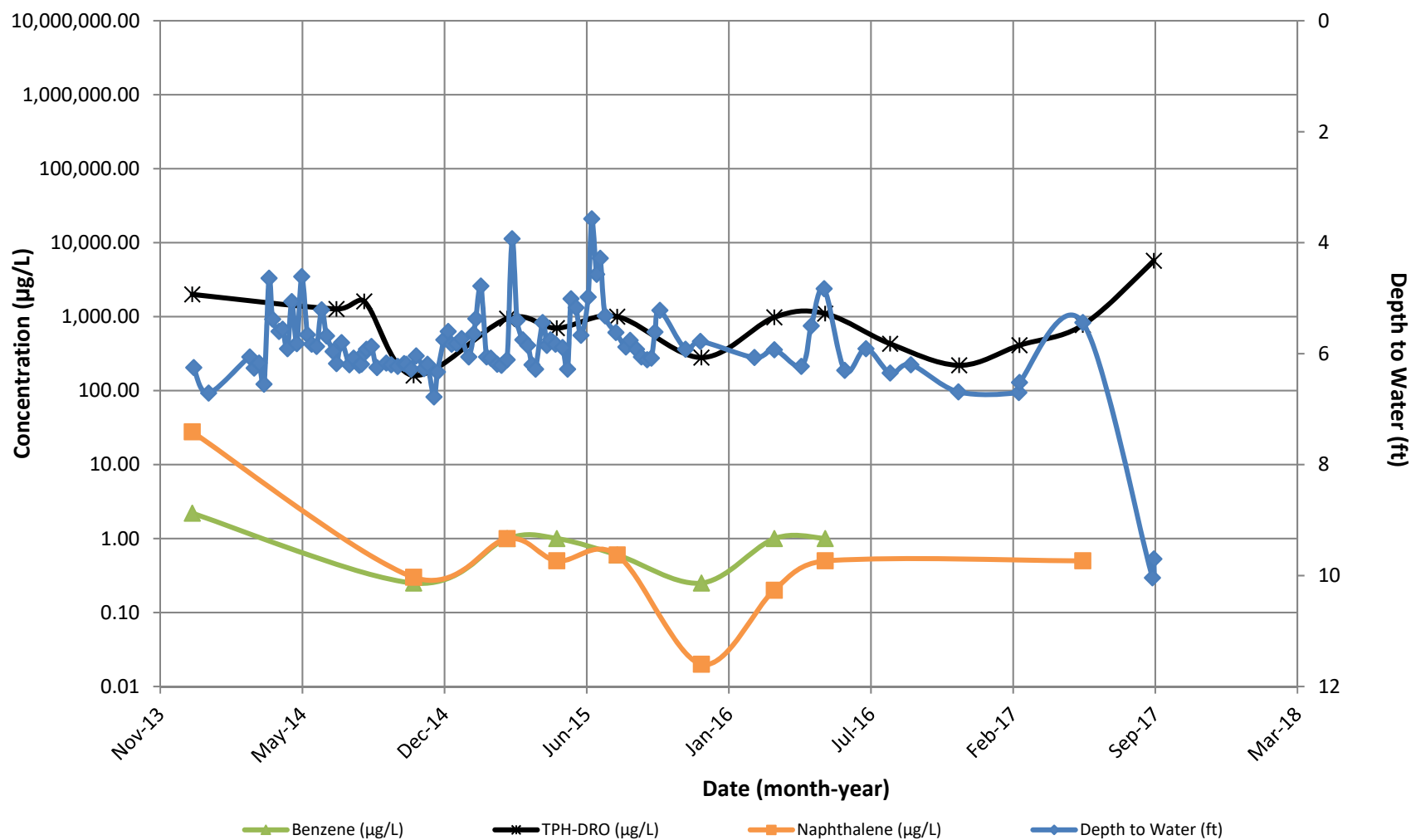


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-04

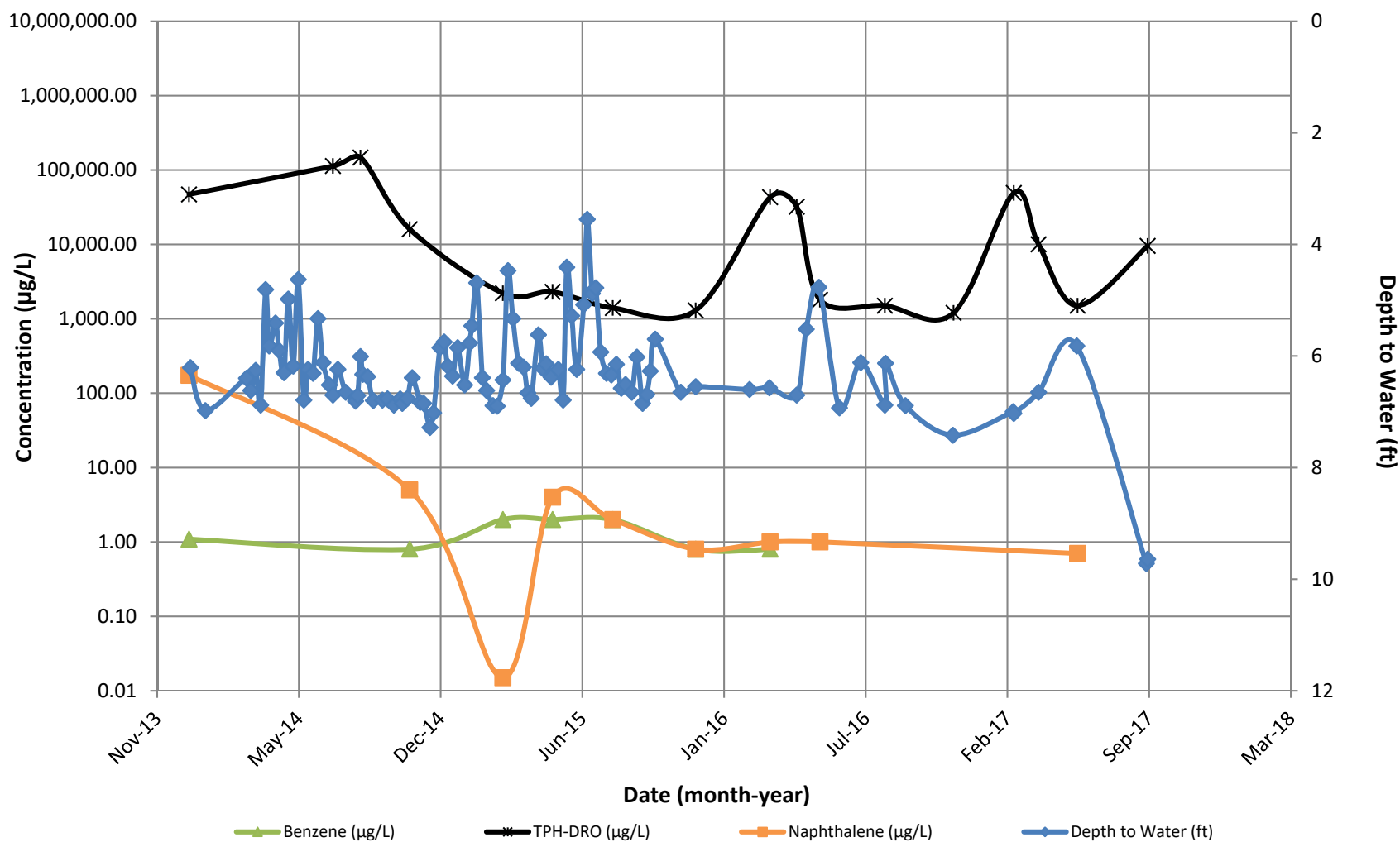


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 $\mu\text{g/L}$ is plotted for a TPH-DRO result of <45 $\mu\text{g/L}$).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-06

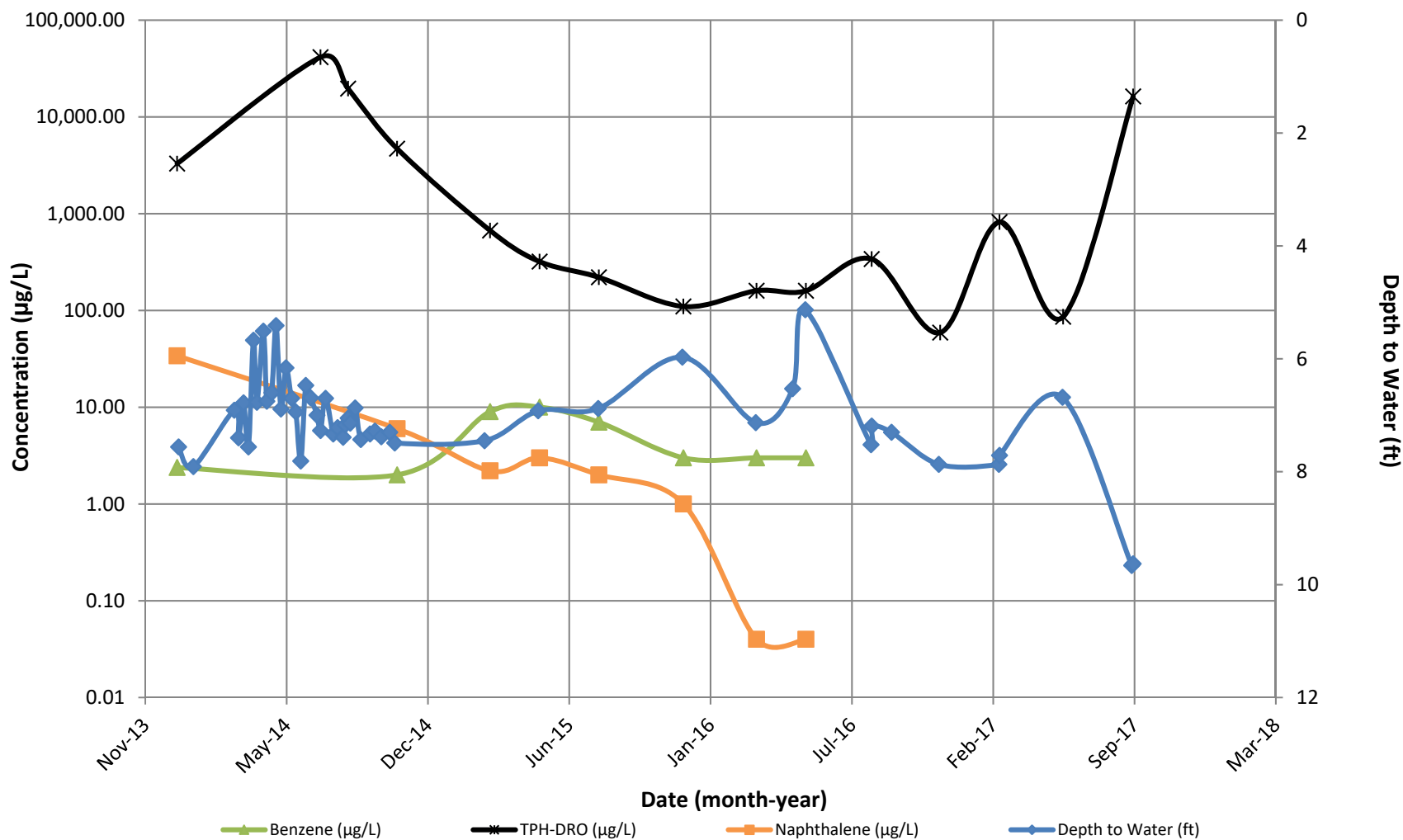


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

TW-07

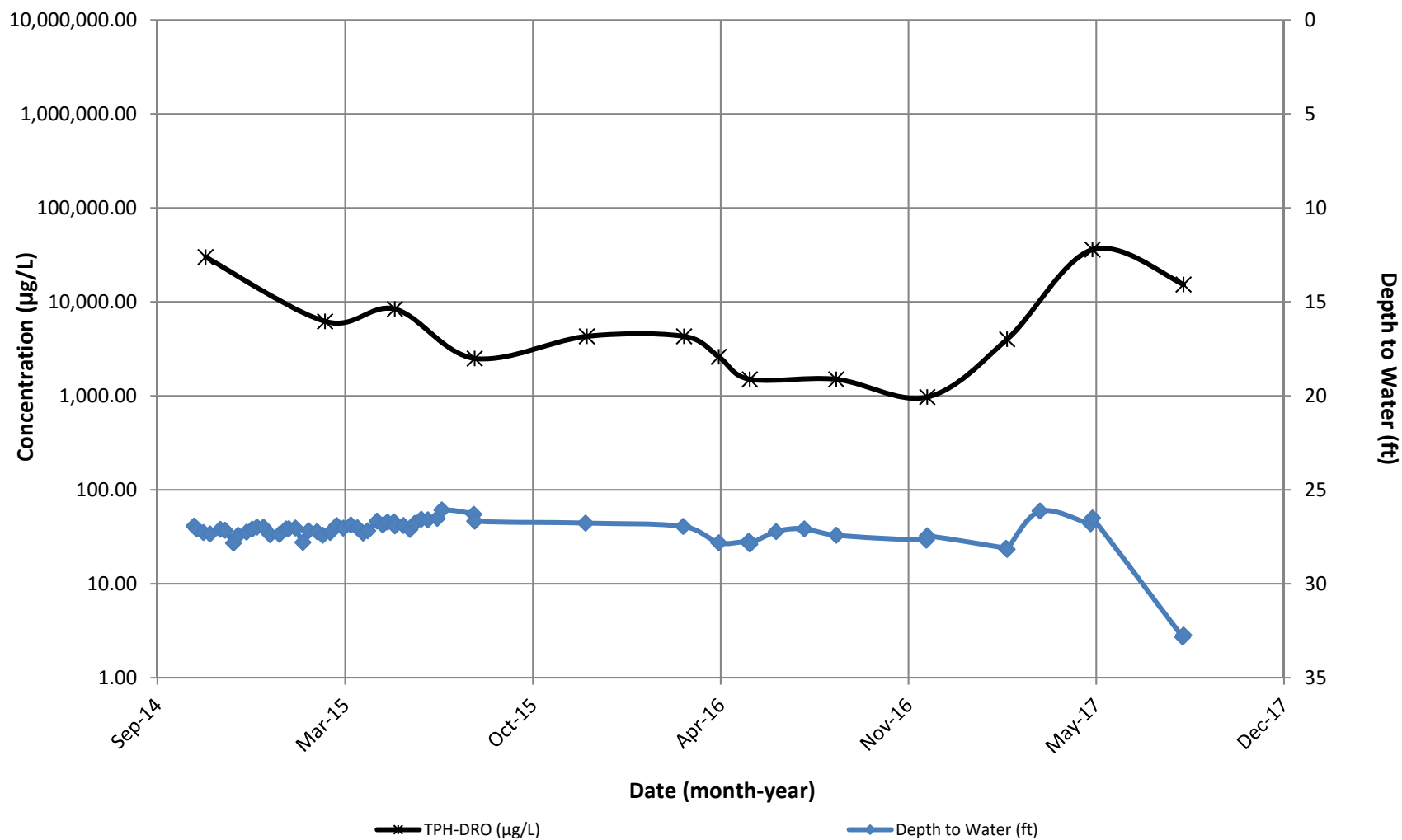


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-1

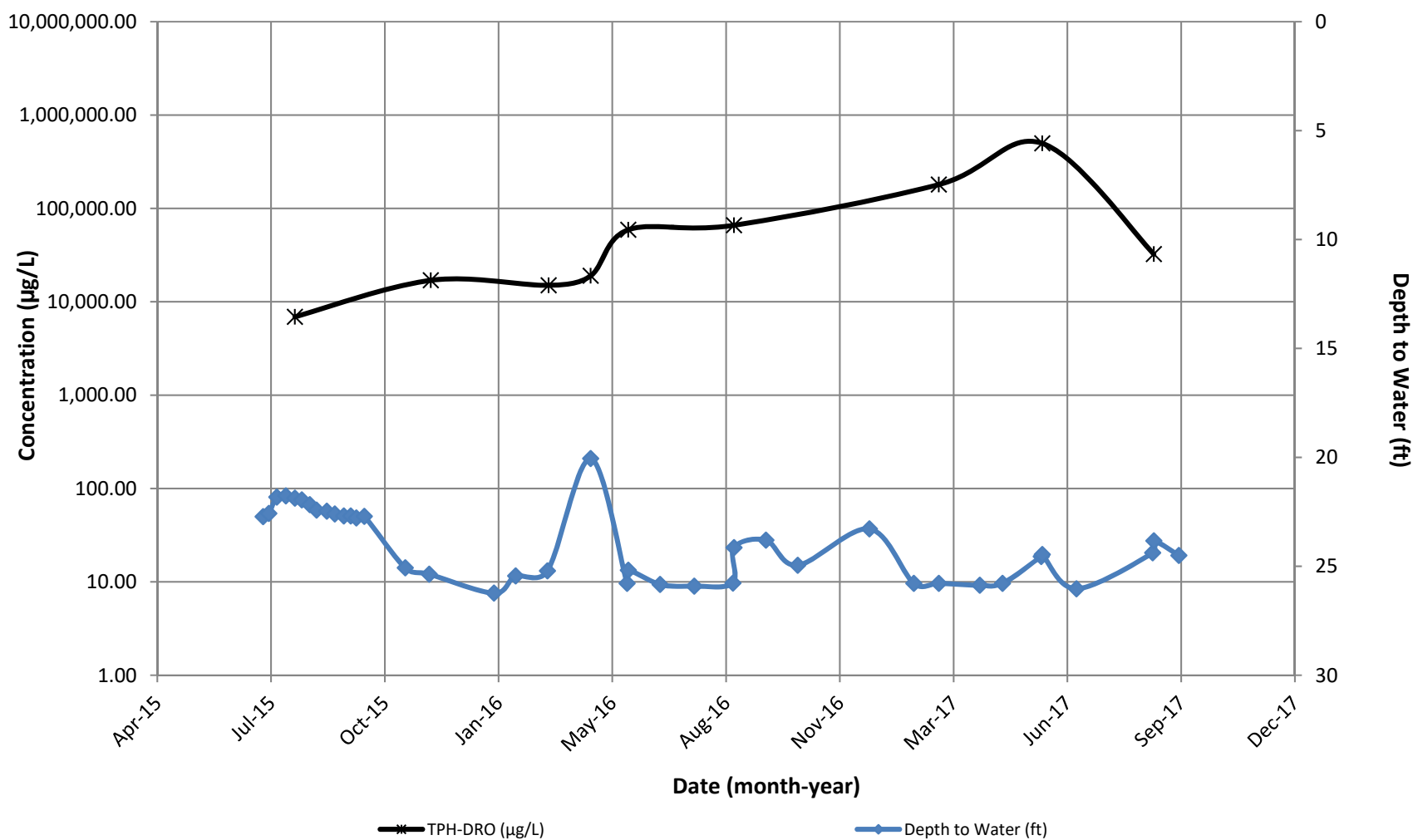


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-05S

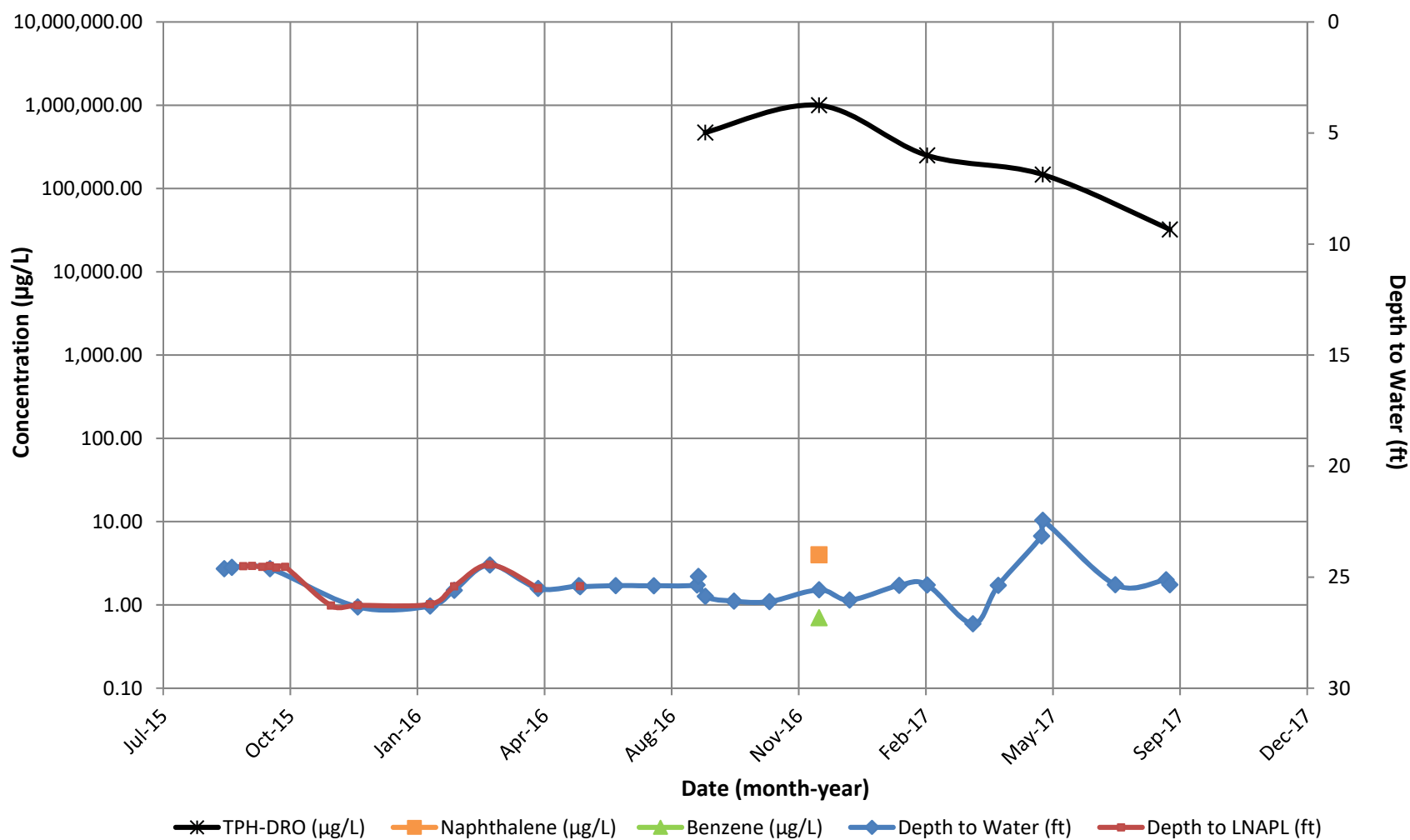


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-25S

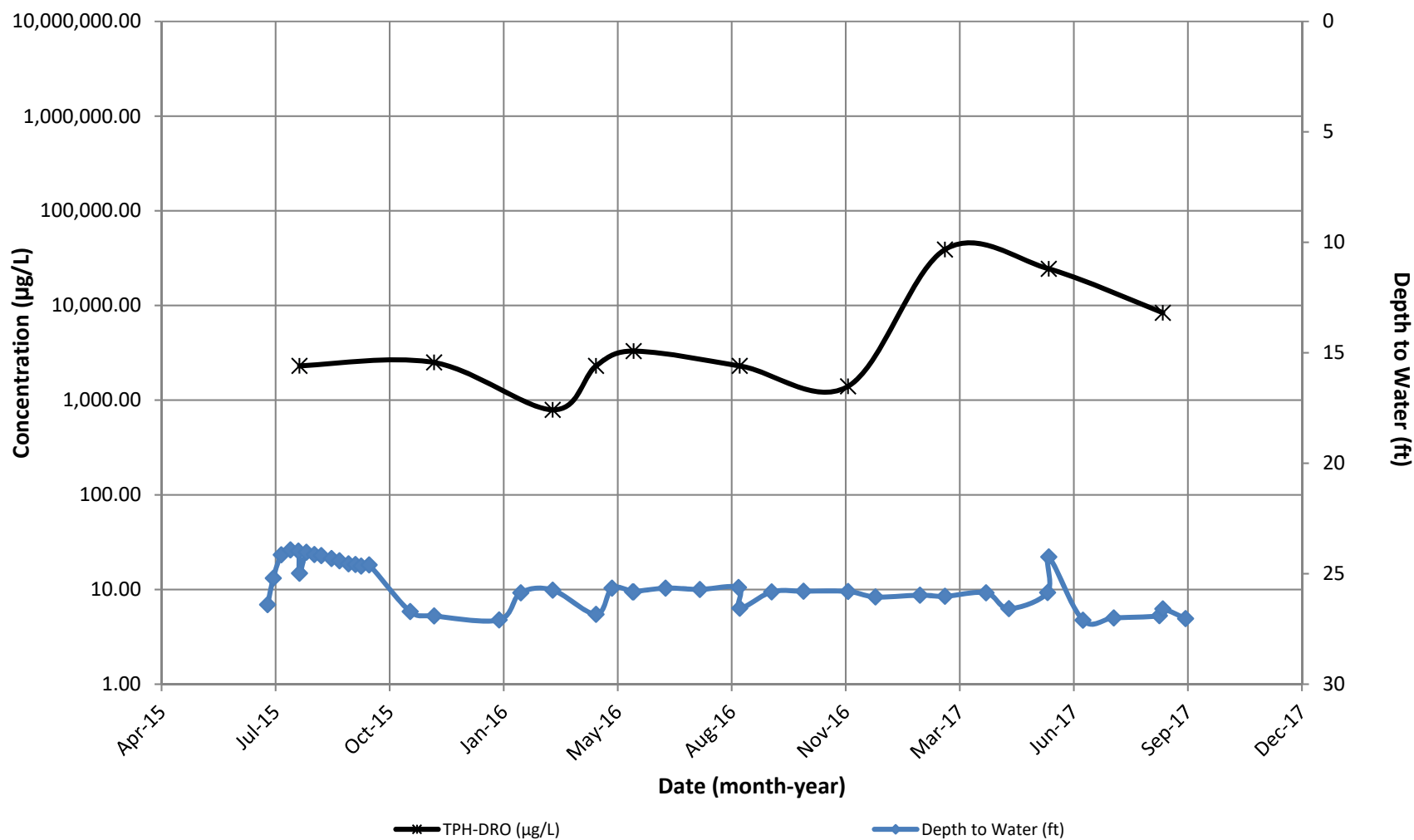


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-28S

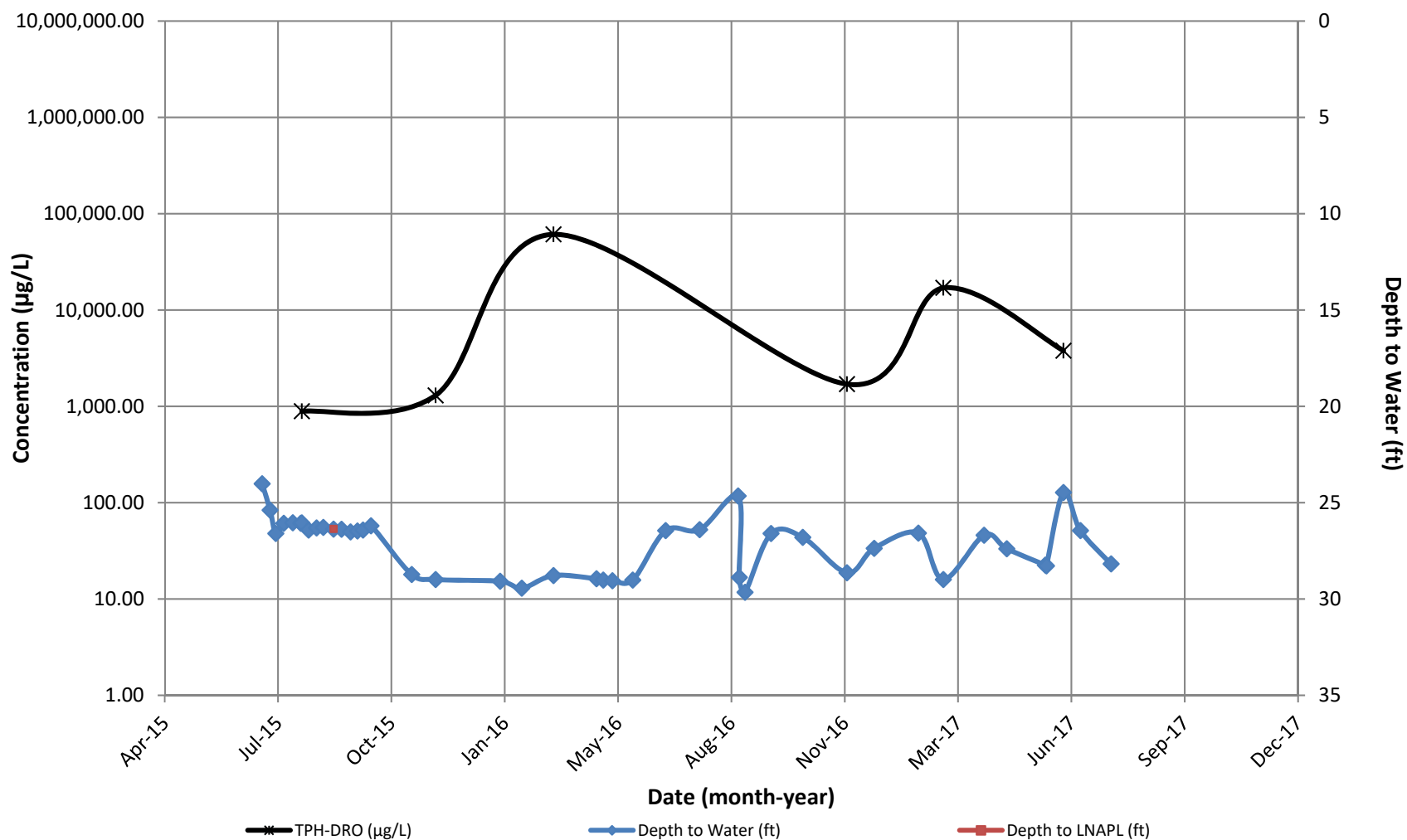


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-30S

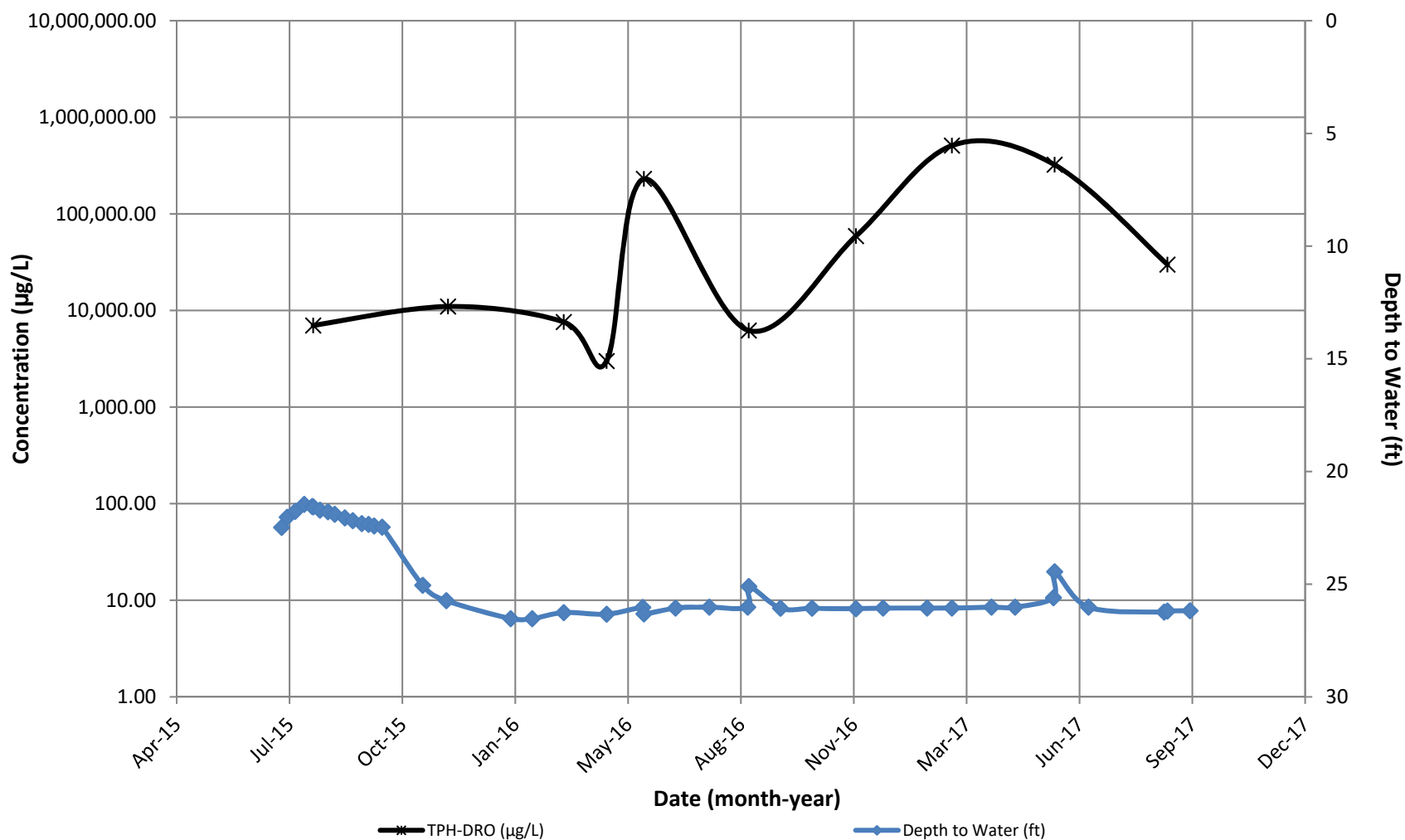


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-116S

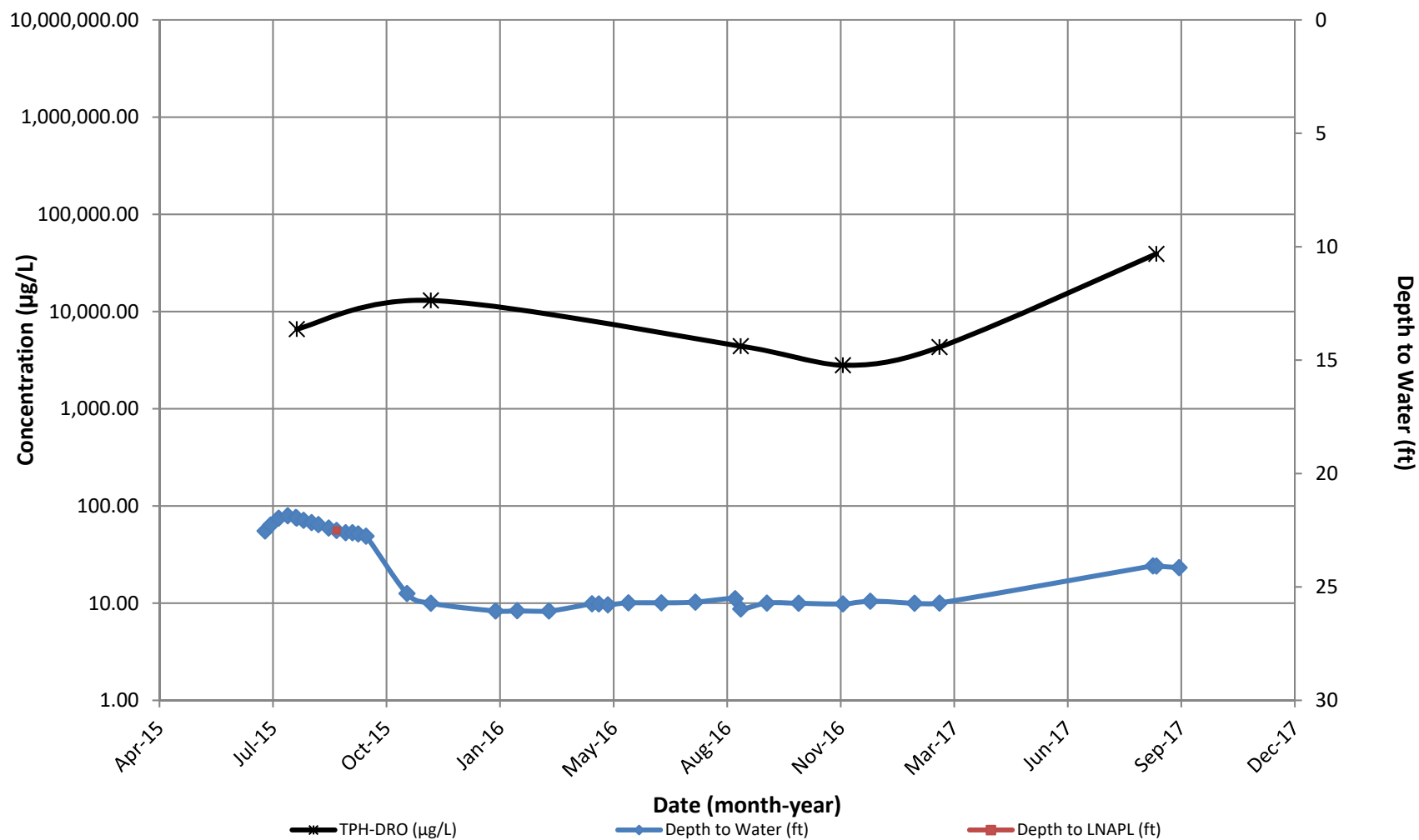


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-117S

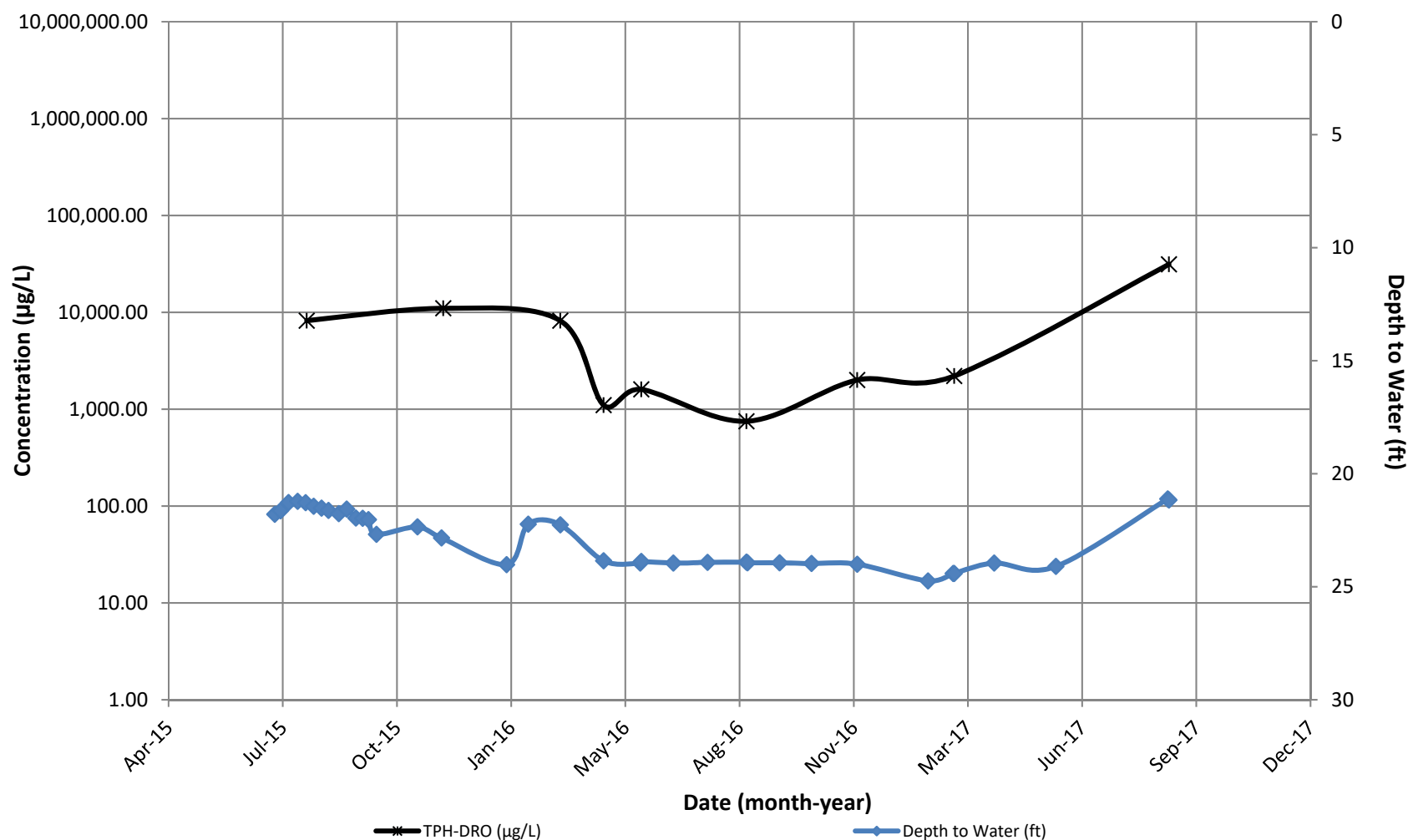


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA

RW-118S

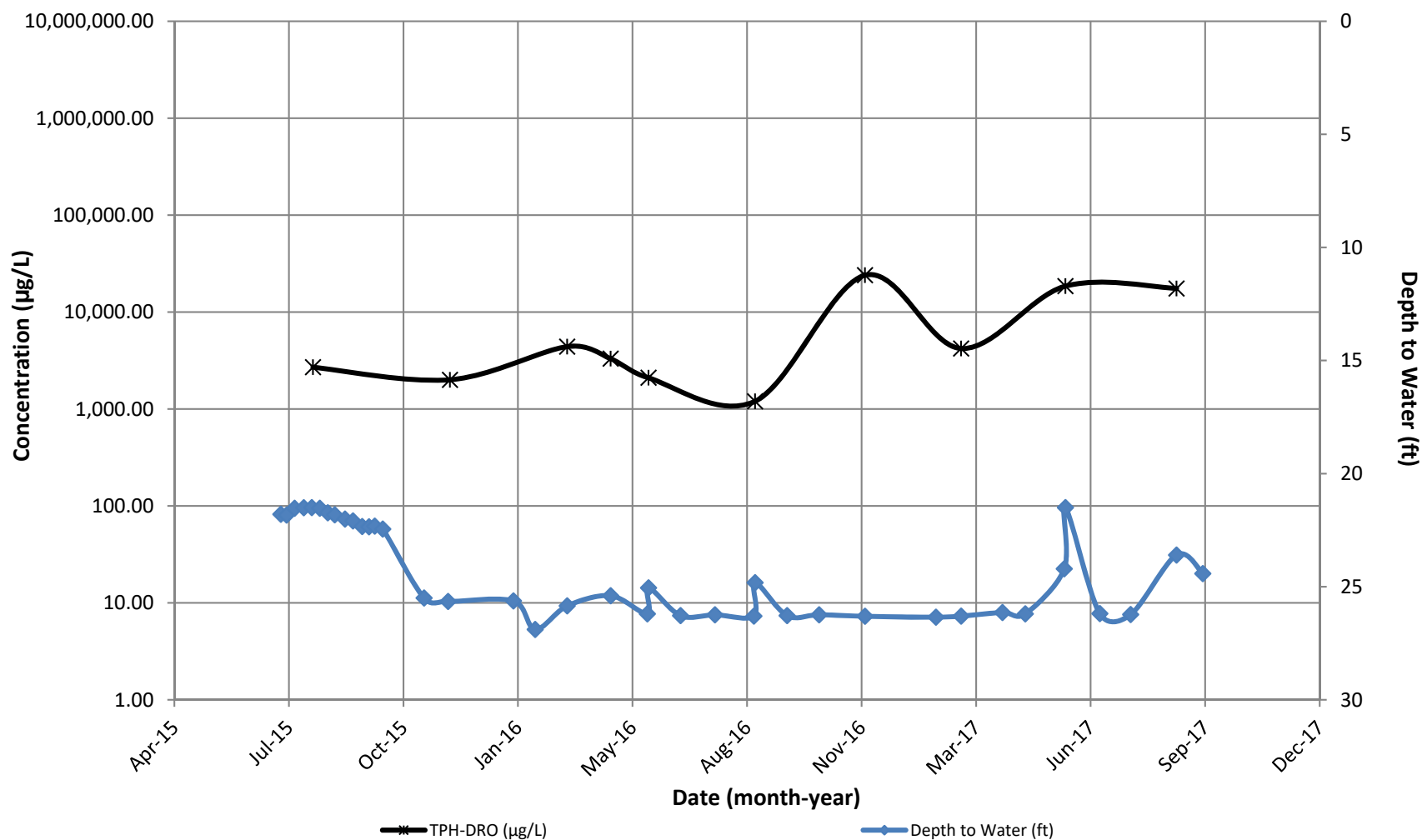


Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

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 B

**LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY
DOCUMENTATION–August 28-31, 2017 GROUNDWATER MONITORING EVENT**

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC49749

Sampling Date: 08/28/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: 16



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.



ACCUTEST

October 9, 2017

Ms. Ashley Bell
Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113

RE: SGS Accutest – Dayton, Job # JC49749 – Reissue

Dear Ms. Bell,

The final report for SGS Accutest job number JC49749 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the comment “sample with silica gel clean up” has been added to sample JC49749-3 regarding the DRO analysis. The attached revised report incorporates these revisions.

SGS Accutest apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Kristin DeGraw

SGS Accutest

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TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Groundwater & Environmental Services

Job No: JC49749

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code	Type	Client Sample ID
	Date	Time By			
JC49749-1	08/28/17	12:45 BH	08/29/17	AQ Ground Water	MW-70
JC49749-2	08/28/17	13:00 BH	08/29/17	AQ Ground Water	MW-52
JC49749-3	08/28/17	13:45 BH	08/29/17	AQ Ground Water	RW-119S

Summary of Hits

Page 1 of 1

Job Number: JC49749

Account: Groundwater & Environmental Services

Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Collected: 08/28/17

Lab Sample ID	Client Sample ID	Result/ Analyte	RL	MDL	Units	Method	
JC49749-1	MW-70						
		Alkalinity, Total as CaCO3 ^a	24.6	5.0	mg/l	SM2320 B-11	
JC49749-2	MW-52						
		Alkalinity, Total as CaCO3 ^a	93.8	5.0	mg/l	SM2320 B-11	
JC49749-3	RW-119S						
		C11-C22 Aromatics (Unadj.)	285	100	50	ug/l	MADEP-EPH-98-1
		C11-C22 Aromatics	285	100	50	ug/l	MADEP-EPH-98-1
		TPH-DRO (C10-C28) ^b	1.41 B	0.083	0.083	mg/l	SW846 8015C
		Sulfur ^c	109000	1000		ug/l	SW846 6010C
		Alkalinity, Total as CaCO3 ^a	117	5.0	mg/l	SM2320 B-11	
		Sulfate	403	40	mg/l	EPA 300/SW846 9056A	

(a) Sample was titrated to a final pH of 4.5.

(b) Silica gel cleanup.

(c) Elevated sample detection limit due to difficult sample matrix.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-70	Date Sampled:	08/28/17
Lab Sample ID:	JC49749-1	Date Received:	08/29/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	24.6	5.0	mg/l	1	08/30/17 15:21	MP	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-52	Date Sampled:	08/28/17
Lab Sample ID:	JC49749-2	Date Received:	08/29/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	93.8	5.0	mg/l	1	08/30/17 15:21	MP	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-119S	Date Sampled:	08/28/17
Lab Sample ID:	JC49749-3	Date Received:	08/29/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63876.D	1	09/06/17 18:36	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.83	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.89	ug/l	
120-12-7	Anthracene	ND	4.0	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.83	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	1.4	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.88	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.82	ug/l	
218-01-9	Chrysene	ND	4.0	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.86	ug/l	
86-73-7	Fluorene	ND	4.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	4.0	0.88	ug/l	
129-00-0	Pyrene	ND	4.0	2.0	ug/l	
	C11-C22 Aromatics (Unadj.)	285	100	50	ug/l	
	C11-C22 Aromatics	285	100	50	ug/l	
	C9-C18 Aliphatics	ND	100	50	ug/l	
	C19-C36 Aliphatics	ND	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	36% ^a		40-140%
580-13-2	2-Bromonaphthalene	79%		40-140%
84-15-1	o-Terphenyl	57%		40-140%
321-60-8	2-Fluorobiphenyl	77%		40-140%

(a) Outside the QC limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-119S	Date Sampled:	08/28/17
Lab Sample ID:	JC49749-3	Date Received:	08/29/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	7Z22588.D	1	09/06/17 03:34	DS	08/31/17 14:00	OP5748	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.41	0.083	0.083	mg/l	B
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	59%		22-140%		
16416-32-3	Tetracosane-d50	47%		13-139%		
438-22-2	5a-Androstane	50%		10-135%		

(a) Silica gel cleanup.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-119S	Date Sampled:	08/28/17
Lab Sample ID:	JC49749-3	Date Received:	08/29/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	109000	1000	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42742
(2) Prep QC Batch: MP2704

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-119S	Date Sampled:	08/28/17
Lab Sample ID:	JC49749-3	Date Received:	08/29/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	117	5.0	mg/l	1	08/30/17 15:21	MP	SM2320 B-11
Sulfate	403	40	mg/l	20	09/07/17 00:46	JN	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	08/31/17 16:08	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC49749
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Sulfur	7704-34-9	SW846 6010C	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

5044749

[illegible]

4.2

JC49749: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC49749

Client: _____

Project: _____

Date / Time Received: 8/29/2017 5:00:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.8);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 1 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|--|--|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Comments

SM089-02
Rev. Date 12/1/16

JC49749: Chain of Custody

Page 2 of 2

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Automated Report

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-51-206, ORG 0404

SGS Accutest Job Number: JC49837

Sampling Date: 08/29/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: **39**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.



ACCUTEST

October 6, 2017

Ms. Ashley Bell
Groundwater & Environmental Services
1350 Blair Drive
Suite A
Odenton, MD 21113

RE: SGS Accutest – Dayton, Job # JC49837 – Reissues

Dear Ms. Bell,

The final report for SGS Accutest job number JC49837 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, DRO's samples JC49837-1, -2, -3, -4, and -5 have been re-extracted/re-analyze with Silica gel cleanup preformed on batches OP6431 and OP6639 to meet client's requirement. The attached revised report incorporates these revisions.

SGS Accutest apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Report Department

SGS Accutest

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TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Groundwater & Environmental Services

Job No: JC49837

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-51-206, ORG 0404

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC49837-1	08/29/17	10:20 BH	08/30/17	AQ	Ground Water	RW-01S
JC49837-1A	08/29/17	10:20 BH	08/30/17	AQ	Ground Water	RW-01S
JC49837-2	08/29/17	11:40 BH	08/30/17	AQ	Ground Water	MW-51S
JC49837-2A	08/29/17	11:40 BH	08/30/17	AQ	Ground Water	MW-51S
JC49837-3	08/29/17	12:45 BH	08/30/17	AQ	Ground Water	RW-10S
JC49837-3A	08/29/17	12:45 BH	08/30/17	AQ	Ground Water	RW-10S
JC49837-4	08/29/17	14:15 BH	08/30/17	AQ	Ground Water	RW-05S
JC49837-4A	08/29/17	14:15 BH	08/30/17	AQ	Ground Water	RW-05S
JC49837-5	08/29/17	15:15 BH	08/30/17	AQ	Ground Water	RW-123S
JC49837-5A	08/29/17	15:15 BH	08/30/17	AQ	Ground Water	RW-123S

Summary of Hits

Job Number: JC49837
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/29/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JC49837-1 RW-01S

Methane	2730	2.8	0.89	ug/l	RSK-175
C11-C22 Aromatics (Unadj.)	391	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^a	0.422	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28)	6.78	0.083	0.083	mg/l	SW846 8015C
Manganese	10100	75		ug/l	SW846 6010C
Sulfur ^b	46600	2500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c	292	5.0		mg/l	SM2320 B-11
Iron, Ferrous ^d	2.3	0.20		mg/l	SM3500FE B-11
Sulfate	170	20		mg/l	EPA 300/SW846 9056A

JC49837-1A RW-01S

TPH-DRO (C10-C28)	6.78	0.083	0.083	mg/l	SW846 8015C
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JC49837-2 MW-51S

Methane	29.3	0.11	0.036	ug/l	RSK-175
Acenaphthylene	2.6 J	4.0	0.89	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)	498	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics	69.2 J	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^e	0.448	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28)	25.6	0.083	0.083	mg/l	SW846 8015C
Manganese	10900	75		ug/l	SW846 6010C
Sulfur ^b	223000	2500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c	169	5.0		mg/l	SM2320 B-11
Iron, Ferrous ^d	90.1	10		mg/l	SM3500FE B-11
Sulfate	836	200		mg/l	EPA 300/SW846 9056A

JC49837-2A MW-51S

TPH-DRO (C10-C28)	25.6	0.083	0.083	mg/l	SW846 8015C
-------------------	------	-------	-------	------	-------------

JC49837-3 RW-10S

Methane	3.9	0.11	0.036	ug/l	RSK-175
Acenaphthene	4.6	4.0	0.83	ug/l	MADEP-EPH-98-1
Phenanthrene	1.4 J	4.0	0.88	ug/l	MADEP-EPH-98-1
Pyrene	2.4 J	4.0	2.0	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)	1740	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics	1540	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics	716	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^f	2.40	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28)	54.3	0.083	0.083	mg/l	SW846 8015C

Summary of Hits

Job Number: JC49837
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/29/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Manganese		8890	15		ug/l	SW846 6010C
Sulfur		442000	2500		ug/l	SW846 6010C
Iron, Ferrous ^d		199	10		mg/l	SM3500FE B-11
Nitrogen, Nitrate ^g		0.64	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		0.64	0.10		mg/l	EPA 353.2/LACHAT
Sulfate		2150	200		mg/l	EPA 300/SW846 9056A

JC49837-3A RW-10S

TPH-DRO (C10-C28)	54.3	0.083	0.083	mg/l	SW846 8015C
-------------------	------	-------	-------	------	-------------

JC49837-4 RW-05S

Acenaphthene	3.5 J	4.0	0.83	ug/l	MADEP-EPH-98-1
Acenaphthylene	2.2 J	4.0	0.89	ug/l	MADEP-EPH-98-1
Fluorene	4.8	4.0	1.5	ug/l	MADEP-EPH-98-1
Phenanthrene	1.8 J	4.0	0.88	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics	532	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics	298	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^f	1.25	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28)	32.4	0.083	0.083	mg/l	SW846 8015C
Sulfur	446000	3000		ug/l	SW846 6010C

JC49837-4A RW-05S

TPH-DRO (C10-C28)	32.4	0.083	0.083	mg/l	SW846 8015C
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JC49837-5 RW-123S

C11-C22 Aromatics (Unadj.)	292	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28)	11.5	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28) ^f	0.266	0.083	0.083	mg/l	SW846 8015C
Sulfur ^b	74900	2500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c	165	5.0		mg/l	SM2320 B-11
Sulfate	236	20		mg/l	EPA 300/SW846 9056A

JC49837-5A RW-123S

TPH-DRO (C10-C28)	11.5	0.083	0.083	mg/l	SW846 8015C
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- (a) Sample extracted outside the holding time. Silica gel cleanup was performed. There is insufficient volume left to re-extract for confirmation.
- (b) Elevated sample detection limit due to difficult sample matrix.
- (c) Sample was titrated to a final pH of 4.5.
- (d) Field analysis required. Received out of hold time and analyzed by request.

Summary of Hits

Job Number: JC49837
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/29/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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- (e) sample extracted outside the holding time, silica gel cleanup was performed.
- (f) Sample extracted outside the holding time, silica gel cleanup was performed.
- (g) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RW-01S						
Lab Sample ID:	JC49837-1					Date Sampled:	08/29/17
Matrix:	AQ - Ground Water					Date Received:	08/30/17
Method:	RSK-175					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60921.D	25	08/31/17 14:09	LM	n/a	n/a	GAA1272
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2730	2.8	0.89	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-01S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-1	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63879.D	1	09/06/17 20:18	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.83	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.89	ug/l	
120-12-7	Anthracene	ND	4.0	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.83	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	1.4	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.88	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.82	ug/l	
218-01-9	Chrysene	ND	4.0	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.86	ug/l	
86-73-7	Fluorene	ND	4.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	4.0	0.88	ug/l	
129-00-0	Pyrene	ND	4.0	2.0	ug/l	
	C11-C22 Aromatics (Unadj.)	391	100	50	ug/l	
	C9-C18 Aliphatics	ND	100	50	ug/l	
	C19-C36 Aliphatics	ND	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	55%		40-140%
580-13-2	2-Bromonaphthalene	127%		40-140%
84-15-1	o-Terphenyl	83%		40-140%
321-60-8	2-Fluorobiphenyl	131%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-01S	
Lab Sample ID:	JC49837-1	Date Sampled: 08/29/17
Matrix:	AQ - Ground Water	Date Received: 08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64055.D	1	09/05/17 12:50	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	2Z64605.D	1	09/27/17 17:46	DS	09/26/17 13:00	OP6431	G2Z2434

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	6.78	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	0.422 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%	51%	22-140%
16416-32-3	Tetracosane-d50	79%	50%	13-139%
438-22-2	5a-Androstane	76%	55%	10-135%

(a) Sample extracted outside the holding time. Silica gel cleanup was performed. There is insufficient volume left to re-extract for confirmation.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-01S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-1	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese	10100	75	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²
Sulfur ^a	46600	2500	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42742

(2) Prep QC Batch: MP2704

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID: RW-01S	Date Sampled: 08/29/17
Lab Sample ID: JC49837-1	Date Received: 08/30/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	292	5.0	mg/l	1	09/05/17 11:59	CD	SM2320 B-11
Iron, Ferrous ^b	2.3	0.20	mg/l	1	08/31/17 20:50	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	< 0.11	0.11	mg/l	1	09/01/17 13:18	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/01/17 13:18	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/30/17 22:27	AT	SM4500NO2 B-11
Sulfate	170	20	mg/l	10	09/03/17 17:36	JN	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.5.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-01S						
Lab Sample ID:	JC49837-1A					Date Sampled:	08/29/17
Matrix:	AQ - Ground Water					Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64055.D	1	09/05/17 12:50	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	6.78	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	80%		22-140%		
16416-32-3	Tetracosane-d50	79%		13-139%		
438-22-2	5a-Androstane	76%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-51S						
Lab Sample ID:	JC49837-2					Date Sampled:	08/29/17
Matrix:	AQ - Ground Water					Date Received:	08/30/17
Method:	RSK-175					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60922.D	1	08/31/17 14:22	LM	n/a	n/a	GAA1272
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	29.3	0.11	0.036	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-51S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-2	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63880.D	1	09/06/17 20:52	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.83	ug/l	J
208-96-8	Acenaphthylene	2.6	4.0	0.89	ug/l	
120-12-7	Anthracene	ND	4.0	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.83	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	1.4	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.88	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.82	ug/l	
218-01-9	Chrysene	ND	4.0	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.86	ug/l	
86-73-7	Fluorene	ND	4.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	4.0	0.88	ug/l	
129-00-0	Pyrene	ND	4.0	2.0	ug/l	
	C11-C22 Aromatics (Unadj.)	498	100	50	ug/l	J
	C9-C18 Aliphatics	69.2	100	50	ug/l	
	C19-C36 Aliphatics	ND	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	51%		40-140%
580-13-2	2-Bromonaphthalene	99%		40-140%
84-15-1	o-Terphenyl	69%		40-140%
321-60-8	2-Fluorobiphenyl	98%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-51S		
Lab Sample ID:	JC49837-2	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64056.D	1	09/05/17 13:24	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22902.D	1	10/05/17 13:04	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	25.6	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	0.448 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%	44%	22-140%
16416-32-3	Tetracosane-d50	53%	30%	13-139%
438-22-2	5a-Androstane	52%	38%	10-135%

(a) sample extracted outside the holding time, silica gel cleanup was performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-51S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-2	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese	10900	75	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²
Sulfur ^a	223000	2500	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42742

(2) Prep QC Batch: MP2704

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-51S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-2	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	169	5.0	mg/l	1	09/05/17 11:59	CD	SM2320 B-11
Iron, Ferrous ^b	90.1	10	mg/l	50	08/31/17 20:50	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	< 0.11	0.11	mg/l	1	09/01/17 13:20	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/01/17 13:20	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/30/17 22:27	AT	SM4500NO2 B-11
Sulfate	836	200	mg/l	100	09/03/17 17:57	JN	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.5.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-51S		
Lab Sample ID:	JC49837-2A	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64056.D	1	09/05/17 13:24	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	25.6	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	72%		22-140%		
16416-32-3	Tetracosane-d50	53%		13-139%		
438-22-2	5a-Androstane	52%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-10S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-3	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSK-175		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60923.D	1	08/31/17 14:36	LM	n/a	n/a	GAA1272
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	3.9	0.11	0.036	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-10S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-3	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63881.D	1	09/06/17 21:26	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	4.6	4.0	0.83	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.89	ug/l	
120-12-7	Anthracene	ND	4.0	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.83	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	1.4	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.88	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.82	ug/l	
218-01-9	Chrysene	ND	4.0	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.86	ug/l	
86-73-7	Fluorene	ND	4.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
85-01-8	Phenanthrene	1.4	4.0	0.88	ug/l	J
129-00-0	Pyrene	2.4	4.0	2.0	ug/l	J
	C11-C22 Aromatics (Unadj.)	1740	100	50	ug/l	
	C9-C18 Aliphatics	1540	100	50	ug/l	
	C19-C36 Aliphatics	716	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	46%		40-140%
580-13-2	2-Bromonaphthalene	142% ^a		40-140%
84-15-1	o-Terphenyl	59%		40-140%
321-60-8	2-Fluorobiphenyl	141% ^a		40-140%

(a) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-10S		
Lab Sample ID:	JC49837-3	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64057.D	1	09/05/17 13:58	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22903.D	1	10/05/17 13:38	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	54.3	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	2.40 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%	24%	22-140%
16416-32-3	Tetracosane-d50	47%	16%	13-139%
438-22-2	5a-Androstane	45%	19%	10-135%

(a) Sample extracted outside the holding time, silica gel cleanup was performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-10S		
Lab Sample ID:	JC49837-3	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese	8890	15	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ³
Sulfur	442000	2500	ug/l	5	09/06/17	09/07/17 AB	SW846 6010C ²	SW846 3010A ³

- (1) Instrument QC Batch: MA42742
- (2) Instrument QC Batch: MA42749
- (3) Prep QC Batch: MP2704

RL = Reporting Limit

Report of Analysis

Client Sample ID: RW-10S	Date Sampled: 08/29/17
Lab Sample ID: JC49837-3	Date Received: 08/30/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	< 5.0	5.0	mg/l	1	09/05/17 11:59	CD	SM2320 B-11
Iron, Ferrous ^b	199	10	mg/l	50	08/31/17 20:50	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	0.64	0.11	mg/l	1	09/01/17 13:21	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.64	0.10	mg/l	1	09/01/17 13:21	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/30/17 22:27	AT	SM4500NO2 B-11
Sulfate	2150	200	mg/l	100	09/03/17 18:18	JN	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.2.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-10S	
Lab Sample ID:	JC49837-3A	Date Sampled: 08/29/17
Matrix:	AQ - Ground Water	Date Received: 08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64057.D	1	09/05/17 13:58	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	54.3	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	63%		22-140%		
16416-32-3	Tetracosane-d50	47%		13-139%		
438-22-2	5a-Androstane	45%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-05S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-4	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63882.D	1	09/06/17 22:01	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	3.5	4.0	0.83	ug/l	J
208-96-8	Acenaphthylene	2.2	4.0	0.89	ug/l	J
120-12-7	Anthracene	ND	4.0	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.83	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	1.4	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.88	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.82	ug/l	
218-01-9	Chrysene	ND	4.0	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.86	ug/l	
86-73-7	Fluorene	4.8	4.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
85-01-8	Phenanthrene	1.8	4.0	0.88	ug/l	J
129-00-0	Pyrene	ND	4.0	2.0	ug/l	
	C11-C22 Aromatics (Unadj.)	ND	100	50	ug/l	
	C11-C22 Aromatics	ND	100	50	ug/l	
	C9-C18 Aliphatics	532	100	50	ug/l	
	C19-C36 Aliphatics	298	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	35% ^a		40-140%
580-13-2	2-Bromonaphthalene	107%		40-140%
84-15-1	o-Terphenyl	58%		40-140%
321-60-8	2-Fluorobiphenyl	103%		40-140%

(a) Outside the QC limits.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-05S						
Lab Sample ID:	JC49837-4					Date Sampled:	08/29/17
Matrix:	AQ - Ground Water					Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64058.D	1	09/05/17 14:32	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22904.D	1	10/05/17 14:11	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	32.4	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	1.25 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%	29%	22-140%
16416-32-3	Tetracosane-d50	43%	27%	13-139%
438-22-2	5a-Androstane	47%	26%	10-135%

(a) Sample extracted outside the holding time, silica gel cleanup was performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-05S		
Lab Sample ID:	JC49837-4	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur	446000	3000	ug/l	3	09/06/17	09/07/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42749
(2) Prep QC Batch: MP2704

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-05S		
Lab Sample ID:	JC49837-4A	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64058.D	1	09/05/17 14:32	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	32.4	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	57%		22-140%		
16416-32-3	Tetracosane-d50	43%		13-139%		
438-22-2	5a-Androstane	47%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-123S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-5	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63883.D	1	09/06/17 22:34	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.83	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.89	ug/l	
120-12-7	Anthracene	ND	4.0	0.96	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.83	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	1.4	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.88	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.82	ug/l	
218-01-9	Chrysene	ND	4.0	0.81	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.0	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.86	ug/l	
86-73-7	Fluorene	ND	4.0	1.5	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	2.0	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	2.0	ug/l	
91-20-3	Naphthalene	ND	4.0	2.0	ug/l	
85-01-8	Phenanthrene	ND	4.0	0.88	ug/l	
129-00-0	Pyrene	ND	4.0	2.0	ug/l	
	C11-C22 Aromatics (Unadj.)	292	100	50	ug/l	
	C9-C18 Aliphatics	ND	100	50	ug/l	
	C19-C36 Aliphatics	ND	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	46%		40-140%
580-13-2	2-Bromonaphthalene	120%		40-140%
84-15-1	o-Terphenyl	79%		40-140%
321-60-8	2-Fluorobiphenyl	123%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-123S		
Lab Sample ID:	JC49837-5	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64059.D	1	09/05/17 15:06	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22905.D	1	10/05/17 14:45	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	11.5	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	0.266 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%	46%	22-140%
16416-32-3	Tetracosane-d50	57%	31%	13-139%
438-22-2	5a-Androstane	59%	34%	10-135%

(a) Sample extracted outside the holding time, silica gel cleanup was performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-123S		
Lab Sample ID:	JC49837-5	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	74900	2500	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42742
(2) Prep QC Batch: MP2704

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-123S	Date Sampled:	08/29/17
Lab Sample ID:	JC49837-5	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	165	5.0	mg/l	1	09/05/17 12:09	CD	SM2320 B-11
Sulfate	236	20	mg/l	10	09/03/17 18:39	JN	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-123S	
Lab Sample ID:	JC49837-5A	Date Sampled: 08/29/17
Matrix:	AQ - Ground Water	Date Received: 08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64059.D	1	09/05/17 15:06	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	11.5	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	73%		22-140%		
16416-32-3	Tetracosane-d50	57%		13-139%		
438-22-2	5a-Androstane	59%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC49837
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Sulfur	7704-34-9	SW846 6010C	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.



CHAIN OF CUSTODY

PAGE : OF :

SGS Accredited • Dayton
2255 Route 196, Dayton, NJ 05419
TEL: (920) 296-2900 FAX: (920) 296-3496 24HR
www.sgslabs.com

[illegible]

4.2

JC49837: Chain of Custody

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SGS Accutest Sample Receipt Summary

Job Number: JC49837

Client: _____

Project: _____

Date / Time Received: 8/30/2017 3:37:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1); Cooler 2: (3.2); Cooler 3: (3.1); Cooler 4: (3.1); Cooler 5: (3.2); Cooler 6: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.4); Cooler 2: (2.5); Cooler 3: (2.4); Cooler 4: (2.4); Cooler 5: (2.5); Cooler 6: (2.4);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 6 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC49837: Chain of Custody

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VERIFICATION, TESTING AND CERTIFICATION COMPANY.



e-Hardcopy 2.0
Automated Report

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-51-206, ORG 0404

SGS Accutest Job Number: JC49838

Sampling Date: 08/29/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: **33**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.



ACCUTEST

October 6, 2017

Ms. Ashley Bell
Groundwater & Environmental Services
1350 Blair Drive
Suite A
Odenton, MD 21113

RE: SGS Accutest – Dayton, Job # JC49838 – Reissues

Dear Ms. Bell,

The final report for SGS Accutest job number JC49838 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, samples JC49838-1, -2, -3, and -5 have been re-extracted/re-analyzed for DRO with Silica gel cleanup performed on batch OP6639. The attached revised report incorporates these revisions.

SGS Accutest apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

SGS Accutest

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TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Groundwater & Environmental Services

Job No: JC49838

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-51-206, ORG 0404

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC49838-1	08/29/17	11:30 JP	08/30/17	AQ	Ground Water	RW-1
JC49838-1A	08/29/17	11:30 JP	08/30/17	AQ	Ground Water	RW-1
JC49838-2	08/29/17	12:10 JP	08/30/17	AQ	Ground Water	MW-08S
JC49838-2A	08/29/17	12:10 JP	08/30/17	AQ	Ground Water	MW-08S
JC49838-3	08/29/17	12:40 JP	08/30/17	AQ	Ground Water	MW-121
JC49838-3A	08/29/17	12:40 JP	08/30/17	AQ	Ground Water	MW-121
JC49838-4	08/29/17	14:00 JP	08/30/17	AQ	Ground Water	MW-15S
JC49838-5	08/29/17	15:00 JP	08/30/17	AQ	Ground Water	RW-118S
JC49838-5A	08/29/17	15:00 JP	08/30/17	AQ	Ground Water	RW-118S

Summary of Hits

Job Number: JC49838
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/29/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JC49838-1 RW-1

Acenaphthylene	3.9 J	4.0	0.76	ug/l	MADEP-EPH-98-1
Anthracene	4.7	4.0	0.52	ug/l	MADEP-EPH-98-1
Benzo(a)anthracene	0.51 J	4.0	0.37	ug/l	MADEP-EPH-98-1
Benzo(b)fluoranthene	0.63 J	4.0	0.39	ug/l	MADEP-EPH-98-1
Fluoranthene	2.3 J	4.0	0.52	ug/l	MADEP-EPH-98-1
Fluorene	1.6 J	4.0	0.72	ug/l	MADEP-EPH-98-1
Phenanthrene	4.0	4.0	0.60	ug/l	MADEP-EPH-98-1
Pyrene	2.5 J	4.0	0.61	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)	3830	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics	7170	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics	1850	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28)	15.3	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28) ^a	11.3	0.083	0.083	mg/l	SW846 8015C
Sulfur ^b	5220	2500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c	50.8	5.0		mg/l	SM2320 B-11
Sulfate	15.3	2.0		mg/l	EPA 300/SW846 9056A

JC49838-1A RW-1

TPH-DRO (C10-C28)	15.3	0.083	0.083	mg/l	SW846 8015C
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JC49838-2 MW-08S

Acenaphthene ^d	2.9 J	4.0	0.72	ug/l	MADEP-EPH-98-1
Fluorene ^d	2.9 J	4.0	0.72	ug/l	MADEP-EPH-98-1
Phenanthrene ^d	1.2 J	4.0	0.60	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.) ^d	850	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics ^d	471	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics ^d	269	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28)	48.0	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28) ^a	1.65	0.083	0.083	mg/l	SW846 8015C
Sulfur	202000	2000		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c	122	5.0		mg/l	SM2320 B-11
Sulfate	696	100		mg/l	EPA 300/SW846 9056A

JC49838-2A MW-08S

TPH-DRO (C10-C28)	48.0	0.083	0.083	mg/l	SW846 8015C
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JC49838-3 MW-121

Methane	35.5	0.11	0.036	ug/l	RSK-175
Acenaphthylene	1.6 J	4.0	0.76	ug/l	MADEP-EPH-98-1

Summary of Hits

Job Number: JC49838
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/29/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Anthracene		3.1 J	4.0	0.52	ug/l	MADEP-EPH-98-1
Benzo(b)fluoranthene		0.39 J	4.0	0.39	ug/l	MADEP-EPH-98-1
Phenanthrene		2.2 J	4.0	0.60	ug/l	MADEP-EPH-98-1
Pyrene		0.72 J	4.0	0.61	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)		1840	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics		3830	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics		864	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^a		5.03	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28)		4.60	0.083	0.083	mg/l	SW846 8015C
Manganese		4400	15		ug/l	SW846 6010C
Sulfur		34100	500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c		158	5.0		mg/l	SM2320 B-11
Iron, Ferrous ^e		0.52	0.20		mg/l	SM3500FE B-11
Sulfate		122	20		mg/l	EPA 300/SW846 9056A

JC49838-3A MW-121

TPH-DRO (C10-C28)	4.60	0.083	0.083	mg/l	SW846 8015C
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JC49838-4 MW-15S

Sulfur ^b	72900	2500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c	487	13		mg/l	SM2320 B-11
Sulfate	270	40		mg/l	EPA 300/SW846 9056A

JC49838-5 RW-118S

Pyrene ^d	0.72 J	4.0	0.61	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.) ^d	996	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics ^d	936	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics ^d	463	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28)	31.3	0.083	0.083	mg/l	SW846 8015C
TPH-DRO (C10-C28) ^a	1.96	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO ₃ ^c	57.9	5.0		mg/l	SM2320 B-11

JC49838-5A RW-118S

TPH-DRO (C10-C28)	31.3	0.083	0.083	mg/l	SW846 8015C
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(a) Sample extracted outside the holding time. Silica gel cleanup performed.

(b) Elevated sample detection limit due to difficult sample matrix.

(c) Sample was titrated to a final pH of 4.5.

(d) Surrogate recovery indicates possible low bias. There was no sample left to reextract for confirmation.

(e) Field analysis required. Received out of hold time and analyzed by request.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RW-1	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-1	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63884.D	1	09/06/17 23:08	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.72	ug/l	
208-96-8	Acenaphthylene	3.9	4.0	0.76	ug/l	J
120-12-7	Anthracene	4.7	4.0	0.52	ug/l	
56-55-3	Benzo(a)anthracene	0.51	4.0	0.37	ug/l	J
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	0.63	4.0	0.39	ug/l	J
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	2.3	4.0	0.52	ug/l	J
86-73-7	Fluorene	1.6	4.0	0.72	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	4.0	4.0	0.60	ug/l	
129-00-0	Pyrene	2.5	4.0	0.61	ug/l	J
	C11-C22 Aromatics (Unadj.)	3830	100	50	ug/l	
	C9-C18 Aliphatics	7170	100	50	ug/l	
	C19-C36 Aliphatics	1850	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	43%		40-140%
580-13-2	2-Bromonaphthalene	130%		40-140%
84-15-1	o-Terphenyl	84%		40-140%
321-60-8	2-Fluorobiphenyl	129%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-1	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-1	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64062.D	1	09/05/17 16:47	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22909.D	1	10/05/17 17:01	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	15.3	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	11.3 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%	37%	22-140%
16416-32-3	Tetracosane-d50	38%	22%	13-139%
438-22-2	5a-Androstane	46%	31%	10-135%

(a) Sample extracted outside the holding time. Silica gel cleanup performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-1	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-1	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	5220	2500	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42742
(2) Prep QC Batch: MP2704

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-1	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-1	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	50.8	5.0	mg/l	1	09/07/17 09:24	CD	SM2320 B-11
Sulfate	15.3	2.0	mg/l	1	09/02/17 15:40	YR	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-1		
Lab Sample ID:	JC49838-1A	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64062.D	1	09/05/17 16:47	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	15.3	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	56%		22-140%		
16416-32-3	Tetracosane-d50	38%		13-139%		
438-22-2	5a-Androstane	46%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-08S	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-2	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Y63918.D	1	09/07/17 18:58	RK	09/01/17 10:00	OP5749	G3Y2404
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	2.9	4.0	0.72	ug/l	J
208-96-8	Acenaphthylene	ND	4.0	0.76	ug/l	
120-12-7	Anthracene	ND	4.0	0.52	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.52	ug/l	
86-73-7	Fluorene	2.9	4.0	0.72	ug/l	J
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	1.2	4.0	0.60	ug/l	J
129-00-0	Pyrene	ND	4.0	0.61	ug/l	
	C11-C22 Aromatics (Unadj.)	850	100	50	ug/l	
	C9-C18 Aliphatics	471	100	50	ug/l	
	C19-C36 Aliphatics	269	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	39% ^a		40-140%
580-13-2	2-Bromonaphthalene	98%		40-140%
84-15-1	o-Terphenyl	68%		40-140%
321-60-8	2-Fluorobiphenyl	98%		40-140%

(a) Surrogate recovery indicates possible low bias. There was no sample left to reextract for confirmation.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-08S		
Lab Sample ID:	JC49838-2	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64063.D	1	09/05/17 17:21	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22910.D	1	10/05/17 17:35	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	48.0	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	1.65 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	96%	38%	22-140%
16416-32-3	Tetracosane-d50	55%	23%	13-139%
438-22-2	5a-Androstane	59%	30%	10-135%

(a) Sample extracted outside the holding time. Silica gel cleanup performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-08S		
Lab Sample ID:	JC49838-2	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur	202000	2000	ug/l	2	09/06/17	09/07/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42749
(2) Prep QC Batch: MP2704

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-08S	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-2	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	122	5.0	mg/l	1	09/07/17 11:22	CD	SM2320 B-11
Sulfate	696	100	mg/l	50	09/03/17 19:00	JN	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-08S						
Lab Sample ID:	JC49838-2A					Date Sampled:	08/29/17
Matrix:	AQ - Ground Water					Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64063.D	1	09/05/17 17:21	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	48.0	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	96%		22-140%		
16416-32-3	Tetracosane-d50	55%		13-139%		
438-22-2	5a-Androstane	59%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-121	
Lab Sample ID:	JC49838-3	Date Sampled: 08/29/17
Matrix:	AQ - Ground Water	Date Received: 08/30/17
Method:	RSK-175	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60919.D	1	08/31/17 13:40	LM	n/a	n/a	GAA1272
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	35.5	0.11	0.036	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-121	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-3	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63886.D	1	09/07/17 00:16	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.72	ug/l	
208-96-8	Acenaphthylene	1.6	4.0	0.76	ug/l	J
120-12-7	Anthracene	3.1	4.0	0.52	ug/l	J
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	0.39	4.0	0.39	ug/l	J
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.52	ug/l	
86-73-7	Fluorene	ND	4.0	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	2.2	4.0	0.60	ug/l	J
129-00-0	Pyrene	0.72	4.0	0.61	ug/l	J
	C11-C22 Aromatics (Unadj.)	1840	100	50	ug/l	
	C9-C18 Aliphatics	3830	100	50	ug/l	
	C19-C36 Aliphatics	864	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	72%		40-140%
580-13-2	2-Bromonaphthalene	135%		40-140%
84-15-1	o-Terphenyl	114%		40-140%
321-60-8	2-Fluorobiphenyl	137%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-121		
Lab Sample ID:	JC49838-3	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64064.D	1	09/05/17 17:55	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22911.D	1	10/05/17 18:09	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	4.60	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	5.03 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%	51%	22-140%
16416-32-3	Tetracosane-d50	67%	29%	13-139%
438-22-2	5a-Androstane	69%	43%	10-135%

(a) Sample extracted outside the holding time. Silica gel cleanup performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-121	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-3	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese	4400	15	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²
Sulfur	34100	500	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42742
(2) Prep QC Batch: MP2704

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-121	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-3	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	158	5.0	mg/l	1	09/07/17 11:22	CD	SM2320 B-11
Iron, Ferrous ^b	0.52	0.20	mg/l	1	08/31/17 20:50	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	< 0.11	0.11	mg/l	1	09/01/17 13:22	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/01/17 13:22	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/30/17 22:27	AT	SM4500NO2 B-11
Sulfate	122	20	mg/l	10	09/03/17 19:21	JN	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.5.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-121		
Lab Sample ID:	JC49838-3A	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64064.D	1	09/05/17 17:55	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	4.60	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	73%		22-140%
16416-32-3	Tetracosane-d50	67%		13-139%
438-22-2	5a-Androstane	69%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15S		
Lab Sample ID:	JC49838-4	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	72900	2500	ug/l	1	09/06/17	09/06/17 PP	SW846 6010C ¹	SW846 3010A ²

- (1) Instrument QC Batch: MA42742
(2) Prep QC Batch: MP2704
- (a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-15S	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-4	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	487	13	mg/l	1	09/07/17 11:22	CD	SM2320 B-11
Sulfate	270	40	mg/l	20	09/03/17 19:42	JN	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-118S	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-5	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	3Y63887.D	1	09/07/17 00:50	RK	09/01/17 10:00	OP5749	G3Y2403
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.72	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.76	ug/l	
120-12-7	Anthracene	ND	4.0	0.52	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.52	ug/l	
86-73-7	Fluorene	ND	4.0	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	ND	4.0	0.60	ug/l	
129-00-0	Pyrene	0.72	4.0	0.61	ug/l	J
	C11-C22 Aromatics (Unadj.)	996	100	50	ug/l	
	C9-C18 Aliphatics	936	100	50	ug/l	
	C19-C36 Aliphatics	463	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	23% ^a		40-140%
580-13-2	2-Bromonaphthalene	83%		40-140%
84-15-1	o-Terphenyl	32% ^a		40-140%
321-60-8	2-Fluorobiphenyl	85%		40-140%

(a) Surrogate recovery indicates possible low bias. There was no sample left to reextract for confirmation.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-118S		
Lab Sample ID:	JC49838-5	Date Sampled:	08/29/17
Matrix:	AQ - Ground Water	Date Received:	08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64065.D	1	09/05/17 18:29	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2 ^a	7Y22912.D	1	10/05/17 18:43	DS	10/04/17 18:46	OP6639	G7Y900

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	31.3	0.083	0.083	mg/l	
	TPH-DRO (C10-C28)	1.96 ^b	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	54%	30%	22-140%
16416-32-3	Tetracosane-d50	38%	14%	13-139%
438-22-2	5a-Androstane	39%	21%	10-135%

(a) Sample extracted outside the holding time. Silica gel cleanup performed.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-118S	Date Sampled:	08/29/17
Lab Sample ID:	JC49838-5	Date Received:	08/30/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	57.9	5.0	mg/l	1	09/07/17 11:22	CD	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-118S	
Lab Sample ID:	JC49838-5A	Date Sampled: 08/29/17
Matrix:	AQ - Ground Water	Date Received: 08/30/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64065.D	1	09/05/17 18:29	RK	09/01/17 15:35	OP5785	G2Z2415
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	31.3	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	54%		22-140%
16416-32-3	Tetracosane-d50	38%		13-139%
438-22-2	5a-Androstane	39%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC49838
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Sulfur	7704-34-9	SW846 6010C	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

4.1
4



PAGE 1 OF 1

SGS Access - Dayton
2235 Revere Rd., Dayton, NJ 05417
TEL: (508) 298-0000 FAX: (508) 298-4400 3000
www.sgs-test.com

[illegible]

4.2

JC49838: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC49838

Client:
Project:
Date / Time Received: 8/30/2017 3:37:00 PM

Delivery Method:
Airbill #s:
Cooler Temps (Raw Measured) °C: Cooler 1: (3.1); Cooler 2: (3.2); Cooler 3: (3.1); Cooler 4: (3.2); Cooler 5: (3.2); Cooler 6: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.4); Cooler 2: (2.5); Cooler 3: (2.4); Cooler 4: (2.5); Cooler 5: (2.5); Cooler 6: (2.4);

Cooler Security
Y or N
Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature
Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: | |
| 3. Cooler media: | Ice (Bag) |
| 4. No. Coolers: | 6 |

Quality Control Preservation
Y or N
N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation
Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition
Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: | Intact |

Sample Integrity - Instructions
Y or N
N/A

- | | |
|--|--|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Comments

SM089-02
Rev. Date 12/1/16

JC49838: Chain of Custody

Page 2 of 2

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VERIFICATION, TESTING AND CERTIFICATION COMPANY.



e-Hardcopy 2.0
Automated Report

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC49969

Sampling Date: 08/30/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: 40



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.



ACCUTEST

September 27, 2017

Ms. Ashley Bell
Groundwater & Environmental Services
1350 Blair Drive
Suite A
Odenton, MD 21113

RE: SGS Accutest – Dayton, Job # JC49969 – Reissues

Dear Ms. Bell,

The final report for SGS Accutest job number JC49969 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the comment “**This extract received a silica gel cleanup**” has been added on DRO’s sample JC49969-9. The attached revised report incorporates these revisions.

SGS Accutest apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Matthew Cordova

SGS Accutest

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TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Groundwater & Environmental Services

Job No: JC49969

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC49969-1	08/30/17	11:15 JP	08/31/17	AQ	Ground Water	MW-100S
JC49969-2	08/30/17	11:30 JP	08/31/17	AQ	Ground Water	MW-100
JC49969-3	08/30/17	11:50 JP	08/31/17	AQ	Ground Water	MW-102
JC49969-4	08/30/17	12:05 JP	08/31/17	AQ	Ground Water	MW-103
JC49969-5	08/30/17	12:15 JP	08/31/17	AQ	Ground Water	MW-104
JC49969-6	08/30/17	12:25 JP	08/31/17	AQ	Ground Water	MW-105
JC49969-7	08/30/17	12:35 JP	08/31/17	AQ	Ground Water	TW-14
JC49969-8	08/30/17	13:15 JP	08/31/17	AQ	Ground Water	MW-16
JC49969-9	08/30/17	14:10 JP	08/31/17	AQ	Ground Water	MW-72S
JC49969-9A	08/30/17	14:10 JP	08/31/17	AQ	Ground Water	MW-72S
JC49969-10	08/30/17	14:45 JP	08/31/17	AQ	Ground Water	MW-72
JC49969-11	08/30/17	13:35 JP	08/31/17	AQ	Ground Water	MW-122
JC49969-12	08/30/17	15:15 JP	08/31/17	AQ	Ground Water	MW-33



Sample Summary
(continued)

Groundwater & Environmental Services

Job No: JC49969

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code Type	Client	
	Date	Time By	Received	Sample ID	
JC49969-13	08/30/17	15:30 JP	08/31/17	AQ	Ground Water
					MW-27

Summary of Hits

Job Number: JC49969
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/30/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC49969-1	MW-100S					
Sulfur ^a		74000	100		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^b		116	5.0		mg/l	SM2320 B-11
Sulfate		269	40		mg/l	EPA 300/SW846 9056A
JC49969-2	MW-100					
Sulfur ^a		7150	500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^b		38.5	5.0		mg/l	SM2320 B-11
Sulfate		22.1	2.0		mg/l	EPA 300/SW846 9056A
JC49969-3	MW-102					
Alkalinity, Total as CaCO ₃ ^b		44.6	5.0		mg/l	SM2320 B-11
JC49969-4	MW-103					
Alkalinity, Total as CaCO ₃ ^b		55.4	5.0		mg/l	SM2320 B-11
JC49969-5	MW-104					
Sulfur ^a		9280	100		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^b		256	5.0		mg/l	SM2320 B-11
Sulfate		29.2	4.0		mg/l	EPA 300/SW846 9056A
JC49969-6	MW-105					
Alkalinity, Total as CaCO ₃ ^b		117	5.0		mg/l	SM2320 B-11
JC49969-7	TW-14					
TPH-DRO (C10-C28)		0.902	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO ₃ ^b		217	5.0		mg/l	SM2320 B-11
JC49969-8	MW-16					
Sulfur ^a		55600	500		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^b		39.5	5.0		mg/l	SM2320 B-11
Sulfate		212	40		mg/l	EPA 300/SW846 9056A
JC49969-9	MW-72S					
Methane		16.1	0.11	0.036	ug/l	RSK-175
Fluoranthene		1.2 J	4.0	0.52	ug/l	MADEP-EPH-98-1

Summary of Hits

Job Number: JC49969

Account: Groundwater & Environmental Services

Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Collected: 08/30/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Phenanthrene		2.2 J	4.0	0.60	ug/l	MADEP-EPH-98-1
Pyrene		0.73 J	4.0	0.61	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)		1710	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics		1900	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics		1340	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^c		4.87	0.083	0.083	mg/l	SW846 8015C
Manganese		50200	150		ug/l	SW846 6010C
Sulfur		657000	500		ug/l	SW846 6010C
Iron, Ferrous ^d		120	5.0		mg/l	SM3500FE B-11
Sulfate		3260	400		mg/l	EPA 300/SW846 9056A
JC49969-9A MW-72S						
TPH-DRO (C10-C28)		15.8	0.083	0.083	mg/l	SW846 8015C
JC49969-10 MW-72						
TPH-DRO (C10-C28)		2.08	0.083	0.083	mg/l	SW846 8015C
JC49969-11 MW-122						
TPH-DRO (C10-C28)		2.78	0.083	0.083	mg/l	SW846 8015C
Sulfur ^a		94000	500		ug/l	SW846 6010C
JC49969-12 MW-33						
Alkalinity, Total as CaCO ₃ ^b		41.5	5.0		mg/l	SM2320 B-11
JC49969-13 MW-27						
TPH-DRO (C10-C28)		11.9	0.083	0.083	mg/l	SW846 8015C

(a) Elevated sample detection limit due to difficult sample matrix.

(b) Sample was titrated to a final pH of 4.5.

(c) This extract received a silica gel cleanup.

(d) Field analysis required. Received out of hold time and analyzed by request.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-100S	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-1	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	74000	100	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

- (1) Instrument QC Batch: MA42749
(2) Prep QC Batch: MP2757
- (a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-100S	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-1	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	116	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11
Sulfate	269	40	mg/l	20	09/07/17 16:53	TG	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-100	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-2	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	7150	500	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42749

(2) Prep QC Batch: MP2757

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-100	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-2	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	38.5	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11
Sulfate	22.1	2.0	mg/l	1	09/05/17 19:14	JN	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-102	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-3	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	44.6	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-103	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-4	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	55.4	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-104	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-5	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	9280	100	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

- (1) Instrument QC Batch: MA42749
(2) Prep QC Batch: MP2757

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-104	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-5	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	256	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11
Sulfate	29.2	4.0	mg/l	2	09/07/17 17:14	TG	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-105	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-6	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	117	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-14						
Lab Sample ID:	JC49969-7					Date Sampled:	08/30/17
Matrix:	AQ - Ground Water					Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22563.D	1	09/05/17 13:22	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.902	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	65%		22-140%		
16416-32-3	Tetracosane-d50	65%		13-139%		
438-22-2	5a-Androstane	56%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-14	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-7	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	217	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-16	
Lab Sample ID:	JC49969-8	Date Sampled: 08/30/17
Matrix:	AQ - Ground Water	Date Received: 08/31/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22564.D	1	09/05/17 13:56	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	65%		22-140%		
16416-32-3	Tetracosane-d50	53%		13-139%		
438-22-2	5a-Androstane	42%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-8	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	55600	500	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

- (1) Instrument QC Batch: MA42749
(2) Prep QC Batch: MP2757
- (a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-16	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-8	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	39.5	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11
Sulfate	212	40	mg/l	20	09/07/17 17:35	TG	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-72S						
Lab Sample ID:	JC49969-9					Date Sampled:	08/30/17
Matrix:	AQ - Ground Water					Date Received:	08/31/17
Method:	RSK-175					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60948.D	1	09/05/17 12:45	LM	n/a	n/a	GAA1274
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	16.1	0.11	0.036	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-72S	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-9	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63905.D	1	09/07/17 11:15	RK	09/05/17 16:30	OP5835	G3Y2404
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.72	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.76	ug/l	
120-12-7	Anthracene	ND	4.0	0.52	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	1.2	4.0	0.52	ug/l	J
86-73-7	Fluorene	ND	4.0	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	2.2	4.0	0.60	ug/l	J
129-00-0	Pyrene	0.73	4.0	0.61	ug/l	J
	C11-C22 Aromatics (Unadj.)	1710	100	50	ug/l	
	C9-C18 Aliphatics	1900	100	50	ug/l	
	C19-C36 Aliphatics	1340	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	77%		40-140%
580-13-2	2-Bromonaphthalene	134%		40-140%
84-15-1	o-Terphenyl	107%		40-140%
321-60-8	2-Fluorobiphenyl	137%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-72S		
Lab Sample ID:	JC49969-9	Date Sampled:	08/30/17
Matrix:	AQ - Ground Water	Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Z64106.D	1	09/07/17 16:55	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	4.87	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	58%		22-140%		
16416-32-3	Tetracosane-d50	48%		13-139%		
438-22-2	5a-Androstane	45%		10-135%		

(a) This extract received a silica gel cleanup.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-72S	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-9	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese	50200	150	ug/l	2	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²
Sulfur	657000	500	ug/l	2	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42753
(2) Prep QC Batch: MP2757

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-72S	Date Sampled: 08/30/17
Lab Sample ID: JC49969-9	Date Received: 08/31/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	< 5.0	5.0	mg/l	1	09/07/17 18:22	AT	SM2320 B-11
Iron, Ferrous ^b	120	5.0	mg/l	25	08/31/17 20:55	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	< 0.11	0.11	mg/l	1	09/05/17 12:58	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/05/17 12:58	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/31/17 21:48	AT	SM4500NO2 B-11
Sulfate	3260	400	mg/l	200	09/07/17 18:38	TG	EPA 300/SW846 9056A

(a) Sample was titrated to a final pH of 4.2.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-72S						
Lab Sample ID:	JC49969-9A					Date Sampled:	08/30/17
Matrix:	AQ - Ground Water					Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64117.D	1	09/07/17 23:01	DS	09/06/17 09:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	15.8	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	65%		22-140%		
16416-32-3	Tetracosane-d50	53%		13-139%		
438-22-2	5a-Androstane	52%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-72						
Lab Sample ID:	JC49969-10					Date Sampled:	08/30/17
Matrix:	AQ - Ground Water					Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22565.D	1	09/05/17 14:31	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	2.08	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	41%		22-140%		
16416-32-3	Tetracosane-d50	37%		13-139%		
438-22-2	5a-Androstane	30%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-122						
Lab Sample ID:	JC49969-11					Date Sampled:	08/30/17
Matrix:	AQ - Ground Water					Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22566.D	1	09/05/17 15:05	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	2.78	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	62%		22-140%		
16416-32-3	Tetracosane-d50	52%		13-139%		
438-22-2	5a-Androstane	46%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-122		
Lab Sample ID:	JC49969-11	Date Sampled:	08/30/17
Matrix:	AQ - Ground Water	Date Received:	08/31/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	94000	500	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42749
(2) Prep QC Batch: MP2757

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-122	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-11	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-33	Date Sampled:	08/30/17
Lab Sample ID:	JC49969-12	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	41.5	5.0	mg/l	1	09/07/17 18:45	AT	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-27		
Lab Sample ID:	JC49969-13	Date Sampled:	08/30/17
Matrix:	AQ - Ground Water	Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22567.D	1	09/05/17 15:40	DS	09/03/17 17:00	OP5809	G7Z929
Run #2 ^a	2Z64100.D	1	09/07/17 12:40	DS	09/06/17 20:30	OP5880	G2Z2417

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	11.9	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	20% ^b	19% ^b	22-140%
16416-32-3	Tetracosane-d50	23%	21%	13-139%
438-22-2	5a-Androstane	21%	21%	10-135%

(a) Confirmation run for surrogate recoveries.

(b) Outside control limits due to matrix interference. Confirmed by re-extraction.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC49969
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Sulfur	7704-34-9	SW846 6010C	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

000000

ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2255 Route 150, Dayton, OH 45424
TEL: 773-239-9000 FAX: 773-239-7409 FAX
www.accutest.com

PAGE 1 OF 2

Client / Reporting Information		Project Information		Requested Analysis (see TESTCODE sheet)		Method Codes	
Company Name Groundwater & Environmental Services, Inc.		Project Name NRG PRGS		Method Codes		Method Codes	
Street Address 1350 Blair Drive, Suite A		City 1400 North Royal St		State VA		Zip 22113	
City Odenton, MD		State VA		Zip 22113		Project # 0402519 - 51 - 206, Org 0404	
Project Contact Ashley Bell		Email AbeK@gesonline.com		Phone 800-220-3506 x 3704		Fax 800-220-3506 x 3704	
Project Manager Ashley Bell		Send to ges-invoices@gesonline.com					
Field ID		Date		Time		Sample ID	
1 6W-106.5		8-3-17		1115		JP GW	
2 MW-100				1138		5	
3 MW-102				1150		5	
4 MW-103				1205		5	
5 MW-104				1215		5	
6 MW-105				1225		5	
7 TW-14				1235		3	
8 MW-16				1315		9	
9 MW-12S				1410		18	
10 MW-12				1415		18	
11 MW-122				1335		5	
12 MW-33		8-3-17		1515		JP GW	
Comments / Special Instructions		Comments / Special Instructions		Comments / Special Instructions		Comments / Special Instructions	
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day RUSH <input type="checkbox"/> 2 Day RUSH <input type="checkbox"/> 1 Day RUSH <input type="checkbox"/> Other:		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> Full "C" (Level 3) <input type="checkbox"/> No Reduced <input type="checkbox"/> Commercial "D" <input type="checkbox"/> No Data of Known Quality Protocol Reporting <input type="checkbox"/> Commercial "A" = Results Only Commercial "B" = Results + QC Summary <input type="checkbox"/> No Reduced = Results + QC Summary + Partial Raw data		<input type="checkbox"/> NYASP Category A <input type="checkbox"/> NYASP Category B <input type="checkbox"/> State Forms <input type="checkbox"/> EDO Format <input type="checkbox"/> Other:		EQ200 Name: NRG PRGS Lab report # 28220 EQ200 rep Method results to: ges@gesonline.com & ges@gesonline.com Send invoice to: ges-invoices@gesonline.com & include Project # & Org # 0402519 - 51 - 206, Org 0404	
Sample Custody must be documented below each time samples change possession, including courier delivery.		Sample inventory is verified upon receipt in the Laboratory.					
Date/Time 8-3-17 17:30 Received By Date/Time 8-3-17 17:30 Received By		Date/Time 8-3-17 17:30 Received By Date/Time 8-3-17 17:30 Received By		Date/Time 8-3-17 17:30 Received By Date/Time 8-3-17 17:30 Received By		Date/Time 8-3-17 17:30 Received By Date/Time 8-3-17 17:30 Received By	

JC49969: Chain of Custody

Page 1 of 4

SGS Americas - Dayton
2255 Route 170, Dayton, NJ 08517
TEL 732-329-0225 FAX 732-329-0490 248
www.sgsintl.com

[illegible]

3802 - 4.10 17

JC49969: Chain of Custody

Page 2 of 4

SGS Accutest Sample Receipt Summary

Job Number: JC49969

Client: GES

Project: NRG PRGS

Date / Time Received: 8/31/2017 5:15:00 PM

Delivery Method: Accutest Courier

Airbill #s:

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8); Cooler 2: (4.1);

Cooler Temps (Corrected) °C: Cooler 1: (3.0); Cooler 2: (3.3);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 2 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments -10 Rec'd limited volume of 1 bottle for DRO.

SM089-02
Rev. Date 12/1/16

JC49969: Chain of Custody

Page 3 of 4

Response:

Response: Proceed with analysis

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-51-206, ORG 0404

SGS Accutest Job Number: JC50042

Sampling Date: 08/31/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: 47



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS Accutest.
Test results relate only to samples analyzed.



ACCUTEST

September 27, 2017

Ms. Ashley Bell
Groundwater & Environmental Services
1350 Blair Drive
Suite A
Odenton, MD 21113

RE: SGS Accutest – Dayton, Job # JC50042 – Reissues

Dear Ms. Bell,

The final report for SGS Accutest job number JC50042 has been edited to reflect corrections to the final results. These edits have been incorporated into the revised report which is attached.

Specifically, the comment “**This extract received a silica gel cleanup**” has been added on DRO’s samples JC50042-6, JC50042-7, JC50042-8, and JC50042-9. The attached revised report incorporates these revisions.

SGS Accutest apologizes for this occurrence and for any inconvenience this situation may have caused. Please contact me if I can be of further assistance in this matter.

Sincerely,

Matthew Cordova

SGS Accutest

SGS ACCUTEST IS PART OF SGS, THE WORLD’S LEADING INSPECTION, VERIFICATION,
TESTING AND CERTIFICATION COMPANY.

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Sample Summary

Groundwater & Environmental Services

Job No: JC50042

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-51-206, ORG 0404

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC50042-1	08/31/17	12:00 JP	09/01/17	AQ	Ground Water	RW-05
JC50042-2	08/31/17	10:40 JP	09/01/17	AQ	Ground Water	RW-14
JC50042-3	08/31/17	11:15 JP	09/01/17	AQ	Ground Water	RW-25
JC50042-4	08/31/17	10:20 JP	09/01/17	AQ	Ground Water	RW-31
JC50042-5	08/31/17	11:45 JP	09/01/17	AQ	Ground Water	RW-51
JC50042-6	08/31/17	12:15 JP	09/01/17	AQ	Ground Water	RW-28S
JC50042-6A	08/31/17	12:15 JP	09/01/17	AQ	Ground Water	RW-28S
JC50042-7	08/31/17	13:40 JP	09/01/17	AQ	Ground Water	RW-117S
JC50042-7A	08/31/17	13:40 JP	09/01/17	AQ	Ground Water	RW-117S
JC50042-8	08/31/17	13:00 JP	09/01/17	AQ	Ground Water	MW-25S
JC50042-8A	08/31/17	13:00 JP	09/01/17	AQ	Ground Water	MW-25S
JC50042-9	08/31/17	14:15 JP	09/01/17	AQ	Ground Water	RW-116S
JC50042-9A	08/31/17	14:15 JP	09/01/17	AQ	Ground Water	RW-116S



Sample Summary
(continued)

Groundwater & Environmental Services

Job No: JC50042

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-51-206, ORG 0404

Sample Number	Collected		Matrix			Client Sample ID
	Date	Time By	Received	Code	Type	
JC50042-10	08/31/17	15:00 JP	09/01/17	AQ	Ground Water	RW-05S

Summary of Hits

Job Number: JC50042
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/31/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC50042-1	RW-05					
TPH-DRO (C10-C28)		31.8	0.083	0.083	mg/l	SW846 8015C
JC50042-2	RW-14					
Methane		44.4	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		7.38	0.083	0.083	mg/l	SW846 8015C
Manganese		148	15		ug/l	SW846 6010C
Sulfur		10300	50		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^a		13.8	5.0		mg/l	SM2320 B-11
Nitrogen, Nitrate ^b		0.25	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		0.26	0.10		mg/l	EPA 353.2/LACHAT
Sulfate		33.8	4.0		mg/l	EPA 300/SW846 9056A
JC50042-3	RW-25					
TPH-DRO (C10-C28)		20.0	0.083	0.083	mg/l	SW846 8015C
Sulfur		10200	50		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^a		10.3	5.0		mg/l	SM2320 B-11
Sulfate		36.6	4.0		mg/l	EPA 300/SW846 9056A
JC50042-4	RW-31					
TPH-DRO (C10-C28)		3.77	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO ₃ ^c		153	5.0		mg/l	SM2320 B-11
JC50042-5	RW-51					
TPH-DRO (C10-C28)		2.50	0.083	0.083	mg/l	SW846 8015C
Sulfur ^d		30200	50		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c		59.5	5.0		mg/l	SM2320 B-11
Sulfate		85.2	20		mg/l	EPA 300/SW846 9056A
JC50042-6	RW-28S					
C11-C22 Aromatics (Unadj.)		450	100	50	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics		450	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics		477	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics		279	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^e		1.65	0.083	0.083	mg/l	SW846 8015C
Sulfur		250000	200		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c		47.7	5.0		mg/l	SM2320 B-11
Sulfate		925	200		mg/l	EPA 300/SW846 9056A

Summary of Hits

Job Number: JC50042
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/31/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
--------------------------	------------------	-----------------	----	-----	-------	--------

JC50042-6A RW-28S

TPH-DRO (C10-C28)	8.37	0.083	0.083	mg/l	SW846 8015C
-------------------	------	-------	-------	------	-------------

JC50042-7 RW-117S

Acenaphthene	2.5 J	4.0	0.72	ug/l	MADEP-EPH-98-1
Acenaphthylene	0.98 J	4.0	0.76	ug/l	MADEP-EPH-98-1
Anthracene	0.92 J	4.0	0.52	ug/l	MADEP-EPH-98-1
Phenanthrene	1.3 J	4.0	0.60	ug/l	MADEP-EPH-98-1
Pyrene	1.4 J	4.0	0.61	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)	1620	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics	1180	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics	570	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^e	3.26	0.083	0.083	mg/l	SW846 8015C

JC50042-7A RW-117S

TPH-DRO (C10-C28)	39.2	0.083	0.083	mg/l	SW846 8015C
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JC50042-8 MW-25S

Acenaphthene	3.4 J	4.0	0.72	ug/l	MADEP-EPH-98-1
Acenaphthylene	3.9 J	4.0	0.76	ug/l	MADEP-EPH-98-1
Phenanthrene	0.78 J	4.0	0.60	ug/l	MADEP-EPH-98-1
Pyrene	1.7 J	4.0	0.61	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)	1290	100	50	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics	1280	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics	674	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics	302	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^e	1.64	0.083	0.083	mg/l	SW846 8015C
Sulfur	407000	250		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^c	34.4	5.0		mg/l	SM2320 B-11
Sulfate	1670	200		mg/l	EPA 300/SW846 9056A

JC50042-8A MW-25S

TPH-DRO (C10-C28)	32.2	0.083	0.083	mg/l	SW846 8015C
-------------------	------	-------	-------	------	-------------

JC50042-9 RW-116S

Anthracene	1.5 J	4.0	0.52	ug/l	MADEP-EPH-98-1
Phenanthrene	1.1 J	4.0	0.60	ug/l	MADEP-EPH-98-1
Pyrene	0.86 J	4.0	0.61	ug/l	MADEP-EPH-98-1
C11-C22 Aromatics (Unadj.)	1150	100	50	ug/l	MADEP-EPH-98-1

Summary of Hits

Job Number: JC50042

Account: Groundwater & Environmental Services

Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Collected: 08/31/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
C11-C22 Aromatics		1150	100	50	ug/l	MADEP-EPH-98-1
C9-C18 Aliphatics		1400 E	100	50	ug/l	MADEP-EPH-98-1
C19-C36 Aliphatics		624	100	50	ug/l	MADEP-EPH-98-1
TPH-DRO (C10-C28) ^e		3.11	0.083	0.083	mg/l	SW846 8015C
Sulfur		67800	50		ug/l	SW846 6010C
Alkalinity, Total as CaCO ₃ ^a		17.4	5.0		mg/l	SM2320 B-11
Sulfate		190	40		mg/l	EPA 300/SW846 9056A

JC50042-9A RW-116S

TPH-DRO (C10-C28)	29.9	0.083	0.083	mg/l	SW846 8015C
-------------------	------	-------	-------	------	-------------

JC50042-10 RW-05S

Sulfate	3200	400		mg/l	EPA 300/SW846 9056A
---------	------	-----	--	------	---------------------

(a) Sample was titrated to a final pH of 4.2.

(b) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

(c) Sample was titrated to a final pH of 4.5.

(d) Elevated sample detection limit due to difficult sample matrix.

(e) This extract received a silica gel cleanup.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RW-05	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-1	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22575.D	1	09/05/17 20:14	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	31.8	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	57%		22-140%
16416-32-3	Tetracosane-d50	51%		13-139%
438-22-2	5a-Androstane	49%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-05	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-1	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	< 5.0	5.0	mg/l	1	09/12/17 11:20	CD	SM2320 B-11

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-14	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-2	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	RSK-175		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA61048.D	1	09/11/17 13:57	LM	n/a	n/a	GAA1278
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	44.4	0.11	0.036	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-14						
Lab Sample ID:	JC50042-2					Date Sampled:	08/31/17
Matrix:	AQ - Ground Water					Date Received:	09/01/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22578.D	1	09/05/17 21:56	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	7.38	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	80%		22-140%
16416-32-3	Tetracosane-d50	70%		13-139%
438-22-2	5a-Androstane	65%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-14	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-2	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese	148	15	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²
Sulfur	10300	50	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42757
(2) Prep QC Batch: MP2757

RL = Reporting Limit

Report of Analysis

Client Sample ID: RW-14	Date Sampled: 08/31/17
Lab Sample ID: JC50042-2	Date Received: 09/01/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	13.8	5.0	mg/l	1	09/12/17 11:20	CD	SM2320 B-11
Iron, Ferrous ^b	< 0.20	0.20	mg/l	1	09/01/17 21:15	CB	SM3500FE B-11
Nitrogen, Nitrate ^c	0.25	0.11	mg/l	1	09/07/17 10:11	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.26	0.10	mg/l	1	09/07/17 10:11	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	09/01/17 20:42	CB	SM4500NO2 B-11
Sulfate	33.8	4.0	mg/l	2	09/09/17 15:32	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/07/17 18:41	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.2.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-25	
Lab Sample ID:	JC50042-3	Date Sampled: 08/31/17
Matrix:	AQ - Ground Water	Date Received: 09/01/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22579.D	1	09/05/17 22:30	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	20.0	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		22-140%
16416-32-3	Tetracosane-d50	78%		13-139%
438-22-2	5a-Androstane	76%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-25	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-3	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur	10200	50	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42757
(2) Prep QC Batch: MP2757

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-25	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-3	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	10.3	5.0	mg/l	1	09/12/17 11:20	CD	SM2320 B-11
Sulfate	36.6	4.0	mg/l	2	09/09/17 15:52	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/07/17 18:41	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-31						
Lab Sample ID:	JC50042-4					Date Sampled:	08/31/17
Matrix:	AQ - Ground Water					Date Received:	09/01/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22582.D	1	09/06/17 00:11	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	3.77	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	48%		22-140%		
16416-32-3	Tetracosane-d50	61%		13-139%		
438-22-2	5a-Androstane	55%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-31	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-4	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	153	5.0	mg/l	1	09/12/17 11:20	CD	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-51		
Lab Sample ID:	JC50042-5	Date Sampled:	08/31/17
Matrix:	AQ - Ground Water	Date Received:	09/01/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22583.D	1	09/06/17 00:45	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	2.50	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	66%		22-140%
16416-32-3	Tetracosane-d50	58%		13-139%
438-22-2	5a-Androstane	54%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-51	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-5	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur ^a	30200	50	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42757

(2) Prep QC Batch: MP2757

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-51	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-5	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	59.5	5.0	mg/l	1	09/12/17 11:20	CD	SM2320 B-11
Sulfate	85.2	20	mg/l	10	09/09/17 16:13	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/07/17 18:41	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-28S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-6	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63908.D	1	09/07/17 12:56	RK	09/05/17 16:30	OP5835	G3Y2404
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.72	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.76	ug/l	
120-12-7	Anthracene	ND	4.0	0.52	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.52	ug/l	
86-73-7	Fluorene	ND	4.0	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	ND	4.0	0.60	ug/l	
129-00-0	Pyrene	ND	4.0	0.61	ug/l	
	C11-C22 Aromatics (Unadj.)	450	100	50	ug/l	
	C11-C22 Aromatics	450	100	50	ug/l	
	C9-C18 Aliphatics	477	100	50	ug/l	
	C19-C36 Aliphatics	279	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	54%		40-140%
580-13-2	2-Bromonaphthalene	109%		40-140%
84-15-1	o-Terphenyl	110%		40-140%
321-60-8	2-Fluorobiphenyl	113%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-28S						
Lab Sample ID:	JC50042-6					Date Sampled:	08/31/17
Matrix:	AQ - Ground Water					Date Received:	09/01/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Z64107.D	1	09/07/17 17:28	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.65	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	49%		22-140%		
16416-32-3	Tetracosane-d50	30%		13-139%		
438-22-2	5a-Androstane	28%		10-135%		

(a) This extract received a silica gel cleanup.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-28S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-6	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur	250000	200	ug/l	2	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42757
(2) Prep QC Batch: MP2757

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-28S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-6	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	47.7	5.0	mg/l	1	09/12/17 11:59	CD	SM2320 B-11
Sulfate	925	200	mg/l	100	09/09/17 16:34	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/07/17 18:41	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-28S						
Lab Sample ID:	JC50042-6A					Date Sampled:	08/31/17
Matrix:	AQ - Ground Water					Date Received:	09/01/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64120.D	1	09/08/17 00:41	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	8.37	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	48%		22-140%		
16416-32-3	Tetracosane-d50	25%		13-139%		
438-22-2	5a-Androstane	22%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-117S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-7	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63909.D	1	09/07/17 13:30	RK	09/05/17 16:30	OP5835	G3Y2404
Run #2 ^a	3Y64191.D	1	09/22/17 03:53	RK	09/20/17 10:00	OP6245	G3Y2412

	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2	1000 ml	2.0 ml

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	2.5	4.0	0.72	ug/l	J
208-96-8	Acenaphthylene	0.98	4.0	0.76	ug/l	J
120-12-7	Anthracene	0.92	4.0	0.52	ug/l	J
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.52	ug/l	
86-73-7	Fluorene	ND	4.0	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	1.3	4.0	0.60	ug/l	J
129-00-0	Pyrene	1.4	4.0	0.61	ug/l	J
	C11-C22 Aromatics (Unadj.)	1620	100	50	ug/l	
	C9-C18 Aliphatics	1180	100	50	ug/l	
	C19-C36 Aliphatics	570	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	28% ^c	12% ^b	40-140%
580-13-2	2-Bromonaphthalene	114%	111%	40-140%
84-15-1	o-Terphenyl	35% ^c	15% ^b	40-140%
321-60-8	2-Fluorobiphenyl	113%	112%	40-140%

(a) Confirmation run for surrogate recoveries.

(b) Outside control limits due to matrix interference.

(c) Outside control limits due to matrix interference. Confirmed by re-extraction.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-117S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-7	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Z64110.D	1	09/07/17 19:08	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2 ^b	2Z64233.D	1	09/12/17 17:44	DS	09/11/17 19:45	OP6006	G2Z2421

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	3.26	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	16% ^c	53%	22-140%
16416-32-3	Tetracosane-d50	19%	52%	13-139%
438-22-2	5a-Androstane	14%	50%	10-135%

(a) This extract received a silica gel cleanup.

(b) Confirmation run for surrogate recoveries.

(c) Outside of in house control limits. The results confirmed by re-extraction outside the holding time.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-117S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-7	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	< 5.0	5.0	mg/l	1	09/12/17 11:59	CD	SM2320 B-11

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-117S	
Lab Sample ID:	JC50042-7A	Date Sampled: 08/31/17
Matrix:	AQ - Ground Water	Date Received: 09/01/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64121.D	1	09/08/17 01:14	DS	09/06/17 09:40	OP5836	G2Z2417
Run #2 ^a	2Z64227.D	1	09/12/17 14:23	DS	09/11/17 19:45	OP6006	G2Z2421

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	280 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	39.2	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	24%	56%	22-140%
16416-32-3	Tetracosane-d50	24%	54%	13-139%
438-22-2	5a-Androstane	28%	58%	10-135%

(a) Confirmation run for surrogate recoveries.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-25S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-8	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63910.D	1	09/07/17 14:04	RK	09/05/17 16:30	OP5835	G3Y2404
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	3.4	4.0	0.72	ug/l	J
208-96-8	Acenaphthylene	3.9	4.0	0.76	ug/l	J
120-12-7	Anthracene	ND	4.0	0.52	ug/l	
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.52	ug/l	
86-73-7	Fluorene	ND	4.0	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	0.78	4.0	0.60	ug/l	J
129-00-0	Pyrene	1.7	4.0	0.61	ug/l	J
	C11-C22 Aromatics (Unadj.)	1290	100	50	ug/l	
	C11-C22 Aromatics	1280	100	50	ug/l	
	C9-C18 Aliphatics	674	100	50	ug/l	
	C19-C36 Aliphatics	302	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	45%		40-140%
580-13-2	2-Bromonaphthalene	111%		40-140%
84-15-1	o-Terphenyl	61%		40-140%
321-60-8	2-Fluorobiphenyl	110%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-25S	
Lab Sample ID:	JC50042-8	Date Sampled: 08/31/17
Matrix:	AQ - Ground Water	Date Received: 09/01/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Z64111.D	1	09/07/17 19:41	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.64	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	26%		22-140%		
16416-32-3	Tetracosane-d50	31%		13-139%		
438-22-2	5a-Androstane	26%		10-135%		

(a) This extract received a silica gel cleanup.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-25S		
Lab Sample ID:	JC50042-8	Date Sampled:	08/31/17
Matrix:	AQ - Ground Water	Date Received:	09/01/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur	407000	250	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42757
(2) Prep QC Batch: MP2757

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-25S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-8	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	34.4	5.0	mg/l	1	09/12/17 11:59	CD	SM2320 B-11
Sulfate	1670	200	mg/l	100	09/09/17 17:37	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/07/17 18:41	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-25S		
Lab Sample ID:	JC50042-8A	Date Sampled:	08/31/17
Matrix:	AQ - Ground Water	Date Received:	09/01/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64122.D	1	09/08/17 01:47	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	32.2	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	43%		22-140%		
16416-32-3	Tetracosane-d50	40%		13-139%		
438-22-2	5a-Androstane	31%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-116S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-9	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	MADEP-EPH-98-1 SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3Y63911.D	1	09/07/17 14:38	RK	09/05/17 16:30	OP5835	G3Y2404
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	2.0 ml
Run #2		

MAEPH List

CAS No.	Compound	Result	RL	MDL	Units	Q
83-32-9	Acenaphthene	ND	4.0	0.72	ug/l	
208-96-8	Acenaphthylene	ND	4.0	0.76	ug/l	
120-12-7	Anthracene	1.5	4.0	0.52	ug/l	J
56-55-3	Benzo(a)anthracene	ND	4.0	0.37	ug/l	
50-32-8	Benzo(a)pyrene	ND	4.0	0.68	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	4.0	0.39	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	4.0	0.45	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	4.0	0.57	ug/l	
218-01-9	Chrysene	ND	4.0	0.37	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	4.0	2.2	ug/l	
206-44-0	Fluoranthene	ND	4.0	0.52	ug/l	
86-73-7	Fluorene	ND	4.0	0.72	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	4.0	1.5	ug/l	
91-57-6	2-Methylnaphthalene	ND	4.0	0.67	ug/l	
91-20-3	Naphthalene	ND	4.0	0.66	ug/l	
85-01-8	Phenanthrene	1.1	4.0	0.60	ug/l	J
129-00-0	Pyrene	0.86	4.0	0.61	ug/l	J
	C11-C22 Aromatics (Unadj.)	1150	100	50	ug/l	
	C11-C22 Aromatics	1150	100	50	ug/l	
	C9-C18 Aliphatics	1400	100	50	ug/l	E
	C19-C36 Aliphatics	624	100	50	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
3386-33-2	1-Chlorooctadecane	96%		40-140%
580-13-2	2-Bromonaphthalene	108%		40-140%
84-15-1	o-Terphenyl	111%		40-140%
321-60-8	2-Fluorobiphenyl	112%		40-140%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-116S	
Lab Sample ID:	JC50042-9	Date Sampled: 08/31/17
Matrix:	AQ - Ground Water	Date Received: 09/01/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	2Z64112.D	1	09/07/17 20:15	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	3.11	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	74%		22-140%		
16416-32-3	Tetracosane-d50	71%		13-139%		
438-22-2	5a-Androstane	72%		10-135%		

(a) This extract received a silica gel cleanup.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-116S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-9	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Sulfur	67800	50	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42749
(2) Prep QC Batch: MP2757

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-116S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-9	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	17.4	5.0	mg/l	1	09/12/17 11:59	CD	SM2320 B-11
Sulfate	190	40	mg/l	20	09/09/17 17:58	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/07/17 18:41	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-116S						
Lab Sample ID:	JC50042-9A					Date Sampled:	08/31/17
Matrix:	AQ - Ground Water					Date Received:	09/01/17
Method:	SW846 8015C SW846 3510C					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64123.D	1	09/08/17 02:20	DS	09/06/17 15:40	OP5836	G2Z2417
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	29.9	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	71%		22-140%		
16416-32-3	Tetracosane-d50	65%		13-139%		
438-22-2	5a-Androstane	80%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	RW-05S	Date Sampled:	08/31/17
Lab Sample ID:	JC50042-10	Date Received:	09/01/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	< 5.0	5.0	mg/l	1	09/12/17 11:59	CD	SM2320 B-11
Sulfate	3200	400	mg/l	200	09/09/17 18:18	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/07/17 18:41	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC50042
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Sulfur	7704-34-9	SW846 6010C	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

SGS Atlantic - Dayton
2235 Route 100, Dayton, NJ 08801
TEL 713-329-2000 FAX 713-329-3498 J48
www.sgsatl.com

[illegible]

4.2

JC50042: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC50042

Client: _____

Project: _____

Date / Time Received: 9/1/2017 4:30:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (4.2); Cooler 2: (4.8);

Cooler Temps (Corrected) °C: Cooler 1: (3.4); Cooler 2: (4.0);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 2 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC50042: Chain of Custody

Page 2 of 2

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC49968

Sampling Date: 08/30/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: **26**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC49968

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected			Received	Matrix		Client Sample ID
	Date	Time	By		Code	Type	
JC49968-1	08/30/17	10:08	SA	08/31/17	AQ	Ground Water	TW-02
JC49968-2	08/30/17	10:19	SA	08/31/17	AQ	Ground Water	TW-03
JC49968-3	08/30/17	12:25	SA	08/31/17	AQ	Ground Water	TW-04
JC49968-4	08/30/17	11:39	SA	08/31/17	AQ	Ground Water	TW-05
JC49968-5	08/30/17	11:17	SA	08/31/17	AQ	Ground Water	TW-06
JC49968-6	08/30/17	10:55	SA	08/31/17	AQ	Ground Water	TW-07

Summary of Hits

Page 1 of 1

Job Number: JC49968
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 08/30/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC49968-1	TW-02					
Alkalinity, Total as CaCO ₃ ^a		146	5.0		mg/l	SM2320 B-11
JC49968-2	TW-03					
Methane		13.1	0.11	0.036	ug/l	RSK-175
Manganese		6510	15		ug/l	SW846 6010C
Sulfur		109000	100		ug/l	SW846 6010C
Iron, Ferrous ^b		42.9	5.0		mg/l	SM3500FE B-11
Sulfate		370	80		mg/l	EPA 300/SW846 9056A
JC49968-3	TW-04					
TPH-DRO (C10-C28)		5.70	0.083	0.083	mg/l	SW846 8015C
JC49968-4	TW-05					
Methane		32.8	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		24.0	0.083	0.083	mg/l	SW846 8015C
Manganese ^c		31600	750		ug/l	SW846 6010C
Sulfur ^c		263000	2500		ug/l	SW846 6010C
Iron, Ferrous ^b		122	10		mg/l	SM3500FE B-11
Sulfate		943	200		mg/l	EPA 300/SW846 9056A
JC49968-5	TW-06					
Methane		39.4	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		9.54	0.083	0.083	mg/l	SW846 8015C
Manganese ^c		6680	75		ug/l	SW846 6010C
Sulfur ^c		226000	250		ug/l	SW846 6010C
Iron, Ferrous ^b		247	10		mg/l	SM3500FE B-11
Sulfate		1530	200		mg/l	EPA 300/SW846 9056A
JC49968-6	TW-07					
TPH-DRO (C10-C28)		16.3	0.083	0.083	mg/l	SW846 8015C

(a) Sample was titrated to a final pH of 4.5.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Elevated sample detection limit due to difficult sample matrix.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TW-02	Date Sampled:	08/30/17
Lab Sample ID:	JC49968-1	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	146	5.0	mg/l	1	09/11/17 10:11	CD	SM2320 B-11

(a) Sample was titrated to a final pH of 4.5.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-03						
Lab Sample ID:	JC49968-2					Date Sampled:	08/30/17
Matrix:	AQ - Ground Water					Date Received:	08/31/17
Method:	RSK-175					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60944.D	1	09/05/17 11:48	LM	n/a	n/a	GAA1274
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	13.1	0.11	0.036	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-03	
Lab Sample ID:	JC49968-2	Date Sampled: 08/30/17
Matrix:	AQ - Ground Water	Date Received: 08/31/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22568.D	1	09/05/17 16:14	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	68%		22-140%		
16416-32-3	Tetracosane-d50	77%		13-139%		
438-22-2	5a-Androstane	69%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-03	Date Sampled:	08/30/17
Lab Sample ID:	JC49968-2	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese	6510	15	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ³
Sulfur	109000	100	ug/l	2	09/07/17	09/08/17 AB	SW846 6010C ²	SW846 3010A ³

- (1) Instrument QC Batch: MA42749
(2) Instrument QC Batch: MA42753
(3) Prep QC Batch: MP2757

RL = Reporting Limit

Report of Analysis

Client Sample ID: TW-03	Date Sampled: 08/30/17
Lab Sample ID: JC49968-2	Date Received: 08/31/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	< 5.0	5.0	mg/l	1	09/11/17 10:11	CD	SM2320 B-11
Iron, Ferrous ^b	42.9	5.0	mg/l	25	08/31/17 20:55	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	< 0.11	0.11	mg/l	1	09/05/17 12:55	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/05/17 12:55	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/31/17 21:46	AT	SM4500NO2 B-11
Sulfate	370	80	mg/l	40	09/08/17 21:43	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.2.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-04	Date Sampled:	08/30/17
Lab Sample ID:	JC49968-3	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22571.D	1	09/05/17 17:57	DS	09/03/17 17:00	OP5809	G7Z929
Run #2 ^a	2Z64101.D	1	09/07/17 13:17	DS	09/06/17 20:30	OP5880	G2Z2417

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	5.70	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	18% ^b	17% ^b	22-140%
16416-32-3	Tetracosane-d50	28%	25%	13-139%
438-22-2	5a-Androstane	21%	18%	10-135%

(a) Confirmation run for surrogate recoveries.

(b) Outside control limits due to matrix interference. Confirmed by re-extraction.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-04	Date Sampled:	08/30/17
Lab Sample ID:	JC49968-3	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	< 5.0	5.0	mg/l	1	09/11/17 10:11	CD	SM2320 B-11

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-05						
Lab Sample ID:	JC49968-4					Date Sampled:	08/30/17
Matrix:	AQ - Ground Water					Date Received:	08/31/17
Method:	RSK-175					Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA						

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60945.D	1	09/05/17 12:03	LM	n/a	n/a	GAA1274
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	32.8	0.11	0.036	ug/l	

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-05								
Lab Sample ID:	JC49968-4							Date Sampled:	08/30/17
Matrix:	AQ - Ground Water							Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C							Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA								

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22572.D	1	09/05/17 18:31	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	24.0	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	81%		22-140%
16416-32-3	Tetracosane-d50	52%		13-139%
438-22-2	5a-Androstane	61%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-05	Date Sampled:	08/30/17
Lab Sample ID:	JC49968-4	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese ^a	31600	750	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²
Sulfur ^a	263000	2500	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42749

(2) Prep QC Batch: MP2757

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID: TW-05	Date Sampled: 08/30/17
Lab Sample ID: JC49968-4	Date Received: 08/31/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	< 5.0	5.0	mg/l	1	09/11/17 10:11	CD	SM2320 B-11
Iron, Ferrous ^b	122	10	mg/l	50	08/31/17 20:55	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	< 0.11	0.11	mg/l	1	09/05/17 12:56	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/05/17 12:56	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/31/17 21:46	AT	SM4500NO2 B-11
Sulfate	943	200	mg/l	100	09/08/17 22:04	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.2.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-06			
Lab Sample ID:	JC49968-5		Date Sampled:	08/30/17
Matrix:	AQ - Ground Water		Date Received:	08/31/17
Method:	RSK-175		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AA60946.D	1	09/05/17 12:17	LM	n/a	n/a	GAA1274
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	39.4	0.11	0.036	ug/l	

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-06		
Lab Sample ID:	JC49968-5	Date Sampled:	08/30/17
Matrix:	AQ - Ground Water	Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22573.D	1	09/05/17 19:06	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	9.54	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	62%		22-140%		
16416-32-3	Tetracosane-d50	55%		13-139%		
438-22-2	5a-Androstane	48%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-06		
Lab Sample ID:	JC49968-5	Date Sampled:	08/30/17
Matrix:	AQ - Ground Water	Date Received:	08/31/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Manganese ^a	6680	75	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²
Sulfur ^a	226000	250	ug/l	1	09/07/17	09/08/17 AB	SW846 6010C ¹	SW846 3010A ²

(1) Instrument QC Batch: MA42749

(2) Prep QC Batch: MP2757

(a) Elevated sample detection limit due to difficult sample matrix.

RL = Reporting Limit

Report of Analysis

Client Sample ID: TW-06	Date Sampled: 08/30/17
Lab Sample ID: JC49968-5	Date Received: 08/31/17
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO ₃ ^a	< 5.0	5.0	mg/l	1	09/11/17 10:11	CD	SM2320 B-11
Iron, Ferrous ^b	247	10	mg/l	50	08/31/17 20:55	AT	SM3500FE B-11
Nitrogen, Nitrate ^c	< 0.11	0.11	mg/l	1	09/05/17 12:57	BM	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	09/05/17 12:57	BM	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	08/31/17 21:46	AT	SM4500NO2 B-11
Sulfate	1530	200	mg/l	100	09/08/17 22:25	YR	EPA 300/SW846 9056A
Sulfide	< 0.20	0.20	mg/l	1	09/05/17 16:30	ST	SM4500S2- C-11,F-11

(a) Sample was titrated to a final pH of 4.2.

(b) Field analysis required. Received out of hold time and analyzed by request.

(c) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-07		
Lab Sample ID:	JC49968-6	Date Sampled:	08/30/17
Matrix:	AQ - Ground Water	Date Received:	08/31/17
Method:	SW846 8015C SW846 3510C	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7Z22574.D	1	09/05/17 19:40	DS	09/03/17 17:00	OP5809	G7Z929
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	16.3	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	38%		22-140%		
16416-32-3	Tetracosane-d50	35%		13-139%		
438-22-2	5a-Androstane	31%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TW-07	Date Sampled:	08/30/17
Lab Sample ID:	JC49968-6	Date Received:	08/31/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Alkalinity, Total as CaCO3 ^a	< 5.0	5.0	mg/l	1	09/11/17 10:55	CD	SM2320 B-11

(a) Sample was titrated to a final pH of 4.2.

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC49968
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

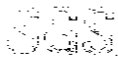
The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
Sulfur	7704-34-9	SW846 6010C	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

4.1
4



ACCUTEST

CHAIN OF CUSTODY

SGS Analytical Services - Dayton
2355 South 13th, Dayton, OH 45424
TEL: (937) 294-0000 FAX: (937) 294-0001
www.sgsusa.com

PAGE 1 OF 1

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes	
Company Name Groundwater & Environmental Services, Inc.		Project Name NRG PRGS					
Street Address 1350 Blair Drive, Suite A		Site # 1400 North Royal St					
City, State, Zip Odenton, MD 21113		Billing Information / Client Name / Report to Alexandria, VA					
Project Contact Ashley Bell		Email Abell@gesonline.com					
Phone # 800-220-3526 x 3704		Fax # 0402919 - 51 - 206					
Project Manager Ashley Bell		Send to ges-invoices@gesonline.com					
Field ID - Point of Collection Tw-02		Date 8/3/17		Time 1008		Lab Use Only	
Field ID - Point of Collection Tw-03		Date 8/3/17		Time 1019		Lab Use Only	
Field ID - Point of Collection Tw-04		Date 8/3/17		Time 1235		Lab Use Only	
Field ID - Point of Collection Tw-05		Date 8/3/17		Time 1139		Lab Use Only	
Field ID - Point of Collection Tw-06		Date 8/3/17		Time 1117		Lab Use Only	
Field ID - Point of Collection Tw-07		Date 8/3/17		Time 1255		Lab Use Only	
Initial Assessment		Label Verification					
Data Deliverable Information		Comments / Special Instructions					
Approved By (SGS Account Manager) [Signature]		ECESD Name NRG PRGS Lab report # 225504ECESD.rpt					
Commercial (A) (Level 1) Commercial (B) (Level 2) Full Test (Level 3+) No Reduct Commercial (C) No Data of Known Quality Practices Reporting Commercial (A) + Results Only Commercial (B) + Results + QC Summary No Reduced Results + QC Summary + Data Review		ECESD Category A ECESD Category B State Forms ECESD Format Other					
Sample Custody must be documented below each time samples change possession, including courier delivery.		Sample inventory is verified upon receipt in the Laboratory.					
Received By [Signature]		Received By [Signature]					
Date 8/3/17		Date 8/3/17					
Time 11:00		Time 11:00					
Quantity 24300mL 14CL		Quantity 38LIP 4.10 IP					

JC49968: Chain of Custody

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SGS Accutest Sample Receipt Summary

Job Number: JC49968

Client: _____

Project: _____

Date / Time Received: 8/31/2017 5:15:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.8); Cooler 2: (4.1);

Cooler Temps (Corrected) °C: Cooler 1: (3.0); Cooler 2: (3.3);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 2 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC49968: Chain of Custody

Page 2 of 2



ATTACHMENT C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION – SYSTEM SAMPLING

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC50356X

Sampling Date: 09/05/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: **22**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC50356X

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code Type	Client	
	Date	Time By	Received	Sample ID	
JC50356-1X	09/05/17	13:00 JP	09/07/17	AQ	Effluent
					EFFLUENT



Subcontract Lab Data

Report of Analysis



FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-17-00055
DoD	2726.01
Florida (Primary NELAP)	E87634
ISO 17025/IEC	2726.01
Louisiana	4115
Maine	2016028
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	1179213
Mississippi	Reciprocity
New Hampshire	208317
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Virginia	8914
Washington	C913
West Virginia	293

Rev. 21-Jun-2017

METHOD 1613B

PCDD/F ONGOING PRECISION AND RECOVERY (OPR)

FORM 8A

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_09062018_12SEP2017

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 171004C02 Analysis Date: 04-OCT-2017 16:30:52

Lab ID: OPR1_15181_DF

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	10	9.27	6.7 - 15.8	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 05 Oct 2017 10:24 Analyst: TF

METHOD 1613B

Lab Name:
Initial Calibration:
Instrument ID:
VER Data Filename:
Lab ID:

SGS North America
ICAL: HRMS3_DF_09062018_12SEP2017
HRMS3
171004C02
OPR1_15181_DF

ZB-5ms
04-OCT-2017 16:30:52

FORM 8B

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
13C-2,3,7,8-TCDD	100	79.9	20 - 175	Y

CLEANUP STANDARD				
37Cl-2,3,7,8-TCDD	40	31.4	12.4 - 76.4	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 05 Oct 2017 10:24 Analyst: TF



Project Manager:	<i>Tamara Morgan</i>
Receipt Date & Time:	03-Oct-17 at 09:38
AP Project name:	<i>B1329</i>
Requested TAT:	<i>5 days</i>
Projected due date:	6-Oct-17
Matrix:	<i>Aqueous</i>
Phone#:	910-794-1613
Email Address:	<i>Tamara.Morgan@so</i>

Company Contact:	<i>Diane Komar</i>
Company:	SGS Accutest
Project Name & Site:	<i>JC50356X</i>
Project PO#:	<i>JC50356X</i>
QAAP/Contract #:	N/A
Requested Analysis:	<i>Method 1613B 2378 TCDD only</i>
Phone#:	732-329-0200
Email Address:	<i>diane.komar@sgs.com</i>

[illegible]

QC'ed by: AK 3 Oct 17

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via:

http://www.sgs.com/terms_and_conditions.htm

SGS North America



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

JC50356X: Chain of Custody

Page 1 of 5

SGS Accutest Sample Receipt Summary

Job Number: JC50356

Client: _____

Project: _____

Date / Time Received: 9/7/2017 5:25:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.3);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC50356X: Chain of Custody

Page 2 of 5

SGS Accutest Sample Receipt Summary

Job Number: JC50356

Client: GES

Project: NRG PRGS

Date / Time Received: 9/7/2017

Delivery Method: Accutest Courier

Airbill #s:

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | | |
| 3. Cooler media: | | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

1) -1: Rec'd 1 x O&G bottle with blank label, set up by process of elimination.

SM089-02
Rev. Date 12/1/16

JC50356X: Chain of Custody

Page 3 of 5

Responded to by: CSR: N/A

Response Date: Response Date: 9/8/2017

Response:

Response: Proceed with analysis

3.1
3

Job Change Order: JC50356

Requested Date: 9/29/2017 Received Date: 9/7/2017
Account Name: Groundwater & Environmental Se Due Date: 9/21/2017
Project Description: NRG PRGS, 1400 North Royal Street, Alexandria, Deliverable: COMMA
CSR: dianek TAT (Days): 1

Sample #: JC50356-1 Change: Log in: Ag, As, Cd, Cr, Cu, Hg, Mo, Ni, Pb, Zn, METDIG (EPA)
Dept:

TAT: 1

EFFLUENT

Above Changes Per: Ashely Bell

Date/Time: 9/29/2017 11:22:20 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG # 0404

SGS Accutest Job Number: JC52202

Sampling Date: 09/29/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: **16**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.



Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC52202

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG # 0404

Sample Number	Collected		Matrix Code	Type	Client	
	Date	Time By	Received		Sample ID	
JC52202-1	09/29/17	11:40 JP	09/30/17	AQ	Effluent	EFFLUENT

Summary of Hits

Job Number: JC52202
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 09/29/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Analyte						

JC52202-1 EFFLUENT

Tetrachloroethene ^a	1.6	1.0	0.82	ug/l	EPA 624
--------------------------------	-----	-----	------	------	---------

(a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/29/17
Lab Sample ID:	JC52202-1	Date Received:	09/30/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 624		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	T226922.D	1	10/02/17 18:13	PR	n/a	n/a	VT9318
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	6.2	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.63	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	ND	1.0	0.20	ug/l	
74-87-3	Chloromethane ^b	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.32	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride ^b	ND	1.0	0.55	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	1.6	1.0	0.82	ug/l	
108-88-3	Toluene	ND	1.0	0.24	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/29/17
Lab Sample ID:	JC52202-1	Date Received:	09/30/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 624		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane ^b	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride ^b	ND	1.0	0.29	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	105%		76-122%
2037-26-5	Toluene-D8 (SUR)	97%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99%		80-120%
1868-53-7	Dibromofluoromethane (S)	101%		80-120%

- (a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.
- (b) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/29/17
Lab Sample ID:	JC52202-1	Date Received:	09/30/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 625 EPA 625		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M139755.D	1	10/03/17 00:26	VP	10/01/17 09:00	OP6533	EM5925
Run #2							

Run #	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol ^a	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine ^a	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/29/17
Lab Sample ID:	JC52202-1	Date Received:	09/30/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 625 EPA 625		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	29%		10-110%
4165-62-2	Phenol-d5	20%		10-110%
118-79-6	2,4,6-Tribromophenol	91%		35-147%
4165-60-0	Nitrobenzene-d5	75%		32-132%
321-60-8	2-Fluorobiphenyl	75%		40-117%
1718-51-0	Terphenyl-d14	76%		33-126%

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/29/17
Lab Sample ID:	JC52202-1	Date Received:	09/30/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 608 EPA 608		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	8G9551.D	1	10/03/17 01:55	KD	10/01/17 09:00	OP6557	G8G285
Run #2	XX216930.D	1	10/02/17 12:24	EAL	10/01/17 09:00	OP6556	GXX6137
Run #3 ^a	8G9567.D	1	10/04/17 00:00	CP	10/01/17 09:00	OP6557	G8G286

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2	1000 ml	5.0 ml
Run #3	1000 ml	5.0 ml

Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0030	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0030	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0028	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0023	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0014	ug/l	
12789-03-6	Chlordane	ND	0.10	0.057	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0018	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0019	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0031	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0025	ug/l	
72-20-8	Endrin	ND	0.010	0.0025	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0026	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0026	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0025	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0021	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0019	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0033	ug/l	
72-43-5	Methoxychlor	ND	0.010	0.0028	ug/l	
8001-35-2	Toxaphene	ND	0.13	0.092	ug/l	
12674-11-2	Aroclor 1016	ND ^b	0.25	0.17	ug/l	
11104-28-2	Aroclor 1221	ND ^b	0.25	0.15	ug/l	
11141-16-5	Aroclor 1232	ND ^b	0.25	0.10	ug/l	
53469-21-9	Aroclor 1242	ND ^b	0.25	0.14	ug/l	
12672-29-6	Aroclor 1248	ND ^b	0.25	0.13	ug/l	
11097-69-1	Aroclor 1254	ND ^b	0.25	0.17	ug/l	
11096-82-5	Aroclor 1260	ND ^b	0.25	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	128%	61%	128%	10-156%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/29/17
Lab Sample ID:	JC52202-1	Date Received:	09/30/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 608 EPA 608		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Pesticide PPL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	64%	42%	66%	10-156%
2051-24-3	Decachlorobiphenyl	60%	41%	58%	10-143%
2051-24-3	Decachlorobiphenyl	65%	38%	63%	10-143%

(a) Confirmation run.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/29/17
Lab Sample ID:	JC52202-1	Date Received:	09/30/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	10/03/17 09:40	BM	EPA 335.4/LACHAT

RL = Reporting Limit



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC52202
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
1,2-Dichlorobenzene	95-50-1	EPA 625	AQ	Accutest is not certified for this parameter. ^a
1,3-Dichlorobenzene	541-73-1	EPA 625	AQ	Accutest is not certified for this parameter. ^a
1,4-Dichlorobenzene	106-46-7	EPA 625	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

SGS Accutest - Dayton
2255 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499/1450
www.sgs-test.com

[illegible]

JC52202: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC52202

Client: _____

Project: _____

Date / Time Received: 9/30/2017 9:50:00 AM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.6);

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | IR Gun | |
| 3. Cooler media: | Ice (Bag) | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC52202: Chain of Custody

Page 2 of 2

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC50356

Sampling Date: 09/05/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashley Bell

Total number of pages in report: 17



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS Accutest.
Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC50356

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
JC50356-1	09/05/17	13:00 JP	09/07/17	AQ	Effluent	EFFLUENT
JC50356-1R	09/05/17	13:00 JP	09/07/17	AQ	Effluent	EFFLUENT
JC50356-2	09/05/17	13:15 JP	09/07/17	AQ	Ground Water	POST OWS
JC50356-3	09/05/17	13:30 JP	09/07/17	AQ	Influent	P&T INFLUENT

Summary of Hits

Job Number: JC50356
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 09/05/17

Lab Sample ID	Client Sample ID	Result/ Analyte Qual	RL	MDL	Units	Method
JC50356-1	EFFLUENT					
	TPH-DRO (C10-C28)	0.814	0.083	0.083	mg/l	SW846 8015C
JC50356-1R	EFFLUENT					
	Copper	15.5	10		ug/l	EPA 200.7
	Nickel	33.4	10		ug/l	EPA 200.7
	Zinc	528	20		ug/l	EPA 200.7
JC50356-2	POST OWS					
	TPH-DRO (C10-C28)	0.969	0.083	0.083	mg/l	SW846 8015C
JC50356-3	P&T INFLUENT					
	TPH-DRO (C10-C28)	1.59	0.083	0.083	mg/l	SW846 8015C



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFFLUENT	
Lab Sample ID:	JC50356-1	Date Sampled: 09/05/17
Matrix:	AQ - Effluent	Date Received: 09/07/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64185.D	1	09/11/17 02:54	TL	09/09/17 12:00	OP5943	G2Z2419
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.814	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	76%		22-140%		
16416-32-3	Tetracosane-d50	91%		13-139%		
438-22-2	5a-Androstane	92%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	09/05/17
Lab Sample ID:	JC50356-1	Date Received:	09/07/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 5.1	5.1	mg/l	1	09/14/17 12:25	TT	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID: EFFLUENT**Lab Sample ID:** JC50356-1R**Matrix:** AQ - Effluent**Date Sampled:** 09/05/17**Date Received:** 09/07/17**Percent Solids:** n/a**Project:** NRG PRGS, 1400 North Royal Street, Alexandria, VA**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 3.0	3.0	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Cadmium	< 3.0	3.0	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Chromium	< 10	10	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Copper	15.5	10	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Lead	< 3.0	3.0	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Mercury	< 0.20	0.20	ug/l	1	09/29/17	09/29/17 JPM	EPA 245.1 ¹	EPA 245.1 ³
Molybdenum	< 20	20	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Nickel	33.4	10	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Silver	< 10	10	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴
Zinc	528	20	ug/l	1	09/30/17	10/01/17 ND	EPA 200.7 ²	EPA 200.7 ⁴

(1) Instrument QC Batch: MA42903

(2) Instrument QC Batch: MA42912

(3) Prep QC Batch: MP3212

(4) Prep QC Batch: MP3219

RL = Reporting Limit

Report of Analysis

Client Sample ID:	POST OWS	
Lab Sample ID:	JC50356-2	Date Sampled: 09/05/17
Matrix:	AQ - Ground Water	Date Received: 09/07/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64186.D	1	09/11/17 03:27	TL	09/09/17 12:00	OP5943	G2Z2419
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.969	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	81%		22-140%		
16416-32-3	Tetracosane-d50	97%		13-139%		
438-22-2	5a-Androstane	98%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	POST OWS	Date Sampled:	09/05/17
Lab Sample ID:	JC50356-2	Date Received:	09/07/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 5.1	5.1	mg/l	1	09/14/17 12:25	TT	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	P&T INFLUENT	Date Sampled:	09/05/17
Lab Sample ID:	JC50356-3	Date Received:	09/07/17
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z64187.D	1	09/11/17 04:00	TL	09/09/17 12:00	OP5943	G2Z2419
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	1.59	0.083	0.083	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	80%		22-140%		
16416-32-3	Tetracosane-d50	96%		13-139%		
438-22-2	5a-Androstane	97%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

JC50356: Chain of Custody

Page 1 of 5

SGS Accutest Sample Receipt Summary

Job Number: JC50356

Client: _____

Project: _____

Date / Time Received: 9/7/2017 5:25:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.3);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 1 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC50356: Chain of Custody

Page 2 of 5

SGS Accutest Sample Receipt Summary

Job Number: JC50356

Client: GES

Project: NRG PRGS

Date / Time Received: 9/7/2017

Delivery Method: Accutest Courier

Airbill #s:

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|-------------------------------------|--------------------------|
| 1. Temp criteria achieved: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | | |
| 3. Cooler media: | | |
| 4. No. Coolers: | 1 | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|--------------------------|--------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N

N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

1) -1: Rec'd 1 x O&G bottle with blank label, set up by process of elimination.

SM089-02
Rev. Date 12/1/16

JC50356: Chain of Custody

Page 3 of 5

Response:

Response: Proceed with analysis

4.1
4

Job Change Order: JC50356

Requested Date: 9/29/2017 Received Date: 9/7/2017
Account Name: Groundwater & Environmental Se Due Date: 9/21/2017
Project Description: NRG PRGS, 1400 North Royal Street, Alexandria, Deliverable: COMMA
CSR: dianek TAT (Days): 1

Sample #: JC50356-1 Change: Log in: Ag, As, Cd, Cr, Cu, Hg, Mo, Ni, Pb, Zn, METDIG (EPA)
Dept:

TAT: 1

EFFLUENT

Above Changes Per: Ashely Bell

Date/Time: 9/29/2017 11:22:20 AM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC48731X

Sampling Date: 08/09/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashely bell

Total number of pages in report: **19**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC48731X

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code	Type	Client Sample ID
	Date	Time By			
JC48731-1X	08/09/17	10:30 JP	08/10/17	AQ Effluent	EFFLUENT



Subcontract Lab Data

Report of Analysis



FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-17-00055
DoD	2726.01
Florida (Primary NELAP)	E87634
ISO 17025/IEC	2726.01
Louisiana	4115
Maine	2016028
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	1179213
Mississippi	Reciprocity
New Hampshire	208317
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Virginia	8914
Washington	C913
West Virginia	293

Rev. 21-Jun-2017

METHOD 1613B

PCDD/F ONGOING PRECISION AND RECOVERY (OPR)

FORM 8A

Lab Name: SGS North America

Initial Calibration: ICAL: MM3_DF_12052016_30DEC2016

Instrument ID: MM3 GC Column ID: ZB-5ms

VER Data Filename: 170816R02 Analysis Date: 16-AUG-2017 09:36:56

Lab ID: OPR1_15061_DF

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	10	9.57	6.7 - 15.8	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 24 Aug 2017 09:38 Analyst: pw

METHOD 1613B

Lab Name:
Initial Calibration:
Instrument ID:
VER Data Filename:
Lab ID:

SGS North America
ICAL: MM3_DF_12052016_30DEC2016
MM3
170816R02
OPR1_15061_DF

GC Column ID:
Analysis Date:

ZB-5ms
16-AUG-2017 09:36:56

PCDD/F ONGOING PRECISION AND RECOVERY (OPR)

FORM 8B

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
13C-2,3,7,8-TCDD	100	82.2	20 - 175	Y

CLEANUP STANDARD

37Cl-2,3,7,8-TCDD	40	35	12.4 - 76.4	Y
-------------------	----	----	-------------	---

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 24 Aug 2017 09:38 Analyst: pw



Project Manager: Tamara Morgan
Receipt Date & Time: 12-Aug-17 at 09:35
MAP Project name: B1156
Requested TAT: 14 days
Projected due date: 28-Aug-17
Matrix: Aqueous
Phone#: 910-794-1613
Email Address: Tamara.Morgan@sas.com

Company Contact:	<i>Matt Cordova</i>
Company:	<i>Accutest</i>
Project Name & Site:	<i>JC4873 IX</i>
Project PO#:	<i>JC4873 IX</i>
QA AP/Contract #:	<i>N/A</i>
Requested Analysis:	<i>Method 1613B TCDD only</i>
Phone#:	<i>732-329-0200</i>
Email Address:	<i>matthew.cordova@sgs.com</i>

[illegible]

QC'ed by: AK 14 Aug 17

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via:

http://www.sgs.com/terms_and_conditions.htm

SGS North America

[illegible]



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

JC48731X: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC48731

Client: _____

Project: _____

Date / Time Received: 8/10/2017 5:15:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6); Cooler 2: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8); Cooler 2: (3.2);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 2 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N N/A

- | | |
|--|--|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Comments

SM089-02
Rev. Date 12/1/16

JC48731X: Chain of Custody

Page 2 of 2

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC48731

Sampling Date: 08/09/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashely bell

Total number of pages in report: **21**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC48731

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code	Type	Client	
	Date	Time By	Received		Sample ID	
JC48731-1	08/09/17	10:30 JP	08/10/17	AQ	Effluent	EFFLUENT
JC48731-2	08/09/17	11:00 JP	08/10/17	AQ	Ground Water	POST OWS
JC48731-3	08/09/17	11:15 JP	08/10/17	AQ	Influent	P&T INFLUENT

Summary of Hits

Page 1 of 1

Job Number: JC48731

Account: Groundwater & Environmental Services

Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Collected: 08/09/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

JC48731-1 EFFLUENT

Chloroform ^a	0.22 J	1.0	0.20	ug/l	EPA 624
Tetrachloroethene ^a	1.1	1.0	0.82	ug/l	EPA 624
bis(2-Ethylhexyl)phthalate	5.6	2.0	1.7	ug/l	EPA 625
Endosulfan sulfate ^b	0.011	0.010	0.0027	ug/l	EPA 608
TPH-DRO (C10-C28)	0.278	0.083	0.064	mg/l	SW846 8015C
Zinc	148	20		ug/l	SW846 6010C

JC48731-2 POST OWS

TPH-DRO (C10-C28)	0.863	0.083	0.064	mg/l	SW846 8015C
-------------------	-------	-------	-------	------	-------------

JC48731-3 P&T INFLUENT

TPH-DRO (C10-C28)	0.200	0.083	0.064	mg/l	SW846 8015C
-------------------	-------	-------	-------	------	-------------

(a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.

(b) More than 40 % RPD for detected concentrations between the two GC columns.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-1	Date Received:	08/10/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 624		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	T226169.D	1	08/12/17 20:33	PR	n/a	n/a	VT9286
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	6.2	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.63	ug/l	
110-75-8	2-Chloroethyl vinyl ether ^b	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	0.22	1.0	0.20	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.32	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.55	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	1.1	1.0	0.82	ug/l	
108-88-3	Toluene	ND	1.0	0.24	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-1	Date Received:	08/10/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 624		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	ND	1.0	0.24	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	114%		76-122%
2037-26-5	Toluene-D8 (SUR)	100%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	99%		80-120%
1868-53-7	Dibromofluoromethane (S)	98%		80-120%

- (a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.
- (b) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-1	Date Received:	08/10/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 625 EPA 625		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5P42004.D	1	08/23/17 13:11	SB	08/12/17 15:00	OP5293	E5P2051
Run #2							

	Initial Volume	Final Volume
Run #1	1000 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.0	0.82	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.0	0.89	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.0	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.0	2.4	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.0	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.0	1.4	ug/l	
108-95-2	Phenol	ND	2.0	0.39	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.92	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.19	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.21	ug/l	
92-87-5	Benzidine	ND	10	0.90	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.20	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.21	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.34	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.40	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.0	0.46	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.0	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.0	0.34	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.0	0.28	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.0	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.0	0.40	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.37	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-1	Date Received:	08/10/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 625 EPA 625		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.17	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.55	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.48	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.0	0.51	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.33	ug/l	
84-74-2	Di-n-butyl phthalate	ND	2.0	0.50	ug/l	
117-84-0	Di-n-octyl phthalate	ND	2.0	0.23	ug/l	
84-66-2	Diethyl phthalate	ND	2.0	0.26	ug/l	
131-11-3	Dimethyl phthalate	ND	2.0	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	5.6	2.0	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.17	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.49	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.8	ug/l	
67-72-1	Hexachloroethane	ND	2.0	0.39	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.33	ug/l	
78-59-1	Isophorone	ND	2.0	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.23	ug/l	
98-95-3	Nitrobenzene	ND	2.0	0.64	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.0	0.82	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.0	0.48	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.0	0.22	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.25	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	44%		10-110%
4165-62-2	Phenol-d5	32%		10-110%
118-79-6	2,4,6-Tribromophenol	67%		35-147%
4165-60-0	Nitrobenzene-d5	83%		32-132%
321-60-8	2-Fluorobiphenyl	72%		40-117%
1718-51-0	Terphenyl-d14	61%		33-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-1	Date Received:	08/10/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 608 EPA 608		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1G138294.D	1	08/21/17 02:13	CP	08/14/17 20:00	OP5320	G1G4400
Run #2	XX214446.D	1	08/17/17 08:23	JR	08/14/17 20:00	OP5319	GXX6096
Run #3 ^a	1G138303.D	1	08/21/17 06:20	CP	08/14/17 20:00	OP5320	G1G4400

	Initial Volume	Final Volume
Run #1	970 ml	5.0 ml
Run #2	970 ml	5.0 ml
Run #3	970 ml	5.0 ml

Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0031	ug/l	
319-84-6	alpha-BHC	ND	0.010	0.0031	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0029	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0024	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0014	ug/l	
12789-03-6	Chlordane	ND	0.10	0.058	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0019	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0020	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0032	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0026	ug/l	
72-20-8	Endrin	ND	0.010	0.0026	ug/l	
1031-07-8	Endosulfan sulfate ^b	0.011	0.010	0.0027	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0026	ug/l	
959-98-8	Endosulfan-I	ND	0.010	0.0026	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0022	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0020	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0034	ug/l	
72-43-5	Methoxychlor	ND	0.010	0.0029	ug/l	
8001-35-2	Toxaphene	ND	0.13	0.095	ug/l	
12674-11-2	Aroclor 1016	ND ^c	0.26	0.18	ug/l	
11104-28-2	Aroclor 1221	ND ^c	0.26	0.15	ug/l	
11141-16-5	Aroclor 1232	ND ^c	0.26	0.10	ug/l	
53469-21-9	Aroclor 1242	ND ^c	0.26	0.14	ug/l	
12672-29-6	Aroclor 1248	ND ^c	0.26	0.13	ug/l	
11097-69-1	Aroclor 1254	ND ^c	0.26	0.18	ug/l	
11096-82-5	Aroclor 1260	ND ^c	0.26	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	113%	91%	111%	10-156%

ND = Not detected

MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-1	Date Received:	08/10/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 608 EPA 608		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Pesticide PPL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	85%	77%	79%	10-156%
2051-24-3	Decachlorobiphenyl	67%	45%	64%	10-143%
2051-24-3	Decachlorobiphenyl	65%	49%	66%	10-143%

(a) Confirmation run.

(b) More than 40 % RPD for detected concentrations between the two GC columns.

(c) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	
Lab Sample ID:	JC48731-1	Date Sampled: 08/09/17
Matrix:	AQ - Effluent	Date Received: 08/10/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z63679.D	1	08/16/17 06:50	HC	08/14/17 08:00	OP5301	G2Z2400
Run #2 ^a	2Z63751.D	1	08/18/17 21:25	HC	08/17/17 20:00	OP5434	G2Z2403

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.278	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%	61%	22-140%
16416-32-3	Tetracosane-d50	69%	62%	13-139%
438-22-2	5a-Androstane	75%	66%	10-135%

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EFFLUENT**Lab Sample ID:** JC48731-1**Matrix:** AQ - Effluent**Date Sampled:** 08/09/17**Date Received:** 08/10/17**Percent Solids:** n/a**Project:** NRG PRGS, 1400 North Royal Street, Alexandria, VA**Total Metals Analysis**

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 3.0	3.0	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Chromium	< 10	10	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Copper	< 10	10	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	08/16/17	08/16/17 JA	SW846 7470A ²	SW846 7470A ⁴
Molybdenum	< 20	20	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Nickel	< 10	10	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Silver	< 10	10	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³
Zinc	148	20	ug/l	1	08/11/17	08/11/17 ND	SW846 6010C ¹	SW846 3010A ³

(1) Instrument QC Batch: MA42588

(2) Instrument QC Batch: MA42607

(3) Prep QC Batch: MP2380

(4) Prep QC Batch: MP2455

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-1	Date Received:	08/10/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	08/16/17 13:05	TG	EPA 335.4/LACHAT
HEM Oil and Grease	< 5.1	5.1	mg/l	1	08/17/17 13:20	KW	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	POST OWS	
Lab Sample ID:	JC48731-2	Date Sampled: 08/09/17
Matrix:	AQ - Ground Water	Date Received: 08/10/17
Method:	SW846 8015C SW846 3510C	Percent Solids: n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA	

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z63680.D	1	08/16/17 07:23	HC	08/14/17 08:00	OP5301	G2Z2400
Run #2 ^a	2Z63752.D	1	08/18/17 21:59	HC	08/17/17 20:00	OP5434	G2Z2403

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.863	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	65%	63%	22-140%
16416-32-3	Tetracosane-d50	66%	61%	13-139%
438-22-2	5a-Androstane	70%	66%	10-135%

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	POST OWS	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-2	Date Received:	08/10/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 5.0	5.0	mg/l	1	08/17/17 13:20	KW	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	P&T INFLUENT	Date Sampled:	08/09/17
Lab Sample ID:	JC48731-3	Date Received:	08/10/17
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z63681.D	1	08/16/17 07:57	HC	08/14/17 08:00	OP5301	G2Z2400
Run #2 ^a	2Z63753.D	1	08/18/17 22:32	HC	08/17/17 20:00	OP5434	G2Z2403

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2	300 ml	1.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.200	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	56%	66%	22-140%
16416-32-3	Tetracosane-d50	58%	66%	13-139%
438-22-2	5a-Androstane	62%	71%	10-135%

(a) Confirmation run.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC48731
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
1,2-Dichlorobenzene	95-50-1	EPA 625	AQ	Accutest is not certified for this parameter. ^a
1,3-Dichlorobenzene	541-73-1	EPA 625	AQ	Accutest is not certified for this parameter. ^a
1,4-Dichlorobenzene	106-46-7	EPA 625	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.



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1988年12月20日
 1989年1月10日
 1989年1月15日
 1989年1月20日

[illegible]

4.2

JC48731: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC48731

Client: _____

Project: _____

Date / Time Received: 8/10/2017 5:15:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6); Cooler 2: (4.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.8); Cooler 2: (3.2);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 2 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N N/A

- | | |
|--|--|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Comments

SM089-02
Rev. Date 12/1/16

JC48731: Chain of Custody

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Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC46755X

Sampling Date: 07/10/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashely bell

Total number of pages in report: **19**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Matt Cordova 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC46755X

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code Type	Client	
	Date	Time By	Received	Sample ID	
JC46755-1X	07/10/17	10:00 JP	07/11/17	AQ	Effluent
					EFFLUENT



Subcontract Lab Data

Report of Analysis



FINAL LAB REPORT

Prepared by

SGS NORTH AMERICA

Prepared for

This report is approved by

PROJECT INFORMATION SUMMARY *(When applicable, see QC Annotations for details)*

Client Project
SGS Project #
Analytical Protocol(s)
No. Samples Submitted
Additional QC Sample(s)
No. Laboratory Method Blanks
No. OPRs / Batch CS3
Date Received
Condition Received
Temperature upon Receipt (°C)
Extraction within Holding Time
Analysis within Holding Time

QC ANNOTATIONS:

1. Please see Appendices attached for data qualifier/attribute and lab identifier descriptions which may be contained in the project.

APPENDIX A: GENERAL DATA QUALIFIERS / DATA ATTRIBUTES

B	The analyte was found in the method blank, at a concentration that was at least 10% of the concentration in the sample.
C	Two or more congeners co-elute. In EDDs, C denotes the lowest IUPAC congener in a co-elution group and additional co-eluters for the group are shown with the number of the lowest IUPAC co-eluter.
E	The reported concentration exceeds the calibration range (upper point of the calibration curve) and is an estimated value.
EMPC	Represents an Estimated Maximum Possible Concentration. EMPCs arise in cases where the signal/noise ratio is not sufficient for peak identification (the determined ion-abundance ratio is outside the allowed theoretical range), or where there is a co-eluting interference.
H/h	If the standard recovery is below the method or SOP specified value "H" is assigned. If the obtained value is less than half the specified value "h" is assigned.
J	Indicates that an analyte has a concentration below the reporting limit (lowest point of the calibration curve) and is an estimated value.
ND	Indicates a non-detect.
NR or R	Indicates a value that is not reportable.
PR	Due to interference, the associated congener is poorly resolved.
QI	Indicates the presence of a quantitative interference.
SI	Denotes "Single Ion Mode" and is utilized for PCBs where the secondary ion trace has a significantly elevated noise level due to background PFK. Responses for such peaks are calculated using an EMPC approach based solely on the primary ion area(s) and may be considered estimates.
U	The analyte was not detected. The estimated detection limit (EDL) may be reported for this analyte.
V	The labeled standard recovery was found to be outside of the method control limits.

APPENDIX B: DRBC/TMDL SPECIFIC DATA QUALIFIERS / DATA ATTRIBUTES

J	The reported result is an estimate. The value is less than the minimum calibration level but greater than the estimated detection limit (EDL).
U	The analyte was not detected in the sample at the estimated detection limit (EDL).
E	The reported concentration is an estimate. The value exceeds the upper calibration range (upper point of the calibration curve).
D	Dilution Data. Result was obtained from the analysis of a dilution.
B	Analyte found in the sample and associated method blank.
C	Co-eluting congener
Cxx	Co-elutes with the indicated congener, data is reported under the lowest IUPAC congener. 'Xx' denotes the IUPAC number with the lowest numerical designated congener.
NR	Analyte is not reportable because of problems in sample preparation or analysis.
V	Labeled standard recovery is not within method control limits.
X	Results from re-injection/repeat/second-column analysis.
EMPC	Estimated maximum possible concentration. Indicates that a peak is identified but did not meet the method specified ion-abundance ratio.

APPENDIX C: LAB IDENTIFIERS

AR	Indicates use of the archived portion of the sample extract.
CU	Indicates a sample that required additional clean-up prior to MS injection/processing.
D	Indicates a dilution of the sample extract. The number that follows the "D" indicates the dilution factor.
DE	Indicates a dilution performed with the addition of ES (extraction standard) solution.
DUP	Designation for a duplicate sample.
MS	Designation for a matrix spike.
MSD	Designation for a matrix spike duplicate.
RJ	Indicates a reinjection of the sample extract.
S	Indicates a sample split. The number that follows the "S" indicates the split factor.

SGS CERTIFICATIONS

Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-17-00055
DoD	2726.01
Florida (Primary NELAP)	E87634
ISO 17025/IEC	2726.01
Louisiana	4115
Maine	2016028
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	1179213
Mississippi	Reciprocity
New Hampshire	208317
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Virginia	8914
Washington	C913
West Virginia	293

Rev. 21-Jun-2017

METHOD 1613B

PCDD/F ONGOING PRECISION AND RECOVERY (OPR)

FORM 8A

Lab Name: SGS North America

Initial Calibration: ICAL: HRMS3_DF_12052016_28DEC2016

Instrument ID: HRMS3 GC Column ID: ZB-5ms

VER Data Filename: 170718C04 Analysis Date: 18-JUL-2017 18:15:35

Lab ID: OPR1_14997_DF

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	10	9.84	6.7 - 15.8	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 20 Jul 2017 09:40 Analyst: TF

METHOD 1613B

Lab Name:
Initial Calibration:
Instrument ID:
VER Data Filename:
Lab ID:

SGS North America
ICAL: HRMS3_DF_12052016_28DEC2016
HRMS3
170718C04
OPR1_14997_DF

ZB-5ms
18-JUL-2017 18:15:35

PCDD/F ONGOING PRECISION AND RECOVERY (OPR)

FORM 8B

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
13C-2,3,7,8-TCDD	100	89.4	20 - 175	Y

CLEANUP STANDARD

37Cl-2,3,7,8-TCDD	40	35.2	12.4 - 76.4	Y
-------------------	----	------	-------------	---

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 20 Jul 2017 09:40 Analyst: TF



Project Manager: Tamara Morgan
Receipt Date & Time: 14-Jul-17 at 10:30
AP Project name: B1076
Requested TAT: 14 days
Projected due date: 28-Jul-17
Matrix: Aqueous
Phone#: 910-794-1613
Email Address: Tamara.Morgan@sas.com

Company Contact:
Company:
Project Name & Site:
Project PO#:
QAAP/Contract #:
Requested Analysis:
Phone#:
Email Address:

Michelle Jenkins
ACCUTEST
JC46755X
JC46755X
N/A
Method 1613B 2378 TCDD only
732-329-0200
michelle.jenkins@sqs.com

[illegible]

Logged in by: Ashley Owens

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via:

http://www.sgs.com/terms_and_conditions.htm

QC'ed by: AK 17 Jul 17

SGS

ACCUTEST

CHAIN OF CUSTODY

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B10760

2

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes	
Company Name: SGS Accutest		Project Name: NRG PRGS, 1400 North Royal Street, Alexandria, VA					
Street Address 2235 Route 130		State				DW - Drinking Water GW - Ground Water WW - Water	
City Dayton		Zip 08810				SW - Surface Water SO - Soil SL - Sludge SED - Sediment OI - Oil LIQ - Other Liquid AIR - Air SOL - Other Solid WP - Wipe FB-Field Blank EB-Equipment Blank RB- Rinse Blank TB-Trip Blank	
Project Contact E-mail michelle.jenkins@sgs.com		Project #					
Phone #		Fax #					
Sampler(s) Name(s) JP		Project Manager					
Field ID / Point of Collection 1X EFFLUENT		Collection Date 7/10/17		Time 10:00:00 AM			
MECH/DI Val #		Sampled by JP		Matrix AQ		LAB USE ONLY 001	
Number of preserved Bottles ENCORE MCOH DI Water NONE H2SO4 HNO3 NaOH		# of bottles 2					
Approved By (SGS Accutest PM): / Date:		Data Deliverable Information		Comments / Special Instructions			
<input type="checkbox"/> Std. 10 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day EMERGENCY <input type="checkbox"/> 2 Day EMERGENCY <input type="checkbox"/> 1 Day EMERGENCY <input checked="" type="checkbox"/> other Due 7/25/2017 Emergency & Rush T/A data available VIA Lablink		<input type="checkbox"/> Commercial "A" (Level 1) <input type="checkbox"/> Commercial "B" (Level 2) <input type="checkbox"/> FULLT1 (Level 3-4) <input type="checkbox"/> NJ Reduced <input type="checkbox"/> Commercial "C" Commercial "A" = Results Only Commercial "B" = Results + QC Summary NJ Reduced = Results + QC Summary + Partial Raw data					
Relinquished by Sampler: 1		Received By: 1		Relinquished By: 2		Received By: 2	
Relinquished by Sampler: 3		Received By: 3		Relinquished By: 4		Received By: 4	
Relinquished by Sampler: 5		Received By: 5		Relinquished By: 5		Received By: 5	



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

[illegible]

JC46755X: Chain of Custody

Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC46755

Client: _____

Project: _____

Date / Time Received: 7/11/2017 6:40:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6); Cooler 2: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.9); Cooler 2: (5.1);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 2 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|--|--|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Comments

SM089-02
Rev. Date 12/1/16

JC46755X: Chain of Custody

Page 2 of 2

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC46546

Sampling Date: 07/06/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashely bell

Total number of pages in report: **11**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Marty Vitanza 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

This report shall not be reproduced, except in its entirety, without the written approval of SGS Accutest.
Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC46546

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code Type	Client Sample ID
	Date	Time By	Received	
JC46546-1	07/06/17	12:15 JP	07/07/17 AIR	TPE VAPOR
JC46546-1R	07/06/17	12:15 JP	07/07/17 AIR	TPE VAPOR

Summary of Hits

Page 1 of 1

Job Number: JC46546

Account: Groundwater & Environmental Services

Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Collected: 07/06/17

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
--------------------------	------------------	-----------------	----	-----	-------	--------

JC46546-1 TPE VAPOR

Benzene ^a		0.38 J	0.80	0.10	ppbv	TO-15
Toluene ^a		0.80	0.80	0.11	ppbv	TO-15
Ethylbenzene ^a		0.41 J	0.80	0.091	ppbv	TO-15
Benzene ^a		1.2 J	2.6	0.32	ug/m3	TO-15
Toluene ^a		3.0	3.0	0.41	ug/m3	TO-15
Ethylbenzene ^a		1.8 J	3.5	0.40	ug/m3	TO-15

JC46546-1R TPE VAPOR

TPH (C1-C4) as Methane		17.5	5.0	0.53	ppmv	EPA TO-3
TPH (C5-C10) as Pentane		7.7	5.0	0.067	ppmv	EPA TO-3
TPH (C1-C4) as Methane		11.5	3.3	0.35	mg/m3	EPA TO-3
TPH (C5-C10) as Pentane		23	15	0.20	mg/m3	EPA TO-3

(a) Sample analyzed by modified Method TO-15 - Tedlar bag sample containers substituted for passivated stainless steel canisters.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TPE VAPOR		
Lab Sample ID:	JC46546-1	Date Sampled:	07/06/17
Matrix:	AIR - Air Summa ID: TBAG	Date Received:	07/07/17
Method:	TO-15	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	5W25253.D	1	07/14/17 02:35	DFT	n/a	n/a	V5W996
Run #2							

	Initial Volume
Run #1	100 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
71-43-2	78.11	Benzene	0.38	0.80	0.10	ppbv	J	1.2	2.6	0.32	ug/m3
108-88-3	92.14	Toluene	0.80	0.80	0.11	ppbv		3.0	3.0	0.41	ug/m3
100-41-4	106.2	Ethylbenzene	0.41	0.80	0.091	ppbv	J	1.8	3.5	0.40	ug/m3
1330-20-7	106.2	Xylenes (total)	ND	0.80	0.14	ppbv		ND	3.5	0.61	ug/m3
	106.2	m,p-Xylene	ND	0.80	0.27	ppbv		ND	3.5	1.2	ug/m3
95-47-6	106.2	o-Xylene	ND	0.80	0.14	ppbv		ND	3.5	0.61	ug/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	113%		65-128%

(a) Sample analyzed by modified Method TO-15 - Tedlar bag sample containers substituted for passivated stainless steel canisters.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TPE VAPOR	Date Sampled:	07/06/17
Lab Sample ID:	JC46546-1R	Date Received:	07/07/17
Matrix:	AIR - Air	Percent Solids:	n/a
Method:	EPA TO-3		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	QT217941.D	1	07/08/17 13:57	LM	n/a	n/a	GQT1775
Run #2							

	Initial Volume
Run #1	0.50 ml
Run #2	

Purgeable Aromatics

CAS No.	MW	Compound	Result	RL	MDL	Units	Q	Result	RL	MDL	Units
	16	TPH (C1-C4) as Methane	17.5	5.0	0.53	ppmv		11.5	3.3	0.35	mg/m3
	72	TPH (C5-C10) as Pentane	7.7	5.0	0.067	ppmv		23	15	0.20	mg/m3

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	93%		59-135%
460-00-4	4-Bromofluorobenzene	89%		59-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes	
Company Name Groundwater & Environmental Services, Inc.		Project Name NRG PRGS					
Address 135C Blair Drive Suite A		City Alexandria, VA		Billing Information (if different from Reporting) Same as above			
State MD		Zip 21113		Phone 800-220-3635 x 3704			
Contact Person Ashley Bell		Email Abell@gesonline.com		Fax 540-220-3635			
Signature <i>Ashley Bell</i>		Printed Name Ashley Bell		Send to: ges-invoices@gesonline.com			
Field ID / Point of Collection TPE Vapor		Sample ID 7-617 1215JP		Analysis Code AP 2 X X		Matrix Code X	
Turnaround Time / Extraction Day		Data Derivations Information		Comments / Special Instructions			
<input checked="" type="checkbox"/> Std. 12 Business Days <input type="checkbox"/> 5 Day RUSH <input type="checkbox"/> 3 Day, RUSH <input type="checkbox"/> 2 Day, RUSH <input type="checkbox"/> 1 Day, RUSH <input type="checkbox"/> Other:		Approved By: SES Administrator Date: _____ Comments at Lab Level 1: <input type="checkbox"/> Commercial "B" Level 2: <input type="checkbox"/> FULL T - Level 2+1: <input type="checkbox"/> NJ Reduced: <input type="checkbox"/> Commercial "C": <input type="checkbox"/> NJ Data St/Knowl Query Processed/Reporting Comments at Lab Level 2: <input type="checkbox"/> Full Scope/Level 20 Summary/Report/Release <input type="checkbox"/> VASPP Category A: <input type="checkbox"/> VASPP Category B: <input type="checkbox"/> State Permit: <input checked="" type="checkbox"/> ISO Format: YES/NO: <input type="checkbox"/> Other:		ECSDO Name: NRG PRGS Lab report # 25901, ECSDO # 2 Email address(es): gdates@gesonline.com & ges@gesonline.com Send results to: nrgprgs@gesonline.com & nrgprgs@gesonline.com			
Emergency & Rapid Response Available? <input type="checkbox"/>		Sample Custody must be documented below each time samples change possession, including courier delivery.		Samples in container(s) YES/NO upon receipt at lab: YES/NO			
Shipping Company: UPS Tracking #: 7-617 073 Signature: <i>[Signature]</i> Date: 7-17 Time: 17:10		Receipt By: <i>[Signature]</i> Date: 7-17 Time: 17:10		Receipt By: <i>[Signature]</i> Date: 7-17 Time: 17:10		Receipt By: <i>[Signature]</i> Date: 7-17 Time: 17:10	

JC46546: Chain of Custody

Page 1 of 3

SGS Accutest Sample Receipt Summary

Job Number: JC46546

Client: _____

Project: _____

Date / Time Received: 7/7/2017 5:10:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C:

Cooler Temps (Corrected) °C:

Cooler Security

Y or N

Y or N

- | | | | | | |
|---------------------------|-------------------------------------|--------------------------|-----------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. COC Present: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Smpl Dates/Time OK | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | | |
|------------------------------|--------------------------|--------------------------|
| 1. Temp criteria achieved: | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Cooler temp verification: | N/A | |
| 3. Cooler media: | N/A | |
| 4. No. Coolers: | N/A | |

Quality Control Preservation

Y or N

N/A

- | | | | |
|---------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Trip Blank present / cooler: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Trip Blank listed on COC: | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Samples preserved properly: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. VOCs headspace free: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Sample Integrity - Documentation

Y or N

- | | | |
|--|-------------------------------------|--------------------------|
| 1. Sample labels present on bottles: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Container labeling complete: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Sample container label / COC agree: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Sample Integrity - Condition

Y or N

- | | | |
|----------------------------------|-------------------------------------|--------------------------|
| 1. Sample recvd within HT: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. All containers accounted for: | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Condition of sample: | Intact | |

Sample Integrity - Instructions

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Analysis requested is clear: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Compositing instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC46546: Chain of Custody

Page 2 of 3

Job Change Order: JC46546

Requested Date: 7/23/2017 Received Date: 7/7/2017
Account Name: Groundwater & Environmental Se Due Date: 7/21/2017
Project Description: NRG PRGS, 1400 North Royal Street, Alexandria, Deliverable: COMMA
CSR: MartyV TAT (Days): 1

Sample #: JC46546-1 Change:
Relog for VTO3TPHF (Originally requested on th echain but not logged in
) Revise original report and reissue.

Dept:
TAT: 1

TPE VAPOR

Above Changes Per: Scott Andresini

Date/Time: 7/23/2017 1:22:09 PM

To Client: This Change Order is confirmation of the revisions, previously discussed with the SGS Accutest Client Service Representative.

Page 1 of 1

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG 0404

SGS Accutest Job Number: JC46755

Sampling Date: 07/10/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; MDLabs@GesOnline.com;
GES@EquisOnline.com
ATTN: Ashely bell

Total number of pages in report: **22**



Test results contained within this data package meet the requirements
of the National Environmental Laboratory Accreditation Program
and/or state specific certification programs as applicable.

Nancy F. Cole

Nancy Cole
Laboratory Director

Client Service contact: Marty Vitanza 732-329-0200

Certifications: NJ(12129), NY(10983), CA, CT, FL, IL, IN, KS, KY, LA, MA, MD, ME, MN, NC,
OH VAP (CL0056), AK (UST-103), AZ (AZ0786), PA, RI, SC, TX, UT, VA, WV, DoD ELAP (L-A-B L2248)

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Test results relate only to samples analyzed.

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Sample Summary

Groundwater & Environmental Services

Job No: JC46755

NRG PRGS, 1400 North Royal Street, Alexandria, VA
Project No: 0402919-53-220, ORG 0404

Sample Number	Collected		Matrix Code Type	Received	Client	
	Date	Time By			Sample ID	
JC46755-1	07/10/17	10:00 JP	07/11/17	AQ	Effluent	EFFLUENT
JC46755-2	07/10/17	10:15 JP	07/11/17	AQ	Ground Water	POST OWS
JC46755-3	07/10/17	10:25 JP	07/11/17	AQ	Influent	P&T INFLUENT
JC46755-4	07/10/17	10:30 JP	07/11/17	AQ	Influent	TPE INFLUENT

Summary of Hits

Page 1 of 1

Job Number: JC46755

Account: Groundwater & Environmental Services

Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Collected: 07/10/17

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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JC46755-1 EFFLUENT

Chloroform ^a	0.25 J	1.0	0.20	ug/l	EPA 624
Tetrachloroethene ^a	1.4	1.0	0.82	ug/l	EPA 624
Trichloroethene ^a	0.40 J	1.0	0.24	ug/l	EPA 624
Di-n-butyl phthalate	1.8 J	2.1	0.51	ug/l	EPA 625
alpha-BHC	0.049	0.010	0.0030	ug/l	EPA 608
Endosulfan-I ^b	0.017	0.010	0.0025	ug/l	EPA 608
TPH-DRO (C10-C28)	3.87	0.083	0.064	mg/l	SW846 8015C
Copper	163	10		ug/l	SW846 6010C
Nickel	89.5	10		ug/l	SW846 6010C
Zinc	537	20		ug/l	SW846 6010C

JC46755-2 POST OWS

TPH-DRO (C10-C28)	5.38	0.083	0.064	mg/l	SW846 8015C
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JC46755-3 P&T INFLUENT

No hits reported in this sample.

JC46755-4 TPE INFLUENT

TPH-DRO (C10-C28)	17.4	0.083	0.064	mg/l	SW846 8015C
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(a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.

(b) More than 40 % RPD for detected concentrations between the two GC columns.



Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 624		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	N264312.D	1	07/13/17 18:27	PR	n/a	n/a	VN11140
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
107-02-8	Acrolein	ND	10	6.2	ug/l	
107-13-1	Acrylonitrile	ND	10	1.9	ug/l	
71-43-2	Benzene	ND	1.0	0.23	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.19	ug/l	
75-25-2	Bromoform	ND	1.0	0.44	ug/l	
74-83-9	Bromomethane	ND	1.0	0.74	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	0.31	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.23	ug/l	
75-00-3	Chloroethane	ND	1.0	0.63	ug/l	
110-75-8	2-Chloroethyl vinyl ether	ND	5.0	1.5	ug/l	
67-66-3	Chloroform	0.25	1.0	0.20	ug/l	J
74-87-3	Chloromethane	ND	1.0	0.29	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.30	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.21	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.24	ug/l	
106-46-7	1,4-Dichlorobenzene ^b	ND	1.0	0.24	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.67	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.32	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.32	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	0.57	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	0.54	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	0.40	ug/l	
78-87-5	1,2-Dichloropropane ^b	ND	1.0	0.36	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.36	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.59	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.21	ug/l	
75-09-2	Methylene chloride	ND	1.0	0.55	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.24	ug/l	
127-18-4	Tetrachloroethene	1.4	1.0	0.82	ug/l	
108-88-3	Toluene	ND	1.0	0.24	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.36	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.35	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 624		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

VOA PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-01-6	Trichloroethene	0.40	1.0	0.24	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.89	ug/l	
75-01-4	Vinyl chloride	ND	1.0	0.29	ug/l	
1330-20-7	Xylenes (total)	ND	1.0	0.20	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4 (SUR)	95%		76-122%
2037-26-5	Toluene-D8 (SUR)	101%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	98%		80-120%
1868-53-7	Dibromofluoromethane (S)	103%		80-120%

- (a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.
- (b) This compound in BS is outside in house QC limits bias high.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 625 EPA 625		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P115503.D	1	07/18/17 19:11	RL	07/17/17 10:00	OP4505	EP5155
Run #2							

	Initial Volume	Final Volume
Run #1	975 ml	1.0 ml
Run #2		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	0.84	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	5.1	0.91	ug/l	
120-83-2	2,4-Dichlorophenol	ND	2.1	1.3	ug/l	
105-67-9	2,4-Dimethylphenol	ND	5.1	2.5	ug/l	
51-28-5	2,4-Dinitrophenol	ND	10	1.6	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	5.1	1.3	ug/l	
88-75-5	2-Nitrophenol	ND	5.1	0.98	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol	ND	5.1	1.4	ug/l	
108-95-2	Phenol	ND	2.1	0.40	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	5.1	0.95	ug/l	
83-32-9	Acenaphthene	ND	1.0	0.20	ug/l	
208-96-8	Acenaphthylene	ND	1.0	0.14	ug/l	
120-12-7	Anthracene	ND	1.0	0.22	ug/l	
92-87-5	Benzidine	ND	10	0.92	ug/l	
56-55-3	Benzo(a)anthracene	ND	1.0	0.21	ug/l	
50-32-8	Benzo(a)pyrene	ND	1.0	0.22	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.21	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	1.0	0.35	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.21	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	2.1	0.41	ug/l	
85-68-7	Butyl benzyl phthalate	ND	2.1	0.47	ug/l	
91-58-7	2-Chloronaphthalene	ND	2.1	0.24	ug/l	
106-47-8	4-Chloroaniline	ND	5.1	0.35	ug/l	
218-01-9	Chrysene	ND	1.0	0.18	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	2.1	0.29	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	2.1	0.25	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	2.1	0.41	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.1	0.38	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.17	ug/l	
122-66-7	1,2-Diphenylhydrazine	ND	1.0	0.19	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.19	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 625 EPA 625		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

ABN PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.18	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	1.0	0.57	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	1.0	0.49	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	2.1	0.52	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.34	ug/l	
84-74-2	Di-n-butyl phthalate	1.8	2.1	0.51	ug/l	J
117-84-0	Di-n-octyl phthalate	ND	2.1	0.24	ug/l	
84-66-2	Diethyl phthalate	ND	2.1	0.27	ug/l	
131-11-3	Dimethyl phthalate	ND	2.1	0.22	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	1.7	ug/l	
206-44-0	Fluoranthene	ND	1.0	0.17	ug/l	
86-73-7	Fluorene	ND	1.0	0.18	ug/l	
118-74-1	Hexachlorobenzene	ND	1.0	0.33	ug/l	
87-68-3	Hexachlorobutadiene	ND	1.0	0.50	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	2.9	ug/l	
67-72-1	Hexachloroethane	ND	2.1	0.40	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.34	ug/l	
78-59-1	Isophorone	ND	2.1	0.28	ug/l	
91-20-3	Naphthalene	ND	1.0	0.24	ug/l	
98-95-3	Nitrobenzene	ND	2.1	0.66	ug/l	
62-75-9	n-Nitrosodimethylamine	ND	2.1	0.84	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	2.1	0.49	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	0.23	ug/l	
85-01-8	Phenanthrene	ND	1.0	0.18	ug/l	
129-00-0	Pyrene	ND	1.0	0.22	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	1.0	0.26	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		10-110%
4165-62-2	Phenol-d5	39%		10-110%
118-79-6	2,4,6-Tribromophenol	105%		35-147%
4165-60-0	Nitrobenzene-d5	93%		32-132%
321-60-8	2-Fluorobiphenyl	84%		40-117%
1718-51-0	Terphenyl-d14	77%		33-126%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 608 EPA 608		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6G49197.D	1	07/13/17 14:07	KD	07/12/17 16:10	OP4396	G6G1404
Run #2	XX212342.D	1	07/13/17 18:04	MH	07/12/17 16:10	OP4397	GXX6066
Run #3 ^a	6G49206.D	5	07/14/17 01:20	KD	07/12/17 16:10	OP4396	G6G1404

	Initial Volume	Final Volume
Run #1	990 ml	5.0 ml
Run #2	990 ml	5.0 ml
Run #3	990 ml	5.0 ml

Pesticide PPL List

CAS No.	Compound	Result	RL	MDL	Units	Q
309-00-2	Aldrin	ND	0.010	0.0031	ug/l	
319-84-6	alpha-BHC	0.049	0.010	0.0030	ug/l	
319-85-7	beta-BHC	ND	0.010	0.0029	ug/l	
319-86-8	delta-BHC	ND	0.010	0.0023	ug/l	
58-89-9	gamma-BHC (Lindane)	ND	0.010	0.0014	ug/l	
12789-03-6	Chlordane	ND	0.10	0.057	ug/l	
60-57-1	Dieldrin	ND	0.010	0.0018	ug/l	
72-54-8	4,4'-DDD	ND	0.010	0.0019	ug/l	
72-55-9	4,4'-DDE	ND	0.010	0.0031	ug/l	
50-29-3	4,4'-DDT	ND	0.010	0.0025	ug/l	
72-20-8	Endrin	ND	0.010	0.0025	ug/l	
1031-07-8	Endosulfan sulfate	ND	0.010	0.0027	ug/l	
7421-93-4	Endrin aldehyde	ND	0.010	0.0026	ug/l	
959-98-8	Endosulfan-I ^b	0.017	0.010	0.0025	ug/l	
33213-65-9	Endosulfan-II	ND	0.010	0.0022	ug/l	
76-44-8	Heptachlor	ND	0.010	0.0019	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.010	0.0033	ug/l	
72-43-5	Methoxychlor	ND	0.010	0.0029	ug/l	
8001-35-2	Toxaphene	ND	0.13	0.093	ug/l	
12674-11-2	Aroclor 1016	ND ^c	0.25	0.17	ug/l	
11104-28-2	Aroclor 1221	ND ^c	0.25	0.15	ug/l	
11141-16-5	Aroclor 1232	ND ^c	0.25	0.10	ug/l	
53469-21-9	Aroclor 1242	ND ^c	0.25	0.14	ug/l	
12672-29-6	Aroclor 1248	ND ^c	0.25	0.13	ug/l	
11097-69-1	Aroclor 1254	ND ^c	0.25	0.17	ug/l	
11096-82-5	Aroclor 1260	ND ^c	0.25	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	119%	132%	232% ^d	10-156%

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	EPA 608 EPA 608		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Pesticide PPL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
877-09-8	Tetrachloro-m-xylene	201% ^d	173% ^d	312% ^d	10-156%
2051-24-3	Decachlorobiphenyl	31%	45%	74%	10-143%
2051-24-3	Decachlorobiphenyl	32%	52%	71%	10-143%

(a) Confirmation run.

(b) More than 40 % RPD for detected concentrations between the two GC columns.

(c) Result is from Run# 2

(d) Outside control limits due to matrix interference.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z63107.D	1	07/13/17 12:35	HC	07/12/17 16:10	OP4400	G2Z2373
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	3.87	0.083	0.064	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	66%		22-140%		
16416-32-3	Tetracosane-d50	73%		13-139%		
438-22-2	5a-Androstane	74%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: EFFLUENT

Lab Sample ID: JC46755-1

Matrix: AQ - Effluent

Date Sampled: 07/10/17

Date Received: 07/11/17

Percent Solids: n/a

Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Arsenic	< 3.0	3.0	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Cadmium	< 3.0	3.0	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Chromium	< 10	10	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Copper	163	10	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Lead	< 3.0	3.0	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Mercury	< 0.20	0.20	ug/l	1	07/13/17	07/13/17 JA	SW846 7470A ¹	SW846 7470A ⁴
Molybdenum	< 20	20	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Nickel	89.5	10	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Silver	< 10	10	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³
Zinc	537	20	ug/l	1	07/12/17	07/13/17 ND	SW846 6010C ²	SW846 3010A ³

(1) Instrument QC Batch: MA42406

(2) Instrument QC Batch: MA42410

(3) Prep QC Batch: MP1876

(4) Prep QC Batch: MP1890

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-1	Date Received:	07/11/17
Matrix:	AQ - Effluent	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Cyanide	< 0.010	0.010	mg/l	1	07/17/17 16:07	BM	EPA 335.4/LACHAT
HEM Oil and Grease	< 4.8	4.8	mg/l	1	07/15/17 11:30	AC	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	POST OWS	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-2	Date Received:	07/11/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z63108.D	1	07/13/17 13:09	HC	07/12/17 16:10	OP4400	G2Z2373
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	5.38	0.083	0.064	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		22-140%
16416-32-3	Tetracosane-d50	76%		13-139%
438-22-2	5a-Androstane	78%		10-135%

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	POST OWS	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-2	Date Received:	07/11/17
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
HEM Oil and Grease	< 5.0	5.0	mg/l	1	07/15/17 11:30	AC	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	P&T INFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-3	Date Received:	07/11/17
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z63111.D	1	07/13/17 14:50	HC	07/12/17 16:10	OP4400	G2Z2373
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	ND	0.083	0.064	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	64%		22-140%		
16416-32-3	Tetracosane-d50	79%		13-139%		
438-22-2	5a-Androstane	80%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TPE INFLUENT	Date Sampled:	07/10/17
Lab Sample ID:	JC46755-4	Date Received:	07/11/17
Matrix:	AQ - Influent	Percent Solids:	n/a
Method:	SW846 8015C SW846 3510C		
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z63112.D	1	07/13/17 15:29	HC	07/12/17 16:10	OP4400	G2Z2373
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	17.4	0.083	0.064	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
84-15-1	o-Terphenyl	70%		22-140%		
16416-32-3	Tetracosane-d50	81%		13-139%		
438-22-2	5a-Androstane	86%		10-135%		

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound



Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Certification Exceptions
- Chain of Custody

Parameter Certification Exceptions

Job Number: JC46755
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

The following parameters included in this report are exceptions to NELAC certification.
The certification status of each is indicated below.

Parameter	CAS#	Method	Mat	Certification Status
1,2-Dichlorobenzene	95-50-1	EPA 625	AQ	Accutest is not certified for this parameter. ^a
1,3-Dichlorobenzene	541-73-1	EPA 625	AQ	Accutest is not certified for this parameter. ^a
1,4-Dichlorobenzene	106-46-7	EPA 625	AQ	Accutest is not certified for this parameter. ^a

(a) Lab cert for analyte not supported by NJDEP, OQA. Only methods/analytes required for reporting by the State of NJ can be certified in NJ. Use of this analyte for compliance must be verified through the appropriate regulatory office.

Certification exceptions shown are based on the New Jersey DEP certifications. Applicability in other states may vary. Please contact your laboratory representative if additional information is required for a specific regulatory program.

Client / Reporting Information		Project Information		Requested Analysis (see TEST CODE sheet)		Matrix Codes	
Client Name: Groundwater & Environmental Services, Inc. Address: 1350 Blair Drive, Suite A City/State/Zip: Odenton, MD 21113 Contact: Ashley Bell Email: Abell@gesonline.com Phone: 800-223-3606 x 3704		Project Name: NRG PRGS Address: 1400 North Royal St City/State/Zip: Alexandria, VA 22304 Contact: Ashley Bell Email: Abell@gesonline.com Phone: 800-223-3606 x 3704		Analysis Requested: 2,3,4,6,7,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99,100 Comments:		Matrix Codes:	
Field ID: 1001 Field Name: Effluent		Field ID: 1002 Field Name: Post OWS		Field ID: 1003 Field Name: P&T Influent		Field ID: 1004 Field Name: TPE Influent	
Field ID: 1005 Field Name: Effluent		Field ID: 1006 Field Name: Post OWS		Field ID: 1007 Field Name: P&T Influent		Field ID: 1008 Field Name: TPE Influent	
Field ID: 1009 Field Name: Effluent		Field ID: 1010 Field Name: Post OWS		Field ID: 1011 Field Name: P&T Influent		Field ID: 1012 Field Name: TPE Influent	
Field ID: 1013 Field Name: Effluent		Field ID: 1014 Field Name: Post OWS		Field ID: 1015 Field Name: P&T Influent		Field ID: 1016 Field Name: TPE Influent	
Field ID: 1017 Field Name: Effluent		Field ID: 1018 Field Name: Post OWS		Field ID: 1019 Field Name: P&T Influent		Field ID: 1020 Field Name: TPE Influent	
Field ID: 1021 Field Name: Effluent		Field ID: 1022 Field Name: Post OWS		Field ID: 1023 Field Name: P&T Influent		Field ID: 1024 Field Name: TPE Influent	
Field ID: 1025 Field Name: Effluent		Field ID: 1026 Field Name: Post OWS		Field ID: 1027 Field Name: P&T Influent		Field ID: 1028 Field Name: TPE Influent	
Field ID: 1029 Field Name: Effluent		Field ID: 1030 Field Name: Post OWS		Field ID: 1031 Field Name: P&T Influent		Field ID: 1032 Field Name: TPE Influent	
Field ID: 1033 Field Name: Effluent		Field ID: 1034 Field Name: Post OWS		Field ID: 1035 Field Name: P&T Influent		Field ID: 1036 Field Name: TPE Influent	
Field ID: 1037 Field Name: Effluent		Field ID: 1038 Field Name: Post OWS		Field ID: 1039 Field Name: P&T Influent		Field ID: 1040 Field Name: TPE Influent	
Field ID: 1041 Field Name: Effluent		Field ID: 1042 Field Name: Post OWS		Field ID: 1043 Field Name: P&T Influent		Field ID: 1044 Field Name: TPE Influent	
Field ID: 1045 Field Name: Effluent		Field ID: 1046 Field Name: Post OWS		Field ID: 1047 Field Name: P&T Influent		Field ID: 1048 Field Name: TPE Influent	
Field ID: 1049 Field Name: Effluent		Field ID: 1050 Field Name: Post OWS		Field ID: 1051 Field Name: P&T Influent		Field ID: 1052 Field Name: TPE Influent	
Field ID: 1053 Field Name: Effluent		Field ID: 1054 Field Name: Post OWS		Field ID: 1055 Field Name: P&T Influent		Field ID: 1056 Field Name: TPE Influent	
Field ID: 1057 Field Name: Effluent		Field ID: 1058 Field Name: Post OWS		Field ID: 1059 Field Name: P&T Influent		Field ID: 1060 Field Name: TPE Influent	
Field ID: 1061 Field Name: Effluent		Field ID: 1062 Field Name: Post OWS		Field ID: 1063 Field Name: P&T Influent		Field ID: 1064 Field Name: TPE Influent	
Field ID: 1065 Field Name: Effluent		Field ID: 1066 Field Name: Post OWS		Field ID: 1067 Field Name: P&T Influent		Field ID: 1068 Field Name: TPE Influent	
Field ID: 1069 Field Name: Effluent		Field ID: 1070 Field Name: Post OWS		Field ID: 1071 Field Name: P&T Influent		Field ID: 1072 Field Name: TPE Influent	
Field ID: 1073 Field Name: Effluent		Field ID: 1074 Field Name: Post OWS		Field ID: 1075 Field Name: P&T Influent		Field ID: 1076 Field Name: TPE Influent	
Field ID: 1077 Field Name: Effluent		Field ID: 1078 Field Name: Post OWS		Field ID: 1079 Field Name: P&T Influent		Field ID: 1080 Field Name: TPE Influent	
Field ID: 1081 Field Name: Effluent		Field ID: 1082 Field Name: Post OWS		Field ID: 1083 Field Name: P&T Influent		Field ID: 1084 Field Name: TPE Influent	
Field ID: 1085 Field Name: Effluent		Field ID: 1086 Field Name: Post OWS		Field ID: 1			

SGS Accutest Sample Receipt Summary

Job Number: JC46755

Client: _____

Project: _____

Date / Time Received: 7/11/2017 6:40:00 PM

Delivery Method: _____

Airbill #s: _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.6); Cooler 2: (3.8);

Cooler Temps (Corrected) °C: Cooler 1: (4.9); Cooler 2: (5.1);

Cooler Security

Y or N

Y or N

- | | |
|--|---|
| 1. Custody Seals Present: <input checked="" type="checkbox"/> <input type="checkbox"/> | 3. COC Present: <input checked="" type="checkbox"/> <input type="checkbox"/> |
| 2. Custody Seals Intact: <input checked="" type="checkbox"/> <input type="checkbox"/> | 4. Smpl Dates/Time OK: <input checked="" type="checkbox"/> <input type="checkbox"/> |

Cooler Temperature

Y or N

- | | |
|---|-----------|
| 1. Temp criteria achieved: <input checked="" type="checkbox"/> <input type="checkbox"/> | IR Gun |
| 2. Cooler temp verification: _____ | |
| 3. Cooler media: _____ | Ice (Bag) |
| 4. No. Coolers: _____ | 2 |

Quality Control Preservation

Y or N

N/A

- | | |
|---|--|
| 1. Trip Blank present / cooler: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Trip Blank listed on COC: <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Samples preserved properly: <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> | |
| 4. VOCs headspace free: <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> | |

Sample Integrity - Documentation

Y or N

- | | |
|---|--|
| 1. Sample labels present on bottles: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Container labeling complete: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Sample container label / COC agree: <input checked="" type="checkbox"/> <input type="checkbox"/> | |

Sample Integrity - Condition

Y or N

- | | |
|---|--------|
| 1. Sample recvd within HT: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. All containers accounted for: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 3. Condition of sample: _____ | Intact |

Sample Integrity - Instructions

Y or N

N/A

- | | |
|---|-------------------------------------|
| 1. Analysis requested is clear: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 2. Bottles received for unspecified tests: <input type="checkbox"/> <input checked="" type="checkbox"/> | |
| 3. Sufficient volume recvd for analysis: <input checked="" type="checkbox"/> <input type="checkbox"/> | |
| 4. Compositing instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5. Filtering instructions clear: <input type="checkbox"/> <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Comments

SM089-02
Rev. Date 12/1/16

JC46755: Chain of Custody

Page 2 of 2

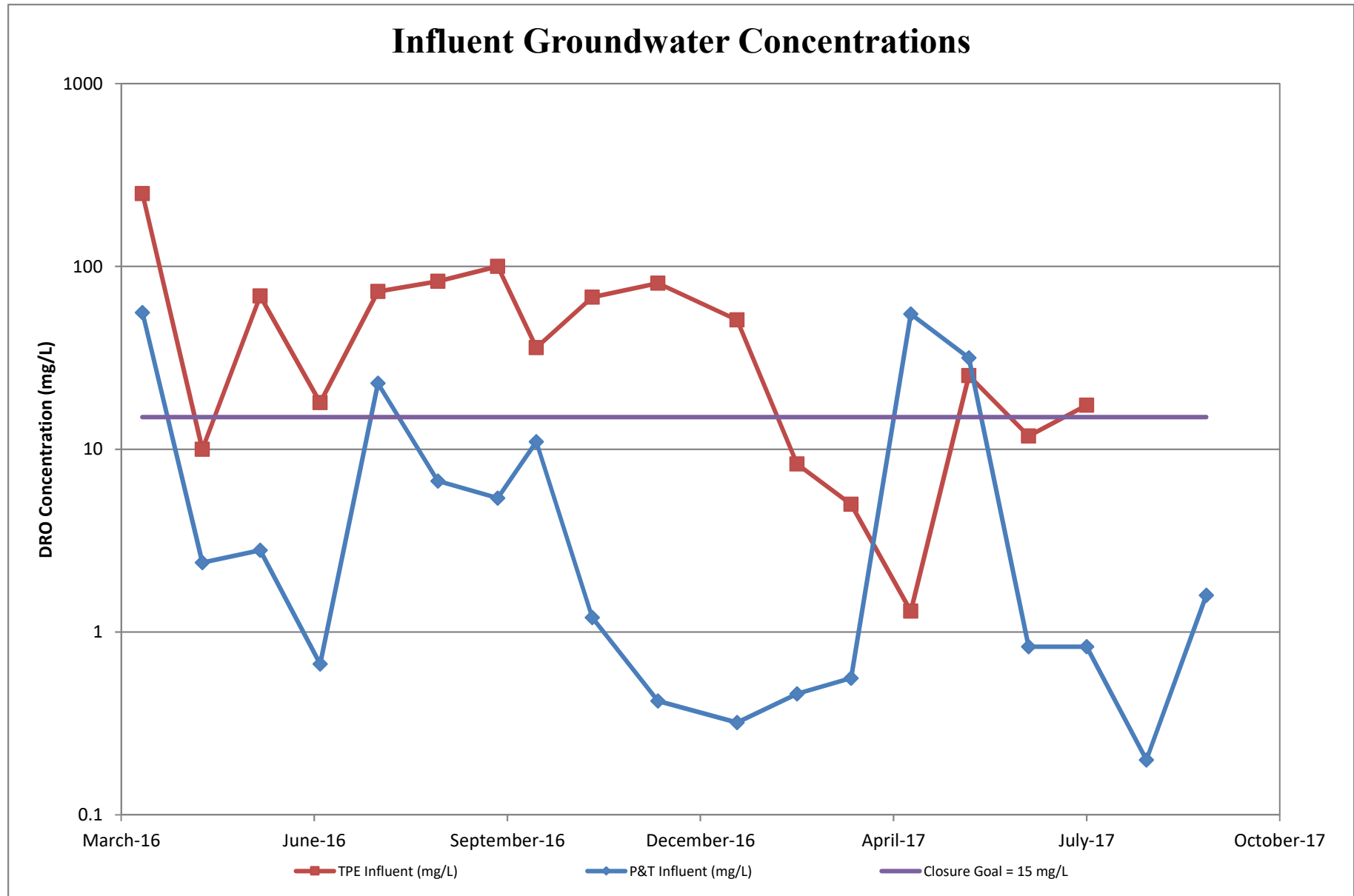


ATTACHMENT D

REMEDIATION SYSTEM PERFORMANCE GRAPHS

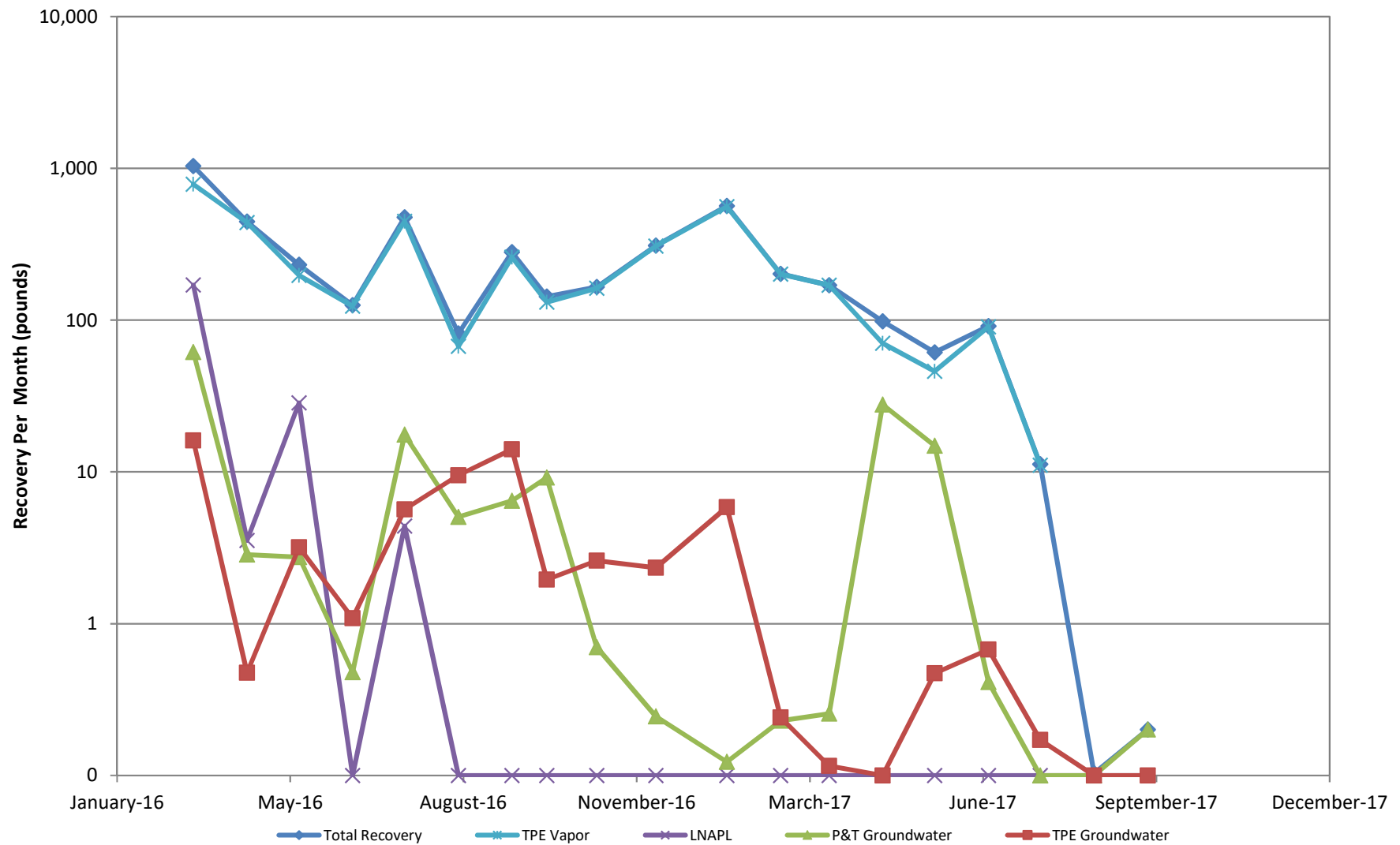
REMEDIATION SYSTEM PERFORMANCE GRAPHS

NRG Potomac River Generating Station
1400 North Royal St
Alexandria, VA



REMEDIATION SYSTEM PERFORMANCE GRAPHS

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.