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January 30, 2018

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:

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

The following activities were conducted during the Fourth 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 November 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 November 28, 2017;
- Down-well water quality measurements recorded on November 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 November 28-30, 2017;

- Collection of additional samples for analysis of sulfate as well as TPH-DRO using a silica gel cleanup;
- Continued semi-monthly operation and maintenance (O&M) field events of the remediation system from October to December, 2017; and
- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises.

The total phase extraction (TPE) system remained off during the fourth quarter 2017. The wells associated with the TPE system were gauged 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@genon.com. For any technical questions, if you prefer, you can contact our consultants at GES directly.

Sincerely,

Mark G. Nitz, P.E.

Environmental Specialist, GenOn

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

GenOn Mid-Atlantic (GenMa)

Quarterly CAP Implementation Monitoring Report

Potomac River Generating Station

1400 North Royal Street

Alexandria, VA

PC #2013-3154

January 2018

Quarterly CAP Implementation Monitoring Report

Potomac River Generating Station
1400 North Royal Street
Alexandria, VA

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1 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES) has prepared this Fourth Quarter 2017 CAP Implementation Monitoring Report (CMR) on behalf of GenOn Mid-Atlantic (GenMa), 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 4th Quarter 2017:

- The total phase extraction (TPE) system remained off during 4th Quarter 2017;
- Twice per month gauging of select wells following shutdown of the TPE system;
- Comprehensive gauging of all accessible site groundwater wells on November 28, 2017;
- Down-well water quality measurements recorded on November 28, 2017, of select site groundwater wells to monitor dissolved oxygen, pH, temperature, oxidation reduction potential (ORP) and conductivity;
- Quarterly groundwater sampling on November 28-30, 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), as well as from select wells for biological indicator parameters including Alkalinity (SM 2320B), Nitrate NO_3^{-1} & Nitrite NO_2^{-} (EPA 353.2), Manganese (Mn^{2+}), Ferrous Iron Fe^{2+} (SM 3500-Fe B modified-199), Sulfate SO_4^{2-} (EPA 300.0) and Methane (RSKSOP-175 modified);
- Headspace vapor measurements recorded on November 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 October through December, 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 Biosparge Wells: SP-01 (turned off December 21, 2017), SP-02 through SP-05, SP-07(turned off December 21, 2017), and SP-09 through SP-15;

- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises (AlexRenew); and
- Discharge permit renewal and sample reduction approval granted by AlexRenew (new permit effective January 1, 2018).

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 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 4th Quarter 2017:

- October – December 2017:
  - Twice per month gauging of select groundwater wells.
- November 28, 2017:
  - Site-wide gauging and headspace vapor monitoring and collection of down-well field parameters of select groundwater wells.
- November 28-30, 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, and TPH-DRO with a silica gel cleanup.

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 4th Quarter 2017, all accessible site groundwater wells, including wells in the basement, were gauged during a comprehensive gauging event on November 28, 2017. Select groundwater wells that historically exhibited measureable LNAPL or elevated dissolved phase hydrocarbon concentrations were also gauged on a twice per month basis. Gauging events conducted during the 4th Quarter 2017 are summarized below:

- Gauging of select wells:
  - October 3, 2017
  - October 17, 2017
  - November 2, 2017
  - December 5, 2017
  - December 19, 2017
- Site-wide gauging of all accessible wells:
  - November 28, 2017

Historical and 4th 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 4th Quarter 2017. During comprehensive gauging on November 28, 2017, monitoring wells MW-11, MW-16S, MW-106, MW-108, RW-28S and RW-30S were dry.

Measured groundwater depths ranged from 2.45 feet below ground surface (bgs) in MW-105 to 33.8 feet bgs in MW/RW-51 during the 4th quarter 2017. Groundwater depths in various monitoring wells appear to be decreasing below historical levels in the following locations: MW/RW-14, MW-16, MW/RW-25. MW-27, MW/RW-31, MW-33, MW/RW-51, MW-52, MW-70, MW/RW-72, MW-100, MW-102, MW-106, MW-109S, MW-109, MW-110S, MW-110, MW-111, MW-121, MW-122, RW-1, RW-28S, RW-116S 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 November 28, 2017, in accordance with the tidal cycle of the Potomac River. On November 28, 2017, low tide at the site occurred at 11:13 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 November 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, MW-25S, MW-51S and MW-72S. 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 was approximately 0.04 feet per foot in the shallow zone during the November 2017 monitoring event. The hydraulic gradient in the deep zone was not calculated due to the influence of the pumping wells.

2.2 Headspace Vapor Monitoring

Monitoring well vapor headspace readings were collected at select groundwater wells on November 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 November 28 to 30, 2017, groundwater samples were collected from 35 groundwater monitoring/recovery wells (MW-01S, MW/RW-05, 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-100S, MW-100, MW-109S, MW-109, MW-110S, MW-110, MW-111, MW-112S, MW-112, MW-113, MW-114, MW-121, MW-122, MW/RW-123S, RW-1, RW-05S, RW-116S, RW-118S, and RW-119S) and 6 temporary wells (TW-03, TW-04, TW-05, TW-06, TW-07, and TW-14) using disposable bailers or dedicated sampling ports. Wells MW-11, MW-106, MW-107, MW-108, RW-25S, RW-28S, RW-30S, and RW-117S were not sampled during the 4th 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 where possible. Purge bailers were decontaminated prior to purging each well. Groundwater pumping wells were sampled using sampling ports at the well heads.

Select wells containing minimal volumes of water were not purged, and grab samples were immediately collected. Purge water was stored in drums onsite to be removed by Triumvirate Environmental for treatment and disposal on December 19, 2017; the liquid non-hazardous waste disposal manifest is attached as **Attachment A**. 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:

- Annual parameters (select wells)
    - Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO)
    - BTEX and 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 (select wells)
    - TPH-DRO C10-C28 (SW-846 8015B) with silica gel cleanup (Method 3630C)

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 B** and discussed further in **Section 2.4**. The analytical results for biological indicator parameters are presented in the Historical Groundwater Biostimulation Analytical Data Summary provided as **Table 5** and discussed further in **Section 2.4**.

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

2.4 Groundwater Analytical Findings

During the 4th Quarter 2017, 40 monitoring, recovery and temporary wells were sampled for TPH-DRO during the quarterly groundwater sampling event in November. 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 4th Quarter 2017 sampling event, are presented as **Figure 6** and **Figure 7**. 22 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 4th Quarter 2017 are presented below:

- TPH-DRO was detected in 31 of the 34 groundwater monitoring wells sampled during the quarterly sampling event in November, with a maximum concentration of 146,000 micrograms per liter (µg/L) in recovery well RW-116S. TPH-DRO was detected in all six temporary wells sampled (TW-03, TW-04, TW-05, TW-06, TW-07 and TW-14), with a maximum concentration of 61,500 µg/L in temporary well TW-05.
- Naphthalene was detected in 2 of the 14 monitoring and temporary wells sampled during the November sampling event, with a maximum concentration of 1.9 J µg/L detected in monitoring well MW-08S.
- Benzene was detected in well MW-08S with a concentration of 0.84 µg/L.
- Toluene was detected in well MW-122 with a concentration of 0.47 J µg/L.
- Ethylbenzene was detected in well MW-122 with a concentration of 0.84 J µg/L.
- Total Xylenes were detected in well MW-122 with a concentration of 1.4 µg/L.

Concentration trend graphs are presented in **Attachment B** showing historical and current benzene, naphthalene, and TPH-DRO concentrations, depths to water, and depths to LNAPL for select monitoring, recovery, and temporary wells. TPH-DRO trends are based solely on the standard TPH-DRO analysis without the silica gel cleanup. Trends observed as of 4th Quarter 2017 are presented below:

- TPH-DRO concentrations have an overall increasing trend in wells MW-01S, MW/RW-10S, MW-51S, MW/RW-72S, MW/RW-123S, RW-05S, RW-28S, RW-116S, RW-117S, RW-118S, RW-119S, and TW-04. However, there is a recent decreasing trend in wells MW-01S, MW/RW-10S, MW/RW-14, MW-51S, MW/RW-123S, 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, RW-25S, TW-03, TW-06, and TW-07. TPH-DRO concentrations are relatively stable in wells MW-08S, MW-27, MW/RW-72, RW-1, and RW-30S.
- In wells that have been sampled for naphthalene enough times to establish a trend, an overall decreasing trend is observed in wells MW-08S, 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, MW/RW-72S and MW/RW-72. Wells TW-03, TW-04, TW-06, and TW-07 have an overall stable or decreasing 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	Methan-ogenesis
	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_2S	CH_4 (methane)
Expected Relationship with High BTEX	$O_2 \downarrow$	$NO_3^- \downarrow$	$Mn^{2+} \uparrow$	$Fe^{2+} \uparrow$	$SO_4^{2-} \downarrow$	$CH_4 \uparrow$

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

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 4th Quarter 2017, DO concentrations were considered aerobic (> 1.0 mg/L) in 7 of the 9 measured shallow zone aquifer wells (MW-01S, MW/RW-10S, MW-51S, MW/RW-123S, RW-05S, RW-28S and RW-116S) and in 12 of the 16 measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-51, MW/RW-72, MW-100, MW-122, TW-03, TW-04, TW-05, and TW-07). DO concentrations were considered anaerobic in six wells during the quarterly sampling event (MW/RW-72S, MW-100S, MW-121, RW-1, TW-02, and TW-06).

ORP

- ORP values were positive in 4 of the 9 measured shallow aquifer zone wells (MW/RW-10S, MW/RW-72S, MW-100S, and RW-05S) and in 13 of the 16 measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-51, MW/RW-72, , MW-100, MW-122, TW-03, TW-04, TW-05, TW-06, and TW-07) during the quarterly groundwater monitoring event in November. Positive ORP values are indicative of aerobic conditions. Wells with negative ORP readings included MW-01S, MW-51S, MW/RW-123S, RW-28S, AND RW-116S in the shallow zone aquifer and MW-121, RW-1, and TW-02 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 4th Quarter 2017, although it was not detected at 4 of the 19 wells where it was measured (MW/RW-72S, MW/RW-72, TW-05, and TW-06). 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. A rebound in alkalinity was observed in select wells during the 4th Quarter 2017 including MW-01S, MW/RW-10S, MW-27, MW-51S, and TW-03.

pH

- In the shallow zone recovery wells, 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 (with the exception of RW-05S). In monitoring conducted in the 4th quarter 2017, pH has been observed below 6.0 at 16 of the 32 wells where it was measured and below 5.0 at 5 of the monitoring wells (MW/RW-72, MW/RW-72S, MW-112S, RW-05S, and TW-06). The lowest pH level was again measured in RW-05S (2.52). Low pH levels in select areas are creating unfavorable conditions for biodegradation.

Nitrate

- Nitrate was detected in none of the 5 shallow zone aquifer wells where it was measured and in 3 of the 8 deep zone aquifer wells where it was measured (MW/RW-14, MW/RW-72, and MW-100).

Nitrite

- Nitrite, an intermediate in denitrification, was not detected in any of the 5 shallow zone aquifer wells but was in one of the 8 deep zone aquifer wells where it was measured (MW-121).

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/RW-72, MW/RW-72S, MW-106, MW-122, TW-03, TW-05, and TW-06. 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-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 accepter 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 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.

2.5 TPH-DRO Analysis

Operation of the remediation system and introduction of oxygen into the subsurface, as discussed above, has caused declining pH, loss of alkalinity, and an increase in sulfate, particularly in the shallow zone recovery wells. The acidic conditions have led to groundwater geochemistry changes and increases in TPH-DRO in some areas. The increases in TPH-DRO concentrations in the select wells appear to be counter to other lines of evidence. The presence of LNAPL at the site has been eliminated, dissolved phase and vapor phase recovery by the remediation has significantly declined, and headspace PID readings are low. In the fourth quarter, headspace PID readings were collected at 10 previously operating shallow zone TPE recovery wells. The PID readings ranged from 0.3 ppm at RW-117S to 10.3 ppm at RW-10S. Historic results show PID readings at these wells ranged up to 422.3 ppm (RW-117S). GES has been taking steps to investigate whether the geochemical changes may have caused the production of organic molecules that would show up in the TPH-DRO range despite not being petroleum based.

To determine the extent of the petroleum based DRO on the site, additional testing was conducted in the third and fourth quarters of 2017. During the third quarter, for select wells, a second TPH-DRO analysis was run with a silica gel cleanup step to remove polar organic molecules and the Massachusetts Extractable Petroleum Hydrocarbons (MA EPH) analysis was run to measure concentrations of petroleum indicator semi-volatile organic compounds (SVOCs). During the fourth quarter, a second TPH-DRO analysis was run with a silica gel cleanup on select wells. Due to discrepancies between results obtained during the third and fourth quarters, two wells were resampled in January 2018 and analyzed for TPH-DRO with and without silica gel, and using two different methods for silica gel cleanup. They were also analyzed for MA EPH.

MA EPH Findings

Diesel consists of aromatic and aliphatic hydrocarbons in the C10-C28 range. The MA EPH analysis was run on 15 wells in the third quarter and the 2 wells resampled in January 2018. 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 (using a cartridge), as shown in **Table 7**. 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. Of note, the MA EPH analysis includes a silica gel cleanup.

The Ohio Environmental Protection Agency Division of Environmental Response and Revitalization (EPA-DERR) has published a guidance document for the assessment of risks associated with petroleum contamination. This includes a chart of petroleum-related indicator compounds. Thirteen of the 17 SVOCs measured by the MA EPH analysis in the third quarter are indicator compounds for diesel range petroleum organics. Of these, only 6 had measurable

concentrations above the detection limit. Detections were only observed in 10 of the 15 wells sampled, and none of the concentrations exceeded 5 µg/L. The highest observed concentration was 4.8 µg/L of fluorene in well RW-05S. Such low levels of indicator compounds is consistent with a lack of petroleum based hydrocarbons.

Silica Gel Findings

To better distinguish between true petroleum based hydrocarbons and other organic compounds that would show up in the DRO range, the silica gel cleanup process (Method 3630C) was used to remove polar organic compounds for 16 of the 25 wells sampled during the third quarter sampling event in August and 22 out of the 40 wells sampled in the fourth quarter.

A summary of the purpose of the silica gel cleanup method is provided in Analytical Method 10 for Contaminated Sites – Silica Gel Cleanup of Extractable Petroleum Hydrocarbons (British Columbia Ministry of Water, Land & Air Protection, July 30, 2004). The cleanup is intended as a means to exclude bionic organics from quantitative results, based on the premise that most naturally occurring hydrocarbons are polar, and so will be irreversibly retained by activated silica-gel. Examples of biogenic organics include lipids, plant oils, tannins, lignins, animal fats, proteins, humic acids, fatty acids, and resin acids. It is important to consider that the silica gel cleanup is not selective to the removal of only biogenic organics. Silica gel will remove non-biogenic organics if they are sufficiently polar (e.g. some bacterial metabolites of petroleum hydrocarbons; typically alcohols, aldehydes, and acids). Non-polar or slightly polar biogenic components (e.g. some plant waxes) will not be removed by silica gel.

- In the third quarter, using this method prior to running Method 8015, the maximum TPH-DRO concentration observed was 11,300 micrograms per liter (µg/L) in recovery well RW-1. When using the silica gel cleanup process reductions ranged from 30% to 99%. On average, the measured TPH-DRO concentration with the silica gel cleanup was only 18% of the measured concentration without the cleanup. This further indicated a lower level of petroleum based hydrocarbons than measured by the standard TPH-DRO test.

- In the fourth quarter sampling results, similar reductions when using the silica gel cleanup were not observed. Results with the silica gel cleanup ranged from slight decreases to increases in concentrations. Through inquiries with the laboratory, it was determined that different silica gel cleanup methods were used in the third and fourth quarters. In the third quarter, the standard column silica gel cleanup method was used. This is the same method used in the MA EPH method. In the fourth quarter, the silica powder gel cleanup method was used.

- Because of the discrepancy between the two quarters of data, an additional sampling event was conducted on January 18, 2018 in order to compare the silica gel cleanup methods and determine if the third quarter results were repeatable. MW-25S and MW-51S were sampled and analyzed using the silica power gel cleanup method, two types of silica gel columns (Restek and Phenomenex branded columns), along with duplicate

analyses with no silica gel. The samples were also analyzed for MA EPH. The results, shown in **Table 7**, generally corresponded with the prior data. Using the column silica gel cleanup method (Restek), the results were greater than 95% lower than the results with the silica powder gel cleanup and without the silica gel cleanup. Using the column silica gel cleanup method (Phenomenex), the results were on average approximately 85% lower than the results with the silica powder gel cleanup and without the silica gel cleanup. This additional data provides direct evidence that the silica powder gel cleanup was not effective in removing the polar compounds that were removed using the column method. It is possible that the loose powder used for the powder gel cleanup had become inactive due to age or other factors. This further supports that data obtained using the column silica gel cleanup method during the third quarter are accurate.

Non Petroleum Hydrocarbons

The recent increases in TPH-DRO levels must then be explained by something other than an increase in petroleum based hydrocarbons. The air introduced to the aquifer when combined with elemental sulfur and biological organics in the subsurface created conditions that facilitated the production of organic polar compounds that show up in the DRO range, such as ketones, esters, aldehydes, and alcohols. The initial concentration of methane combined with low DO prior to start-up of the remediation system indicate an anaerobic biologically active environment. Once treatment started introducing air to the aquifer, the system became aerobic allowing for the oxidation of elemental sulfur in the subsurface to sulfate. This can be observed as the concentrations of sulfate increased as much as two orders of magnitude in some wells. The oxidation of elemental sulfur also releases protons into solution, thereby acidifying the system.

We would expect the system to be rich in biological organics because of the anaerobic biological activity that produced the high methane concentrations observed before system start-up and the proximity to the Potomac River. Once the system became highly acidic, two processes increased the concentrations of organic compounds that are showing up on the standard TPH-DRO analysis. First, sorbed polar biological organics are being protonated. This releases them into solution increasing their aqueous concentration. Second, smaller organics are going through an acid catalyzed aldol reaction, which joins oxygenated molecules together to form larger compounds. Both of these processes create polar molecules that will show up on the TPH-DRO test despite being biologically produced rather than petroleum based. These polar organic compounds would be removed by the silica gel cleanup, thus accounting for the large discrepancy between the two DRO measurements.

2.6 Sulfate Analysis

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. The declines in pH and alkalinity, along with increasing sulfate and metals in solution and an increased specific conductance, suggests there is a significant source of sulfur in the aquifer that is being oxidized. The sulfur and sulfide 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 lowest pH are also the ones with the highest sulfate concentrations. The concentrations of sulfate in the shallow zone are shown in **Figure 10**. These show higher concentrations towards the center of the site. This can be compared to the shallow zone pH map (**Figure 11**), which also shows generally lower pH at the center of the site. In the deep zone, the sulfate concentrations are generally highest to the east near the river (**Figure 12**). This is also where the pH is lowest in wells sampled for all three parameters (**Figure 13**).

During the 4th quarter, in monitoring wells that saw a rebound or increase in pH, the sulfate levels correspondingly declined. In monitoring wells that saw further decline in pH, the sulfate levels increased. Through limiting oxygen introduction into the aquifer and allowing the aquifer to return to an anaerobic state, the oxidization of sulfur would be halted and the pH would be allowed to neutralize. Allowing the aquifer to return to its natural state would also allow for the gradual reduction of sulfate levels and natural biodegradation of any remaining hydrocarbons by the anaerobic organisms already present in the aquifer. Because the groundwater is not used as a drinking water source and there is a sealed bulkhead to prevent migration of sulfate into the Potomac River, no additional actions to mitigate the elevated sulfate levels are recommended at this time.

3 REMEDIATION SYSTEM OPERATION

Portions of the remediation system operated during the 4th 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 14**). The P&T and biosparge systems operated during a portion or all of the 4th Quarter 2017, with specifics provided below, while the TPE system has been shut down since July 28, 2017. The reporting period for the 4th Quarter 2017 was from September 29, 2017 to December 19, 2017, and was controlled by the O&M schedule. Activities of note completed during the 4th Quarter 2017 included:

- Bi-monthly system operations and/or maintenance (O&M) visits were performed on October 3 and 17, November 2 and 15, and December 5 and 19, 2017 including monthly system sampling and twice monthly gauging of select wells.
- Monthly Self-Monitoring Reports (SMRs) for 4th Quarter 2017 were submitted to AlexRenew by November 10, 2017, December 10, 2017 and January 10, 2018.
- On December 19, 2017, all systems were down due to an air compressor problem. The compressor was repaired on December 21, 2017 and P&T and biosparge were restarted and operational on departure.
- On December 21, 2017 sparge points SP-01 and SP-07 were turned off.

The TPE system was not operated during the reporting period; it was deactivated on July 28, 2017. The cumulative groundwater flow for the system is 86,566 gallons. A TPE Operational Summary is included as **Table 8**, TPE recovery data is included in **Table 11,** system sampling analytical reports are included in **Attachment D**, and system performance graphs are included in **Attachment E**.

The P&T system operated for approximately 88 days out of 90 days during the reporting period, with a system uptime of 98%. The total groundwater flow for the reporting period was 103,433 gallons, with an average flow rate of 0.8 gpm. The cumulative groundwater recovery since system startup was 1,161,443 gallons. The estimated groundwater TPH-DRO recovery for the reporting period was 0.7 lbs. No additional LNAPL was recovered by the oil/water separator or manual bailing. A P&T Operational Summary is included as **Table 9,** P&T recovery data is included in **Table 11,** system sampling analytical reports are included in **Attachment D**, and system performance graphs are included in **Attachment E**.

The biosparge system operated for approximately 87 days out of 90 days during the reporting period, with a system uptime of 97%. The average flow for each of the biosparge wells on the first leg (SP-01 through SP-08) was 0.8 scfm, with the exceptions of SP-06 and SP-08, which were off. 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 10.**

The total estimated hydrocarbon recovery to date is 3,133 lbs (428 gallons). This includes 135 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 11**.

Hydrocarbon Recovery:

Dissolved-Phase Hydrocarbons (Period/Cumulative): **0.7 lbs / 135 lbs**

Vapor-Phase Hydrocarbons (Period/Cumulative): **0 lbs / 2,913 lbs**

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

Total Hydrocarbon Recovery (Period/Cumulative): **0.7 lbs /3,133 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 4th Quarter 2017. An application to renew the permit was submitted to AlexRenew on October 10, 2017. A response was received on November 15, 2017 renewing the permit. The new permit became effective on January 1, 2018. In accordance with the requirements of the new permit, system sampling and SMR submittals will occur quarterly.

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 Future Activities (1st Quarter 2018)

- Monthly gauging (during system O&M) of wells that have historically shown the presence of LNAPL;
- Twice monthly system O&M field events;
- Quarterly system sampling;
- Submittal of a quarterly CMR; and
- Submittal of quarterly SMRs to AlexRenew.

5 REMEDIAL STRATEGY EVALUATION & RECOMMENDATIONS

Since startup of the remediation system in March 2016, significant hydrocarbon recovery has occurred and the observance of LNAPL has been eliminated. However, as dissolved oxygen has been introduced into the subsurface as part of the remediation process, a loss of alkalinity and declining pH have resulted in select areas. The declines in pH and alkalinity, 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/or sulfurous acid. The acidic conditions have also led to organic molecules that are not petroleum based showing up in the TPH-DRO analysis.

Because of the hydrocarbon reductions that have occurred and the unfavorable conditions being created through the addition of dissolved oxygen, GES recommends a trial shutdown of the remediation system (TPE, P&T, and biosparge). Shutting down the system would halt the acidification of the aquifer and would allow pH and sulfate levels to begin to return to prior levels. The trial shutdown period would allow further evaluation of petroleum based hydrocarbons and would allow monitoring to determine the level of rebound that may occur in the absence of active remediation. It will allow the determination of whether the transition to monitored natural attenuation described in the Corrective Action Plan (CAP) is warranted at this time. The trial shutdown would also serve to determine how quickly the pH and sulfate will naturally return to prior levels, and if intervening steps to address the pH and sulfate are recommended.

The shutdown of the remediation system is further justified by the remedial progress made to date, as described below:

- No LNAPL is being recovered by the system during recent operation and hydrocarbon recovery by the system has significantly declined;
- No LNAPL is being observed in the monitoring and recovery wells (i.e., the remedial goal of reducing the presence of LNAPL to a thickness of 0.01 feet or less has been achieved);
- Naphthalene was detected in just 2 of the 14 monitoring and temporary wells sampled during the November sampling event, with a maximum concentration of 1.9 J µg/L detected in monitoring well MW-08S (i.e., the remedial goal of naphthalene being below 10 µg/L has been achieved); and
- When considering the TPH-DRO concentrations include polar organic molecules, further analysis may demonstrate that petroleum-based TPH-DRO is close to or below the remedial goal of 15 mg/L.

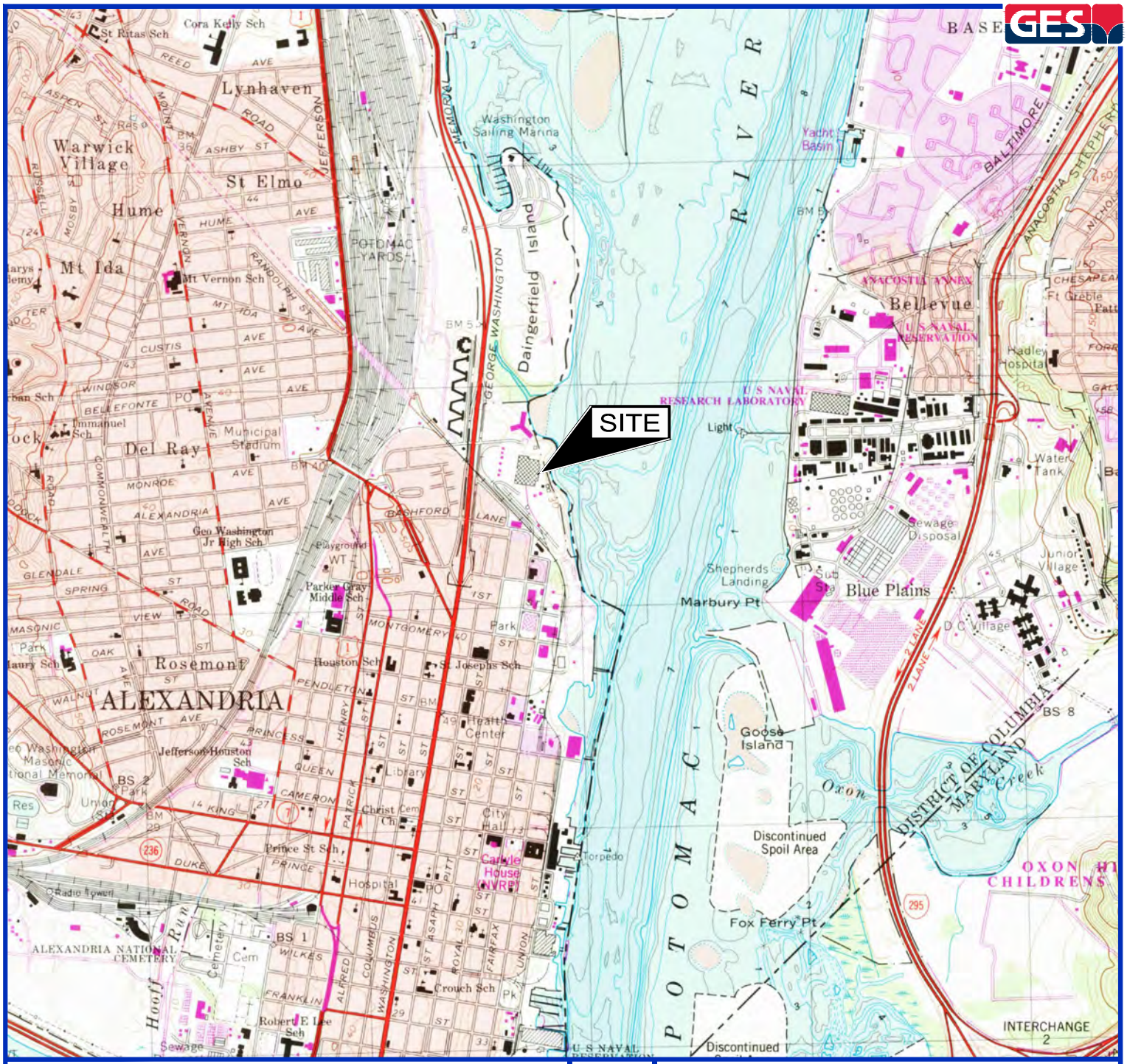
Future TPH DRO Analyses:

Because the TPH-DRO analyses from the 3rd and 4th quarters suggest the majority of what is being reported in the standard DRO analysis is polar, non-petroleum hydrocarbons, we recommend repeating the duplicate analyses during the 1st quarter 2018 for any sample that had a TPH-DRO result greater than 15 mg/L during the 4th quarter 2017. The second analysis will be conducted following use of a cartridge silica gel cleanup (Method 3630C). 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.

LNAPL Gauging:

Based on the absence of LNAPL in the 4th 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.

Figures



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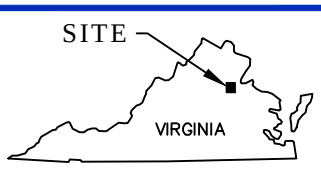

QUADRANGLE LOCATION
NO SCALE

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	FIGURE
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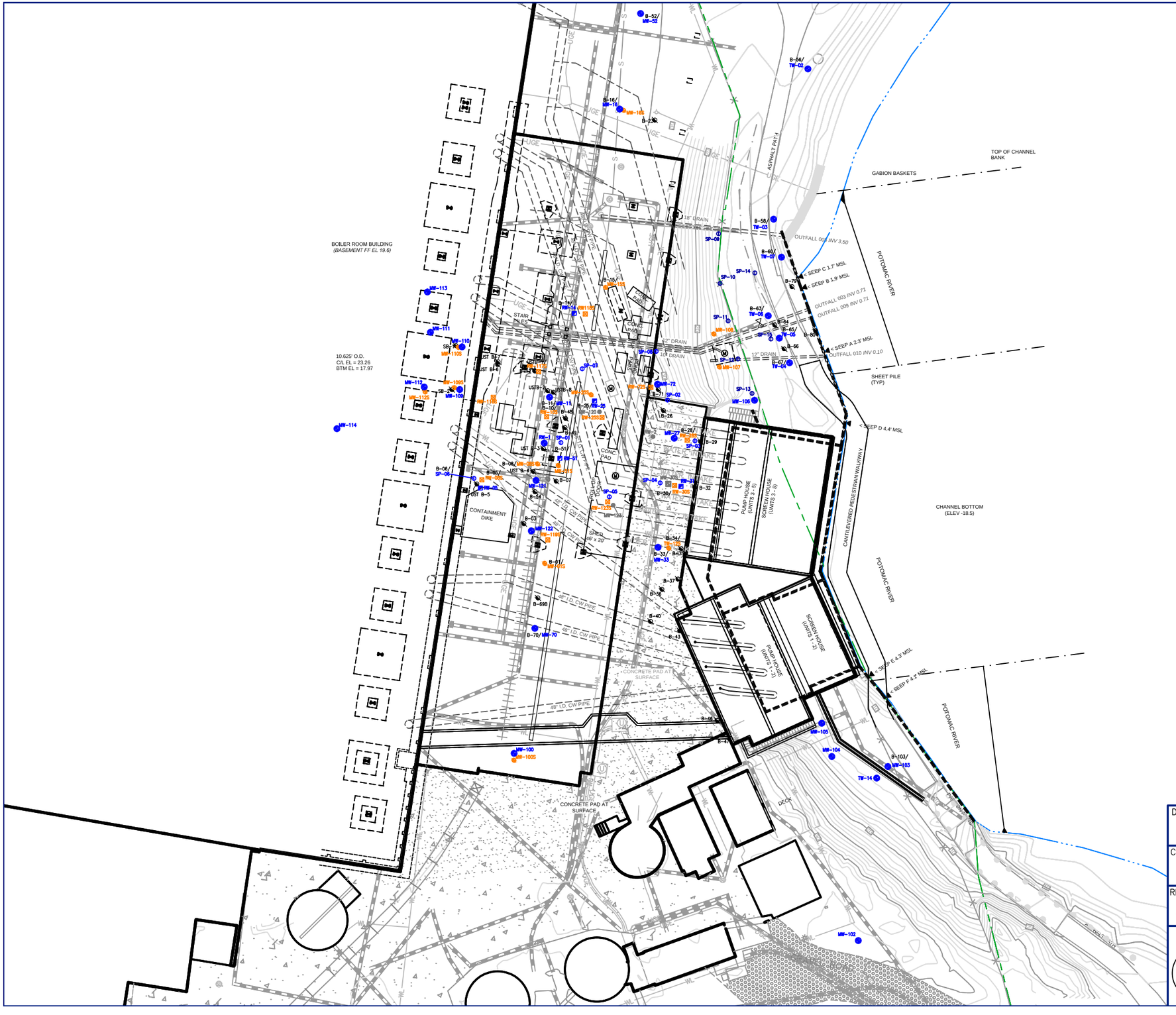
BOILER ROOM BUILDING
(BASEMENT FF EL 19.6)
10.625' O.D.
C/L EL = 23.26
BTM EL = 17.97
CONTAINMENT DIKE
ASPHALT PATH
GABION BASKETS
TOP OF CHANNEL BANK
POTOMAC RIVER
SHEET PILE (TYP)
CANTILEVERED PEDESTRIAN WALKWAY
CHANNEL BOTTOM (ELEV -18.5)
PUMP HOUSE (UNITS 1 - 5)
SCREEN HOUSE (UNITS 3 -5)
SCREEN HOUSE (UNITS 1 - 2)
PUMP HOUSE (UNITS 1 - 2)
CONCRETE PAD AT SURFACE
DECK
OUTFALL 004 INV 3.50
OUTFALL 003 INV 0.71
OUTFALL 009 INV 0.71
OUTFALL 010 INV 0.10
< SEEP C 1.7' MSL
< SEEP B 1.9' MSL
< SEEP A 2.3' MSL
< SEEP D 4.4' MSL
< SEEP E 4.3' MSL
< SEEP F 4.1' MSL
18" DRAIN
12" DRAIN
48" I.D. CW PIPE
POTOMAC RIVER
MW-100
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MW-101S
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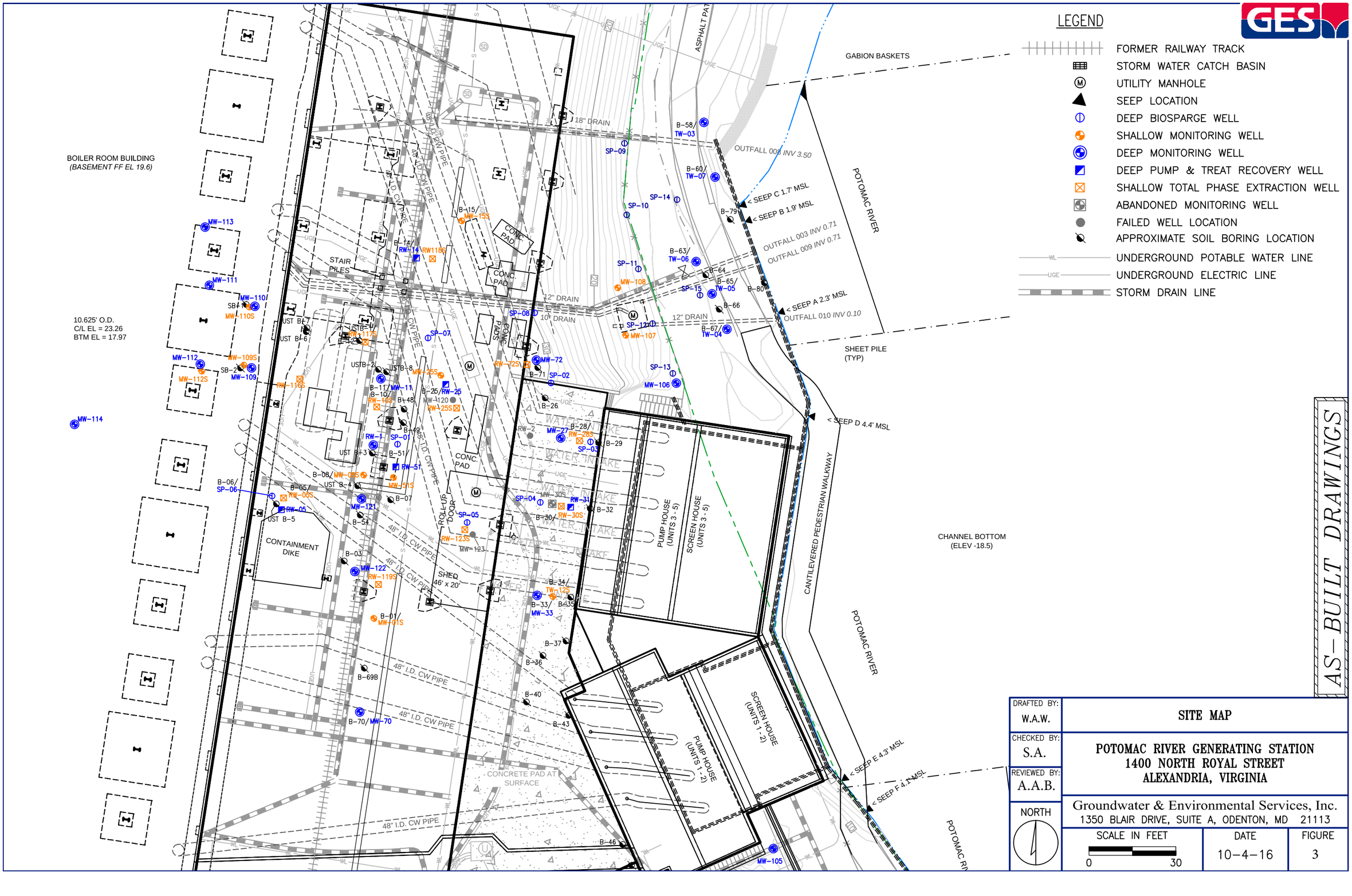

DRAFTED BY: W.A.W.	SITE MAP
CHECKED BY: S.A.	POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA
REVIEWED BY: A.A.B.	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113
NORTH	SCALE IN FEET: 0 30 / DATE: 10-4-16 / FIGURE: 3

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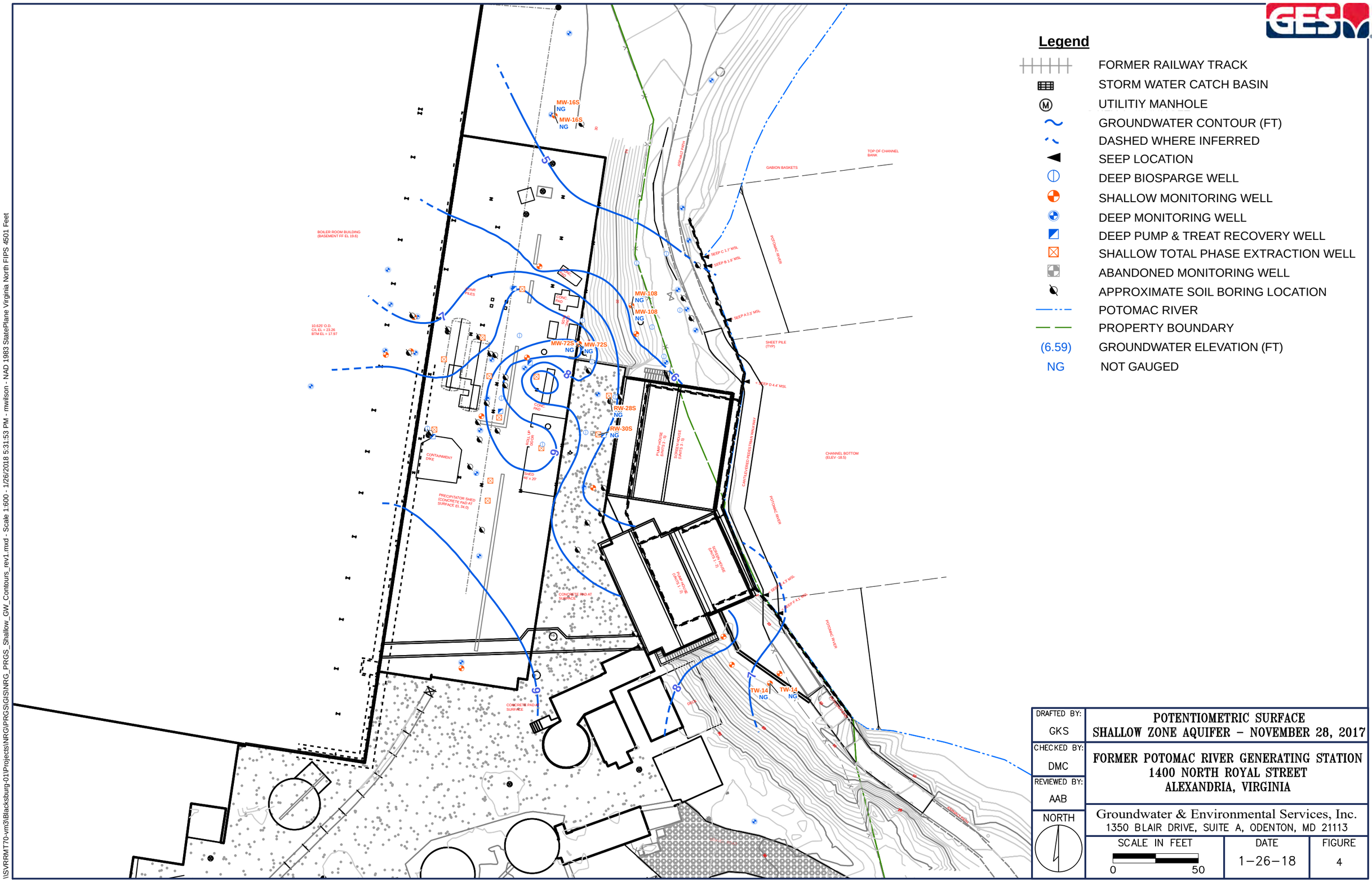
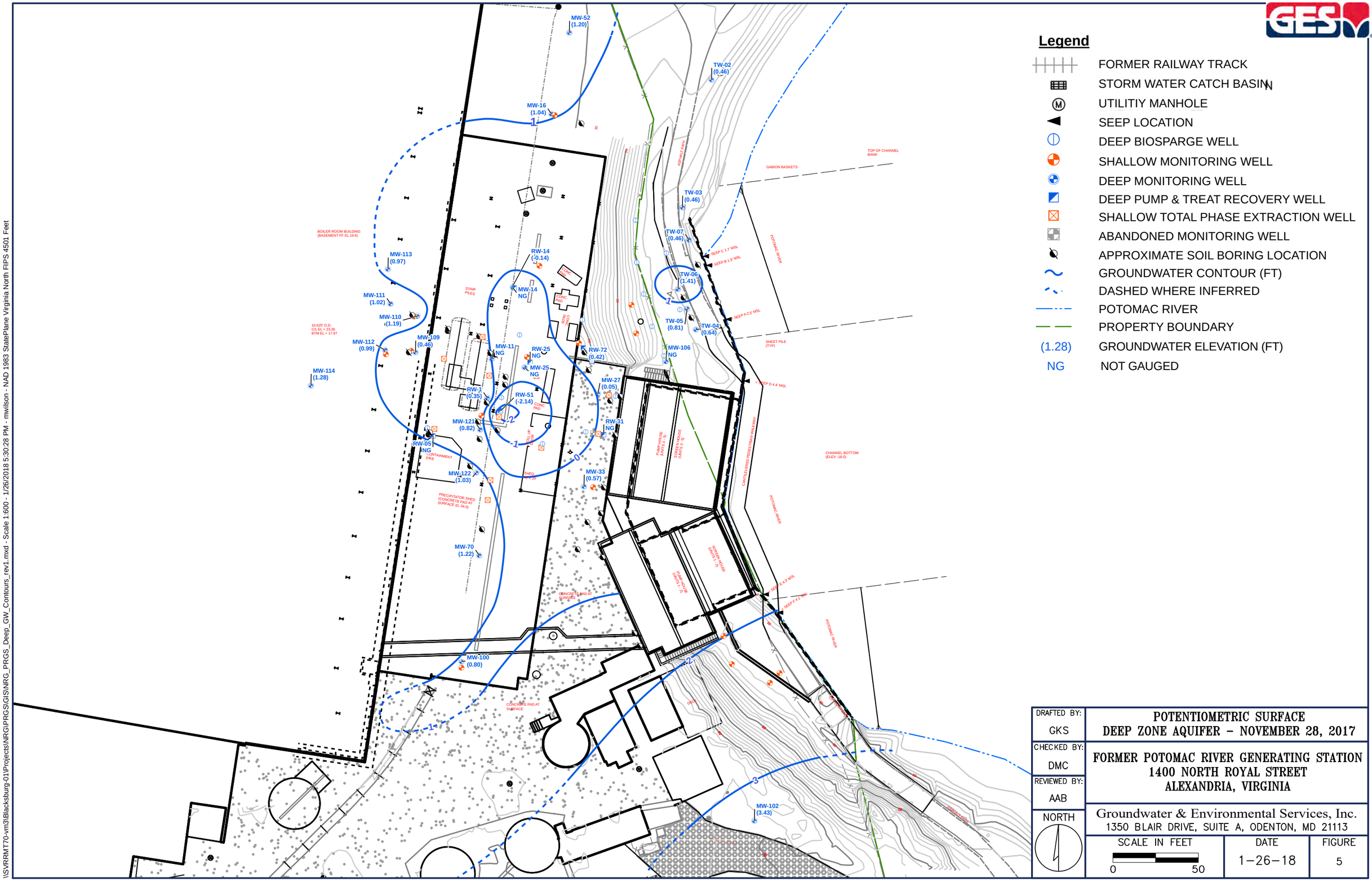


Legend

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

DRAFTED BY: GKS	POTENTIOMETRIC SURFACE SHALLOW ZONE AQUIFER – NOVEMBER 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: 0 – 50 / DATE: 1–26–18 / FIGURE: 4

\\SVRRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_Shallow_GW_Contours_rev1.mxd - Scale 1:600 - 1/26/2018 5:31:53 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet

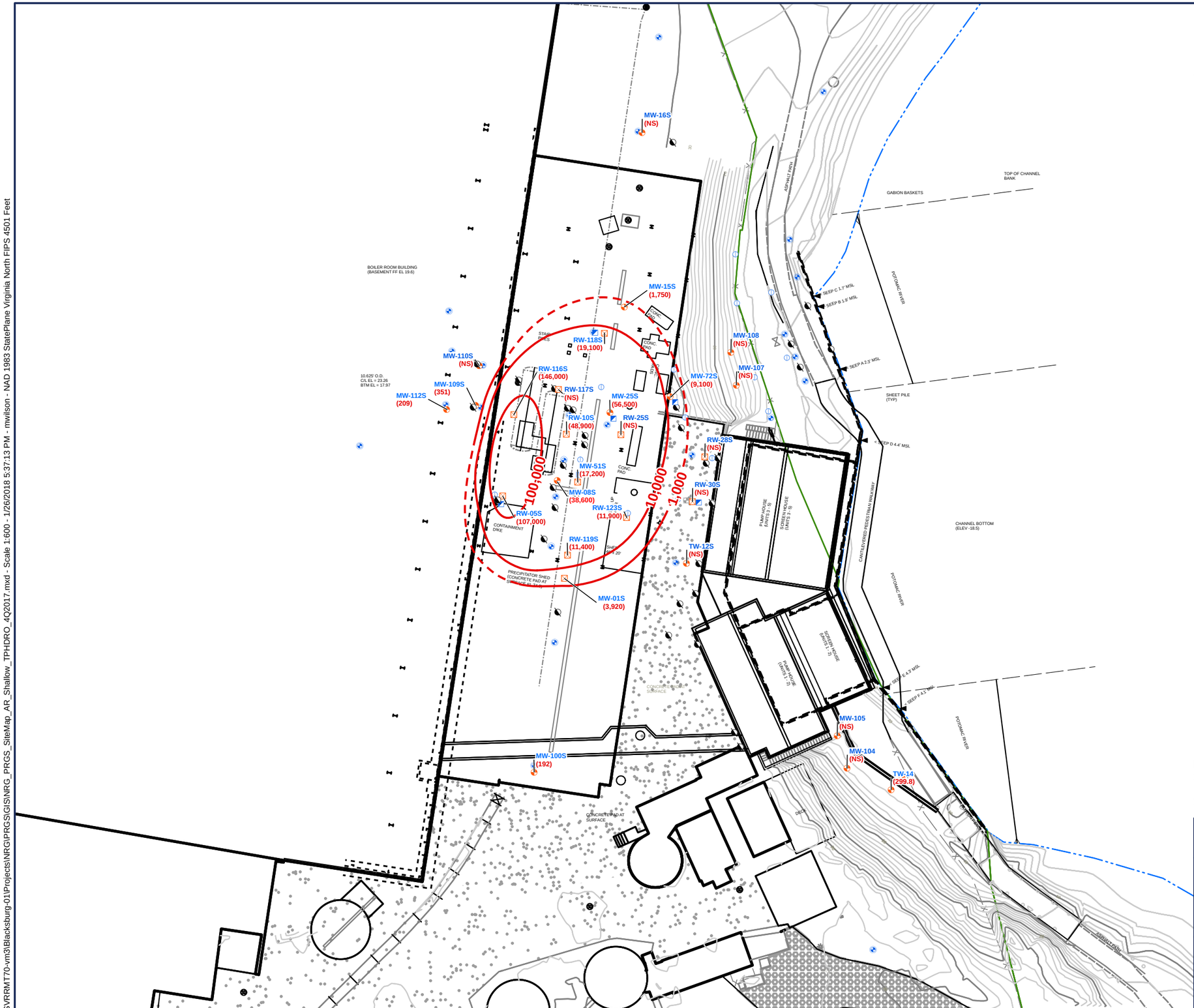


Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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
- (1.28) GROUNDWATER ELEVATION (FT)
- NG NOT GAUGED

DRAFTED BY: GKS	POTENTIOMETRIC SURFACE DEEP ZONE AQUIFER – NOVEMBER 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: 0 50 / DATE: 1-26-18 / FIGURE: 5

\\SVRRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_Deep_GW_Contours_rev1.mxd - Scale 1:600 - 1/26/2018 5:30:28 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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) TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics

2) µg/L: Micrograms per liter

DRAFTED BY: GKS	TPH-DRO CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER - FOURTH 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: 1-26-18 / FIGURE: 6

\\SVRRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Shallow_TPHDRO_4Q2017.mxd - Scale 1:600 - 1/26/2018 5:37:13 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet

Legend

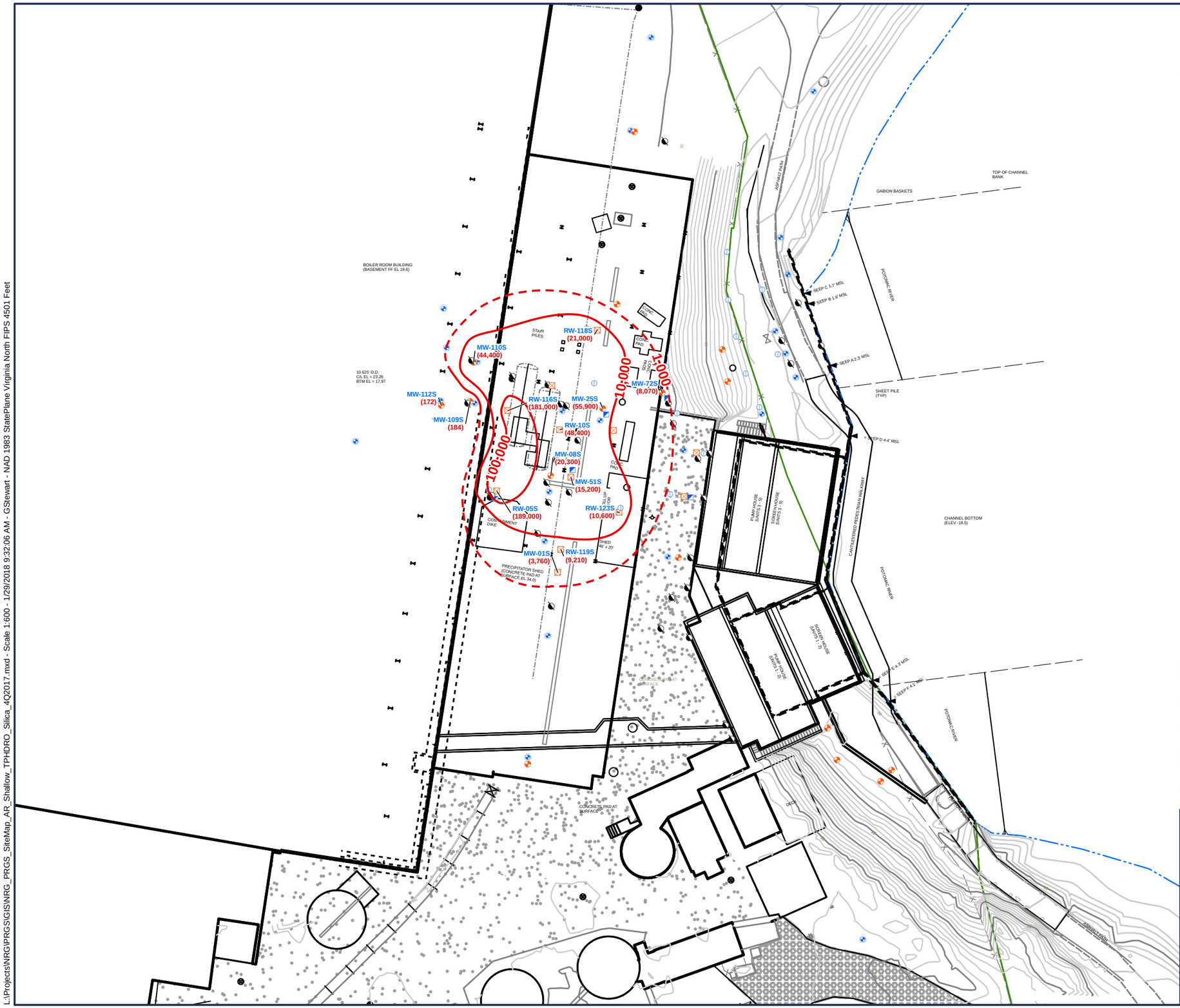
- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY MANHOLE
- SEEP LOCATION
- DEEP BIOSPARGE WELL
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- SHALLOW TOTAL PHASE EXTRACTION WELL
- ABANDONED MONITORING WELL
- APPROXIMATE SOIL BORING LOCATION
- TPH-DRO CONCENTRATION CONTOUR (µg/L)
- DASHED WHERE INFERRED
- (1,000) TPH-DRO CONCENTRATION (µg/L)
- (NS) NOT SAMPLED

Note:
1) TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics

2) µg/L: Micrograms per liter

DRAFTED BY: GKS	TPH-DRO CONCENTRATION CONTOURS DEEP ZONE AQUIFER - FOURTH 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: 1-26-18 / FIGURE: 7

\\SVRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Deep_TPHDRO_4Q2017.mxd - Scale 1:600 - 1/26/2018 5:39:02 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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 determine via Silica Gel Cleanup Method 3630C

2) TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics

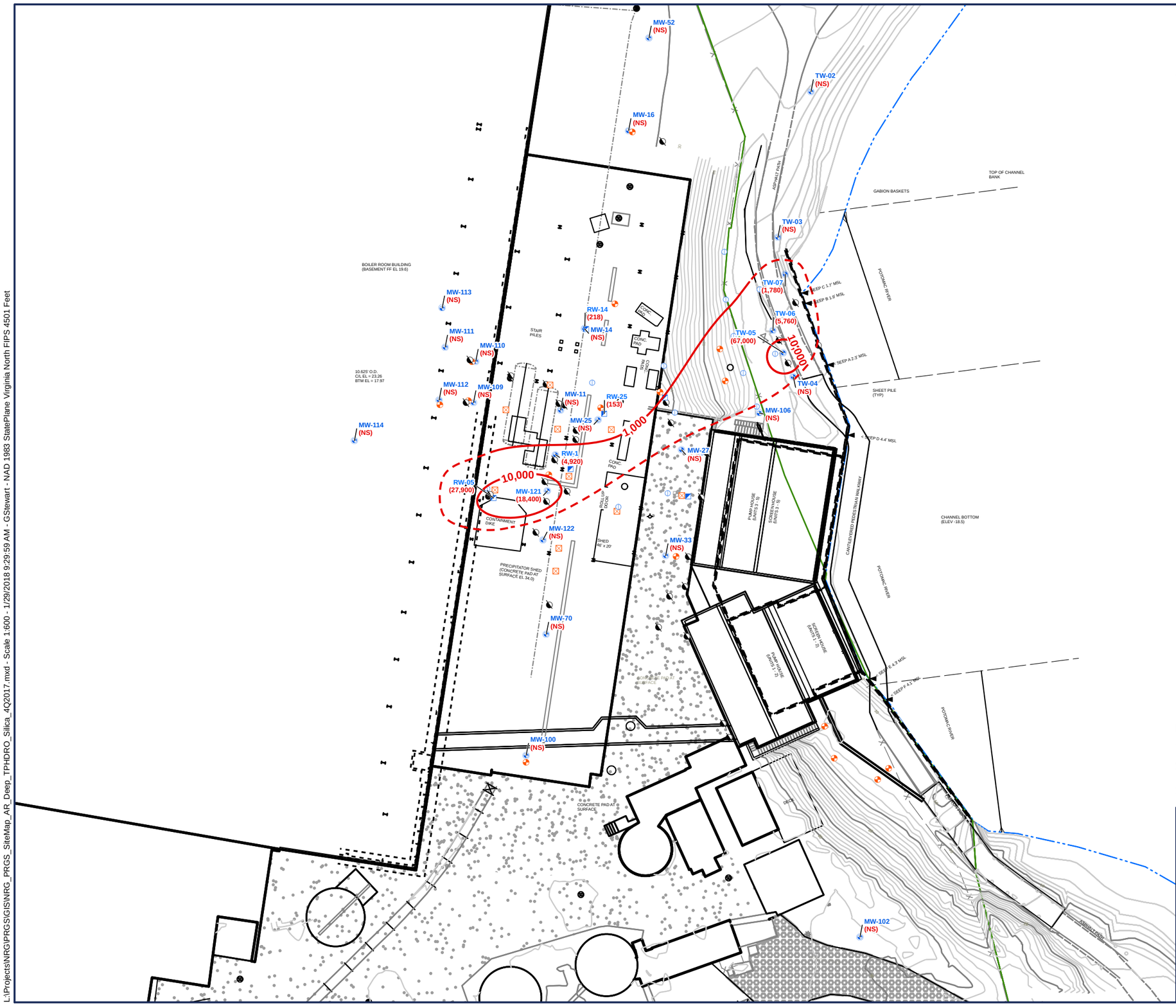
3) µg/L: Micrograms per liter

4) TW-12S, MW-107, and MW-108 could not be sampled due to an insufficient amount of water.

5) MW-16S, MW-103, MW-104, and MW-105 were not sampled since they are currently not in the sampling plan.

DRAFTED BY: GKS	TPH-DRO (SILICA GEL) CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER - FOURTH 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: 1-29-18 / FIGURE: 8

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Shallow_TPHDRO_Silica_4Q2017.mxd - Scale 1:600 - 1/29/2018 9:32:06 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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 (SILICA GEL) CONCENTRATION CONTOURS DEEP ZONE AQUIFER - FOURTH 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 1-29-18 / FIGURE 9

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Deep_TPHDRO_Silica_4Q2017.mxd - Scale 1:600 - 1/29/2018 9:29:59 AM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet

Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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

(1,640) SULFATE CONCENTRATION (mg/L)

(NS) NOT SAMPLED

Note:
mg/L: Milligrams per liter

DRAFTED BY: GKS	SULFATE CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER – FOURTH 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: 1–26–18 / FIGURE: 10

\\SVRRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Shallow_Sulfate_4Q2017.mxd - Scale 1:600 - 1/26/2018 5:38:04 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet

Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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

pH OBSERVATIONS (S.U.)

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

(6.80) pH OBSERVATION (S.U.)

(NS) NOT SAMPLED

Note:
S.U.: Standard Units

DRAFTED BY: GKS	PH CONTOURS SHALLOW ZONE AQUIFER FOURTH 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 1-26-18 / FIGURE 11

\\SVRRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_pH_Shallow.mxd - Scale 1:600 - 1/26/2018 5:35:15 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet

Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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

(1,840) SULFATE CONCENTRATION (mg/L)

(NS) NOT SAMPLED

Note:
mg/L: Milligrams per liter

DRAFTED BY: GKS	SULFATE CONCENTRATION CONTOURS DEEP ZONE AQUIFER – FOURTH 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: 1-26-18 / FIGURE: 12

\\SVRRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_AR_Deep_Sulfate_4Q2017.mxd - Scale 1:600 - 1/26/2018 5:29:37 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet

Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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

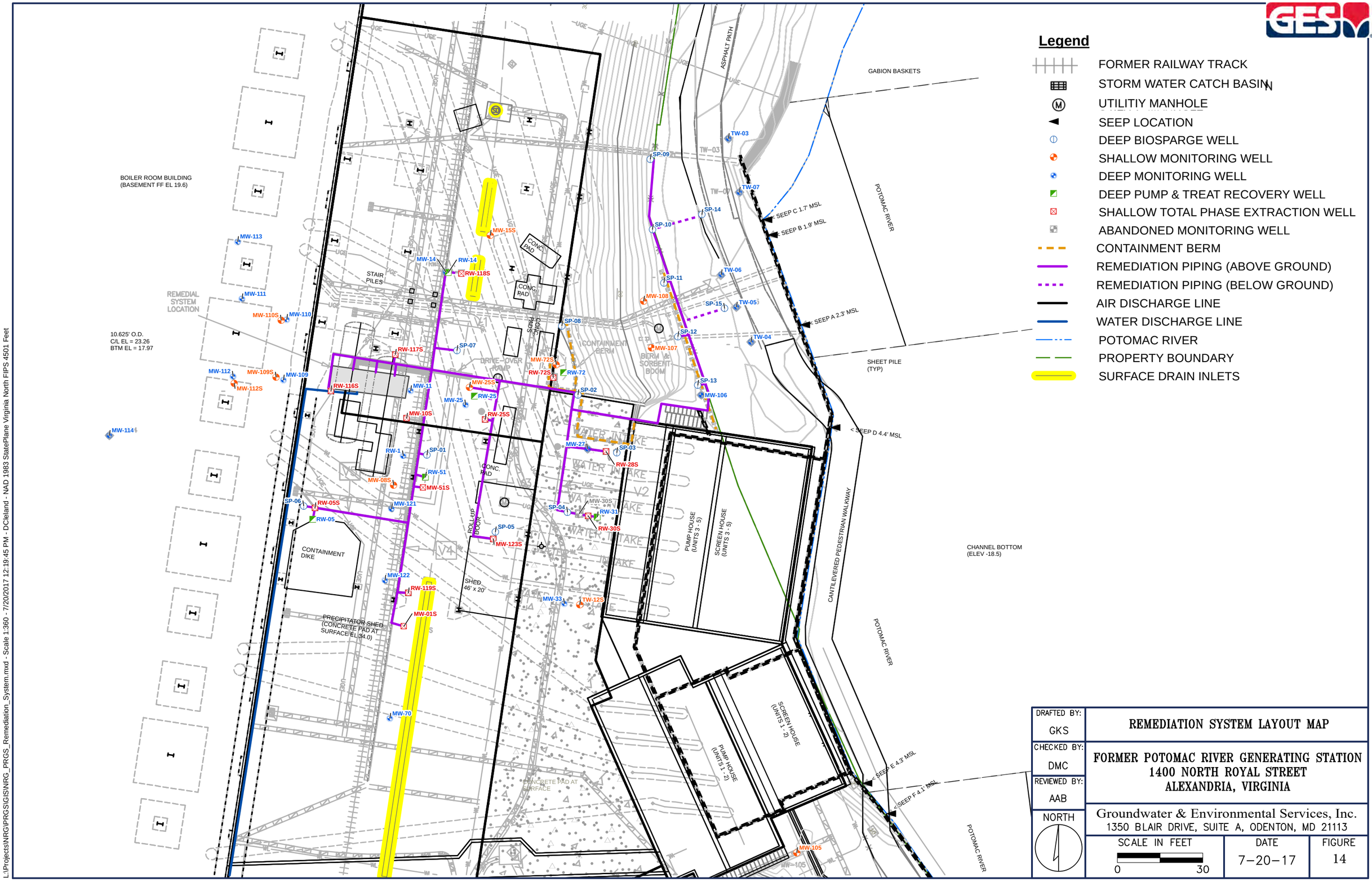
pH OBSERVATIONS (S.U.)

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

Note:
S.U.: Standard Units

DRAFTED BY: GKS	PH CONTOURS DEEP ZONE AQUIFER FOURTH 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 1-26-18 / FIGURE 13

\\SVRRMT70-vm3\Blacksburg-01\Projects\NRG\PRGS\GIS\NRG_PRGS_SiteMap_pH_Deep.mxd - Scale 1:600 - 1/26/2018 5:26:02 PM - mwilson - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITIY 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
- REMEDIATION PIPING (ABOVE GROUND)
- REMEDIATION PIPING (BELOW GROUND)
- AIR DISCHARGE LINE
- WATER DISCHARGE LINE
- POTOMAC RIVER
- PROPERTY BOUNDARY
- SURFACE DRAIN INLETS

NORTH

DRAFTED BY: GKS	REMEDIATION 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
SCALE IN FEET: 0 30	DATE: 7-20-17
	FIGURE: 14

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

Tables

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, specifife 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

		Field Parameters								Laboratory Parameters												
Well ID	**Aquifer Zone**	**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)**	**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)**	**Methane (RSKSOP-175 modified)**	**Sample Method**	**Comments**
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	X	X								P&S	
MW-08S	Shallow	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	X	P&S	
MW-15S	Shallow									X							X	X	X		P&S	
MW-16S	Shallow																				P&S	
MW-16	Deep									X		X	X						X		P&S	
MW-25S	Shallow	X								X	X	X	X								P&S	
MW-25 / RW-25	Deep	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	X	P&S	
MW-31 / RW-31	Deep	X								X			X								P&S	
MW-33	Deep									X											P&S	
MW-51S	Shallow	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								P&S	
MW-52	Deep																				P&S	
MW-70	Deep																				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	X	P&S	
MW-100S	Shallow	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	P&S	
MW-100	Deep	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	P&S	
MW-102	Deep																				P&S	
MW-103	Shallow																				P&S	
MW-104	Shallow																				P&S	
MW-105	Shallow																				P&S	
MW-106	Deep	X	X	X	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

		Field Parameters								Laboratory Parameters												
Well ID	**Aquifer Zone**	**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)**	**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)**	**Methane (RSKSOP-175 modified)**	**Sample Method**	**Comments**
MW-107	Deep									X											P&S	
MW-108	Deep									X											P&S	
MW-109S	Shallow	X								X	X										P&S	
MW-109	Deep									X											P&S	
MW-110S	Shallow	X								X	X										P&S	
MW-110	Deep									X											P&S	
MW-111	Deep									X											P&S	basement wells
MW-112S	Shallow	X								X	X										P&S	
MW-112	Deep									X											P&S	
MW-113	Deep									X											P&S	
MW-114	Deep									X											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	X	P&S	
RW-123S	Shallow	X	X	X	X	X	X	X	X	X	X								X		P&S	
TW-02	Deep																				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											P&S	
TW-05	Deep	X	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	X	P&S	
TW-07	Deep	X	X	X	X	X	X	X	X	X	X										P&S	
TW-12S	Shallow									X											P&S	
TW-14	Shallow									X		X									P&S	
RW-1	Deep	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										P&S	

Table 2

GROUNDWATER MONITORING AND SAMPLING PLAN

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

		Field Parameters								Laboratory Parameters													
Well ID	**Aquifer Zone**	**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)**	**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)**	**Methane (RSKSOP-175 modified)**	**Sample Method**	**Comments**
RW-25S	Shallow	X	X	X	X	X	X	X	X	X	X	X									P&S	
RW-28S	Shallow	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										P&S	
RW-116S	Shallow	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										P&S	
RW-118S	Shallow	X								X	X										P&S	
RW-119S	Shallow	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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/11/2014	30.78	22.62	-	-	-	-	8.16	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/15/2014	30.78	22.60	-	-	-	-	8.18	-	-	-	-	-	-	-	-	-	-	-	-	2,670	
MW-01S	08/18/2014	30.78	22.88	-	-	-	-	7.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/25/2014	30.87	22.27	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/02/2014	30.87	22.28	-	-	-	-	8.59	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/15/2014	30.87	22.61	-	-	-	-	8.26	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/22/2014	30.87	22.75	-	-	-	-	8.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/24/2014	30.87	22.95	-	-	-	-	7.92	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	10/01/2014	30.87	22.94	-	-	-	26.59	7.93	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	10/10/2014	30.87	23.06	-	-	-	-	7.81	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	10/20/2014	30.87	23.53	-	-	-	26.58	7.34	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	10/22/2014	30.87	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	23,000	
MW-01S	02/24/2015	30.87	25.89	25.74	0.15	-	26.65	5.11	15:24	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	02/26/2015	30.87	25.61	25.51	0.10	-	-	5.35	16:10	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/04/2015	30.87	25.63	25.52	0.11	-	-	5.34	14:21	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/11/2015	30.87	25.51	25.39	0.12	-	-	5.47	13:00	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/18/2015	30.87	25.14	25.03	0.11	-	-	5.83	11:19	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	03/26/2015	30.87	25.07	24.98	0.09	-	26.60	5.88	10:35	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/02/2015	30.87	25.06	24.96	0.10	-	26.60	5.90	11:33	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/08/2015	30.87	25.10	24.96	0.14	-	26.64	5.89	9:27	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/13/2015	30.87	24.92	24.83	0.09	-	-	6.03	10:35	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/23/2015	30.87	24.38	24.35	0.03	-	26.55	6.52	12:04	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	04/29/2015	30.87	24.38	24.34	0.04	-	26.60	6.53	14:29	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/04/2015	30.87	24.32	24.28	0.04	-	-	6.59	11:55	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/11/2015	30.87	24.37	24.31	0.06	-	-	6.55	10:55	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/21/2015	30.87	24.46	24.41	0.05	-	-	6.45	12:15	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	05/28/2015	30.87	24.65	24.54	0.11	-	26.55	6.32	11:50	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/02/2015	30.87	24.52	24.46	0.06	-	-	6.40	13:16	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/09/2015	30.87	24.12	24.10	0.02	-	-	6.77	10:43	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/16/2015	30.87	24.05	24.04	0.01	-	-	6.83	11:37	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/26/2015	30.87	23.72	-	-	-	26.50	7.15	10:43	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/01/2015	30.87	23.25	23.24	0.01	-	-	7.63	12:34	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	07/08/2015	30.87	22.93	22.93	TRACE	TRACE	-	7.94	11:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/13/2015	30.87	22.72	-	-	-	-	8.15	9:42	-	-	-	-	-	-	-	-	-	-	-	-	

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	07/20/2015	30.87	22.40	-	-	-	-	8.47	9:37	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/28/2015	30.87	22.43	-	-	-	26.69	8.44	10:56	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/04/2015	30.87	22.46	22.45	0.01	TRACE	26.56	8.42	10:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/11/2015	30.87	22.50	22.50	TRACE	TRACE	26.61	8.37	10:39	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/18/2015	30.87	22.63	-	-	-	-	8.24	10:46	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/24/2015	30.87	22.69	-	-	-	-	8.18	10:43	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/02/2015	30.87	22.90	22.88	0.02	TRACE	26.62	7.99	9:32	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/09/2015	30.87	22.96	22.95	0.01	-	26.60	7.92	11:17	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	09/17/2015	30.87	23.19	23.18	0.01	-	26.62	7.69	10:58	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	09/23/2015	30.87	23.07	23.06	0.01	TRACE	-	7.81	11:01	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	09/28/2015	30.87	23.10	23.10	TRACE	-	26.10	7.77	10:08	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	10/05/2015	30.87	23.09	23.09	TRACE	-	26.60	7.78	11:07	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	11/10/2015	30.87	23.59	-	-	-	-	7.28	13:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	12/01/2015	30.87	24.05	24.04	0.01	-	26.57	6.83	12:02	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	01/27/2016	30.87	23.98	23.98	TRACE	-	-	6.89	9:54	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	02/15/2016	30.87	23.54	-	-	-	-	7.33	9:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	03/14/2016	30.87	23.27	-	-	-	26.60	7.60	11:45	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	03/16/2016	30.87	23.16	-	-	-	26.60	7.71	12:46	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	04/21/2016	30.87	23.48	-	-	-	26.59	7.39	11:05	-	-	-	-	-	-	-	-	-	-	-	56,000	
MW-01S	05/23/2016	30.87	23.69	23.68	0.01	-	-	7.19	12:00	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-01S	06/21/2016	30.87	22.93	-	-	-	-	7.94	11:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	07/21/2016	30.87	22.57	-	-	-	-	8.30	10:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/24/2016	30.87	22.96	-	-	-	26.67	7.91	11:07	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	08/25/2016	30.87	23.08	-	-	-	26.75	7.79	10:55	-	-	-	-	-	-	-	-	-	-	-	140,000	
MW-01S	11/28/2016	30.87	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	11/29/2016	30.87	25.61	25.48	0.13	0.02	26.58	5.37	11:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	12/22/2016	30.87	25.78	25.78	TRACE	TRACE	-	5.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	01/30/2017	30.87	23.57	-	-	-	-	7.30	10:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	02/21/2017	30.87	23.07	-	-	-	26.50	7.80	10:17	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
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-01S	10/03/2017	32.69	24.07	-	-	-	-	8.62	11:24	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	10/17/2017	32.69	24.06	-	-	-	-	8.63	11:11	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	11/02/2017	32.69	23.96	-	-	-	-	8.73	11:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	11/28/2017	32.69	23.99	-	-	-	27.90	8.70	13:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	11/29/2017	32.69	24.13	-	-	-	-	8.56	9:39	<0.5	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	3,760	3,760	
MW-01S	12/05/2017	32.69	24.07	-	-	-	-	8.62	10:19	-	-	-	-	-	-	-	-	-	-	-	-	
MW-01S	12/19/2017	32.69	24.23	-	-	-	-	8.46	10:20	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
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-08S	11/28/2017	30.86	22.02	-	-	-	24.68	8.84	13:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW-08S	11/29/2017	30.86	22.07	-	-	-	24.73	8.79	11:02	2.4	<1.0	<1.0	<1.0	-	-	-	-	1.9 J	-	20,300	38,600	
MW/RW-10S	08/08/2014	31.24	22.40	-	-	-	26.51	8.84	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	12/11/2014	31.24	22.33	22.33	TRACE	-	-	8.91	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/16/2014	31.24	22.36	22.36	TRACE	-	-	8.88	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/23/2014	31.24	22.37	-	-	-	-	8.87	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/18/2015	31.24	22.44	22.43	0.01	-	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/24/2015	31.24	22.50	22.49	0.01	-	26.11	8.75	15:44	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/04/2015	31.24	22.50	22.48	0.02	-	-	8.76	14:28	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/11/2015	31.24	22.51	22.48	0.03	-	-	8.76	12:54	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/18/2015	31.24	22.56	22.52	0.04	-	-	8.72	11:23	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/26/2015	31.24	22.53	22.50	0.03	-	26.10	8.74	11:27	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	07/13/2015	31.24	21.96	-	-	-	-	9.28	9:44	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	07/20/2015	31.24	21.48	-	-	-	-	9.76	9:13	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	07/28/2015	31.24	21.36	-	-	-	26.11	9.88	10:39	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	08/05/2015	31.24	21.51	21.42	0.09	-	-	9.81	9:24	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	08/11/2015	31.24	21.49	21.49	TRACE	TRACE	26.15	9.75	10:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	08/18/2015	31.24	21.76	21.59	0.17	0.02	-	9.63	10:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	08/24/2015	31.24	21.80	21.68	0.12	0.01	-	9.55	10:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	09/02/2015	31.24	21.95	21.81	0.14	0.01	26.10	9.41	10:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	09/09/2015	31.24	22.05	21.91	0.14	0.02	26.11	9.31	11:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	09/17/2015	31.24	22.10	22.00	0.10	TRACE	-	9.23	10:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	09/23/2015	31.24	22.06	22.02	0.04	TRACE	-	9.22	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	09/28/2015	31.24	22.14	22.07	0.07	TRACE	26.10	9.16	10:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	10/05/2015	31.24	22.12	-	-	-	26.10	9.12	9:26	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	11/10/2015	31.24	24.00	24.00	TRACE	-	-	7.24	13:25	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	12/01/2015	33.02	24.10	-	-	-	27.85	8.92	10:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	01/27/2016	33.02	24.18	24.18	TRACE	-	-	8.84	10:52	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	02/15/2016	33.02	24.37	24.36	0.01	-	-	8.66	10:35	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	03/14/2016	33.02	24.07	-	-	-	27.87	8.95	12:50	-	-	-	-	-	-	-	-	-	-	-	29,000	
MW/RW-10S	04/21/2016	33.02	25.99	25.95	0.04	-	-	7.07	11:27	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-10S	05/23/2016	33.02	25.55	-	-	-	27.90	7.47	11:40	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	
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/RW-10S	10/03/2017	32.11	23.05	-	-	-	-	9.06	11:13	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	10/17/2017	32.11	23.10	-	-	-	-	9.01	11:57	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	11/02/2017	32.11	23.20	-	-	-	-	8.91	11:18	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	11/28/2017	32.11	23.19	-	-	-	26.98	8.92	14:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	11/30/2017	32.11	23.12	-	-	-	26.38	8.99	9:21	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	48,400	48,900	
MW/RW-10S	12/05/2017	32.11	23.20	-	-	-	-	8.91	10:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-10S	12/19/2017	32.11	23.24	-	-	-	-	8.87	9:50	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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-11	10/03/2017	30.85	DRY	-	-	-	29.03	-	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	10/17/2017	30.85	DRY	-	-	-	29.03	-	11:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	11/02/2017	30.85	DRY	-	-	-	29.03	-	11:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	11/28/2017	30.85	DRY	-	-	-	29.03	-	11:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-11	12/05/2017	30.85	DRY	-	-	-	29.03	-	10:05	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	07/31/2014	31.22	28.04	-	-	-	38.15	3.18	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/08/2014	31.22	28.21	-	-	-	38.14	3.01	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/11/2014	31.22	27.81	-	-	-	-	3.41	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/15/2014	31.22	27.43	-	-	-	-	3.79	-	-	-	-	-	-	-	-	-	-	-	-	305	
MW/RW-14	08/18/2014	31.22	27.17	-	-	-	-	4.05	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/25/2014	31.22	26.83	-	-	-	-	4.39	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	09/02/2014	31.22	27.25	-	-	-	-	3.97	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	09/15/2014	31.22	27.15	-	-	-	-	4.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	09/22/2014	31.22	27.04	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	10/01/2014	31.22	27.23	-	-	-	37.28	3.99	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	10/13/2014	31.22	27.25	27.25	TRACE	-	-	3.97	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	

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	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	Sheen
MW/RW-14	12/01/2015	31.22	26.88	-	-	-	37.30	4.34	13:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	12/02/2015	31.22	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,600	
MW/RW-14	03/14/2016	31.22	26.93	-	-	-	37.30	4.29	8:55	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	03/15/2016	31.22	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28,000	
MW/RW-14	04/21/2016	31.22	28.05	27.42	0.63	0.75	-	3.72	9:33	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/05/2016	31.22	29.03	28.20	0.83	-	-	2.92	13:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	05/23/2016	31.22	26.82	26.81	0.01	-	-	4.41	11:54	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	06/21/2016	31.22	28.18	27.77	0.41	0.06	-	3.40	10:26	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	07/21/2016	31.22	28.85	27.90	0.95	0.44	-	3.20	11:21	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-14	08/04/2016	31.33	28.32	27.75	0.57	0.00	-	3.51	12:00	-	-	-	-	-	-	-	-	-	-	-	-	installed pump & lines & started
MW/RW-14	08/24/2016	31.33	30.32	-	-	-	-	1.01	10:05	-	-	-	-	-	-	-	-	-	-	-	-	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-14	08/25/2016	31.33	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	15,000	pump in well
MW/RW-14	09/22/2016	31.33	31.30	-	-	-	-	0.03	13:10	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	10/20/2016	31.33	31.22	-	-	-	-	0.11	11:14	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	11/28/2016	31.33	30.87	-	-	-	-	0.46	10:12	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	11/29/2016	31.33	27.47	-	-	-	-	3.86	12:25	-	-	-	-	-	-	-	-	-	-	-	110,000	pump in well
MW/RW-14	12/22/2016	31.33	30.25	-	-	-	-	1.08	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	01/30/2017	31.33	27.67	-	-	-	-	3.66	12:16	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	02/21/2017	31.33	30.20	-	-	-	-	1.13	12:40	-	-	-	-	-	-	-	-	-	-	-	5,600	pump in well
MW/RW-14	03/29/2017	31.33	31.35	-	-	-	-	-0.02	12:27	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	04/18/2017	31.33	31.35	-	-	-	-	-0.02	12:00	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	05/18/2017	31.33	31.40	-	-	-	-	-0.07	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	05/22/2017	31.33	27.11	-	-	-	-	4.22	12:57	-	-	-	-	-	-	-	-	-	-	-	1,390	pump in well
MW/RW-14	06/22/2017	31.33	31.45	-	-	-	-	-0.12	12:08	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	07/06/2017	31.33	31.10	-	-	-	-	0.23	13:10	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	08/21/2017	31.33	32.20	-	-	-	-	-0.87	9:48	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	08/28/2017	31.33	32.20	-	-	-	-	-0.87	9:15	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	08/31/2017	31.33	32.50	-	-	-	36.48	-1.17	9:15	-	-	-	-	-	-	-	-	-	-	-	7,380	pump in well
MW/RW-14	09/20/2017	31.33	32.18	-	-	-	-	-0.85	10:25	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	10/17/2017	31.33	31.40	-	-	-	-	-0.07	11:47	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	11/28/2017	31.33	31.47	-	-	-	-	-0.14	11:40	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-14	11/30/2017	31.33	NR	-	-	-	-	-	11:00	-	-	-	-	-	-	-	-	-	-	218	1,000	pump in well
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-15S	11/28/2017	31.03	25.47	-	-	-	25.60	5.56	14:44	-	-	-	-	-	-	-	-	-	-	-	-	
MW-15S	11/30/2017	31.03	25.40	-	-	-	25.93	5.63	9:50	-	-	-	-	-	-	-	-	-	-	-	1,750	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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-16S	05/22/2017	31.03	DRY	-	-	-	24.55	-	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	08/28/2017	31.03	DRY	-	-	-	24.69	-	11:05	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16S	11/28/2017	31.03	DRY	-	-	-	24.62	-	11:33	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	08/15/2014	30.97	26.78	-	-	-	35.74	4.19	-	-	-	-	-	-	-	-	-	-	-	-	<300	
MW-16	08/18/2014	30.97	26.73	-	-	-	-	4.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	08/25/2014	30.97	26.55	-	-	-	-	4.42	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	09/02/2014	30.97	26.91	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	09/15/2014	30.97	26.76	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	09/22/2014	30.97	26.80	-	-	-	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/01/2014	30.97	26.95	-	-	-	35.53	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/10/2014	30.97	26.85	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/20/2014	30.97	27.19	-	-	-	35.61	3.78	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	10/22/2014	30.97	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	<20	-	<45	
MW-16	02/24/2015	30.97	27.25	-	-	-	35.61	3.72	13:34	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	02/25/2015	30.97	27.23	-	-	-	35.62	3.74	11:14	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.03	<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-16	11/28/2017	30.97	29.93	-	-	-	35.59	1.04	11:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-16	11/30/2017	30.97	29.85	-	-	-	35.59	1.12	10:15	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	-	103	
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	

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	08/18/2014	31.07	21.95	-	-	-	-	9.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/25/2014	31.07	21.98	-	-	-	-	9.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/02/2014	31.07	21.99	-	-	-	-	9.08	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/15/2014	31.07	22.04	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/22/2014	31.07	22.50	-	-	-	-	8.57	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/24/2014	31.07	22.12	22.12	TRACE	-	-	8.95	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	10/01/2014	31.07	22.07	-	-	-	25.47	9.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	10/10/2014	31.07	22.09	22.09	TRACE	-	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	10/13/2014	31.07	22.13	22.11	0.02	TRACE	-	8.96	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	10/20/2014	31.07	22.19	22.18	0.01	TRACE	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	10/27/2014	31.07	22.10	22.09	0.01	TRACE	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	10/27/2014	31.07	22.10	22.09	0.01	TRACE	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/07/2014	31.07	22.08	22.07	0.01	TRACE	-	9.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/12/2014	31.07	22.28	22.10	0.18	0.06	-	8.95	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/21/2014	31.07	22.43	22.18	0.25	0.09	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/26/2014	31.07	22.37	22.17	0.20	0.06	-	8.88	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	12/05/2014	31.07	22.57	22.20	0.37	-	25.50	8.82	-	-	-	-	-	-	-	-	-	-	-	-	840,000	HIT event
MW-25S	12/11/2014	31.07	22.22	22.21	0.01	TRACE	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	12/16/2014	31.07	22.38	22.11	0.27	0.03	-	8.93	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	12/23/2014	31.07	22.43	22.13	0.30	0.05	-	8.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	12/30/2014	31.07	22.50	22.20	0.30	0.04	-	8.83	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	01/09/2015	31.07	22.49	22.19	0.30	-	-	8.84	-	-	-	-	-	-	-	-	-	-	-	-	2,200,000	HIT event
MW-25S	01/16/2015	31.07	22.60	22.48	0.12	0.01	-	8.58	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	01/19/2015	31.07	22.34	22.25	0.09	0.01	-	8.81	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	01/26/2015	31.07	22.30	22.16	0.14	0.02	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	02/03/2015	31.07	22.25	-	-	-	25.50	8.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	02/09/2015	31.07	22.31	22.14	0.17	-	-	8.91	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	02/18/2015	31.07	22.37	22.18	0.19	-	-	8.87	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	02/24/2015	31.07	22.59	22.28	0.31	-	-	8.75	14:03	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/04/2015	31.07	22.48	22.30	0.18	-	-	8.75	14:31	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/11/2015	31.07	22.50	22.30	0.20	-	-	8.75	13:04	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/18/2015	31.07	22.46	22.23	0.23	-	-	8.81	11:26	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	03/26/2015	31.07	22.35	22.17	0.18	-	25.50	8.88	11:59	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/02/2015	31.07	22.40	22.18	0.22	-	25.45	8.86	12:06	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/08/2015	31.07	22.40	22.08	0.32	-	25.47	8.95	9:15	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB

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	04/13/2015	31.07	22.50	22.22	0.28	-	-	8.82	11:03	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/23/2015	31.07	22.39	22.16	0.23	-	25.50	8.88	12:25	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	04/29/2015	31.07	22.35	22.12	0.23	-	25.50	8.92	14:48	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/04/2015	31.07	22.47	22.19	0.28	-	-	8.85	12:04	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/11/2015	31.07	22.45	22.20	0.25	-	-	8.84	11:00	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/21/2015	31.07	22.40	22.23	0.17	-	-	8.82	12:53	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	05/28/2015	31.07	22.60	22.27	0.33	-	25.50	8.76	12:06	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	06/02/2015	31.07	22.53	22.25	0.28	-	-	8.79	13:24	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	06/09/2015	31.07	22.38	22.16	0.22	-	-	8.88	10:46	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW-25S	06/16/2015	31.07	22.37	22.13	0.24	-	-	8.91	11:40	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW-25S	07/20/2015	31.07	21.37	21.33	0.04	TRACE	-	9.74	9:43	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	07/28/2015	31.07	21.20	-	-	-	25.49	9.87	12:25	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/04/2015	31.07	21.28	21.24	TRACE	TRACE	-	9.79	12:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/11/2015	31.07	21.37	21.36	0.01	0.01	25.49	9.71	11:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/18/2015	31.07	21.51	21.46	0.05	TRACE	-	9.60	10:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	08/24/2015	31.07	21.60	21.54	0.06	TRACE	-	9.52	10:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/02/2015	31.07	21.76	21.69	0.07	0.01	25.47	9.37	10:31	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/09/2015	31.07	21.81	21.77	0.04	0.01	25.49	9.30	10:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	09/17/2015	31.07	21.92	21.89	0.03	0.01	25.52	9.18	10:37	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	Sheen
MW-25S	02/21/2017	31.07	23.62	23.60	0.02	TRACE	25.41	7.47	11:14	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	
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-25S	10/03/2017	33.28	23.88	-	-	-	-	9.40	11:16	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	10/17/2017	33.28	23.92	-	-	-	-	9.36	11:29	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/02/2017	33.28	23.98	-	-	-	-	9.30	11:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/28/2017	33.28	24.00	-	-	-	27.28	9.28	14:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	11/29/2017	33.28	24.00	-	-	-	27.33	9.28	13:27	<0.50	<1.0	<1.0	<1.0	-	-	-	-	1.3 J	-	55,900	56,500	
MW-25S	12/05/2017	33.28	DRY	-	-	-	24.02	-	10:12	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	12/19/2017	33.28	24.13	-	-	-	-	9.15	10:02	-	-	-	-	-	-	-	-	-	-	-	-	
MW-25S	01/18/2018	33.28	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	834	34,600	
MW-25S	01/18/2018	33.28	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27,500	30,300	
MW-25S	01/18/2018	33.28	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34,200	
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

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	08/18/2014	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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	12/23/2014	31.13	27.20	26.95	0.25	0.04	-	4.15	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	12/30/2014	31.13	28.02	27.33	0.69	0.28	-	3.72	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	01/09/2015	31.13	27.80	27.38	0.42	-	-	3.70	-	-	-	-	-	-	-	-	-	-	-	-	56,000	HIT event
MW/RW-25	01/16/2015	31.13	27.24	27.16	0.08	0.00	-	3.96	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	01/19/2015	31.13	27.28	26.97	0.31	0.06	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	01/26/2015	31.13	27.27	26.98	0.29	0.05	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	02/03/2015	31.13	28.10	27.52	0.58	-	35.86	3.54	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	02/09/2015	31.13	27.43	27.06	0.37	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	02/18/2015	31.13	27.63	27.24	0.39	-	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	02/24/2015	31.13	27.68	27.18	0.50	-	-	3.89	14:00	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	03/04/2015	31.13	27.85	27.19	0.66	-	-	3.86	14:35	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	03/11/2015	31.13	27.27	26.76	0.51	-	-	4.31	13:08	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	03/18/2015	31.13	27.63	26.93	0.70	-	-	4.11	11:30	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	03/26/2015	31.13	27.31	26.70	0.61	-	35.90	4.36	12:03	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	04/02/2015	31.13	27.60	26.85	0.75	-	35.80	4.19	12:09	-	-	-	-	-	-	-	-	-	-	-	-	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-25	04/08/2015	31.13	28.00	27.15	0.85	-	35.90	3.88	9:10	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	04/13/2015	31.13	27.98	27.05	0.93	-	-	3.97	11:06	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	04/23/2015	31.13	27.21	26.47	0.74	-	35.90	4.57	12:28	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	04/29/2015	31.13	27.50	26.67	0.83	-	35.90	4.36	14:52	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/04/2015	31.13	27.37	26.57	0.80	-	-	4.46	12:08	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/11/2015	31.13	27.50	27.43	0.07	-	-	3.69	15:10	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/13/2015	31.13	28.31	27.19	1.12	1.50	-	3.80	12:53	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/21/2015	31.13	26.85	26.82	0.03	-	-	4.31	12:50	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	05/28/2015	31.13	27.55	27.09	0.46	-	35.80	3.98	12:10	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/02/2015	31.13	27.10	26.74	0.36	-	-	4.35	13:28	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/09/2015	31.13	26.91	26.46	0.45	-	-	4.62	10:50	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/16/2015	31.13	26.86	26.56	0.30	-	-	4.53	11:43	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	06/26/2015	31.13	26.91	26.48	0.43	-	35.80	4.60	11:31	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	07/01/2015	31.13	26.43	25.98	0.45	-	-	5.10	12:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	07/08/2015	31.13	26.63	26.13	0.50	0.25	-	4.94	12:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	07/13/2015	31.13	26.13	25.89	0.24	-	-	5.21	9:50	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-25	07/20/2015	31.13	26.23	26.23	TRACE	TRACE	-	4.90	9:48	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	07/28/2015	31.13	26.37	26.23	0.14	TRACE	36.00	4.88	12:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/04/2015	31.13	26.27	26.20	0.07	0.02	-	4.92	12:25	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/11/2015	31.13	26.05	25.90	0.15	0.03	35.88	5.21	11:19	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/18/2015	31.13	26.52	26.42	0.10	0.01	-	4.70	10:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	08/24/2015	31.13	26.55	26.33	0.22	0.02	-	4.77	10:56	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/02/2015	31.13	26.80	26.62	0.18	0.02	35.92	4.49	10:28	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/09/2015	31.13	26.51	26.45	0.06	0.02	35.93	4.67	10:42	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/17/2015	31.13	26.73	26.53	0.20	0.04	35.95	4.58	10:48	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/23/2015	31.13	26.82	26.63	0.19	0.02	-	4.48	11:18	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	09/28/2015	31.13	26.34	26.31	0.03	0.01	35.89	4.82	9:51	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	10/05/2015	31.13	26.21	26.06	0.15	0.05	35.87	5.05	11:18	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-25	11/10/2015	31.13	26.05	26.02	0.03	-	-	5.11	13:31	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-25	12/01/2015	30.52	26.19	26.06	0.13	-	-	4.44	13:54	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	01/27/2016	30.52	26.68	26.38	0.30	-	-	4.10	11:00	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	02/15/2016	30.52	26.88	26.59	0.29	-	-	3.89	10:39	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	03/14/2016	30.52	26.42	26.27	0.15	-	-	4.23	10:30	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	03/30/2016	30.52	32.73	-	-	-	-	-2.21	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	04/21/2016	30.52	32.76	-	-	-	-	-2.24	10:18	-	-	-	-	-	-	-	-	-	-	-	5,800	pump in well

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	05/23/2016	30.52	32.81	-	-	-	33.70	-2.29	11:39	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	05/24/2016	30.52	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3,900	pump in well
MW/RW-25	06/21/2016	30.52	32.76	-	-	-	-	-2.24	10:10	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	07/21/2016	30.52	32.75	-	-	-	-	-2.23	11:12	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	08/24/2016	30.52	30.20	-	-	-	-	0.32	10:40	-	-	-	-	-	-	-	-	-	-	-	4,600	pump in well
MW/RW-25	09/22/2016	30.52	32.70	-	-	-	-	-2.18	13:05	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	10/20/2016	30.52	32.85	-	-	-	-	-2.33	11:10	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	11/28/2016	30.52	32.65	-	-	-	-	-2.13	9:30	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	-	250	pump in well
MW/RW-25	12/22/2016	30.52	32.83	-	-	-	-	-2.31	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	01/30/2017	30.52	26.83	-	-	-	-	3.69	12:11	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	02/21/2017	30.52	32.85	-	-	-	-	-2.33	12:44	-	-	-	-	-	-	-	-	-	-	-	220	pump in well
MW/RW-25	03/29/2017	31.16	32.87	-	-	-	-	-1.71	12:20	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	04/18/2017	31.16	32.85	-	-	-	-	-1.69	11:50	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	05/18/2017	31.16	32.85	-	-	-	-	-1.69	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	05/22/2017	31.16	26.60	-	-	-	-	4.56	13:09	-	-	-	-	-	-	-	-	-	-	-	685	pump in well
MW/RW-25	06/22/2017	31.16	32.90	-	-	-	-	-1.74	12:00	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	07/06/2017	31.16	32.62	-	-	-	-	-1.46	12:38	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	07/19/2017	31.16	32.25	-	-	-	-	-1.09	12:01	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	08/21/2017	31.16	32.95	-	-	-	-	-1.79	9:36	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	08/28/2017	31.16	32.12	-	-	-	-	-0.96	9:40	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	08/31/2017	31.16	31.91	-	-	-	35.14	-0.75	9:50	-	-	-	-	-	-	-	-	-	-	-	20,000	pump in well
MW/RW-25	09/20/2017	31.16	32.95	-	-	-	-	-1.79	10:20	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	10/17/2017	31.16	NR	-	-	-	32.40	-	11:42	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	11/28/2017	31.16	NR	-	-	-	26.28	-	12:36	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-25	11/30/2017	31.16	NR	-	-	-	-	-	11:45	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	153	162	pump in well
MW-27	07/24/2014	31.44	27.59	-	-	-	-	3.85	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	07/31/2014	31.44	27.58	-	-	-	34.47	3.86	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/08/2014	31.44	27.69	-	-	-	34.46	3.75	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/11/2014	31.44	27.33	-	-	-	-	4.11	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/15/2014	31.44	27.90	-	-	-	-	3.54	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/16/2014	31.44	27.65	-	-	-	34.48	3.79	-	-	-	-	-	-	-	-	-	-	-	-	1,490	
MW-27	08/18/2014	31.44	27.62	-	-	-	-	3.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	08/25/2014	31.44	27.09	-	-	-	-	4.35	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	09/02/2014	31.44	27.52	-	-	-	-	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	09/15/2014	31.44	27.38	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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
MW-27	02/15/2016	31.44	27.64	-	-	-	-	3.80	9:55	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	03/14/2016	31.44	27.32	-	-	-	34.03	4.12	9:00	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	03/15/2016	31.44	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33,000	
MW-27	04/21/2016	31.44	27.85	-	-	-	33.80	3.59	10:30	-	-	-	-	-	-	-	-	-	-	-	8,400	Sheen
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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-27	11/28/2017	31.44	31.39	-	-	-	32.45	0.05	10:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW-27	11/29/2017	31.44	31.02	-	-	-	33.68	0.42	11:20	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	-	782	
MW-30S	08/08/2014	30.67	23.31	-	-	-	25.28	7.36	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	08/11/2014	30.67	23.33	-	-	-	-	7.34	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	08/15/2014	30.67	24.84	-	-	-	-	5.83	-	-	-	-	-	-	-	-	-	-	-	-	7,040	
MW-30S	08/18/2014	30.67	24.84	-	-	-	-	5.83	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	08/25/2014	30.67	24.79	-	-	-	-	5.88	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	09/02/2014	30.67	24.83	-	-	-	-	5.84	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	09/15/2014	30.67	24.85	-	-	-	-	5.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	09/22/2014	30.67	24.88	-	-	-	-	5.79	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	10/01/2014	30.67	24.88	-	-	-	25.28	5.79	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	10/10/2014	30.67	24.87	-	-	-	-	5.80	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	10/20/2014	30.67	24.77	-	-	-	25.29	5.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	10/23/2014	30.67	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	3	<0.5	<0.5	-	25	-	2,900	
MW-30S	10/27/2014	30.67	24.78	-	-	-	-	5.89	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	11/07/2014	30.67	24.85	-	-	-	-	5.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	11/12/2014	30.67	24.87	-	-	-	-	5.80	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	11/21/2014	30.67	24.94	-	-	-	-	5.73	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	11/26/2014	30.67	24.93	-	-	-	-	5.74	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	12/05/2014	30.67	24.92	-	-	-	-	5.75	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	12/11/2014	30.67	24.72	-	-	-	-	5.95	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	12/16/2014	30.67	24.74	-	-	-	-	5.93	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	12/23/2014	30.67	24.70	-	-	-	-	5.97	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-30S	12/30/2014	30.67	24.68	-	-	-	-	5.99	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	05/13/2015	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	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	04/21/2016	31.42	33.03	-	-	-	-	-1.61	10:27	-	-	-	-	-	-	-	-	-	-	-	440	pump in well
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

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	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/RW-31	10/17/2017	31.42	31.05	-	-	-	-	0.37	11:22	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	11/28/2017	31.42	NR	-	-	-	29.40	-	11:30	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-31	11/30/2017	31.42	NR	-	-	-	-	-	11:00	-	-	-	-	-	-	-	-	-	-	-	167	pump in well
MW/RW-31	12/05/2017	31.42	31.70	-	-	-	29.20	-0.28	12:00	-	-	-	-	-	-	-	-	-	-	-	-	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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	10/20/2014	30.88	26.96	-	-	-	34.47	3.92	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-33	10/23/2014	30.88	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	<20	-	<45	
MW-33	02/24/2015	30.88	26.99	-	-	-	-	3.89	13:05	-	-	-	-	-	-	-	-	-	-	-	-	
MW-33	02/25/2015	30.88	27.03	-	-	-	34.45	3.85	10:08	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.03	<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-33	11/28/2017	30.88	30.31	-	-	-	34.41	0.57	11:43	-	-	-	-	-	-	-	-	-	-	-	-	
MW-33	11/29/2017	30.88	30.17	-	-	-	34.47	0.71	11:34	-	-	-	-	-	-	-	-	-	-	-	<83	
MW-51S	08/08/2014	30.81	21.15	-	-	-	25.27	9.66	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	08/11/2014	30.81	21.27	-	-	-	-	9.54	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	08/15/2014	30.81	21.17	-	-	-	25.30	9.64	-	-	-	-	-	-	-	-	-	-	-	-	1,590	
MW-51S	08/18/2014	30.81	21.23	-	-	-	-	9.58	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	08/25/2014	30.81	21.34	-	-	-	-	9.47	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/02/2014	30.81	21.38	-	-	-	-	9.43	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/15/2014	30.81	21.46	-	-	-	-	9.35	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/22/2014	30.81	21.48	-	-	-	-	9.33	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/24/2014	30.81	21.49	-	-	-	-	9.32	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	10/01/2014	30.81	21.32	21.32	TRACE	-	25.30	9.49	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	

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-51S	10/27/2014	30.81	21.64	-	-	-	-	9.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	11/07/2014	30.81	21.53	-	-	-	-	9.28	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	11/12/2014	30.81	21.66	-	-	-	-	9.15	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	11/21/2014	30.81	21.73	-	-	-	-	9.08	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	12/05/2014	30.81	21.64	-	-	-	-	9.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	12/11/2014	30.81	21.72	-	-	-	-	9.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	12/16/2014	30.81	21.78	-	-	-	-	9.03	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	12/23/2014	30.81	21.83	-	-	-	-	8.98	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	12/30/2014	30.81	21.87	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	01/09/2015	30.81	21.89	-	-	-	-	8.92	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	01/16/2015	30.81	21.80	-	-	-	-	9.01	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	01/19/2015	30.81	21.87	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	01/26/2015	30.81	21.82	-	-	-	-	8.99	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	02/03/2015	30.81	22.00	-	-	-	25.21	8.81	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	02/09/2015	30.81	21.92	-	-	-	-	8.89	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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-51S	07/13/2015	30.81	21.62	-	-	-	-	9.19	9:41	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	07/20/2015	30.81	21.57	-	-	-	-	9.24	9:19	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	07/28/2015	30.81	21.37	-	-	-	25.35	9.44	11:29	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	08/04/2015	30.81	21.21	-	-	-	25.30	9.60	12:02	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	08/05/2015	30.81	21.25	-	-	-	25.30	9.56	9:12	-	-	-	-	-	-	-	-	-	-	-	11,000	
MW-51S	08/11/2015	30.81	21.28	-	-	-	25.31	9.53	10:14	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	08/18/2015	30.81	21.22	-	-	-	-	9.59	10:19	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	08/24/2015	30.81	21.27	-	-	-	-	9.54	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/02/2015	30.81	21.35	-	-	-	25.30	9.46	9:54	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/09/2015	30.81	21.42	-	-	-	25.32	9.39	10:32	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/17/2015	30.81	21.52	-	-	-	25.43	9.29	10:32	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	09/23/2015	30.81	21.48	-	-	-	-	9.33	10:53	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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-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	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	10/17/2017	32.99	23.47	-	-	-	-	9.52	11:04	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	11/28/2017	32.99	23.61	-	-	-	27.18	9.38	13:57	-	-	-	-	-	-	-	-	-	-	-	-	
MW-51S	11/29/2017	32.99	23.68	-	-	-	27.15	9.31	11:59	-	-	-	-	-	-	-	-	-	-	15200	17,200	
MW-51S	01/18/2018	32.99	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	422	12,400	
MW-51S	01/18/2018	32.99	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10,500	12,800	
MW-51S	01/18/2018	32.99	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12,800	
MW/RW-51	07/25/2014	30.97	27.25	-	-	-	35.95	3.72	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/08/2014	30.97	27.00	27.00	TRACE	-	36.48	3.97	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	08/11/2014	30.97	26.70	-	-	-	-	4.27	-	-	-	-	-	-	-	-	-	-	-	-	1,180	
MW/RW-51	08/13/2014	30.97	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,650	
MW/RW-51	08/15/2014	30.97	27.30	-	-	-	-	3.67	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/16/2014	30.97	26.99	26.99	TRACE	-	34.65	3.98	-	-	-	-	-	-	-	-	-	-	-	-	281,000	LNAPL NMB
MW/RW-51	08/18/2014	30.97	26.94	26.94	TRACE	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	08/25/2014	30.97	26.59	26.59	TRACE	-	-	4.38	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	09/02/2014	30.97	26.93	26.93	TRACE	-	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	09/15/2014	30.97	26.88	26.85	0.03	TRACE	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/22/2014	30.97	26.83	26.80	0.03	TRACE	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/24/2014	30.97	27.19	27.15	0.04	-	-	3.82	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/01/2014	30.97	26.93	26.93	TRACE	-	36.15	4.04	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/10/2014	30.97	26.84	26.81	0.03	-	-	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/13/2014	30.97	27.01	26.94	0.07	-	-	4.02	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/20/2014	30.97	27.05	27.03	0.02	TRACE	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	10/27/2014	30.97	27.16	27.12	0.04	TRACE	-	3.85	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/07/2014	30.97	27.11	27.07	0.04	TRACE	-	3.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/12/2014	30.97	26.92	26.90	0.02	TRACE	-	4.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/21/2014	30.97	27.57	27.50	0.07	TRACE	-	3.46	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/26/2014	30.97	27.20	27.17	0.03	TRACE	-	3.80	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/05/2014	30.97	26.98	26.96	0.02	TRACE	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	12/11/2014	30.97	26.88	26.87	0.01	TRACE	-	4.10	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/16/2014	30.97	26.83	26.80	0.03	TRACE	-	4.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/23/2014	30.97	26.83	26.83	TRACE	TRACE	-	4.14	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	12/30/2014	30.97	27.28	27.22	0.06	TRACE	-	3.74	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/09/2015	30.97	27.20	27.15	0.05	TRACE	-	3.81	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/16/2015	30.97	26.95	26.91	0.04	TRACE	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/19/2015	30.97	26.88	26.83	0.05	TRACE	-	4.13	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	01/26/2015	30.97	26.98	26.92	0.06	TRACE	-	4.04	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	02/03/2015	30.97	27.52	27.45	0.07	-	36.15	3.51	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	02/09/2015	30.97	26.93	26.91	0.02	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	02/18/2015	30.97	27.07	27.02	0.05	-	-	3.94	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	02/24/2015	30.97	27.07	27.06	0.01	TRACE	-	3.91	13:46	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	03/04/2015	30.97	27.24	27.17	0.07	-	-	3.79	14:25	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	03/11/2015	30.97	26.68	26.65	0.03	-	-	4.32	12:51	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	03/18/2015	30.97	26.94	26.84	0.10	-	-	4.12	11:11	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	03/26/2015	30.97	26.74	26.60	0.14	-	36.10	4.35	11:50	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/02/2015	30.97	27.78	27.75	0.03	-	36.05	3.22	11:46	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/08/2015	30.97	27.15	27.02	0.13	-	36.11	3.93	9:00	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/13/2015	30.97	27.09	26.98	0.11	-	-	3.98	10:47	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/23/2015	30.97	26.42	26.35	0.07	-	36.05	4.61	12:17	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	04/29/2015	30.97	26.71	26.60	0.11	-	36.00	4.36	14:39	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	05/04/2015	30.97	26.54	26.48	0.06	-	-	4.48	11:46	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	05/11/2015	30.97	26.44	26.40	0.04	-	-	4.57	15:00	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	05/13/2015	30.97	27.31	27.10	0.21	0.03	-	3.84	12:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	05/21/2015	30.97	26.74	26.71	0.03	-	-	4.26	12:10	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	05/28/2015	30.97	27.10	26.95	0.15	-	36.05	4.00	11:58	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/02/2015	30.97	26.85	26.82	0.03	-	-	4.15	13:07	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/09/2015	30.97	26.75	26.72	0.03	-	-	4.25	10:37	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/16/2015	30.97	26.57	26.54	0.03	-	-	4.43	11:30	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	06/26/2015	30.97	26.44	26.31	0.13	-	36.00	4.64	11:23	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	07/01/2015	30.97	25.86	25.85	0.01	-	-	5.12	12:30	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	07/08/2015	30.97	26.28	26.05	0.23	0.05	-	4.89	11:54	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	07/13/2015	30.97	26.03	25.90	0.13	-	-	5.05	9:46	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-51	07/20/2015	30.97	25.97	25.92	0.05	TRACE	-	5.04	9:52	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	07/28/2015	30.97	26.16	26.10	0.06	TRACE	36.18	4.86	11:55	-	-	-	-	-	-	-	-	-	-	-	-	

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	08/04/2015	30.97	26.11	26.02	0.09	0.01	-	4.94	12:28	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/11/2015	30.97	25.78	25.70	0.08	0.01	36.14	5.26	11:07	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/18/2015	30.97	27.29	27.23	0.06	TRACE	-	3.73	10:43	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	08/24/2015	30.97	26.18	26.16	0.02	TRACE	-	4.81	10:46	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/02/2015	30.97	26.42	26.40	0.02	0.01	36.10	4.57	10:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/09/2015	30.97	26.35	26.27	0.08	0.02	36.12	4.69	10:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/17/2015	30.97	26.61	-	-	-	36.14	4.36	10:54	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/23/2015	30.97	26.49	26.47	0.02	TRACE	-	4.50	11:06	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	09/28/2015	30.97	26.00	26.00	TRACE	-	36.10	4.97	10:01	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	10/05/2015	30.97	26.67	-	-	-	36.15	4.30	12:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-51	11/10/2015	30.97	26.52	26.48	0.04	-	-	4.49	13:42	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	12/01/2015	30.97	26.57	26.55	0.02	-	-	4.42	13:53	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-51	01/27/2016	31.62	26.86	26.73	0.13	-	-	4.87	10:48	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	02/15/2016	31.62	27.22	27.14	0.08	-	-	4.47	10:23	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	03/14/2016	31.62	26.72	26.63	0.09	-	-	4.98	10:25	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	03/30/2016	31.62	33.60	-	-	-	-	-1.98	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	04/21/2016	31.62	33.00	-	-	-	-	-1.38	10:13	-	-	-	-	-	-	-	-	-	-	-	2,900	pump in well
MW/RW-51	05/23/2016	31.62	33.31	-	-	-	34.52	-1.69	11:30	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
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

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	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/RW-51	10/17/2017	31.62	33.80	-	-	-	-	-2.18	11:00	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	11/28/2017	31.62	33.76	-	-	-	34.20	-2.14	12:39	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-51	11/30/2017	31.62	NR	-	-	-	-	-	11:20	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	-	149	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	
MW-52	08/04/2015	30.17	25.21	-	-	-	35.55	4.96	12:01	-	-	-	-	-	-	-	-	-	-	-	-	
MW-52	08/05/2015	30.17	25.68	-	-	-	35.49	4.49	9:47	-	-	-	-	-	-	-	-	-	-	-	110	
MW-52	12/01/2015	30.17	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Manhole flooded
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-52	11/28/2017	30.17	28.97	-	-	-	35.03	1.20	12:23	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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-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-70	11/28/2017	30.86	29.64	-	-	-	35.09	1.22	12:20	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/08/2014	30.63	23.33	-	-	-	25.30	7.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/11/2014	30.63	22.85	-	-	-	-	7.78	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/15/2014	30.63	21.35	-	-	-	23.90	9.28	-	-	-	-	-	-	-	-	-	-	-	-	5,980	
MW/RW-72S	08/18/2014	30.63	21.34	-	-	-	-	9.29	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	08/25/2014	30.63	21.41	-	-	-	-	9.22	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	09/02/2014	30.63	21.45	-	-	-	-	9.18	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	09/15/2014	30.63	21.54	-	-	-	-	9.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	09/22/2014	30.63	21.56	-	-	-	-	9.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	10/01/2014	30.63	21.63	-	-	-	23.90	9.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	10/10/2014	30.63	21.69	-	-	-	-	8.94	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	10/20/2014	30.63	21.73	-	-	-	23.88	8.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	11/21/2014	30.63	22.04	-	-	-	-	8.59	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	11/26/2014	30.63	22.10	-	-	-	-	8.53	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/05/2014	30.63	22.23	-	-	-	-	8.40	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/11/2014	30.63	22.11	-	-	-	-	8.52	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/16/2014	30.63	22.00	-	-	-	-	8.63	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/23/2014	30.63	21.99	-	-	-	-	8.64	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	12/30/2014	30.63	21.98	-	-	-	-	8.65	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/09/2015	30.63	21.94	-	-	-	-	8.69	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/16/2015	30.63	21.93	-	-	-	-	8.70	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/19/2015	30.63	21.88	-	-	-	-	8.75	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	01/26/2015	30.63	21.78	-	-	-	-	8.85	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/03/2015	30.63	21.79	-	-	-	23.93	8.84	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/09/2015	30.63	21.77	-	-	-	-	8.86	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/18/2015	30.63	21.85	-	-	-	-	8.78	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/24/2015	30.63	21.90	-	-	-	23.89	8.73	15:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	02/25/2015	30.63	21.87	-	-	-	23.75	8.76	14:10	-	-	-	-	-	-	-	-	-	-	-	3,400	
MW/RW-72S	03/04/2015	30.63	21.79	-	-	-	-	8.84	13:45	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	03/11/2015	30.63	21.75	-	-	-	-	8.88	12:12	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	03/18/2015	30.63	21.70	-	-	-	-	8.93	10:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	03/26/2015	30.63	21.73	-	-	-	23.90	8.90	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/02/2015	30.63	21.78	-	-	-	23.90	8.85	10:55	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/08/2015	30.63	21.82	-	-	-	23.87	8.81	9:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/13/2015	30.63	21.86	-	-	-	-	8.77	10:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/23/2015	30.63	21.86	-	-	-	23.87	8.77	11:12	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	04/29/2015	30.63	21.85	-	-	-	23.85	8.78	13:56	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	05/04/2015	30.63	21.84	-	-	-	-	8.79	11:06	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	05/11/2015	30.63	21.91	-	-	-	23.90	8.72	10:48	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	05/13/2015	30.63	21.90	-	-	-	-	8.73	9:57	13	<0.5	24	<0.5	<0.5	<2	<0.5	<0.5	16.00	-	-	4,000	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	08/04/2015	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	-	-	-	-	-	-	-	-	-	-	-	-	Obstruction during gauging
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	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW/RW-72S	11/29/2016	30.63	26.04	-	-	-	26.10	4.59	13:30	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW/RW-72S	12/07/2016	30.63	26.07	-	-	-	26.13	4.56	12:26	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW/RW-72S	12/22/2016	30.63	DRY	-	-	-	26.10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
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	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW/RW-72S	02/22/2017	30.63	26.03	-	-	-	26.19	4.60	-	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
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	
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-72S	11/28/2017	30.63	21.57	-	-	-	23.91	9.06	14:19	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72S	11/30/2017	30.63	21.69	-	-	-	23.92	8.94	9:25	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	8,070	9,100	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	09/02/2014	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	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	03/11/2015	31.06	26.98	-	-	-	-	4.08	12:15	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	03/15/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,200	pump in well
MW/RW-72	03/30/2016	31.06	31.47	-	-	-	-	-0.41	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	04/21/2016	31.06	31.45	-	-	-	-	-0.39	10:22	-	-	-	-	-	-	-	-	-	-	-	350	pump in well
MW/RW-72	05/23/2016	31.06	31.50	-	-	-	-	-0.44	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	05/24/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	360	pump in well
MW/RW-72	06/21/2016	31.06	31.50	-	-	-	-	-0.44	10:21	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	07/21/2016	31.06	31.51	-	-	-	-	-0.45	10:01	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-72	08/04/2016	31.06	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Uninstalled pump to use in MW-14 due to increasing LNAPL levels in MW-14
MW/RW-72	08/24/2016	31.06	27.21	-	-	-	33.00	3.85	11:43	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	08/25/2016	31.06	27.42	-	-	-	33.18	3.64	11:06	-	-	-	-	-	-	-	-	-	-	-	330	
MW/RW-72	09/22/2016	31.06	26.54	-	-	-	-	4.52	14:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	11/28/2016	31.06	26.36	-	-	-	33.69	4.70	8:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	11/29/2016	31.06	26.72	-	-	-	33.07	4.34	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	-	160	
MW/RW-72	02/21/2017	31.06	27.88	-	-	-	33.03	3.18	12:26	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	02/22/2017	31.06	27.65	-	-	-	33.03	3.41	12:50	-	-	-	-	-	-	-	-	-	-	-	150	
MW/RW-72	05/22/2017	31.03	26.79	-	-	-	33.10	4.24	13:20	-	-	-	-	-	-	-	-	-	-	-	-	

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/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/RW-72	11/28/2017	31.03	30.61	-	-	-	35.23	0.42	11:06	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-72	11/29/2017	31.03	30.42	-	-	-	33.08	0.61	11:16	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	-	642	
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-100S	11/28/2017	31.03	21.42	-	-	-	24.72	9.61	12:14	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100S	11/30/2017	31.03	21.45	-	-	-	24.22	9.58	9:30	-	-	-	-	-	-	-	-	-	-	-	192	
MW-100	08/15/2014	30.78	26.80	-	-	-	36.90	3.98	-	-	-	-	-	-	-	-	-	-	-	-	<152	
MW-100	08/18/2014	30.78	26.66	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	08/25/2014	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-100	11/28/2017	30.78	29.98	-	-	-	36.28	0.80	12:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-100	11/30/2017	30.78	29.99	-	-	-	36.25	0.79	9:34	-	-	-	-	-	-	-	-	-	-	-	98.5	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	10/21/2014	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-102	05/11/2015	29.72	24.44	-	-	-	36.40	5.28	15:01	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	05/12/2015	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-102	08/04/2015	29.72	23.39	-	-	-	36.43	6.33	12:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	08/05/2015	29.72	23.50	-	-	-	36.42	6.22	10:14	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-102	12/01/2015	29.72	22.61	-	-	-	31.80	7.11	13:52	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	03/14/2016	29.72	24.11	-	-	-	36.41	5.61	10:04	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	05/23/2016	29.72	23.33	-	-	-	36.40	6.39	10:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-102	08/24/2016	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VO
MW-102	11/28/2016	29.72	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	VO
MW-102	02/21/2017	29.72	25.22	-	-	-	36.43	4.50	11:59	-	-	-	-	-	-	-	-	-	-	-	-	
MW-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-102	11/28/2017	29.72	26.29	-	-	-	36.42	3.43	12:05	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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	12/01/2015	11.07	9.70	-	-	-	-	1.37	11:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-103	03/14/2016	11.07	4.15	-	-	-	14.89	6.92	10:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW-103	05/23/2016	11.07	4.01	-	-	-	14.80	7.06	11:28	-	-	-	-	-	-	-	-	-	-	-	-	
MW-103	08/24/2016	11.07	4.26	-	-	-	14.98	6.81	11:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW-103	11/28/2016	11.07	5.15	-	-	-	15.05	5.92	11:36	-	-	-	-	-	-	-	-	-	-	-	-	
MW-103	02/21/2017	11.07	5.34	-	-	-	14.89	5.73	10:56	-	-	-	-	-	-	-	-	-	-	-	-	
MW-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-103	11/28/2017	11.07	4.50	-	-	-	14.91	6.57	13:10	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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-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-104	11/28/2017	12.00	4.70	-	-	-	12.06	7.30	13:04	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/15/2014	10.94	1.67	-	-	-	9.95	9.27	-	-	-	-	-	-	-	-	-	-	-	-	<1,500	
MW-105	08/18/2014	10.94	2.06	-	-	-	-	8.88	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/25/2014	10.94	2.25	-	-	-	-	8.69	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	09/02/2014	10.94	2.24	-	-	-	-	8.70	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	09/15/2014	10.94	2.32	-	-	-	-	8.62	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	09/22/2014	10.94	2.71	-	-	-	-	8.23	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/01/2014	10.94	2.57	-	-	-	9.88	8.37	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/10/2014	10.94	2.70	-	-	-	-	8.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/20/2014	10.94	1.70	-	-	-	9.93	9.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	10/21/2014	10.94	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.06	<20	-	<45	
MW-105	05/11/2015	10.94	2.40	-	-	-	9.70	8.54	10:35	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	05/12/2015	10.94	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	-	<45	
MW-105	08/04/2015	10.94	1.65	-	-	-	9.62	9.29	10:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-105	08/05/2015	10.94	1.67	-	-	-	9.60	9.27	10:26	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-105	12/01/2015	10.94	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Manhole flooded
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-105	11/28/2017	10.94	2.45	-	-	-	9.09	8.49	12:59	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/08/2014	11.12	8.30	-	-	-	10.27	2.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/11/2014	11.12	8.27	-	-	-	-	2.85	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/15/2014	11.12	7.63	-	-	-	9.88	3.49	-	-	-	-	-	-	-	-	-	-	-	-	89,200	
MW-106	08/18/2014	11.12	7.58	-	-	-	-	3.54	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-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	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	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	07/01/2015	11.12	4.77	-	-	-	-	6.35	11:54	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/04/2015	11.12	7.42	-	-	-	9.86	3.70	12:19	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/05/2015	11.12	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,300	
MW-106	12/01/2015	11.12	7.65	-	-	-	9.85	3.47	13:45	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	12/03/2015	11.12	NR	-	-	-	-	-	-	<0.5	<0.5	1	<0.5	-	-	-	-	<1	-	-	3,300	
MW-106	03/14/2016	11.12	7.33	-	-	-	9.84	3.79	9:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	03/15/2016	11.12	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2,900	
MW-106	04/21/2016	11.12	7.85	-	-	-	9.80	3.27	9:42	-	-	-	-	-	-	-	-	-	-	-	2,000	
MW-106	05/05/2016	11.12	6.97	-	-	-	-	4.15	12:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	05/23/2016	11.12	6.52	-	-	-	9.80	4.60	10:21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	05/24/2016	11.12	6.26	-	-	-	9.60	4.86	13:00	-	-	-	-	-	-	-	-	-	-	-	1,100	
MW-106	06/21/2016	11.12	7.90	-	-	-	-	3.22	9:45	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	07/21/2016	11.12	7.63	-	-	-	-	3.49	9:37	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/24/2016	11.12	7.90	-	-	-	9.60	3.22	9:37	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	08/25/2016	11.12	7.80	-	-	-	-	3.32	14:15	-	-	-	-	-	-	-	-	-	-	-	1,800	
MW-106	09/22/2016	11.12	7.87	-	-	-	-	3.25	14:20	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	11/28/2016	11.12	8.51	-	-	-	9.50	2.61	8:31	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	11/29/2016	11.12	8.15	-	-	-	9.45	2.97	-	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	-	8,800	
MW-106	02/21/2017	11.12	DRY	-	-	-	9.50	-	12:25	-	-	-	-	-	-	-	-	-	-	-	-	
MW-106	02/22/2017	11.12	7.94	-	-	-	9.50	3.18	11:49	-	-	-	-	-	-	-	-	-	-	-	670	Very muddy
MW-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-106	11/28/2017	11.12	DRY	-	-	-	8.80	-	10:47	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	08/08/2014	15.74	10.62	-	-	-	11.57	5.12	-	-	-	-	-	-	-	-	-	-	-	-	-	

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-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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	06/16/2015	15.74	9.05	-	-	-	-	6.69	10:58	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	06/26/2015	15.74	6.86	-	-	-	11.00	8.88	9:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	07/01/2015	15.74	4.03	-	-	-	-	11.71	11:51	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	08/04/2015	15.74	9.40	-	-	-	11.00	6.34	12:21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	08/05/2015	15.74	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	280	
MW-107	12/01/2015	15.74	8.80	-	-	-	11.01	6.94	13:47	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	12/03/2015	15.74	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	730	
MW-107	03/14/2016	15.74	8.09	-	-	-	11.03	7.65	9:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	05/23/2016	15.74	7.29	-	-	-	10.90	8.45	10:26	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	08/24/2016	15.74	DRY	-	-	-	11.02	-	9:30	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	11/28/2016	15.74	DRY	-	-	-	11.00	-	8:27	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	12/07/2016	15.74	DRY	-	-	-	11.00	-	12:18	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	02/21/2017	15.74	DRY	-	-	-	11.00	-	12:28	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-107	02/22/2017	15.74	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-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-107	11/28/2017	15.74	9.96	-	-	-	11.02	5.78	10:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW-107	11/30/2017	15.74	10.66	-	-	-	10.93	5.08	10:35	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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-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
MW-108	11/28/2016	15.61	9.07	-	-	-	9.25	6.54	8:29	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW-108	12/07/2016	15.61	DRY	-	-	-	9.24	-	12:21	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	02/21/2017	15.61	DRY	-	-	-	9.21	-	12:33	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	02/22/2017	15.61	9.19	-	-	-	9.22	6.42	11:52	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW-108	05/22/2017	15.61	DRY	-	-	-	9.21	-	11:31	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW-108	05/23/2017	15.61	DRY	-	-	-	9.20	-	13:45	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW-108	08/28/2017	15.61	9.09	-	-	-	9.20	6.52	10:05	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
MW-108	11/28/2017	15.61	DRY	-	-	-	9.25	-	10:53	-	-	-	-	-	-	-	-	-	-	-	-	DRY
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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-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-109S	11/28/2017	19.27	11.52	-	-	-	13.24	7.75	12:34	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109S	11/29/2017	19.27	11.50	-	-	-	13.25	7.77	10:03	-	-	-	-	-	-	-	-	-	-	184	351	
MW-109	08/21/2014	19.16	14.82	-	-	-	22.40	4.34	13:55	-	-	-	-	-	-	-	-	-	-	-	<600	
MW-109	08/25/2014	19.16	14.59	-	-	-	-	4.57	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	09/15/2014	19.16	14.98	-	-	-	-	4.18	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	09/22/2014	19.16	14.88	-	-	-	-	4.28	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	10/01/2014	19.16	15.07	-	-	-	22.79	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	10/10/2014	19.16	14.96	-	-	-	-	4.20	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	10/13/2014	19.16	15.09	-	-	-	-	4.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	10/20/2014	19.16	15.22	-	-	-	22.72	3.94	-	-	-	-	-	-	-	-	-	-	-	-	200	
MW-109	10/27/2014	19.16	15.27	-	-	-	-	3.89	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	11/07/2014	19.16	15.07	-	-	-	-	4.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	11/12/2014	19.16	15.13	-	-	-	-	4.03	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	11/21/2014	19.16	15.81	-	-	-	-	3.35	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	11/26/2014	19.16	15.33	-	-	-	-	3.83	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	02/24/2015	19.16	15.25	-	-	-	22.80	3.91	13:58	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	02/26/2015	19.16	15.25	-	-	-	22.80	3.91	10:44	-	-	-	-	-	-	-	-	-	-	-	100	
MW-109	05/11/2015	19.16	14.61	-	-	-	22.84	4.55	15:04	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	05/12/2015	19.16	14.77	-	-	-	22.84	4.39	9:57	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-109	05/21/2015	19.16	15.23	-	-	-	22.80	3.93	12:36	-	-	-	-	-	-	-	-	-	-	-	-	
MW-109	11/28/2016	19.16	16.95	-	-	-	22.24	2.21	9:29	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-109	11/28/2017	19.16	18.70	-	-	-	22.54	0.46	12:25	-	-	-	-	-	-	-	-	-	-	-	<83	
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	

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-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-110S	11/28/2017	19.13	12.27	-	-	-	12.70	6.86	12:31	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110S	11/29/2017	19.13	12.28	-	-	-	12.70	6.85	9:59	-	-	-	-	-	-	-	-	-	-	44,400	-	Insufficient GW Vol. to analyze for TPH-
MW-110	08/25/2014	19.51	14.70	-	-	-	24.40	4.81	-	-	-	-	-	-	-	-	-	-	-	-	<153	
MW-110	09/15/2014	19.51	15.11	-	-	-	-	4.40	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	09/22/2014	19.51	14.98	-	-	-	-	4.53	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	10/01/2014	19.51	15.18	-	-	-	23.33	4.33	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	10/10/2014	19.51	15.07	-	-	-	-	4.44	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	10/20/2014	19.51	14.35	-	-	-	23.34	5.16	-	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-110	10/27/2014	19.51	14.39	-	-	-	-	5.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	11/07/2014	19.51	15.18	-	-	-	-	4.33	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	11/12/2014	19.51	15.25	-	-	-	-	4.26	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	11/21/2014	19.51	15.97	-	-	-	-	3.54	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	11/26/2014	19.51	15.45	-	-	-	-	4.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	02/24/2015	19.51	15.38	-	-	-	23.36	4.13	13:52	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	02/26/2015	19.51	15.38	-	-	-	23.36	4.13	10:36	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-110	05/11/2015	19.51	14.74	-	-	-	23.42	4.77	14:54	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	05/12/2015	19.51	14.91	-	-	-	23.42	4.60	9:44	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-110	05/21/2015	19.51	15.40	-	-	-	23.36	4.11	12:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-110	11/28/2016	19.51	15.67	-	-	-	23.52	3.84	9:22	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-110	11/28/2017	19.51	18.32	-	-	-	23.48	1.19	12:28	-	-	-	-	-	-	-	-	-	-	-	<83	
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	

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-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-111	11/28/2017	19.17	18.15	-	-	-	21.65	1.02	12:17	-	-	-	-	-	-	-	-	-	-	-	251	
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-112S	11/28/2017	19.22	11.37	-	-	-	12.48	7.85	12:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112S	11/29/2017	19.22	11.37	-	-	-	12.35	7.85	9:55	-	-	-	-	-	-	-	-	-	-	172	209	
MW-112	08/15/2014	19.08	15.11	-	-	-	22.55	3.97	-	-	-	-	-	-	-	-	-	-	-	-	<1,500	
MW-112	08/18/2014	19.08	14.43	-	-	-	22.31	4.65	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	08/25/2014	19.08	14.53	-	-	-	-	4.55	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	09/02/2014	19.08	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Access to Gauge
MW-112	09/15/2014	19.08	14.85	-	-	-	-	4.23	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	09/22/2014	19.08	14.77	-	-	-	-	4.31	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	10/01/2014	19.08	14.92	-	-	-	22.83	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	10/10/2014	19.08	14.87	-	-	-	-	4.21	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	10/20/2014	19.08	15.15	-	-	-	22.83	3.93	-	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-112	02/24/2015	19.08	15.19	-	-	-	22.75	3.89	13:40	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	02/26/2015	19.08	15.15	-	-	-	22.75	3.93	10:22	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-112	05/11/2015	19.08	14.52	-	-	-	22.83	4.56	14:59	-	-	-	-	-	-	-	-	-	-	-	-	
MW-112	05/12/2015	19.08	14.64	-	-	-	22.83	4.44	9:51	-	-	-	-	-	-	-	-	-	-	-	<45	
MW-112	11/28/2016	19.08	15.50	-	-	-	22.85	3.58	9:12	-	-	-	-	-	-	-	-	-	-	-	<45	

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	11/28/2017	19.08	18.09	-	-	-	22.85	0.99	12:20	-	-	-	-	-	-	-	-	-	-	-	<83	
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-113	11/28/2017	19.11	18.14	-	-	-	22.82	0.97	12:14	-	-	-	-	-	-	-	-	-	-	-	1,050	
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-114	11/28/2017	19.26	17.98	-	-	-	22.77	1.28	12:10	-	-	-	-	-	-	-	-	-	-	-	130	
MW-121	07/08/2015	31.43	26.52	-	-	-	-	4.91	11:21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	07/13/2015	31.43	26.14	-	-	-	36.93	5.29	9:28	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	07/20/2015	31.43	26.37	-	-	-	-	5.06	9:25	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	07/28/2015	31.43	26.53	-	-	-	37.06	4.90	11:38	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	08/04/2015	31.43	25.91	-	-	-	36.33	5.52	12:22	-	-	-	-	-	-	-	-	-	-	-	9,400	
MW-121	08/11/2015	31.43	25.58	-	-	-	36.31	5.85	9:59	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	08/18/2015	31.43	26.12	-	-	-	-	5.31	10:23	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	08/24/2015	31.43	26.02	-	-	-	-	5.41	10:23	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	09/02/2015	31.43	26.38	-	-	-	36.31	5.05	9:45	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	09/09/2015	31.43	26.11	-	-	-	36.29	5.32	10:23	-	-	-	-	-	-	-	-	-	-	-	-	

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	09/17/2015	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-121	11/28/2017	31.43	30.61	-	-	-	38.47	0.82	10:59	-	-	-	-	-	-	-	-	-	-	-	-	
MW-121	11/29/2017	31.43	30.32	-	-	-	36.34	1.11	10:58	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	18,400	15,900	
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	

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-122	08/11/2015	31.64	25.46	-	-	-	34.79	6.18	9:58	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	08/18/2015	31.64	25.98	-	-	-	-	5.66	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	08/24/2015	31.64	25.83	-	-	-	-	5.81	10:37	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	09/02/2015	31.64	26.21	-	-	-	34.76	5.43	9:41	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	09/09/2015	31.64	26.03	-	-	-	34.78	5.61	10:21	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	09/17/2015	31.64	26.45	-	-	-	34.83	5.19	10:25	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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-122	11/28/2017	31.64	30.61	-	-	-	37.25	1.03	11:02	-	-	-	-	-	-	-	-	-	-	-	-	
MW-122	11/29/2017	31.64	30.42	-	-	-	37.25	1.22	0.45	<0.50	0.47 J	0.84 J	1.4	-	-	-	-	<5.0	-	-	950	

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	07/08/2015	31.09	DRY	-	-	-	24.92	-	11:35	-	-	-	-	-	-	-	-	-	-	-	-	DRY
MW/RW-123S	07/13/2015	31.09	23.96	-	-	-	24.90	7.13	9:17	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	07/20/2015	31.09	22.37	-	-	-	-	8.72	9:22	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	07/28/2015	31.09	22.15	-	-	-	24.98	8.94	11:05	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/04/2015	31.09	22.04	-	-	-	24.91	9.05	13:08	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/05/2015	31.09	22.07	-	-	-	24.93	9.02	9:16	-	-	-	-	-	-	-	-	-	-	-	2,400	
MW/RW-123S	08/11/2015	31.09	22.04	-	-	-	24.91	9.05	10:10	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/18/2015	31.09	22.05	-	-	-	-	9.04	9:50	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	08/24/2015	31.09	22.08	-	-	-	-	9.01	9:53	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	09/02/2015	31.09	22.26	22.25	0.01	TRACE	24.92	8.84	9:28	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	10/03/2017	33.54	23.97	-	-	-	-	9.57	11:27	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	10/17/2017	33.54	23.98	-	-	-	-	9.56	11:15	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	11/02/2017	33.54	23.87	-	-	-	-	9.67	11:34	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	11/28/2017	33.54	23.75	-	-	-	26.57	9.79	13:43	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	11/29/2017	33.54	23.93	-	-	-	26.50	9.61	14:16	-	-	-	-	-	-	-	-	-	-	10,600	11,900	
MW/RW-123S	12/05/2017	33.54	24.03	-	-	-	-	9.51	10:23	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-123S	12/19/2017	33.54	24.25	-	-	-	-	9.29	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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-1	02/09/2015	31.19	27.18	-	-	-	-	4.01	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/18/2015	31.19	27.22	-	-	-	-	3.97	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/24/2015	31.19	27.42	-	-	-	40.35	3.77	13:49	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	02/26/2015	31.19	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,200	
RW-1	03/04/2015	31.19	27.27	-	-	-	-	3.92	14:12	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/11/2015	31.19	26.90	-	-	-	-	4.29	12:42	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/18/2015	31.19	27.04	-	-	-	-	4.15	11:02	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/26/2015	31.19	26.87	-	-	-	40.70	4.32	11:35	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/02/2015	31.19	27.02	-	-	-	40.60	4.17	11:23	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/08/2015	31.19	27.30	-	-	-	40.55	3.89	8:45	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/13/2015	31.19	27.18	-	-	-	-	4.01	10:38	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/23/2015	31.19	26.67	-	-	-	40.65	4.52	11:52	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	04/29/2015	31.19	26.87	-	-	-	40.70	4.32	14:19	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/04/2015	31.19	26.72	-	-	-	-	4.47	11:36	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/11/2015	31.19	26.70	-	-	-	40.78	4.49	15:03	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/12/2015	31.19	26.92	-	-	-	40.63	4.27	14:15	-	-	-	-	-	-	-	-	-	-	-	8,400	
RW-1	05/21/2015	31.19	26.90	-	-	-	40.70	4.29	12:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/28/2015	31.19	27.11	-	-	-	40.60	4.08	11:43	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	06/02/2015	31.19	26.79	-	-	-	-	4.40	13:01	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	06/09/2015	31.19	26.57	-	-	-	-	4.62	10:27	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	06/16/2015	31.19	26.60	-	-	-	-	4.59	11:21	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	06/26/2015	31.19	26.52	-	-	-	40.50	4.67	10:37	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	07/01/2015	31.19	26.07	-	-	-	-	5.12	12:12	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	08/04/2015	31.19	26.30	-	-	-	40.66	4.89	12:16	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	08/05/2015	31.19	26.67	-	-	-	40.65	4.52	9:08	-	-	-	-	-	-	-	-	-	-	-	2,500	
RW-1	12/01/2015	31.19	26.77	-	-	-	40.67	4.42	13:41	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	12/02/2015	31.19	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,300	
RW-1	03/14/2016	31.19	26.95	-	-	-	40.65	4.24	8:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	03/15/2016	31.19	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4,300	
RW-1	04/21/2016	31.19	27.82	-	-	-	40.69	3.37	9:47	-	-	-	-	-	-	-	-	-	-	-	2,600	
RW-1	05/23/2016	31.19	27.73	-	-	-	41.31	3.46	10:06	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	05/24/2016	31.19	27.89	-	-	-	40.65	3.30	10:15	-	-	-	-	-	-	-	-	-	-	-	1,500	
RW-1	06/21/2016	31.19	27.22	-	-	-	-	3.97	10:53	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	07/21/2016	31.19	27.08	-	-	-	-	4.11	11:00	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	08/24/2016	31.19	27.42	-	-	-	40.70	3.77	10:00	-	-	-	-	-	-	-	-	-	-	-	1,500	

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-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	Sheen during purge
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-1	11/28/2017	31.19	30.84	-	-	-	43.65	0.35	11:11	-	-	-	-	-	-	-	-	-	-	-	-	
RW-1	11/29/2017	31.19	30.57	-	-	-	40.75	0.62	11:05	-	-	-	-	-	-	-	-	-	-	4,920	6,640	
RW-05S	07/08/2015	31.38	22.72	-	-	-	-	8.66	11:25	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	07/13/2015	31.38	22.57	-	-	-	26.03	8.81	9:34	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	07/20/2015	31.38	21.82	-	-	-	-	9.56	9:28	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	07/28/2015	31.38	21.77	-	-	-	26.07	9.61	11:21	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	08/05/2015	31.38	21.87	-	-	-	26.03	9.51	9:27	-	-	-	-	-	-	-	-	-	-	-	6,900	
RW-05S	08/11/2015	31.38	21.95	-	-	-	26.06	9.43	10:05	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	08/18/2015	31.38	22.17	-	-	-	-	9.21	10:27	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	08/24/2015	31.38	22.42	-	-	-	-	8.96	10:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/02/2015	31.38	22.47	-	-	-	26.05	8.91	9:49	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/09/2015	31.38	22.60	-	-	-	26.07	8.78	10:25	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/17/2015	31.38	22.69	-	-	-	26.07	8.69	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/23/2015	31.38	22.69	-	-	-	-	8.69	10:37	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	09/28/2015	31.38	22.78	-	-	-	26.07	8.60	9:26	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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	06/21/2016	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	
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	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	10/17/2017	33.47	24.79	-	-	-	-	8.68	12:04	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	11/28/2017	33.47	24.56	-	-	-	28.38	8.91	13:47	-	-	-	-	-	-	-	-	-	-	-	-	
RW-05S	11/30/2017	33.47	25.05	-	-	-	27.65	8.42	12:00	-	-	-	-	-	-	-	-	-	-	189000	107,000	
RW-05S	12/19/2017	33.47	23.98	-	-	-	-	9.49	10:45	-	-	-	-	-	-	-	-	-	-	-	-	
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

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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
MW/RW-05	10/01/2014	31.57	26.67	26.67	TRACE	TRACE	31.94	4.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/10/2014	31.57	26.58	26.57	0.01	TRACE	-	5.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/13/2014	31.57	26.73	26.71	0.02	TRACE	-	4.86	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/20/2014	31.57	26.91	26.89	0.02	TRACE	-	4.68	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	10/27/2014	31.57	27.07	27.06	0.01	TRACE	-	4.51	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/07/2014	31.57	26.93	26.88	0.05	TRACE	-	4.68	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/12/2014	31.57	26.96	26.94	0.02	TRACE	-	4.63	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/21/2014	31.57	27.74	27.73	0.01	TRACE	-	3.84	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	11/26/2014	31.57	27.28	27.25	0.03	TRACE	-	4.32	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/05/2014	31.57	27.18	27.16	0.02	TRACE	-	4.41	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/11/2014	31.57	26.93	-	0.00	TRACE	-	4.64	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/16/2014	31.57	26.87	26.82	0.05	TRACE	-	4.74	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/23/2014	31.57	26.95	26.92	0.03	TRACE	-	4.65	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	12/30/2014	31.57	27.35	27.32	0.03	TRACE	-	4.25	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/09/2015	31.57	27.36	27.32	0.04	TRACE	-	4.25	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/16/2015	31.57	27.06	27.02	0.04	TRACE	-	4.55	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/19/2015	31.57	27.08	27.03	0.05	TRACE	-	4.53	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	01/26/2015	31.57	26.99	26.95	0.04	TRACE	-	4.62	-	-	-	-	-	-	-	-	-	-	-	-	-	
MW/RW-05	02/03/2015	31.57	27.73	27.71	0.02	-	32.04	3.86	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	02/09/2015	31.57	27.23	27.17	0.06	-	-	4.39	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	02/18/2015	31.57	27.25	27.21	0.04	-	-	4.36	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	02/24/2015	31.57	27.38	27.37	0.01	TRACE	-	4.20	13:51	-	-	-	-	-	-	-	-	-	-	-	-	
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

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	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	-	-	-	-	-	-	-	-	-	-	-	-	HIT event
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	0.05	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	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	12/01/2015	32.20	26.16	25.98	0.18	-	-	6.20	13:56	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
MW/RW-05	01/27/2016	32.20	26.56	26.34	0.22	-	-	5.83	10:44	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	02/15/2016	32.20	26.99	26.98	0.01	-	-	5.22	10:31	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	03/14/2016	32.20	25.65	25.65	TRACE	-	-	6.55	10:20	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	03/24/2016	32.20	29.70	-	-	-	-	2.50	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	03/30/2016	32.20	29.68	-	-	-	-	2.52	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	04/21/2016	32.20	29.65	-	-	-	-	2.55	10:34	-	-	-	-	-	-	-	-	-	-	-	-	pump in well

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	05/23/2016	32.20	29.80	-	-	-	-	2.40	11:27	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	05/24/2016	32.20	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	62,000	pump in well
MW/RW-05	06/21/2016	32.20	29.79	-	-	-	-	2.41	10:50	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	07/21/2016	32.20	23.85	-	-	-	-	8.35	10:30	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	08/24/2016	32.20	21.60	-	-	-	-	10.60	11:11	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	08/25/2016	32.20	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,000	pump in well
MW/RW-05	09/22/2016	32.20	29.00	-	-	-	-	3.20	11:40	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	10/20/2016	32.20	29.00	-	-	-	-	3.20	11:35	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	11/28/2016	32.20	NR	-	-	-	-	-	9:45	<0.5	<0.5	<0.5	<0.5	-	-	-	-	<1	-	-	7,300	Pump Obstruction at 26.80 ft during gauging
MW/RW-05	12/22/2016	32.20	28.22	-	-	-	-	3.98	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	01/30/2017	32.20	27.88	-	-	-	-	4.32	12:06	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	02/21/2017	32.20	28.70	-	-	-	-	3.50	12:51	-	-	-	-	-	-	-	-	-	-	-	5,200	pump in well
MW/RW-05	03/29/2017	32.20	27.90	-	-	-	-	4.30	11:55	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	04/18/2017	32.20	28.50	-	-	-	-	3.70	12:00	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	05/18/2017	32.20	18.95	-	-	-	-	13.25	-	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	05/22/2017	32.20	23.24	-	-	-	-	8.96	13:02	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	05/23/2017	32.20	23.93	-	-	-	-	8.27	9:45	-	-	-	-	-	-	-	-	-	-	-	981	pump in well
MW/RW-05	06/22/2017	32.20	28.50	-	-	-	-	3.70	12:28	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	07/06/2017	32.20	28.50	-	-	-	-	3.70	13:05	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	07/19/2017	32.20	28.30	-	-	-	-	3.90	12:15	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	08/21/2017	32.20	28.35	-	-	-	-	3.85	10:05	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	08/28/2017	32.20	23.32	-	-	-	-	8.88	9:30	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	08/31/2017	32.20	23.60	-	-	-	31.33	8.60	9:36	-	-	-	-	-	-	-	-	-	-	-	31,800	pump in well
MW/RW-05	09/20/2017	32.20	28.10	-	-	-	-	4.10	10:51	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	10/17/2017	32.20	27.80	-	-	-	-	4.40	12:10	-	-	-	-	-	-	-	-	-	-	-	-	pump in well
MW/RW-05	11/28/2017	32.20	NR	-	-	-	25.40	-	11:50	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	27,900	6,860	pump in well
RW-25S	07/08/2015	30.97	DRY	-	-	-	24.64	-	11:43	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	07/13/2015	30.97	DRY	-	-	-	24.65	-	9:39	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	07/20/2015	30.97	DRY	-	-	-	-	-	9:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	07/28/2015	30.97	DRY	-	-	-	24.71	-	10:47	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/04/2015	30.97	DRY	-	-	-	24.64	-	13:06	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	08/11/2015	30.97	DRY	-	-	-	-	-	11:25	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
RW-25S	12/01/2015	32.70	26.34	26.27	0.07	-	26.36	6.42	11:55	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
RW-25S	01/27/2016	32.70	26.30	26.22	0.08	-	-	6.47	11:04	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
RW-25S	02/15/2016	32.70	25.59	25.42	0.17	-	-	7.26	10:44	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
RW-25S	03/14/2016	32.70	24.45	24.44	0.01	-	-	8.26	13:00	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-25S	08/30/2016	32.70	25.86	-	-	-	27.36	6.84	11:35	-	-	-	-	-	-	-	-	-	-	-	470,000	
RW-25S	09/22/2016	32.70	26.08	-	-	-	26.38	6.62	12:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	10/20/2016	32.70	26.10	-	-	-	-	6.60	11:06	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	11/28/2016	32.70	25.57	-	-	-	-	7.13	9:41	0.7 J	1	2	5	-	-	-	-	4 J	-	-	1,000,000	
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	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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	09/20/2017	31.92	DRY	-	-	-	25.33	-	10:12	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	10/03/2017	31.92	DRY	-	-	-	25.33	-	11:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	10/17/2017	31.92	DRY	-	-	-	25.43	-	11:32	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	11/02/2017	31.92	DRY	-	-	-	25.33	-	11:26	-	-	-	-	-	-	-	-	-	-	-	-	
RW-25S	11/28/2017	31.92	25.41	-	-	-	25.42	6.51	14:05	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
RW-25S	12/05/2017	31.92	DRY	-	-	-	25.33	-	10:15	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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	09/22/2016	32.99	25.82	-	-	-	28.35	7.17	12:12	-	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	10/20/2016	32.99	25.79	-	-	-	-	7.20	10:58	-	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	11/28/2016	32.99	25.80	-	-	-	28.61	7.19	10:51	-	-	-	-	-	-	-	-	-	-	-	1,400	
RW-28S	12/22/2016	32.99	26.05	-	-	-	28.37	6.94	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	01/30/2017	32.99	25.97	-	-	-	28.35	7.02	10:07	-	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	02/21/2017	32.99	26.02	-	-	-	28.30	6.97	10:18	-	-	-	-	-	-	-	-	-	-	-	39,000	
RW-28S	03/29/2017	32.99	25.86	-	-	-	28.45	7.13	12:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-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-28S	10/17/2017	32.99	27.46	-	-	-	-	5.53	11:25	-	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	11/28/2017	32.99	DRY	-	-	-	27.95	-	14:14	-	-	-	-	-	-	-	-	-	-	-	-	
RW-28S	11/29/2017	32.99	27.28	-	-	-	28.02	5.71	15:30	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
RW-28S	12/19/2017	32.99	27.52	-	-	-	-	5.47	10:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	06/26/2015	31.32	DRY	-	-	-	28.40	-	9:28	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	07/01/2015	31.32	24.02	-	-	-	-	7.30	12:03	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	07/08/2015	31.32	25.39	-	-	-	-	5.93	10:51	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	09/28/2015	31.32	26.42	-	-	-	28.41	4.90	9:37	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	10/05/2015	31.32	26.20	-	-	-	28.41	5.12	9:05	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	11/10/2015	31.32	28.73	-	-	-	-	2.59	12:46	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	12/01/2015	33.63	28.99	-	-	-	30.54	4.64	12:36	-	-	-	-	-	-	-	-	-	-	-	1,300	
RW-30S	01/27/2016	33.63	29.08	-	-	-	-	4.55	10:01	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	02/15/2016	33.63	29.44	-	-	-	-	4.19	9:47	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	03/14/2016	33.63	28.78	-	-	-	30.60	4.85	12:10	-	-	-	-	-	-	-	-	-	-	-	61,000	
RW-30S	04/21/2016	33.63	28.95	-	-	-	29.03	4.68	10:44	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	04/27/2016	33.63	29.02	-	-	-	29.12	4.61	10:18	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/05/2016	33.63	29.05	-	-	-	29.10	4.58	12:48	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/23/2016	33.63	29.02	-	-	-	29.70	4.61	11:14	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	05/25/2016	33.63	DRY	-	-	-	29.05	-	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	06/21/2016	33.63	26.45	-	-	-	-	7.18	9:56	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	07/21/2016	33.63	26.40	-	-	-	-	7.23	9:51	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/24/2016	33.63	24.65	-	-	-	29.37	8.98	11:56	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	08/25/2016	33.63	28.88	-	-	-	29.20	4.75	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	08/30/2016	33.63	29.65	-	-	-	29.79	3.98	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-30S	09/22/2016	33.63	26.60	-	-	-	29.35	7.03	12:07	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	10/20/2016	33.63	26.80	-	-	-	-	6.83	10:50	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	11/28/2016	33.63	28.64	-	-	-	30.35	4.99	10:48	-	-	-	-	-	-	-	-	-	-	-	1,700	
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	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	10/03/2017	33.12	DRY	-	-	-	28.78	-	11:30	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	10/17/2017	33.12	DRY	-	-	-	28.83	-	11:18	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	11/02/2017	33.12	28.72	-	-	-	-	4.40	11:37	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	11/28/2017	33.12	DRY	-	-	-	28.74	-	13:39	-	-	-	-	-	-	-	-	-	-	-	-	
RW-30S	12/05/2017	33.12	DRY	-	-	-	28.93	-	10:26	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	07/08/2015	31.80	22.48	-	-	-	-	9.32	11:28	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	07/13/2015	31.80	22.03	-	-	-	26.20	9.77	9:24	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	07/20/2015	31.80	21.77	-	-	-	-	10.03	9:10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	07/28/2015	31.44	21.46	-	-	-	25.90	9.98	10:31	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	08/04/2015	31.44	21.55	-	-	-	25.82	9.89	13:11	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	08/05/2015	31.44	21.57	-	-	-	25.82	9.87	9:05	-	-	-	-	-	-	-	-	-	-	-	7,000	
RW-116S	08/11/2015	31.44	21.72	-	-	-	24.88	9.72	10:31	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	08/18/2015	31.44	21.79	-	-	-	-	9.65	10:13	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	08/24/2015	31.44	21.90	-	-	-	-	9.54	10:16	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	09/02/2015	31.44	22.06	-	-	-	25.86	9.38	10:05	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	09/09/2015	31.44	22.18	-	-	-	25.89	9.26	10:12	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	09/17/2015	31.44	22.31	-	-	-	25.89	9.13	10:14	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	09/23/2015	31.44	22.35	-	-	-	-	9.09	10:34	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	09/28/2015	31.44	22.42	-	-	-	25.84	9.02	9:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	10/05/2015	31.44	22.47	-	-	-	25.84	8.97	9:31	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	11/10/2015	31.44	25.05	-	-	-	-	6.39	13:03	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	12/01/2015	33.78	25.73	-	-	-	28.20	8.05	11:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	12/02/2015	33.78	NR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11,000	
RW-116S	01/27/2016	33.78	26.53	-	-	-	-	7.25	10:29	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	02/15/2016	33.78	26.53	-	-	-	-	7.25	10:10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	03/14/2016	33.78	26.26	-	-	-	28.18	7.52	11:35	-	-	-	-	-	-	-	-	-	-	-	7,600	
RW-116S	04/21/2016	33.78	26.33	-	-	-	28.25	7.45	11:18	-	-	-	-	-	-	-	-	-	-	-	3,000	
RW-116S	05/23/2016	33.78	26.03	-	-	-	28.25	7.75	11:20	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	05/24/2016	33.78	26.32	-	-	-	28.90	7.46	9:45	-	-	-	-	-	-	-	-	-	-	-	230,000	
RW-116S	06/21/2016	33.78	26.06	-	-	-	-	7.72	10:43	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	07/21/2016	33.78	26.02	-	-	-	-	7.76	10:22	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	08/24/2016	33.78	26.02	-	-	-	27.76	7.76	11:08	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	08/25/2016	33.78	25.10	-	-	-	-	8.68	10:15	-	-	-	-	-	-	-	-	-	-	-	6,200	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	10/17/2017	33.15	25.83	-	-	-	-	7.32	12:00	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	11/28/2017	33.15	25.68	-	-	-	27.12	7.47	14:26	-	-	-	-	-	-	-	-	-	-	181,000	146,000	
RW-116S	11/30/2017	33.15	25.78	-	-	-	27.02	7.37	12:42	-	-	-	-	-	-	-	-	-	-	-	-	
RW-116S	12/19/2017	33.15	26.09	-	-	-	-	7.06	9:45	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	07/08/2015	31.81	22.53	-	-	-	-	9.28	11:08	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	07/13/2015	31.81	22.27	-	-	-	24.25	9.54	9:22	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	07/20/2015	31.81	21.97	-	-	-	-	9.84	9:07	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	07/28/2015	31.81	21.86	-	-	-	24.34	9.95	9:30	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/04/2015	31.81	21.94	-	-	-	24.23	9.87	13:15	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/05/2015	31.81	21.96	-	-	-	24.27	9.85	9:20	-	-	-	-	-	-	-	-	-	-	-	6,600	
RW-117S	08/11/2015	31.81	22.06	-	-	-	24.30	9.75	10:28	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/18/2015	31.81	22.16	-	-	-	-	9.65	10:10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/24/2015	31.81	22.25	-	-	-	-	9.56	10:13	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	09/02/2015	31.81	22.40	-	-	-	24.30	9.41	10:10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	09/09/2015	31.81	22.51	22.51	TRACE	TRACE	24.31	9.30	10:10	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	09/17/2015	31.81	22.61	-	-	-	24.31	9.20	10:12	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	09/23/2015	31.81	22.61	-	-	-	-	9.20	10:31	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	09/28/2015	31.81	22.66	-	-	-	24.29	9.15	9:18	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	10/05/2015	31.81	22.76	-	-	-	24.30	9.05	9:34	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	11/10/2015	31.81	25.29	-	-	-	-	6.52	12:59	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	12/01/2015	33.73	25.72	-	-	-	26.13	8.01	11:16	-	-	-	-	-	-	-	-	-	-	-	13,000	
RW-117S	01/27/2016	33.73	26.06	-	-	-	-	7.67	10:25	-	-	-	-	-	-	-	-	-	-	-	-	

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	02/15/2016	33.73	26.05	-	-	-	-	7.68	10:07	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	03/14/2016	33.73	26.06	-	-	-	26.09	7.67	11:05	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	04/21/2016	33.73	25.74	-	-	-	26.07	7.99	11:38	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	04/27/2016	33.73	25.75	-	-	-	26.08	7.98	10:14	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	05/05/2016	33.73	25.79	-	-	-	26.05	7.94	12:56	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	05/23/2016	33.73	25.70	-	-	-	26.05	8.03	11:16	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	05/24/2016	33.73	DRY	-	-	-	26.07	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	08/25/2016	33.73	25.52	-	-	-	26.08	8.21	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
RW-117S	08/30/2016	33.73	25.97	-	-	-	26.77	7.76	11:10	-	-	-	-	-	-	-	-	-	-	-	4,400	
RW-117S	09/22/2016	33.73	25.71	-	-	-	26.18	8.02	12:32	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	10/20/2016	33.73	25.72	-	-	-	-	8.01	11:22	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	11/28/2016	33.73	25.75	-	-	-	26.77	7.98	10:57	-	-	-	-	-	-	-	-	-	-	-	2,800	
RW-117S	12/22/2016	33.73	25.63	-	-	-	26.15	8.10	-	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	01/30/2017	33.73	25.72	-	-	-	26.15	8.01	10:21	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	02/21/2017	33.73	25.71	-	-	-	26.13	8.02	10:07	-	-	-	-	-	-	-	-	-	-	-	4,300	
RW-117S	03/29/2017	33.16	DRY	-	-	-	25.67	-	12:33	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	04/18/2017	33.16	DRY	-	-	-	25.67	-	11:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	05/22/2017	33.16	DRY	-	-	-	25.64	-	10:30	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
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-117S	10/17/2017	33.16	24.47	-	-	-	-	8.69	11:50	-	-	-	-	-	-	-	-	-	-	-	-	
RW-117S	11/28/2017	33.16	25.78	-	-	-	25.69	7.38	14:30	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
RW-117S	12/19/2017	33.16	25.56	-	-	-	-	7.60	9:57	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	08/05/2015	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	
RW-118S	08/25/2016	31.24	23.94	-	-	-	-	7.30	13:30	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
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	

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	11/28/2017	30.81	22.63	-	-	-	24.19	8.18	14:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-118S	11/30/2017	30.81	22.76	-	-	-	24.25	8.05	12:50	-	-	-	-	-	-	-	-	-	-	21,000	19,100	
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	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	05/24/2016	33.33	25.05	-	-	-	29.50	8.28	9:10	-	-	-	-	-	-	-	-	-	-	-	2,100	
RW-119S	06/21/2016	33.33	26.28	-	-	-	-	7.05	11:13	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	07/21/2016	33.33	26.24	-	-	-	-	7.09	10:35	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/24/2016	33.33	26.30	-	-	-	29.70	7.03	12:00	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	08/25/2016	33.33	24.82	-	-	-	-	8.51	9:40	-	-	-	-	-	-	-	-	-	-	-	1,200	
RW-119S	09/22/2016	33.33	26.28	-	-	-	29.28	7.05	12:44	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	10/20/2016	33.33	26.24	-	-	-	-	7.09	11:40	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	11/28/2016	33.33	NR	-	-	-	-	-	11:06	-	-	-	-	-	-	-	-	-	-	-	-	Obstruction at 12.63 ft during gauging
RW-119S	11/29/2016	33.33	26.31	-	-	-	28.96	7.02	-	-	-	-	-	-	-	-	-	-	-	-	24,000	

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-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	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	10/17/2017	33.28	25.02	-	-	-	-	8.26	11:08	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	11/28/2017	33.28	24.96	-	-	-	28.97	8.32	13:22	-	-	-	-	-	-	-	-	-	-	-	-	
RW-119S	11/29/2017	33.28	25.11	-	-	-	28.83	8.17	11:07	-	-	-	-	-	-	-	-	-	-	9210	11,400	
RW-119S	12/19/2017	33.28	25.30	-	-	-	-	7.98	10:14	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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-02	11/28/2017	16.11	15.65	-	-	-	21.42	0.46	11:01	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	12/16/2013	14.87	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	ND	-	-	351	
TW-03	12/18/2013	14.87	9.08	-	-	-	-	5.79	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	01/08/2014	14.87	9.42	-	-	-	-	5.45	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	03/07/2014	14.87	7.66	-	-	-	-	7.21	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	03/13/2014	14.87	8.09	-	-	-	-	6.78	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	03/20/2014	14.87	7.50	-	-	-	-	7.37	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	03/27/2014	14.87	8.47	-	-	-	-	6.40	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	04/03/2014	14.87	6.99	-	-	-	-	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	04/08/2014	14.87	7.64	-	-	-	-	7.23	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	04/17/2014	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	
TW-03	12/01/2015	10.40	7.64	-	-	-	13.12	2.76	13:26	-	-	-	-	-	-	-	-	-	-	-	-	

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-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	Geosyntec sampling, could not gauge
TW-03	5/23/2016[L]	10.40	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.1 J	27 J	-	180	
TW-03	08/24/2016	10.40	8.70	-	-	-	13.22	1.70	10:45	-	-	-	-	-	-	-	-	-	-	-	100	
TW-03	08/25/2016	10.40	8.09	-	-	-	-	2.31	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	09/22/2016	10.40	8.18	-	-	-	-	2.22	14:25	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	11/28/2016	10.40	8.83	-	-	-	13.10	1.57	8:46	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	-	54 J	
TW-03	02/21/2017	10.40	9.02	-	-	-	13.07	1.38	12:17	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	02/22/2017	10.40	8.69	-	-	-	13.10	1.71	10:09	-	-	-	-	-	-	-	-	-	-	-	61 J	
TW-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-03	11/28/2017	10.40	9.94	-	-	-	13.34	0.46	11:05	-	-	-	-	-	-	-	-	-	-	-	-	
TW-03	11/29/2017	10.40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	219	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	05/27/2014	13.26	5.66	-	-	-	-	7.60	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/02/2014	13.26	5.83	-	-	-	-	7.43	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/09/2014	13.26	5.87	-	-	-	-	7.39	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/16/2014	13.26	5.21	-	-	-	-	8.05	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	06/23/2014	13.26	5.68	-	-	-	-	7.58	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/02/2014	13.26	5.96	-	-	-	-	7.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/07/2014	13.26	6.18	-	-	-	13.77	7.08	-	-	-	-	-	-	-	-	-	-	-	-	1,270	
TW-04	07/14/2014	13.26	5.80	-	-	-	-	7.46	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/25/2014	13.26	6.20	-	-	-	13.70	7.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/31/2014	13.26	6.08	-	-	-	13.76	7.18	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/08/2014	13.26	6.21	-	-	-	-	7.05	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/11/2014	13.26	6.19	-	-	-	-	7.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/15/2014	13.26	5.99	-	-	-	13.75	7.27	-	-	-	-	-	-	-	-	-	-	-	-	1,610	
TW-04	08/18/2014	13.26	5.92	-	-	-	-	7.34	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/25/2014	9.49	5.87	-	-	-	-	3.62	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/02/2014	9.49	6.25	-	-	-	-	3.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/15/2014	9.49	6.17	-	-	-	-	3.32	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/22/2014	9.49	6.20	-	-	-	-	3.29	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/01/2014	9.49	6.23	-	-	-	13.55	3.26	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/10/2014	9.49	6.18	-	-	-	-	3.31	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/13/2014	9.49	6.19	-	-	-	-	3.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/20/2014	9.49	6.28	-	-	-	13.40	3.21	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/23/2014	9.49	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.3	<20	-	160	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	01/19/2015	9.49	5.37	-	-	-	-	4.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	01/26/2015	9.49	4.78	-	-	-	-	4.71	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/03/2015	9.49	6.06	-	-	-	13.21	3.43	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/09/2015	9.49	6.08	-	-	-	-	3.41	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/18/2015	9.49	6.19	-	-	-	-	3.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	02/24/2015	9.49	6.21	-	-	-	-	3.28	15:00	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/04/2015	9.49	6.11	-	-	-	-	3.38	11:45	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	1	27 J	-	940	
TW-04	03/11/2015	9.49	3.93	-	-	-	-	5.56	12:00	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/18/2015	9.49	5.40	-	-	-	-	4.09	10:23	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/26/2015	9.49	5.75	-	-	-	13.20	3.74	12:21	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/02/2015	9.49	5.85	-	-	-	13.25	3.64	10:28	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/08/2015	9.49	6.20	-	-	-	13.25	3.29	10:00	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/13/2015	9.49	6.28	-	-	-	-	3.21	9:55	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/23/2015	9.49	5.44	-	-	-	13.25	4.05	10:43	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	04/29/2015	9.49	5.85	-	-	-	13.25	3.64	13:15	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/04/2015	9.49	5.75	-	-	-	-	3.74	10:50	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/11/2015	9.49	5.83	-	-	-	13.20	3.66	15:33	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/13/2015	9.49	NR	-	-	-	-	-	-	1 J	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	33 J	-	700	
TW-04	05/21/2015	9.49	5.89	-	-	-	13.27	3.60	13:05	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/28/2015	9.49	6.28	-	-	-	13.25	3.21	10:55	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	09/23/2015	9.49	6.08	-	-	-	-	3.41	10:00	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	09/28/2015	9.49	5.61	-	-	-	13.08	3.88	10:36	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	10/05/2015	9.49	5.22	-	-	-	13.13	4.27	10:20	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/10/2015	9.49	5.92	-	-	-	-	3.57	12:29	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/01/2015	9.49	5.78	-	-	-	13.10	3.71	13:20	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	12/02/2015	9.49	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	22 J	-	280	
TW-04	02/15/2016	9.49	6.07	-	-	-	-	3.42	9:05	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	03/14/2016	9.49	5.93	-	-	-	13.11	3.56	9:55	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.2	31 J	-	980	
TW-04	04/21/2016	9.49	6.23	-	-	-	-	3.26	9:17	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/05/2016	9.49	5.50	-	-	-	-	3.99	12:27	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/23/2016	9.49	4.83	-	-	-	-	4.66	10:49	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	05/24/2016	9.49	NR	-	-	-	-	-	-	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.5	50 J	-	1,100	
TW-04	06/21/2016	9.49	6.30	-	-	-	-	3.19	9:35	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	07/21/2016	9.49	5.91	-	-	-	-	3.58	9:25	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	08/24/2016	9.49	6.35	-	-	-	13.15	3.14	9:44	-	-	-	-	-	-	-	-	-	-	-	430	
TW-04	09/22/2016	9.49	6.20	-	-	-	-	3.29	14:45	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/28/2016	9.49	6.69	-	-	-	10.07	2.80	8:35	-	-	-	-	-	-	-	-	-	-	-	-	
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-04	11/28/2017	9.49	8.85	-	-	-	13.62	0.64	10:57	-	-	-	-	-	-	-	-	-	-	-	-	
TW-04	11/29/2017	9.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,170	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	04/22/2014	13.73	5.65	-	-	-	-	8.08	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/29/2014	13.73	6.06	-	-	-	-	7.67	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/05/2014	13.73	4.91	-	-	-	-	8.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/12/2014	13.73	6.01	-	-	-	-	7.72	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/19/2014	13.73	4.65	-	-	-	-	9.08	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	05/27/2014	13.73	5.91	-	-	-	-	7.82	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/02/2014	13.73	6.07	-	-	-	-	7.66	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/09/2014	13.73	6.11	-	-	-	-	7.62	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/16/2014	13.73	5.28	-	-	-	-	8.45	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	06/23/2014	13.73	5.95	-	-	-	-	7.78	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/02/2014	13.73	6.28	-	-	-	-	7.45	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/07/2014	13.73	6.49	-	-	-	12.06	7.24	-	-	-	-	-	-	-	-	-	-	-	-	66,300	
TW-05	07/14/2014	13.73	6.06	-	-	-	-	7.67	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/25/2014	13.73	5.43	-	-	-	12.08	8.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	07/31/2014	13.73	6.50	-	-	-	12.10	7.23	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/08/2014	13.73	6.56	-	-	-	-	7.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/11/2014	13.73	6.51	-	-	-	-	7.22	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/15/2014	13.73	5.91	-	-	-	11.95	7.82	-	-	-	-	-	-	-	-	-	-	-	-	271,000	
TW-05	08/18/2014	13.73	6.14	-	-	-	-	7.59	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	12/23/2014	9.64	6.08	-	-	-	-	3.56	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	12/30/2014	9.64	5.50	-	-	-	-	4.14	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	01/09/2015	9.64	6.27	-	-	-	-	3.37	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	01/16/2015	9.64	5.48	-	-	-	-	4.16	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	01/19/2015	9.64	5.08	-	-	-	-	4.56	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	01/26/2015	9.64	4.30	-	-	-	-	5.34	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	02/03/2015	9.64	6.20	-	-	-	11.88	3.44	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	02/09/2015	9.64	6.38	-	-	-	-	3.26	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	02/18/2015	9.64	6.64	-	-	-	-	3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	02/24/2015	9.64	6.61	-	-	-	-	3.03	14:57	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/04/2015	9.64	6.27	-	-	-	-	3.37	12:15	2	<0.50	1	<0.5	<0.5	<2	<0.5	<0.5	3	130	-	2,200	
TW-05	03/11/2015	9.64	3.15	-	-	-	-	6.49	12:03	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/18/2015	9.64	4.61	-	-	-	-	5.03	10:26	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/26/2015	9.64	5.94	-	-	-	12.10	3.70	12:25	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/02/2015	9.64	6.00	-	-	-	12.10	3.64	10:30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	04/08/2015	9.64	6.41	-	-	-	12.14	3.23	10:05	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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	08/11/2015	9.64	5.56	-	-	-	12.54	4.08	12:30	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/18/2015	9.64	6.28	-	-	-	-	3.36	9:23	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	08/24/2015	9.64	6.23	-	-	-	-	3.41	9:43	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	09/02/2015	9.64	6.32	-	-	-	12.53	3.32	11:33	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	09/09/2015	9.64	6.73	-	-	-	12.55	2.91	14:06	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	09/17/2015	9.64	6.54	-	-	-	12.53	3.10	11:45	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	09/23/2015	9.64	6.41	-	-	-	-	3.23	10:03	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	09/28/2015	9.64	6.01	-	-	-	12.51	3.63	10:38	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	10/05/2015	9.64	5.43	-	-	-	12.54	4.21	10:17	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	11/10/2015	9.64	6.31	-	-	-	-	3.33	12:31	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	12/01/2015	9.64	5.99	-	-	-	12.38	3.65	13:10	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	30 J	-	330	
TW-05	02/15/2016	9.64	6.34	-	-	-	-	3.30	9:09	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	03/14/2016	9.64	6.22	-	-	-	12.43	3.42	10:00	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.3	<20	-	960	
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-05	11/28/2017	9.64	8.83	-	-	-	14.57	0.81	11:20	-	-	-	-	-	-	-	-	-	-	-	-	
TW-05	11/30/2017	9.64	9.02	-	-	-	14.62	0.62	11:39	-	-	-	-	-	-	-	-	-	-	67000	61,500	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	03/20/2014	13.97	6.26	-	-	-	-	7.71	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/27/2014	13.97	6.88	-	-	-	-	7.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/03/2014	13.97	4.81	-	-	-	-	9.16	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/08/2014	13.97	5.82	-	-	-	-	8.15	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/17/2014	13.97	5.41	-	-	-	-	8.56	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/22/2014	13.97	5.90	-	-	-	-	8.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	04/29/2014	13.97	6.30	-	-	-	-	7.67	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/05/2014	13.97	4.98	-	-	-	-	8.99	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/12/2014	13.97	6.18	-	-	-	-	7.79	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/19/2014	13.97	4.63	-	-	-	-	9.34	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	05/27/2014	13.97	6.79	-	-	-	-	7.18	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/02/2014	13.97	6.24	-	-	-	-	7.73	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/09/2014	13.97	6.31	-	-	-	-	7.66	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/16/2014	13.97	5.33	-	-	-	-	8.64	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	06/23/2014	13.97	6.12	-	-	-	-	7.85	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	11/21/2014	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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	11/10/2015	9.86	6.65	-	-	-	-	3.21	12:32	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	12/01/2015	9.86	6.55	-	-	-	12.62	3.31	13:22	0.8 J	<0.5	1	<0.5	<0.5	<2	<0.5	<0.5	0.8	92	-	1,300	
TW-06	02/15/2016	9.86	6.60	-	-	-	-	3.26	9:15	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/14/2016	9.86	6.57	-	-	-	12.63	3.29	10:05	-	-	-	-	-	-	-	-	-	-	-	-	
TW-06	03/15/2016	9.86	NR	-	-	-	-	-	-	0.8 J	<0.5	3	<0.5	<0.5	<2	<0.5	<0.5	1	110	-	43,000	
TW-06	04/21/2016	9.99	6.70	-	-	-	12.40	3.29	9:28	-	-	-	-	-	-	-	-	-	-	-	32,000	Sheen; Elevation change due to well being disturbed during construction activities
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	

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	02/21/2017	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	Sheen
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-06	11/28/2017	9.99	8.58	-	-	-	12.60	1.41	11:15	-	-	-	-	-	-	-	-	-	-	5,670	7,350	
TW-07	12/16/2013	14.00	NR	-	-	-	-	-	-	2.38	ND	0.97	ND	ND	-	-	-	34.00	-	-	3290.00	
TW-07	12/18/2013	14.00	7.56	-	-	-	-	6.44	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	01/08/2014	14.00	7.91	-	-	-	-	6.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	03/07/2014	14.00	6.91	-	-	-	-	7.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	03/13/2014	14.00	7.40	-	-	-	-	6.60	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	03/20/2014	14.00	6.78	-	-	-	-	7.22	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	03/27/2014	14.00	7.56	-	-	-	-	6.44	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/03/2014	14.00	5.67	-	-	-	-	8.33	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/08/2014	14.00	6.77	-	-	-	-	7.23	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/17/2014	14.00	5.51	-	-	-	-	8.49	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/22/2014	14.00	6.75	-	-	-	-	7.25	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	04/29/2014	14.00	6.60	-	-	-	-	7.40	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/05/2014	14.00	5.41	-	-	-	-	8.59	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/12/2014	14.00	6.89	-	-	-	-	7.11	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/19/2014	14.00	6.16	-	-	-	-	7.84	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	05/27/2014	14.00	6.70	-	-	-	-	7.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/02/2014	14.00	6.94	-	-	-	-	7.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/09/2014	14.00	7.81	-	-	-	-	6.19	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/16/2014	14.00	6.47	-	-	-	-	7.53	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	06/23/2014	14.00	6.69	-	-	-	-	7.31	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/02/2014	14.00	7.00	-	-	-	-	7.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/07/2014	14.00	7.27	-	-	-	13.42	6.73	-	-	-	-	-	-	-	-	-	-	-	-	41500.00	
TW-07	07/14/2014	14.00	6.70	-	-	-	-	7.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/25/2014	14.00	7.33	-	-	-	13.30	6.67	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	07/31/2014	14.00	7.22	-	-	-	13.30	6.78	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	08/08/2014	14.00	7.39	-	-	-	-	6.61	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	08/11/2014	14.00	7.17	-	-	-	13.20	6.83	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	
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	

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	11/28/2017	9.88	9.42	-	-	-	13.60	0.46	11:10	-	-	-	-	-	-	-	-	-	-	-	-	
TW-07	11/30/2017	9.88	9.80	-	-	-	13.35	0.08	11:40	-	-	-	-	-	-	-	-	-	-	1780	849	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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	-	-	-	-	-	-	-	-	-	-	-	-	-	

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-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	-	-	-	-	-	-	-	-	-	-	-	-	-	
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																				

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-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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
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	-	-	-	-	-	-	-	-	-	-	-	-	-	LNAPL NMB
TW-11	07/24/2014	37.39	26.88	-	-	-	-	10.51	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-11	07/31/2014	37.39	27.10	-	-	-	37.02	10.29	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-11	08/05/2014	Overdrilled and replaced with MW-31																				
TW-12S	12/18/2013	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	01/08/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	03/07/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	03/13/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	03/20/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	03/27/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	04/03/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	04/08/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	04/17/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	04/22/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	04/29/2014	38.01	DRY	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	02/24/2015	31.33	24.81	-	-	-	-	6.52	15:47	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	05/11/2015	31.33	24.82	-	-	-	24.90	6.51	10:40	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/04/2015	31.33	24.78	-	-	-	25.00	6.55	10:25	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	12/01/2015	31.33	24.82	-	-	-	24.92	6.51	11:32	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	03/14/2016	31.33	24.76	-	-	-	25.00	6.57	9:34	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	05/23/2016	31.33	24.75	-	-	-	24.90	6.58	11:19	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	05/25/2016	31.33	24.69	-	-	-	24.91	6.64	12:08	-	-	-	-	-	-	-	-	-	-	-	-	DRY
TW-12S	08/24/2016	31.33	24.71	-	-	-	24.94	6.62	12:11	-	-	-	-	-	-	-	-	-	-	-	-	
TW-12S	08/25/2016	31.33	24.72	-	-	-	24.94	6.61	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
TW-12S	08/30/2016	31.33	24.73	-	-	-	24.93	6.60	-	-	-	-	-	-	-	-	-	-	-	-	-	DRY
TW-12S	11/28/2016	31.33	24.75	-	-	-	25.04	6.58	10:43	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	11/29/2016	31.33	DRY	-	-	-	24.92	-	11:10	-	-	-	-	-	-	-	-	-	-	-	-	DRY

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-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	12/07/2016	31.33	24.77	-	-	-	24.93	6.56	12:14	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	02/21/2017	31.33	24.72	-	-	-	24.94	6.61	11:50	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	02/22/2017	31.33	24.76	-	-	-	24.94	6.57	12:46	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	05/22/2017	31.33	DRY	-	-	-	24.93	-	11:36	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	08/28/2017	31.33	24.75	-	-	-	24.95	6.58	12:10	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-12S	11/28/2017	31.33	24.74	-	-	-	24.95	6.59	13:28	-	-	-	-	-	-	-	-	-	-	-	-	Insufficient GW Vol.
TW-13	12/18/2013	36.99	NR	-	-	-	-	-	-	6.06	ND	44.5	137	ND	-	-	-	239	-	-	3,580	
TW-13	01/08/2014	36.99	30.45	-	-	-	-	6.54	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/07/2014	36.99	29.11	-	-	-	-	7.88	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/13/2014	36.99	29.91	-	-	-	-	7.08	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/20/2014	36.99	29.09	-	-	-	-	7.90	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	03/27/2014	36.99	29.98	-	-	-	-	7.01	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/03/2014	36.99	29.05	-	-	-	-	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/08/2014	36.99	29.98	-	-	-	-	7.01	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/17/2014	36.99	29.62	-	-	-	-	7.37	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/22/2014	36.99	28.93	-	-	-	-	8.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	04/29/2014	36.99	28.90	-	-	-	-	8.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	05/05/2014	36.99	29.95	-	-	-	-	7.04	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	05/12/2014	36.99	28.91	-	-	-	-	8.08	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	05/19/2014	36.99	28.87	-	-	-	-	8.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/02/2014	36.99	28.86	-	-	-	-	8.13	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/09/2014	36.99	28.73	-	-	-	-	8.26	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/16/2014	36.99	28.88	-	-	-	-	8.11	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	06/23/2014	36.99	28.65	-	-	-	-	8.34	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	07/02/2014	36.99	28.69	-	-	-	-	8.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	07/07/2014	36.99	28.91	-	-	-	35.02	8.08	-	-	-	-	-	-	-	-	-	-	-	-	17,500	
TW-13	07/14/2014	36.99	28.58	-	-	-	-	8.41	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-13	07/29/2014	Overdrilled and replaced with MW-14																				
TW-14	01/17/2014	15.55	2.48	-	-	-	-	13.07	-	<0.5	<0.5	<0.5	<0.5	0.536	-	-	-	ND	-	-	2,290	
TW-14	03/07/2014	15.55	2.29	-	-	-	-	13.26	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	03/13/2014	15.55	2.55	-	-	-	-	13.00	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	03/20/2014	15.55	2.25	-	-	-	-	13.30	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	03/27/2014	15.55	2.42	-	-	-	-	13.13	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	04/03/2014	15.55	2.31	-	-	-	-	13.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	04/08/2014	15.55	2.27	-	-	-	-	13.28	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table 3

HISTORICAL GROUNDWATER MONITORING AND ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	Top of Casing (ft)	Depth to Water (DTW) (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom (DTB) - Measured Depth (ft)	Groundwater Elevation (ft)	Gauging Time	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-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	04/17/2014	15.55	2.26	-	-	-	-	13.29	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	04/22/2014	15.55	2.48	-	-	-	-	13.07	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	04/29/2014	15.55	2.66	-	-	-	-	12.89	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	05/05/2014	15.55	2.56	-	-	-	-	12.99	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	05/12/2014	15.55	2.58	-	-	-	-	12.97	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	05/19/2014	15.55	2.38	-	-	-	-	13.17	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	06/02/2014	15.55	2.52	-	-	-	-	13.03	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	06/09/2014	15.55	2.50	-	-	-	-	13.05	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	06/16/2014	15.55	2.31	-	-	-	-	13.24	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	06/23/2014	15.55	2.44	-	-	-	-	13.11	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	07/02/2014	15.55	4.63	-	-	-	-	10.92	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	07/07/2014	15.55	4.65	-	-	-	7.27	10.90	-	-	-	-	-	-	-	-	-	-	-	-	16,000	
TW-14	07/14/2014	15.55	4.40	-	-	-	-	11.15	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	07/24/2014	15.55	4.46	-	-	-	-	11.09	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	07/31/2014	15.55	4.63	-	-	-	7.39	10.92	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	08/08/2014	15.55	4.43	-	-	-	7.39	11.12	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	08/11/2014	15.55	4.57	-	-	-	-	10.98	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	08/15/2014	15.55	4.36	-	-	-	7.39	11.19	-	-	-	-	-	-	-	-	-	-	-	-	3,900	
TW-14	08/18/2014	15.55	4.49	-	-	-	-	11.06	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	08/25/2014	11.61	3.01	-	-	-	-	8.60	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	09/02/2014	11.61	3.03	-	-	-	-	8.58	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	09/15/2014	11.61	3.19	-	-	-	-	8.42	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	09/22/2014	11.61	3.38	-	-	-	-	8.23	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	10/01/2014	11.61	3.50	-	-	-	5.90	8.11	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	10/10/2014	11.61	3.67	-	-	-	-	7.94	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	10/20/2014	11.61	3.02	-	-	-	5.90	8.59	-	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	10/21/2014	11.61	NR	-	-	-	-	-	-	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	-	100	-	670	
TW-14	02/24/2015	11.61	2.67	-	-	-	-	8.94	15:29	-	-	-	-	-	-	-	-	-	-	-	-	
TW-14	02/26/2015	11.61	2.68	-	-	-	5.90	8.93	12:00	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.03	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	-	-	-	-	-	-	-	-	-	-	-	-	

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	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	
TW-14	11/29/2017	11.61	-	-	-	-	-	-	-	<0.50	<1.0	<1.0	<1.0	-	-	-	-	<5.0	-	-	299.8	

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.
ft = feet
gal = gallons
DRY = No water for sampling.
Vol. = Insufficient Groundwater (GW) Volume (Vol.) for sampling
GW = Groundwater
LNAPL = Light Non-Aqueous Phase Liquid
NR = Not recorded

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

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-01S	11/28/2017	0.8	21.3	0.0	0.0	5.3	6.51	16.14	-99.9	560.0	-
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					

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	05/23/2016	0.2	20.8	0.0	0.0	8.46	3.48	16.03	385.0	3,150	-
MW/RW-05	08/24/2016	6.4	-	-	-	2.69	6.53	19.98	15.2	640	-
MW/RW-05	08/30/2016	47.4	21.6	0.1	10.0	-	-	-	-	-	-
MW/RW-05	11/28/2016	0.7	20.9	0.2	0.0		4.35	17.10	229.5	1,280	-
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/RW-05	11/28/2017	138.1	9.4	7.5	0.0	1.40	5.45	16.14	111.6	540.0	-
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-08S	11/28/2017					-	6.42	-	-	-	-
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	-	-	-	-	-	-

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	10/22/2014	-	-	-	-	1.30	6.48	18.44	-72.7	1,002	-
MW/RW-10S	02/24/2015	54.5	1.0	14.7	3.4	-	-	-	-	-	-
MW/RW-10S	05/11/2015	22.6	6.5	9.2	7.6	-	-	-	-	-	-
MW/RW-10S	08/04/2015	53.6	4.2	10.6	7.6	0.02	6.73	16.52	-90.0	1,440	-
MW/RW-10S	03/14/2016	134.2	19.4	1.2	0.4	0.14	6.59	15.38	-121.4	1,350	-
MW/RW-10S	04/21/2016	190.3	17.5	2.5	0.5	-	-	-	-	-	-
MW/RW-10S	05/23/2016	44.3	20.9	0.3	0.0	6.87	3.93	15.87	114.8	1,570	-
MW/RW-10S	08/24/2016	45.8	-	-	-	-	-	-	-	-	-
MW/RW-10S	08/30/2016	208.1	20.1	1.2	0.1	6.09	6.45	20.54	65.4	1,410	-
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	2,785.9	-
MW/RW-10S	11/28/2017	10.3	21.4	0.0	0.0	2.77	5.36	16.24	61.8	2,870	-
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	-

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	10/13/2014	15.9	17.2	-	-	2.79	6.00	18.13	68.0	368	-
MW/RW-14	10/20/2014	82.4	14.4	3.7	1.3	-	-	-	-	-	-
MW/RW-14	10/22/2014	-	-	-	-	0.26	5.79	18.43	216.2	310	-
MW/RW-14	02/24/2015	188.0	14.4	0.9	0.4	-	-	-	-	-	-
MW/RW-14	02/25/2015	-	-	-	-	0.84	6.25	17.90	-98.6	460	-
MW/RW-14	05/11/2015	166.8	18.4	2.4	0.2	0.07	6.22	17.30	-69.6	420	-
MW/RW-14	08/04/2015	11.9	17.8	3.2	0.3	0.07	6.72	17.10	-69.4	1,100	-
MW/RW-14	03/14/2016	143.4	13.6	5.9	0.8	0.10	6.35	16.95	-84.7	490	-
MW/RW-14	04/21/2016	503.7	20.4	1.5	0.8	PRODUCT					
MW/RW-14	05/23/2016	132.0	20.8	0.3	0.2	PRODUCT					
MW/RW-14	08/24/2016	550.3	-	-	-	7.06	5.76	18.95	103.60	190	-
MW/RW-14	08/30/2016	101.8	21.7	0.0	0.1	-	-	-	-	-	-
MW/RW-14	11/28/2016	0.8	20.9	0.2	0.0	11.69	5.94	14.91	87.9	209	-
MW/RW-14	02/21/2017	61.3	20.9	0.0	0.0	11.32	6.02	15.48	41.6	190	-
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/RW-14	11/28/2017	47.5	20.9	0.1	0.0	8.49	5.72	16.44	86.9	270.0	-
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

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-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	-	-	-	-	-	-
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-25S	11/28/2017	-	-	-	-	-	6.09	-	-	-	-
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	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW/RW-25	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/RW-25	11/28/2017	139.3	20.6	0.5	0.0	10.82	5.73	16.57	95.2	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
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	-

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	08/28/2017	0.0	20.9	0.0	0.0	1.50	6.67	17.10	66.3	847.7	-
MW-27	11/28/2017	26.2	20.6	0.2	0.0	3.04	6.66	16.43	12.9	930.0	-
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/RW-31	11/29/2017										
MW-33	10/10/2014	1.4	9.7	-	-	0.68	5.81	17.97	157.4	654	-
MW-33	10/15/2014	0.5	19.0	-	-	0.09	5.84	18.30	64.9	633	-
MW-33	10/15/2014	0.0	20.9	-	-	0.42	5.86	18.30	92.6	658	-
MW-33	10/20/2014	1.0	12.0	5.4	0.0	-	-	-	-	-	-
MW-33	10/23/2014	-	-	-	-	2.37	6.05	18.24	186.7	698	1,120
MW-33	02/24/2015	0.0	20.6	0.1	0.1	2.35	5.51	15.51	88.7	648	-
MW-33	05/11/2015	21.4	19.0	1.0	0.0	0.47	5.69	14.03	88.0	720	-
MW-33	08/04/2015	1.4	3.3	8.6	0.0	0.05	6.29	15.84	48.5	780	-
MW-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	-

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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	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	-
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-51S	11/28/2017	0.9	21.4	0.0	0.0	2.3	6.19	16.83	-22.4	2,000	-
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	-	-	-	-	-	-

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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-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/RW-51	11/28/2017	109.8	20.5	0.6	0.0	9.27	6.54	16.83	22.1	520.0	-
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	-
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	-

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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	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	3,636	-
MW/RW-72S	08/30/2017	-	-	-	-	-	4.40	18.1	-	-	-
MW/RW-72S	11/28/2017	1.6	21.1	0.1	0.0	0.8	4.39	17.7	140.2	2,710	-
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	-
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	-

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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	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/RW-72	11/30/2017	51.4	20.4	0.3	0.0	3.48	4.40	17.8	162.2	1,899	
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-100S	11/28/2017	0.8	21.4	0.0	0.0	0.78	5.81	16.8	81.8	1,100	-
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-100	11/28/2017	1.3	16.3	2.2	0.0	2.47	5.94	16.7	98.8	290	-
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	-

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1400 North Royal St
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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-103	08/30/2017	-	-	-	-	-	6.05	22.6	-	-	-
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	-

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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-106	08/28/2017	9.5	20.1	0.1	0.0	DRY					
MW-106	11/28/2017	17.1	20.6	0.1	0.0	DRY					
MW-107	10/10/2014	10.5	11.8	-	-	0.62	3.51	18.90	348.4	2,063	-
MW-107	10/15/2014	7.3	13.7	-	-	1.51	3.63	19.54	393.0	1,047	-
MW-107	10/15/2014	-	-	-	-	2.52	3.76	19.36	428.9	1,117	-
MW-107	10/20/2014	0.3	7.3	9.4	0.0	-	-	-	-	-	-
MW-107	10/23/2014	-	-	-	-	3.40	2.90	19.05	480.1	1,462	-
MW-107	02/24/2015	0.0	19.3	1.5	0.1	7.33	3.01	11.73	338.5	15,400	-
MW-107	05/11/2015	0.8	9.1	6.7	0.0	0.40	3.36	12.51	425.7	2,010	-
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-109S	11/28/2017	-	-	-	-	-	5.25	15.16	-	-	-
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	-	-	-	-	-	-

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-110S	02/25/2015	-	-	-	-	1.65	6.39	13.79	-19.5	849	-
MW-110S	11/28/2017	-	-	-	-	-	6.37	14.66	-	-	-
MW-110	10/10/2014	13.1	16.4	-	-	1.30	5.39	17.98	117.8	215	-
MW-110	02/24/2015	5.8	19.4	1.0	0.4	-	-	-	-	-	-
MW-110	02/25/2015	-	-	-	-	1.70	5.48	15.49	168.1	245	-
MW-111	10/10/2014	7.3	16.9	-	-	1.70	5.82	17.98	75.9	247	-
MW-111	02/24/2015	0.0	18.7	1.7	0.2	-	-	-	-	-	-
MW-111	02/25/2015	-	-	-	-	1.21	6.05	15.24	122.6	368	-
MW-112S	10/10/2014	25.0	14.7	-	-	1.95	5.46	18.26	148.5	369	-
MW-112S	10/20/2014	0.0	12.0	7.9	0.0	-	-	-	-	-	-
MW-112S	10/21/2014	-	-	-	-	2.50	5.38	18.27	172.9	333	-
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-112S	11/28/2017	-	-	-	-	-	4.88	14.11	-	-	-
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	-	-	-	-	-	-

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-114	02/25/2015	-	-	-	-	8.72	6.10	12.05	113.7	326	-
MW-114	05/11/2015	0.0	19.4	1.0	0.0	3.99	5.99	15.33	199.7	300	-
MW-121	08/04/2015	-	-	-	-	0.02	7.00	17.04	-13.1	890	-
MW-121	12/01/2015	14.8	14.8	3.6	15.2	0.04	6.72	17.44	-91.7	880	-
MW-121	03/14/2016	7.0	13.0	4.5	17.6	0.02	6.84	17.13	-159.0	850	-
MW-121	05/23/2016	251.2	17.6	4.4	0.7	1.54	6.77	17.35	-50.8	1,230	-
MW-121	08/24/2016	1,070.0	2.6	14.6	0.6	0.49	6.80	17.89	-126.4	1,300	-
MW-121	11/28/2016	378.4	5.0	10.0	0.1	0.26	6.72	18.08	-106.2	1,298	-
MW-121	02/21/2017	238.3	15.5	3.5	0.0	0.32	6.72	18.03	-46.1	930	-
MW-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-121	11/28/2017	287.1	17.1	1.9	0.0	0.90	6.76	17.4	-351.9	530.0	-
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-122	11/28/2017	421.3	16.9	1.7	0.0	5.98	6.42	17.4	116.2	1,220	-
MW/RW-123S	08/04/2015	-	-	-	-	2.66	12.52	16.99	-53.2	15,080	-

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-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	-	-	-	
MW/RW-123S	08/28/2017	0.3	15.8	0.7	0.0	2.3	6.78	19.01	24.2	1,063	-
MW/RW-123S	11/28/2017	2.3	21.5	0.0	0.0	3.2	6.74	17.78	-123.3	1,070	-
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	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
RW-1	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-1	11/28/2017	164.4	19.4	0.9	0.0	0.66	6.62	17.1	-47.2	260.0	-
RW-05S	08/04/2015	-	-	-	-	0.00	8.88	15.65	-469.6	1,960	-
RW-05S	12/01/2015	193.7	19.2	1.3	3.5	0.04	6.59	17.01	-89.7	1,560	-
RW-05S	03/14/2016	44.2	20.3	0.6	0.3	1.78	6.63	14.38	-98.0	1,260	-
RW-05S	04/21/2016	264.4	19.6	1.2	0.3	6.62	7.09	14.94	-27.4	500	-
RW-05S	05/23/2016	46.1	20.9	0.2	0.0	3.75	6.11	14.74	39.9	710	-
RW-05S	08/24/2016	48.8	-	-	-	-	-	-	-	-	-
RW-05S	08/30/2016	11.2	21.3	0.1	0.1	3.47	6.16	21.27	60.9	940	-
RW-05S	11/28/2016	0.3	20.9	0.0	0.0	DRY					
RW-05S	02/21/2017	21.4	20.9	0.0	0.0	0.10	6.18	13.58	34.80	1,840	-
RW-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-05S	11/28/2017	2.5	21.4	0.0	0.0	2.8	2.52	15.04	187.8	2,130.0	-
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	-	-	-	-	-	-

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-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-25S	11/28/2017	5.6	21.2	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	-	-	-	-	-	-	-	-	-
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-28S	11/28/2017	1.4	21.2	0.1	0.0	8.67	6.79	16.03	-57.5	1,170.0	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
RW-30S	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					
RW-30S	11/28/2017	4.5	21.4	0.1	0.0	DRY					
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	-

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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	08/24/2016	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-116S	11/28/2017	3.7	21.2	0.0	0.0	2.2	6.8	16.6	-63.2	1580.0	-
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	-
RW-117S	08/31/2017	-	-	-	-	-	4.97	21.6	-	-	-
RW-117S	11/28/2017	0.3	21.6	0.0	0.0	DRY					
RW-118S	08/04/2015	19.6	6.4	7.3	0.1	0.14	6.78	16.32	-59.8	1,350	-

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-118S	08/29/2017	-	-	-	-	-	6.12	18.1	-	-	-
RW-118S	11/28/2017	-	-	-	-	-	6.23	-	-	-	-
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	-	-	-	-
RW-119S	11/28/2017	-	-	-	-	-	6.87	-	-	-	-
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-02	11/28/2017	-	-	-	-	0.14	6.87	17.80	-138.8	474	6.3
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

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	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
TW-03	08/28/2017	0.9	10.1	6.1	0.0	1.07	7.19	19.79	60.2	589.9	-
TW-03	11/28/2017	0.2	19.5	1.0	0.0	1.04	5.69	19.24	32.5	1,179	8.7
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-04	11/28/2017	-	-	-	-	4.60	5.59	17.69	32.1	2,194	over range
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	-	-	-	-	-	-

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-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-05	11/28/2017	0.4	20.9	0.0	0.0	3.99	5.23	17.14	44.9	1,853	2,195
TW-06	10/13/2014	39.8	14.4	-	-	1.31	6.42	18.99	-	983	-
TW-06	10/15/2014	78.9	11.0	-	-	1.33	6.54	21.65	-65.0	873	-
TW-06	10/15/2014	-	-	-	-	0.31	6.28	19.79	-46.8	986	-
TW-06	10/20/2014	0.8	5.4	12.0	0.0	-	-	-	-	-	-
TW-06	10/23/2014	-	-	-	-	0.84	6.51	18.95	-68.8	823	-
TW-06	02/24/2015	0.7	5.0	8.9	0.3	-	-	-	-	-	-
TW-06	02/25/2015	-	-	-	-	0.84	6.75	7.20	-32.9	882	-
TW-06	05/11/2015	-	-	-	-	1.33	6.49	18.61	-69.1	710	-
TW-06	08/04/2015	-	-	-	-	0.22	6.17	19.07	-36.8	975	30.5
TW-06	12/01/2015	4.7	1.1	14.5	0.0	-	-	-	-	-	-
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

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	08/28/2017	4.5	16.3	1.3	0.0	1.62	5.49	21.06	77.0	1,567.1	-
TW-06	11/28/2017	0.1	20.8	0.0	0.0	0.26	4.39	19.12	142.3	2,413	16.20
TW-07	10/13/2014	33.5	16.4	-	-	1.40	4.96	19.08	-	580	-
TW-07	10/15/2014	15.6	15.4	-	-	0.40	4.94	20.81	97.9	569	-
TW-07	10/20/2014	0.0	14.6	5.0	0.0	-	-	-	-	-	-
TW-07	10/23/2014	-	-	-	-	0.41	4.99	19.04	139.5	415	-
TW-07	02/24/2015	0.0	14.4	7.2	0.3	-	-	-	-	-	-
TW-07	02/25/2015	-	-	-	-	1.53	5.07	7.15	244.8	640	-
TW-07	05/11/2015	0.0	9.0	11.0	0.0	2.02	4.70	20.64	202.2	660	-
TW-07	08/04/2015	0.0	7.2	16.9	0.0	0.20	4.39	22.88	150.0	629	65.8
TW-07	03/14/2016	0.0	18.8	2.3	0.1	-	-	-	-	-	-
TW-07	05/23/2016	2.3	19.9	0.7	0.0	-	-	-	-	-	-
TW-07	05/24/2016	-	-	-	-	0.90	4.85	15.88	206.9	653	-
TW-07	08/24/2016	1.6	-	-	-	-	-	-	-	-	-
TW-07	08/25/2016	-	-	-	-	6.99	4.58	24.52	223.9	722	45
TW-07	08/30/2016	98.2	21.7	0.0	0.0	-	-	-	-	-	-
TW-07	11/28/2016	0.5	20.9	1.0	0.0	-	-	-	-	-	-
TW-07	11/30/2016	-	-	-	-	6.66	4.60	15.79	172.6	524	3.92
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-07	11/28/2017	0.0	20.6	0.3	0.0	2.25	5.11	16.23	121.0	922.0	3,373 (au)
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	-	-	-	-	-	-	-	-

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-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	-	-	-	-	8.66	6.52	21.9	-61.9	852	680 (au)

Notes:

- = Not available
% = Percent
µS/cm = Microsiemens per centimeter
deg C = Degrees Celsius
mg/L = Milligrams per liter
(cont.) = continued
mV = Millivolts
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 SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-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	<0.010	292	2.3	10.1
MW-01S	11/29/2017	2,330	-	-	29.0	<0.11	<0.010	437	3.4	9.54
MW-08S	8/29/2017	-	202	-	696	-	-	122	-	-
MW-08S	11/29/2017	-	-	-	524	-	-	-	-	-
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	<0.010	<5	199	8.89
MW/RW-10S	11/30/2017	<0.11	-	-	1640	<0.11	<0.010	75.2	242	10.8
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/RW-14	11/30/2017	0.11			41.4	1.80	<0.010	6.7	<0.20	<0.015
MW-15S	8/29/2017	-	72.9	-	270	-	-	487	-	-
MW-16	8/30/2017	-	55.6	<0.2	212	-	-	39.5	-	-
MW-16	11/30/2017	-	-	-	222	-	-	22.7	-	-
MW-25S	11/29/2017	-	-	-	-	-	-	364	-	-
MW/RW-25	11/30/2017	-	-	-	-	-	-	14.4	-	-
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-27	11/29/2017	0.27	-	-	384	<0.11	<0.010	79.8	0.90	4.61
MW/RW-31	10/23/2014	4,300	-	-	57.2	<0.040	<0.015	416	2.6	-

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 SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW/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/RW-31	11/30/2017	-	-	-	-	-	-	102	-	-
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
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	<0.010	169	90.1	10.9
MW-51S	11/29/2017	418	-	-	464	<0.11	<0.010	493	135	5.7
MW-51	11/30/2017	-	-	-	-	-	-	70	-	-
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	<0.010	<5.0	120	50.2
MW/RW-72S	11/30/2017	23.1	-	-	1,880	<0.11	<0.010	<5.0	110	34.5
MW/RW-72	10/22/2014	2,200	-	-	389	<0.040	<0.015	65.5	0.33	-
MW/RW-72	2/25/2015	490	-	-	396	<0.040	<0.015	72.7	4.8	18.8
MW/RW-72	5/13/2015	540	-	-	434	<0.040	0.057	101	10.8	17.5
MW/RW-72	8/5/2015	1,400	-	-	393	<0.040	<0.015	548	14.3	13.5
MW/RW-72	5/24/2016	<3.0	-	-	246	0.25	<0.015	24	0.073	1.72
MW/RW-72	8/25/2016	<3.0	-	-	351	0.12	<0.015	25.1	0.085	3.6

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 SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW/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/RW-72	11/29/2017	0.22	-	-	1,080	0.27	<0.010	<5.0	<0.20	22.8
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-100S	11/30/2017	16.5	-	-	319	<0.11	<0.010	46.4	16.5	9.31
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-100	11/30/2017	<0.11	-	-	47.3	1.9	<0.010	21.6	<1.0	446
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
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-121	11/29/2017	4.0	-	-	83.3	<0.11	0.015	113	1.4	4.02
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

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 SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-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	-	-	-	-	-	-
MW-122	11/29/2017	1.3	-	-	383	<0.11	<0.010	86.5	<0.20	12.3
RW-123S	8/29/2017	-	74.9	-	236	-	-	165	-	-
RW-123S	11/29/2017	-	-	-	77.2	-	-	-	-	-
RW-1	8/29/2017	-	5.22	-	15.3	-	-	50.8	-	-
RW-05S	8/29/2017	-	446	-	-	-	-	-	-	-
MW/RW-05	11/28/2017	-	-	-	-	-	-	21.1	-	-
RW-118S	8/29/2017	-	-	-	-	-	-	57.9	-	-
RW-119S	8/28/2017	-	109	<0.2	403	-	-	117	-	-
RW-119S	11/29/2017	-	-	-	17.3	-	-	-	-	-
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-03	11/29/2017	13.6	-	-	616	<0.11	<0.010	43.3	102	12.1
TW-04	8/30/2017	-	-	-	-	-	-	<5	-	-
TW-05	3/4/2015	2,800	-	-	367	<0.040	0.13	89.4	72.6	5.28
TW-05	5/13/2015	1,300	-	-	463	0.052 J	0.18	66.2	58.6	4.77
TW-05	8/6/2015	3,000	-	-	388	-	-	-	-	-
TW-05	8/13/2015	-	-	-	-	<0.040	0.091	16.1	84.5	3.55
TW-05	3/14/2016	460	-	-	410	0.12	0.042 J	114	41.5	3.05
TW-05	8/25/2016	NA	-	-	515	<0.040	<0.015	68.7	54.5	4.91
TW-05	11/30/2017	-	-	-	1140	-	-	-	-	-
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

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 SO4 (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	Ferrous Iron (mg/L)	Manganese (mg/L)
TW-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-06	11/28/2017	20.1	-	-	1840	<0.11	<0.010	<5.0	299	12.7
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	<.096	<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-25S	01/18/2018	<0.72	<0.76	<0.52	<0.37	<0.68	<0.39	<0.45	<0.57	<0.37	<2.2	2.1 J	<0.72	<1.5	0.86 J	2.1 J	<0.60	<0.61	542	247	<50
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-51S	01/18/2018	<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	<50	<50	<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

pH, Sulfur, TPH, EPH DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	pH	Sulfur (mg/L)	Sulfate as SO4 (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	TPH-DRO (µg/L)	TPH-DRO - Silica Gel Cartridge (Restek) (µg/L)	TPH-DRO - Silica Gel Cartridge (Phenomenex) (µg/L)	TPH-DRO - Silica Gel Powder (µg/L)	Sum of EPH Hydrocarbon Concentrations (aliphatics plus aromatics, [µg/L])
MW-01S	08/28/2017	6.42	46.6	170	292	67,810	422	-	-	491
MW-01S	11/29/2017	6.51	-	29	437	3,920	-	-	3,760	-
MW/RW-05	11/28/2017	5.45	-	-	21	6,860	-	-	27,900	-
MW-08S	08/29/2017	6.43	202	696	122	48,000	1,650	-	-	1,590
MW-08S	11/29/2017	6.42	-	524	-	38,600	-	-	20,300	-
MW/RW-10S	08/29/2017	5.20	442	2,150	<5.0	54,300	2,400	-	-	3,996
MW/RW-10S	11/30/2017	5.36	-	1,640	75.2	48,900	-	-	48,400	-
MW/RW-14	11/30/2017	5.72	-	-	6.7	1,000	-	-	218	-
MW-25S	08/31/2017	6.15	-	-	-	32,200	1,640	-	-	2,266
MW-25S	11/29/2017	6.09	-	-	364	56,500	-	-	55,900	-
MW-25S	01/18/2018	-	-	-	-	34,600	834	3,670	27,500	839
MW-25S	01/18/2018	-	-	-	-	30,300	-	-	-	-
MW-25S	01/18/2018	-	-	-	-	34,200	-	-	-	-
MW/RW-25	11/30/2017	5.73	-	-	14.40	162	-	-	153	-
MW-51S	08/29/2017	7.30	223	836	169	25,600	448	-	-	617
MW-51S	11/30/2017	6.19	-	464	493	17,200	-	-	15,200	-
MW-51S	01/18/2018	-	-	-	-	12,400	422	2,130	10,500	<150
MW-51S	01/18/2018	-	-	-	-	12,800	-	-	-	-
MW-51S	01/18/2018	-	-	-	-	12,800	-	-	-	-
MW/RW-72S	08/30/2017	4.40	657	3,260	<5.0	15,800	4,870	-	-	4,950
MW/RW-72S	11/30/2017	4.39	-	1,880	<5.0	9,100	-	-	8,070	-
MW-109S	11/29/2017	5.25	-	-	-	351	-	-	184	-
MW-110S	11/29/2017	6.37	-	-	-	-	-	-	44,400	-
MW-112S	11/29/2017	4.88	-	-	-	209	-	-	172	-
MW-121	08/29/2017	6.80	34.1	122	158	4,600	5,030	-	-	6,534
MW-121	11/29/2017	6.76	-	83	113	15,900	-	-	18,400	-
MW/RW-123S	08/29/2017	6.78	74.9	236	165	11,500	266	-	-	392
MW/RW-123S	11/29/2017	6.74	-	77	-	11,900	-	-	10,600	-
TW-05	11/30/2017	5.23	-	1,140	-	61,500	-	-	67,000	-
TW-06	11/28/2017	4.39	-	1,840	<5.0	7,350	-	-	5,760	-
TW-07	11/30/2017	5.11	-	-	-	849	-	-	1,780	-
RW-01	08/29/2017	6.31	5.22	15.3	50.8	15,300	11,300	-	-	12,850
RW-01	11/29/2017	6.62	-	-	-	6,640	-	-	4,920	-
RW-05S	08/29/2017	3.70	446	-	-	32,400	1,250	-	-	880
RW-05S	11/30/2017	2.52	-	-	-	107,000	-	-	189,000	-
RW-25S	08/31/2017	-	-	-	-	32,200	1,640	-	-	-
RW-28S	08/31/2017	6.69	-	-	-	8,370	1,650	-	-	1,206
RW-116S	08/31/2017	4.42	-	-	-	29,900	3,110	-	-	3,174
RW-116S	11/30/2017	6.80	-	-	-	146,000	-	-	181,000	-

Table 7

pH, Sulfur, TPH, EPH DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Date	pH	Sulfur (mg/L)	Sulfate as SO4 (mg/L)	Alkalinity, Carbonate (mg/L as CaCO3)	TPH-DRO (µg/L)	TPH-DRO - Silica Gel Cartridge (Restek) (µg/L)	TPH-DRO - Silica Gel Cartridge (Phenomenex) (µg/L)	TPH-DRO - Silica Gel Powder (µg/L)	Sum of EPH Hydrocarbon Concentrations (aliphatics plus aromatics, [µg/L])
RW-117S	08/31/2017	4.97	-	-	-	39,200	3,260	-	-	3,370
RW-118S	08/29/2017	6.12	-	-	57.9	31,300	1,960	-	-	2,395
RW-118S	11/30/2017	6.23	-	-	-	19,100	-	-	21,000	-
RW-119S	08/28/2017	6.48	109	403	117	17,500	1,410	-	-	385
RW-119S	11/29/2017	6.87	-	17	-	11,400	-	-	9,210	-

Notes:
- = No data available
<# = Result less than the method detection limit (#), i.e. non-detect
µg/L = Micrograms per Liter
TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics
EPH = Extractable Petroleum Hydrocarbons

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	-	-	-	-		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	43,907	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		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	117,175	109,780	26,045	1.0	589,447	20	347,559	13	591,420	20	62,240	1.3		
April 20, 2016	7	6.3	701	3.1		137,844	34,325	0.9	773,123	20	355,229	1	775,119	20	69,772	0.8		
April 27, 2016	7	5.1	824	3.1		161,082	37,883	0.5	918,471	20	407,031	7	921,715	20	80,116	1.4		
May 5, 2016	8	7.5	1,005	3.0		193,885	39,826	0.2	1,138,059	20	471,149	6	1,136,789	20	90,455	1.0		
May 10, 2016	5	1.1	1,031	3.1	87,572	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		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	61,464	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	66,632	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		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	97,504	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	74,361	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**
October 3, 2017	13	12.3	11,372	0.1	13,545	1,060,140	3,518,731	23.7	13,046,133	5.5	6,144,871	0.2	11,374,255	6			4,124,063	6
October 17, 2017	14	13.8	11,704	0.6		1,071,555	3,531,896	0.7	13,254,085	10.4	6,158,757	0.7	11,516,361	7			4,190,623	3
November 2, 2017	16	15.4	12,074	1.0	67,496	1,093,414	3,533,318	0.1	13,533,646	12.6	6,360,635	9.1	11,697,764	8			4,352,876	7
November 30, 2017	28	28.0	12,747	1.1		1,139,051	3,567,226	0.8	14,053,988	12.9	6,942,169	14.4	12,041,703	9			4,667,761	8
December 5, 2017	5	4.9	12,864	1.1	22,392	1,146,659	3,567,280	0.0	14,151,750	13.9	7,075,109	18.9	12,103,352	9			4,726,270	8
December 19, 2017	14	13.7	13,192	0.8		1,161,443	3,567,464	0.0	14,384,237	11.8	7,293,257	11.1	12,230,206	6			4,856,464	7
Q4 2017	**90**	**88**		**0.8**	**103,433**		**467,499**	**3.7**	**1,496,844**	**11.8**	**1,151,402**	**9.1**	**962,769**	**8**	**0**	**0**	**741,353**	**6**

Notes:

gal - gallons

gpm - gallons per minute

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

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

Table 9

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	-		-	-	-	-		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	830	**26.9**	10.1	21	0.22	2,572	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		4,207
April 13, 2016	6	5.9	568	13.7	380	71	-	21.7	129	424	0.14	4,671	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		8,530
May 18, 2016	13	8.9	1248	14.4	350	48	-	13.4	119	759	0.12	4,121	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		31,745
August 15, 2016	11	7.4	3103	16.0	350	-	-	**2.2**	16	1350	0.38	10,131	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		39,684
September 22, 2016	21	20.8	3865	16.6	345	23.7	-	6.6	136	1513	0.20	11,516	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 9

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		83,603
July 19, 2017	13	11.9	9960	15.9	275	9.6	-	2.1	25	2905	0.11	4,696	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**	
October-17	System Off												
November-17	System Off												
December-17	System Off												
Q4 2017	**System Off**												

Table 9

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)

Notes:

PID - photoionization detector; ppm-v - parts per million by volume; gal - gallons
in. Hg - inches of mercury; mg/m^3 - milligrams per cubic meter; gpm - gallons per minute
scfm - standard cubic feet per minute; lbs - pounds; 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.

* 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/m^3:

Pounds = Vapor Flow Rate (scfm) x Influent >C4-C10 Hydrocarbons (mg/m^3) x Period (days) x c

c = conversion factors, 1440 min/day, 0.02832 m^3/ft^3, 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 10

BIOSPARGE OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

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

BIOSPARGE OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

October-17	27	26.8	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
November-17	44	41.8	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
December-17	19	18.5	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
Q4 2017	**90**	**87**	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**OFF**	**0.8**	**OFF**	**0.5**	**0.5**	**0.5**	**0.5**	**0.5**	**0.3**	**0.3**

Notes:

scfm - standard cubic feet per minute

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

Table 11

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)	(mg/L)	(lbs)	(ft)	(lbs)	(lbs)	(lbs)	(lbs)	(lbs)	(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**						
October-17	0	0	0.00	13,545	0.757	0.1	0.00	0.0	43	92	85	2913	3132	428
November-17	0	0	0.0	67,496	0.189	0.1	0.00	0.0	43	92	85	2913	3133	428
December-17	0	0	0.0	22,392	2.49	0.5	0.00	0.0	43	92	85	2913	3133	428
Q4 2017			**0.0**			**0.7**		**0.0**						

Table 11

HYDROCARBON RECOVERY SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Notes:

TPE - total phase extraction
P&T - pump & treat
TPH-DRO - total petroleum hydrocarbons - diesel range organics
LNAPL - light non-aqueous phase liquid
gal - gallon
mg/L - milligrams per liter
lbs - pounds
ft - feet

[1] - LNAPL drum includes LNAPL bailed previously during well gauge and bail events

[2] - 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.

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 Radius^2 (ft^2) x π x LNAPL Density (lb/ft^3)
drum diameter = 1.875 feet
Density of LNAPL (#2 fuel oil) is 54.81 lb/ft^3 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) / Denisty of LNAPL (54.8 lb/ft^3) x 7.48 gal/ft^3)

Attachment A – Waste Documentation

Pit AFTER SETTLES WATER GOES INTO TANK

TRIUMVIRATE ENVIRONMENTAL BILL OF LADING

STRAIGHT BILL OF LADING

ORIGINAL - NOT NEGOTIABLE

BOL Document Number: BOL332559C

TRANSPORTER:	US EPA ID Number:	Phone:
1 Triumvirate Environmental, Inc. - Baltimc	MDD985597124	(410) 636-3700
2		

GENERATOR:	US EPA ID Number:	Phone:
NRG - Virginia 1400 North Royal Street Alexandria, VA 22314	VAD000731588	

FACILITY:	US EPA ID Number:	Phone:
Triumvirate Environmental - Baltimore, LLC 1500 Carbon Avenue Baltimore, MD 21226	MDD093002384 Received: Andy Lesher (Print Name) Andy Lesher (Signature) 12.19.17 (Date)	(410) 636-3700

HM	Description of Articles or Proper Shipping Name	Containers No.	Size	Type	Weight	Unit Wt/Vol.
	Non-RCRA, Non-DOT Regulated Materials - Liquids (Petroleum Impacted Water) 13920-20020A	001 x	Tanker	TT	825	G
		x				
		x				
		x				

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

	Print Name	Signature	Date
GENERATOR: NRG - Virginia	Ron Ullman		12.19.17
TRANSPORTER: 1 Triumvirate Environmental, Inc. - Baltimore	Andy Lesher	Andy Lesher	12.19.17
2			

ER #: (800) 966-9282

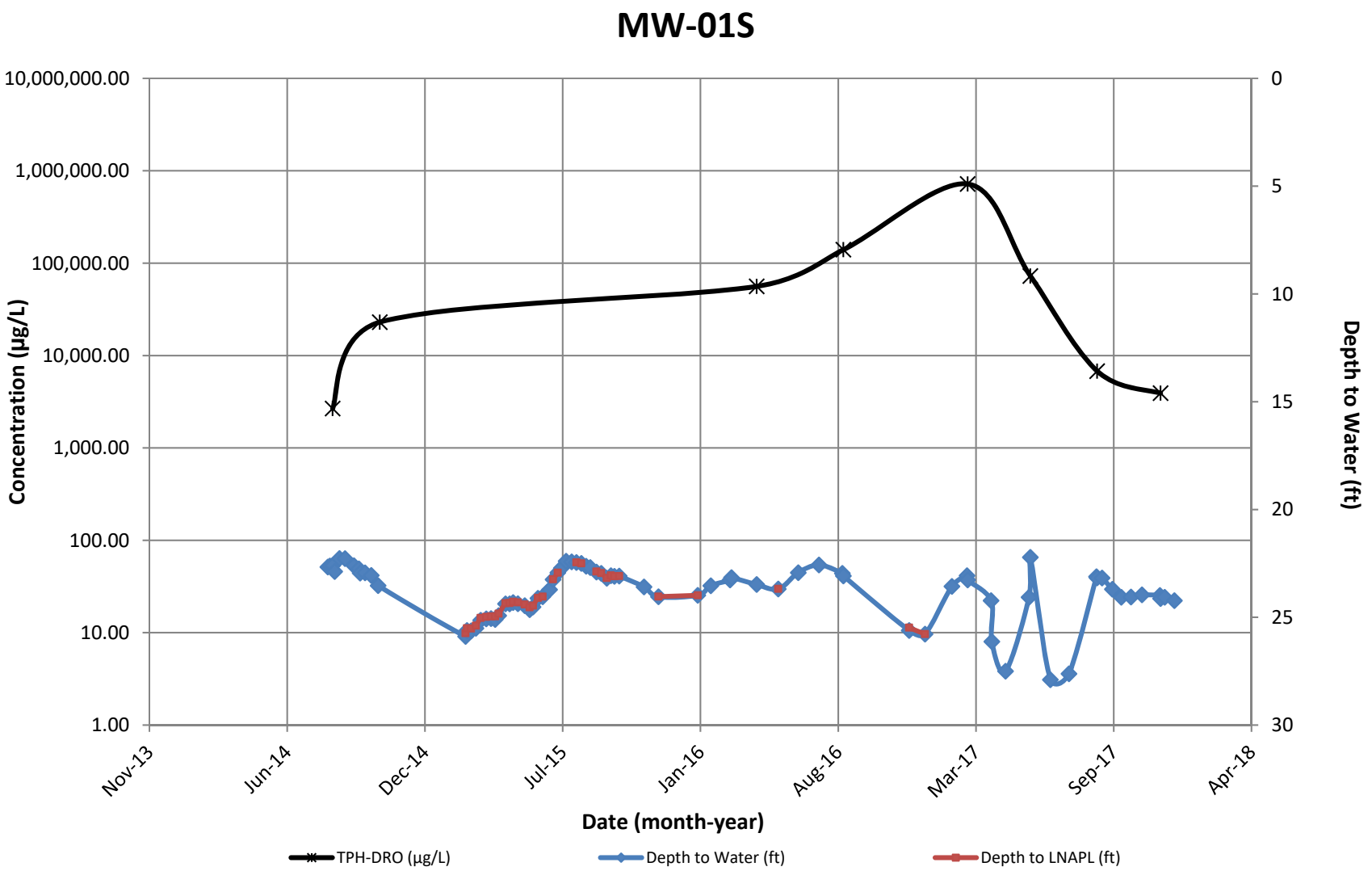
ERIP: Triumvirate Environmental

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

Attachment B – Concentration Trend Graphs

CONCENTRATION TREND GRAPHS

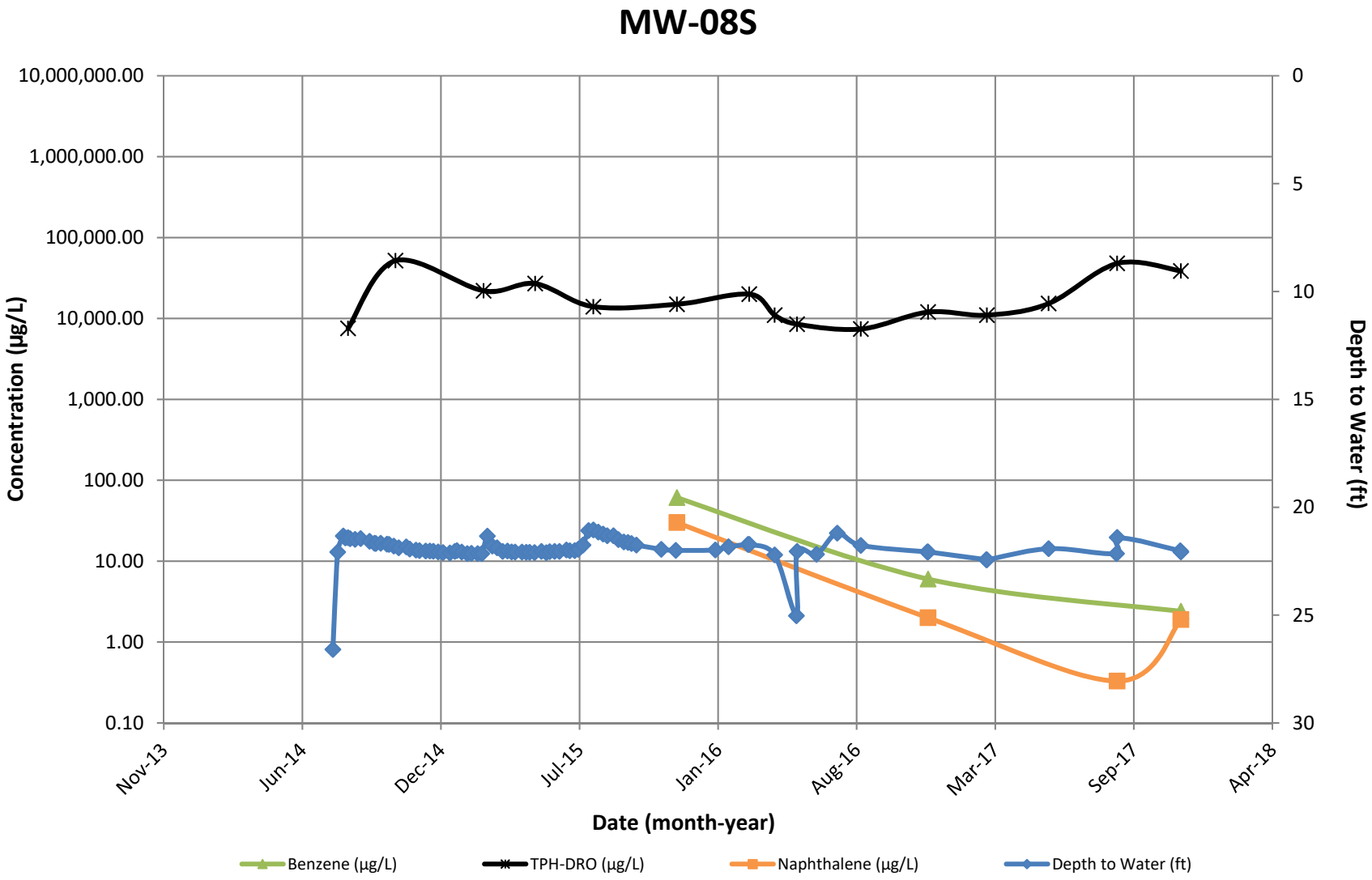
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

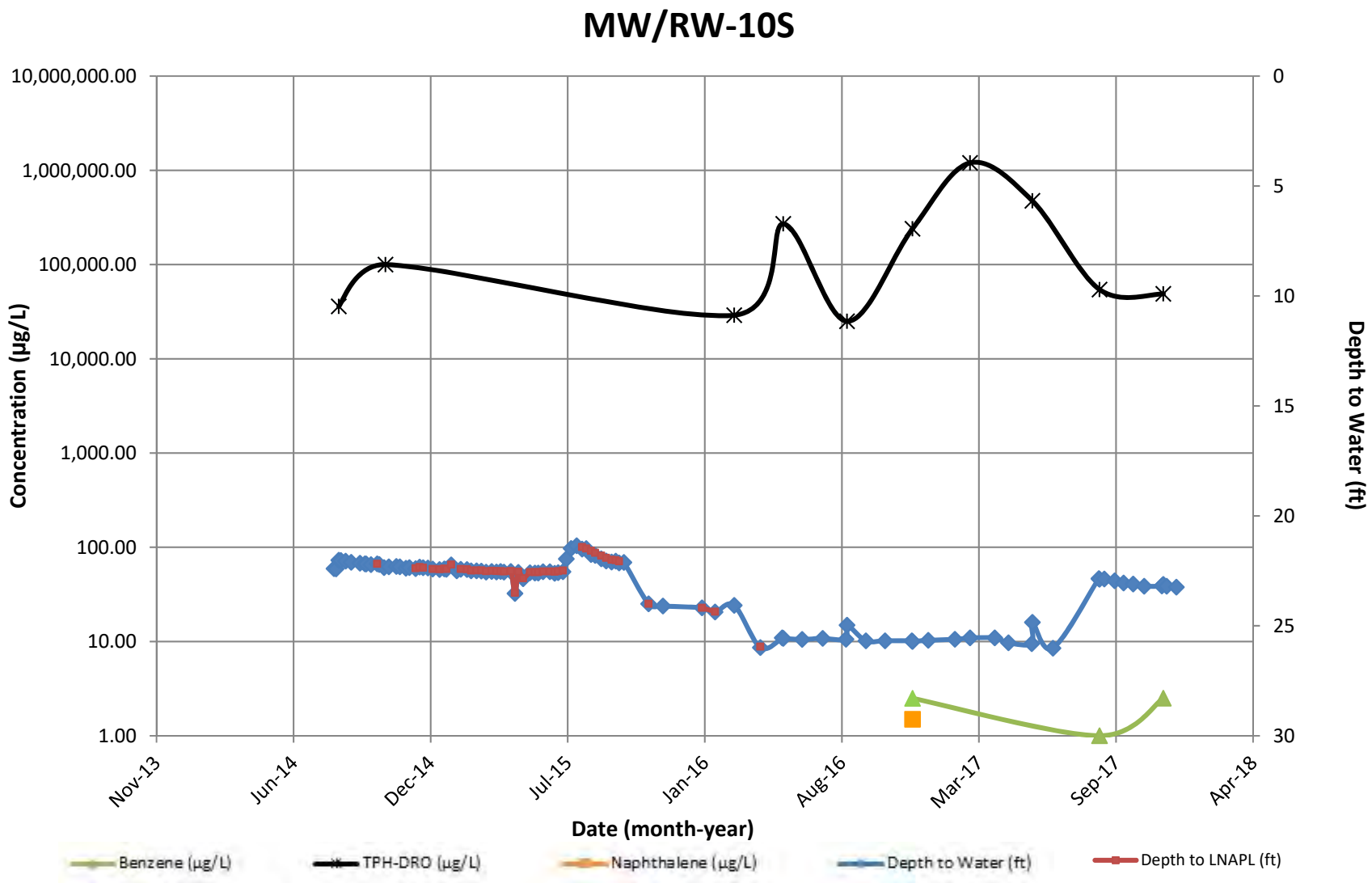
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

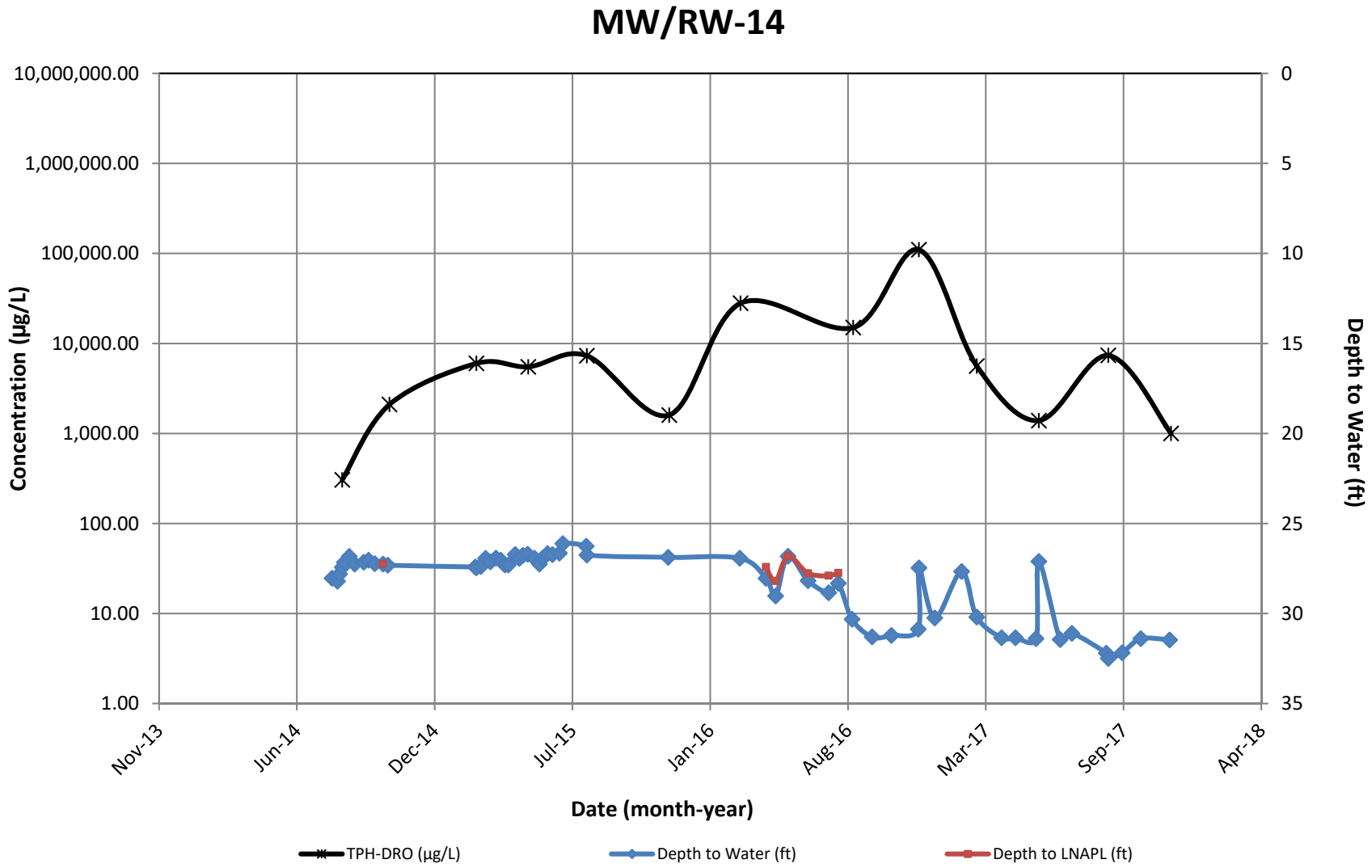
NRG PRGS
1400 North Royal Street
Alexandria, VA



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).

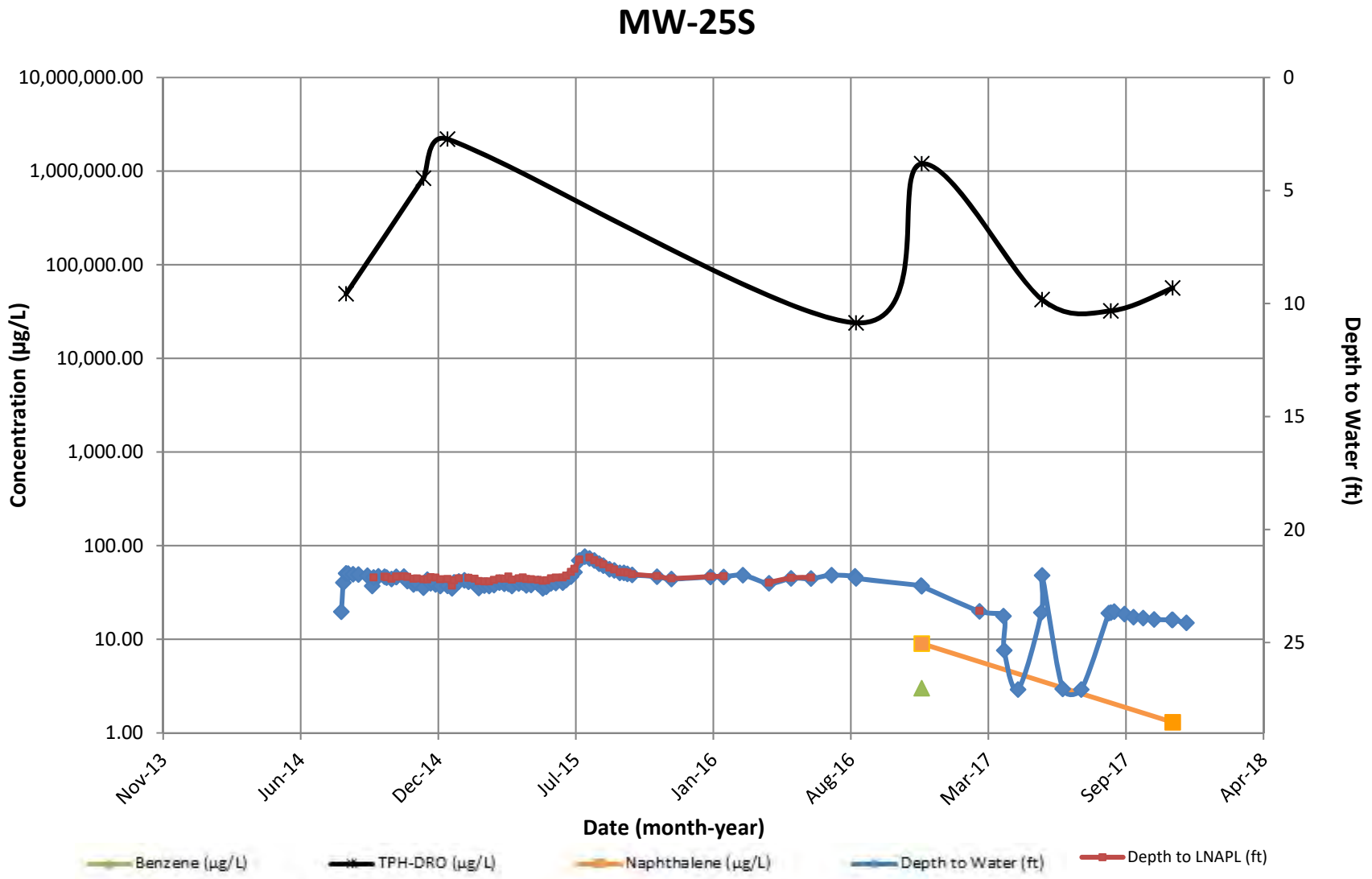
CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA



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).

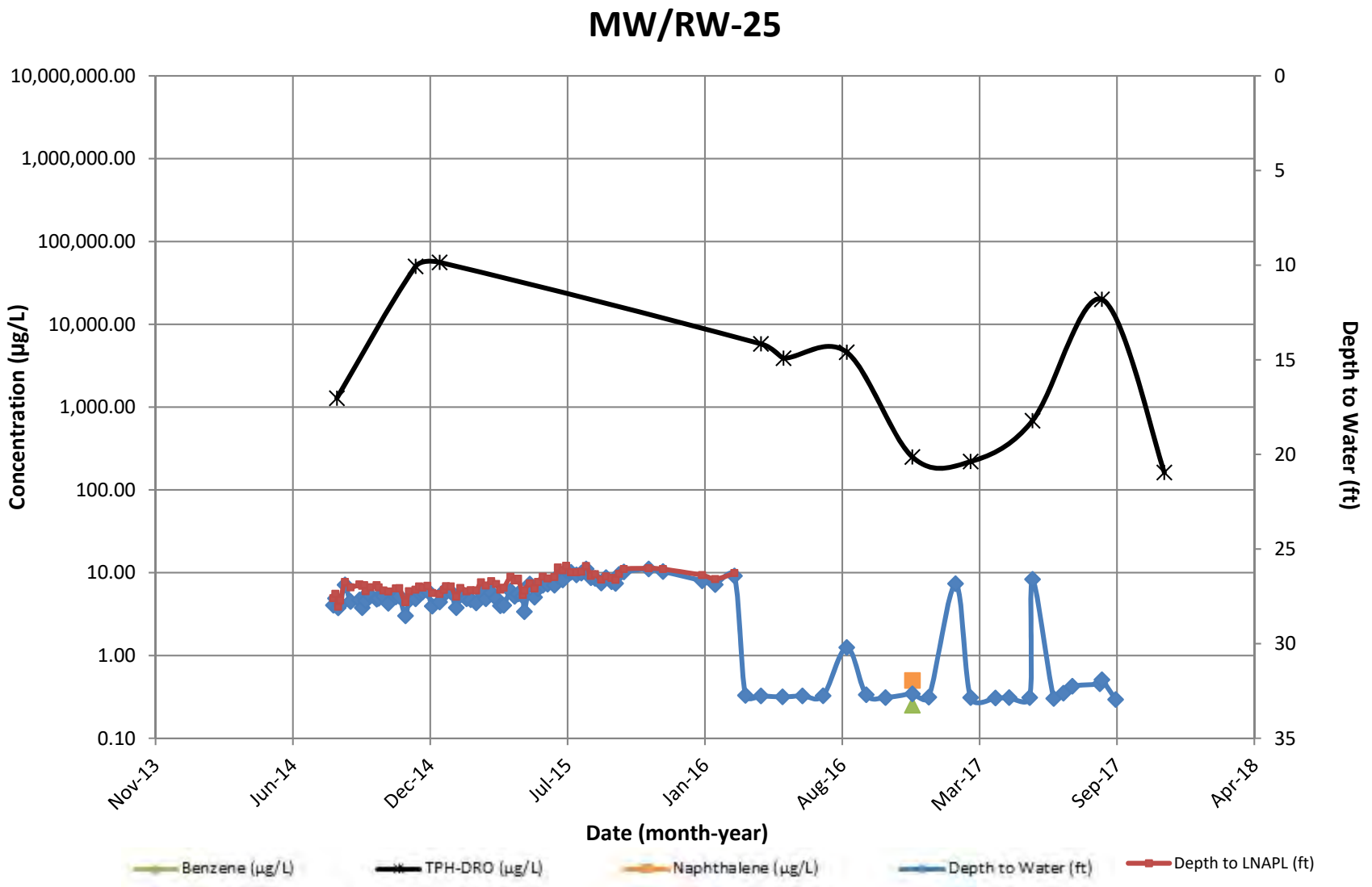
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

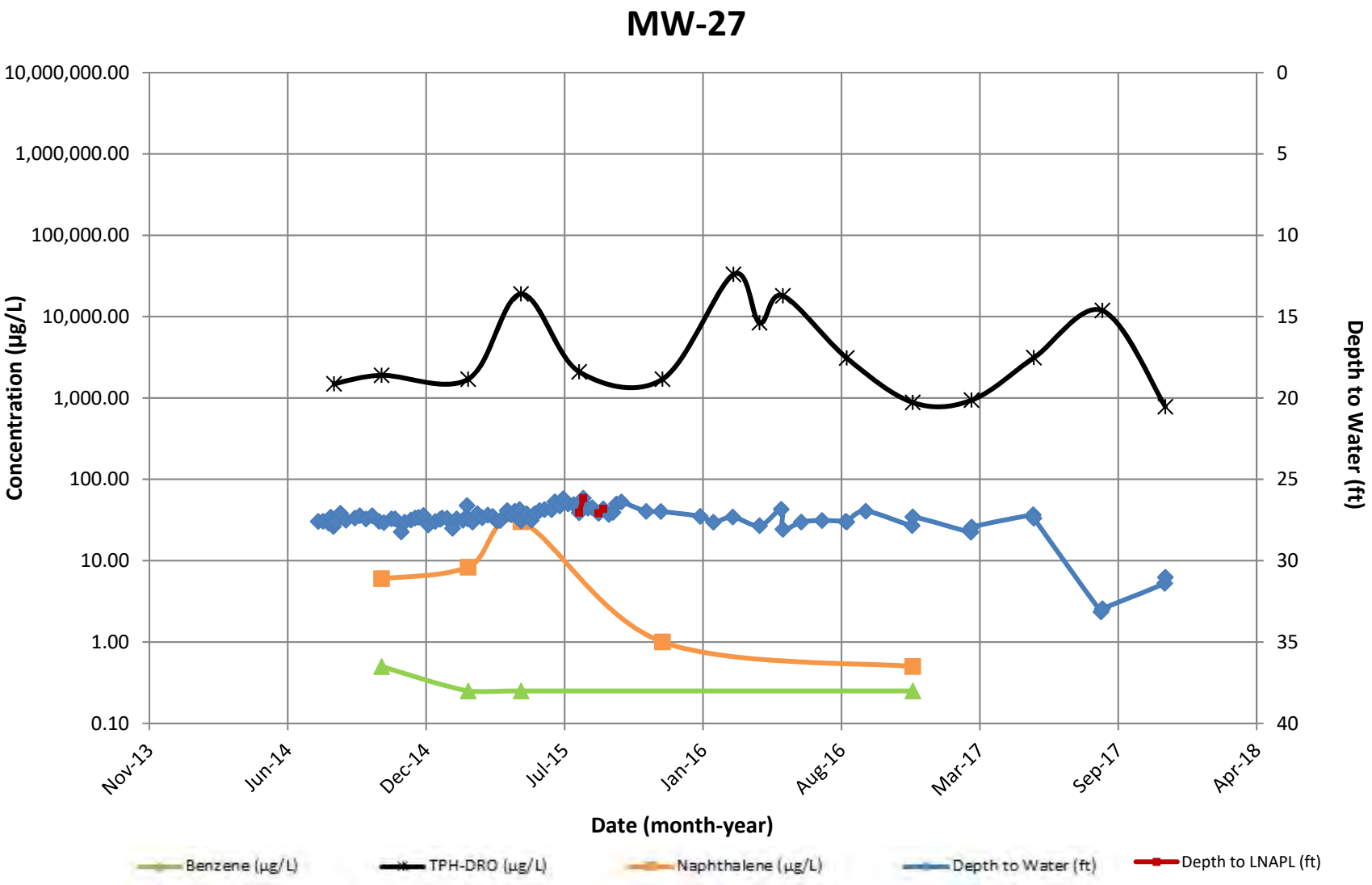
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

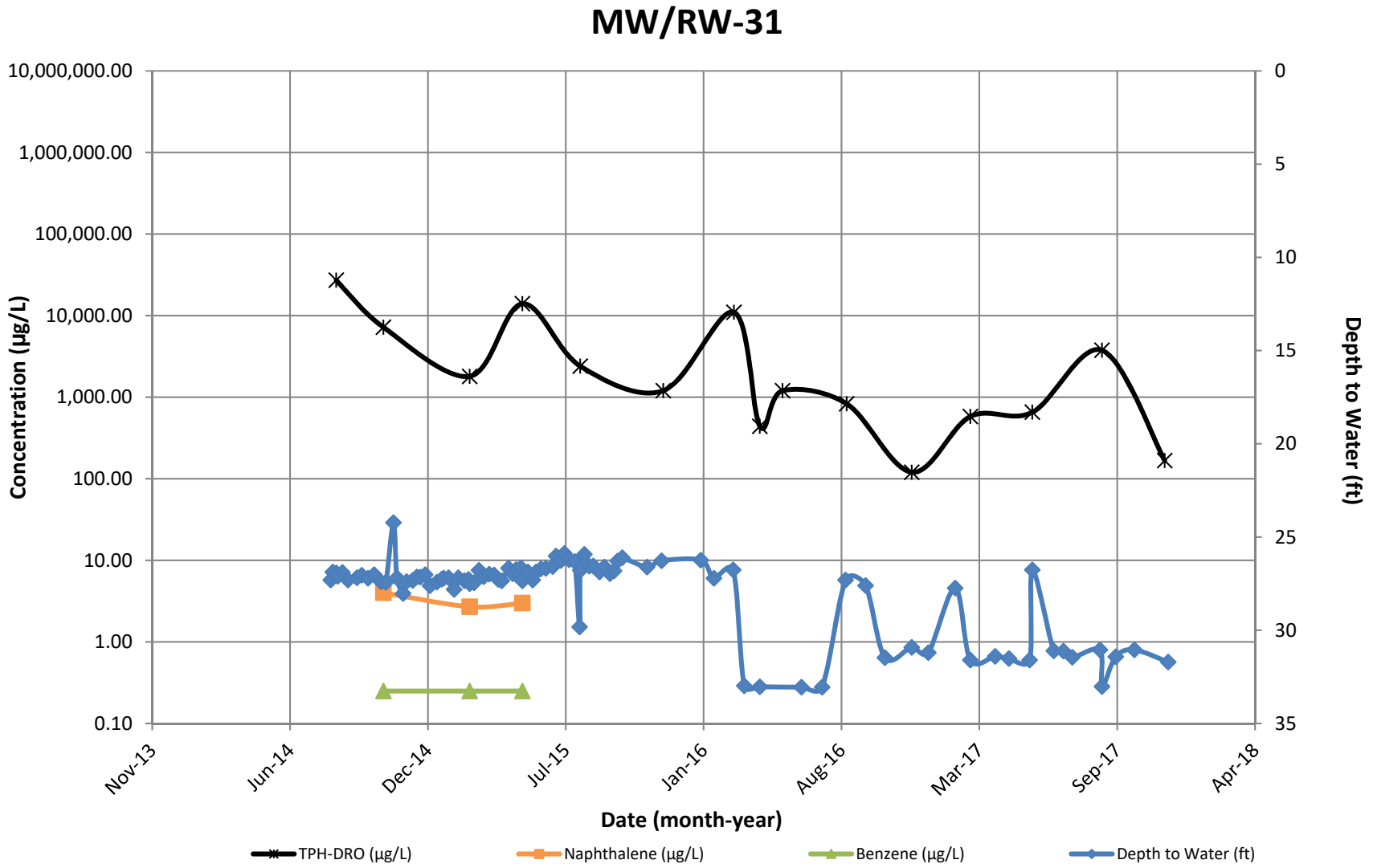
NRG PRGS
1400 North Royal Street
Alexandria, VA



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).

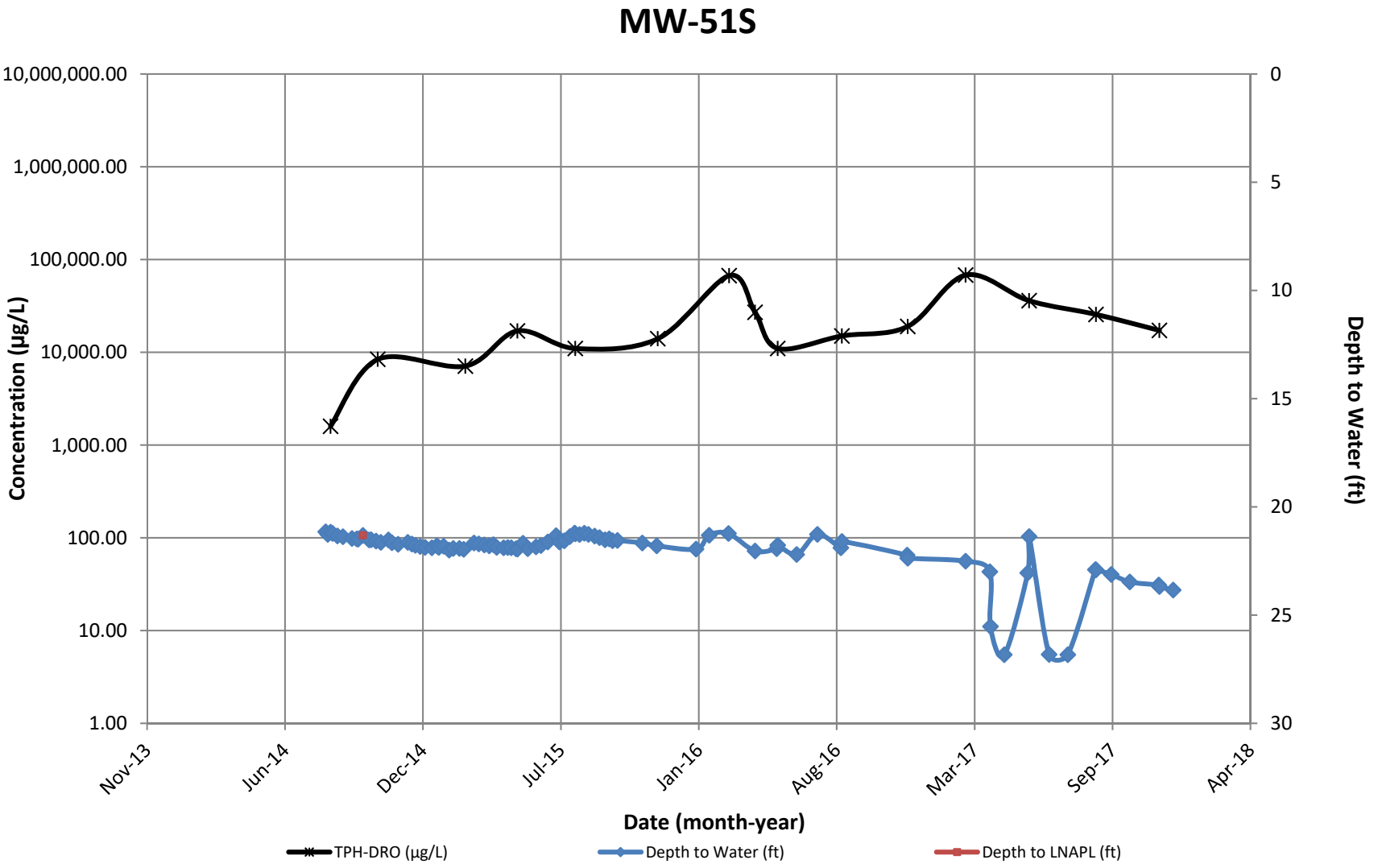
CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA



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).

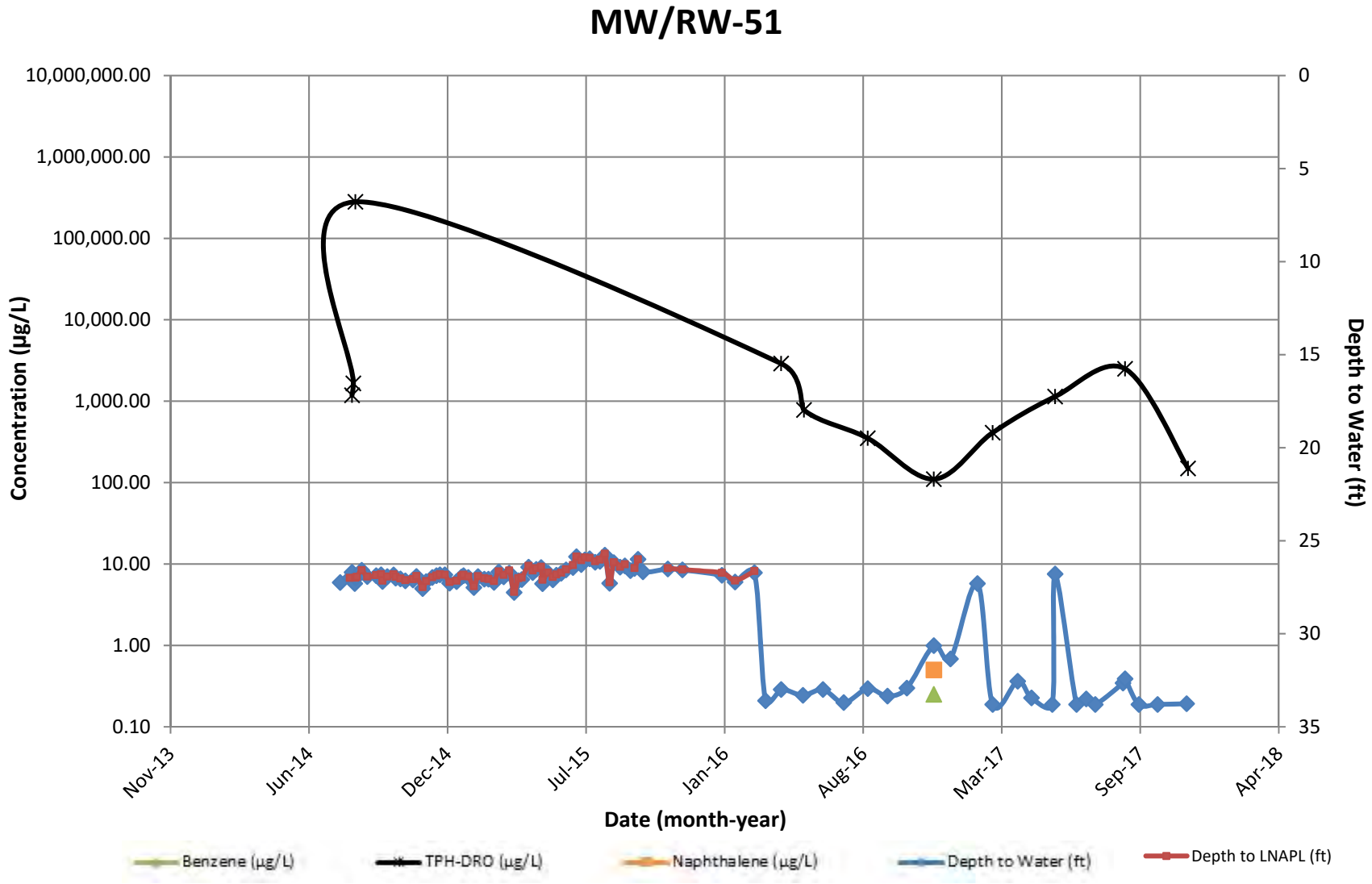
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

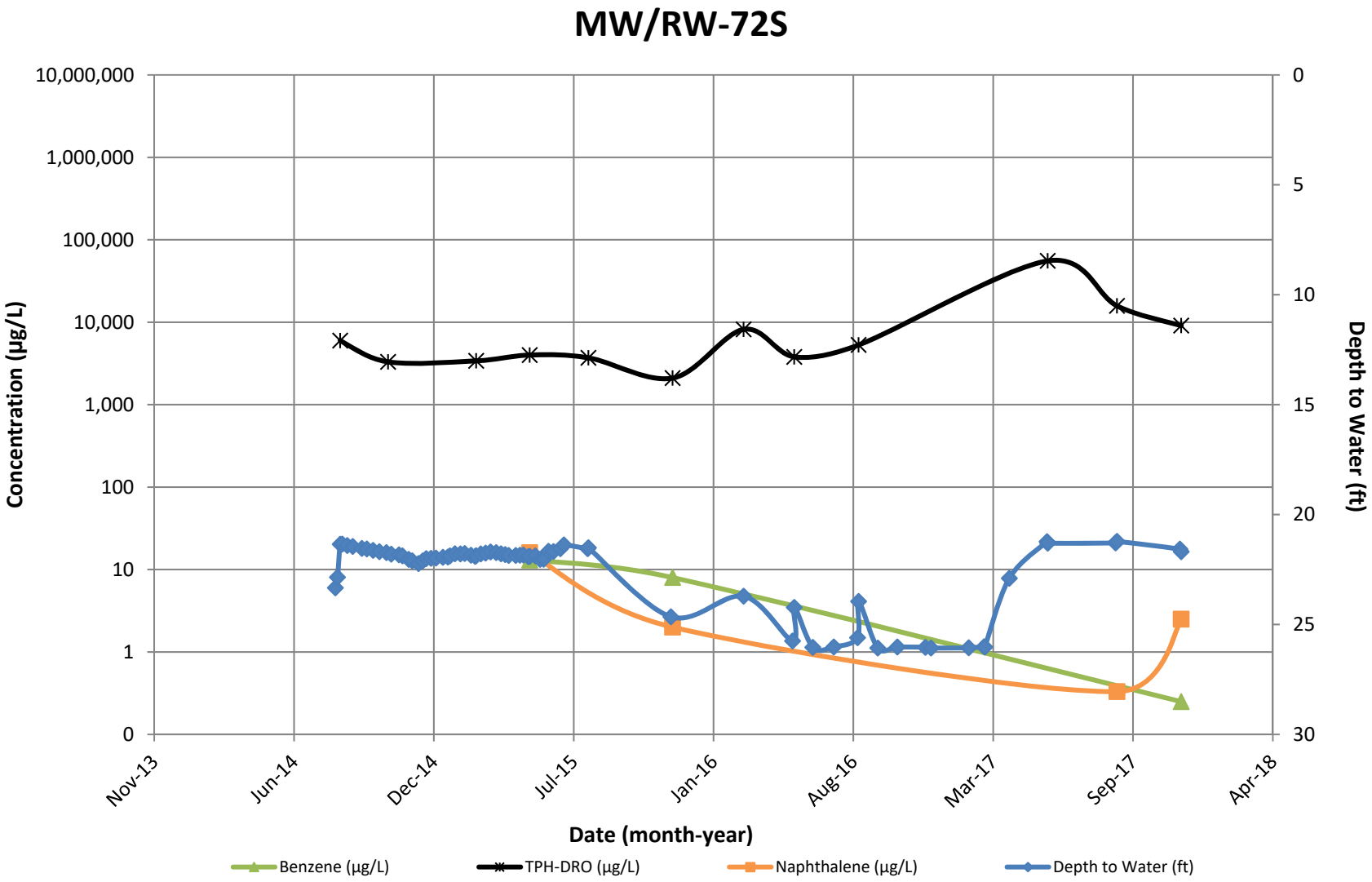
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

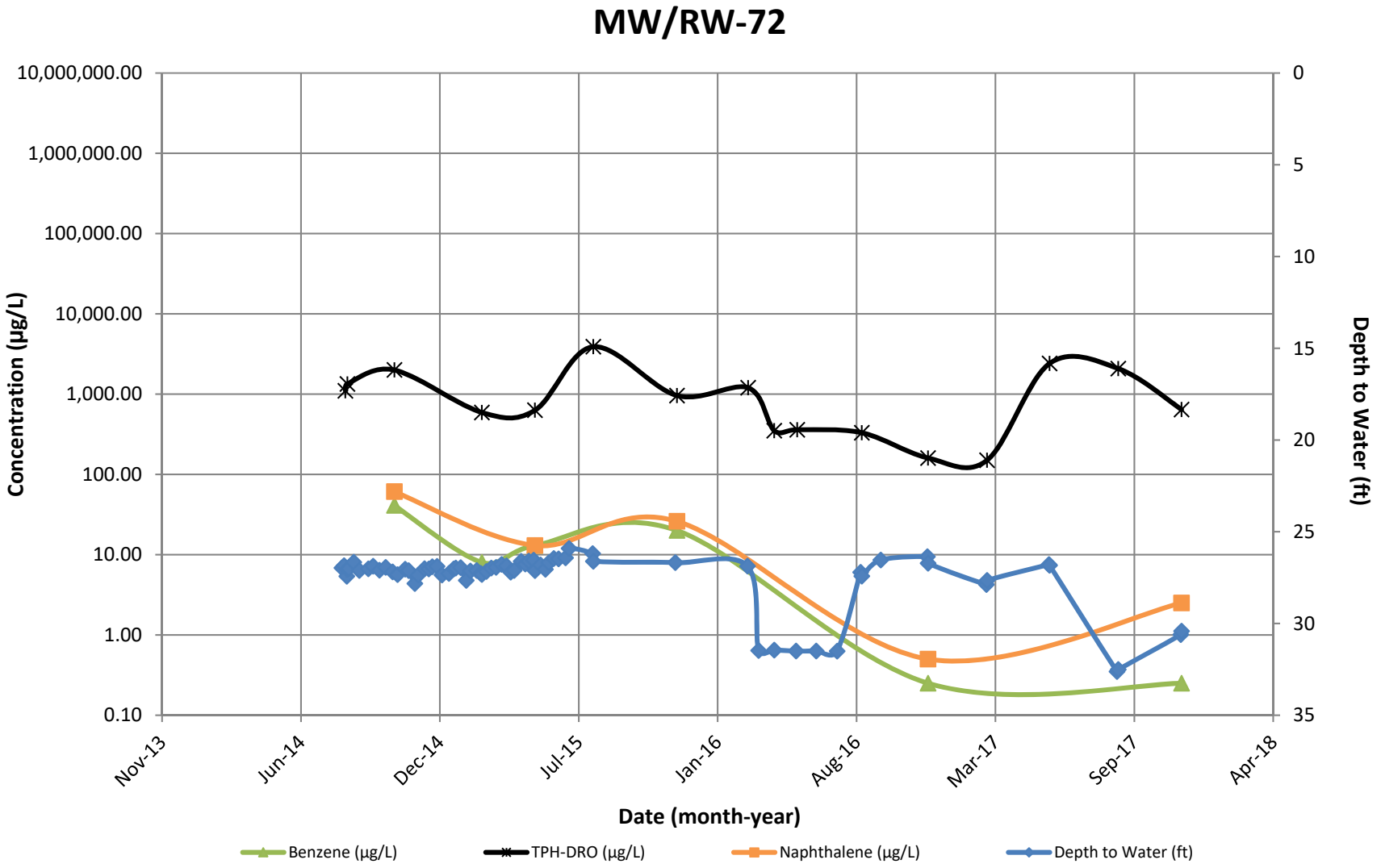
NRG PRGS
1400 North Royal Street
Alexandria, VA



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).

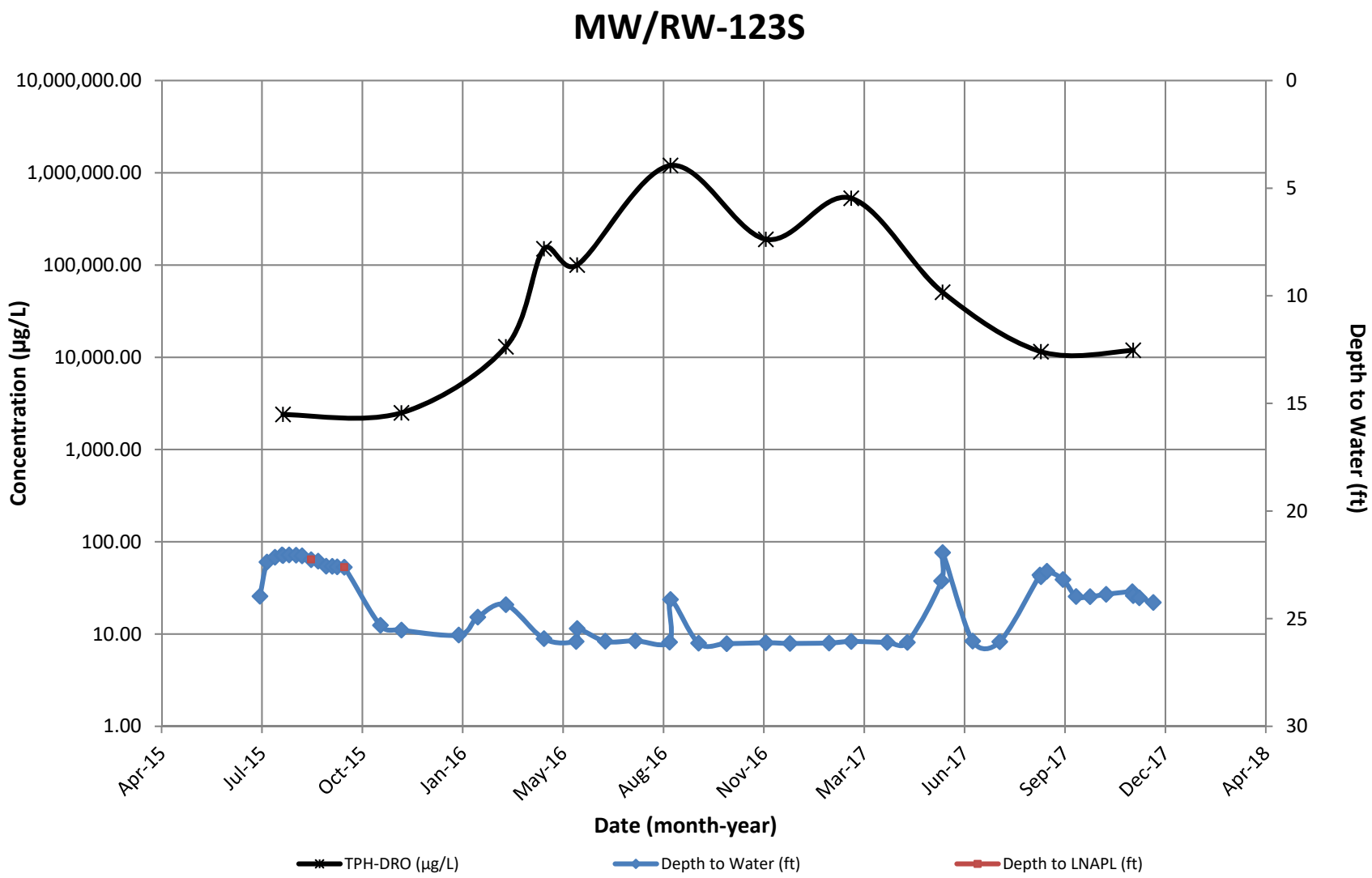
CONCENTRATION TREND GRAPHS

NRG PRGS
1400 North Royal Street
Alexandria, VA



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).

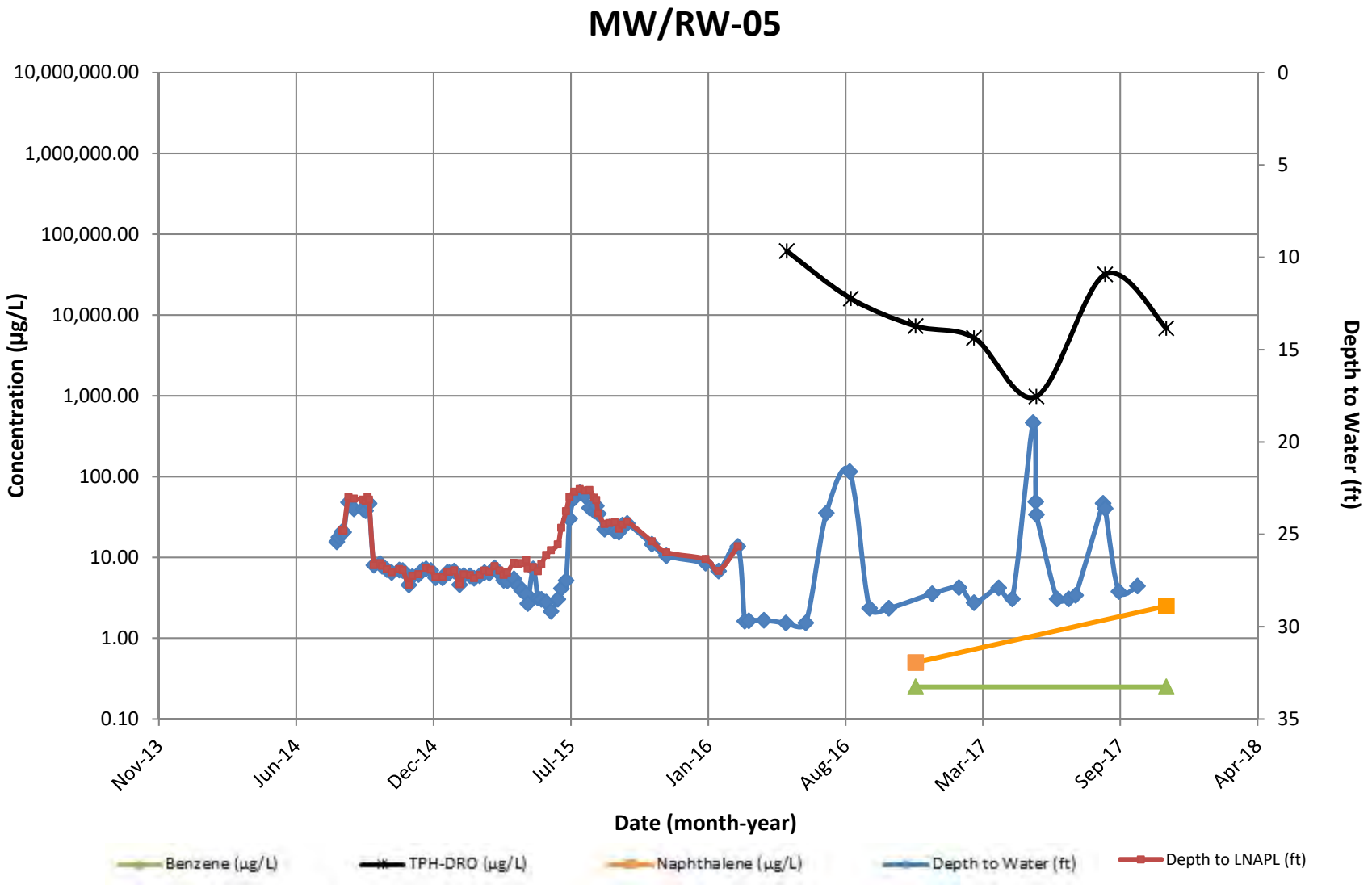
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

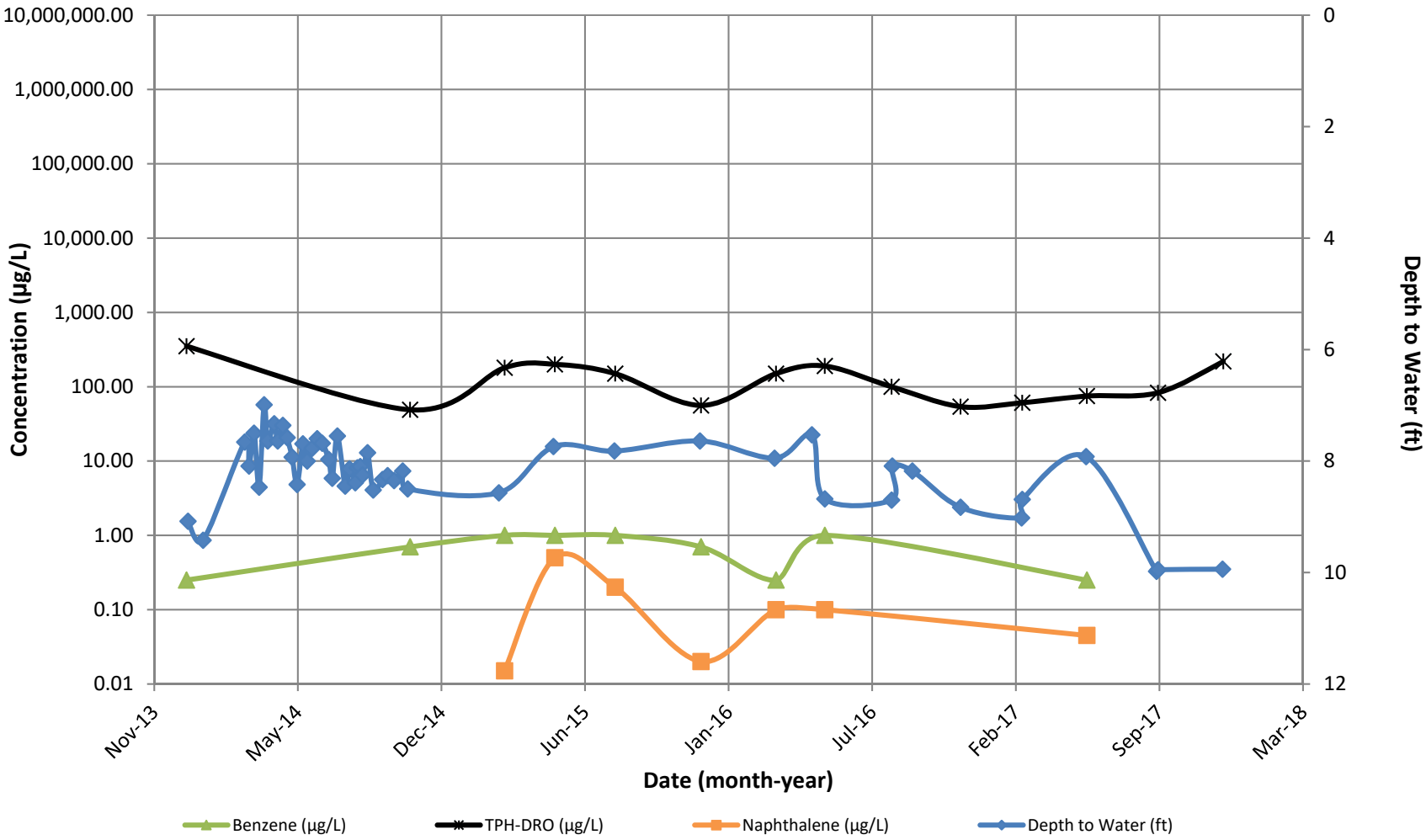
NRG PRGS
1400 North Royal Street
Alexandria, VA



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).

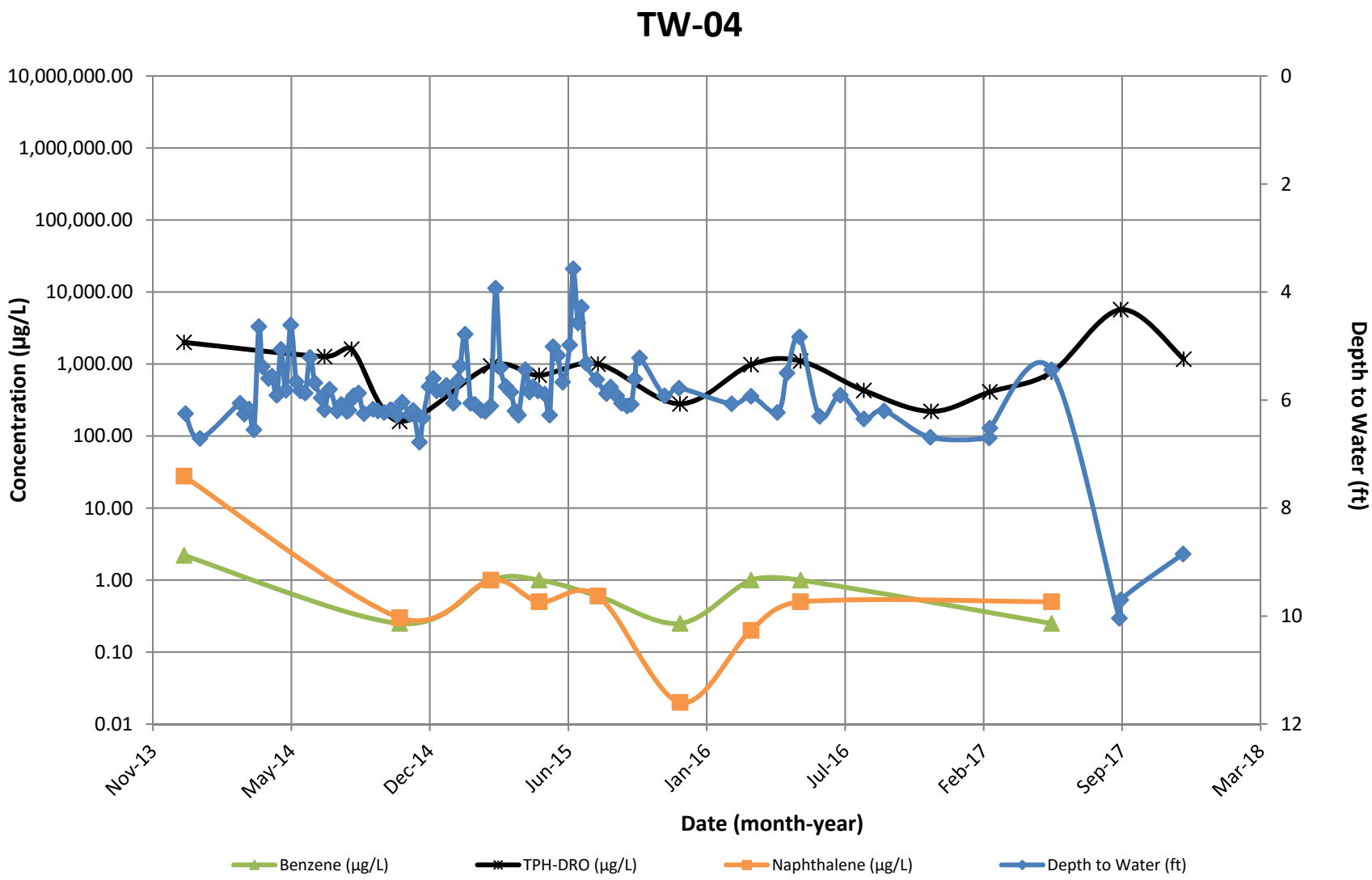
NRG PRGS
1400 North Royal Street
Alexandria, VA

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).

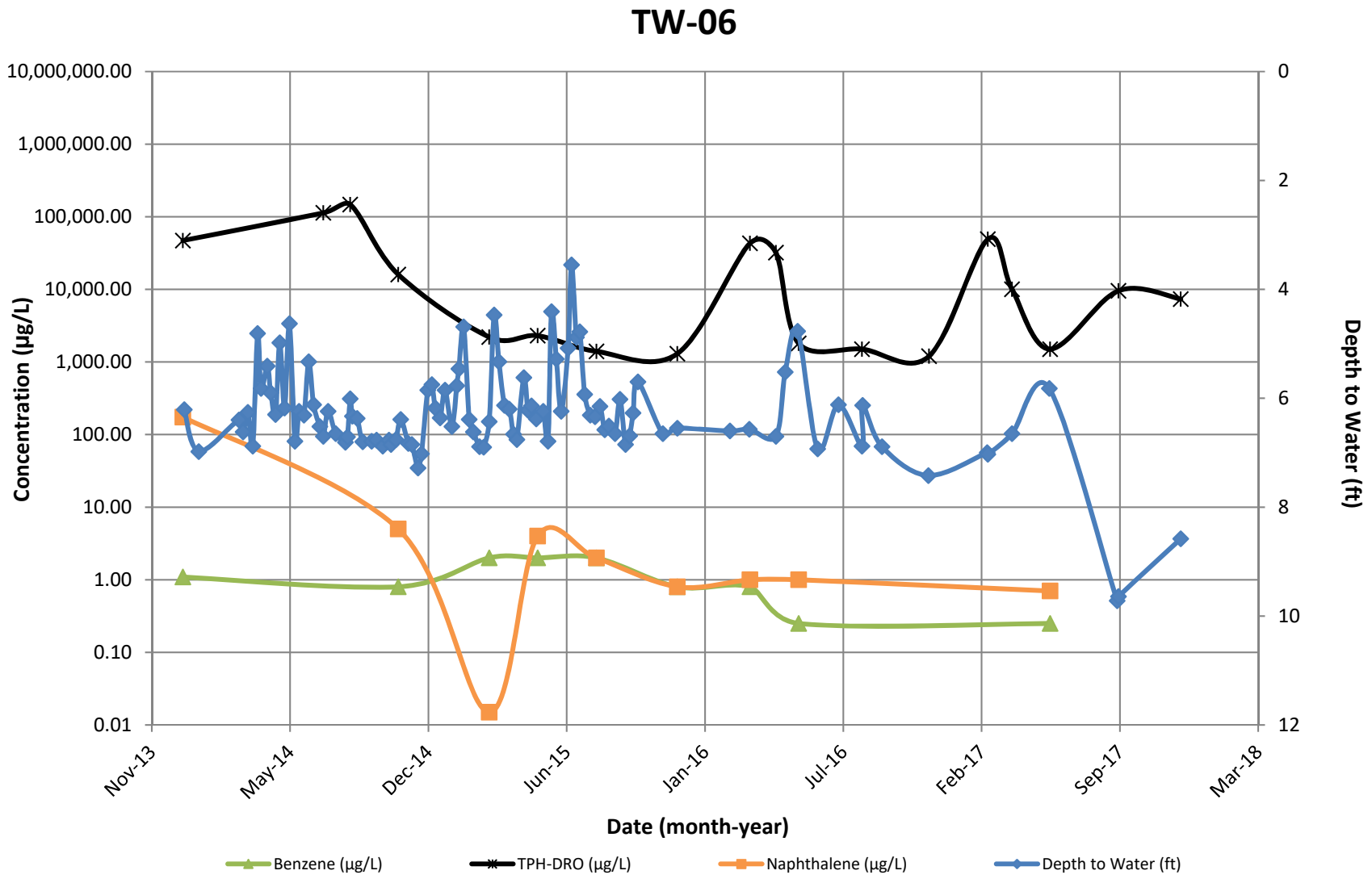
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

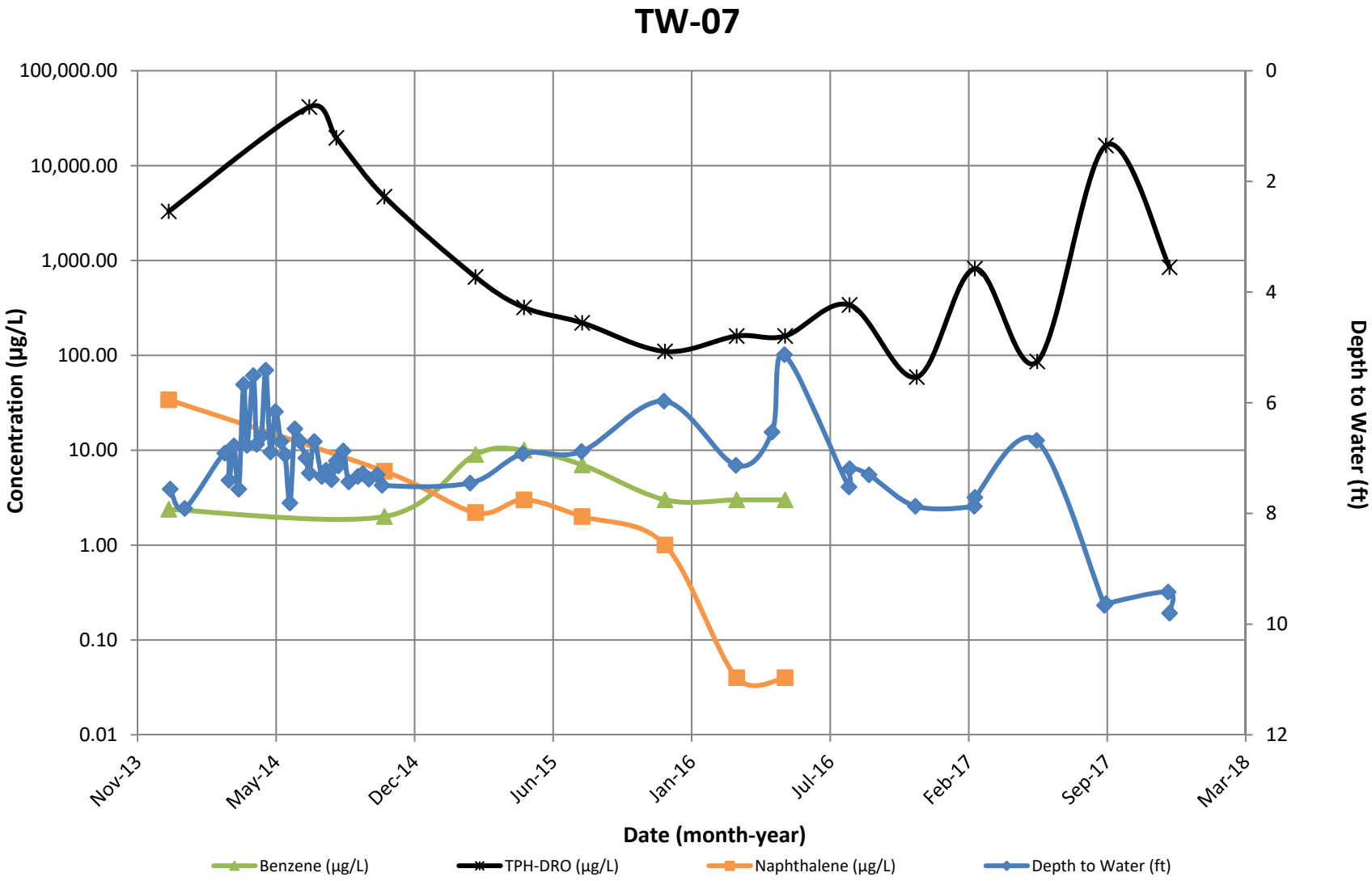
NRG PRGS
1400 North Royal Street
Alexandria, VA



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

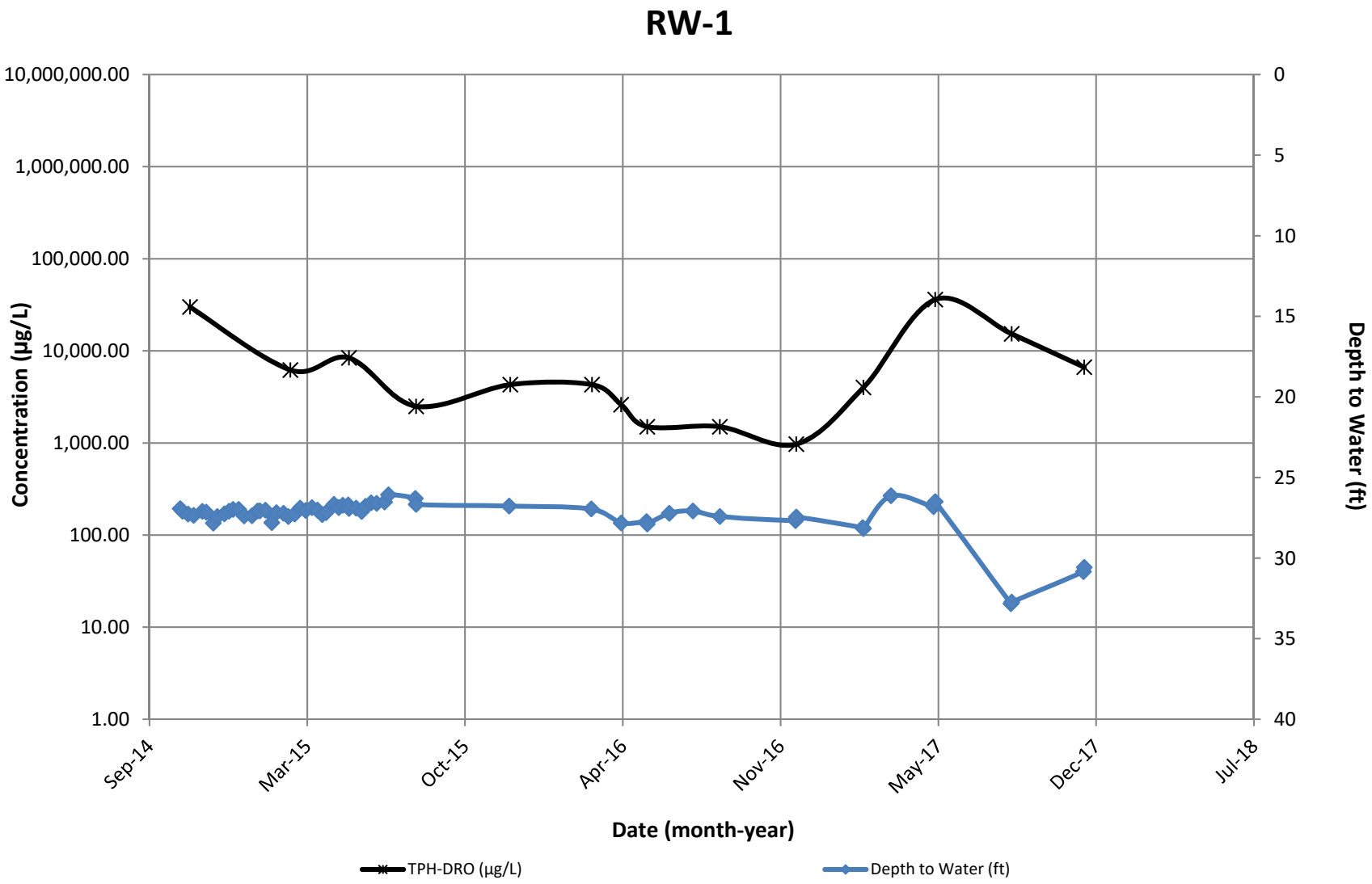
NRG PRGS
1400 North Royal Street
Alexandria, VA



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



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).

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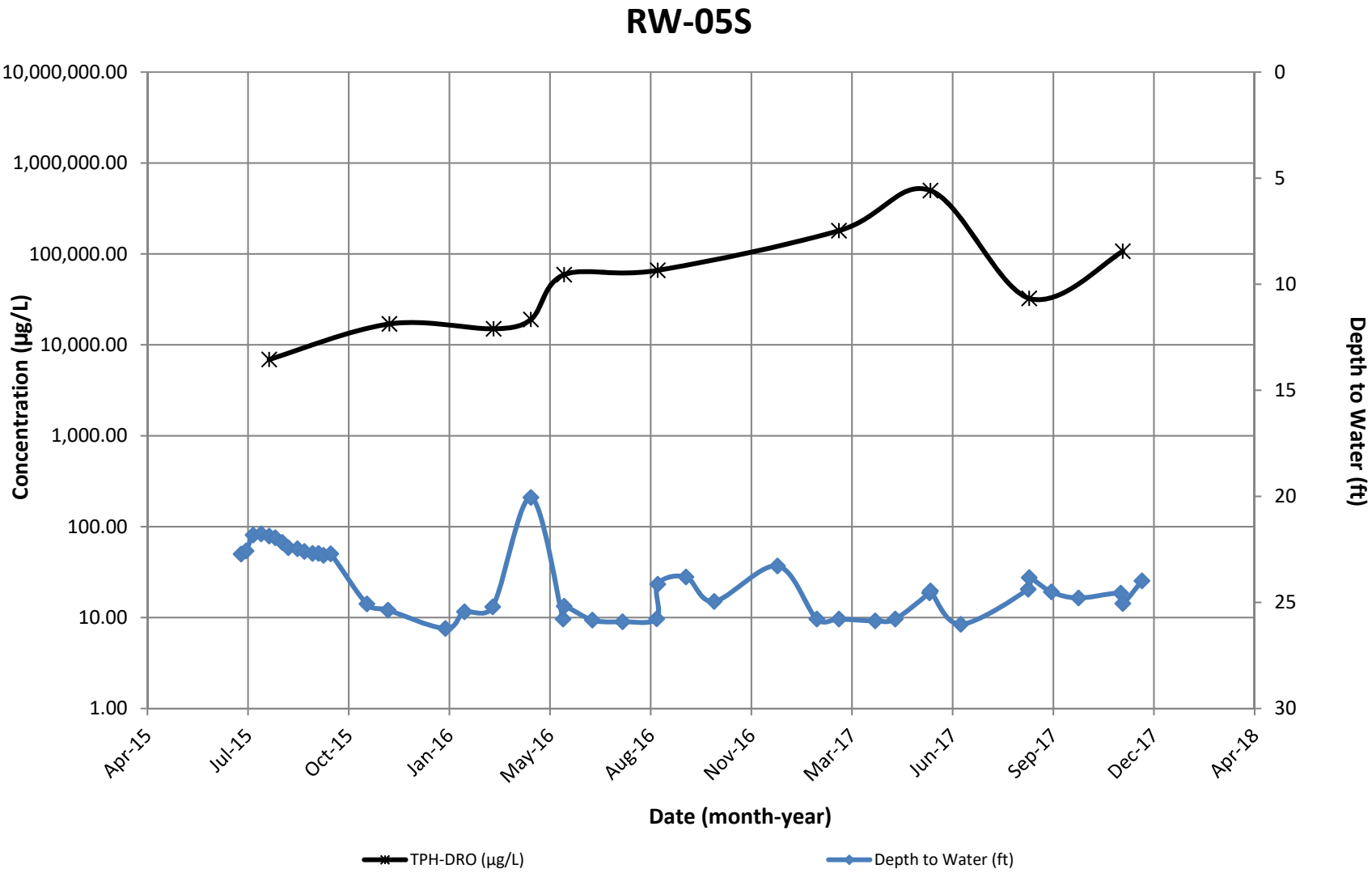
Alexandria, VA



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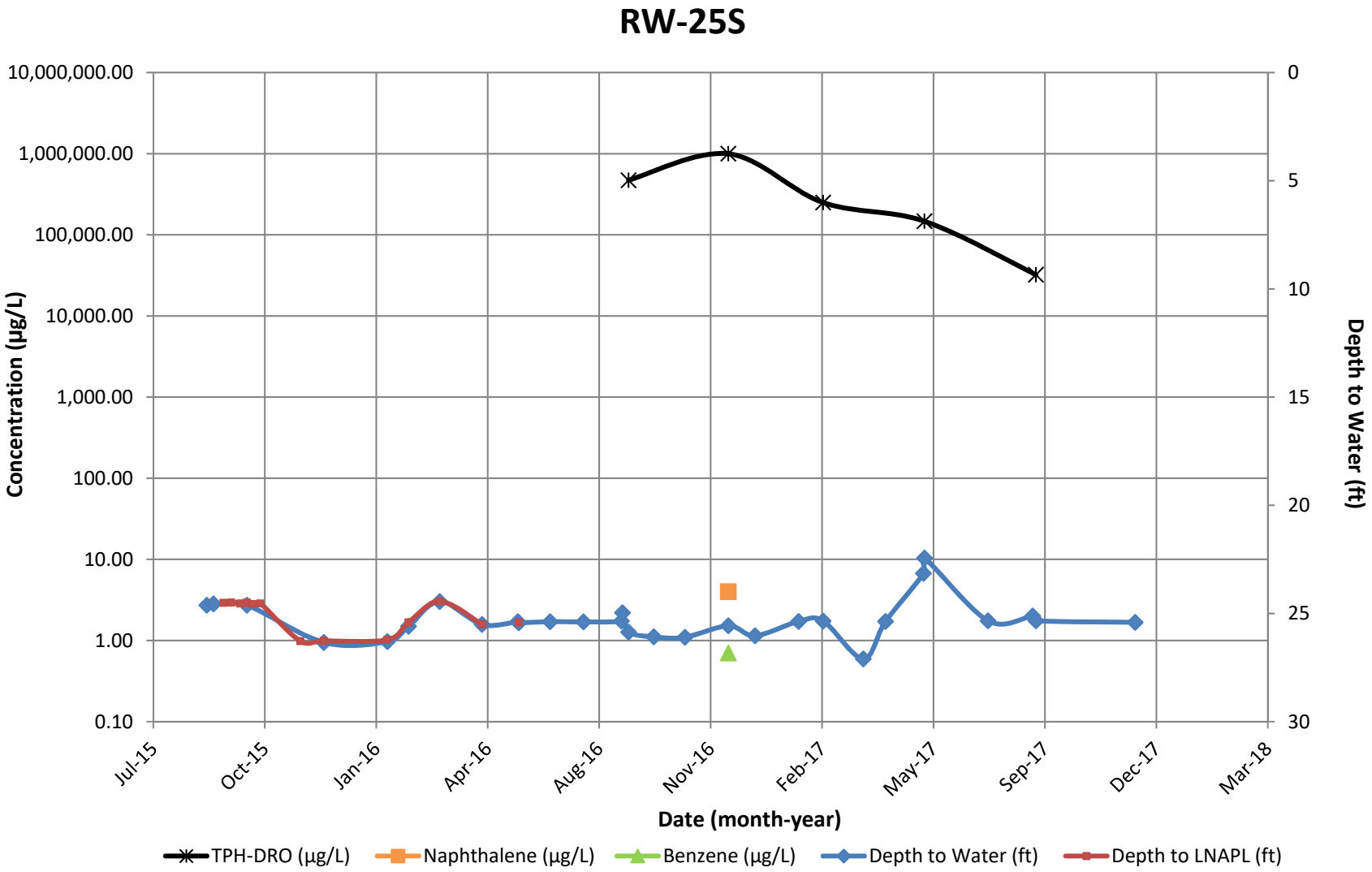

Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

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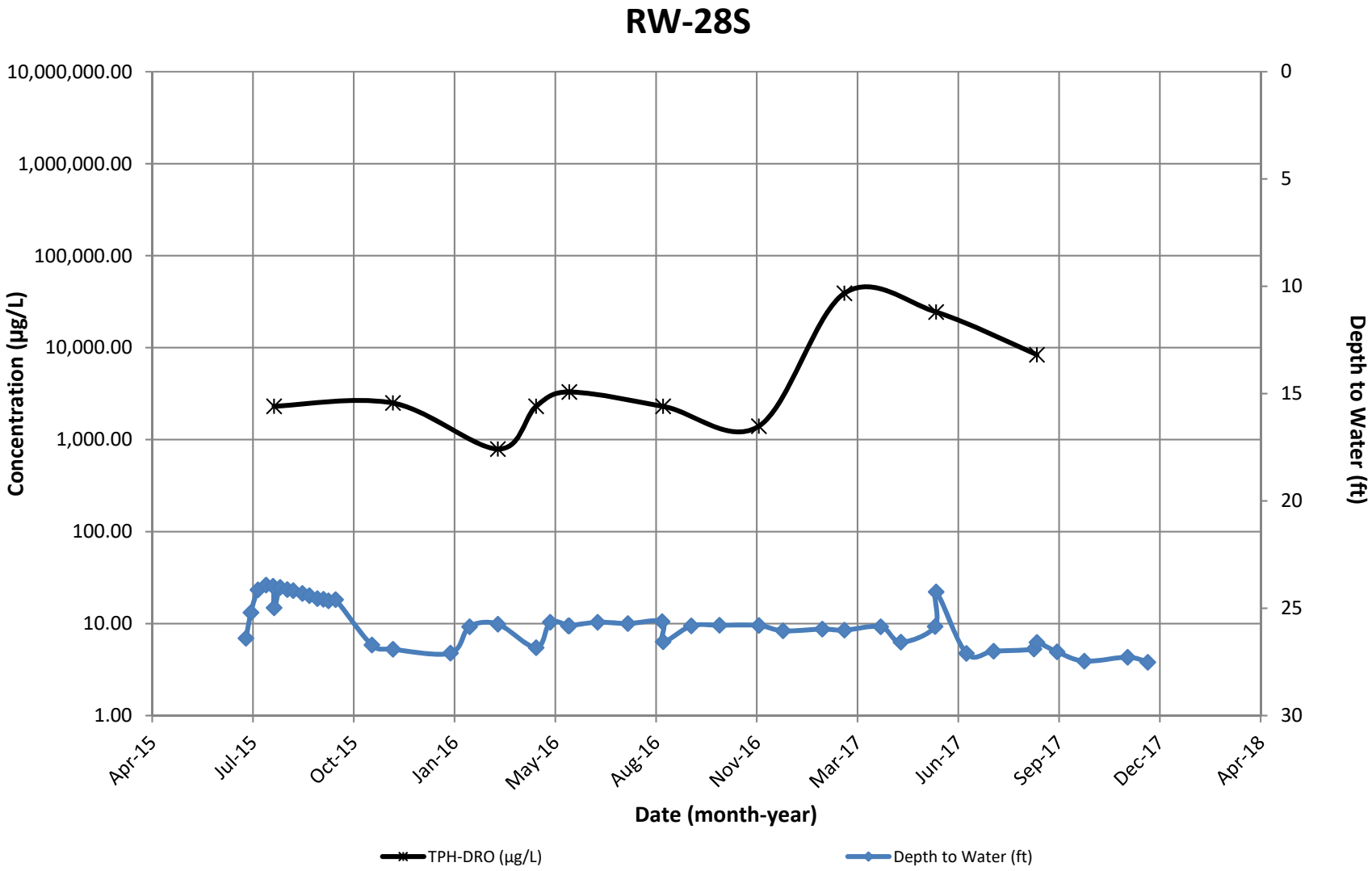
NRG PRGS
1400 North Royal Street
Alexandria, VA



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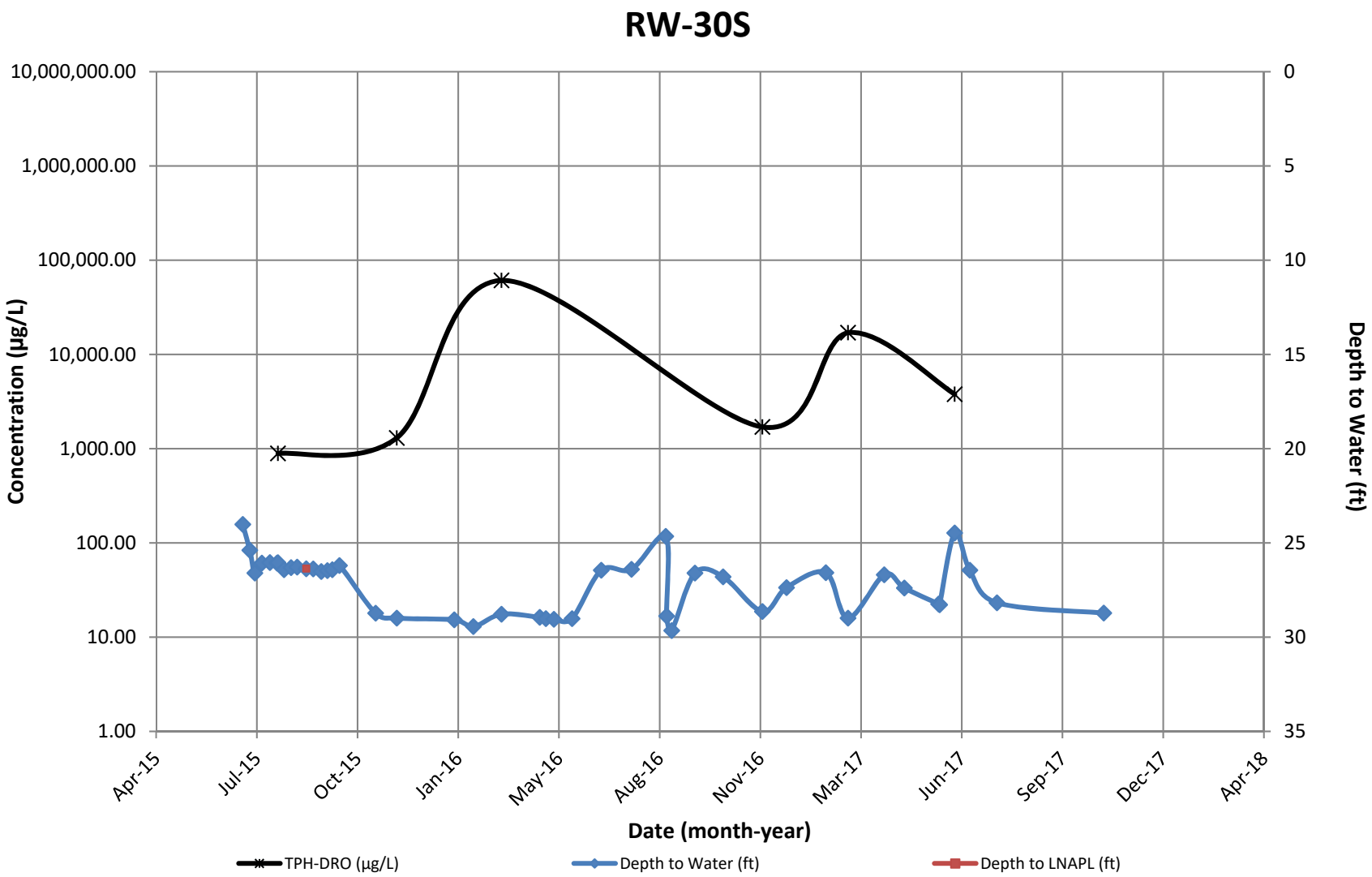
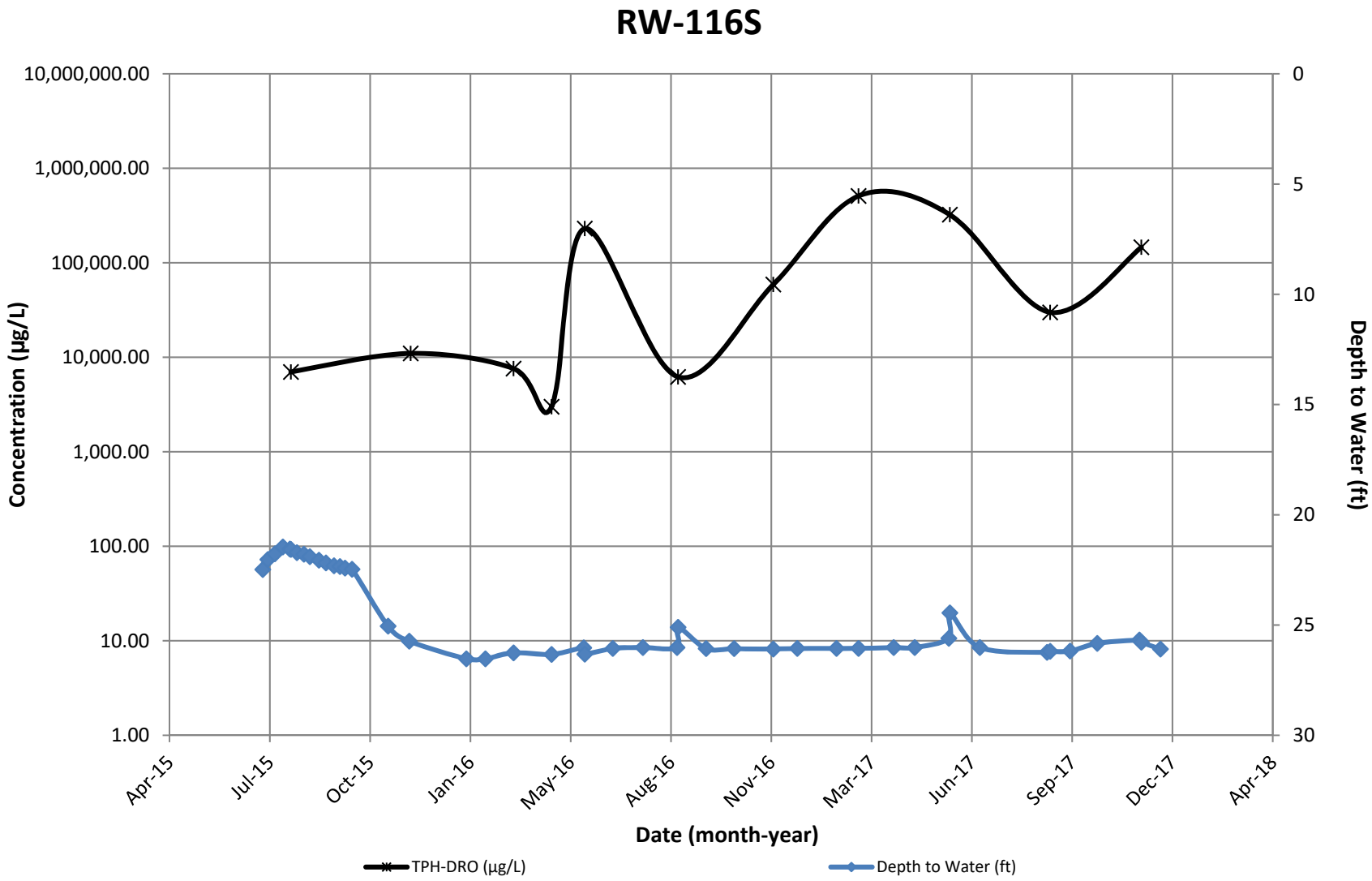
1400 North Royal Street
Alexandria, VA



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



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

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1400 North Royal Street
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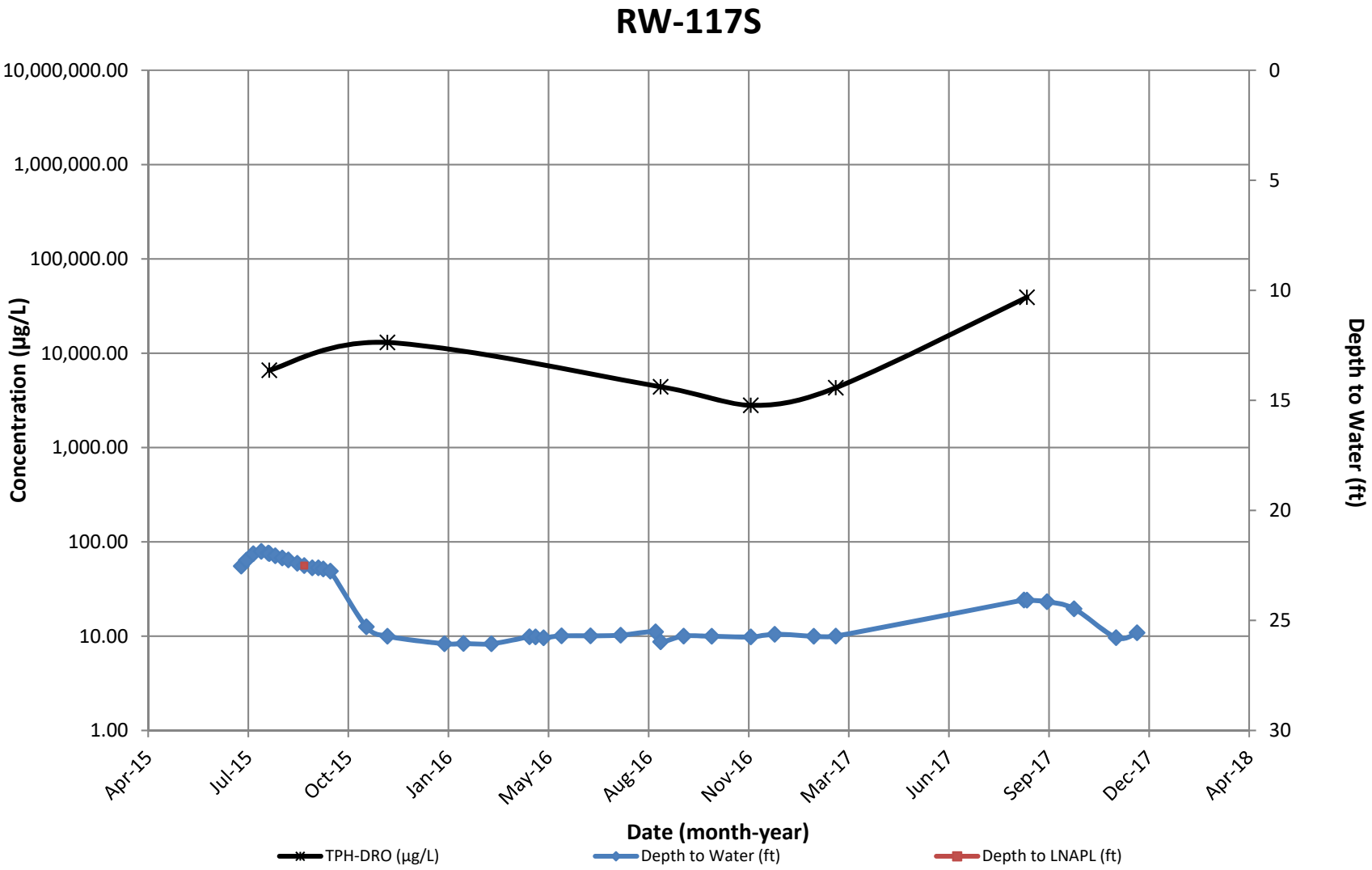

Note: 1. Non-detect results are plotted at half the method detection limit (i.e. 22.5 µg/L is plotted for a TPH-DRO result of <45 µg/L).

NRG PRGS
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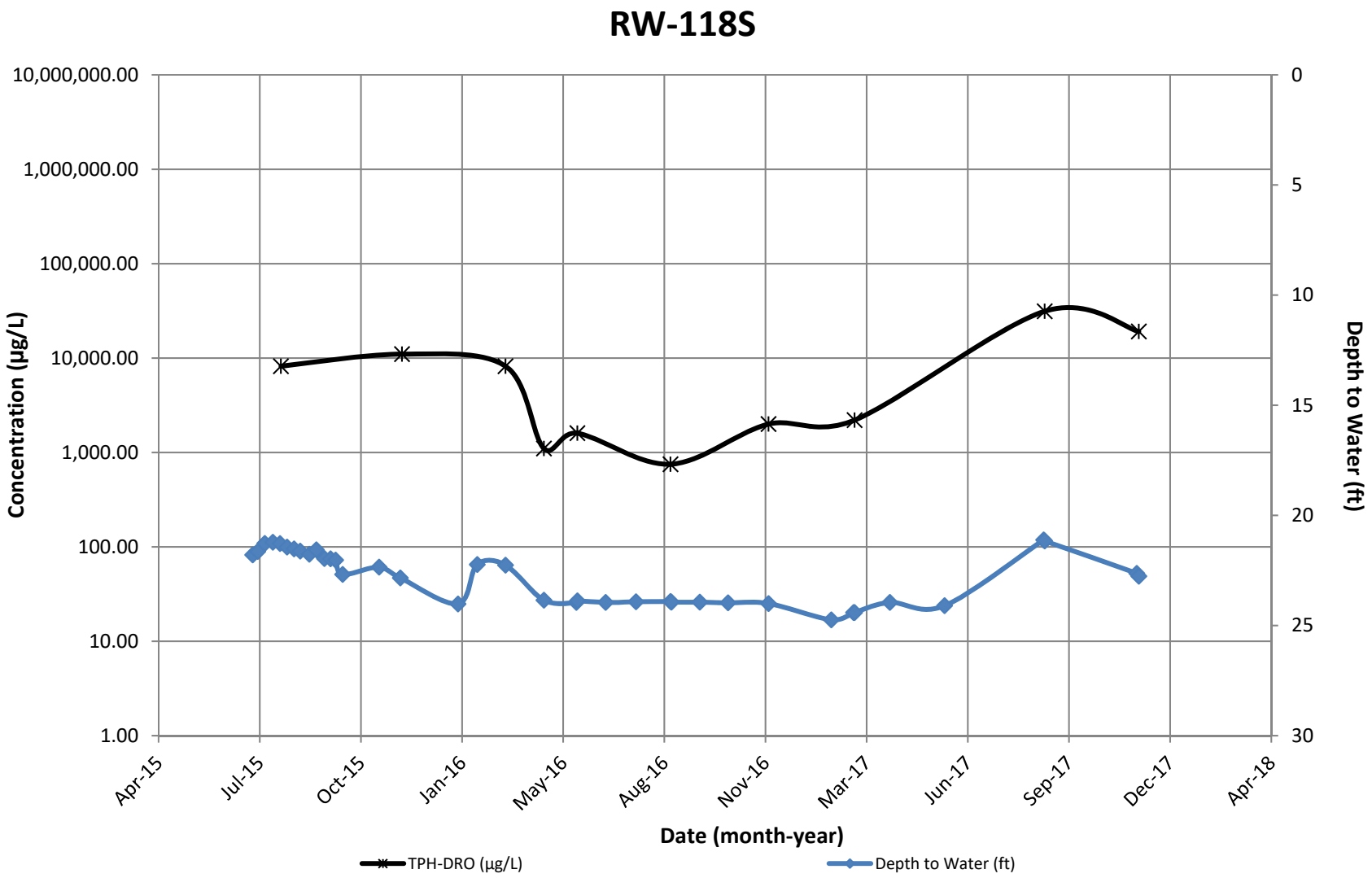
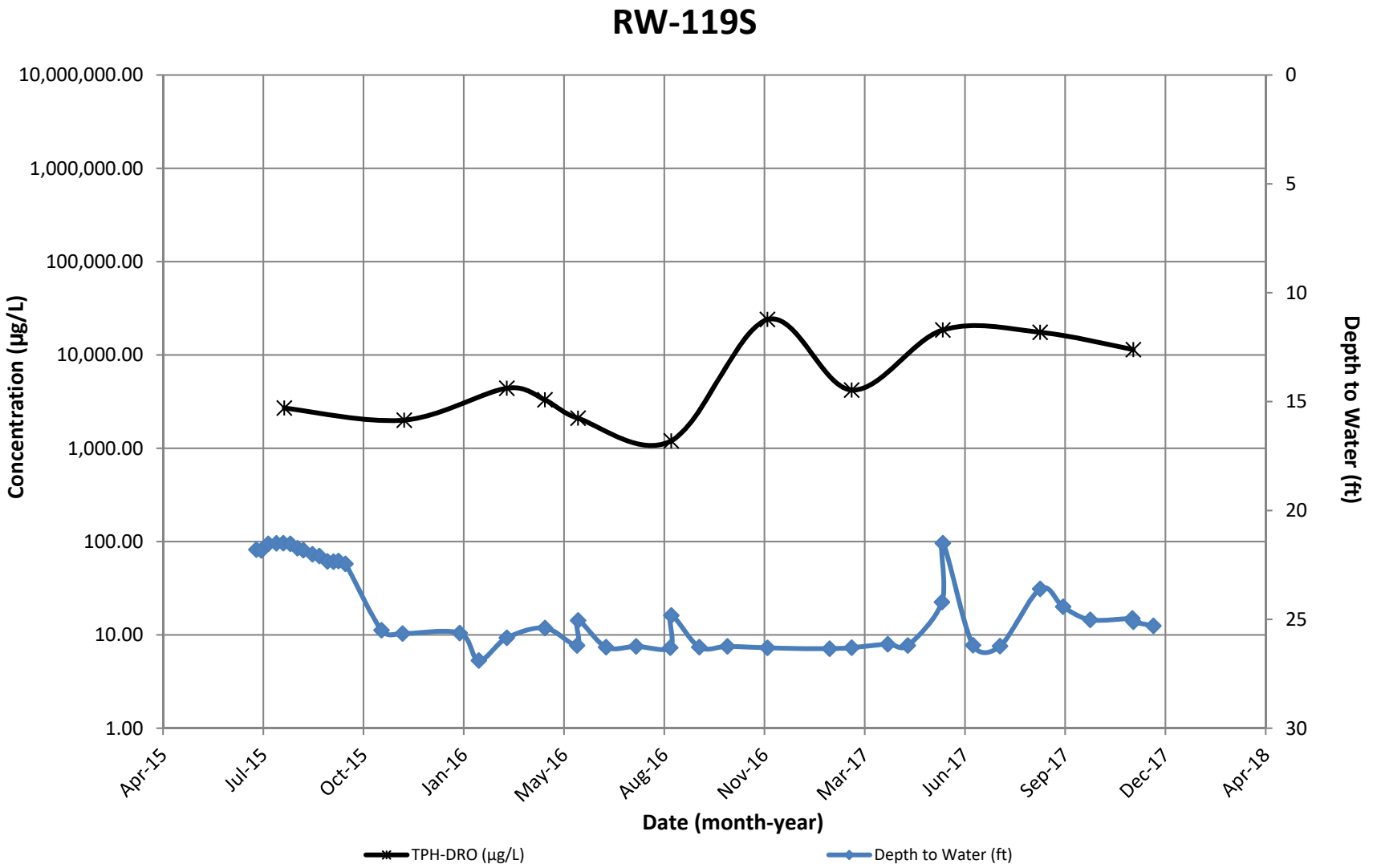
Alexandria, VA



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



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

Attachment C – Laboratory Analytical Reports and Chains of Custody Documentation - November 28-30, 2017 and January 18, 2018 Groundwater Monitoring Event

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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: JC56173

Sampling Date: 11/28/17

Report to:

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

Total number of pages in report: 24

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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Section 3: Sample Results **6**
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3.3: JC56173-3: MW-111 9
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4.1: Chain of Custody 23

Sample Summary

Groundwater & Environmental Services

Job No: JC56173

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
JC56173-1	11/28/17	14:45	JP	11/29/17	AQ	Ground Water	MW-109
JC56173-2	11/28/17	15:00	JP	11/29/17	AQ	Ground Water	MW-110
JC56173-3	11/28/17	14:15	JP	11/29/17	AQ	Ground Water	MW-111
JC56173-4	11/28/17	15:15	JP	11/29/17	AQ	Ground Water	MW-112
JC56173-5	11/28/17	14:00	JP	11/29/17	AQ	Ground Water	MW-113
JC56173-6	11/28/17	13:45	JP	11/29/17	AQ	Ground Water	MW-114
JC56173-7	11/28/17	13:40	AA	11/29/17	AQ	Ground Water	TW-06
JC56173-7A	11/28/17	13:40	AA	11/29/17	AQ	Ground Water	TW-06
JC56173-8	11/28/17	14:30	JP	11/29/17	AQ	Ground Water	RW-05
JC56173-8A	11/28/17	14:30	JP	11/29/17	AQ	Ground Water	RW-05

Summary of Hits

Job Number: JC56173
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/28/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56173-1	**MW-109**					
No hits reported in this sample.						
JC56173-2	**MW-110**					
No hits reported in this sample.						
JC56173-3	**MW-111**					
TPH-DRO (C10-C28)		0.251	0.086	0.086	mg/l	SW846 8015C
JC56173-4	**MW-112**					
No hits reported in this sample.						
JC56173-5	**MW-113**					
TPH-DRO (C10-C28)		1.05	0.083	0.083	mg/l	SW846 8015C
JC56173-6	**MW-114**					
TPH-DRO (C10-C28)		0.130	0.083	0.083	mg/l	SW846 8015C
JC56173-7	**TW-06**					
Methane		20.1	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28) [a]		5.76	0.083	0.083	mg/l	SW846 8015C
Manganese		12700	150		ug/l	SW846 6010C
Iron, Ferrous [b]		299	20		mg/l	SM3500FE B-11
Sulfate		1840	20		mg/l	EPA 300/SW846 9056A
JC56173-7A	**TW-06**					
TPH-DRO (C10-C28)		7.35	0.083	0.083	mg/l	SW846 8015C
JC56173-8	**RW-05**					
TPH-DRO (C10-C28) [a]		27.9	0.086	0.086	mg/l	SW846 8015C
Alkalinity, Total as CaCO3 [c]		21.1	5.0		mg/l	SM2320 B-11
JC56173-8A	**RW-05**					
TPH-DRO (C10-C28)		6.86	0.083	0.083	mg/l	SW846 8015C

Summary of Hits

Job Number: JC56173
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/28/17

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

(a) Had silica gel cleanup.
(b) Field analysis required. Received out of hold time and analyzed by request.
(c) Sample was titrated to a final pH of 4.5.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-109		
Lab Sample ID:	JC56173-1	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65893.D	1	12/02/17 13:47	DS	12/01/17 16:30	OP8288	G2Z2485
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	69%		22-140%
16416-32-3	Tetracosane-d50	48%		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-110		
Lab Sample ID:	JC56173-2	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65894.D	1	12/02/17 14:21	DS	12/01/17 16:30	OP8288	G2Z2485
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	67%		22-140%
16416-32-3	Tetracosane-d50	59%		13-139%
438-22-2	5a-Androstane	51%		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-111		
Lab Sample ID:	JC56173-3	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65897.D	1	12/02/17 16:01	DS	12/01/17 16:30	OP8288	G2Z2485
Run #2							

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.251	0.086	0.086	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		22-140%
16416-32-3	Tetracosane-d50	36%		13-139%
438-22-2	5a-Androstane	28%		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-112		
Lab Sample ID:	JC56173-4	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65898.D	1	12/02/17 16:34	DS	12/01/17 16:30	OP8288	G2Z2485
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	75%		22-140%
16416-32-3	Tetracosane-d50	76%		13-139%
438-22-2	5a-Androstane	68%		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-113		
Lab Sample ID:	JC56173-5	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65899.D	1	12/02/17 17:08	DS	12/01/17 16:30	OP8288	G2Z2485
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)	1.05	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	39%		13-139%
438-22-2	5a-Androstane	32%		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-114		
Lab Sample ID:	JC56173-6	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65900.D	1	12/02/17 17:41	DS	12/01/17 16:30	OP8288	G2Z2485
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)	0.130	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	35%		13-139%
438-22-2	5a-Androstane	27%		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:	JC56173-7	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	AA62274.D	1	12/01/17 10:55	LM	n/a	n/a	GAA1325
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	20.1	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-06		
Lab Sample ID:	JC56173-7	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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]	2Z65903.D	1	12/02/17 19:20	DS	12/01/17 16:30	OP8288	G2Z2485
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)	5.76	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		22-140%
16416-32-3	Tetracosane-d50	62%		13-139%
438-22-2	5a-Androstane	57%		10-135%

(a) Had 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:	TW-06		
Lab Sample ID:	JC56173-7	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
		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
Barium	< 200	200	ug/l	1	12/01/17	12/05/17	ND	SW846 6010C [1]	SW846 3010A [3]
Manganese	12700	150	ug/l	10	12/01/17	12/05/17	GT	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA43333
(2) Instrument QC Batch: MA43337
(3) Prep QC Batch: MP4490

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TW-06		
Lab Sample ID:	JC56173-7	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
		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	12/04/17 22:05	AT	SM2320 B-11
Iron, Ferrous [b]	299	20	mg/l	100	11/29/17 20:48	AT	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 14:55	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 14:55	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/30/17 10:04	YR	SM4500NO2 B-11
Sulfate	1840	20	mg/l	10	12/04/17 11:26	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:	TW-06		
Lab Sample ID:	JC56173-7A	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65901.D	1	12/02/17 18:14	DS	12/01/17 16:30	OP8288	G2Z2485
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)	7.35	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		22-140%
16416-32-3	Tetracosane-d50	84%		13-139%
438-22-2	5a-Androstane	77%		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		
Lab Sample ID:	JC56173-8	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
Method:	SW846 8260C	**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	U219279.D	1	12/05/17 03:03	GA	n/a	n/a	VU10019
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

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		
Lab Sample ID:	JC56173-8	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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]	2Z65904.D	1	12/02/17 19:53	DS	12/01/17 16:30	OP8288	G2Z2485
Run #2							

	Initial Volume	Final Volume
Run #1	290 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	27.9	0.086	0.086	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		22-140%
16416-32-3	Tetracosane-d50	80%		13-139%
438-22-2	5a-Androstane	67%		10-135%

(a) Had 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-05		
Lab Sample ID:	JC56173-8	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
		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]	21.1	5.0	mg/l	1	12/04/17 22:05	AT	SM2320 B-11

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-05		
Lab Sample ID:	JC56173-8A	**Date Sampled:**	11/28/17
Matrix:	AQ - Ground Water	**Date Received:**	11/29/17
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	2Z65902.D	1	12/02/17 18:47	DS	12/01/17 16:30	OP8288	G2Z2485
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)	6.86	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		22-140%
16416-32-3	Tetracosane-d50	83%		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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW

E

CHAIN OF CUSTODY

PAGE 1 OF 1

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC56173

Client / Reporting Information

Company Name: Groundwater & Environmental Services, Inc.
Street Address: 1350 Blair Drive, Suite A
City: Odenton, State: MD, Zip: 21113
Project Contact: Ashley Bell, E-mail: Abell@gesonline.com
Phone #: 800-220-3606 x 3704, Fax #:
Sampler(s) Name(s): Jeff Plummer, Phone #:

Project Information

Project Name: NRG PRGS
Street: 1400 North Royal St
City: Alexandria, State: VA
Project #: 0402919 - 51 - 206, Org 0404
Client Purchase Order #:
Project Manager: Ashley Bell

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention: Send to: ges-invoices@gesonline.com

Requested Analysis (see TEST CODE sheet)

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPH-DRO C-10-28 (SW-846 8015B)	BTEX, Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO3-1 & Nitrite NO-2(EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO4 2- (EPA 300.0)	Methane (RSKSOP-175 modified)	TPH-DRO C-10-28 (SW-846 8015B) w/ silica gel cleanup (Soil)	Sulfur (Solid)	Sulfide (9030C S-2-F-11)	LAB USE ONLY
1	MW-09		11-28-17	1445	JP	GW	2	X								X											E107
2	MW-10			1500			2									X											A16
3	MW-11			1415			2									X											C11
4	MW-12			1515			2									X											G12
5	MW-13			1400			2									X											V310
6	MW-14			1345	JP		2									X											
7	TW-06			1370	AA		15									X		X	X	X	X	X	X	X	X	X	
8	RW-05		11-28-17	1430	JP	GW	8	X								X	X	X					X				

INITIAL ASSESSMENT 2A (A)

LABEL VERIFICATION

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Approved By (SGS Accutest PM): / Date:

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format: GES EQEDD
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

EQEDD Name: NRG PRGS Lab report # 25800 EQEDD.zip
Email lab results to: seprregion@gesonline.com, ges@gesonline.com
Send invoice to: ges-invoices@gesonline.com & include Project # & Org #: 0402919 - 51 - 206, Org 0404

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1	Jeff Plummer	11-29-17 0730	1	2	11-29-17 1640	2 Robert Chambers
3	Robert Chambers	11-29-17 1320	3	4		4
5			5			

Custody Seal #: 655 Intact / Not Intact

Preserved where applicable

On Ice: X

Cooler Temp: 1.6 3.1 °C

SGS Accutest Sample Receipt Summary

Job Number: JC56173 **Client:** _____ **Project:** _____

Date / Time Received: 11/29/2017 1:20:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (3.1);

Cooler Temps (Corrected) °C: Cooler 1: (2.1);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC56173: Chain of Custody
Page 2 of 2

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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: JC56390

Sampling Date: 11/29/17

Report to:

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

Total number of pages in report: **31**

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: JC56390

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
JC56390-1	11/29/17	10:05	AR	12/01/17	AQ	Ground Water	MW-01S
JC56390-1A	11/29/17	10:05	AR	12/01/17	AQ	Ground Water	MW-01S
JC56390-2	11/29/17	11:25	AR	12/01/17	AQ	Ground Water	RW-119S
JC56390-2A	11/29/17	11:25	AR	12/01/17	AQ	Ground Water	RW-119S
JC56390-3	11/29/17	12:23	AR	12/01/17	AQ	Ground Water	MW-51S
JC56390-3A	11/29/17	12:23	AR	12/01/17	AQ	Ground Water	MW-51S
JC56390-4	11/29/17	13:40	AR	12/01/17	AQ	Ground Water	MW-25S
JC56390-4A	11/29/17	13:40	AR	12/01/17	AQ	Ground Water	MW-25S
JC56390-5	11/29/17	14:33	AR	12/01/17	AQ	Ground Water	RW-123S
JC56390-5A	11/29/17	14:33	AR	12/01/17	AQ	Ground Water	RW-123S

Summary of Hits

Job Number: JC56390
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/29/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56390-1	**MW-01S**					
Methane		2330	11	3.6	ug/l	RSK-175
TPH-DRO (C10-C28) [a]		3.76	0.083	0.083	mg/l	SW846 8015C
Manganese		9540	30		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [b]		437	5.0		mg/l	SM2320 B-11
Iron, Ferrous [c]		3.4	0.20		mg/l	SM3500FE B-11
Sulfate		29.0	2.0		mg/l	EPA 300/SW846 9056A
JC56390-1A	**MW-01S**					
TPH-DRO (C10-C28)		3.92	0.083	0.083	mg/l	SW846 8015C
JC56390-2	**RW-119S**					
TPH-DRO (C10-C28) [a]		9.21	0.083	0.083	mg/l	SW846 8015C
Sulfate		17.3	2.0		mg/l	EPA 300/SW846 9056A
JC56390-2A	**RW-119S**					
TPH-DRO (C10-C28)		11.4	0.083	0.083	mg/l	SW846 8015C
JC56390-3	**MW-51S**					
Methane		418	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28) [a]		15.2	0.083	0.083	mg/l	SW846 8015C
Manganese [d]		5700	30		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [b]		493	5.0		mg/l	SM2320 B-11
Iron, Ferrous [c]		135	10		mg/l	SM3500FE B-11
Sulfate		464	4.0		mg/l	EPA 300/SW846 9056A
JC56390-3A	**MW-51S**					
TPH-DRO (C10-C28)		17.2	0.083	0.083	mg/l	SW846 8015C
JC56390-4	**MW-25S**					
Naphthalene		1.3 J	5.0	1.1	ug/l	SW846 8260C
TPH-DRO (C10-C28) [a]		55.9	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO3 [b]		364	5.0		mg/l	SM2320 B-11
JC56390-4A	**MW-25S**					
TPH-DRO (C10-C28)		56.5	0.083	0.083	mg/l	SW846 8015C

Summary of Hits

Job Number: JC56390
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/29/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56390-5	**RW-123S**					
TPH-DRO (C10-C28) [a]		10.6	0.083	0.083	mg/l	SW846 8015C
Sulfate		77.2	2.0		mg/l	EPA 300/SW846 9056A
JC56390-5A	**RW-123S**					
TPH-DRO (C10-C28)		11.9	0.083	0.083	mg/l	SW846 8015C

(a) Had silica gel cleanup.
(b) Sample was titrated to a final pH of 4.5.
(c) Field analysis required. Received out of hold time and analyzed by request.
(d) Elevated sample detection limit due to difficult sample matrix.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-01S		
Lab Sample ID:	JC56390-1	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
Method:	SW846 8260C	**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	U219342.D	1	12/06/17 12:44	GA	n/a	n/a	VU10022
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	104%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

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-01S		
Lab Sample ID:	JC56390-1	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	AA62338.D	100	12/05/17 14:03	LM	n/a	n/a	GAA1327
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	2330	11	3.6	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-01S		
Lab Sample ID:	JC56390-1	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66051.D	1	12/08/17 21:19	DS	12/05/17 19:45	OP8387	G2Z2489
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)	3.76	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	78%		13-139%
438-22-2	5a-Androstane	78%		10-135%

(a) Had 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-01S		
Lab Sample ID:	JC56390-1	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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
Manganese	9540	30	ug/l	2	12/05/17	12/07/17	ND	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43353
(2) Prep QC Batch: MP4569

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-01S		
Lab Sample ID:	JC56390-1	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	437	5.0	mg/l	1	12/04/17 22:05	AT	SM2320 B-11
Iron, Ferrous [b]	3.4	0.20	mg/l	1	12/01/17 22:28	LS	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:29	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:29	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite [d]	< 0.010	0.010	mg/l	1	12/01/17 22:01	LS	SM4500NO2 B-11
Sulfate	29.0	2.0	mg/l	1	12/05/17 18:52	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) Nitrogen, Nitrite analysis done past holding time.
(d) Received and analyzed out of holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-01S		
Lab Sample ID:	JC56390-1A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66010.D	1	12/07/17 09:16	DS	12/05/17 20:15	OP8395	G2Z2488
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)	3.92	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	66%		13-139%
438-22-2	5a-Androstane	64%		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-119S		
Lab Sample ID:	JC56390-2	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66052.D	1	12/08/17 21:53	DS	12/05/17 19:45	OP8387	G2Z2489
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)	9.21	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		22-140%
16416-32-3	Tetracosane-d50	62%		13-139%
438-22-2	5a-Androstane	60%		10-135%

(a) Had 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		
Lab Sample ID:	JC56390-2	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	17.3	2.0	mg/l	1	12/05/17 19:16	JN	EPA 300/SW846 9056A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-119S		
Lab Sample ID:	JC56390-2A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66011.D	1	12/07/17 09:49	DS	12/05/17 20:15	OP8395	G2Z2488
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)	11.4	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	73%		13-139%
438-22-2	5a-Androstane	72%		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:	JC56390-3	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	AA62340.D	10	12/05/17 14:33	LM	n/a	n/a	GAA1327
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	418	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		
Lab Sample ID:	JC56390-3	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66055.D	1	12/08/17 23:34	DS	12/05/17 19:45	OP8387	G2Z2489
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)	15.2	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	74%		13-139%
438-22-2	5a-Androstane	65%		10-135%

(a) Had 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-51S		
Lab Sample ID:	JC56390-3	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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
Manganese [a]	5700	30	ug/l	1	12/05/17	12/06/17	ND	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43346
(2) Prep QC Batch: MP4569

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-51S		
Lab Sample ID:	JC56390-3	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	493	5.0	mg/l	1	12/04/17 22:21	AT	SM2320 B-11
Iron, Ferrous [b]	135	10	mg/l	50	12/01/17 22:35	LS	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:30	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:30	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite [d]	< 0.010	0.010	mg/l	1	12/01/17 22:01	LS	SM4500NO2 B-11
Sulfate	464	4.0	mg/l	2	12/07/17 13:13	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) Nitrogen, Nitrite analysis done past holding time.
(d) Received and analyzed out of holding time.

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-51S		
Lab Sample ID:	JC56390-3A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66012.D	1	12/07/17 10:23	DS	12/05/17 20:15	OP8395	G2Z2488
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)	17.2	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	74%		13-139%
438-22-2	5a-Androstane	66%		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-25S		
Lab Sample ID:	JC56390-4	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
Method:	SW846 8260C	**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	U219343.D	1	12/06/17 13:14	GA	n/a	n/a	VU10022
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	1.3	5.0	1.1	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

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:	JC56390-4	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66056.D	1	12/09/17 00:08	DS	12/05/17 19:45	OP8387	G2Z2489
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)	55.9	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	114%		22-140%
16416-32-3	Tetracosane-d50	72%		13-139%
438-22-2	5a-Androstane	66%		10-135%

(a) Had 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:	JC56390-4	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	364	5.0	mg/l	1	12/04/17 22:21	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-25S		
Lab Sample ID:	JC56390-4A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66013.D	1	12/07/17 10:57	DS	12/05/17 20:15	OP8395	G2Z2488
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)	56.5	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	105%		22-140%
16416-32-3	Tetracosane-d50	75%		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:	RW-123S		
Lab Sample ID:	JC56390-5	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66057.D	1	12/09/17 00:42	DS	12/05/17 19:45	OP8387	G2Z2489
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)	10.6	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	70%		13-139%
438-22-2	5a-Androstane	66%		10-135%

(a) Had 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-123S		
Lab Sample ID:	JC56390-5	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	77.2	2.0	mg/l	1	12/05/17 20:51	JN	EPA 300/SW846 9056A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-123S		
Lab Sample ID:	JC56390-5A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66014.D	1	12/07/17 11:31	DS	12/05/17 20:15	OP8395	G2Z2488
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)	11.9	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	83%		13-139%
438-22-2	5a-Androstane	77%		10-135%

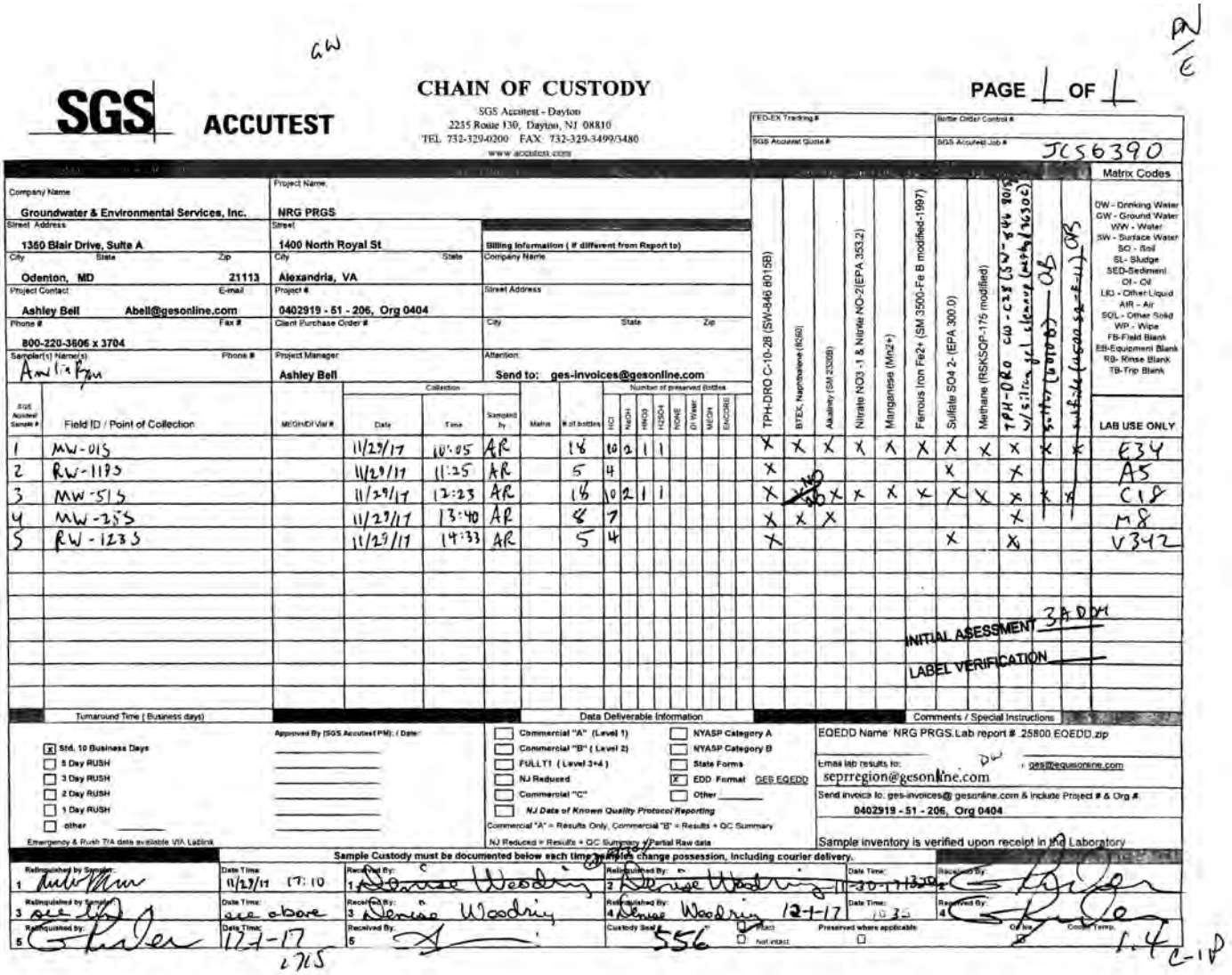
ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

SGS Accutest Job # JC56390

Company Name	Project Name	Billing Information (if different from Report to)
Groundwater & Environmental Services, Inc.	NRG PRGS	
Street Address: 1360 Blair Drive, Suite A	Street: 1400 North Royal St	Company Name
City / State / Zip: Odenton, MD 21113	City / State: Alexandria, VA	Street Address
Project Contact / E-mail: Ashley Bell Abell@gesonline.com	Project #: 0402919 - 51 - 206, Org 0404	City / State / Zip
Phone # / Fax #: 800-220-3606 x 3704	Client Purchase Order #	
Sampler(s) Name(s) / Phone #: Amilia Ryn	Project Manager: Ashley Bell	Attention: Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPH-DRO C-10-28 (SW-846 8015B)	BTEX, Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO3 -1 & Nitrite NO-2(EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO4 2- (EPA 300.0)	Methane (RSKSOP-175 modified)	TPH-DRO C10-C28 (SW-846 8015B) w/ silica gel cleanup (method 3630c)	Sulfate SO4 2- (EPA 300.0)	Nitrate NO3 -1 & Nitrite NO-2(EPA 353.2)	LAB USE ONLY
1	MW-01S		11/29/17	10:05	AR		18	10	2	1	1					X	X	X	X	X	X	X	X	X	X	X	E34
2	RW-1193		11/29/17	11:25	AR		5	4								X						X		X			A5
3	MW-51S		11/29/17	12:23	AR		18	10	2	1	1					X	X	X	X	X	X	X	X	X	X	X	C18
4	MW-25S		11/29/17	13:40	AR		8	7								X	X	X						X			M8
5	RW-1233		11/29/17	14:33	AR		5	4								X						X		X			V342

INITIAL ASSESSMENT 3A DOM

LABEL VERIFICATION

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labtink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary

NJ Reduced = Results + QC Summary + Partial Raw data

- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format GES EQEDD
- [ ] Other

Comments / Special Instructions

EQEDD Name: NRG PRGS.Lab report # 25800.EQEDD.zip

Email lab results to: sepregion@gesonline.com ; ges@gesonline.com

Send invoice to: ges-invoices@ gesonline.com & include Project # & Org #.
0402919 - 51 - 206, Org 0404

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1		11/29/17 17:10	Denise Woodring	Denise Woodring	11-30-17 1330	
2						
3	see above	see above	Denise Woodring	Denise Woodring	12-1-17 10:35	
4						
5		12-1-17 1715		Custody Seal # 556 Intact / Not intact	Preserved where applicable	On Ice / Cooler Temp. 1.4 C-IP

SGS Accutest Sample Receipt Summary

Job Number: JC56390 **Client:** GES **Project:** NRG PRGS

Date / Time Received: 12/1/2017 5:15:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (1.4);

Cooler Temps (Corrected) °C: Cooler 1: (2.3);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☐		☑
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments -1 & -3 NO2 rec'd out of hold.
-1 & -3 Please note Sulfur and Sulfide was crossed off COC but volume was rec'd.

SM089-02
Rev. Date 12/1/16

Responded to by: M Cordova

Response Date: 12/1

Proceed with all NO2 XNO# analysis
Crossed off analysis are not needed.

JC56390: Chain of Custody
Page 3 of 3

The results set forth herein are provided by SGS North America Inc.

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 Job Number: JC56321

Sampling Date: 11/29/17

Report to:

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

Total number of pages in report: 54

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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SGS ACCUTEST

January 8, 2018

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

RE: SGS Accutest – Dayton, Job # JC56321 – Reissues

Dear Ms. Bell,

The final report for SGS Accutest jobs number JC56321 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 " Silica Gel treated(cleanup) per project" has been added on samples JC56321-1 thru -4, -8, and -10 per prject'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

SGS ACCUTEST IS PART **OF SGS, THE WORLD'S** LEADING INSPECTION, VERIFICATION, TESTING AND CERTIFICATION COMPANY.

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SGS North America Inc.

Sample Summary

Groundwater & Environmental Services

Job No: JC56321

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
JC56321-1	11/29/17	10:45	JP	11/30/17	AQ	Ground Water	MW-109S
JC56321-1A	11/29/17	10:45	JP	11/30/17	AQ	Ground Water	MW-109S
JC56321-2	11/29/17	10:30	JP	11/30/17	AQ	Ground Water	MW-110S
JC56321-3	11/29/17	10:15	JP	11/30/17	AQ	Ground Water	MW-112S
JC56321-3A	11/29/17	10:15	JP	11/30/17	AQ	Ground Water	MW-112S
JC56321-4	11/29/17	12:10	JP	11/30/17	AQ	Ground Water	MW-08S
JC56321-4A	11/29/17	12:10	JP	11/30/17	AQ	Ground Water	MW-08S
JC56321-5	11/29/17	14:15	JP	11/30/17	AQ	Ground Water	MW-27
JC56321-6	11/29/17	14:00	JP	11/30/17	AQ	Ground Water	MW-33
JC56321-7	11/29/17	15:00	JP	11/30/17	AQ	Ground Water	MW-72
JC56321-8	11/29/17	13:00	JP	11/30/17	AQ	Ground Water	MW-121
JC56321-8A	11/29/17	13:00	JP	11/30/17	AQ	Ground Water	MW-121
JC56321-9	11/29/17	13:30	JP	11/30/17	AQ	Ground Water	MW-122

Sample Summary
(continued)

Groundwater & Environmental Services

Job No: JC56321

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
JC56321-10	11/29/17	12:30	JP	11/30/17	AQ	Ground Water	RW-1
JC56321-10A	11/29/17	12:30	JP	11/30/17	AQ	Ground Water	RW-1
JC56321-11	11/29/17	08:40	AA	11/30/17	AQ	Ground Water	TW-14
JC56321-12	11/29/17	12:30	AA	11/30/17	AQ	Ground Water	TW-03
JC56321-13	11/29/17	09:45	AA	11/30/17	AQ	Ground Water	TW-04

Summary of Hits

Job Number: JC56321
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/29/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56321-1	**MW-109S**					
TPH-DRO (C10-C28) [a]		0.184	0.083	0.083	mg/l	SW846 8015C
JC56321-1A	**MW-109S**					
TPH-DRO (C10-C28)		0.351	0.083	0.083	mg/l	SW846 8015C
JC56321-2	**MW-110S**					
TPH-DRO (C10-C28) [a]		44.4	0.083	0.083	mg/l	SW846 8015C
JC56321-3	**MW-112S**					
TPH-DRO (C10-C28) [a]		0.172	0.083	0.083	mg/l	SW846 8015C
JC56321-3A	**MW-112S**					
TPH-DRO (C10-C28)		0.209	0.083	0.083	mg/l	SW846 8015C
JC56321-4	**MW-08S**					
Benzene		2.4	0.50	0.17	ug/l	SW846 8260C
Naphthalene		1.9 J	5.0	1.1	ug/l	SW846 8260C
TPH-DRO (C10-C28) [a]		20.3	0.083	0.083	mg/l	SW846 8015C
Sulfate		524	6.0		mg/l	EPA 300/SW846 9056A
JC56321-4A	**MW-08S**					
TPH-DRO (C10-C28)		38.6	0.083	0.083	mg/l	SW846 8015C
JC56321-5	**MW-27**					
Methane		0.27	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		0.782	0.083	0.083	mg/l	SW846 8015C
Manganese [b]		4610	75		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [c]		79.8	5.0		mg/l	SM2320 B-11
Iron, Ferrous [d]		0.90	0.20		mg/l	SM3500FE B-11
Sulfate		384	4.0		mg/l	EPA 300/SW846 9056A
JC56321-6	**MW-33**					

No hits reported in this sample.

Summary of Hits

Job Number: JC56321
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/29/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56321-7	**MW-72**					
Methane		0.22	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		0.642	0.083	0.083	mg/l	SW846 8015C
Manganese		22800	75		ug/l	SW846 6010C
Nitrogen, Nitrate [e]		0.27	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		0.27	0.10		mg/l	EPA 353.2/LACHAT
Sulfate		1080	10		mg/l	EPA 300/SW846 9056A
JC56321-8	**MW-121**					
Methane		4.0	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28) [a]		18.4	0.083	0.083	mg/l	SW846 8015C
Manganese		4020	15		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [c]		113	5.0		mg/l	SM2320 B-11
Iron, Ferrous [d]		1.4	0.20		mg/l	SM3500FE B-11
Nitrogen, Nitrate + Nitrite		0.10	0.10		mg/l	EPA 353.2/LACHAT
Nitrogen, Nitrite		0.015	0.010		mg/l	SM4500NO2 B-11
Sulfate		83.3	2.0		mg/l	EPA 300/SW846 9056A
JC56321-8A	**MW-121**					
TPH-DRO (C10-C28)		15.9	0.083	0.083	mg/l	SW846 8015C
JC56321-9	**MW-122**					
Toluene		0.47 J	1.0	0.25	ug/l	SW846 8260C
Ethylbenzene		0.84 J	1.0	0.22	ug/l	SW846 8260C
Xylene (total)		1.4	1.0	0.22	ug/l	SW846 8260C
Methane		1.3	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		0.950	0.083	0.083	mg/l	SW846 8015C
Manganese		12300	75		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [c]		86.5	5.0		mg/l	SM2320 B-11
Sulfate		383	2.0		mg/l	EPA 300/SW846 9056A
JC56321-10	**RW-1**					
TPH-DRO (C10-C28) [a]		4.92	0.083	0.083	mg/l	SW846 8015C
JC56321-10A	**RW-1**					
TPH-DRO (C10-C28)		6.64	0.083	0.083	mg/l	SW846 8015C

Summary of Hits

Job Number: JC56321
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/29/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56321-11	**TW-14**					
TPH-DRO (C10-C28)		0.298	0.083	0.083	mg/l	SW846 8015C
JC56321-12	**TW-03**					
Methane		13.6	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		0.219	0.083	0.083	mg/l	SW846 8015C
Manganese		12100	30		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [c]		43.3	5.0		mg/l	SM2320 B-11
Iron, Ferrous [d]		102	10		mg/l	SM3500FE B-11
Sulfate		616	6.0		mg/l	EPA 300/SW846 9056A
JC56321-13	**TW-04**					
TPH-DRO (C10-C28)		1.17	0.083	0.083	mg/l	SW846 8015C

(a) Silica Gel treated(cleanup) per project.
(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.
(e) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-109S		
Lab Sample ID:	JC56321-1	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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 [a]	2Z65924.D	1	12/04/17 18:05	DS	12/03/17 14:35	OP8337	G2Z2486
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)	0.184	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	42%		13-139%
438-22-2	5a-Androstane	36%		10-135%

(a) Silica Gel treated(cleanup) per project.

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-109S		
Lab Sample ID:	JC56321-1A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65945.D	1	12/05/17 05:46	DS	12/03/17 14:35	OP8338	G2Z2486
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)	0.351	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%		22-140%
16416-32-3	Tetracosane-d50	52%		13-139%
438-22-2	5a-Androstane	50%		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-110S		
Lab Sample ID:	JC56321-2	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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 [a]	2Z65927.D	1	12/04/17 19:45	DS	12/03/17 14:35	OP8337	G2Z2486
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)	44.4	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	43%		13-139%
438-22-2	5a-Androstane	44%		10-135%

(a) Silica Gel treated(cleanup) per project.

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-112S		
Lab Sample ID:	JC56321-3	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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 [a]	2Z65928.D	1	12/04/17 20:19	DS	12/03/17 14:35	OP8337	G2Z2486
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)	0.172	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	47%		22-140%
16416-32-3	Tetracosane-d50	44%		13-139%
438-22-2	5a-Androstane	40%		10-135%

(a) Silica Gel treated(cleanup) per project.

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-112S		
Lab Sample ID:	JC56321-3A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65946.D	1	12/05/17 06:20	DS	12/03/17 14:35	OP8338	G2Z2486
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)	0.209	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	50%		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:	MW-08S		
Lab Sample ID:	JC56321-4	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
Method:	SW846 8260C	**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	U219324.D	1	12/06/17 04:03	GA	n/a	n/a	VU10021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	2.4	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	1.9	5.0	1.1	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

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:	JC56321-4	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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 [a]	2Z65929.D	1	12/04/17 20:53	DS	12/03/17 14:35	OP8337	G2Z2486
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)	20.3	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	45%		22-140%
16416-32-3	Tetracosane-d50	29%		13-139%
438-22-2	5a-Androstane	28%		10-135%

(a) Silica Gel treated(cleanup) per project.

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:	JC56321-4	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		Percent Solids:	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	524	6.0	mg/l	3	12/05/17 23:15	JN	EPA 300/SW846 9056A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-08S		
Lab Sample ID:	JC56321-4A	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65947.D	1	12/05/17 06:53	DS	12/03/17 14:35	OP8338	G2Z2486
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)	38.6	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	115%		22-140%
16416-32-3	Tetracosane-d50	42%		13-139%
438-22-2	5a-Androstane	53%		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-27		
Lab Sample ID:	JC56321-5	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
Method:	SW846 8260C	**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	U219325.D	1	12/06/17 04:32	GA	n/a	n/a	VU10021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	101%		81-124%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

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-27		
Lab Sample ID:	JC56321-5	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	AA62298.D	1	12/04/17 11:03	LM	n/a	n/a	GAA1326
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.27	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-27		
Lab Sample ID:	JC56321-5	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65934.D	1	12/04/17 23:39	DS	12/03/17 14:35	OP8338	G2Z2486
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)	0.782	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	53%		22-140%
16416-32-3	Tetracosane-d50	51%		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:	MW-27		
Lab Sample ID:	JC56321-5	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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 [a]	4610	75	ug/l	1	12/01/17	12/05/17	GT	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43332
(2) Prep QC Batch: MP4534

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-27		
Lab Sample ID:	JC56321-5	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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]	79.8	5.0	mg/l	1	12/04/17 22:05	AT	SM2320 B-11
Iron, Ferrous [b]	0.90	0.20	mg/l	1	11/30/17 22:38	AT	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:00	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:00	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/30/17 22:16	LS	SM4500NO2 B-11
Sulfate	384	4.0	mg/l	2	12/05/17 23:39	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-33		
Lab Sample ID:	JC56321-6	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65937.D	1	12/05/17 01:19	DS	12/03/17 14:35	OP8338	G2Z2486
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	63%		22-140%
16416-32-3	Tetracosane-d50	63%		13-139%
438-22-2	5a-Androstane	57%		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:	JC56321-7	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
Method:	SW846 8260C	**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	U219326.D	1	12/06/17 05:01	GA	n/a	n/a	VU10021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

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:	JC56321-7	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	AA62300.D	1	12/04/17 11:37	LM	n/a	n/a	GAA1326
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.22	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-72		
Lab Sample ID:	JC56321-7	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65938.D	1	12/05/17 01:53	DS	12/03/17 14:35	OP8338	G2Z2486
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)	0.642	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	46%		13-139%
438-22-2	5a-Androstane	44%		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:	JC56321-7	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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	22800	75	ug/l	1	12/01/17	12/05/17	GT	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43332
(2) Prep QC Batch: MP4534

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-72		
Lab Sample ID:	JC56321-7	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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	12/05/17 18:25	AT	SM2320 B-11
Iron, Ferrous [b]	< 0.20	0.20	mg/l	1	11/30/17 22:38	AT	SM3500FE B-11
Nitrogen, Nitrate [c]	0.27	0.11	mg/l	1	12/06/17 15:01	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.27	0.10	mg/l	1	12/06/17 15:01	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/30/17 22:16	LS	SM4500NO2 B-11
Sulfate	1080	10	mg/l	5	12/06/17 00:03	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:	JC56321-8	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
Method:	SW846 8260C	**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	U219327.D	1	12/06/17 05:30	GA	n/a	n/a	VU10021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	105%		80-120%
460-00-4	4-Bromofluorobenzene	102%		80-120%

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:	JC56321-8	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	AA62301.D	1	12/04/17 11:52	LM	n/a	n/a	GAA1326
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	4.0	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-121		
Lab Sample ID:	JC56321-8	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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 [a]	2Z65932.D	1	12/04/17 22:33	DS	12/03/17 14:35	OP8337	G2Z2486
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)	18.4	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	46%		13-139%
438-22-2	5a-Androstane	48%		10-135%

(a) Silica Gel treated(cleanup) per project.

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:	JC56321-8	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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	4020	15	ug/l	1	12/01/17	12/05/17	GT	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43332
(2) Prep QC Batch: MP4534

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-121		
Lab Sample ID:	JC56321-8	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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]	113	5.0	mg/l	1	12/05/17 18:25	AT	SM2320 B-11
Iron, Ferrous [b]	1.4	0.20	mg/l	1	11/30/17 22:38	AT	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:02	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	0.10	0.10	mg/l	1	12/06/17 15:02	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	0.015	0.010	mg/l	1	11/30/17 22:16	LS	SM4500NO2 B-11
Sulfate	83.3	2.0	mg/l	1	12/04/17 20:47	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: JC56321-8A
Matrix: AQ - Ground Water
Method: SW846 8015C SW846 3510C
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Date Sampled: 11/29/17
Date Received: 11/30/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z65948.D	1	12/05/17 07:26	DS	12/03/17 14:35	OP8338	G2Z2486
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)	15.9	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		22-140%
16416-32-3	Tetracosane-d50	52%		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-122		
Lab Sample ID:	JC56321-9	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
Method:	SW846 8260C	**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	U219328.D	1	12/06/17 05:59	GA	n/a	n/a	VU10021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	0.47	1.0	0.25	ug/l	J
100-41-4	Ethylbenzene	0.84	1.0	0.22	ug/l	J
1330-20-7	Xylene (total)	1.4	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		81-124%
2037-26-5	Toluene-D8	103%		80-120%
460-00-4	4-Bromofluorobenzene	105%		80-120%

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:	JC56321-9	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	AA62302.D	1	12/04/17 12:07	LM	n/a	n/a	GAA1326
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	1.3	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-122		
Lab Sample ID:	JC56321-9	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65939.D	1	12/05/17 02:26	DS	12/03/17 14:35	OP8338	G2Z2486
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)	0.950	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%		22-140%
16416-32-3	Tetracosane-d50	62%		13-139%
438-22-2	5a-Androstane	58%		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:	JC56321-9	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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	12300	75	ug/l	1	12/01/17	12/05/17	GT	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43332
(2) Prep QC Batch: MP4534

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-122		
Lab Sample ID:	JC56321-9	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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]	86.5	5.0	mg/l	1	12/05/17 20:05	AT	SM2320 B-11
Iron, Ferrous [b]	< 0.20	0.20	mg/l	1	11/30/17 22:41	AT	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:03	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:03	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/30/17 22:16	LS	SM4500NO2 B-11
Sulfate	383	2.0	mg/l	1	12/04/17 21:11	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-1		
Lab Sample ID:	JC56321-10	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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 [a]	2Z65933.D	1	12/04/17 23:06	DS	12/03/17 14:35	OP8337	G2Z2486
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)	4.92	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	51%		13-139%
438-22-2	5a-Androstane	49%		10-135%

(a) Silica Gel treated(cleanup) per project.

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
Lab Sample ID: JC56321-10A
Matrix: AQ - Ground Water
Method: SW846 8015C SW846 3510C
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Date Sampled: 11/29/17
Date Received: 11/30/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z65949.D	1	12/05/17 07:59	DS	12/03/17 14:35	OP8338	G2Z2486
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)	6.64	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	45%		13-139%
438-22-2	5a-Androstane	44%		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		
Lab Sample ID:	JC56321-11	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
Method:	SW846 8260C	**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	U219329.D	1	12/06/17 06:28	GA	n/a	n/a	VU10021
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

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		
Lab Sample ID:	JC56321-11	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65940.D	1	12/05/17 02:59	DS	12/03/17 14:35	OP8338	G2Z2486
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)	0.298	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	40%		13-139%
438-22-2	5a-Androstane	36%		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		
Lab Sample ID:	JC56321-12	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	AA62303.D	1	12/04/17 12:22	LM	n/a	n/a	GAA1326
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	13.6	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:	JC56321-12	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65943.D	1	12/05/17 04:39	DS	12/03/17 14:35	OP8338	G2Z2486
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)	0.219	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%		22-140%
16416-32-3	Tetracosane-d50	50%		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-03		
Lab Sample ID:	JC56321-12	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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	12100	30	ug/l	2	12/01/17	12/05/17	GT	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43337
(2) Prep QC Batch: MP4534

RL = Reporting Limit

SGS North America Inc.

Report of Analysis

Client Sample ID:	TW-03		
Lab Sample ID:	JC56321-12	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
		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]	43.3	5.0	mg/l	1	12/05/17 20:05	AT	SM2320 B-11
Iron, Ferrous [b]	102	10	mg/l	50	11/30/17 22:41	AT	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:06	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:06	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	11/30/17 22:16	LS	SM4500NO2 B-11
Sulfate	616	6.0	mg/l	3	12/06/17 01:15	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:	TW-04		
Lab Sample ID:	JC56321-13	**Date Sampled:**	11/29/17
Matrix:	AQ - Ground Water	**Date Received:**	11/30/17
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	2Z65944.D	1	12/05/17 05:13	DS	12/03/17 14:35	OP8338	G2Z2486
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)	1.17	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%		22-140%
16416-32-3	Tetracosane-d50	44%		13-139%
438-22-2	5a-Androstane	40%		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

GW

E
PW

SGS ACCUTEST

CHAIN OF CUSTODY

PAGE 1 OF 2

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC56321

Company Name	Project Name	Billing Information (if different from Report to)
Groundwater & Environmental Services, Inc.	NRG PRGS	
Street Address: 1350 Blair Drive, Suite A	Street: 1400 North Royal St	Company Name:
City: Odenton, State: MD, Zip: 21113	City: Alexandria, State: VA	Street Address:
Project Contact: Ashley Bell, E-mail: Abell@gesonline.com	Project #: 0402919 - 51 - 206, Org 0404	City, State, Zip:
Phone #: 800-220-3606 x 3704, Fax #:	Client Purchase Order #:	Attention: Send to: ges-invoices@gesonline.com
Sampler(s) Name(s): Jeff Plummer, Phone #:	Project Manager: Ashley Bell	

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preservation: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPH-DRO C-10-28 (SW-846 8015B)	BTEX, Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO3 -1 & Nitrite NO-2(EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO4 2- (EPA 300.0)	Methane (RSKSOP-175 modified)	TPH-DRO C10-28 (SW846 8015B) w/silica cleanup (Silica Gel)	Sulfide 4500 S2-F-11 (GW)	LAB USE ONLY
1	MW-107S		11-29-17	1045	JP	GW	4	X								X							X	X		E108
2	MW-110S			1030			1									X							X			A2
3	MW-112S			1015			4									X							X			C18
4	MW-08S			1210			11		X			X				X	X					X		X	X	X	V331
5	MW-27			1415			16		X	X	X					X	X	X	X	X	X	X	X		X	X	
6	MW-33			1400			2									X										
7	MW-72			1500			16		X	X	X	X				X	X	X	X	X	X	X	X		X	X	
8	MW-121			1300			18		X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	
9	MW-122			1330			16		X	X	X	X				X	X	X	X	X	X	X	X		X	X	
10	RW-1			1230	JP		4									X								X		
11	TW-14			0840	AA		5									X	X									
12	TW-03		11-27-17	1230	AA	GW	13	X	X	X	X	X				X		X	X	X	X	X	X		X	X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM) / Date:

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labnet

INITIAL ASSESSMENT: 28/17

LABEL VERIFICATION:

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format: GES EQEDD
- [ ] Other

Comments / Special Instructions

EQEDD Name: NRG PRGS.Lab report # 25800.EQEDD.zip

DW

Email lab results to: seprregion@gesonline.com, ges@gesonline.com

Send invoice to: ges-invoices@gesonline.com & include Project # & Org #: 0402919 - 51 - 206, Org 0404

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Jeff Plummer	11-30-17 0730	1 Denise Wooding	2 Denise Wooding	11-30-17 13:20	2
3		11-30-17	3	4		4
5		1930	5	Custody Seal # 967, 9688 978	Preserved where applicable	On Ice: Cooler Temp: 1.4 1.6 2.5 C-1P

E

CHAIN OF CUSTODY

PAGE 2 OF 2

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX. 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC56321

Company Name	Project Name	Billing Information (if different from Report to)
Groundwater & Environmental Services, Inc.	NRG PRGS	
Street Address: 1350 Blair Drive, Suite A	Street: 1400 North Royal St	Company Name
City / State / Zip: Odenton, MD 21113	City / State: Alexandria, VA	Street Address
Project Contact / E-mail: Ashley Bell Abell@gesonline.com	Project #: 0402919 - 51 - 206, Org 0404	City / State / Zip
Phone # / Fax #: 800-220-3606 x 3704	Client Purchase Order #	
Sampler(s) Name(s) / Phone #: Jeff Plummer	Project Manager: Ashley Bell	Attention: Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPH-DRO C-10-28 (SW-846 8015B)	BTEX, Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO3 -1 & Nitrite NO-2(EPA 353.2)	Manganese (Mn2+)	Ferrous iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO4 2- (EPA 300.0)	Methane (RSKSOP-175 modified)			LAB USE ONLY
13	TW-04		11-29-17	0745	AA	GW	2	X								X										

Turnaround Time (Business days)
- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Approved By (SGS Accutest PM) / Date:
Emergency & Rush T/A data available VIA Labline

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format GES EQEDD
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions
EQEDD Name: NRG PRGS.Lab report #.25800.EQEDD.zip
Email lab results to: septregion@gesonline.com; ges@gesonline.com
Send invoice to: ges-invoices@ gesonline.com & include Project # & Org #.
0402919 - 51 - 206, Org 0404
Sample inventory is verified upon receipt in the laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished By:	Date Time:	Received By:
1	Jeff Plummer	11-30-17 0725	Denise Woodring
2	Denise Woodring	11-30-17 1320	
3		11-30-17	
4			
5		1738	

Custody Seal # 962-968-978 Intact / Not Intact
Preserved where applicable
On Ice
Cooler Temp.

SGS Accutest Sample Receipt Summary

Job Number: JC56321 **Client:** GES **Project:** NRG PRGS

Date / Time Received: 11/30/2017 7:30:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (1.4); Cooler 2: (1.6); Cooler 3: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.3); Cooler 2: (2.5); Cooler 3: (2.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:	IR Gun		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	3		

Quality Control Preservation	Y	or	N	N/A
1. Trip Blank present / cooler:	☑		☐	☐
2. Trip Blank listed on COC:	☑		☐	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments -2 Rec'd limited volume of 1x 300ml for DRO via 8015B and 3630C.
-3, -4, -7, -8, -9 & -12 Sulfur and Sulfide crossed off on COC but we did receive volume.

SM089-02
Rev. Date 12/1/16

Responded to by: M Cordova Response Date: 12/1

Note and proceed. Log in as noted.
Revised 12/4:
Lab has extracted -2 for DRO w/ silica gel cleanup and there is insufficient volume for DRO analysis. Please cancel DRO.

JC56321: Chain of Custody
Page 4 of 4

The results set forth herein are provided by SGS North America Inc.

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 Job Number: JC56396

Sampling Date: 11/30/17

Report to:

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

Total number of pages in report: 27

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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SGS North America Inc.

Sample Summary

Groundwater & Environmental Services

Job No: JC56396

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC56396-1	11/30/17	09:25	SA	12/01/17	AQ	Ground Water	MW-72S
JC56396-1A	11/30/17	09:25	SA	12/01/17	AQ	Ground Water	MW-72S
JC56396-2	11/30/17	09:50	SA	12/01/17	AQ	Ground Water	MW-15
JC56396-3	11/30/17	10:15	SA	12/01/17	AQ	Ground Water	MW-16
JC56396-4	11/30/17	11:00	SA	12/01/17	AQ	Ground Water	RW-14
JC56396-4A	11/30/17	11:00	SA	12/01/17	AQ	Ground Water	RW-14
JC56396-5	11/30/17	11:40	SA	12/01/17	AQ	Ground Water	TW-07
JC56396-5A	11/30/17	11:40	SA	12/01/17	AQ	Ground Water	TW-07

2

Summary of Hits

Job Number: JC56396
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/30/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56396-1	**MW-72S**					
Methane		23.1	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28) [a]		8.07	0.083	0.083	mg/l	SW846 8015C
Manganese		34500	75		ug/l	SW846 6010C
Iron, Ferrous [b]		110	10		mg/l	SM3500FE B-11
Sulfate		1880	20		mg/l	EPA 300/SW846 9056A
JC56396-1A	**MW-72S**					
TPH-DRO (C10-C28)		9.10	0.083	0.083	mg/l	SW846 8015C
JC56396-2	**MW-15**					
TPH-DRO (C10-C28)		1.75	0.083	0.083	mg/l	SW846 8015C
JC56396-3	**MW-16**					
TPH-DRO (C10-C28)		0.103	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO3 [c]		22.7	5.0		mg/l	SM2320 B-11
Sulfate		222	2.0		mg/l	EPA 300/SW846 9056A
JC56396-4	**RW-14**					
Methane		0.11	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28) [a]		0.218	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO3 [d]		6.7	5.0		mg/l	SM2320 B-11
Nitrogen, Nitrate [e]		1.8	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		1.8	0.10		mg/l	EPA 353.2/LACHAT
Sulfate		41.4	2.0		mg/l	EPA 300/SW846 9056A
JC56396-4A	**RW-14**					
TPH-DRO (C10-C28)		1.00	0.083	0.083	mg/l	SW846 8015C
JC56396-5	**TW-07**					
TPH-DRO (C10-C28) [a]		1.78	0.083	0.083	mg/l	SW846 8015C
JC56396-5A	**TW-07**					
TPH-DRO (C10-C28)		0.849	0.083	0.083	mg/l	SW846 8015C

(a) Had silica gel cleanup.
(b) Field analysis required. Received out of hold time and analyzed by request.

Summary of Hits

Job Number: JC56396
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/30/17

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

(c) Sample was titrated to a final pH of 4.5.
(d) Sample was titrated to a final pH of 4.2.
(e) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-72S		
Lab Sample ID:	JC56396-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
Method:	SW846 8260C	**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	4B77566.D	1	12/05/17 16:12	HT	n/a	n/a	V4B3182
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	91%		80-120%
17060-07-0	1,2-Dichloroethane-D4	82%		81-124%
2037-26-5	Toluene-D8	97%		80-120%
460-00-4	4-Bromofluorobenzene	98%		80-120%

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:	JC56396-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	AA62341.D	1	12/05/17 15:09	LM	n/a	n/a	GAA1327
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	23.1	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		
Lab Sample ID:	JC56396-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66058.D	1	12/09/17 01:15	DS	12/05/17 19:45	OP8387	G2Z2489
Run #2 [b]	2Z66342.D	1	12/21/17 16:33	DS	12/20/17 09:00	OP8818	G2Z2500

	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)	8.07	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%	80%	22-140%
16416-32-3	Tetracosane-d50	62%	66%	13-139%
438-22-2	5a-Androstane	58%	66%	10-135%

(a) Had silica gel cleanup.
(b) Sample extracted outside the holding time. Had silica gel cleanup. 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:	MW-72S		
Lab Sample ID:	JC56396-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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
Manganese	34500	75	ug/l	5	12/05/17	12/13/17	ND	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43386
(2) Prep QC Batch: MP4570

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-72S		
Lab Sample ID:	JC56396-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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	12/07/17 17:55	AT	SM2320 B-11
Iron, Ferrous [b]	110	10	mg/l	50	12/01/17 22:35	LS	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:33	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:33	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	12/01/17 22:01	LS	SM4500NO2 B-11
Sulfate	1880	20	mg/l	10	12/07/17 13:37	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:	MW-72S		
Lab Sample ID:	JC56396-1A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66017.D	1	12/07/17 13:13	DS	12/05/17 20:15	OP8395	G2Z2488
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)	9.10	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	74%		13-139%
438-22-2	5a-Androstane	68%		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-15		
Lab Sample ID:	JC56396-2	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66015.D	1	12/07/17 12:05	DS	12/05/17 20:15	OP8395	G2Z2488
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)	1.75	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	61%		22-140%
16416-32-3	Tetracosane-d50	70%		13-139%
438-22-2	5a-Androstane	66%		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		
Lab Sample ID:	JC56396-3	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
Method:	SW846 8260C	**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	4B77567.D	1	12/05/17 16:40	HT	n/a	n/a	V4B3182
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%		80-120%
17060-07-0	1,2-Dichloroethane-D4	85%		81-124%
2037-26-5	Toluene-D8	95%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

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		
Lab Sample ID:	JC56396-3	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66016.D	1	12/07/17 12:39	DS	12/05/17 20:15	OP8395	G2Z2488
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)	0.103	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		22-140%
16416-32-3	Tetracosane-d50	53%		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:	MW-16		
Lab Sample ID:	JC56396-3	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	22.7	5.0	mg/l	1	12/07/17 17:55	AT	SM2320 B-11
Sulfate	222	2.0	mg/l	1	12/05/17 21:39	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-14		
Lab Sample ID:	JC56396-4	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	AA62342.D	1	12/05/17 16:11	LM	n/a	n/a	GAA1327
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	0.11	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:	JC56396-4	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66061.D	1	12/09/17 02:57	DS	12/05/17 19:45	OP8387	G2Z2489
Run #2 [b]	2Z66254.D	1	12/15/17 19:29	DS	12/14/17 16:35	OP8701	G2Z2495

	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)	0.218	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%	60%	22-140%
16416-32-3	Tetracosane-d50	79%	56%	13-139%
438-22-2	5a-Androstane	76%	55%	10-135%

(a) Had silica gel cleanup.
(b) Had silica gel cleanup. 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:	RW-14		
Lab Sample ID:	JC56396-4	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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
Manganese	< 15	15	ug/l	1	12/05/17	12/07/17	GT	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43345
(2) Prep QC Batch: MP4570

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-14		
Lab Sample ID:	JC56396-4	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	6.7	5.0	mg/l	1	12/07/17 17:55	AT	SM2320 B-11
Iron, Ferrous [b]	< 0.20	0.20	mg/l	1	12/01/17 22:28	LS	SM3500FE B-11
Nitrogen, Nitrate [c]	1.8	0.11	mg/l	1	12/06/17 15:35	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	1.8	0.10	mg/l	1	12/06/17 15:35	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	12/01/17 22:01	LS	SM4500NO2 B-11
Sulfate	41.4	2.0	mg/l	1	12/05/17 22:03	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-14		
Lab Sample ID:	JC56396-4A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66020.D	1	12/07/17 14:55	DS	12/05/17 20:15	OP8395	G2Z2488
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)	1.00	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	82%		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:	TW-07		
Lab Sample ID:	JC56396-5	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66062.D	1	12/09/17 03:30	DS	12/05/17 19:45	OP8387	G2Z2489
Run #2 [b]	2Z66343.D	1	12/21/17 17:06	DS	12/20/17 09:00	OP8818	G2Z2500

	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)	1.78	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	62%	77%	22-140%
16416-32-3	Tetracosane-d50	64%	79%	13-139%
438-22-2	5a-Androstane	60%	78%	10-135%

(a) Had silica gel cleanup.
(b) Sample extracted outside the holding time. Had silica gel cleanup. 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:	TW-07		
Lab Sample ID:	JC56396-5A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66021.D	1	12/07/17 15:29	DS	12/05/17 20:15	OP8395	G2Z2488
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)	0.849	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	66%		13-139%
438-22-2	5a-Androstane	63%		10-135%

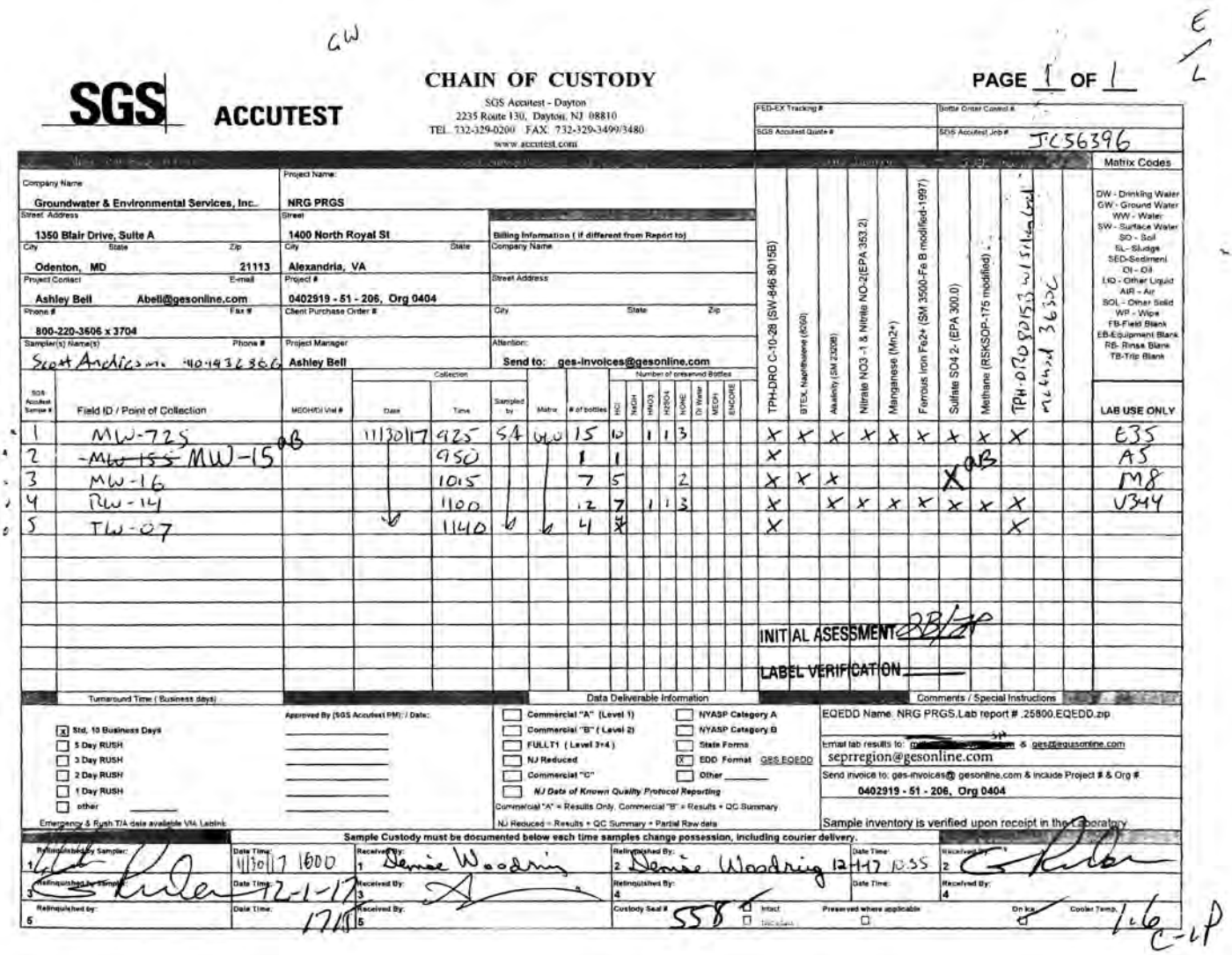
ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC56396

Company Name: Groundwater & Environmental Services, Inc.
Street Address: 1350 Blair Drive, Suite A
City / State / Zip: Odenton, MD 21113
Project Contact / E-mail: Ashley Bell Abell@gesonline.com
Phone # / Fax #: 800-220-3606 x 3704
Sampler(s) Name(s) / Phone #: Scott Anderson 410-493-6866

Project Name: NRG PRGS
Street: 1400 North Royal St
City / State: Alexandria, VA
Project #: 0402919 - 51 - 206, Org 0404
Client Purchase Order #:
Project Manager: Ashley Bell

Billing Information (if different from Report to)
Company Name:
Street Address:
City / State / Zip:
Attention:
Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	Di Water	MEOH	ENCORE	TPH-DRO C-10-28 (SW-846 8015B)	BTEX, Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO3 -1 & Nitrite NO-2(EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO4 2- (EPA 300.0)	Methane (RSKSOP-175 modified)	TPH-DRO 8015 w/ silica gel	methane 3630C		LAB USE ONLY
1	MW-725		11/30/17	925	SA	GW	15	10		1	1	3				X	X	X	X	X	X	X	X	X			E35
2	~~MW-15~~ MW-15	OB		950			1	1								X											A5
3	MW-16			1015			7	5				2				X	X	X				X	OB				M8
4	RW-14			1100			12	7		1	1	3				X		X	X	X	X	X	X	X			V344
5	TW-07			1140			4	4								X								X			

INITIAL ASESSMENT: OB 12/1/17
LABEL VERIFICATION:

Turnaround Time (Business days)
Approved By (SGS Accutest PM) / Date:
- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labink

Data Deliverable Information
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format: GES EQEDD
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions
EQEDD Name: NRG PRGS.Lab report # .25800.EQEDD.zip
Email lab results to: [redacted] & ges@gesonline.com
seprregion@gesonline.com
Send invoice to: ges-invoices@ gesonline.com & include Project # & Org #
0402919 - 51 - 206, Org 0404
Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		11/30/17 1600	1 Denise Woodring	2 Denise Woodring	12-1-17 10:55	2
3	Relinquished by Sampler:	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
5	Relinquished by:	Date Time: 12-1-17 1715	Received By: 5	Custody Seal # 558	Intact / Not Intact	Preserved where applicable: On Ice: Cooler Temp: 1.6 C-UP

SGS Accutest Sample Receipt Summary

Job Number: JC56396 **Client:** GES **Project:** NRG PRGS

Date / Time Received: 12/1/2017 5:15:00 PM **Delivery Method:** Accutest Courier **Airbill #'s:**

Cooler Temps (Raw Measured) °C: Cooler 1: (1.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.5);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments -2 Rec'd limited volume of 1x 300ml for DRO.

SM089-02
Rev. Date 12/1/16

Responded to by: CSR: N/A

Response Date: Response Date: 12/1/2017

Response:

Response: Proceed with analysis

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, 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: JC56389

Sampling Date: 11/30/17

Report to:

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

Total number of pages in report: **30**

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: JC56389

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
JC56389-1	11/30/17	10:00	JP	12/01/17	AQ	Ground Water	MW-100S
JC56389-2	11/30/17	10:30	JP	12/01/17	AQ	Ground Water	MW-100
JC56389-3	11/30/17	11:00	JP	12/01/17	AQ	Ground Water	RW-31
JC56389-4	11/30/17	11:20	JP	12/01/17	AQ	Ground Water	RW-51
JC56389-5	11/30/17	11:45	JP	12/01/17	AQ	Ground Water	RW-25
JC56389-5A	11/30/17	11:45	JP	12/01/17	AQ	Ground Water	RW-25
JC56389-6	11/30/17	12:15	JP	12/01/17	AQ	Ground Water	RW-05S
JC56389-6A	11/30/17	12:15	JP	12/01/17	AQ	Ground Water	RW-05S
JC56389-7	11/30/17	13:15	JP	12/01/17	AQ	Ground Water	RW-118S
JC56389-7A	11/30/17	13:15	JP	12/01/17	AQ	Ground Water	RW-118S

Summary of Hits

Job Number: JC56389
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/30/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56389-1	**MW-100S**					
Methane		16.5	0.11	0.036	ug/l	RSK-175
TPH-DRO (C10-C28)		0.192	0.083	0.083	mg/l	SW846 8015C
Manganese [a]		9310	75		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [b]		46.4	5.0		mg/l	SM2320 B-11
Iron, Ferrous [c]		16.5	5.0		mg/l	SM3500FE B-11
Sulfate		319	2.0		mg/l	EPA 300/SW846 9056A
JC56389-2	**MW-100**					
TPH-DRO (C10-C28)		0.0985	0.083	0.083	mg/l	SW846 8015C
Manganese [a]		446	30		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [b]		21.6	5.0		mg/l	SM2320 B-11
Nitrogen, Nitrate [d]		1.9	0.11		mg/l	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite		1.9	0.10		mg/l	EPA 353.2/LACHAT
Sulfate		47.3	2.0		mg/l	EPA 300/SW846 9056A
JC56389-3	**RW-31**					
TPH-DRO (C10-C28)		0.167	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO3 [b]		102	5.0		mg/l	SM2320 B-11
JC56389-4	**RW-51**					
TPH-DRO (C10-C28)		0.149	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO3 [b]		70.0	5.0		mg/l	SM2320 B-11
JC56389-5	**RW-25**					
TPH-DRO (C10-C28) [e]		0.153	0.083	0.083	mg/l	SW846 8015C
Alkalinity, Total as CaCO3 [b]		14.4	5.0		mg/l	SM2320 B-11
JC56389-5A	**RW-25**					
TPH-DRO (C10-C28)		0.162	0.083	0.083	mg/l	SW846 8015C
JC56389-6	**RW-05S**					
TPH-DRO (C10-C28) [e]		189	0.42	0.41	mg/l	SW846 8015C
JC56389-6A	**RW-05S**					
TPH-DRO (C10-C28)		107	0.083	0.083	mg/l	SW846 8015C

Summary of Hits

Job Number: JC56389
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/30/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56389-7	**RW-118S**					
TPH-DRO (C10-C28) [e]		21.0	0.083	0.083	mg/l	SW846 8015C
JC56389-7A	**RW-118S**					
TPH-DRO (C10-C28)		19.1	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) Field analysis required. Received out of hold time and analyzed by request.
(d) Calculated as: (Nitrogen, Nitrate + Nitrite) - (Nitrogen, Nitrite)
(e) Had silica gel cleanup.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-100S		
Lab Sample ID:	JC56389-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	AA62334.D	1	12/05/17 12:46	LM	n/a	n/a	GAA1327
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	16.5	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-100S		
Lab Sample ID:	JC56389-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66000.D	1	12/07/17 03:38	DS	12/05/17 20:15	OP8395	G2Z2488
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)	0.192	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		22-140%
16416-32-3	Tetracosane-d50	32%		13-139%
438-22-2	5a-Androstane	28%		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-100S		
Lab Sample ID:	JC56389-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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
Manganese [a]	9310	75	ug/l	1	12/05/17	12/07/17	ND	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43346
(2) Prep QC Batch: MP4568

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-100S		
Lab Sample ID:	JC56389-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	46.4	5.0	mg/l	1	12/07/17 16:45	AT	SM2320 B-11
Iron, Ferrous [b]	16.5	5.0	mg/l	25	12/01/17 22:28	LS	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:27	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:27	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	12/01/17 21:50	LS	SM4500NO2 B-11
Sulfate	319	2.0	mg/l	1	12/05/17 18:04	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-100		
Lab Sample ID:	JC56389-2	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	AA62336.D	1	12/05/17 13:37	LM	n/a	n/a	GAA1327
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	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-100		
Lab Sample ID:	JC56389-2	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66001.D	1	12/07/17 04:12	DS	12/05/17 20:15	OP8395	G2Z2488
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)	0.0985	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	63%		13-139%
438-22-2	5a-Androstane	60%		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-100		
Lab Sample ID:	JC56389-2	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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
Manganese [a]	446	30	ug/l	1	12/05/17	12/07/17	ND	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43346
(2) Prep QC Batch: MP4568

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-100		
Lab Sample ID:	JC56389-2	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	21.6	5.0	mg/l	1	12/07/17 16:45	AT	SM2320 B-11
Iron, Ferrous [b]	< 1.0	1.0	mg/l	5	12/01/17 22:28	LS	SM3500FE B-11
Nitrogen, Nitrate [c]	1.9	0.11	mg/l	1	12/06/17 15:28	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	1.9	0.10	mg/l	1	12/06/17 15:28	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	12/01/17 22:01	LS	SM4500NO2 B-11
Sulfate	47.3	2.0	mg/l	1	12/05/17 18:28	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-31		
Lab Sample ID:	JC56389-3	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66002.D	1	12/07/17 04:46	DS	12/05/17 20:15	OP8395	G2Z2488
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)	0.167	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	78%		13-139%
438-22-2	5a-Androstane	75%		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		
Lab Sample ID:	JC56389-3	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	102	5.0	mg/l	1	12/07/17 16:45	AT	SM2320 B-11

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-51		
Lab Sample ID:	JC56389-4	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
Method:	SW846 8260C	**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	U219340.D	1	12/06/17 11:46	GA	n/a	n/a	VU10022
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		80-120%
17060-07-0	1,2-Dichloroethane-D4	102%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	104%		80-120%

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		
Lab Sample ID:	JC56389-4	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66003.D	1	12/07/17 05:20	DS	12/05/17 20:15	OP8395	G2Z2488
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)	0.149	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	67%		22-140%
16416-32-3	Tetracosane-d50	73%		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:	RW-51		
Lab Sample ID:	JC56389-4	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	70.0	5.0	mg/l	1	12/07/17 16:45	AT	SM2320 B-11

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-25		
Lab Sample ID:	JC56389-5	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
Method:	SW846 8260C	**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	U219341.D	1	12/06/17 12:15	GA	n/a	n/a	VU10022
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		80-120%
17060-07-0	1,2-Dichloroethane-D4	103%		81-124%
2037-26-5	Toluene-D8	104%		80-120%
460-00-4	4-Bromofluorobenzene	103%		80-120%

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		
Lab Sample ID:	JC56389-5	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66028.D	1	12/07/17 19:26	DS	12/05/17 19:45	OP8387	G2Z2488
Run #2 [b]	2Z66255.D	1	12/15/17 20:02	DS	12/14/17 16:35	OP8701	G2Z2495

	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)	0.153	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	71%	79%	22-140%
16416-32-3	Tetracosane-d50	80%	73%	13-139%
438-22-2	5a-Androstane	76%	71%	10-135%

(a) Had silica gel cleanup.
(b) Had silica gel cleanup. 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:	RW-25		
Lab Sample ID:	JC56389-5	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	14.4	5.0	mg/l	1	12/07/17 17:55	AT	SM2320 B-11

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-25		
Lab Sample ID:	JC56389-5A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66004.D	1	12/07/17 05:53	DS	12/05/17 20:15	OP8395	G2Z2488
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)	0.162	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		22-140%
16416-32-3	Tetracosane-d50	88%		13-139%
438-22-2	5a-Androstane	85%		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		
Lab Sample ID:	JC56389-6	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66066.D	1	12/09/17 05:46	DS	12/05/17 19:45	OP8387	G2Z2489
Run #2 [a]	2Z66138.D	5	12/12/17 02:29	DS	12/05/17 19:45	OP8387	G2Z2491

	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)	189 [b]	0.42	0.41	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	94%	109%	22-140%
16416-32-3	Tetracosane-d50	106%	94%	13-139%
438-22-2	5a-Androstane	127%	48%	10-135%

(a) Had silica gel cleanup.
(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:	JC56389-6A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66005.D	1	12/07/17 06:27	DS	12/05/17 20:15	OP8395	G2Z2488
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)	107	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	110%		22-140%
16416-32-3	Tetracosane-d50	76%		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:	RW-118S		
Lab Sample ID:	JC56389-7	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66027.D	1	12/07/17 18:52	DS	12/05/17 19:45	OP8387	G2Z2488
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)	21.0	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	64%		10-135%

(a) Had 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-118S
Lab Sample ID: JC56389-7A
Matrix: AQ - Ground Water
Method: SW846 8015C SW846 3510C
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

Date Sampled: 11/30/17
Date Received: 12/01/17
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	2Z66065.D	1	12/09/17 05:12	DS	12/05/17 20:15	OP8395	G2Z2489
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)	19.1	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%		22-140%
16416-32-3	Tetracosane-d50	55%		13-139%
438-22-2	5a-Androstane	51%		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

GW
P

E

SGS ACCUTEST

CHAIN OF CUSTODY

PAGE 1 OF 1

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC56389

Company Name: Groundwater & Environmental Services, Inc.
Street Address: 1350 Blair Drive, Suite A
City: Odenton, State: MD, Zip: 21113
Project Contact: Ashley Bell, E-mail: Abell@gesonline.com
Phone #: 800-220-3606 x 3704, Fax #:
Sampler(s) Name(s): Jeff Plummer, Phone #:

Project Name: NRG PRGS
Street: 1400 North Royal St
City: Alexandria, State: VA
Project #: 0402919 - 51 - 206, Org 0404
Client Purchase Order #:
Project Manager: Ashley Bell

Billing Information (If different from Report to):
Company Name:
Street Address:
City: State: Zip:
Attention:
Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	EnCore	TPH-DRO C-10-28 (SW-846 8015B)	BTEX, Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO3 -1 & Nitrite NO-2(EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO4 2- (EPA 300.0)	Methane (RSKSOP-175 modified)	TPH-DRO cl-c22 (SW846 8015 w/silica gel cleanup (Silvex))			LAB USE ONLY
1	MW-100S		11-30-17	1000	JP	GW	10	5		1	1	3				X		X	X	X	X	X	X				E36
2	MW-100			1030			10	5		1	1	3				X		X	X	X	X	X	X				A5
3	RW-31			1100			3	2				1				X		X									M8
4	RW-51			1120			6	5				1				X	X	X									V342
5	RW-25			1145			8	7				1				X	X	X						X			
6	RW-05S			1215			4	4								X								X			
7	RW-11S		11-30-17	1315	JP	GW	4	4								X								X			

INITIAL ASSESMENT 12/8/17
LABEL VERIFICATION

Turnaround Time (Business days):
- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Approved By (SGS Accutest PM) / Date:
Emergency & Rush T/A data available VIA Labline

Data Deliverable Information:
- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format GES EQEDD
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions:
EQEDD Name: NRG PRGS.Lab report # .25800.EQEDD.zip
Email lab results to: ~~mdabs@gesonline.com~~ & ges@gesonline.com
seprregion@gesonline.com
Send invoice to: ~~ges-invoices@~~gesonline.com & include Project # & Org #.
0402919 - 51 - 206, Org 0404
Sample inventory is verified upon receipt in the laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1 Jeff Plummer	12-1-17 0735	1 Denise Woodring	2 Denise Woodring	12-1-17 1035	2
3	12-1-17	3	4		4
5	1715	5	Custody Seal # 552,554 Intact / Not Intact	Preserved where applicable	On Ice / Cooler Temp: 1.4 1.6 C1P

SGS Accutest Sample Receipt Summary

Job Number: JC56389 **Client:** _____ **Project:** _____

Date / Time Received: 12/1/2017 5:15:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (1.4); Cooler 2: (1.6);

Cooler Temps (Corrected) °C: Cooler 1: (2.3); Cooler 2: (2.5);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC56389: Chain of Custody
Page 2 of 2

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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: JC56388

Sampling Date: 11/30/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; Seprregion@GESOnline.com;
GES@EquisOnline.com
ATTN: Ashley 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 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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Sections: 1 2 3 4

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Sample Summary

Groundwater & Environmental Services

Job No: JC56388

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
JC56388-1	11/30/17	09:53	AR	12/01/17	AQ	Ground Water	RW-10S
JC56388-1A	11/30/17	09:53	AR	12/01/17	AQ	Ground Water	RW-10S
JC56388-2	11/30/17	11:45	AR	12/01/17	AQ	Ground Water	TW-05
JC56388-2A	11/30/17	11:45	AR	12/01/17	AQ	Ground Water	TW-05
JC56388-3	11/30/17	12:48	AR	12/01/17	AQ	Ground Water	RW-116S
JC56388-3A	11/30/17	12:48	AR	12/01/17	AQ	Ground Water	RW-116S

Summary of Hits

Job Number: JC56388
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/30/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56388-1	**RW-10S**					
TPH-DRO (C10-C28) [a]		48.4	0.083	0.083	mg/l	SW846 8015C
Manganese [b]		10800	30		ug/l	SW846 6010C
Alkalinity, Total as CaCO3 [c]		75.2	5.0		mg/l	SM2320 B-11
Iron, Ferrous [d]		242	10		mg/l	SM3500FE B-11
Sulfate		1640	10		mg/l	EPA 300/SW846 9056A
JC56388-1A	**RW-10S**					
TPH-DRO (C10-C28)		48.9	0.083	0.083	mg/l	SW846 8015C
JC56388-2	**TW-05**					
TPH-DRO (C10-C28) [a]		67.0	0.083	0.083	mg/l	SW846 8015C
Sulfate		1140	10		mg/l	EPA 300/SW846 9056A
JC56388-2A	**TW-05**					
TPH-DRO (C10-C28)		61.5	0.083	0.083	mg/l	SW846 8015C
JC56388-3	**RW-116S**					
TPH-DRO (C10-C28) [a]		181	0.42	0.41	mg/l	SW846 8015C
JC56388-3A	**RW-116S**					
TPH-DRO (C10-C28)		146	0.083	0.083	mg/l	SW846 8015C

(a) Had silica gel cleanup.
(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.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	RW-10S		
Lab Sample ID:	JC56388-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
Method:	SW846 8260C	**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	2C155222.D	1	12/06/17 15:10	HT	n/a	n/a	V2C6877
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics, Naphthalene

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.50	0.17	ug/l	
108-88-3	Toluene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.22	ug/l	
1330-20-7	Xylene (total)	ND	1.0	0.22	ug/l	
91-20-3	Naphthalene	ND	5.0	1.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		80-120%
17060-07-0	1,2-Dichloroethane-D4	104%		81-124%
2037-26-5	Toluene-D8	99%		80-120%
460-00-4	4-Bromofluorobenzene	97%		80-120%

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:	JC56388-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	AA62332.D	1	12/05/17 12:18	LM	n/a	n/a	GAA1327
Run #2							

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	ND	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		
Lab Sample ID:	JC56388-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66024.D	1	12/07/17 17:10	DS	12/05/17 19:45	OP8387	G2Z2488
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)	48.4	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	77%		22-140%
16416-32-3	Tetracosane-d50	65%		13-139%
438-22-2	5a-Androstane	56%		10-135%

(a) Had 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-10S		
Lab Sample ID:	JC56388-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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
Manganese [a]	10800	30	ug/l	1	12/05/17	12/07/17	ND	SW846 6010C [1]	SW846 3010A [2]

(1) Instrument QC Batch: MA43346
(2) Prep QC Batch: MP4568

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

RL = Reporting Limit

Report of Analysis

Client Sample ID:	RW-10S		
Lab Sample ID:	JC56388-1	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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]	75.2	5.0	mg/l	1	12/05/17 20:05	AT	SM2320 B-11
Iron, Ferrous [b]	242	10	mg/l	50	12/01/17 22:28	LS	SM3500FE B-11
Nitrogen, Nitrate [c]	< 0.11	0.11	mg/l	1	12/06/17 15:20	TG	EPA353.2/SM4500NO2B
Nitrogen, Nitrate + Nitrite	< 0.10	0.10	mg/l	1	12/06/17 15:20	TG	EPA 353.2/LACHAT
Nitrogen, Nitrite	< 0.010	0.010	mg/l	1	12/01/17 21:50	LS	SM4500NO2 B-11
Sulfate	1640	10	mg/l	5	12/07/17 12:25	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-10S		
Lab Sample ID:	JC56388-1A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z65998.D	1	12/07/17 02:30	DS	12/05/17 20:15	OP8395	G2Z2488
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)	48.9	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	50%		13-139%
438-22-2	5a-Androstane	38%		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		
Lab Sample ID:	JC56388-2	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66025.D	1	12/07/17 17:44	DS	12/05/17 19:45	OP8387	G2Z2488
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)	67.0	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		22-140%
16416-32-3	Tetracosane-d50	40%		13-139%
438-22-2	5a-Androstane	45%		10-135%

(a) Had 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:	TW-05		
Lab Sample ID:	JC56388-2	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
		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	12/05/17 20:05	AT	SM2320 B-11
Sulfate	1140	10	mg/l	5	12/07/17 12:49	JN	EPA 300/SW846 9056A

(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:	JC56388-2A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z65999.D	1	12/07/17 03:04	DS	12/05/17 20:15	OP8395	G2Z2488
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)	61.5	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	92%		22-140%
16416-32-3	Tetracosane-d50	63%		13-139%
438-22-2	5a-Androstane	63%		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		
Lab Sample ID:	JC56388-3	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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]	2Z66026.D	1	12/07/17 18:18	DS	12/05/17 19:45	OP8387	G2Z2488
Run #2 [a]	2Z66068.D	5	12/09/17 06:53	DS	12/05/17 19:45	OP8387	G2Z2489

	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)	181 [b]	0.42	0.41	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	114%	111%	22-140%
16416-32-3	Tetracosane-d50	86%	102%	13-139%
438-22-2	5a-Androstane	131%	52%	10-135%

(a) Had silica gel cleanup.
(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-116S		
Lab Sample ID:	JC56388-3A	**Date Sampled:**	11/30/17
Matrix:	AQ - Ground Water	**Date Received:**	12/01/17
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	2Z66067.D	1	12/09/17 06:20	DS	12/05/17 20:15	OP8395	G2Z2489
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)	146	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	99%		22-140%
16416-32-3	Tetracosane-d50	95%		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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW

E

SGS ACCUTEST

CHAIN OF CUSTODY

PAGE 1 OF 1

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL 732-329-0200 FAX 732-329-3499/3480
www.accutest.com

FED-EX Tracking #:
Bottle Order Control #:
SGS Accutest Quote #:
SGS Accutest Job #: JC56388

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

Company Name	Groundwater & Environmental Services, Inc.
Street Address	1350 Blair Drive, Suite A
City / State / Zip	Odenton, MD 21113
Project Contact / E-mail	Ashley Bell Abell@gesonline.com
Phone # / Fax #	800-220-3606 x 3704
Sampler(s) Name(s) / Phone #	Amelia Ryan
Project Name	NRG PRGS
Street	1400 North Royal St
City / State	Alexandria, VA
Project #	0402919 - 51 - 206, Org 0404
Client Purchase Order #	
Project Manager	Ashley Bell
Billing Information (if different from Report to)	
Company Name	
Street Address	
City / State / Zip	
Attention	Send to: ges-invoices@gesonline.com

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled By	Matrix	# of bottles	Number of preserved Bottles: HCl	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TPH-DRO C-10-28 (SW-846 8015B)	BTEX, Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO3-1 & Nitrite NO-2(EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO4 2- (EPA 300.0)	Methane (RSKSOP-175 modified)	TPH-DRO C10-C28 (SW-846 8015B) w/silica gel cleanup (modified 3630c)	Sulfide (EPA 376.2-E-11)	LAB USE ONLY
1	RW-103		11/30/17	9:53	AR		15	10		1	1				X	X	X	X	X	X	X	X	X		E18
2	~~TW-05~~ TW-05 OB		11/30/17	11:45	AR		6	4							X		X				X		X		A5
3	RW-116S		11/30/17	12:48	AR		4	4							X								X		M8
																									V342

INITIAL ASSESSMENT

LABEL VERIFICATION

Turnaround Time (Business days)

Approved By (SGS Accutest PM) / Date:

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labtink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULL T1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format: GES EQEDD
- [ ] Other

Commercial "A" = Results Only; Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

EQEDD Name: NRG PRGS Lab report # :25800.EQEDD.zip

Email lab results to: ~~ashley@gesonline.com~~ OB & ges@equisonline.com
sepregion@gesonline.com

Send invoice to: ges-invoices@ gesonline.com & include Project # & Org #.
0402919 - 51 - 206, Org 0404

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1		15:10		2	12-1-17 1035	
3		12-1-17		4		
5				Custody Seal # 550 Intact / Not intact	Preserved where applicable	On Ice / Cooler Temp 1.8 C-1P

SGS Accutest Sample Receipt Summary

Job Number: JC56388 **Client:** _____ **Project:** _____

Date / Time Received: 12/1/2017 10:35:00 AM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (1.8);

Cooler Temps (Corrected) °C: Cooler 1: (2.7);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC56388: Chain of Custody
Page 2 of 2

The results set forth herein are provided by SGS North America Inc.

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 Job Number: JC59444

Sampling Date: 01/18/18

Report to:

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

Total number of pages in report: 25

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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SGS North America Inc.

Sample Summary

Groundwater & Environmental Services

Job No: JC59444

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
JC59444-1	01/18/18	10:45	JP	01/19/18	AQ	Ground Water	MW-25S
JC59444-2	01/18/18	11:30	JP	01/19/18	AQ	Ground Water	MW-51S
JC59444-3	01/18/18	10:45	JP	01/19/18	AQ	Ground Water	MW-25S
JC59444-3A	01/18/18	10:45	JP	01/19/18	AQ	Ground Water	MW-25S
JC59444-4	01/18/18	10:45	JP	01/19/18	AQ	Ground Water	MW-25S
JC59444-4A	01/18/18	10:45	JP	01/19/18	AQ	Ground Water	MW-25S
JC59444-5	01/18/18	10:45	JP	01/19/18	AQ	Ground Water	MW-25S
JC59444-5A	01/18/18	10:45	JP	01/19/18	AQ	Ground Water	MW-25S
JC59444-6	01/18/18	11:30	JP	01/19/18	AQ	Ground Water	MW-51S
JC59444-6A	01/18/18	11:30	JP	01/19/18	AQ	Ground Water	MW-51S
JC59444-7	01/18/18	11:30	JP	01/19/18	AQ	Ground Water	MW-51S
JC59444-7A	01/18/18	11:30	JP	01/19/18	AQ	Ground Water	MW-51S
JC59444-8	01/18/18	11:30	JP	01/19/18	AQ	Ground Water	MW-51S

Sample Summary
(continued)

Groundwater & Environmental Services

Job No: JC59444

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC59444-8A	01/18/18	11:30	JP	01/19/18	AQ	Ground Water	MW-51S

2

Summary of Hits

Job Number: JC59444
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 01/18/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC59444-1	**MW-25S**					
Fluoranthene		2.1 J	4.0	0.52	ug/l	MADEP EPH REV 1.1
2-Methylnaphthalene		0.86 J	4.0	0.67	ug/l	MADEP EPH REV 1.1
Naphthalene		2.1 J	4.0	0.66	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics (Unadj.)		542	100	50	ug/l	MADEP EPH REV 1.1
C11-C22 Aromatics		537	100	50	ug/l	MADEP EPH REV 1.1
C9-C18 Aliphatics		247	100	50	ug/l	MADEP EPH REV 1.1
JC59444-2	**MW-51S**					
No hits reported in this sample.						
JC59444-3	**MW-25S**					
TPH-DRO (C10-C28)		34.6	0.17	0.17	mg/l	SW846 8015C
JC59444-3A	**MW-25S**					
TPH-DRO (C10-C28) [a]		27.5	0.17	0.17	mg/l	SW846 8015C
JC59444-4	**MW-25S**					
TPH-DRO (C10-C28)		30.3	0.17	0.17	mg/l	SW846 8015C
JC59444-4A	**MW-25S**					
TPH-DRO (C10-C28) [b]		0.834	0.17	0.17	mg/l	SW846 8015C
JC59444-5	**MW-25S**					
TPH-DRO (C10-C28)		34.2	0.17	0.17	mg/l	SW846 8015C
JC59444-5A	**MW-25S**					
TPH-DRO (C10-C28) [c]		3.67	0.17	0.17	mg/l	SW846 8015C
JC59444-6	**MW-51S**					
TPH-DRO (C10-C28)		12.4	0.17	0.17	mg/l	SW846 8015C
JC59444-6A	**MW-51S**					
TPH-DRO (C10-C28) [a]		10.5	0.17	0.17	mg/l	SW846 8015C

Summary of Hits

Job Number: JC59444
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 01/18/18

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC59444-7	**MW-51S**					
TPH-DRO (C10-C28)		12.8	0.17	0.17	mg/l	SW846 8015C
JC59444-7A	**MW-51S**					
TPH-DRO (C10-C28) [b]		0.422	0.17	0.17	mg/l	SW846 8015C
JC59444-8	**MW-51S**					
TPH-DRO (C10-C28)		12.8	0.17	0.17	mg/l	SW846 8015C
JC59444-8A	**MW-51S**					
TPH-DRO (C10-C28) [c]		2.13	0.17	0.17	mg/l	SW846 8015C

(a) Silica powder gel cleanup.
(b) Restek EPH cartridge cleanup.
(c) Phenomenex EPH cartridge cleanup.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-25S		
Lab Sample ID:	JC59444-1	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
Method:	MADEP EPH REV 1.1 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	3Y67094.D	1	01/24/18 14:37	RK	01/22/18 17:20	OP9436	G3Y2509
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	2.1	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	0.86	4.0	0.67	ug/l	J
91-20-3	Naphthalene	2.1	4.0	0.66	ug/l	J
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.)	542	100	50	ug/l	
	C11-C22 Aromatics	537	100	50	ug/l	
	C9-C18 Aliphatics	247	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	59%		40-140%
580-13-2	2-Bromonaphthalene	89%		40-140%
84-15-1	o-Terphenyl	61%		40-140%
321-60-8	2-Fluorobiphenyl	88%		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:	JC59444-2	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
Method:	MADEP EPH REV 1.1 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	3Y67094A.D	1	01/24/18 15:11	RK	01/22/18 17:20	OP9436	G3Y2509
Run #2 [a]	3Y67082.D	1	01/24/18 08:23	RK	01/23/18 12:00	OP9491	G3Y2509

	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	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.)	ND	100	50	ug/l	
	C11-C22 Aromatics	ND	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	54%	33% [b]	40-140%
580-13-2	2-Bromonaphthalene	80%	79%	40-140%
84-15-1	o-Terphenyl	58%	39% [b]	40-140%
321-60-8	2-Fluorobiphenyl	83%	79%	40-140%

(a) Confirmation run.
(b) Outside of in house control 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:	MW-25S		
Lab Sample ID:	JC59444-3	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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	2Y89134.D	1	01/24/18 18:32	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	34.6	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	68%		22-140%
16416-32-3	Tetracosane-d50	50%		13-139%
438-22-2	5a-Androstane	44%		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-25S		
Lab Sample ID:	JC59444-3A	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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]	2Y89135.D	1	01/24/18 19:06	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	27.5	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	63%		22-140%
16416-32-3	Tetracosane-d50	44%		13-139%
438-22-2	5a-Androstane	38%		10-135%

(a) Silica powder 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:	JC59444-4	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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	2Y89136.D	1	01/24/18 19:39	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	30.3	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	59%		22-140%
16416-32-3	Tetracosane-d50	41%		13-139%
438-22-2	5a-Androstane	36%		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-25S		
Lab Sample ID:	JC59444-4A	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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]	2Y89137.D	1	01/24/18 20:13	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.834	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	45%		22-140%
16416-32-3	Tetracosane-d50	26%		13-139%
438-22-2	5a-Androstane	27%		10-135%

(a) Restek EPH cartridge 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:	JC59444-5	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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	2Y89140.D	1	01/24/18 21:53	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2 [a]	2Z67183.D	1	01/26/18 02:24	DS	01/24/18 13:10	OP9550	G2Z2523

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2	300 ml	2.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	34.2	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	51%	56%	22-140%
16416-32-3	Tetracosane-d50	37%	39%	13-139%
438-22-2	5a-Androstane	37%	51%	10-135%

(a) Confirmation run.

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-25S		
Lab Sample ID:	JC59444-5A	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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]	2Y89141.D	1	01/24/18 22:27	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2 [b]	2Z67184.D	1	01/26/18 02:58	DS	01/24/18 13:10	OP9550	G2Z2523

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2	300 ml	2.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	3.67	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	44%	37%	22-140%
16416-32-3	Tetracosane-d50	26%	30%	13-139%
438-22-2	5a-Androstane	27%	29%	10-135%

(a) Phenomenex EPH cartridge cleanup.
(b) Phenomenex EPH cartridge cleanup. 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:	MW-51S		
Lab Sample ID:	JC59444-6	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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	2Y89142.D	1	01/24/18 23:00	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12.4	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	76%		22-140%
16416-32-3	Tetracosane-d50	48%		13-139%
438-22-2	5a-Androstane	43%		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:	JC59444-6A	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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]	2Y89143.D	1	01/24/18 23:34	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	10.5	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	72%		22-140%
16416-32-3	Tetracosane-d50	47%		13-139%
438-22-2	5a-Androstane	42%		10-135%

(a) Silica powder 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-51S		
Lab Sample ID:	JC59444-7	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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	2Y89144.D	1	01/25/18 00:07	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12.8	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		22-140%
16416-32-3	Tetracosane-d50	57%		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-51S		
Lab Sample ID:	JC59444-7A	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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]	2Y89145.D	1	01/25/18 00:41	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2							

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	0.422	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	64%		22-140%
16416-32-3	Tetracosane-d50	38%		13-139%
438-22-2	5a-Androstane	39%		10-135%

(a) Restek EPH cartridge 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-51S		
Lab Sample ID:	JC59444-8	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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	2Y89146.D	1	01/25/18 01:14	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2 [a]	2Z67188.D	1	01/26/18 05:11	DS	01/24/18 13:10	OP9550	G2Z2523

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2	300 ml	2.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	12.8	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	83%	63%	22-140%
16416-32-3	Tetracosane-d50	53%	56%	13-139%
438-22-2	5a-Androstane	48%	54%	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:	MW-51S		
Lab Sample ID:	JC59444-8A	**Date Sampled:**	01/18/18
Matrix:	AQ - Ground Water	**Date Received:**	01/19/18
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]	2Y89147.D	1	01/25/18 01:48	DS	01/23/18 10:00	OP9469	G2Y3395
Run #2 [b]	2Z67189.D	1	01/26/18 05:44	DS	01/24/18 13:10	OP9550	G2Z2523

	Initial Volume	Final Volume
Run #1	300 ml	2.0 ml
Run #2	300 ml	2.0 ml

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-DRO (C10-C28)	2.13	0.17	0.17	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	70%	45%	22-140%
16416-32-3	Tetracosane-d50	37%	37%	13-139%
438-22-2	5a-Androstane	40%	36%	10-135%

(a) Phenomenex EPH cartridge cleanup.
(b) Phenomenex EPH cartridge cleanup. 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:

- Chain of Custody

GW

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC59444

Client	Project Name:	
Company Name: GES	NRG	
Street Address: 1350 Blair Drive, Suite A	Street: 1400 N. Royal Street	Billing Information (if different from Report to)
City: Odenton State: MD Zip: 21113	City: Alexandria State: VA	Company Name
Project Contact: Ashley Bell E-mail:	Project #: 0402919-51-206	Street Address
Phone #: 800-220-3606 x. 3704 Fax #:	Client Purchase Order #	City State Zip
Sampler(s) Name(s): Jeff Plummer Phone #:	Project Manager: Ashley Bell	Attention:

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	EnCore	MADEP-EPH-98-1 SW846 3510C	TPH-DRO (8015)					LAB USE ONLY
1	MW-25S	•	1/18/18	1045	JP	GW	6	6								X	X	XX TPH-DRO AG (1)	XX TPH-DRO silica gel column AG	XX TPH-DRO silica gel column AG	XX TPH-EPH AG	E94
2	MW-51S	•	1/18/18	1130	JP	GW	6	6								X	X					

INITIAL ASSESSMENT: HA 1/19/18

LABEL VERIFICATION:

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [X] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labilink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Please run EPH upon arrival. Please hold TPH-DRO analyses and see Matt Cordova for login

• 6 x 300 mL DRO @ 1/19/18

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler	Date Time	Received By	Relinquished By	Date Time	Received By
1		1/18/18 1530	Louise Woodring	Louise Woodring	1-19-18 10:51	
2						
3		1-19-18				
4						
5		1/18/18 1880		Custody Seal # 250	Intact / Not Intact	Preserved where applicable: On Ice ✓ Cooler Temp: 2.6 C-1 P

SGS Sample Receipt Summary

Job Number: JC59444 **Client:** _____ **Project:** _____

Date / Time Received: 1/19/2018 6:40:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.6);

Cooler Temps (Corrected) °C: Cooler 1: (3.5);

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

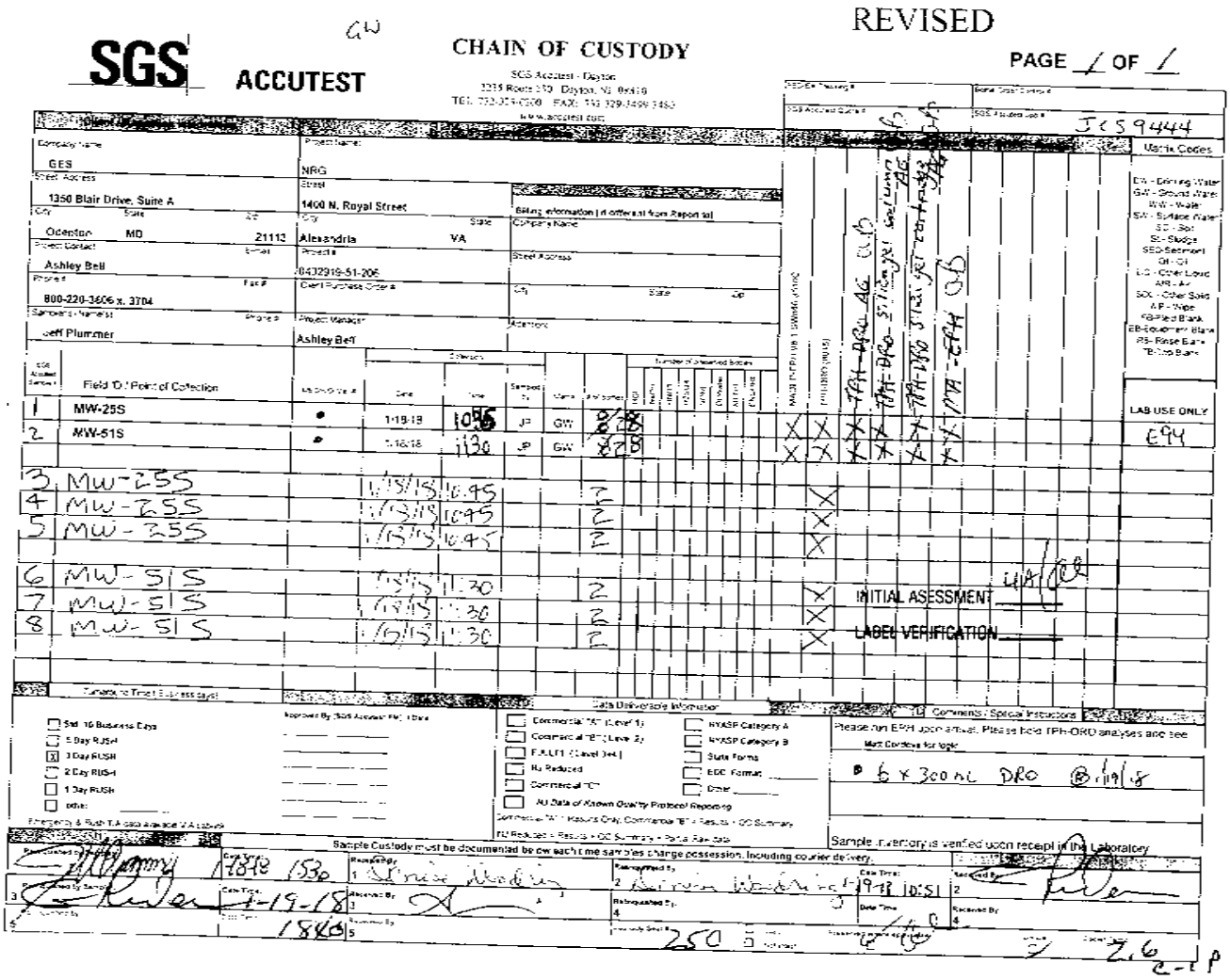
Sample Integrity - Instructions

	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17



SGS ACCUTEST

GW

CHAIN OF CUSTODY

REVISED

PAGE 1 OF 1

SGS Accutest - Dayton
3235 Route 130 Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732 329-3499/3480
www.accutest.com

JC59444

Company Name: GES
Street Address: 1350 Blair Drive, Suite A
City: Odenton State: MD Zip: 21113
Project Contact: Ashley Bell
Phone #: 800-220-3606 x. 3704
Sampler(s) Name(s): Jeff Plummer

Project Name: NRG
Street: 1400 N. Royal Street
City: Alexandria State: VA
Project #: 0432919-51-206
Client Purchase Order #:
Project Manager: Ashley Bell

Billing Information (if different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention:

Matrix Codes
DW - Drinking Water
GW - Ground Water
WW - Water
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

#	Field ID / Point of Collection	Date	Time	Sampled by	Matrix	# of bottles	Preservation	Analysis	LAB USE ONLY
1	MW-25S	1-18-18	1056	JP	GW	6	HCl	DRO	E94
2	MW-51S	1-16-18	1130	JP	GW	6	HCl	DRO	
3	MW-25S	1/15/18	10:45			2			
4	MW-25S	1/15/18	10:45			2			
5	MW-25S	1/15/18	10:45			2			
6	MW-51S	1/15/18	1:30			2			
7	MW-51S	1/15/18	1:30			2			
8	MW-51S	1/15/18	1:30			2			

INITIAL ASSESSMENT
LABEL VERIFICATION

Turnaround Time (Business days)
- Std. 10 Business Days
- 5 Day RUSH
- 3 Day RUSH
- 2 Day RUSH
- 1 Day RUSH
- other:

Approved By (SGS Accutest PM): / Date:

Data Deliverable Information
- Commercial "A" (Level 1)
- Commercial "B" (Level 2)
- FULL1 (Level 3+4)
- RL Reduced
- Commercial "C"
- NJ Data of Known Quality Protocol Reporting

NYASP Category A
NYASP Category B
State Forms
EDD Format:
Other:

Comments / Special Instructions
Please run EPH upon arrival. Please bold TPH-DRO analyses and see Matt Cordova for logic
8 6 x 300 mL DRO @ 1/19/18

Sample Custody must be documented below each time samples change possession, including courier delivery.

Sample Integrity is verified upon receipt in the Laboratory

	Relinquished By	Date Time	Received By
1		1/18/18 1530	
2		1-19-18 1851	
3			
4			
5			

Cooler Temp: 2.6 2-1P

Attachment D – Laboratory Analytical Reports and Chains of Custody Documentation - System Sampling

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, 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: JC52541

Sampling Date: 10/03/17

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: **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 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: JC52541

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
JC52541-1	10/03/17	10:30	JP	10/05/17	AQ	Effluent	EFFLUENT
JC52541-2	10/03/17	10:45	JP	10/05/17	AQ	Ground Water	POST OWS
JC52541-3	10/03/17	11:00	JP	10/05/17	AQ	Influent	P&T INFLUENT

Summary of Hits

Job Number: JC52541
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 10/03/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC52541-1	**EFFLUENT**					
Chloroform [a]		0.35 J	1.0	0.20	ug/l	EPA 624
Tetrachloroethene [a]		2.3	1.0	0.82	ug/l	EPA 624
TPH-DRO (C10-C28)		0.909	0.083	0.083	mg/l	SW846 8015C
Copper		59.1	10		ug/l	SW846 6010C
Nickel		10.4	10		ug/l	SW846 6010C
Zinc		78.7	20		ug/l	SW846 6010C
JC52541-2	**POST OWS**					
TPH-DRO (C10-C28)		0.812	0.083	0.083	mg/l	SW846 8015C
JC52541-3	**P&T INFLUENT**					
TPH-DRO (C10-C28)		0.757	0.083	0.083	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.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
Method:	EPA 624	**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]	N265228.D	1	10/11/17 22:21	PR	n/a	n/a	VN11178
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	0.35	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	2.3	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		
Lab Sample ID:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
Method:	EPA 624	**Percent Solids:**	n/a
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)	116%		76-122%
2037-26-5	Toluene-D8 (SUR)	96%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	89%		80-120%
1868-53-7	Dibromofluoromethane (S)	107%		80-120%

(a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.

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:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
Method:	EPA 625 EPA 625	**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	F170956.D	1	10/13/17 21:02	RL	10/09/17 20:30	OP6774	EF7257
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 [a]	ND	5.0	0.96	ug/l	
100-02-7	4-Nitrophenol	ND	10	1.2	ug/l	
87-86-5	Pentachlorophenol [b]	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
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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:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
Method:	EPA 625 EPA 625	**Percent Solids:**	n/a
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 [a]	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	33%		10-110%
4165-62-2	Phenol-d5	22%		10-110%
118-79-6	2,4,6-Tribromophenol	70%		35-147%
4165-60-0	Nitrobenzene-d5	65%		32-132%
321-60-8	2-Fluorobiphenyl	63%		40-117%
1718-51-0	Terphenyl-d14	61%		33-126%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.

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:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
Method:	EPA 608 EPA 608	**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	8G9765.D	1	10/09/17 16:23	DM	10/09/17 01:30	OP6771	G8G291
Run #2	5G74467.D	1	10/09/17 18:18	RK	10/09/17 01:30	OP6770	G5G1730

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2	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 [a]	0.25	0.17	ug/l	
11104-28-2	Aroclor 1221	ND [a]	0.25	0.15	ug/l	
11141-16-5	Aroclor 1232	ND [a]	0.25	0.10	ug/l	
53469-21-9	Aroclor 1242	ND [a]	0.25	0.14	ug/l	
12672-29-6	Aroclor 1248	ND [a]	0.25	0.13	ug/l	
11097-69-1	Aroclor 1254	ND [a]	0.25	0.17	ug/l	
11096-82-5	Aroclor 1260	ND [a]	0.25	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	99%	80%	10-156%
877-09-8	Tetrachloro-m-xylene	74%	72%	10-156%
2051-24-3	Decachlorobiphenyl	101%	82%	10-143%

ND = Not detected MDL = Method Detection Limit
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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:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
Method:	EPA 608 EPA 608	**Percent Solids:**	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Pesticide PPL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2051-24-3	Decachlorobiphenyl	104%	77%	10-143%

(a) 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:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
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	2Z64868.D	1	10/10/17 21:55	DS	10/09/17 18:30	OP6776	G2Z2444
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)	0.909	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	55%		22-140%
16416-32-3	Tetracosane-d50	70%		13-139%
438-22-2	5a-Androstane	77%		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:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
		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	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Cadmium	< 3.0	3.0	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Copper	59.1	10	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	10/09/17	10/09/17	JPM	SW846 7470A [1]	SW846 7470A [4]
Molybdenum	< 20	20	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Nickel	10.4	10	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Silver	< 10	10	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]
Zinc	78.7	20	ug/l	1	10/09/17	10/10/17	GT	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA42961
(2) Instrument QC Batch: MA42969
(3) Prep QC Batch: MP3381
(4) Prep QC Batch: MP3391

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC52541-1	**Date Sampled:**	10/03/17
Matrix:	AQ - Effluent	**Date Received:**	10/05/17
		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	10/16/17 13:09	BM	EPA 335.4/LACHAT
HEM Oil and Grease	< 5.1	5.1	mg/l	1	10/08/17 14:35	CB	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	POST OWS		
Lab Sample ID:	JC52541-2	**Date Sampled:**	10/03/17
Matrix:	AQ - Ground Water	**Date Received:**	10/05/17
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	2Z64869.D	1	10/10/17 22:28	DS	10/09/17 18:30	OP6776	G2Z2444
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)	0.812	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	76%		13-139%
438-22-2	5a-Androstane	85%		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		
Lab Sample ID:	JC52541-2	**Date Sampled:**	10/03/17
Matrix:	AQ - Ground Water	**Date Received:**	10/05/17
		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	10/08/17 14:35	CB	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	P&T INFLUENT		
Lab Sample ID:	JC52541-3	**Date Sampled:**	10/03/17
Matrix:	AQ - Influent	**Date Received:**	10/05/17
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	2Z64870.D	1	10/10/17 23:02	DS	10/09/17 18:30	OP6776	G2Z2444
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)	0.757	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	81%		13-139%
438-22-2	5a-Androstane	87%		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

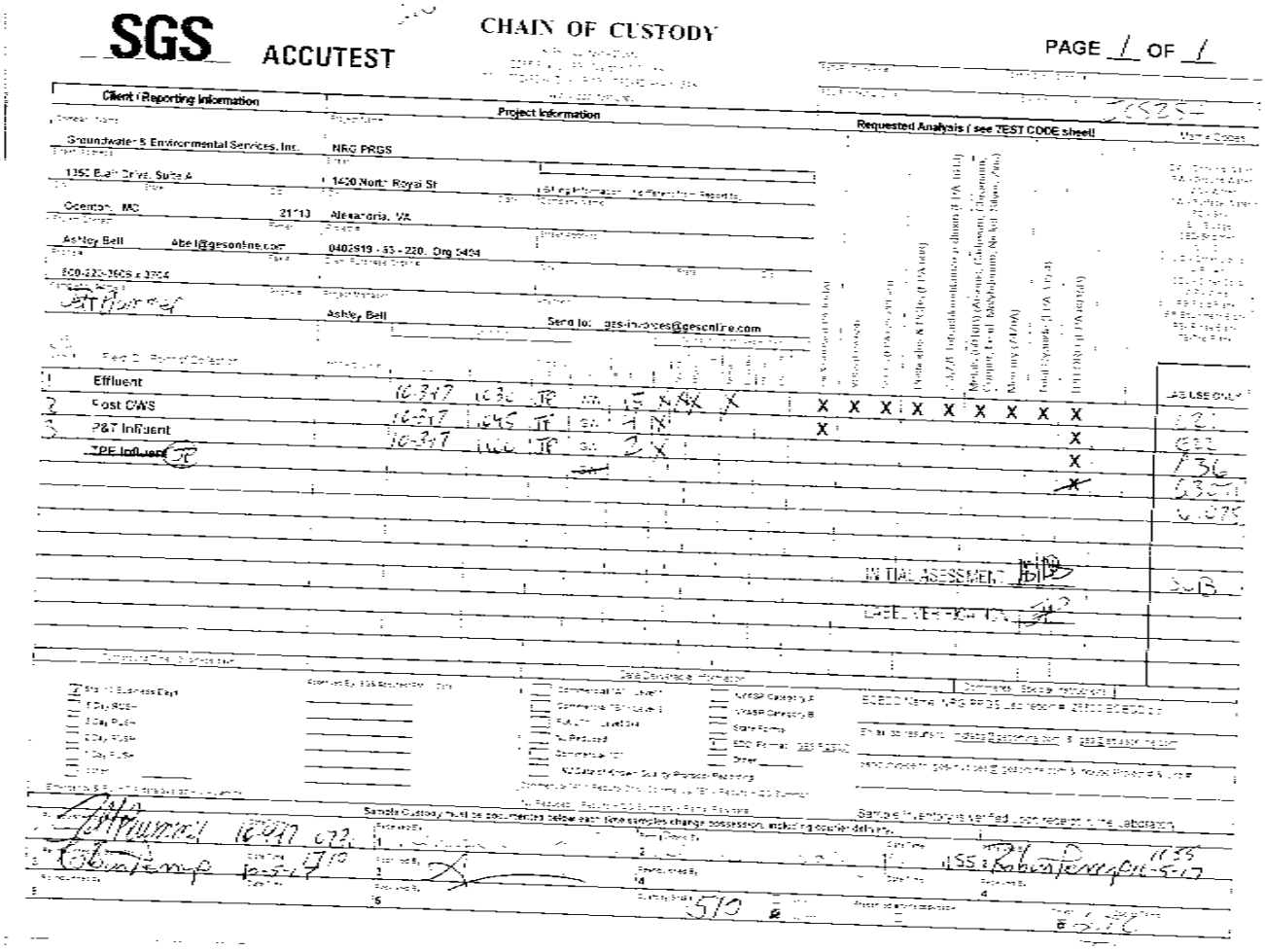
Job Number: JC52541
Account: GESMD Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Client / Reporting Information

Groundwater & Environmental Services, Inc.

1352 Exeter Drive, Suite A

Ocean, MD 21113

Ashley Bell Abell@gesonline.com

Project Information

NRG PRGS

1620 North Royal St

Alexandria, VA

0402819 - 53 - 220 Org 5404

Send to: ges-invoices@gesonline.com

Requested Analysis (see TEST CODE sheet)

Effluent

Post GWS

P&T Influent

TPE Influent

INITIAL ASSESSMENT

Sample Custody must be documented below each time samples change possession, including courier delivery.

Sample Integrity is verified upon receipt in the laboratory.

SGS Accutest Sample Receipt Summary

Job Number: JC52541 **Client:** _____ **Project:** _____

Date / Time Received: 10/5/2017 5:10:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.8);

Cooler Temps (Corrected) °C: Cooler 1: (1.2);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC52541: Chain of Custody
Page 2 of 2

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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: JC52541X

Sampling Date: 10/03/17

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: **19**

NELAP ACCREDITED TNI LABORATORY

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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Sample Summary

Groundwater & Environmental Services

Job No: JC52541X

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC52541-1X	10/03/17	10:30	JP	10/05/17	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 (ºC)
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

Sample ID: Effluent — Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	SGS Accutest	Matrix:	Aqueous	Lab Project ID:	B1361	Date Received:	07-Oct-2017
Project ID:	JC52541X	Weight/Volume:	0.99 L	Lab Sample ID	B1361_15193_DF_001	Date Extracted:	09-Oct-2017
Date Collected:	03-Oct-2017	pH:	5	QC Batch No:	15193	Date Analyzed:	11-Oct-2017
		Split:	-	Dilution:	-	Time Analyzed:	11:24:33

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.1			ES 2378-TCDD	80.1	

Totals					Standard	CS Recoveries	
					CS 37Cl-2378-TCDD	80.2	

SGS
5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample ID: Method Blank B1361_15193 — Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	SGS Accutest	Matrix:	Aqueous	Lab Project ID:	B1361	Date Received:	n/a
Project ID:	JC52541X	Weight/Volume:	1.00 L	Lab Sample ID	MB1_15193_DF_TLX	Date Extracted:	09-Oct-2017
Date Collected:	n/a	pH:	n/a	QC Batch No:	15193	Date Analyzed:	11-Oct-2017
		Split:	-	Dilution:	-	Time Analyzed:	5:49:49

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	4.28			ES 2378-TCDD	78.4	

Totals					Standard	CS Recoveries	
					CS 37Cl-2378-TCDD	82	

SGS
5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_09062018_09OCT2017		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	171011R02	Analysis Date:	11-OCT-2017 04:14:13
Lab ID:	OPR1_15193_DF		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	10	9.39	6.7 - 15.8	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 12 Oct 2017 07:57 Analyst: pw

SGS ACCUTEST
13 of 19
JC52541X

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_09062018_09OCT2017		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	171011R02	Analysis Date:	11-OCT-2017 04:14:13
Lab ID:	OPR1_15193_DF		

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	74.1	20	-	175	Y

CLEANUP STANDARD

37Cl-2,3,7,8-TCDD	40	30.7	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 12 Oct 2017 07:57 Analyst: pw

SGS ACCUTEST
JC52541X
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Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Morgan*
Receipt Date & Time:	*07-Oct-17 at 10:50*
AP Project name:	*B1361*
Requested TAT:	*14 days*
Projected due date:	*23-Oct-17*
Matrix:	*Aqueous*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Matt Cordova*
Company:	*SGS Accutest*
Project Name & Site:	*JC52541X*
Project PO#:	*JC52541X*
QAAP/Contract #:	*N/A*
Requested Analysis:	*Method 1613B TCDD only*
Phone#:	*732-329-0200*
Email Address:	*matthew.cordova@sgs.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp	Container #	Shipping #
Effluent	B1361_001	AQ	2	1-Liter Amber	03-Oct-17	10:30	0.3	1	5633 9350 6543

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact.

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Mark Collare *Logged in by: Ashley Owens* *QC'ed by:* AK 9 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

B1361
Page 1 of 1

CHAIN OF CUSTODY

SGS ACCUTEST

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com

FED-EX Tracking # 5633 9350 6543 | Bottle Order Control #
SGS Accutest Quote # | SGS Accutest Job # JC52541X

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: Matthew.Cordova@sgs.com E-mail:
Phone #: 732-329-0200 Fax #:
Sampler(s) Name(s): JP Phone:

Project Information

Project Name: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Street:
City: State:
Project #:
Client Purchase Order #:
Project Manager:

Billing Information (if different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	TCDD Method 1613,	LAB USE ONLY
1X	EFFLUENT		10/3/17	10:30:00 AM	JP	AQ	2					2				X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other 14

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 10-6-17 1700	Received By: 1 FEDEX	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time:	Received By: 4
Relinquished by: 5	Date Time: 10/7/17 1055	Received By: 5	Custody Seal # 372	Intact / Not intact	Preserved where applicable: On Ice ☑ Cooler Temp. 0.3°C

SGS ACCUTEST JC52541X 16 of 19

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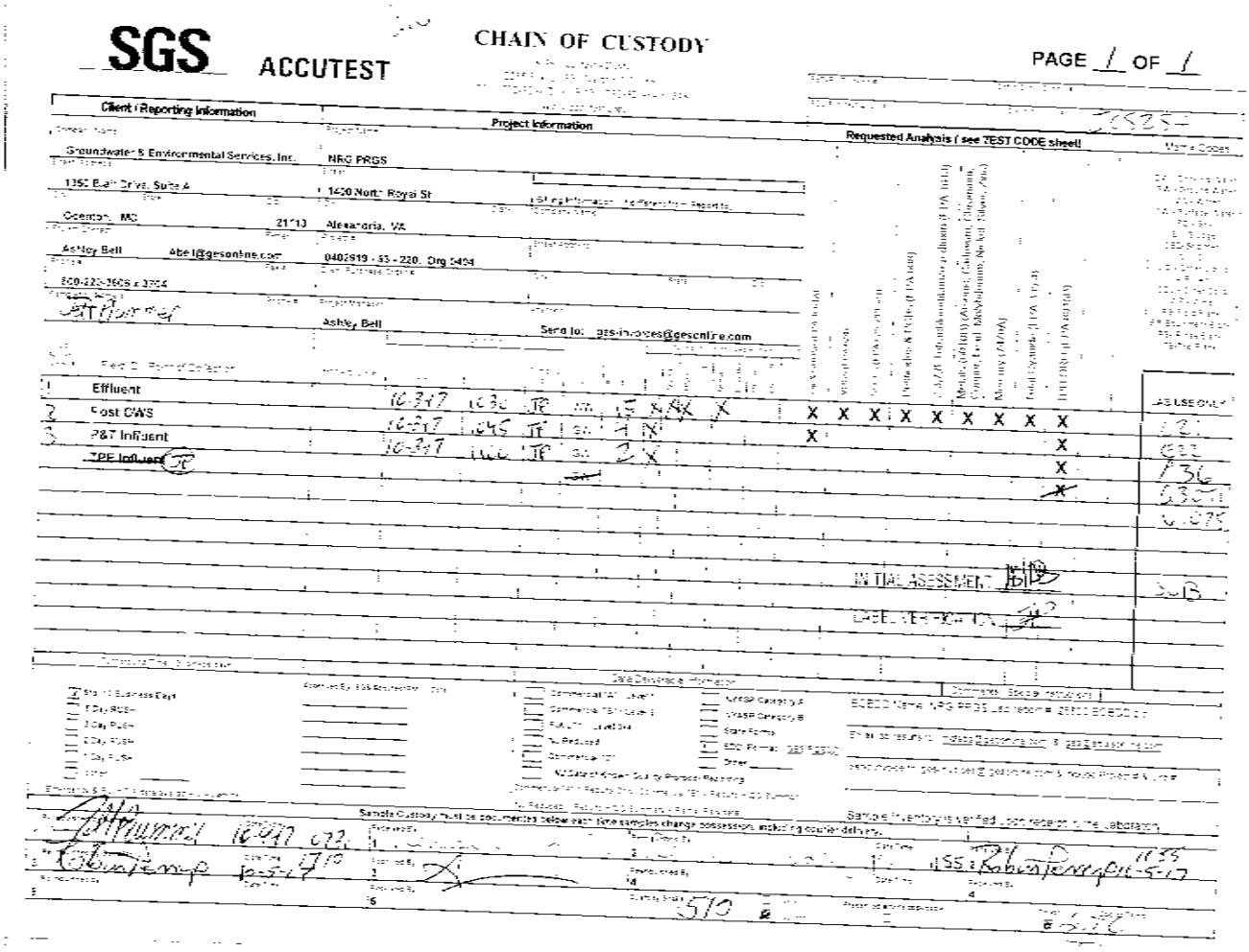
Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



SGS ACCUTEST

CHAIN OF CUSTODY

PAGE 1 OF 1

Client / Reporting Information

Groundwater & Environmental Services, Inc.
1352 Exeter Drive, Suite A
Ocean, MD 21113
Ashley Bell Abell@gesonline.com
800-220-3068 x 3704

Project Information

NRG PRGS
1620 North Royal St
Alexandria, VA
0402819 - 53 - 220 Org 5404
Ashley Bell
Send to: ges-invoices@gesonline.com

Requested Analysis (see TEST CODE sheet)

1	Effluent
2	Post CWS
3	P&T Influent
	TPE Influent

INITIAL ASSESSMENT

Sample Custody must be documented below each time samples change possession, including courier delivery.

Sample Integrity is verified upon receipt in the laboratory.

SGS Accutest Sample Receipt Summary

Job Number: JC52541 **Client:** _____ **Project:** _____

Date / Time Received: 10/5/2017 5:10:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.8);

Cooler Temps (Corrected) °C: Cooler 1: (1.2);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC52541X: Chain of Custody
Page 2 of 2

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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: JC54732

Sampling Date: 11/02/17

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: **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 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: JC54732

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
JC54732-1	11/02/17	10:30	JP	11/03/17	AQ	Effluent	EFFLUENT
JC54732-2	11/02/17	10:45	JP	11/03/17	AQ	Ground Water	POST OWS
JC54732-3	11/02/17	11:00	JP	11/03/17	AQ	Influent	P & T INFLUENT

Summary of Hits

Job Number: JC54732
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 11/02/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC54732-1	**EFFLUENT**					
Tetrachloroethene [a]		1.5	1.0	0.82	ug/l	EPA 624
Acenaphthene		0.64 J	1.0	0.19	ug/l	EPA 625
bis(2-Ethylhexyl)phthalate		2.7	2.0	1.7	ug/l	EPA 625
Phenanthrene		0.41 J	1.0	0.18	ug/l	EPA 625
TPH-DRO (C10-C28)		0.320	0.083	0.083	mg/l	SW846 8015C
Copper		14.0	10		ug/l	SW846 6010C
Nickel		10.8	10		ug/l	SW846 6010C
Zinc		23.3	20		ug/l	SW846 6010C
JC54732-2	**POST OWS**					
TPH-DRO (C10-C28)		0.200	0.083	0.083	mg/l	SW846 8015C
JC54732-3	**P & T INFLUENT**					
TPH-DRO (C10-C28)		0.189	0.083	0.083	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.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
Method:	EPA 624	**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]	N265893.D	1	11/07/17 22:16	CSF	n/a	n/a	VN11204
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	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	1.5	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		
Lab Sample ID:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
Method:	EPA 624	**Percent Solids:**	n/a
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)	102%		76-122%
2037-26-5	Toluene-D8 (SUR)	95%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	89%		80-120%
1868-53-7	Dibromofluoromethane (S)	97%		80-120%

(a) Results reported from the HCl preserved sample. This reported result can only be used for screening purposes for acrolein and acrylonitrile.

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:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
Method:	EPA 625 EPA 625	**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	F171976.D	1	11/13/17 23:56	RL	11/07/17 09:20	OP7650	EF7296
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 [a]	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	0.64	1.0	0.19	ug/l	J
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		
Lab Sample ID:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
Method:	EPA 625 EPA 625	**Percent Solids:**	n/a
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 [a]	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	2.7	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 [b]	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 [a]	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	0.41	1.0	0.18	ug/l	J
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	27%		10-110%
4165-62-2	Phenol-d5	17%		10-110%
118-79-6	2,4,6-Tribromophenol	63%		35-147%
4165-60-0	Nitrobenzene-d5	69%		32-132%
321-60-8	2-Fluorobiphenyl	60%		40-117%
1718-51-0	Terphenyl-d14	78%		33-126%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV outside of control limits low.

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:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
Method:	EPA 608 EPA 608	**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	1G140843.D	1	11/16/17 03:12	CP	11/06/17 16:45	OP7570	G1G4473
Run #2	5G75277.D	1	11/16/17 05:44	RK	11/06/17 16:45	OP7569	G5G1766

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2	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 [a]	0.25	0.17	ug/l	
11104-28-2	Aroclor 1221	ND [a]	0.25	0.15	ug/l	
11141-16-5	Aroclor 1232	ND [a]	0.25	0.10	ug/l	
53469-21-9	Aroclor 1242	ND [a]	0.25	0.14	ug/l	
12672-29-6	Aroclor 1248	ND [a]	0.25	0.13	ug/l	
11097-69-1	Aroclor 1254	ND [a]	0.25	0.17	ug/l	
11096-82-5	Aroclor 1260	ND [a]	0.25	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	90%	89%	10-156%
877-09-8	Tetrachloro-m-xylene	72%	100%	10-156%
2051-24-3	Decachlorobiphenyl	98%	90%	10-143%

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:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
Method:	EPA 608 EPA 608	**Percent Solids:**	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Pesticide PPL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2051-24-3	Decachlorobiphenyl	66%	98%	10-143%

(a) 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:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
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	2Z65412.D	1	11/08/17 23:05	DS	11/07/17 19:50	OP7651	G2Z2466
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)	0.320	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	91%		13-139%
438-22-2	5a-Androstane	82%		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:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
		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	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 3.0	3.0	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Copper	14.0	10	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	11/14/17	11/14/17	JPM	SW846 7470A [2]	SW846 7470A [4]
Molybdenum	< 20	20	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Nickel	10.8	10	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Silver	< 10	10	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]
Zinc	23.3	20	ug/l	1	11/06/17	11/08/17	GT	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA43185
(2) Instrument QC Batch: MA43230
(3) Prep QC Batch: MP4071
(4) Prep QC Batch: MP4239

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC54732-1	**Date Sampled:**	11/02/17
Matrix:	AQ - Effluent	**Date Received:**	11/03/17
		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	11/09/17 08:46	BM	EPA 335.4/LACHAT
HEM Oil and Grease	< 5.2	5.2	mg/l	1	11/10/17 21:30	CB	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	POST OWS		
Lab Sample ID:	JC54732-2	**Date Sampled:**	11/02/17
Matrix:	AQ - Ground Water	**Date Received:**	11/03/17
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	2Z65413.D	1	11/08/17 23:38	DS	11/07/17 19:50	OP7651	G2Z2466
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)	0.200	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	75%		22-140%
16416-32-3	Tetracosane-d50	95%		13-139%
438-22-2	5a-Androstane	83%		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		
Lab Sample ID:	JC54732-2	**Date Sampled:**	11/02/17
Matrix:	AQ - Ground Water	**Date Received:**	11/03/17
		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	11/10/17 21:30	CB	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	P & T INFLUENT		
Lab Sample ID:	JC54732-3	**Date Sampled:**	11/02/17
Matrix:	AQ - Influent	**Date Received:**	11/03/17
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	2Z65414.D	1	11/09/17 00:11	DS	11/07/17 19:50	OP7651	G2Z2466
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)	0.189	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	98%		13-139%
438-22-2	5a-Androstane	85%		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: JC54732
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.

GW SUB

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC54732

Client / Reporting Information | **Project Information** | **Requested Analysis (see TEST CODE sheet)** | Matrix Codes

Company Name: Groundwater & Environmental Services, Inc.
Street Address: 1350 Blair Drive, Suite A
City: Odenton, State: MD, Zip: 21113
Project Contact: Ashley Bell, E-mail: Abell@gesonline.com
Phone #: 800-220-3606 x 3704, Fax #:
Sampler(s) Name(s): Jeff Plummer, Phone #:

Project Name: NRG PRGS
Street: 1400 North Royal St
City: Alexandria, State: VA
Project #: 0402919 - 53 - 220, Org 0404
Client Purchase Order #:
Project Manager: Ashley Bell

Billing Information (if different from Report to)
Company Name:
Street Address:
City: State: Zip:
Attention:
Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	EnCORE	Oil & Grease (EPA 1664A)	VOCs (EPA 624)	SVOCs (EPA 625, PPL list)	Pesticides & PCBs (EPA 608)	2,3,7,8-Tetrachlorodibenzo p-dioxin (EPA 1613)	Metals (6010B) (Arsenic, Cadmium, Chromium, Copper, Lead, Molybdenum, Nickel, Silver, Zinc)	Mercury (7470A)	Total Cyanide (EPA 335.4)	TPH-DRO (EPA 8015B)			LAB USE ONLY
1	Effluent		11-2-17	1030	JP	WW	15	X		X		X				X	X	X	X	X	X	X	X	X			E74
2	Post OWS		11-2-17	1045	JP	GW	4	X								X								X			G4 T3
3	P&T Influent		11-2-17	1100	JP	GW	2	X																X			V126
	~~TPE Influent~~ JP					~~GW~~																		~~X~~			L32 SJ3

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labtink

Approved By (SGS Accutest PM): / Date:

INITIAL ASESSMENT IB DOM

LABEL VERIFICATION

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format GES EQEDD
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

EQEDD Name: NRG PRGS.Lab report # .25800.EQEDD.zip

Email lab results to: mdlabs@gesonline.com & ges@equisonline.com

Send invoice to: ges-invoices@ gesonline.com & include Project # & Org #.

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Jeff Plummer	11-3-17 0740	Denise Woodrow	Denise Woodrow	11-3-17 1055	
2						
3		11-3-17 1750				
4						
5	Relinquished by:	Date Time:	Received By: 6	Custody Seal # 546	Intact / Not intact	Preserved where applicable	On Ice	Cooler Temp 3.2 C-IP

SGS Accutest Sample Receipt Summary

Job Number: JC54732 **Client:** _____ **Project:** _____

Date / Time Received: 11/3/2017 5:50:00 PM **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:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC54732: 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

0402919-53-220, ORG # 0404

SGS Accutest Job Number: JC54732X

Sampling Date: 11/02/17

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: **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 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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Sample Summary

Groundwater & Environmental Services

Job No: JC54732X

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

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
JC54732-1X	11/02/17	10:30	JP	11/03/17	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 (ºC)
Extraction within Holding Time
Analysis within Holding Time

ACCUTEST
JC54732X

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

Sample ID: Effluent

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	SGS Accutest	Matrix:	Aqueous	Lab Project ID:	B1545	Date Received:	07-Nov-2017
Project ID:	JC54732X	Weight/Volume:	1.01 L	Lab Sample ID	B1545_15293_DF_001	Date Extracted:	13-Nov-2017
Date Collected:	02-Nov-2017	pH:	6	QC Batch No:	15293	Date Analyzed:	15-Nov-2017
		Split:	-	Dilution:	-	Time Analyzed:	19:54:19

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.79			ES 2378-TCDD	83.5	

Totals					Standard	CS Recoveries	
					CS 37Cl-2378-TCDD	83.1	

SGS
5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample ID: Method Blank B1545_15293 — Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	SGS Accutest	Matrix:	Aqueous	Lab Project ID:	B1545	Date Received:	n/a
Project ID:	JC54732X	Weight/Volume:	1.00 L	Lab Sample ID	MB1_15293_DF_TLX	Date Extracted:	13-Nov-2017
Date Collected:	n/a	pH:	n/a	QC Batch No:	15293	Date Analyzed:	15-Nov-2017
		Split:	-	Dilution:	-	Time Analyzed:	17:30:45

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	2.35			ES 2378-TCDD	92.1	

Totals					Standard	CS Recoveries	
					CS 37Cl-2378-TCDD	93.4	

SGS
5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_09062018_09OCT2017		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	171115R08	Analysis Date:	15-NOV-2017 15:56:19
Lab ID:	OPR1_15293_DF-RJ		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	10	9.52	6.7 - 15.8	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 16 Nov 2017 10:30 Analyst: pw

SGS ACCUTEST
13 of 19
JC54732X

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_09062018_09OCT2017		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	171115R08	Analysis Date:	15-NOV-2017 15:56:19
Lab ID:	OPR1_15293_DF-RJ		

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	100	84.3	20	-	175	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	40	33.5	12.4	-	76.4	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 16 Nov 2017 10:30 Analyst: pw

SGS ACCUTEST
JC54732X

Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Morgan*
Receipt Date & Time:	*07-Nov-17 at 10:21*
AP Project name:	*B1545*
Requested TAT:	*14 days*
Projected due date:	*21-Nov-17*
Matrix:	*Aqueous*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Matt Cordova*
Company:	*SGS Accutest*
Project Name & Site:	*JC54732X*
Project PO#:	*JC54732X*
QAAP/Contract #:	*N/A*
Requested Analysis:	*Method 1613B TCDD only*
Phone#:	*732-329-0200*
Email Address:	*matthew.cordova@sgs.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp	Container #	Shipping #
Effluent	B1545_001	AQ	2	1-Liter Amber	02-Nov-17	10:30	0.6	1	5633 9350 8590

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact.

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: *Ashley Owens* *Logged in by:* *Ashley Owens* *QC'ed by:* AK 8 Nov 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

B1545
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CHAIN OF CUSTODY

SGS ACCUTEST

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com

FED-EX Tracking # 5633 9350 8590 | Bottle Order Control #
SGS Accutest Quote # | SGS Accutest Job # JC54732X

Client / Reporting Information

Company Name: SGS Accutest
Street Address: 2235 Route 130
City: Dayton State: NJ Zip: 08810
Project Contact: Matthew.Cordova@sgs.com E-mail
Phone #: 732-329-0200 Fax #
Sampler(s) Name(s): JP Phone

Project Information

Project Name: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Street
City State
Project #
Client Purchase Order #
Project Manager

Billing Information (if different from Report to)

Company Name
Street Address
City State Zip
Attention:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SB1613TCDD,
1X	EFFLUENT		11/2/17	10:30:00 AM	JP	AQ	2					2				X

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

LAB USE ONLY

Comments / Special Instructions

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day EMERGENCY
- [ ] 2 Day EMERGENCY
- [ ] 1 Day EMERGENCY
- [X] other 14

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [X] Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler: 1	Date Time: 11-6-17 1200	Received By: 1 FEDEX	Relinquished By: 2	Date Time:	Received By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4	Date Time: 11/7/17 10:21	Received By: 4 Ashley OWENS
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # 38 [X] Intact [ ] Not intact	Preserved where applicable [ ]	On Ice: Y Cooler Temp: 0.6

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

GW SUB

SGS ACCUTEST

CHAIN OF CUSTODY

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL: 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

PAGE 1 OF 1

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC54732

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	Street: 1400 North Royal St	Billing Information (if different from Report to)
City / State / Zip: Odenton, MD 21113	City / State: Alexandria, VA	Company Name:
Project Contact / E-mail: Ashley Bell Abell@gesonline.com	Project #: 0402919 - 53 - 220, Org 0404	Street Address:
Phone # / Fax #: 800-220-3606 x 3704	Client Purchase Order #:	City / State / Zip:
Sampler(s) Name(s) / Phone #: Jeff Plummer	Project Manager: Ashley Bell	Attention: Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	EnCORE	Oil & Grease (EPA 1664A)	VOCs (EPA 624)	SVOCs (EPA 625, PPL list)	Pesticides & PCBs (EPA 608)	2,3,7,8-Tetrachlorodibenzo p-dioxin (EPA 1613)	Metals (6010B) (Arsenic, Cadmium, Chromium, Copper, Lead, Molybdenum, Nickel, Silver, Zinc)	Mercury (7470A)	Total Cyanide (EPA 335.4)	TPH-DRO (EPA 8015B)			LAB USE ONLY
1	Effluent		11-2-17	1030	JP	WW	15	X		X		X				X	X	X	X	X	X	X	X	X			E74
2	Post OWS		11-2-17	1045	JP	GW	4	X								X								X			G4 T3
3	P&T Influent		11-2-17	1100	JP	GW	2	X																X			V126
	~~TPE Influent~~ JP					~~GW~~																		~~X~~			L32 SJ3

Turnaround Time (Business days)

- [x] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Labtink

Approved By (SGS Accutest PM): / Date:

INITIAL ASESSMENT IB DOM

LABEL VERIFICATION

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [x] EDD Format GES EQEDD
- [ ] Other

Comments / Special Instructions

EQEDD Name: NRG PRGS.Lab report # .25800.EQEDD.zip

Email lab results to: mdlabs@gesonline.com & ges@equisonline.com

Send invoice to: ges-invoices@ gesonline.com & include Project # & Org #.

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Jeff Plummer	11-3-17 0740	Denise Woodring	Denise Woodring	11-3-17 1055	
2						
3		11-3-17 1750				
4						
5	Relinquished by:	Date Time:	Received By: 6	Custody Seal # 546	Intact / Not intact	Preserved where applicable	On Ice	Cooler Temp 3.2 C-IP

SGS Accutest Sample Receipt Summary

Job Number: JC54732 **Client:** _____ **Project:** _____

Date / Time Received: 11/3/2017 5:50:00 PM **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:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☐		☐	☑

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

SM089-02
Rev. Date 12/1/16

JC54732X: Chain of Custody
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The results set forth herein are provided by SGS North America Inc.

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Automated Report

Technical Report for

Groundwater & Environmental Services

NRG PRGS, 1400 North Royal Street, Alexandria, VA

0402919-53-220, ORG # 0404

SGS Job Number: JC56866

Sampling Date: 12/05/17

Report to:

Groundwater & Environmental Services
1350 Blair Drive Suite A
Odenton, MD 21113
ABell@GesOnline.com; Seprregion@GESOnline.com;
GES@EquisOnline.com
ATTN: Ashley 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 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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SGS North America Inc.

Sample Summary

Groundwater & Environmental Services

Job No: JC56866

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
JC56866-1	12/05/17	11:00	JP	12/07/17	AQ	Effluent	EFFLUENT
JC56866-2	12/05/17	11:30	JP	12/07/17	AQ	Ground Water	POST OWS
JC56866-3	12/05/17	11:45	JP	12/07/17	AQ	Influent	P&T INFLUENT

Summary of Hits

Job Number: JC56866
Account: Groundwater & Environmental Services
Project: NRG PRGS, 1400 North Royal Street, Alexandria, VA
Collected: 12/05/17

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
JC56866-1	**EFFLUENT**					
Chloroform [a]		0.26 J	1.0	0.20	ug/l	EPA 624
Tetrachloroethene [a]		1.5	1.0	0.82	ug/l	EPA 624
TPH-DRO (C10-C28)		0.189	0.083	0.083	mg/l	SW846 8015C
Copper		14.3	10		ug/l	SW846 6010C
Zinc		21.0	20		ug/l	SW846 6010C
JC56866-2	**POST OWS**					
TPH-DRO (C10-C28)		0.146	0.083	0.083	mg/l	SW846 8015C
JC56866-3	**P&T INFLUENT**					
TPH-DRO (C10-C28)		2.49	0.083	0.083	mg/l	SW846 8015C

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
Method:	EPA 624	**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]	T228656.D	1	12/11/17 16:34	CSF	n/a	n/a	VT9390
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	0.26	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	1.5	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		
Lab Sample ID:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
Method:	EPA 624	**Percent Solids:**	n/a
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)	113%		76-122%
2037-26-5	Toluene-D8 (SUR)	104%		80-120%
460-00-4	4-Bromofluorobenzene (SUR)	97%		80-120%
1868-53-7	Dibromofluoromethane (S)	110%		80-120%

(a) Results reported from the HCl preserved sample. The reported result for acrolein is for screening only and cannot be used for compliance purposes.
(b) 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		
Lab Sample ID:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
Method:	EPA 625 EPA 625	**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	P119583.D	1	12/26/17 22:56	RL	12/11/17 03:00	OP8564	EP5358
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 [a]	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 [a]	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		
Lab Sample ID:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
Method:	EPA 625 EPA 625	**Percent Solids:**	n/a
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 [a]	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	40%		10-110%
4165-62-2	Phenol-d5	29%		10-110%
118-79-6	2,4,6-Tribromophenol	103%		35-147%
4165-60-0	Nitrobenzene-d5	72%		32-132%
321-60-8	2-Fluorobiphenyl	77%		40-117%
1718-51-0	Terphenyl-d14	71%		33-126%

(a) Associated CCV outside of control limits low.

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:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
Method:	EPA 608 EPA 608	**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	6G53447.D	1	12/19/17 12:11	RK	12/11/17 18:00	OP8583	G6G1570
Run #2	2G157940.D	1	12/19/17 18:20	MH	12/11/17 17:30	OP8582	G2G4216

	Initial Volume	Final Volume
Run #1	1000 ml	5.0 ml
Run #2	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 [a]	0.25	0.17	ug/l	
11104-28-2	Aroclor 1221	ND [a]	0.25	0.15	ug/l	
11141-16-5	Aroclor 1232	ND [a]	0.25	0.10	ug/l	
53469-21-9	Aroclor 1242	ND [a]	0.25	0.14	ug/l	
12672-29-6	Aroclor 1248	ND [a]	0.25	0.13	ug/l	
11097-69-1	Aroclor 1254	ND [a]	0.25	0.17	ug/l	
11096-82-5	Aroclor 1260	ND [a]	0.25	0.14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	104%	102%	10-156%
877-09-8	Tetrachloro-m-xylene	97%	90%	10-156%
2051-24-3	Decachlorobiphenyl	106%	87%	10-143%

ND = Not detected MDL = Method Detection Limit
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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:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
Method:	EPA 608 EPA 608	**Percent Solids:**	n/a
Project:	NRG PRGS, 1400 North Royal Street, Alexandria, VA		

Pesticide PPL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
2051-24-3	Decachlorobiphenyl	104%	77%	10-143%

(a) 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:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
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	2Z66135.D	1	12/12/17 00:48	DS	12/11/17 03:00	OP8563	G2Z2491
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)	0.189	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	85%		13-139%
438-22-2	5a-Androstane	89%		10-135%

ND = Not detected MDL = Method Detection Limit
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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:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
		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	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Cadmium	< 3.0	3.0	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Copper	14.3	10	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Lead	< 3.0	3.0	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	12/12/17	12/12/17	JA	SW846 7470A [1]	SW846 7470A [4]
Molybdenum	< 20	20	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Nickel	< 10	10	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Silver	< 10	10	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]
Zinc	21.0	20	ug/l	1	12/11/17	12/13/17	GT	SW846 6010C [2]	SW846 3010A [3]

(1) Instrument QC Batch: MA43378
(2) Instrument QC Batch: MA43382
(3) Prep QC Batch: MP4696
(4) Prep QC Batch: MP4726

RL = Reporting Limit

Report of Analysis

Client Sample ID:	EFFLUENT		
Lab Sample ID:	JC56866-1	**Date Sampled:**	12/05/17
Matrix:	AQ - Effluent	**Date Received:**	12/07/17
		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	12/12/17 09:51	BM	EPA 335.4/LACHAT
HEM Oil and Grease	< 5.1	5.1	mg/l	1	12/20/17 11:00	JOO	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	POST OWS		
Lab Sample ID:	JC56866-2	**Date Sampled:**	12/05/17
Matrix:	AQ - Ground Water	**Date Received:**	12/07/17
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	2Z66136.D	1	12/12/17 01:21	DS	12/11/17 03:00	OP8563	G2Z2491
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)	0.146	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	86%		22-140%
16416-32-3	Tetracosane-d50	91%		13-139%
438-22-2	5a-Androstane	96%		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		
Lab Sample ID:	JC56866-2	**Date Sampled:**	12/05/17
Matrix:	AQ - Ground Water	**Date Received:**	12/07/17
		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	12/20/17 11:00	JOO	EPA 1664A

RL = Reporting Limit

Report of Analysis

Client Sample ID:	P&T INFLUENT		
Lab Sample ID:	JC56866-3	**Date Sampled:**	12/05/17
Matrix:	AQ - Influent	**Date Received:**	12/07/17
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	2Z66137.D	1	12/12/17 01:55	DS	12/11/17 03:00	OP8563	G2Z2491
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)	2.49	0.083	0.083	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	84%		22-140%
16416-32-3	Tetracosane-d50	83%		13-139%
438-22-2	5a-Androstane	90%		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: JC56866
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	SGS is not certified for this parameter.[a]
1,3-Dichlorobenzene	541-73-1	**EPA 625**	AQ	SGS is not certified for this parameter.[a]
1,4-Dichlorobenzene	106-46-7	**EPA 625**	AQ	SGS 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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SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC56866

Company Name	Project Name:	Billing Information (if different from Report to)
Groundwater & Environmental Services, Inc.	NRG PRGS	
Street Address: 1350 Blair Drive, Suite A	Street: 1400 North Royal St	Company Name
City / State / Zip: Odenton, MD 21113	City / State: Alexandria, VA	Street Address
Project Contact / E-mail: Ashley Bell Abell@gesonline.com	Project #: 0402919 - 53 - 220, Org 0404	City / State / Zip
Phone # / Fax #: 800-220-3606 x 3704	Client Purchase Order #	
Sampler(s) Name(s) / Phone #: Jeff Plummer	Project Manager: Ashley Bell	Attention: Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Oil & Grease (EPA 1664A)	VOCs (EPA 624)	SVOCs (EPA 625, PPL list)	Pesticides & PCBs (EPA 608)	2,3,7,8-Tetrachlorodibenzo-p-dioxin (EPA 1613)	Metals (6010B) (Arsenic, Cadmium, Chromium, Copper, Lead, Molybdenum, Nickel, Silver, Zinc)	Mercury (7470A)	Total Cyanide (EPA 335.4)	TPH-DRO (EPA 8015B)			LAB USE ONLY
1	Effluent		12-5-17	1100	JP	WW	15	7		1	1		6			X	X	X	X	X	X	X	X	X			SUB
2	Post OWS		12-5-17	1130	JP	GW	4	4								X								X			
3	P&T Influent		12-5-17	1145	JP	GW	~~2~~ 3	2																X			L23
	~~TPS Influent~~ JP					~~GW~~	JP																	~~X~~	JP		E63
																											A36
																											G7T4
																											V405

Turnaround Time (Business days)

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

Emergency & Rush T/A data available VIA Lablink

Approved By (SGS Accutest PM): / Date:

INITIAL ~~ASSESSMENT~~ JB Dow

LABEL ~~VERIFICATION~~

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format GES EQEDD
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

EQEDD Name: NRG PRGS.Lab report # .25800.EQEDD.zip
DW
Email lab results to: ~~mdabs@gesonline.com~~ & ges@equisonline.com
Superregion @ gesonline.com
Send invoice to: ges-invoices@gesonline.com & include Project # & Org #.

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1 Jeff Plummer	12-5-17 1430	1 Sonya Woodley	2 Denise Woodley	12-7-17 1113	2 E Ruder
3 E Ruder	12-7-17	3 A	4		4
5	1800		Custody Seal # 700	[ ] Intact [ ] Not Intact	Preserved where applicable: [ ] On Ice Cooler Temp. 2.0 C-10

JC56866: Chain of Custody
Page 1 of 2

SGS Accutest Sample Receipt Summary

Job Number: JC56866 **Client:** _____ **Project:** _____

Date / Time Received: 12/7/2017 6:00:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC56866: Chain of Custody
Page 2 of 2

SGS ACCUTEST IS PART OF SGS, THE WORLD'S LEADING INSPECTION, 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: JC56866X

Sampling Date: 12/05/17

Report to:

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

SGS Accutest is the sole authority for authorizing edits or modifications to this document.
Unauthorized modification of this report is strictly prohibited.
Review standard terms at: http://www.sgs.com/en/terms-and-conditions

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Section 2: Subcontract Lab Data **4**
Section 3: Misc. Forms **17**
3.1: Chain of Custody 18

Sample Summary

Groundwater & Environmental Services

Job No: JC56866X

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
JC56866-1X	12/05/17	11:00	JP	12/07/17	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 (ºC)
Extraction within Holding Time
Analysis within Holding Time

ACCUTEST
JC56866X

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 DEQ	4115
Louisiana DOH	LA170030
Maine	2016028
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	1179213
Mississippi	Reciprocity
Nebraska	NE-OS-33-17
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. 04-Aug-2017

Sample ID: Effluent

Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	SGS Accutest	Matrix:	Aqueous	Lab Project ID:	B1709	Date Received:	09-Dec-2017
Project ID:	JC56866X	Weight/Volume:	0.99 L	Lab Sample ID	B1709_15372_DF_001-RJ	Date Extracted:	11-Dec-2017
Date Collected:	05-Dec-2017	pH:	6	QC Batch No:	15372	Date Analyzed:	16-Dec-2017
		Split:	-	Dilution:	-	Time Analyzed:	14:55:24

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	1.87			ES 2378-TCDD	83.9	

Totals					Standard	CS Recoveries	
					CS 37Cl-2378-TCDD	127	

SGS
5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290

Sample ID: Method Blank B1709_15372 — Method 1613B

Client Data		Sample Data		Laboratory Data			
Name:	SGS Accutest	Matrix:	Aqueous	Lab Project ID:	B1709	Date Received:	n/a
Project ID:	JC56866X	Weight/Volume:	1.00 L	Lab Sample ID	MB1_15372_DF_TLX-RJ	Date Extracted:	11-Dec-2017
Date Collected:	n/a	pH:	n/a	QC Batch No:	15372	Date Analyzed:	16-Dec-2017
		Split:	2	Dilution:	-	Time Analyzed:	9:20:39

Analyte	Conc. (pg/L)	DL (pg/L)	EMPC (pg/L)	Qualifiers	Standard	ES Recoveries	Qualifiers
2378-TCDD	ND	3.61			ES 2378-TCDD	60.8	

Totals					Standard	CS Recoveries	
					CS 37Cl-2378-TCDD	102	

SGS
5500 Business Drive
Wilmington, NC 28405, USA
www.us.sgs.com
Tel: +1 910 794-1613; Toll-Free 866 846-8290

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8A**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_09062018_09OCT2017		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	171216R02	Analysis Date:	16-DEC-2017 06:57:11
Lab ID:	OPR1_15372_DF-RJ		

NATIVE ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)	OK
2,3,7,8-TCDD	40	37.1	26.8 - 63.2	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 19 Dec 2017 14:00 Analyst: pw

SGS ACCUTEST 13 of 19 JC56866X

METHOD 1613B **PCDD/F ONGOING PRECISION AND RECOVERY (OPR)** **FORM 8B**

Lab Name:	SGS North America		
Initial Calibration:	ICAL: MM3_DF_09062018_09OCT2017		
Instrument ID:	MM3	GC Column ID:	ZB-5ms
VER Data Filename:	171216R02	Analysis Date:	16-DEC-2017 06:57:11
Lab ID:	OPR1_15372_DF-RJ		

LABELED ANALYTES	SPIKE CONC.	CONC. FOUND	RANGE (ng/mL)			OK
13C-2,3,7,8-TCDD	400	138	80	-	700	Y
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD	160	189	49.6	-	305.6	Y

Contract-required concentration limits for OPR as specified in Table 6,
Method 1613. 10/94

Processed: 19 Dec 2017 14:00 Analyst: pw

SGS ACCUTEST JC56866X 14 of 19

Sample Receipt Notification

5500 Business Drive
Wilmington, NC 28405 USA
Tel: 910 794-1613
Toll Free: 866 846-8290
Fax: 910 794-3919

Project Manager:	*Tamara Morgan*
Receipt Date & Time:	*09-Dec-17 at 13:07*
AP Project name:	*B1709*
Requested TAT:	*14 days*
Projected due date:	*26-Dec-17*
Matrix:	*Aqueous*
Phone#:	*910-794-1613*
Email Address:	*Tamara.Morgan@sgs.com*

Company Contact:	*Matt Cordova*
Company:	*SGS Accutest*
Project Name & Site:	*JC56866X*
Project PO#:	*JC56866X*
QAAP/Contract #:	*N/A*
Requested Analysis:	*Method 1613B TCDD only*
Phone#:	*732-329-0200*
Email Address:	*matthew.cordova@sgs.com*

Client Smp ID	AP Smp ID	Sample Condition & Notes	Quantity	Size	Sampling Date	Sampling Time	Received Temp	Container #	Shipping #
Effluent	B1709_001	AQ	2	1-Liter Amber	05-Dec-17	11:00	1.2	1	5633 9350 9851

Preservation Type: **Sample Seals:** No

Notes/Comments:

Samples received intact.

Any un-extracted sample will be stored for 90 days from reporting date. Additional storage fees may apply for any samples stored longer than 90 days.

Received by: Suanne Hudson *Logged in by: Ashley Owens* *QC'ed by:* AK 11 Dec 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

B1709
Page 1 of 1

SGS ACCUTEST

CHAIN OF CUSTODY

2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.sgs.com

FED-EX Tracking # 5633 9350 9857 | Bottle Order Control #
SGS Accutest Quote # | SGS Accutest Job # JC56866X

Client / Reporting Information	Project Information	Billing Information (if different from Report to)
Company Name: SGS Accutest	Project Name: NRG PRGS, 1400 North Royal Street, Alexandria, VA	
Street Address: 2235 Route 130	Street	Company Name
City: Dayton State: NJ Zip: 08810	City State	Street Address
Project Contact: Matthew.Cordova@sgs.com E-mail	Project #	City State Zip
Phone #: 732-329-0200 Fax #	Client Purchase Order #	Attention:
Sampler(s) Name(s): JP Phone	Project Manager	

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	SB1613TCDD ,	LAB USE ONLY
1X	EFFLUENT		12/5/17	11:00:00 AM	JP	AQ										X	

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- ☐ Std. 10 Business Days
- ☐ 5 Day RUSH
- ☐ 3 Day EMERGENCY
- ☐ 2 Day EMERGENCY
- ☐ 1 Day EMERGENCY
- ☒ other 14

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- ☐ Commercial "A" (Level 1)
- ☐ Commercial "B" (Level 2)
- ☐ FULLT1 (Level 3+4)
- ☐ NJ Reduced
- ☐ Commercial "C"
- ☐ NYASP Category A
- ☐ NYASP Category B
- ☐ State Forms
- ☐ EDD Format
- ☒ Other COMMA

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

Sample Custody must be documented below each time samples change possession, including courier delivery.

Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	12-8-17 700	1 FED EX	2		2
3	Date Time:	3	4	12/9/17 13:07	4 Ashley ONCUS
5	Date Time:	5	Custody Seal # 142 ☒ Intact ☐ Not intact	Preserved where applicable ☐	On Ice ☒ Cooler Temp. 1.2°

SGS ACCUTEST JC56866X 16 of 19

2

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

PAGE 1 OF 1

SGS ACCUTEST

SGS Accutest - Dayton
2235 Route 130, Dayton, NJ 08810
TEL. 732-329-0200 FAX: 732-329-3499/3480
www.accutest.com

FED-EX Tracking #: | Bottle Order Control #:
SGS Accutest Quote #: | SGS Accutest Job #: JC56866

Company Name	Groundwater & Environmental Services, Inc.
Street Address	1350 Blair Drive, Suite A
City / State / Zip	Odenton, MD 21113
Project Contact / E-mail	Ashley Bell Abell@gesonline.com
Phone # / Fax #	800-220-3606 x 3704
Sampler(s) Name(s) / Phone #	Jeff Plummer

Project Name	NRG PRGS
Street	1400 North Royal St
City / State	Alexandria, VA
Project #	0402919 - 53 - 220, Org 0404
Client Purchase Order #	
Project Manager	Ashley Bell

Billing Information (if different from Report to)
Company Name:
Street Address:
City / State / Zip:
Attention:
Send to: ges-invoices@gesonline.com

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; 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

SGS Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Oil & Grease (EPA 1664A)	VOCs (EPA 624)	SVOCs (EPA 625, PPL list)	Pesticides & PCBs (EPA 608)	2,3,7,8-Tetrachlorodibenzo-p-dioxin (EPA 1613)	Metals (6010B) (Arsenic, Cadmium, Chromium, Copper, Lead, Molybdenum, Nickel, Silver, Zinc)	Mercury (7470A)	Total Cyanide (EPA 335.4)	TPH-DRO (EPA 8015B)			LAB USE ONLY
1	Effluent		12-5-17	1100	JP	WW	15	7		1	1		6			X	X	X	X	X	X	X	X	X			SUB
2	Post OWS		12-5-17	1130	JP	GW	4	4								X								X			
3	P&T Influent		12-5-17	1145	JP	GW	~~2~~ 3	2																X			L23
	~~TPS Influent~~ JP					~~GW~~	JP																	~~X~~	JP		E63
																											A36
																											G7T4
																											V405

Turnaround Time (Business days)

Approved By (SGS Accutest PM): / Date:

- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day RUSH
- [ ] 2 Day RUSH
- [ ] 1 Day RUSH
- [ ] other

INITIAL ~~ASSESSMENT~~ JB Dow
LABEL ~~VERIFICATION~~

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] NJ Reduced
- [ ] Commercial "C"
- [ ] NJ Data of Known Quality Protocol Reporting
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [X] EDD Format GES EQEDD
- [ ] Other

Commercial "A" = Results Only, Commercial "B" = Results + QC Summary
NJ Reduced = Results + QC Summary + Partial Raw data

Comments / Special Instructions

EQEDD Name: NRG PRGS.Lab report # .25800.EQEDD.zip
DW
Email lab results to: ~~mdata@gesonline.com~~ & ges@equisonline.com
Superregion@gesonline.com
Send invoice to: ges-invoices@gesonline.com & include Project # & Org #.

Sample inventory is verified upon receipt in the Laboratory

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished By Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Jeff Plummer	12-5-17 1430	1 Shaniqua Woodley	2 Shaniqua Woodley	12-7-17 1113	2 C Ruler
3	C Ruler	12-7-17	3	4		4
5	Relinquished by:	Date Time: 1800	Received By:	Custody Seal # 700	[X] Intact [ ] Not Intact	Preserved where applicable: [X]	On Ice: [X]	Cooler Temp: 2.0 C-10

SGS Accutest Sample Receipt Summary

Job Number: JC56866 **Client:** _____ **Project:** _____

Date / Time Received: 12/7/2017 6:00:00 PM **Delivery Method:** _____ **Airbill #'s:** _____

Cooler Temps (Raw Measured) °C: Cooler 1: (2.0);

Cooler Temps (Corrected) °C: Cooler 1: (2.9);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
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:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Test Strip Lot #s: pH 1-12: 216017 pH 12+: 208717 Other: (Specify) _____ _____

Comments

SM089-03
Rev. Date 12/7/17

JC56866X: Chain of Custody
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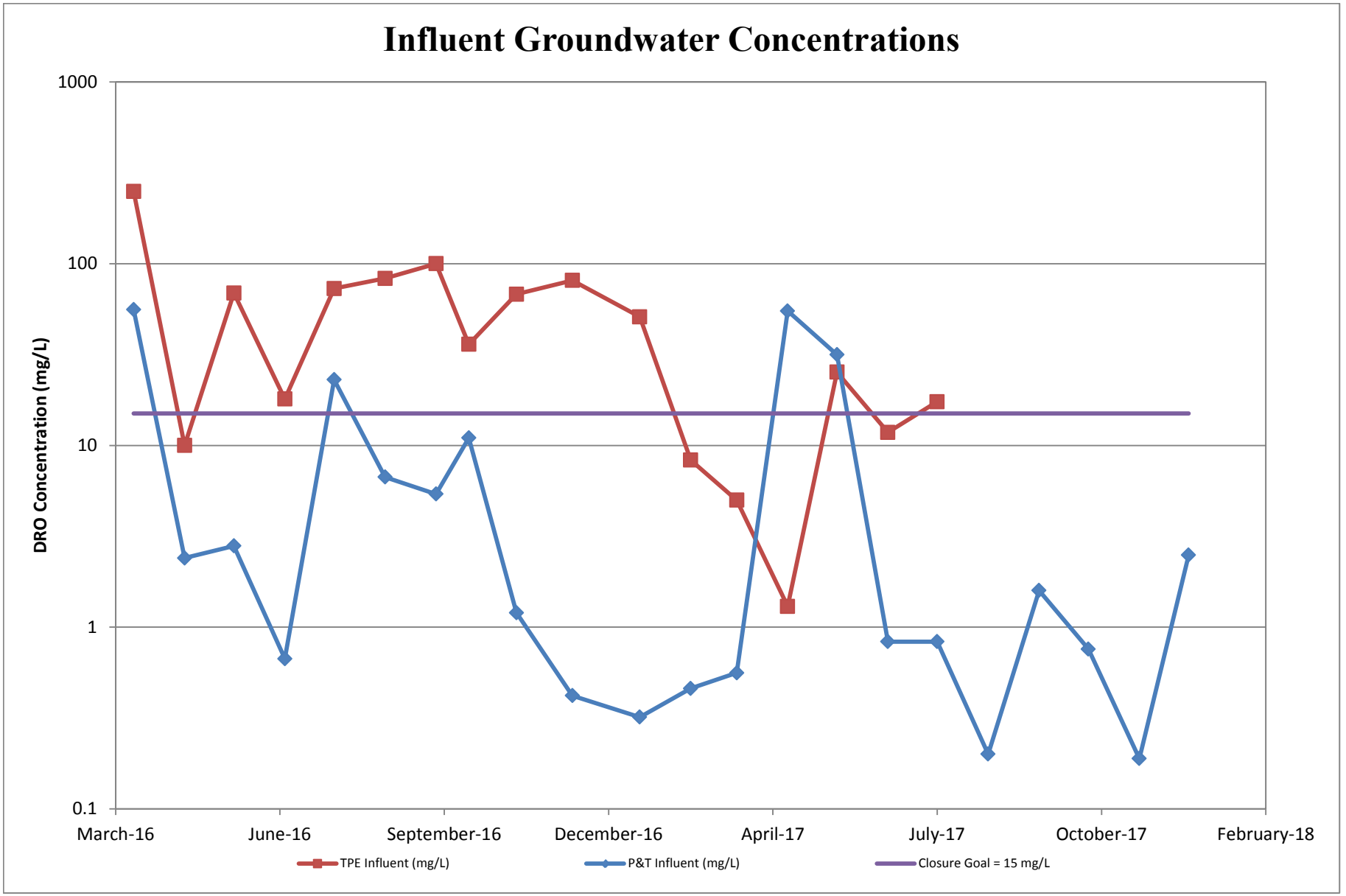
Attachment E – Remediation System Preformance Graphs

Attachment D

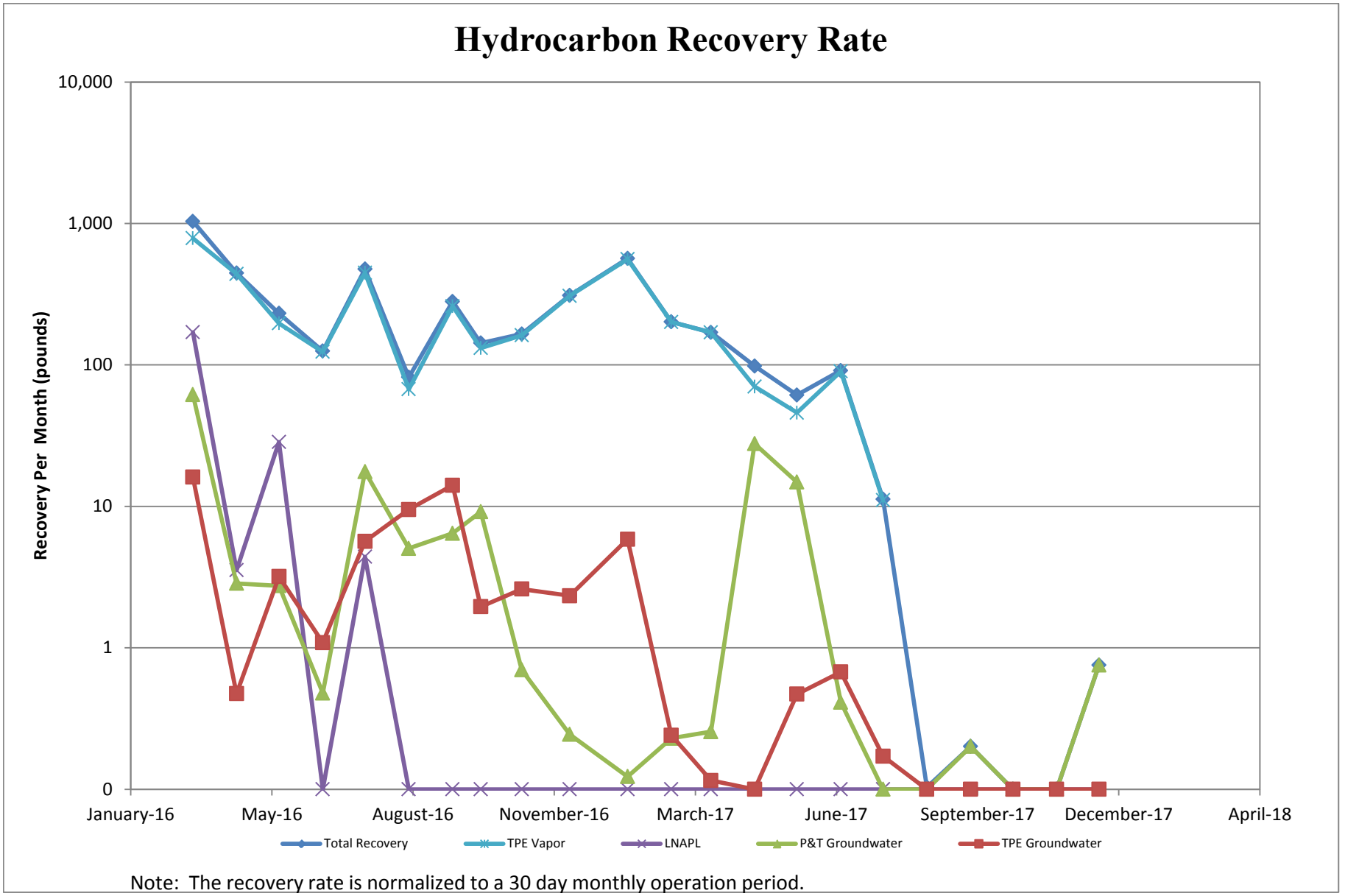
REMEDIATION SYSTEM PERFORMANCE GRAPHS

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



Note: The recovery rate is normalized to a 30 day monthly operation period.