

NRG Potomac River, LLC
8301 Professional Place
Suite 230
Landover, MD 20785

October 26, 2016

Via email delivery only

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

**Re: Third Quarter 2016 CAP Implementation Monitoring Report
NRG Potomac River Generating Station
1400 North Royal Street
Alexandria, VA 22314
PC#2013-3154**

Dear Mr. Wardle:

NRG Potomac River LLC (PRGS) is pleased to submit the Third Quarter 2016 CAP Implementation Monitoring Report (CMR). The following activities were conducted during the Third Quarter of 2016:

- Monthly liquid level gauging and manual light non-aqueous phase liquid (LNAPL) bailing of select site monitoring wells;
- Comprehensive gauging of all accessible site monitoring wells on August 24, 2016;
- Biostimulation headspace vapor monitoring of select site monitoring wells to measure the presence of volatile organic compounds (VOCs), oxygen, carbon dioxide, and methane on August 24 and 30, 2016;
- Down-well water quality measurements recorded on August 24 and 30, 2016 of select site groundwater wells to monitor dissolved oxygen, pH, temperature, oxygen reduction potential and conductivity;
- Routine quarterly sampling of groundwater from select site monitoring wells for petroleum hydrocarbons and from select wells for biostimulation parameters, in accordance with the groundwater sampling plan, on August 24-25 and August 30, 2016;
- Continued bi-monthly operation and maintenance (O&M) field events of the remediation system from July to September 2016; and
- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises.

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

Sincerely,

A handwritten signature in blue ink, appearing to read 'Mark G. Nitz'.

Mark G. Nitz, P.E.
Environmental Specialist, NRG

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



Groundwater
& Environmental Services, Inc.

**3RD QUARTER CAP IMPLEMENTATION MONITORING
REPORT
OCTOBER 2016**

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

PC# 2013-3154

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

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

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

OCTOBER 26, 2016



SITE NAME: Potomac River Generating Station

SITE LOCATION: 1400 North Royal Street, Alexandria, VA

VDEQ PC# 2013-3154

DATE OF REPORT: October 26, 2016

LAND USE CLASSIFICATION: Industrial

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

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

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

Prepared by:

A handwritten signature in black ink, appearing to read 'Lindsay Keeney', written over a horizontal line.

Lindsay Keeney
Associate Geologist

Reviewed by:

A handwritten signature in blue ink, appearing to read 'Daniel R. Drennan', written over a horizontal line.

Dan Drennan, PE
Project Engineer

A handwritten signature in black ink, appearing to read 'A. Ashley Bell', written over a horizontal line.

A. Ashley Bell
Senior Project Manager

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- B – LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY
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DOCUMENTATION – SYSTEM SAMPLING**

1.0 INTRODUCTION

Groundwater & Environmental Services, Inc. (GES) has prepared this 3rd Quarter 2016 CAP Implementation Monitoring Report (CMR) on behalf of NRG Potomac River LLC (NRG), documenting environmental monitoring and corrective action activities performed at the Potomac River Generating Station (PRGS), located at 1400 North Royal Street, Alexandria, VA (the site). Site activities were performed to address a subsurface petroleum release regulated by the Virginia Department of Environmental Quality (VDEQ) Northern Regional Office (NRO) under Pollution Complaint (PC) #2013-3154. The site is the location of a decommissioned power generating facility. A Site Location Map is provided as **Figure 1**, a Site Layout Map, depicting pertinent features of the site and adjacent areas, is provided as **Figure 2**, and a Site Map is provided as **Figure 3**.

Specifically, this summary report documents the following activities conducted during the 3rd Quarter 2016:

- Monthly liquid level gauging and manual bailing of light non-aqueous phase liquid (LNAPL), if present, from select site groundwater wells;
- Routine quarterly groundwater sampling on August 24 – 25 and 30, 2016 from select site groundwater wells for total petroleum hydrocarbons – diesel range organics (TPH-DRO) and from select wells for biostimulation parameters;
- Comprehensive gauging of all accessible site groundwater wells on August 24, 2016;
- Biostimulation headspace vapor measurements recorded on August 24 and 30, 2016 from select site groundwater wells to monitor the presence of volatile organic compounds (VOCs), oxygen, carbon dioxide, and methane;
- Down-well water quality measurements recorded on August 24 and 30, 2016 of select site groundwater wells to monitor dissolved oxygen, pH, temperature, oxygen reduction potential and conductivity; and
- Bi-monthly operations and maintenance (O&M) events during July through September, including once a month gauging of recovery wells and groundwater and vapor sampling of the system.
- Monthly submittals of Self-Monitoring Reports (SMRs) to Alexandria Renewal Enterprises (AlexRenew).

1.1 SITE HISTORY

The site was developed as a power generating facility in the 1940s. The first generating unit was constructed by 1949, and the last of the five units was brought online in 1954. The facility used Number 2 (No. 2) fuel oil to preheat its generating unit boilers and coal as its primary fuel to generate electricity. The No. 2 fuel oil was stored in two adjoining 25,000-gallon underground storage tanks (USTs) centrally located within the power plant complex, as shown on the Site Map provided as **Figure 3**. On October 1, 2012, the coal-fired power plant ceased operation.



PC #2013-3154 was opened by the VDEQ 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 and 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, install of the offsite remediation system and



bulkhead wall seep sealing initiated. CAP-II requirements to repair and seal the bulk head 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 condominium and office buildings. To the east, the site is bordered by the NPS Mt. Vernon Trail, beyond which lies the Potomac River.

2.0 SITE CHARACTERIZATION AND MONITORING ACTIVITIES

A Well Construction Table, included as **Table 1**, displays construction details of monitored and sampled wells. The Groundwater Monitoring and Sampling Plan, included as **Table 2**, details the quarterly and annual monitoring and sampling schedule of monitoring and recovery wells. The following site characterization and monitoring activities were conducted during the 3rd Quarter 2016:

- July, August, and September 2016:
 - Monthly gauging of select groundwater wells. Hand bailing of LNAPL from monitoring well MW-14 in July.
- August 24 and 30, 2016:
 - Site-wide gauging and biostimulation headspace vapor monitoring and collection of down-well field parameters of select groundwater wells.
- August 24 – 25 and 30, 2016:
 - Gauging and groundwater sampling of all accessible site groundwater wells.

2.1 WELL GAUGING AND LNAPL BAILING

An oil-water interface probe capable of measuring groundwater and LNAPL to 0.01 feet was used to gauge the site groundwater wells. During the 3rd Quarter 2016, all accessible site groundwater wells were gauged during a comprehensive gauging event on August 24, 2016. Select groundwater wells that historically exhibited measureable LNAPL or elevated dissolved phase hydrocarbon concentrations were also gauged on a monthly basis. Gauging events conducted during the 3rd Quarter 2016 are summarized below:

- Monthly gauging of select wells:
 - July 21, 2016
 - August 4, 2016
 - September 22, 2016
- Site-wide gauging of all accessible wells:
 - August 24, 2016

Historical and 3rd Quarter 2016 groundwater and LNAPL elevation data is presented in **Table 3 - Groundwater Gauging Data Summary**. LNAPL was detected in groundwater well MW/RW-14 during the 3rd Quarter 2016, with a maximum thickness of 0.95 feet measured in MW/RW-14 on July 21, 2016. During the July gauging event, approximately 0.438 gallons of LNAPL were bailed from MW/RW-14 on July 21, 2016. No LNAPL was bailed from any wells connected to the remediation system.

Groundwater depths ranged from 1.70 feet below ground surface (bgs) in MW-105 to 32.95 feet bgs in MW/RW-51 during the 3rd Quarter 2016, which is consistent with historical data from the site. Site-wide gauging was conducted on August 24, 2016, in accordance with the tidal cycle of the Potomac River. Low tide occurred at 9:48 am on August 24, 2016 at the site. Site wells were gauged as quickly as possible by multiple personnel, and gauging was conducted bracketing the river's low tide. This approach was used to

minimize the impact of tidal influence on groundwater elevation data. During the comprehensive gauging event on August 24, 2016, monitoring well MW-102 was not able to be located or gauged due to heavy vegetation overgrowth and MW- 107, MW-108, MW-16S and RW-117S were dry.

Groundwater contour maps representing shallow zone and deep zone data, respectively, from the August 24, 2016 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 central portion of the site. Radial flow is observed towards MW/RW-72S and TW-12S. Mounding is observed around MW-08S, MW-25S, and RW-30S. Groundwater flow in the southeastern portion of the site is to the southeast. The deep zone groundwater contour map indicates that groundwater flow is predominantly radial towards recovery well MW/RW-51. The hydraulic gradient at the site was calculated to range from approximately 0.02 feet per foot in the shallow zone and to approximately 0.30 feet per foot in the deep zone during the August 2016 monitoring event.

2.2 HEADSPACE VAPOR MONITORING

Monitoring well biostimulation vapor headspace readings were collected at select groundwater wells on August 24 and 30, 2016 using a photoionization detector (PID) and a GEM 2000 landfill gas meter. The PID was fitted with a 10.6 electron volt bulb and was calibrated using a factory-supplied calibration gas standard (100 parts per million [ppm] isobutylene) prior to use.

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

Detailed PID and landfill gas meter response data are presented in **Table 4**.

2.3 GROUNDWATER SAMPLING

On August 24 – 25 and 30, 2016, groundwater samples were collected from 25 groundwater monitoring/recovery wells (MW-01S, MW-08S, MW/RW-05, MW/RW-10S, MW/RW-14, MW-25S, MW/RW-25, MW-27, MW/RW-31, MW-51S, MW/RW-51, MW/RW-72S, MW/RW-72, MW-106, MW-121, MW-122, MW/RW-123S, RW-1, RW-05S, RW-25S, RW-28S, RW-116S, RW-118S, RW-117S, and RW-119S) using disposable bailers or dedicated sampling ports and 6 temporary wells (TW-03, TW-04, TW-05, TW-06, TW-07, and TW-14) using a peristaltic pump and dedicated polyethylene tubing. Monitoring wells MW-108, TW-12S, and RW-30S were not sampled during the 3rd Quarter 2016 sampling event since the wells were dry. Monitoring wells MW-11, MW-15S, MW-33, MW-100S, MW-100, MW-107, MW-109S, MW-109, MW-110S, MW-110, MW-111, MW-112S, MW-112, MW-113, and MW-114 are annually sampled and will be sampled during the 4th Quarter 2016. The sampling schedule is presented in the attached **Table 2**.

Each monitoring well was gauged prior to purging and sampling, and gauging data is presented in **Table 3**. Prior to the collection of groundwater samples, a minimum of three well volumes of water was purged from each monitoring well using purge bailers. Purge bailers were decontaminated prior to purging each well. System wells with pumps were sampled using sampling ports at the well heads. Temporary wells were sampled by Geosyntec in accordance with low-flow sampling protocols using a peristaltic pump and dedicated polyethylene tubing. Select wells containing minimal volumes of water were not purged, and grab samples were immediately collected. Purge water was containerized in 55-gallon drums and stored on site for proper disposal. On August 30, 2016, Triumvirate pumped out the drums and transported the purge water to their facility in Baltimore, MD. Waste documentation can be found in **Attachment A**. Groundwater samples were collected directly in laboratory provided bottleware, packaged on ice in coolers, and transported under proper chain of custody to Eurofins Lancaster Labs (Eurofins). Samples were requested to be analyzed for the following:

- Standard quarterly parameters
 - Total Petroleum Hydrocarbons – Diesel Range Organics (TPH-DRO)
- Biostimulation parameters
 - Alkalinity
 - Nitrate (NO_3^{1-})
 - Nitrite (NO_2^{1-})
 - Manganese (Mn^{2+})
 - Ferrous Iron (Fe^{2+})
 - Sulfate (SO_4^{2-})
 - Methane

TPH-DRO analytical results are presented in the Historical Groundwater Analytical Data Summary included as **Table 5** and discussed further in **Section 2.4**. The analytical results from sampling biostimulation parameters are presented in the Historical Groundwater Biostimulation Analytical Data Summary provided as **Table 6** and discussed further in **Section 2.4**.

The complete laboratory reports and chain of custody documentation for the groundwater sampling event conducted in August 2016 are included in **Attachment B**.

2.4 GROUNDWATER ANALYTICAL FINDINGS

During the 3rd Quarter 2016, 31 monitoring, recovery and temporary wells were sampled for TPH-DRO during the comprehensive groundwater monitoring and sampling event in August. Current and historical benzene, toluene, ethylbenzene, total xylenes, 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 Analytical Data Table (**Table 5**). TW-02 through TW-07 and TW-14, which were sampled by Geosyntec in August in accordance with requirements from the District of Columbia Department of Energy & Environment results, are also included in the attached **Table 5**. Two TPH-DRO contour maps representing shallow zone data and deep zone data, respectively, from August's comprehensive sampling event are presented as **Figure 6** and **Figure 7**. The results from the collection and analysis of groundwater samples from wells sampled during the 3rd Quarter 2016 are presented below:

- TPH-DRO was detected in 29 of the 31 groundwater wells sampled during the quarterly sampling event in August, with a maximum concentration of 1,200,000 micrograms per liter ($\mu\text{g/L}$) in recovery well MW/RW-123S. TPH-DRO was not detected in temporary wells TW-02 and TW-14.

Biostimulation 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 6**, 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.

	<div style="display: flex; justify-content: space-between; align-items: center;"> Time → ← Distance from Source </div>					
	Aerobic Respiration	Nitrate Reduction	Manganese Reduction	Ferric Iron Reduction	Sulfate Reduction	Methanogenesis
	Aerobic	Anaerobic				
Electron Acceptor	O_2	NO_3^-	Mn^{4+}	Fe^{3+} (solid)	SO_4^{2-}	CO_2
Metabolic By-Product	CO_2	N_2, CO_2	Mn^{2+}	Fe^{2+} (dissolved)	H_2S	CH_4 (methane)
Expected Relationship with High BTEX	$\text{O}_2 \downarrow$	$\text{NO}_3^- \downarrow$	$\text{Mn}^{2+} \uparrow$	$\text{Fe}^{2+} \uparrow$	$\text{SO}_4^{2-} \downarrow$	$\text{CH}_4 \uparrow$

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 biostimulation data and the field parameters, the following observations have been made:

- The groundwater quality data from monitoring wells MW-112S (shallow zone aquifer) and MW-114 (deep zone aquifer) are considered to be representative of background conditions due to the historical relative absence of dissolved-phase hydrocarbons and aerobic conditions within these wells.
- Monitoring wells MW-11, MW/RW-14, MW-33 and MW-70 show either current or historic low levels of contamination and are up-gradient or side-gradient of the main body of the plume. They have historically shown slight changes in some of the biostimulation parameters and appear to

generally be fringe wells. However, since the start-up of the remediation system, measurable thicknesses of LNAPL have been observed in monitoring well MW-14. Biostimulation parameters were measured in MW/RW-14 during the 3rd Quarter 2016 and results suggest aerobic conditions in this well. As noted in Section 3.0, this well was converted from a monitoring well to a recovery well in early August 2016.

- 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 quarterly groundwater monitoring event in August, DO concentrations were considered aerobic (> 1.0 mg/L) in eight of the ten measured shallow zone aquifer wells (MW/RW-10S, MW/RW-72S, MW/RW-123S, RW-05S, RW-25S, RW-28S, RW-116S, and RW-117S) and in eight of the ten measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-51, MW/RW-72, MW-106, and RW-1). Anaerobic conditions were observed in four wells during the quarterly sampling event (MW-01S, MW-51S, MW-121, and MW-122).
- ORP values were positive in seven of the ten measured shallow aquifer zone wells (MW/RW-10S, MW/RW-72S, MW/RW-123S, RW-05S, RW-28S, RW-116S, and RW-117S) and in seven of the ten measured deep zone aquifer wells (MW/RW-05, MW/RW-14, MW/RW-25, MW-27, MW/RW-72, MW-106, and RW-1) during the quarterly groundwater monitoring event in August. Positive ORP values are indicative of aerobic conditions. Wells with negative ORP readings included MW-01S, MW-51S, and RW-25S in the shallow zone aquifer and MW/RW-51, MW-121, and MW-122 in the deep zone aquifer.
- Alkalinity concentrations in wells within the area of the plume are generally lower than prior to system start-up. The microbial activity is likely causing a consumption of alkalinity. So far, the pH has remained stable or has only decreased marginally in most areas. If the alkalinity continues to decline (reducing the buffering capacity of the aquifer) and the pH begins to drop, microbial activity could be diminished by the low pH environment.
- Nitrate concentrations in the four shallow zone aquifer wells where it was measured (MW-01S, MW/RW-10S, MW-51S, and MW/RW-72S) and in the nine deep zone aquifer wells where it was measured (MW/RW-14, MW-27, MW/RW-72, MW-106, MW-121, MW-122, TW-03, TW-05, and TW-06) indicate that nitrate reduction was essentially complete prior to system operation and significant increases have not been observed. Nitrite concentrations were non-detect in all but one (MW-51S) of the shallow zone aquifer wells where it was measured and in all but one (TW-06) of the deep zone aquifer wells where it was measured.
- Dissolved manganese concentrations in the four shallow zone aquifer wells where it was measured (MW-01S, MW/RW-10S, MW-51S, and MW/RW-72S) and in eight of the nine deep zone aquifer wells where it was measured (MW-27, MW/RW-72, MW-106, MW-121, MW-122, TW-03, TW-05, and TW-06) show relatively higher concentrations than historic concentrations in the background wells. The manganese concentration has decreased and is comparable to the deep aquifer zone background concentrations in monitoring well MW/RW-14. Overall, pH concentrations are acidic in all wells analyzed for manganese except for MW/RW-14, indicating that elevated manganese concentrations may be more dependent on pH than on the amount of oxygen in the system.

- Ferrous iron concentrations in the four shallow zone aquifer wells where it was measured (MW-01S, MW/RW-10S, MW-51S, and MW/RW-72S) and in eight of the nine deep zone aquifer wells where it was measured (MW/RW-14, MW-27, MW-106, MW-121, MW-122, TW-03, TW-05, and TW-06) show generally significantly high concentrations as compared to historical background well concentrations. The ferrous iron concentration has remained stable (since 2nd Quarter 2016) and comparable to deep zone aquifer background concentrations in MW/RW-72. Ferrous iron concentrations have significantly decreased in monitoring wells MW/RW-10S, MW/RW-14, MW-121, and MW-122 and slightly decreased in monitoring wells MW-51S, MW-27, and MW-106. This reduction is likely due to the increase in oxygen in the system and the conversion of ferrous iron to ferric iron.
- Sulfate as SO_4^{2-} concentrations in the four shallow zone aquifer wells where it was measured (MW-01S, MW/RW-10S, MW-51S and MW/RW-72S) and in eight of the nine deep zone aquifer wells where it was measured (MW-27, MW/RW-72, MW-106, MW-121, MW-122, TW-03, TW-05, and TW-06) show increased concentrations as compared with historical concentrations in background wells. The sulfate concentration in MW/RW-14 is similar to historical deep zone background concentrations. Sulfate concentrations in shallow zone wells MW-01S, MW/RW-10S, and MW-51S and in deep zone wells MW/RW-14, MW-27, MW/RW-72, MW-121, TW-05, and TW-06 have increased since last reporting period (2nd Quarter 2016). The observed increases in sulfate may be due to the addition of oxygen into the system combined with excess sulfur resulting from historical power plant operations. Sulfate concentrations have decreased, since last reporting period, in shallow zone well MW/RW-72S and in deep zone wells MW-121 and TW-03.
- Methane concentrations in the four shallow zone aquifer wells where it was measured (MW-01S, MW/RW-10S, MW-51S, and MW/RW-72S) and in the seven deep zone aquifer wells where it was measured (MW/RW-14, MW-27, MW/RW-72, MW-106, MW-121, MW-122, and TW-03) decreased from prior measurements, with significant decreases comparable to historical low-level to non-detect background well concentrations in MW/RW-10S, MW/RW-14, MW-27, MW/RW-72, and MW-106. These decreases in methane concentrations since 2nd Quarter 2016 are consistent with continued aerobic conditions associated with remediation system operation.

Overall, the biostimulation data and field parameters indicate that the remediation system continues to successfully introduce oxygen into the source area.

3.0 REMEDIATION SYSTEM OPERATION

The remediation system operated during the 3rd Quarter 2016, 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 8**). The TPE, P&T, and biosparge systems all operated during the 3rd Quarter 2016. The reporting period for the 3rd Quarter 2016 was from June 21, 2016 to September 30, 2016, and was controlled by the O&M schedule. Activities of note completed during the 3rd Quarter 2016 included:

- Bi-monthly system operations and/or maintenance (O&M) visits were performed on July 12, July

21, August 4, August 17, September 1, and September 22.

- Monthly Self-Monitoring Reports (SMRs) for 3rd Quarter 2016 were submitted to AlexRenew on August 4, September 6, and October 6, 2016.
- On August 4, 2016 the pump in recovery well MW/RW-72 was removed and transferred to monitoring well MW-14, due to elevated LNAPL thickness in MW-14. MW-14 was converted to a deep pump and treat recovery well (RW-14) and began pumping the same day, after air and water lines were connected.
- On August 17, 2016 all systems were down on arrival; a GES technician added oil to the air compressor and all systems were operational by departure.
- On August 30, 2016, the oil/water separator was cleaned and air compressor maintenance was conducted.
- On September 1, 2016 GES noted that the MW/RW-25 cycle counter was not registering on arrival, but operational after cleaning, and that SP-14 and SP-15 were off and left off at departure.
- On September 14, 2016 GES met with Odyssey on site to air jet stuck pumps in MW/RW-05 and MW/RW-31. After cleaning, the pumps would not restart; they were removed and taken to GES' office for additional repairs.
- On September 22, 2016 pumps were reinstalled in MW/RW-05 and MW/RW-31 and operational on departure.
- On September 30, 2016 the MW/RW-31 pump was pulled and reinstalled after replacing a faulty check valve and critical equipment (such as high liquid level switches) were inspected and tested with passing results.

The TPE system operated for approximately 91 days out of 101 days during the reporting period, with a system uptime of 90%. The average vapor flow rate for the reporting period was 342 standard cubic feet per minute (scfm). The total groundwater recovered for the reporting period was 30,865 gallons (gal) with an average flow rate of 0.2 gallons per minute (gpm). The cumulative groundwater flow was 47,425 gallons by the end of the reporting period. The estimated vapor C1-C10 hydrocarbon recovery for the reporting period was 671 pounds (lbs), and the estimated groundwater TPH-DRO recovery for the reporting period was 22.2 lbs. A TPE Operational Summary is included as **Table 7** and system sampling analytical reports are included in **Attachment C**.

The P&T system operated for approximately 93 days out of 101 days during the reporting period, with a system uptime of 92%. The total groundwater flow for the reporting period was 255,103 gallons, with an average flow rate of 2.2 gpm. The cumulative groundwater flow since system startup was 565,221 gallons. The estimated groundwater TPH-DRO recovery for the reporting period was 25.6 lbs. An additional 4.4 lbs of LNAPL was recovered by the oil/water separator and manual bailing. A P&T Operational Summary is included as **Table 8** and analytical reports are included in **Attachment C**.

The biosparge system operated for approximately 95 days out of 101 days during the reporting period, with a system uptime of 94%. The average flow for each of the biosparge wells on the first leg (SP-01 through SP-08) was 0.6 scfm and the average flow for the wells on the second leg (SP-09 through SP-15) was 0.4 scfm. A Biosparge Operational Summary is included as **Table 9**.



The total estimated hydrocarbon recovery to date is 1,555 lbs (212 gallons). This includes 82 lbs of dissolved-phase, 1,388 lbs of vapor-phase, and 85 lbs of liquid-phase. The liquid-phase recovery is inclusive of previously bailed LNAPL and recovery from the TPE and P&T systems. A Hydrocarbon Recovery Summary is included as **Table 10**.

Hydrocarbon Recovery:

Dissolved-Phase Hydrocarbons (Period/Cumulative): **48 lbs / 82 lbs**

Vapor-Phase Hydrocarbons (Period/Cumulative): **671 lbs / 1,530 lbs**

Liquid-Phase Hydrocarbons (Period/Cumulative): **4 lbs / 85 lbs**

Total Hydrocarbon Recovery (Period/Cumulative): **723 lbs / 1,697 lbs**

3.1 PERMIT SUMMARY

Special Use Permit

Required for: Work along the NPS Trail

Issued by: National Parks Service

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

Significant Industrial User Permit:

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

Issued by: AlexRenew

Status: AlexRenew issued an approval letter on January 13, 2016, pending results from initial system effluent sampling. Following receipt of the preliminary system effluent sampling results, final approval to discharge was granted on March 11, 2016. Monthly SMRs were submitted to AlexRenew during the 3rd Quarter 2016.

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. However, in the event of future odor complaints, additional treatment options may be considered.

3.2 FUTURE ACTIVITIES (4TH QUARTER 2016)

- Routine quarterly and annual groundwater sampling for petroleum and biostimulation parameters in accordance with the approved groundwater sampling plan;
- Monthly gauging of select wells;



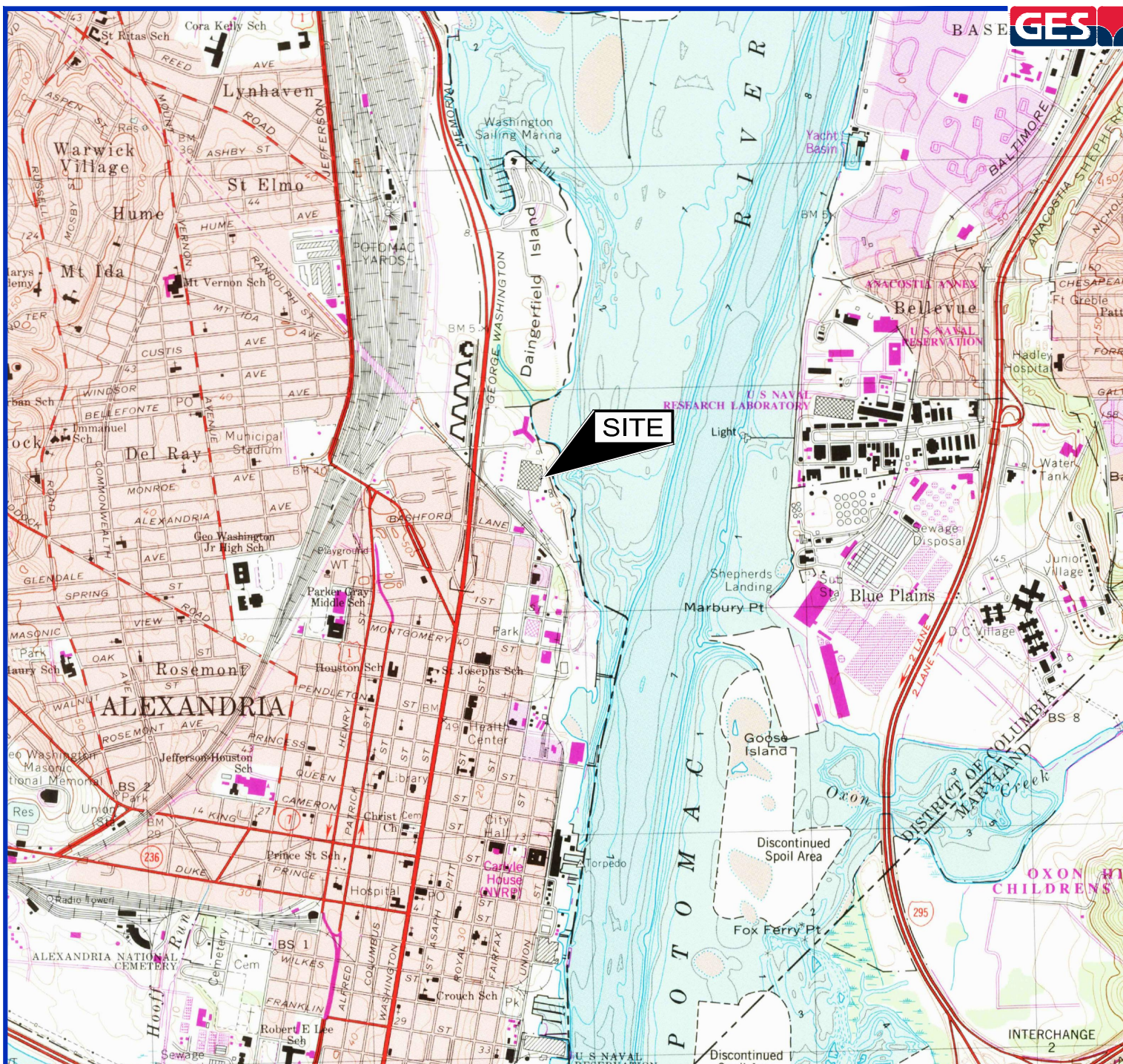
- Twice monthly system O&M field events, including system sampling;
- Submittal of quarterly CMR; and
- Submittal of monthly SMRs.

4.0 CONCLUSIONS

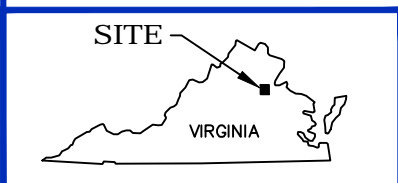
GES has completed this 3rd Quarter 2016 CMR for the Potomac River Generating Station, located at 1400 North Royal Street, Alexandria, Virginia. The following is a summary of pertinent findings from the 3rd Quarter 2016 monitoring and remedial activities conducted at the site:

- LNAPL was observed in one of the site monitoring wells (MW/RW-14) during the 3rd Quarter 2016; following connection of the well to the remediation system, no LNAPL has been measured.
- Groundwater flow in the shallow zone was generally towards the central portion of the site on August 24, 2016. Groundwater flow in the deep zone was radial towards MW/RW-51 on August 24, 2016. The primary groundwater flow driver at the site is currently the operation of the pumping wells associated with the remediation system.
- TPH-DRO was detected in 30 of the 31 groundwater wells sampled during the quarterly groundwater sampling event, with a maximum concentration of 1,200,000 µg/L in monitoring/recovery well MW/RW-123S on August 25, 2016.
- The analysis of biostimulation parameters continues to show that the operation of the remediation system is causing aerobic biodegradation in the area of the hydrocarbon plume.
- Bi-monthly system operations and/ maintenance visits were performed during the 3rd Quarter 2016.
- Monthly discharge SMRs were submitted to AlexRenew.

FIGURES



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



QUADRANGLE LOCATION
NO SCALE

DRAFTED BY:

JW

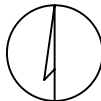
CHECKED BY:

NG

REVIEWED BY:

AC

NORTH



SITE LOCATION MAP

FORMER POTOMAC RIVER GENERATING STATION ALEXANDRIA, VIRGINIA

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

SCALE IN FEET



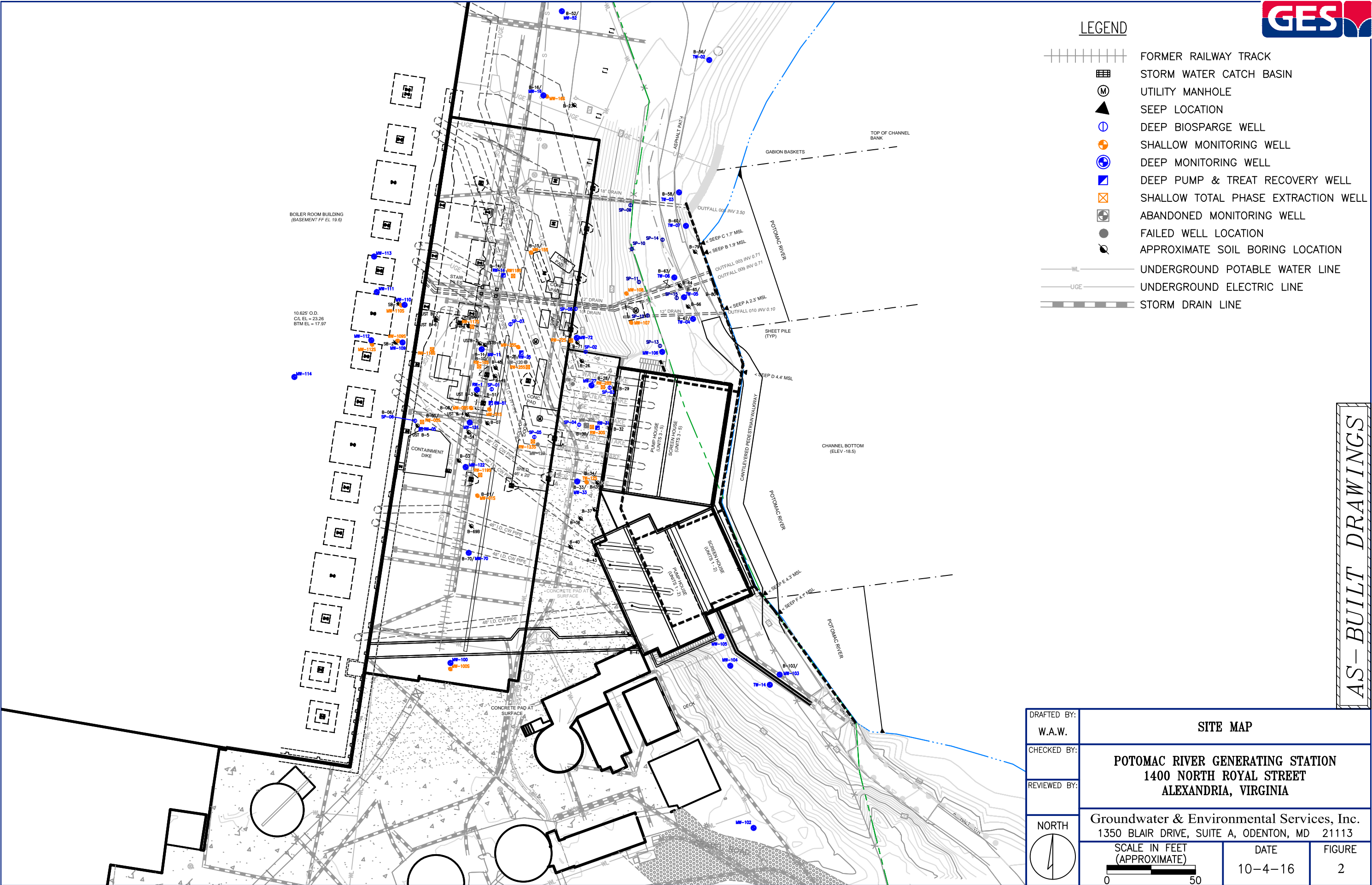
DATE

7-17-15

FIGURE

1

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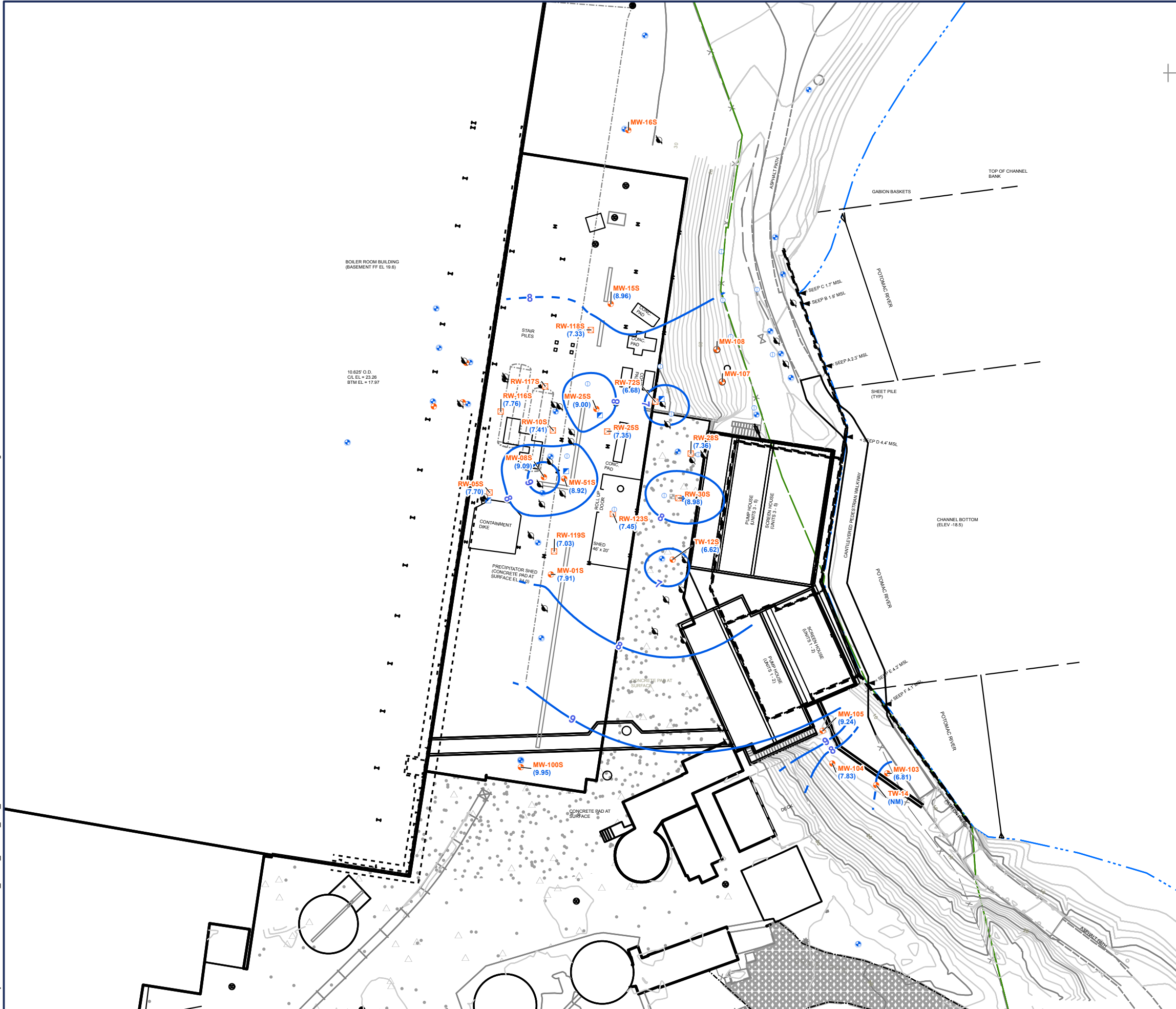


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Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- POTOMAC RIVER
- PROPERTY BOUNDARY
- 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
- GROUNDWATER ELEVATION (FT)
- NOT MEASURED



NOTE: TW-14 WAS NOT MEASURED DUE TO GEOSYNTEC LOW-FLOW SAMPLING THE WELL.
MW-16S, MW-107, MW-108, AND RW-117S WERE DRY.

DRAFTED BY: GKS	POTENTIOMETRIC SURFACE SHALLOW ZONE AQUIFER - AUGUST 24, 2016		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
NORTH	SCALE IN FEET 0 50	DATE 10-10-16	FIGURE 4

L:\Projects\NRG\PRGS\GIS\NRG_PRGS_Deep_GW_Contours.mxd - Scale 1:600 - 10/10/2016 2:18:11 PM - GStewart - NAD 1983 StatePlane Virginia North FIPS 4501 Feet



Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- POTOMAC RIVER
- PROPERTY BOUNDARY
- 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
- GROUNDWATER ELEVATION (FT)

NOTE:
MW-102 COULD NOT BE LOCATED DUE TO OVERGROWN VEGETATION
AND THEREFORE WAS NOT MEASURED.
DEEP PUMP AND TREAT RECOVERY WELLS RW-51, RW-25, AND RW-14
WERE PUMPING AND RW-05 AND RW-31 WERE NOT PUMPING DURING
GROUNDWATER GAUGING.

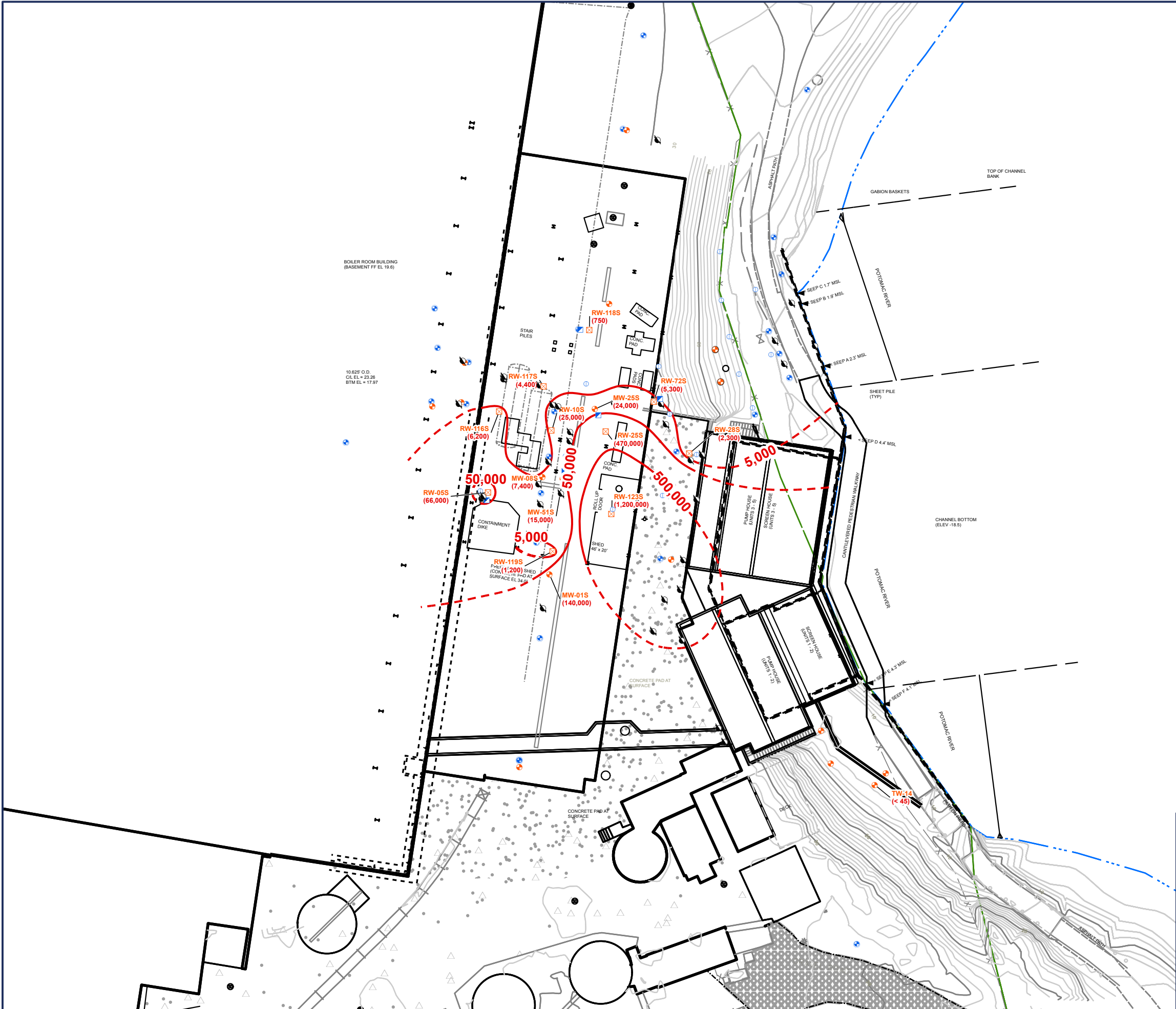
DRAFTED BY: GKS	POTENTIOMETRIC SURFACE DEEP ZONE AQUIFER – AUGUST 24, 2016		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY:	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
NORTH 	SCALE IN FEET 		FIGURE 5
	DATE 10-10-16		

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Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- SEEP LOCATION
- DEEP BIOSPARGE WELL
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- SHALLOW TOTAL PHASE EXTRACTION WELL
- ABANDONED MONITORING WELL
- APPROXIMATE SOIL BORING LOCATION
- TPH-DRO CONCENTRATION CONTOUR (UG/L)
- DASHED WHERE INFERRED
- TPH-DRO CONCENTRATION (UG/L)



Note:
TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics
UG/L: Micrograms per liter
LNAPL: Light Non-Aqueous Phase Liquid

MW-108, TW-12S, RW-30S were not sampled because either the wells were dry or there was not enough water to sample.

DRAFTED BY: GKS	TPH-DRO CONCENTRATION CONTOURS SHALLOW ZONE AQUIFER - AUGUST 2016		
CHECKED BY: DMC	FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA		
REVIEWED BY: AAB			
NORTH 	Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113		
SCALE IN FEET 	DATE 10-11-16	FIGURE 6	

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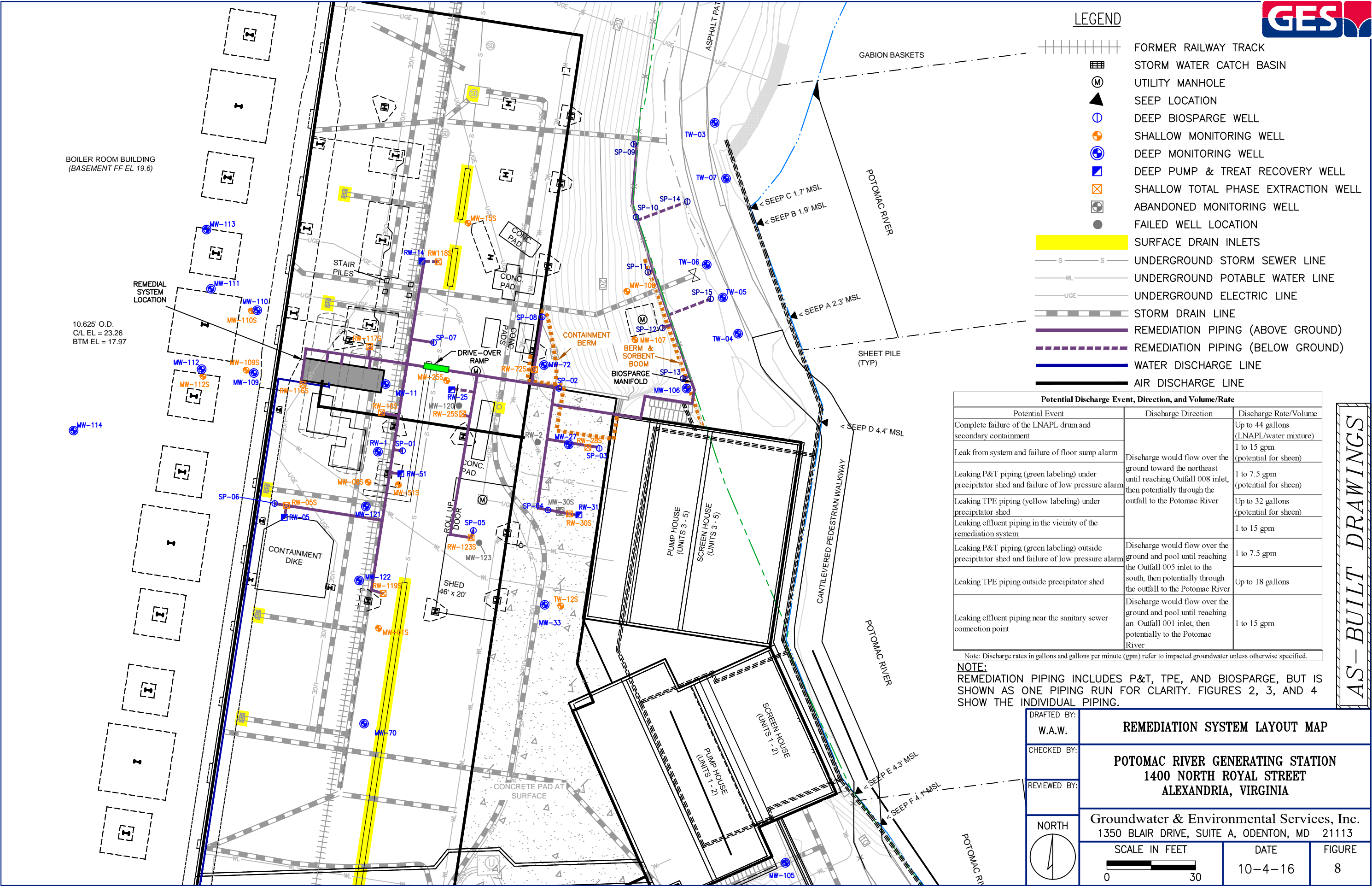
Legend

- FORMER RAILWAY TRACK
- STORM WATER CATCH BASIN
- UTILITY MANHOLE
- SEEP LOCATION
- DEEP BIOSPARGE WELL
- SHALLOW MONITORING WELL
- DEEP MONITORING WELL
- DEEP PUMP & TREAT RECOVERY WELL
- SHALLOW TOTAL PHASE EXTRACTION WELL
- ABANDONED MONITORING WELL
- APPROXIMATE SOIL BORING LOCATION
- TPH-DRO CONCENTRATION CONTOUR (UG/L)
- DASHED WHERE INFERRED
- TPH-DRO CONCENTRATION (UG/L)

Note:
TPH-DRO: Total Petroleum Hydrocarbons - Diesel Range Organics
UG/L: Micrograms per liter

DRAFTED BY:	GKS		
CHECKED BY:	DMC		
REVIEWED BY:	AAB		
NORTH			
TPH-DRO CONCENTRATION CONTOURS DEEP ZONE AQUIFER - AUGUST 2016			
FORMER POTOMAC RIVER GENERATING STATION 1400 NORTH ROYAL STREET ALEXANDRIA, VIRGINIA			
Groundwater & Environmental Services, Inc. 1350 BLAIR DRIVE, SUITE A, ODENTON, MD 21113			
SCALE IN FEET	DATE	FIGURE	
	10-10-16	7	

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AS-BUILT DRAWINGS

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

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

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

- = Not available

ft = Feet

in = Inches

NA = Not applicable

MW = Monitoring Well

P&T = Pump & Treat Well

SP = Air Sparge Point

TPE = Total Phase Extraction Well

TPH-DRO = Total Petroleum Hydrocarbons - Diesel Range Organics

VDEQ = Virginia Department of Environmental Quality

DDOE = District Department of the Environment



Table 2

MONITORING AND SAMPLING PLAN

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

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

Table 2

MONITORING AND SAMPLING PLAN

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Aquifer Zone	Field Parameters								Laboratory Parameters								Sample Method	Comments
		pH	Specific Conductance	Temperature	Oxidation Reduction Potential	Dissolved Oxygen	Headspace CO ₂ concentration	Headspace VOC concentration	Headspace O ₂	TPH-DRO C10-C28 (SW-846 8015B)	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ₂ ⁻² (EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfate SO ₄ ²⁻ (EPA 300.0)	Methane (RSKSOP-175 modified)		
MW-72 / RW-72	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-100S	Shallow	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	P&S	
MW-100	Deep	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	P&S	
MW-102	Deep																	NS	Gauge only
MW-103	Shallow																	NS	Gauge only
MW-104	Shallow																	NS	Gauge only
MW-105	Shallow																	NS	Gauge only
MW-106	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	Begin biostimulation sampling 1Q16
MW-107	Deep									A								P&S	
MW-108	Deep									Q								P&S	Typically Dry
MW-109S	Shallow									A								P&S	basement wells
MW-109	Deep									A								P&S	
MW-110S	Shallow									A								P&S	
MW-110	Deep									A								P&S	
MW-111	Deep									A								P&S	
MW-112S	Shallow									A								P&S	
MW-112	Deep									A								P&S	
MW-113	Deep									A								P&S	
MW-114	Deep									A								P&S	
MW-121	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	
MW-122	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q	A	Q	Q	Q	Q	Q	Q	P&S	
MW-123S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
TW-02	Deep																	NS	Gauge only
TW-03	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	LF	Begin biostimulation sampling 1Q16
TW-04	Deep									Q								LF	

Table 2

MONITORING AND SAMPLING PLAN

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Aquifer Zone	Field Parameters								Laboratory Parameters								Sample Method	Comments
		pH	Specific Conductance	Temperature	Oxidation Reduction Potential	Dissolved Oxygen	Headspace CO ₂ concentration	Headspace VOC concentration	Headspace O ₂	TPH-DRO C10-C28 (SW-846 8015B)	BTEX Naphthalene (8260)	Alkalinity (SM 2320B)	Nitrate NO ₃ ⁻¹ & Nitrite NO ₂ ⁻² (EPA 353.2)	Manganese (Mn2+)	Ferrous Iron Fe ²⁺ (SM 3500-Fe B modified-1997)	Sulfate SO ₄ ²⁻ (EPA 300.0)	Methane (RSKSOP-175 modified)		
TW-05	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	LF	Begin biostimulation sampling 1Q16
TW-06	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q		Q	Q	Q	Q	Q	Q	LF	
TW-07	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q								LF	Begin collection of field parameters 1Q16
TW-12S	Shallow									Q								P&S	Dry
TW-14	Shallow									Q	A							LF	
RW-1	Deep	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-05S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-25S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q	A							P&S	LNAPL**
RW-28S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-30S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	Begin collection of field parameters 1Q16
RW-116S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-117S	Shallow	Q	Q	Q	Q	Q	Q	Q	Q	Q								P&S	
RW-118S	Shallow									Q								P&S	
RW-119S	Shallow									Q								P&S	

Notes:

2Q2016 - TW-03 was not gauged because well was being sampled during measuring time. TW-05 was not sampled because of an interference caused by the new sparge points which led to air entering the well and too high of a turbidity to sample. TW-12S, RW-30S, and RW-117S were not sampled because they were dry or there was not enough water in the well. Select annual samples were collected during the 4th quarter of 2015. Moving forward, annual sampling to be completed in the 4th quarter of a year.

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

Q - Quarterly sampling frequency

A - Annual sampling frequency

P&S - Purge and Sample

LF - Low Flow Sampling

NS - No Sampling Planned

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-01S	08/08/2014	30.78	22.67	-	-	-	26.58	8.11	-	
	08/11/2014	30.78	22.62	-	-	-	-	8.16	-	
	08/15/2014	30.78	22.60	-	-	-	-	8.18	-	
	08/18/2014	30.78	22.88	-	-	-	-	7.90	-	
	08/25/2014	30.87	22.27	-	-	-	-	8.60	-	
	09/02/2014	30.87	22.28	-	-	-	-	8.59	-	
	09/15/2014	30.87	22.61	-	-	-	-	8.26	-	
	09/22/2014	30.87	22.75	-	-	-	-	8.12	-	
	09/24/2014	30.87	22.95	-	-	-	-	7.92	-	
	10/01/2014	30.87	22.94	-	-	-	26.59	7.93	-	
	10/10/2014	30.87	23.06	-	-	-	-	7.81	-	
	10/20/2014	30.87	23.53	-	-	-	26.58	7.34	-	
	02/24/2015	30.87	25.89	25.74	0.15	-	26.65	5.11	15:24	LNAPL not manually bailed
	02/26/2015	30.87	25.61	25.51	0.10	-	-	5.35	16:10	LNAPL not manually bailed
	03/04/2015	30.87	25.63	25.52	0.11	-	-	5.34	14:21	LNAPL not manually bailed
	03/11/2015	30.87	25.51	25.39	0.12	-	-	5.47	13:00	LNAPL not manually bailed
	03/18/2015	30.87	25.14	25.03	0.11	-	-	5.83	11:19	LNAPL not manually bailed
	03/26/2015	30.87	25.07	24.98	0.09	-	26.60	5.88	10:35	LNAPL not manually bailed
	04/02/2015	30.87	25.06	24.96	0.10	-	26.60	5.90	11:33	LNAPL not manually bailed
	04/08/2015	30.87	25.10	24.96	0.14	-	26.64	5.89	9:27	LNAPL not manually bailed
	04/13/2015	30.87	24.92	24.83	0.09	-	-	6.03	10:35	LNAPL not manually bailed
	04/23/2015	30.87	24.38	24.35	0.03	-	26.55	6.52	12:04	LNAPL not manually bailed
	04/29/2015	30.87	24.38	24.34	0.04	-	26.60	6.53	14:29	LNAPL not manually bailed
	05/04/2015	30.87	24.32	24.28	0.04	-	-	6.59	11:55	LNAPL not manually bailed
	05/11/2015	30.87	24.37	24.31	0.06	-	-	6.55	10:55	LNAPL not manually bailed
	05/21/2015	30.87	24.46	24.41	0.05	-	-	6.45	12:15	LNAPL not manually bailed
	05/28/2015	30.87	24.65	24.54	0.11	-	26.55	6.32	11:50	LNAPL not manually bailed
	06/02/2015	30.87	24.52	24.46	0.06	-	-	6.40	13:16	LNAPL not manually bailed
	06/09/2015	30.87	24.12	24.10	0.02	-	-	6.77	10:43	LNAPL not manually bailed
	06/16/2015	30.87	24.05	24.04	0.01	-	-	6.83	11:37	LNAPL not manually bailed
	06/26/2015	30.87	23.72	-	-	-	26.50	7.15	10:43	LNAPL not manually bailed
	07/01/2015	30.87	23.25	23.24	0.01	-	-	7.63	12:34	LNAPL not manually bailed
	07/08/2015	30.87	22.93	TRACE	TRACE	TRACE	-	7.94	11:50	
	07/13/2015	30.87	22.72	-	-	-	-	8.15	9:42	
	07/20/2015	30.87	22.40	-	-	-	-	8.47	9:37	
	07/28/2015	30.87	22.43	-	-	-	26.69	8.44	10:56	
	08/04/2015	30.87	22.46	22.45	0.01	TRACE	26.56	8.42	10:35	
	08/11/2015	30.87	22.50	TRACE	TRACE	TRACE	26.61	8.37	10:39	
	08/18/2015	30.87	22.63	-	-	-	-	8.24	10:46	
	08/24/2015	30.87	22.69	-	-	-	-	8.18	10:43	
	09/02/2015	30.87	22.90	22.88	0.02	TRACE	26.62	7.99	9:32	
	09/09/2015	30.87	22.96	22.95	0.01	-	26.60	7.92	11:17	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-01S (cont.)	09/17/2015	30.87	23.19	23.18	0.01	-	26.62	7.69	10:58	LNAPL not manually bailed LNAPL not manually bailed
	09/23/2015	30.87	23.07	23.06	0.01	TRACE	-	7.81	11:01	
	09/28/2015	30.87	23.10	TRACE	TRACE	-	26.10	7.77	10:08	
	10/05/2015	30.87	23.09	TRACE	TRACE	-	26.60	7.78	11:07	
	11/10/2015	30.87	23.59	-	-	-	-	7.28	13:10	
	12/01/2015	30.87	24.05	24.04	0.01	-	26.57	6.83	12:02	
	01/27/2016	30.87	23.98	TRACE	TRACE	-	-	6.89	9:54	
	02/15/2016	30.87	23.54	-	-	-	-	7.33	9:40	
	03/14/2016	30.87	23.27	-	-	-	26.60	7.60	11:45	
	03/16/2016	30.87	23.16	-	-	-	26.60	7.71	12:46	
	04/21/2016	30.87	23.48	-	-	-	26.59	7.39	11:05	
	05/23/2016	30.87	23.69	23.68	0.01	-	-	7.19	12:00	
	06/21/2016	30.87	22.93	-	-	-	-	7.94	11:17	
	07/21/2016	30.87	22.57	-	-	-	-	8.30	10:40	
	08/24/2016	30.87	22.96	-	-	-	26.67	7.91	11:07	
	08/25/2016	30.87	23.08	-	-	-	26.75	7.79	10:55	
TW-01	12/18/2013	38.31	31.38	-	-	-	-	6.93	-	
	01/08/2014	38.31	31.80	31.79	0.01	-	-	6.52	-	
	03/07/2014	38.31	30.41	-	-	-	-	7.90	-	
	03/13/2014	38.31	31.13	-	-	-	-	7.18	-	
	03/20/2014	38.31	30.36	-	-	-	-	7.95	-	
	03/27/2014	38.31	31.22	-	-	-	-	7.09	-	
	04/03/2014	38.31	30.36	-	-	-	-	7.95	-	
	04/08/2014	38.31	30.21	-	-	-	-	8.10	-	
	04/17/2014	38.31	31.02	-	-	-	-	7.29	-	
	04/22/2014	38.31	30.18	-	-	-	-	8.13	-	
	04/29/2014	38.31	30.22	-	-	-	-	8.09	-	
	05/05/2014	38.31	30.29	-	-	-	-	8.02	-	
	05/12/2014	38.31	30.28	-	-	-	-	8.03	-	
	05/19/2014	38.31	30.16	-	-	-	-	8.15	-	
	06/02/2014	38.31	30.17	-	-	-	-	8.14	-	
	06/09/2014	38.31	30.08	-	-	-	-	8.23	-	
	06/16/2014	38.31	30.23	-	-	-	-	8.08	-	
	06/23/2014	38.31	30.02	-	-	-	-	8.29	-	
	07/02/2014	38.31	29.98	-	-	-	-	8.33	-	
	07/07/2014	38.31	30.16	-	-	-	34.52	8.15	-	
	07/14/2014	38.31	29.89	-	-	-	-	8.42	-	
	07/31/2014	38.31	30.26	-	-	-	34.50	8.05	-	
	08/01/2014	Overdrilled and replaced with MW-05								
MW/RW-05	08/08/2014	31.57	25.41	-	-	-	33.94	6.16	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-05 / RW-05 (cont.)	08/11/2014	31.57	25.16	-	-	-	-	6.41	-	Transducers in well for pump test
	08/15/2014	31.57	24.98	-	-	-	-	6.59	-	
	08/16/2014	31.57	24.84	24.80	0.04	NA	-	6.77	-	Transducers in well for pump test
	08/18/2014	31.57	24.88	24.80	0.08	NA	-	6.76	-	
	08/25/2014	31.57	23.27	22.99	0.28	0.06	-	8.55	-	HIT event
	09/02/2014	31.57	23.62	23.07	0.55	0.31	-	8.43	-	
	09/15/2014	31.57	23.63	23.13	0.50	NR	-	8.38	-	
	09/19/2014	31.57	23.72	23.18	0.54	0.17	-	8.32	-	
	09/22/2014	31.57	23.25	22.97	0.28	0.06	-	8.57	-	
	09/24/2014	31.57	23.33	23.13	0.20	NR	-	8.42	-	
	10/01/2014	31.57	26.67	TRACE	TRACE	TRACE	31.94	4.90	-	
	10/10/2014	31.57	26.58	26.57	0.01	TRACE	-	5.00	-	
	10/13/2014	31.57	26.73	26.71	0.02	TRACE	-	4.86	-	
	10/20/2014	31.57	26.91	26.89	0.02	TRACE	-	4.68	-	
	10/27/2014	31.57	27.07	27.06	0.01	TRACE	-	4.51	-	
	11/07/2014	31.57	26.93	26.88	0.05	TRACE	-	4.68	-	
	11/12/2014	31.57	26.96	26.94	0.02	TRACE	-	4.63	-	
	11/21/2014	31.57	27.74	27.73	0.01	TRACE	-	3.84	-	
	11/26/2014	31.57	27.28	27.25	0.03	TRACE	-	4.32	-	
	12/05/2014	31.57	27.18	27.16	0.02	TRACE	-	4.41	-	
	12/11/2014	31.57	26.93	-	0.00	TRACE	-	4.64	-	
	12/16/2014	31.57	26.87	26.82	0.05	TRACE	-	4.74	-	
	12/23/2014	31.57	26.95	26.92	0.03	TRACE	-	4.65	-	
	12/30/2014	31.57	27.35	27.32	0.03	TRACE	-	4.25	-	
	01/09/2015	31.57	27.36	27.32	0.04	TRACE	-	4.25	-	
	01/16/2015	31.57	27.06	27.02	0.04	TRACE	-	4.55	-	
	01/19/2015	31.57	27.08	27.03	0.05	TRACE	-	4.53	-	
	01/26/2015	31.57	26.99	26.95	0.04	TRACE	-	4.62	-	
	02/03/2015	31.57	27.73	27.71	0.02	-	32.04	3.86	-	LNAPL not manually bailed
	02/09/2015	31.57	27.23	27.17	0.06	-	-	4.39	-	LNAPL not manually bailed
	02/18/2015	31.57	27.25	27.21	0.04	-	-	4.36	-	LNAPL not manually bailed
	02/24/2015	31.57	27.38	27.37	0.01	TRACE	-	4.20	13:51	LNAPL not manually bailed
	03/04/2015	31.57	27.25	27.20	0.05	-	-	4.36	14:18	
	03/11/2015	31.57	27.07	26.97	0.10	-	-	4.59	12:57	
	03/18/2015	31.57	27.11	27.03	0.08	-	-	4.53	11:15	
	03/26/2015	31.57	26.81	26.73	0.08	-	31.90	4.83	12:06	
	04/02/2015	31.57	27.13	26.97	0.16	-	31.95	4.58	11:37	
	04/08/2015	31.57	27.49	27.20	0.29	-	32.00	4.33	9:20	
	04/13/2015	31.57	27.53	27.07	0.46	-	-	4.44	10:51	
	04/23/2015	31.57	27.41	26.55	0.86	-	32.00	4.92	12:10	
	04/29/2015	31.57	27.78	26.61	1.17	-	31.90	4.82	14:39	
	05/04/2015	31.57	28.03	26.56	1.47	-	-	4.83	11:51	LNAPL not manually bailed

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-05 / RW-05 (cont.)	05/11/2015	31.57	28.24	26.40	1.84	-	-	4.95	15:10	LNAPL not manually bailed
	05/13/2015	31.57	28.75	26.84	1.91	1.50	-	4.50	13:20	
	05/21/2015	31.57	26.87	26.78	0.09	-	-	4.78	12:48	LNAPL not manually bailed
	05/28/2015	31.57	28.45	27.00	1.45	-	32.00	4.39	11:54	LNAPL not manually bailed
	06/02/2015	31.57	28.52	26.62	1.90	-	-	4.72	13:11	LNAPL not manually bailed
	06/09/2015	31.57	28.67	26.12	2.55	-	-	5.14	10:55	LNAPL not manually bailed
	06/16/2015	31.57	29.17	25.86	3.31	-	-	5.31	11:48	LNAPL not manually bailed
	06/26/2015	31.57	28.51	25.55	2.96	-	32.00	5.66	10:50	LNAPL not manually bailed
	07/01/2015	31.57	27.93	24.65	3.28	-	-	6.52	12:39	LNAPL not manually bailed
	07/08/2015	31.57	27.50	23.75	3.75	-	-	7.36	8:00	Baildown test
	07/13/2015	31.57	24.16	22.98	1.18	-	-	8.45	8:10	HIT event
	07/20/2015	31.57	23.03	22.69	0.34	0.09	-	8.84	9:56	
	07/28/2015	31.57	22.75	22.55	0.20	0.09	32.07	9.00	12:40	
	08/04/2015	31.57	22.92	22.63	0.29	0.06	-	8.90	12:31	
	08/11/2015	31.57	23.57	22.60	0.97	0.09	32.05	8.85	10:43	
	08/18/2015	31.57	23.74	23.02	0.72	0.38	-	8.46	10:56	
	08/21/2015	31.57	23.46	23.15	0.31	-	-	8.38	7:55	HIT event
	08/24/2015	31.57	23.88	23.86	0.02	TRACE	-	7.71	11:00	
	09/02/2015	31.57	24.72	24.44	0.28	0.05	32.04	7.10	11:00	
	09/09/2015	31.57	24.60	24.39	0.21	0.06	32.05	7.15	11:20	
	09/17/2015	31.57	24.83	24.36	0.47	0.07	32.08	7.15	11:00	
	09/23/2015	31.57	24.88	24.70	0.18	0.02	-	6.85	11:23	
	09/28/2015	31.57	24.50	24.48	0.02	0.04	31.94	7.09	10:05	
	10/05/2015	31.57	24.41	24.31	0.10	0.05	32.01	7.25	-	
	11/10/2015	31.57	25.53	25.38	0.15	-	-	6.17	13:44	LNAPL not manually bailed
	12/01/2015	31.57	26.16	25.98	0.18	-	-	5.57	13:56	LNAPL not manually bailed
	01/27/2016	31.57	26.56	26.34	0.22	-	-	5.20	10:44	pump in well
	02/15/2016	31.57	26.99	26.98	0.01	-	-	4.59	10:31	pump in well
	03/14/2016	31.57	25.65	TRACE	TRACE	-	-	5.92	10:20	pump in well
	03/24/2016	31.57	29.70	-	-	-	-	1.87	-	O&M event
	03/30/2016	31.57	29.68	-	-	-	-	1.89	-	O&M event
	04/21/2016	31.57	29.65	-	-	-	-	1.92	10:34	
	05/23/2016	31.57	29.80	-	-	-	-	1.77	11:27	
	06/21/2016	31.57	29.79	-	-	-	-	1.78	10:50	
	07/21/2016	31.57	23.85	-	-	-	-	7.72	10:30	pump in well
	08/24/2016	31.57	21.60	-	-	-	-	9.97	11:11	pump in well
	08/25/2016	31.57	-	-	-	-	-	-	-	pump in well
	09/22/2016	31.57	29.00	-	-	-	-	2.57	11:40	pump in well
TW-09S	12/18/2013	36.65	DRY	-	-	-	-	-	-	
	01/08/2014	36.65	DRY	25.54	0.46	0.10	-	-	-	
	03/07/2014	36.65	24.71	24.70	0.01	-	-	11.95	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-09S (cont.)	03/13/2014	36.65	25.78	24.71	1.07	0.10	-	11.81	-	
	03/20/2014	36.65	DRY	25.65	0.50	0.10	-	-	-	
	03/27/2014	36.65	DRY	25.58	0.54	0.10	-	-	-	
	04/03/2014	36.65	23.37	23.18	0.19	0.10	-	13.45	-	
	04/08/2014	36.65	23.39	23.23	0.16	0.10	-	13.40	-	
	04/17/2014	36.65	23.72	23.66	0.06	-	-	12.99	-	
	04/22/2014	36.65	23.53	23.40	0.13	0.10	-	13.24	-	
	04/29/2014	36.65	23.76	23.68	0.08	-	-	12.96	-	
	05/05/2014	36.65	23.23	23.17	0.06	-	-	13.48	-	
	05/12/2014	36.65	23.25	23.23	0.02	-	-	13.42	-	
	05/19/2014	36.65	23.17	23.16	0.01	-	-	13.49	-	
	06/02/2014	36.65	23.19	-	-	-	-	13.46	-	
	06/09/2014	36.65	23.17	-	-	-	-	13.48	-	
	06/16/2014	36.65	23.13	-	-	-	-	13.52	-	
	06/23/2014	36.65	23.11	-	-	-	-	13.54	-	
	07/02/2014	36.65	23.03	TRACE	TRACE	TRACE	-	13.62	-	
	07/07/2014	36.65	23.01	-	-	-	26.15	13.64	-	
	07/14/2014	36.65	23.02	-	-	-	-	13.63	-	
	07/23/2014	Overdrilled and replaced with MW-08S								
MW-08S	07/24/2014	30.86	26.59	-	-	-	-	4.27	-	
	07/31/2014	30.86	22.08	-	-	-	24.35	8.78	-	
	08/08/2014	30.86	21.33	-	-	-	24.64	9.53	-	
	08/11/2014	30.86	21.42	-	-	-	-	9.44	-	
	08/15/2014	30.86	21.41	-	-	-	-	9.45	-	
	08/18/2014	30.86	21.46	-	-	-	-	9.40	-	
	08/25/2014	30.86	21.49	-	-	-	-	9.37	-	
	09/02/2014	30.86	21.45	-	-	-	-	9.41	-	
	09/15/2014	30.86	21.58	-	-	-	-	9.28	-	
	09/22/2014	30.86	21.67	-	-	-	-	9.19	-	
	09/24/2014	30.86	21.68	-	-	-	-	9.18	-	
	10/01/2014	30.86	21.67	-	-	-	24.66	9.19	-	
	10/10/2014	30.86	21.71	-	-	-	-	9.15	-	
	10/13/2014	30.86	21.72	-	-	-	-	9.14	-	
	10/20/2014	30.86	21.80	-	-	-	24.65	9.06	-	
	10/27/2014	30.86	21.88	-	-	-	-	8.98	-	
	11/07/2014	30.86	21.84	-	-	-	-	9.02	-	
	11/12/2014	30.86	21.94	-	-	-	-	8.92	-	
	11/21/2014	30.86	21.99	-	-	-	-	8.87	-	
	11/26/2014	30.86	22.01	-	-	-	-	8.85	-	
	12/05/2014	30.86	22.03	-	-	-	-	8.83	-	
	12/11/2014	30.86	22.03	-	-	-	-	8.83	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-08S (cont.)	12/16/2014	30.86	22.04	-	-	-	-	8.82	-	
	12/23/2014	30.86	22.07	-	-	-	-	8.79	-	
	12/30/2014	30.86	22.10	-	-	-	-	8.76	-	
	01/09/2015	30.86	22.12	-	-	-	-	8.74	-	
	01/16/2015	30.86	22.05	-	-	-	-	8.81	-	
	01/19/2015	30.86	22.01	-	-	-	-	8.85	-	
	01/26/2015	30.86	22.08	-	-	-	-	8.78	-	
	02/03/2015	30.86	22.15	-	-	-	24.72	8.71	-	
	02/09/2015	30.86	22.14	-	-	-	-	8.72	-	
	02/18/2015	30.86	22.15	-	-	-	-	8.71	-	
	02/24/2015	30.86	22.15	-	-	-	24.64	8.71	15:48	
	03/04/2015	30.86	21.34	-	-	-	-	9.52	14:15	
	03/11/2015	30.86	21.80	-	-	-	-	9.06	12:45	
	03/18/2015	30.86	21.88	-	-	-	-	8.98	11:05	
	03/26/2015	30.86	22.05	-	-	-	24.70	8.81	11:40	
	04/02/2015	30.86	22.03	-	-	-	24.60	8.83	11:25	
	04/08/2015	30.86	22.07	-	-	-	24.68	8.79	8:50	
	04/13/2015	30.86	22.08	-	-	-	-	8.78	10:41	
	04/23/2015	30.86	22.08	-	-	-	24.65	8.78	11:55	
	04/29/2015	30.86	22.09	-	-	-	24.60	8.77	14:22	
	05/04/2015	30.86	22.09	-	-	-	-	8.77	11:39	
	05/11/2015	30.86	22.10	-	-	-	24.70	8.76	9:50	
	05/21/2015	30.86	22.05	-	-	-	24.65	8.81	12:22	
	05/28/2015	30.86	22.11	-	-	-	24.60	8.75	11:45	
	06/02/2015	30.86	22.06	-	-	-	-	8.80	13:04	
	06/09/2015	30.86	22.05	-	-	-	-	8.81	10:30	
	06/16/2015	30.86	22.05	-	-	-	-	8.81	11:24	
	06/26/2015	30.86	21.98	-	-	-	24.50	8.88	10:40	
	07/01/2015	30.86	22.02	-	-	-	-	8.84	12:15	
	07/08/2015	30.86	22.01	-	-	-	-	8.85	11:18	
	07/13/2015	30.86	21.95	-	-	-	-	8.91	9:26	
	07/20/2015	30.86	21.75	-	-	-	-	9.11	9:16	
	07/28/2015	30.86	21.08	-	-	-	24.75	9.78	11:46	
	07/28/2015	30.86	21.08	-	-	-	24.75	9.78	11:46	
	08/04/2015	30.86	21.05	-	-	-	24.30	9.81	9:39	
	08/11/2015	30.86	21.15	-	-	-	24.69	9.71	10:18	
	08/18/2015	30.86	21.24	-	-	-	-	9.62	10:16	
	08/24/2015	30.86	21.32	-	-	-	-	9.54	10:26	
	09/02/2015	30.86	21.32	-	-	-	24.66	9.54	11:10	
	09/09/2015	30.86	21.50	-	-	-	24.71	9.36	10:15	
	09/17/2015	30.86	21.61	-	-	-	24.74	9.25	10:17	
	09/23/2015	30.86	21.63	-	-	-	-	9.23	10:40	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-08S (cont.)	09/28/2015	30.86	21.68	-	-	-	24.69	9.18	9:22	
	10/05/2015	30.86	21.75	-	-	-	24.70	9.11	9:23	
	11/10/2015	30.86	21.95	-	-	-	-	8.91	13:13	
	12/01/2015	30.86	22.00	-	-	-	24.66	8.86	10:43	
	01/27/2016	30.86	21.98	-	-	-	-	8.88	10:33	
	02/15/2016	30.86	21.83	-	-	-	-	9.03	10:14	
	03/14/2016	30.86	21.72	-	-	-	25.62	9.14	11:04	
	03/16/2016	30.86	21.72	-	-	-	24.65	9.14	12:42	
	04/21/2016	30.86	22.21	-	-	-	24.65	8.65	12:11	
	05/23/2016	30.86	25.03	-	-	-	25.48	5.83	11:00	
	05/24/2016	30.86	22.05	-	-	-	24.68	8.81	10:11	
	06/21/2016	30.86	22.18	-	-	-	-	8.68	10:56	
	07/21/2016	30.86	21.20	-	-	-	-	9.66	10:55	
	08/24/2016	30.86	21.77	-	-	-	24.65	9.09	11:22	
MW-10S / RW-10S	08/08/2014	31.24	22.40	-	-	-	26.51	8.84	-	HIT event
	08/11/2014	31.24	22.41	-	-	-	-	8.83	-	
	08/15/2014	31.24	22.02	-	-	-	-	9.22	-	
	08/18/2014	31.24	22.03	-	-	-	-	9.21	-	
	08/25/2014	31.24	22.06	-	-	-	-	9.18	-	
	09/02/2014	31.24	22.11	-	-	-	-	9.13	-	
	09/15/2014	31.24	22.15	-	-	-	-	9.09	-	
	09/22/2014	31.24	22.18	-	-	-	-	9.06	-	
	09/24/2014	31.24	22.19	-	-	-	-	9.05	-	
	10/01/2014	31.24	22.22	-	-	-	26.09	9.02	-	
	10/10/2014	31.24	22.18	TRACE	TRACE	-	-	9.06	-	
	10/13/2014	31.24	22.21	-	-	-	-	9.03	-	
	10/20/2014	31.24	22.35	-	-	-	26.10	8.89	-	
	10/27/2014	31.24	22.32	-	-	-	-	8.92	-	
	11/07/2014	31.24	22.30	-	-	-	-	8.94	-	
	11/12/2014	31.24	22.32	-	-	-	-	8.92	-	
	11/21/2014	31.24	22.38	-	-	-	-	8.86	-	
	11/26/2014	31.24	22.35	-	-	-	-	8.89	-	
	12/05/2014	31.24	22.40	22.38	0.02	TRACE	-	8.86	-	
	12/11/2014	31.24	22.33	TRACE	TRACE	-	-	8.91	-	
	12/16/2014	31.24	22.36	TRACE	TRACE	-	-	8.88	-	
	12/23/2014	31.24	22.37	-	-	-	-	8.87	-	
	12/30/2014	31.24	22.42	TRACE	TRACE	-	-	8.82	-	
	01/09/2015	31.24	22.44	22.43	0.01	TRACE	-	8.81	-	
	01/16/2015	31.24	22.41	22.40	0.01	TRACE	-	8.84	-	
	01/19/2015	31.24	22.43	22.42	0.01	TRACE	-	8.82	-	
	01/26/2015	31.24	22.23	22.22	0.01	TRACE	-	9.02	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-10S / RW-10S (cont.)	02/03/2015	31.24	22.50	-	-	-	26.11	8.74	-	
	02/09/2015	31.24	22.43	22.42	0.01	-	-	8.82	-	LNAPL not manually bailed
	02/18/2015	31.24	22.44	22.43	0.01	-	-	8.81	-	LNAPL not manually bailed
	02/24/2015	31.24	22.50	22.49	0.01	-	26.11	8.75	15:44	LNAPL not manually bailed
	03/04/2015	31.24	22.50	22.48	0.02	-	-	8.76	14:28	LNAPL not manually bailed
	03/11/2015	31.24	22.51	22.48	0.03	-	-	8.76	12:54	LNAPL not manually bailed
	03/18/2015	31.24	22.56	22.52	0.04	-	-	8.72	11:23	LNAPL not manually bailed
	03/26/2015	31.24	22.53	22.50	0.03	-	26.10	8.74	11:27	LNAPL not manually bailed
	04/02/2015	31.24	22.55	22.51	0.04	-	26.05	8.73	11:52	LNAPL not manually bailed
	04/08/2015	31.24	22.53	22.52	0.01	-	26.10	8.72	9:05	LNAPL not manually bailed
	04/13/2015	31.24	22.56	22.53	0.03	-	-	8.71	10:59	LNAPL not manually bailed
	04/23/2015	31.24	22.53	22.51	0.02	-	26.05	8.73	12:22	LNAPL not manually bailed
	04/29/2015	31.24	23.53	23.50	0.03	-	26.00	7.74	14:43	LNAPL not manually bailed
	05/04/2015	31.24	22.57	22.54	0.03	-	-	8.70	11:59	LNAPL not manually bailed
	05/11/2015	31.24	22.86	22.84	0.02	-	26.10	8.40	10:00	LNAPL not manually bailed
	05/21/2015	31.24	22.59	22.56	0.03	-	-	8.68	12:46	LNAPL not manually bailed
	05/28/2015	31.24	22.60	22.56	0.04	-	26.00	8.68	12:01	LNAPL not manually bailed
	06/02/2015	31.24	22.60	22.56	0.04	-	-	8.68	13:20	LNAPL not manually bailed
	06/09/2015	31.24	22.54	22.53	0.01	-	-	8.71	10:40	LNAPL not manually bailed
	06/19/2015	31.24	22.54	22.53	0.01	-	-	8.71	11:34	LNAPL not manually bailed
	06/26/2015	31.24	22.61	22.54	0.07	-	26.00	8.69	11:26	LNAPL not manually bailed
	07/01/2015	31.24	22.58	22.52	0.06	-	-	8.71	12:26	LNAPL not manually bailed
	07/08/2015	31.24	22.54	22.49	0.05	TRACE	-	8.74	11:57	LNAPL not manually bailed
	07/13/2015	31.24	21.96	-	-	-	-	9.28	9:44	
	07/20/2015	31.24	21.48	-	-	-	-	9.76	9:13	
	07/28/2015	31.24	21.36	-	-	-	26.11	9.88	10:39	
	08/05/2015	31.24	21.51	21.42	0.09	-	-	9.81	9:24	
	08/11/2015	31.24	21.49	TRACE	TRACE	TRACE	26.15	9.75	10:22	
	08/18/2015	31.24	21.76	21.59	0.17	0.02	-	9.63	10:40	
	08/24/2015	31.24	21.80	21.68	0.12	0.01	-	9.55	10:50	
	09/02/2015	31.24	21.95	21.81	0.14	0.01	26.10	9.41	10:00	
	09/09/2015	31.24	22.05	21.91	0.14	0.02	26.11	9.31	11:08	
	09/17/2015	31.24	22.10	22.00	0.10	TRACE	-	9.23	10:35	
	09/23/2015	31.24	22.06	22.02	0.04	TRACE	-	9.22	11:10	
	09/28/2015	31.24	22.14	22.07	0.07	TRACE	26.10	9.16	10:00	
	10/05/2015	31.24	22.12	-	-	-	26.10	9.12	9:26	
	11/10/2015	31.24	24.00	TRACE	TRACE	-	-	7.24	13:25	LNAPL not manually bailed
	12/01/2015	33.02	24.10	-	-	-	27.85	8.92	10:53	
	01/27/2016	33.02	24.18	TRACE	TRACE	-	-	8.84	10:52	LNAPL not manually bailed
	02/15/2016	33.02	24.37	24.36	0.01	-	-	8.66	10:35	LNAPL not manually bailed
	03/14/2016	33.02	24.07	-	-	-	27.87	8.95	12:50	
	04/21/2016	33.02	25.99	25.95	0.04	-	-	7.07	11:27	LNAPL not manually bailed

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
	05/23/2016	33.02	25.55	-	-	-	27.90	7.47	11:40	
	05/24/2016	33.02	25.57	-	-	-	27.89	7.45	10:00	
	06/21/2016	33.02	25.62	-	-	-	-	7.40	10:40	
	07/21/2016	33.02	25.57	-	-	-	-	7.45	10:15	
	08/24/2016	33.02	25.61	-	-	-	27.80	7.41	11:11	
	08/25/2016	33.02	24.97	-	-	-	-	8.05	11:55	
	09/22/2016	33.02	25.68	-	-	-	27.89	7.34	12:24	
MW-11	07/25/2014	30.85	26.90	-	-	-	33.40	3.95	-	
	08/08/2014	30.85	26.76	-	-	-	34.00	4.09	-	
	08/11/2014	30.85	26.57	-	-	-	-	4.28	-	
	08/15/2014	30.85	27.15	-	-	-	-	3.70	-	
	08/16/2014	30.85	26.81	-	-	-	34.00	4.04	-	
	08/18/2014	30.85	26.77	-	-	-	-	4.08	-	
	08/25/2014	30.85	26.43	-	-	-	-	4.42	-	
	09/02/2014	30.85	26.83	-	-	-	-	4.02	-	
	09/15/2014	30.85	26.75	-	-	-	-	4.10	-	
	09/22/2014	30.85	26.64	-	-	-	-	4.21	-	
	09/24/2014	30.85	27.08	-	-	-	-	3.77	-	
	10/01/2014	30.85	26.87	-	-	-	34.02	3.98	-	
	10/13/2014	30.85	26.86	-	-	-	-	3.99	-	
	10/20/2014	30.85	26.96	-	-	-	33.99	3.89	-	
	02/24/2015	30.85	27.03	-	-	-	-	3.82	13:39	
	02/26/2015	30.85	27.07	-	-	-	34.00	3.78	10:18	
	03/04/2015	30.85	26.95	-	-	-	-	3.90	14:09	
	03/11/2015	30.85	26.58	-	-	-	-	4.27	12:39	
	03/18/2015	30.85	26.74	-	-	-	-	4.11	10:59	
	03/26/2015	30.85	26.56	-	-	-	33.90	4.29	11:22	
	04/02/2015	30.85	26.69	-	-	-	33.90	4.16	11:12	
	04/08/2015	30.85	27.00	-	-	-	33.82	3.85	9:25	
	04/13/2015	30.85	26.88	-	-	-	-	3.97	10:32	
	04/23/2015	30.85	26.40	-	-	-	33.85	4.45	11:40	
	04/29/2015	30.85	26.56	-	-	-	33.80	4.29	14:09	
	05/04/2015	30.85	26.39	-	-	-	-	4.46	11:33	
	05/11/2015	30.85	26.35	-	-	-	33.80	4.50	15:05	
	05/21/2015	30.85	26.88	-	-	-	33.90	3.97	12:12	
	05/28/2015	30.85	26.83	-	-	-	33.80	4.02	11:38	
	06/02/2015	30.85	26.50	-	-	-	-	4.35	12:58	
	06/09/2015	30.85	26.23	-	-	-	-	4.62	10:24	
	06/16/2015	30.85	26.28	-	-	-	-	4.57	11:18	
	06/26/2015	30.85	26.22	-	-	-	33.80	4.63	10:32	
	07/01/2015	30.85	25.73	-	-	-	-	5.12	12:09	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-11 (cont.)	08/04/2015	30.85	25.94	-	-	-	33.86	4.91	12:13	
	08/05/2015	30.85	26.31	-	-	-	33.84	4.54	8:46	
	09/28/2015	30.85	25.92	25.90	0.02	-	33.92	4.95	9:58	
	10/05/2015	30.85	25.72	-	-	-	33.92	5.13	9:29	
	11/10/2015	30.85	26.35	-	-	-	-	4.50	13:23	
	12/01/2015	30.85	26.48	-	-	-	33.92	4.37	13:38	
	01/27/2016	30.85	26.68	-	-	-	-	4.17	10:31	
	02/15/2016	30.85	27.03	-	-	-	-	3.82	10:03	
	03/14/2016	30.85	26.63	-	-	-	34.06	4.22	8:30	
	04/21/2016	30.85	26.97	-	-	-	-	3.88	10:04	
	05/23/2016	30.85	27.68	-	-	-	32.83	3.17	9:59	
	06/21/2016	30.85	26.03	-	-	-	-	4.82	10:36	
	07/21/2016	30.85	25.75	-	-	-	-	5.10	10:18	
	08/24/2016	30.85	25.35	-	-	-	30.69	5.50	9:22	
TW-13	12/18/2013	36.99	30.09	-	-	-	-	6.90	-	
	01/08/2014	36.99	30.45	-	-	-	-	6.54	-	
	03/07/2014	36.99	29.11	-	-	-	-	7.88	-	
	03/13/2014	36.99	29.91	-	-	-	-	7.08	-	
	03/20/2014	36.99	29.09	-	-	-	-	7.90	-	
	03/27/2014	36.99	29.98	-	-	-	-	7.01	-	
	04/03/2014	36.99	29.05	-	-	-	-	7.94	-	
	04/08/2014	36.99	29.98	-	-	-	-	7.01	-	
	04/17/2014	36.99	29.62	-	-	-	-	7.37	-	
	04/22/2014	36.99	28.93	-	-	-	-	8.06	-	
	04/29/2014	36.99	28.90	-	-	-	-	8.09	-	
	05/05/2014	36.99	29.95	-	-	-	-	7.04	-	
	05/12/2014	36.99	28.91	-	-	-	-	8.08	-	
	05/19/2014	36.99	28.87	-	-	-	-	8.12	-	
	06/02/2014	36.99	28.86	-	-	-	-	8.13	-	
	06/09/2014	36.99	28.73	-	-	-	-	8.26	-	
	06/16/2014	36.99	28.88	-	-	-	-	8.11	-	
	06/23/2014	36.99	28.65	-	-	-	-	8.34	-	
	07/02/2014	36.99	28.69	-	-	-	-	8.30	-	
	07/07/2014	36.99	28.91	-	-	-	35.02	8.08	-	
	07/14/2014	36.99	28.58	-	-	-	-	8.41	-	
	07/29/2014	Overdrilled and replaced with MW-14								
MW-14 / RW-14	07/31/2014	31.22	28.04	-	-	-	38.15	3.18	-	
	08/08/2014	31.22	28.21	-	-	-	38.14	3.01	-	
	08/11/2014	31.22	27.81	-	-	-	-	3.41	-	
	08/15/2014	31.22	27.43	-	-	-	-	3.79	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-14 / RW-14 (cont.)	08/18/2014	31.22	27.17	-	-	-	-	4.05	-	
	08/25/2014	31.22	26.83	-	-	-	-	4.39	-	
	09/02/2014	31.22	27.25	-	-	-	-	3.97	-	
	09/15/2014	31.22	27.15	-	-	-	-	4.07	-	
	09/22/2014	31.22	27.04	-	-	-	-	4.18	-	
	10/01/2014	31.22	27.23	-	-	-	37.28	3.99	-	
	10/13/2014	31.22	27.25	TRACE	TRACE	-	-	3.97	-	
	10/20/2014	31.22	27.32	-	-	-	37.30	3.90	-	
	02/24/2015	31.22	27.42	-	-	-	37.31	3.80	13:40	
	02/25/2015	31.22	27.46	-	-	-	37.31	3.76	10:47	
	03/04/2015	31.22	27.39	-	-	-	-	3.83	14:06	
	03/11/2015	31.22	26.94	-	-	-	-	4.28	12:36	
	03/18/2015	31.22	27.13	-	-	-	-	4.09	10:56	
	03/26/2015	31.22	26.92	-	-	-	37.30	4.30	11:19	
	04/02/2015	31.22	27.04	-	-	-	37.25	4.18	11:08	
	04/08/2015	31.22	27.30	-	-	-	37.21	3.92	9:26	
	04/13/2015	31.22	27.30	-	-	-	-	3.92	10:55	
	04/23/2015	31.22	26.72	-	-	-	37.25	4.50	11:37	
	04/29/2015	31.22	26.94	-	-	-	37.25	4.28	14:06	
	05/04/2015	31.22	26.77	-	-	-	-	4.45	11:30	
	05/11/2015	31.22	26.71	-	-	-	37.37	4.51	14:52	
	05/12/2015	31.22	27.08	-	-	-	-	4.14	12:15	
	05/21/2015	31.22	26.93	-	-	-	37.33	4.29	12:10	
	05/28/2015	31.22	27.25	-	-	-	37.25	3.97	11:36	
	06/02/2015	31.22	26.92	-	-	-	-	4.30	12:55	
	06/09/2015	31.22	26.67	-	-	-	-	4.55	10:21	
	06/16/2015	31.22	26.73	-	-	-	-	4.49	11:15	
	06/26/2015	31.22	26.65	-	-	-	37.30	4.57	10:30	
	07/01/2015	31.22	26.12	-	-	-	-	5.10	12:06	
	08/04/2015	31.22	26.26	-	-	-	37.28	4.96	12:09	
	08/05/2015	31.22	26.75	SHEEN	-	-	37.27	4.47	8:50	
	12/01/2015	31.22	26.88	-	-	-	37.30	4.34	13:35	
	03/14/2016	31.22	26.93	-	-	-	37.30	4.29	8:55	
	04/21/2016	31.22	28.05	27.42	0.63	0.75	-	3.72	9:33	bailed 0.75 gallon of product
	05/05/2016	31.22	29.03	28.20	0.83	-	-	2.92	13:00	
	05/23/2016	31.22	26.82	26.81	0.01	-	-	4.41	11:54	
	06/21/2016	31.22	28.18	27.77	0.41	0.06	-	3.40	10:26	bailed 8 ounces of product
	07/21/2016	31.22	28.85	27.90	0.95	0.44	-	3.20	11:21	bailed 1.75 quarts of product
	08/04/2016	31.22	28.32	27.75	0.57	0.00	-	3.40	12:00	installed pump & connected air & water lines to system; started pump
	08/24/2016	31.22	30.32	-	-	-	-	0.90	10:05	pump in well

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-14 / RW-14 (cont.)	08/25/2016	31.22	NR	-	-	-	-	-	-	pump in well pump in well
	09/22/2016	31.22	31.30	-	-	-	-	-0.08	13:10	
MW-15S	08/08/2014	31.03	26.11	-	-	-	26.20	4.92	-	
	08/11/2014	31.03	26.11	-	-	-	-	4.92	-	
	08/15/2014	31.03	24.00	-	-	-	-	7.03	-	
	08/18/2014	31.03	24.67	-	-	-	-	6.36	-	
	08/25/2014	31.03	24.82	-	-	-	-	6.21	-	
	09/02/2014	31.03	24.82	-	-	-	-	6.21	-	
	09/15/2014	31.03	24.96	-	-	-	-	6.07	-	
	09/22/2014	31.03	25.06	-	-	-	-	5.97	-	
	10/01/2014	31.03	25.20	-	-	-	25.88	5.83	-	
	10/13/2014	31.03	26.37	-	-	-	-	4.66	-	
	10/20/2014	31.03	25.45	-	-	-	25.90	5.58	-	
	05/11/2015	31.03	25.33	-	-	-	26.00	5.70	9:10	
	05/12/2015	31.03	25.35	-	-	-	-	5.68	12:10	
	08/04/2015	31.03	22.16	-	-	-	25.90	8.87	9:47	
	12/01/2015	31.03	25.46	-	-	-	25.88	5.57	11:03	
	03/14/2016	31.03	25.58	-	-	-	26.00	5.45	8:55	
	05/23/2016	31.03	25.29	-	-	-	26.00	5.74	11:08	
	07/21/2016	31.03	25.44	-	-	-	-	5.59	11:26	
	08/24/2016	31.03	22.07	-	-	-	25.86	8.96	12:16	
MW-16S	08/15/2014	31.03	24.13	-	-	-	24.61	6.90	-	
	08/16/2014	31.03	24.12	-	-	-	24.48	6.91	-	
	08/18/2014	31.03	24.13	-	-	-	-	6.90	-	
	08/25/2014	31.03	24.24	-	-	-	-	6.79	-	
	09/02/2014	31.03	DRY	-	-	-	24.65	-	-	
	09/15/2014	31.03	DRY	-	-	-	24.64	-	-	
	09/22/2014	31.03	DRY	-	-	-	-	-	-	
	10/01/2014	31.03	DRY	-	-	-	24.64	-	-	
	10/10/2014	31.03	DRY	-	-	-	-	-	-	
	10/20/2014	31.03	DRY	-	-	-	24.64	-	-	
	02/24/2015	31.03	DRY	-	-	-	24.70	-	15:36	
	05/11/2015	31.03	DRY	-	-	-	24.70	-	10:15	
	08/04/2015	31.03	22.63	-	-	-	24.62	8.40	9:54	
	12/01/2015	31.03	DRY	-	-	-	24.64	-	11:07	
	03/14/2016	31.03	DRY	-	-	-	24.70	-	8:45	
	05/23/2016	31.03	DRY	-	-	-	24.82	-	11:15	
	08/24/2016	31.03	DRY	-	-	-	24.65	-	12:18	
MW-16	08/15/2014	30.97	26.78	-	-	-	35.74	4.19	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-16 (cont.)	08/18/2014	30.97	26.73	-	-	-	-	4.24	-	
	08/25/2014	30.97	26.55	-	-	-	-	4.42	-	
	09/02/2014	30.97	26.91	-	-	-	-	4.06	-	
	09/15/2014	30.97	26.76	-	-	-	-	4.21	-	
	09/22/2014	30.97	26.80	-	-	-	-	4.17	-	
	10/01/2014	30.97	26.95	-	-	-	35.53	4.02	-	
	10/10/2014	30.97	26.85	-	-	-	-	4.12	-	
	10/20/2014	30.97	27.19	-	-	-	35.61	3.78	-	
	02/24/2015	30.97	27.25	-	-	-	35.61	3.72	13:34	
	02/25/2015	30.97	27.23	-	-	-	35.62	3.74	11:14	
	05/11/2015	30.97	26.43	-	-	-	35.60	4.54	14:50	
	05/12/2015	30.97	26.90	-	-	-	-	4.07	9:52	
	08/04/2015	30.97	24.75	-	-	-	35.55	6.22	12:06	
	08/05/2015	30.97	25.04	-	-	-	35.53	5.93	9:51	
	12/01/2015	30.97	26.55	-	-	-	27.90	4.42	13:30	
	03/14/2016	30.97	26.67	-	-	-	35.55	4.30	9:00	
	05/23/2016	30.97	26.65	-	-	-	35.82	4.32	10:35	
	08/24/2016	30.97	26.75	-	-	-	35.55	4.22	9:42	
MW-25S	08/08/2014	31.07	23.64	-	-	-	25.80	7.43	-	
	08/11/2014	31.07	22.35	-	-	-	-	8.72	-	
	08/15/2014	31.07	21.94	-	-	-	-	9.13	-	
	08/18/2014	31.07	21.95	-	-	-	-	9.12	-	
	08/25/2014	31.07	21.98	-	-	-	-	9.09	-	
	09/02/2014	31.07	21.99	-	-	-	-	9.08	-	
	09/15/2014	31.07	22.04	-	-	-	-	9.03	-	
	09/22/2014	31.07	22.50	-	-	-	-	8.57	-	
	09/24/2014	31.07	22.12	TRACE	TRACE	-	-	8.95	-	
	10/01/2014	31.07	22.07	-	-	-	25.47	9.00	-	
	10/10/2014	31.07	22.09	TRACE	TRACE	-	-	8.98	-	
	10/13/2014	31.07	22.13	22.11	0.02	TRACE	-	8.96	-	
	10/20/2014	31.07	22.19	22.18	0.01	TRACE	-	8.89	-	
	10/27/2014	31.07	22.10	22.09	0.01	TRACE	-	8.98	-	
	10/27/2014	31.07	22.10	22.09	0.01	TRACE	-	8.98	-	
	11/07/2014	31.07	22.08	22.07	0.01	TRACE	-	9.00	-	
	11/12/2014	31.07	22.28	22.10	0.18	0.06	-	8.95	-	
	11/21/2014	31.07	22.43	22.18	0.25	0.09	-	8.86	-	
	11/26/2014	31.07	22.37	22.17	0.20	0.06	-	8.88	-	
	12/05/2014	31.07	22.57	22.20	0.37	-	25.50	8.82	-	HIT event
	12/11/2014	31.07	22.22	22.21	0.01	TRACE	-	8.86	-	
	12/16/2014	31.07	22.38	22.11	0.27	0.03	-	8.93	-	
	12/23/2014	31.07	22.43	22.13	0.30	0.05	-	8.90	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-25S (cont.)	12/30/2014	31.07	22.50	22.20	0.30	0.04	-	8.83	-	HIT event
	01/09/2015	31.07	22.49	22.19	0.30	-	-	8.84	-	
	01/16/2015	31.07	22.60	22.48	0.12	0.01	-	8.58	-	
	01/19/2015	31.07	22.34	22.25	0.09	0.01	-	8.81	-	
	01/26/2015	31.07	22.30	22.16	0.14	0.02	-	8.89	-	
	02/03/2015	31.07	22.25	-	-	-	25.50	8.82	-	LNAPL not manually bailed
	02/09/2015	31.07	22.31	22.14	0.17	-	-	8.91	-	
	02/18/2015	31.07	22.37	22.18	0.19	-	-	8.87	-	
	02/24/2015	31.07	22.59	22.28	0.31	-	-	8.75	14:03	
	03/04/2015	31.07	22.48	22.30	0.18	-	-	8.75	14:31	
	03/11/2015	31.07	22.50	22.30	0.20	-	-	8.75	13:04	
	03/18/2015	31.07	22.46	22.23	0.23	-	-	8.81	11:26	
	03/26/2015	31.07	22.35	22.17	0.18	-	25.50	8.88	11:59	
	04/02/2015	31.07	22.40	22.18	0.22	-	25.45	8.86	12:06	
	04/08/2015	31.07	22.40	22.08	0.32	-	25.47	8.95	9:15	
	04/13/2015	31.07	22.50	22.22	0.28	-	-	8.82	11:03	
	04/23/2015	31.07	22.39	22.16	0.23	-	25.50	8.88	12:25	
	04/29/2015	31.07	22.35	22.12	0.23	-	25.50	8.92	14:48	
	05/04/2015	31.07	22.47	22.19	0.28	-	-	8.85	12:04	
	05/11/2015	31.07	22.45	22.20	0.25	-	-	8.84	11:00	
	05/21/2015	31.07	22.40	22.23	0.17	-	-	8.82	12:53	
	05/28/2015	31.07	22.60	22.27	0.33	-	25.50	8.76	12:06	
	06/02/2015	31.07	22.53	22.25	0.28	-	-	8.79	13:24	
	06/09/2015	31.07	22.38	22.16	0.22	-	-	8.88	10:46	
	06/16/2015	31.07	22.37	22.13	0.24	-	-	8.91	11:40	
	06/26/2015	31.07	22.35	22.12	0.23	-	25.40	8.92	11:28	
	07/01/2015	31.07	22.23	22.04	0.19	-	-	9.01	12:18	
	07/08/2015	31.07	22.08	21.88	0.20	0.04	-	9.17	12:04	
	07/13/2015	31.07	21.89	21.74	0.15	-	-	9.31	9:48	HIT event
	07/20/2015	31.07	21.37	21.33	0.04	TRACE	-	9.74	9:43	
	07/28/2015	31.07	21.20	-	-	-	25.49	9.87	12:25	
	08/04/2015	31.07	21.28	21.24	TRACE	TRACE	-	9.79	12:22	
	08/11/2015	31.07	21.37	21.36	0.01	0.01	25.49	9.71	11:22	
	08/18/2015	31.07	21.51	21.46	0.05	TRACE	-	9.60	10:50	
	08/24/2015	31.07	21.60	21.54	0.06	TRACE	-	9.52	10:53	
	09/02/2015	31.07	21.76	21.69	0.07	0.01	25.47	9.37	10:31	
	09/09/2015	31.07	21.81	21.77	0.04	0.01	25.49	9.30	10:50	
	09/17/2015	31.07	21.92	21.89	0.03	0.01	25.52	9.18	10:37	
	09/23/2015	31.07	21.92	21.89	0.03	TRACE	-	9.18	11:14	
	09/28/2015	31.07	21.96	21.92	0.04	TRACE	25.48	9.15	9:49	
	10/05/2015	31.07	22.01	21.98	0.03	TRACE	25.51	9.09	11:32	
	11/10/2015	31.07	22.09	22.06	0.03	TRACE	-	9.01	13:27	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-25S (cont.)	12/01/2015	31.07	22.19	22.16	0.03	-	25.43	8.91	12:10	LNAPL not manually bailed
	01/27/2016	31.07	22.10	22.08	0.02	-	-	8.99	10:56	LNAPL not manually bailed
	02/15/2016	31.07	22.10	22.07	0.03	TRACE	-	9.00	10:39	LNAPL not manually bailed
	03/14/2016	31.07	22.02	-	-	-	25.50	9.05	9:20	strong product odor
	04/21/2016	31.07	22.38	22.35	0.03	TRACE	-	8.72	12:15	bailed traces of product
	05/23/2016	31.07	22.16	22.14	0.02	TRACE	-	8.93	11:45	
	06/21/2016	31.07	22.17	22.13	0.04	TRACE	-	8.94	10:14	bailed traces of product
	07/21/2016	31.07	22.02	-	-	-	-	9.05	11:16	
	08/24/2016	31.07	22.07	-	-	-	25.65	9.00	11:35	
	08/25/2016	31.07	22.16	-	-	-	25.52	8.91	11:15	
MW-25 / RW-25	08/08/2014	31.13	27.97	27.60	0.37	0.08	36.69	3.48	-	Transducers in well for pump test
	08/11/2014	31.13	27.61	27.37	0.24	NA	-	3.73	-	
	08/15/2014	31.13	28.11	28.05	0.06	NA	-	3.07	-	
	08/16/2014	31.13	27.81	27.75	0.06	NA	-	3.37	-	
	08/18/2014	31.13	27.94	27.71	0.23	NA	-	3.39	-	
	08/25/2014	31.13	26.89	26.74	0.15	0.05	-	4.37	-	
	09/02/2014	31.13	27.77	27.03	0.74	0.50	-	4.01	-	
	09/15/2014	31.13	27.69	26.87	0.82	NR	-	4.16	-	
	09/19/2014	31.13	28.10	26.95	1.15	0.93	-	4.04	-	
	09/22/2014	31.13	27.53	26.91	0.62	0.38	-	4.14	-	
	09/24/2014	31.13	27.73	27.23	0.50	NR	-	3.84	-	HIT event
	10/01/2014	31.13	27.47	27.02	0.45	0.19	35.90	4.06	-	HIT event
	10/10/2014	31.13	27.65	26.91	0.74	0.50	-	4.13	-	
	10/13/2014	31.13	27.60	27.03	0.57	NR	-	4.03	-	
	10/20/2014	31.13	27.49	27.19	0.30	0.13	-	3.90	-	
	10/27/2014	31.13	27.87	27.25	0.62	NR	-	3.80	-	
	11/07/2014	31.13	27.53	27.08	0.45	0.19	-	4.00	-	
	11/12/2014	31.13	27.50	27.07	0.43	0.19	-	4.01	-	
	11/21/2014	31.13	28.53	27.81	0.72	0.16	-	3.23	-	
	11/26/2014	31.13	27.70	27.23	0.47	0.19	-	3.84	-	
	12/05/2014	31.13	27.63	27.15	0.48	-	35.87	3.92	-	HIT event
	12/11/2014	31.13	27.31	26.98	0.33	0.06	-	4.11	-	HIT event
	12/16/2014	31.13	27.27	27.04	0.23	0.03	-	4.06	-	
	12/23/2014	31.13	27.20	26.95	0.25	0.04	-	4.15	-	
	12/30/2014	31.13	28.02	27.33	0.69	0.28	-	3.72	-	
	01/09/2015	31.13	27.80	27.38	0.42	-	-	3.70	-	
	01/16/2015	31.13	27.24	27.16	0.08	0.00	-	3.96	-	
	01/19/2015	31.13	27.28	26.97	0.31	0.06	-	4.12	-	
	01/26/2015	31.13	27.27	26.98	0.29	0.05	-	4.11	-	
	02/03/2015	31.13	28.10	27.52	0.58	-	35.86	3.54	-	LNAPL not manually bailed
	02/09/2015	31.13	27.43	27.06	0.37	-	-	4.02	-	LNAPL not manually bailed

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-25 / RW-25 (cont'd)	02/18/2015	31.13	27.63	27.24	0.39	-	-	3.84	-	LNAPL not manually bailed
	02/24/2015	31.13	27.68	27.18	0.50	-	-	3.89	14:00	LNAPL not manually bailed
	03/04/2015	31.13	27.85	27.19	0.66	-	-	3.86	14:35	LNAPL not manually bailed
	03/11/2015	31.13	27.27	26.76	0.51	-	-	4.31	13:08	LNAPL not manually bailed
	03/18/2015	31.13	27.63	26.93	0.70	-	-	4.11	11:30	LNAPL not manually bailed
	03/26/2015	31.13	27.31	26.70	0.61	-	35.90	4.36	12:03	LNAPL not manually bailed
	04/02/2015	31.13	27.60	26.85	0.75	-	35.80	4.19	12:09	LNAPL not manually bailed
	04/08/2015	31.13	28.00	27.15	0.85	-	35.90	3.88	9:10	LNAPL not manually bailed
	04/13/2015	31.13	27.98	27.05	0.93	-	-	3.97	11:06	LNAPL not manually bailed
	04/23/2015	31.13	27.21	26.47	0.74	-	35.90	4.57	12:28	LNAPL not manually bailed
	04/29/2015	31.13	27.50	26.67	0.83	-	35.90	4.36	14:52	LNAPL not manually bailed
	05/04/2015	31.13	27.37	26.57	0.80	-	-	4.46	12:08	LNAPL not manually bailed
	05/11/2015	31.13	27.50	27.43	0.07	-	-	3.69	15:10	LNAPL not manually bailed
	05/13/2015	31.13	28.31	27.19	1.12	1.50	-	3.80	12:53	
	05/21/2015	31.13	26.85	26.82	0.03	-	-	4.31	12:50	LNAPL not manually bailed
	05/28/2015	31.13	27.55	27.09	0.46	-	35.80	3.98	12:10	LNAPL not manually bailed
	06/02/2015	31.13	27.10	26.74	0.36	-	-	4.35	13:28	LNAPL not manually bailed
	06/09/2015	31.13	26.91	26.46	0.45	-	-	4.62	10:50	LNAPL not manually bailed
	06/16/2015	31.13	26.86	26.56	0.30	-	-	4.53	11:43	LNAPL not manually bailed
	06/26/2015	31.13	26.91	26.48	0.43	-	35.80	4.60	11:31	LNAPL not manually bailed
	07/01/2015	31.13	26.43	25.98	0.45	-	-	5.10	12:22	LNAPL not manually bailed
	07/08/2015	31.13	26.63	26.13	0.50	0.25	-	4.94	12:00	
	07/13/2015	31.13	26.13	25.89	0.24	-	-	5.21	9:50	HIT event
	07/20/2015	31.13	26.23	TRACE	TRACE	TRACE	-	4.90	9:48	
	07/28/2015	31.13	26.37	26.23	0.14	TRACE	36.00	4.88	12:10	
	08/04/2015	31.13	26.27	26.20	0.07	0.02	-	4.92	12:25	
	08/11/2015	31.13	26.05	25.90	0.15	0.03	35.88	5.21	11:19	
	08/18/2015	31.13	26.52	26.42	0.10	0.01	-	4.70	10:53	
	08/24/2015	31.13	26.55	26.33	0.22	0.02	-	4.77	10:56	
	09/02/2015	31.13	26.80	26.62	0.18	0.02	35.92	4.49	10:28	
	09/09/2015	31.13	26.51	26.45	0.06	0.02	35.93	4.67	10:42	
	09/17/2015	31.13	26.73	26.53	0.20	0.04	35.95	4.58	10:48	
	09/23/2015	31.13	26.82	26.63	0.19	0.02	-	4.48	11:18	
	09/28/2015	31.13	26.34	26.31	0.03	0.01	35.89	4.82	9:51	
	10/05/2015	31.13	26.21	26.06	0.15	0.05	35.87	5.05	11:18	
	11/10/2015	31.13	26.05	26.02	0.03	-	-	5.11	13:31	LNAPL not manually bailed
	12/01/2015	30.52	26.19	26.06	0.13	-	-	4.44	13:54	LNAPL not manually bailed
	01/27/2016	30.52	26.68	26.38	0.30	-	-	4.10	11:00	pump in well
	02/15/2016	30.52	26.88	26.59	0.29	-	-	3.89	10:39	pump in well
	03/14/2016	30.52	26.42	26.27	0.15	-	-	4.23	10:30	pump in well
	03/30/2016	30.52	32.73	-	-	-	-	-2.21	-	O&M event
	04/21/2016	30.52	32.76	-	-	-	-	-2.24	10:18	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-25 / RW-25 (cont'd)	05/23/2016	30.52	32.81	-	-	-	33.70	-2.29	11:39	pump in well pump in well
	06/21/2016	30.52	32.76	-	-	-	-	-2.24	10:10	
	07/21/2016	30.52	32.75	-	-	-	-	-2.23	11:12	
	08/24/2016	30.52	30.20	-	-	-	-	0.32	10:40	
	09/22/2016	30.52	32.70	-	-	-	-	-2.18	13:05	
TW-10	12/18/2013	37.28	30.31	-	-	-	-	6.97	-	
	01/08/2014	37.28	30.56	-	-	-	-	6.72	-	
	03/07/2014	37.28	29.70	-	-	-	-	7.58	-	
	03/13/2014	37.28	30.08	-	-	-	-	7.20	-	
	03/20/2014	37.28	29.22	-	-	-	-	8.06	-	
	03/27/2014	37.28	30.13	-	-	-	-	7.15	-	
	04/03/2014	37.28	29.08	-	-	-	-	8.20	-	
	04/08/2014	37.28	29.14	-	-	-	-	8.14	-	
	04/17/2014	37.28	29.66	-	-	-	-	7.62	-	
	04/22/2014	37.28	29.12	-	-	-	-	8.16	-	
	04/29/2014	37.28	28.96	-	-	-	-	8.32	-	
	05/05/2014	37.28	29.22	-	-	-	-	8.06	-	
	05/12/2014	37.28	29.06	-	-	-	-	8.22	-	
	05/19/2014	37.28	29.02	-	-	-	-	8.26	-	
	06/02/2014	37.28	28.99	-	-	-	-	8.29	-	
	06/09/2014	37.28	28.89	-	-	-	-	8.39	-	
	06/16/2014	37.28	29.02	-	-	-	-	8.26	-	
	06/23/2014	37.28	28.86	-	-	-	-	8.42	-	
	07/02/2014	37.28	28.87	-	-	-	-	8.41	-	
	07/07/2014	37.28	29.12	-	-	-	36.47	8.16	-	
	07/14/2014	37.28	28.68	-	-	-	-	8.60	-	
	07/21/2014	Overdrilled and replaced with MW-27								
MW-27	07/24/2014	31.43	27.59	-	-	-	-	3.84	-	
	07/31/2014	31.43	27.58	-	-	-	34.47	3.85	-	
	08/08/2014	31.43	27.69	-	-	-	34.46	3.74	-	
	08/11/2014	31.43	27.33	-	-	-	-	4.10	-	
	08/15/2014	31.43	27.90	-	-	-	-	3.53	-	
	08/16/2014	31.43	27.65	-	-	-	34.48	3.78	-	
	08/18/2014	31.43	27.62	-	-	-	-	3.81	-	
	08/25/2014	31.43	27.09	-	-	-	-	4.34	-	
	09/02/2014	31.43	27.52	-	-	-	-	3.91	-	
	09/15/2014	31.43	27.38	-	-	-	-	4.05	-	
	09/22/2014	31.43	27.24	-	-	-	-	4.19	-	
	10/01/2014	31.43	27.44	-	-	-	34.27	3.99	-	
	10/10/2014	31.43	27.24	-	-	-	-	4.19	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-27 (cont.)	10/20/2014	31.43	27.59	-	-	-	34.13	3.84	-	
	10/27/2014	31.43	27.66	-	-	-	-	3.77	-	
	11/07/2014	31.43	27.43	-	-	-	-	4.00	-	
	11/12/2014	31.43	27.43	-	-	-	-	4.00	-	
	11/21/2014	31.43	28.23	-	-	-	-	3.20	-	
	11/26/2014	31.43	27.64	-	-	-	-	3.79	-	
	12/05/2014	31.43	27.50	-	-	-	-	3.93	-	
	12/11/2014	31.43	27.38	-	-	-	-	4.05	-	
	12/16/2014	31.43	27.34	-	-	-	-	4.09	-	
	12/23/2014	31.43	27.22	-	-	-	-	4.21	-	
	12/30/2014	31.43	27.80	-	-	-	-	3.63	-	
	01/09/2015	31.43	27.59	-	-	-	-	3.84	-	
	01/16/2015	31.43	27.46	-	-	-	-	3.97	-	
	01/19/2015	31.43	27.38	-	-	-	-	4.05	-	
	01/26/2015	31.43	27.40	-	-	-	-	4.03	-	
	02/03/2015	31.43	28.01	-	-	-	34.05	3.42	-	
	02/09/2015	31.43	27.43	-	-	-	-	4.00	-	
	02/18/2015	31.43	27.52	-	-	-	-	3.91	-	
	02/24/2015	31.43	26.61	-	-	-	-	4.82	13:15	
	02/25/2015	31.43	27.45	-	-	-	34.06	3.98	13:38	
	03/04/2015	31.43	27.63	-	-	-	-	3.80	13:59	
	03/11/2015	31.43	27.11	-	-	-	-	4.32	12:26	
	03/18/2015	31.43	27.36	-	-	-	-	4.07	10:49	
	03/26/2015	31.43	27.20	-	-	-	34.00	4.23	10:50	
	04/02/2015	31.43	27.28	-	-	-	34.05	4.15	11:15	
	04/08/2015	31.43	27.55	-	-	-	34.04	3.88	9:30	
	04/13/2015	31.43	27.53	-	-	-	-	3.90	10:14	
	04/23/2015	31.43	26.92	-	-	-	34.05	4.51	11:33	
	04/29/2015	31.43	27.18	-	-	-	34.05	4.25	13:52	
	05/04/2015	31.43	26.96	-	-	-	-	4.47	11:26	
	05/11/2015	31.43	26.86	-	-	-	34.04	4.57	15:15	
	05/13/2015	31.43	27.55	-	-	-	-	3.88	9:52	
	05/21/2015	31.43	27.12	-	-	-	34.12	4.31	12:02	
	05/28/2015	31.43	27.51	-	-	-	34.00	3.92	11:25	
	06/02/2015	31.43	27.11	-	-	-	-	4.32	12:45	
	06/09/2015	31.43	26.92	-	-	-	-	4.51	10:11	
	06/16/2015	31.43	26.86	-	-	-	-	4.57	11:05	
	06/26/2015	31.43	26.87	-	-	-	34.00	4.56	10:15	
	07/01/2015	31.43	26.38	-	-	-	-	5.05	11:57	
	07/08/2015	31.43	26.64	-	-	-	-	4.79	10:45	
	07/13/2015	31.43	26.19	-	-	-	-	5.24	9:10	
	07/20/2015	31.43	26.51	-	-	-	-	4.92	8:52	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-27 (cont.)	07/28/2015	31.43	26.55	-	-	-	34.13	4.88	9:56	Sheen during purge
	08/04/2015	31.43	26.58	-	-	-	34.05	4.85	12:05	
	08/05/2015	31.43	27.06	TRACE	TRACE	TRACE	34.07	4.37	8:16	
	08/11/2015	31.43	26.16	TRACE	TRACE	TRACE	34.03	5.27	9:38	
	08/18/2015	31.43	26.77	-	-	-	-	4.66	10:03	
	08/24/2015	31.43	26.75	-	-	-	-	4.68	10:06	
	09/02/2015	31.43	27.09	TRACE	TRACE	TRACE	34.08	4.34	9:08	
	09/09/2015	31.43	26.82	TRACE	TRACE	TRACE	34.05	4.61	9:57	
	09/17/2015	31.43	27.16	-	-	-	34.08	4.27	10:07	
	09/23/2015	31.43	27.03	-	-	-	-	4.40	10:24	
	09/28/2015	31.43	26.52	-	-	-	34.09	4.91	9:42	
	10/05/2015	31.43	26.39	-	-	-	34.05	5.04	9:00	
	11/10/2015	31.43	26.97	-	-	-	-	4.46	12:51	
	12/01/2015	31.43	26.98	-	-	-	33.35	4.45	13:39	
	01/27/2016	31.43	27.28	SHEEN	-	-	-	4.15	10:14	
	02/15/2016	31.43	27.64	-	-	-	-	3.79	9:55	
	03/14/2016	31.43	27.32	-	-	-	34.03	4.11	9:00	
	04/21/2016	31.43	27.85	-	-	-	33.80	3.58	10:30	
	05/23/2016	31.43	26.84	-	-	-	33.70	4.59	11:14	
	05/25/2016	31.43	28.07	-	-	-	33.81	3.36	-	
	06/21/2016	31.43	27.63	-	-	-	-	3.80	9:50	
	07/21/2016	31.43	27.53	-	-	-	-	3.90	9:44	
	08/24/2016	31.43	27.59	-	-	-	33.50	3.84	10:10	
	08/25/2016	31.43	27.62	-	-	-	33.60	3.81	11:10	
	09/22/2016	31.43	26.96	-	-	-	-	4.47	14:15	
MW-30S	08/08/2014	30.67	23.31	-	-	-	25.28	7.36	-	
	08/11/2014	30.67	23.33	-	-	-	-	7.34	-	
	08/15/2014	30.67	24.84	-	-	-	-	5.83	-	
	08/18/2014	30.67	24.84	-	-	-	-	5.83	-	
	08/25/2014	30.67	24.79	-	-	-	-	5.88	-	
	09/02/2014	30.67	24.83	-	-	-	-	5.84	-	
	09/15/2014	30.67	24.85	-	-	-	-	5.82	-	
	09/22/2014	30.67	24.88	-	-	-	-	5.79	-	
	10/01/2014	30.67	24.88	-	-	-	25.28	5.79	-	
	10/10/2014	30.67	24.87	-	-	-	-	5.80	-	
	10/20/2014	30.67	24.77	-	-	-	25.29	5.90	-	
	10/27/2014	30.67	24.78	-	-	-	-	5.89	-	
	11/07/2014	30.67	24.85	-	-	-	-	5.82	-	
	11/12/2014	30.67	24.87	-	-	-	-	5.80	-	
	11/21/2014	30.67	24.94	-	-	-	-	5.73	-	
	11/26/2014	30.67	24.93	-	-	-	-	5.74	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-30S (cont.)	12/05/2014	30.67	24.92	-	-	-	-	5.75	-	
	12/11/2014	30.67	24.72	-	-	-	-	5.95	-	
	12/16/2014	30.67	24.74	-	-	-	-	5.93	-	
	12/23/2014	30.67	24.70	-	-	-	-	5.97	-	
	12/30/2014	30.67	24.68	-	-	-	-	5.99	-	
	01/09/2015	30.67	24.66	-	-	-	-	6.01	-	
	01/16/2015	30.67	24.62	-	-	-	-	6.05	-	
	01/19/2015	30.67	24.60	-	-	-	-	6.07	-	
	01/26/2015	30.67	24.48	-	-	-	-	6.19	-	
	02/03/2015	30.67	24.56	-	-	-	25.34	6.11	-	
	02/09/2015	30.67	24.57	-	-	-	-	6.10	-	
	02/18/2015	30.67	24.63	-	-	-	-	6.04	-	
	02/24/2015	30.67	24.24	-	-	-	25.31	6.43	15:32	
	02/25/2015	30.67	24.10	-	-	-	25.31	6.57	13:10	
	03/04/2015	30.67	24.20	-	-	-	-	6.47	14:04	
	03/11/2015	30.67	24.20	-	-	-	-	6.47	12:32	
	03/18/2015	30.67	24.22	-	-	-	-	6.45	10:55	
	03/26/2015	30.67	24.32	-	-	-	25.30	6.35	10:42	
	04/02/2015	30.67	24.27	-	-	-	25.30	6.40	11:02	
	04/08/2015	30.67	24.30	-	-	-	25.29	6.37	9:31	
	04/13/2015	30.67	24.31	-	-	-	-	6.36	10:28	
	04/23/2015	30.67	DRY	-	-	-	25.28	-	11:23	
	04/29/2015	30.67	24.27	-	-	-	25.25	6.40	13:38	
	05/04/2015	30.67	24.32	-	-	-	-	6.35	11:23	
	05/11/2015	30.67	24.41	-	-	-	25.20	6.26	10:50	
	05/13/2015	30.67	24.41	-	-	-	-	6.26	9:50	
	05/21/2015	30.67	24.68	-	-	-	25.15	5.99	12:04	
	05/28/2015	30.67	24.67	-	-	-	25.28	6.00	11:21	
	06/02/2015	30.67	24.55	-	-	-	-	6.12	12:51	
	06/09/2015	30.67	24.30	-	-	-	-	6.37	10:17	
	06/16/2015	30.67	24.33	-	-	-	-	6.34	11:08	
	06/22/2015	Destroyed during overdrilling activities; replaced with RW-30S								
TW-11	12/18/2013	37.39	26.40	-	-	-	-	10.99	-	
	01/08/2014	37.39	27.73	-	-	-	-	9.66	-	
	03/07/2014	37.39	29.17	-	-	-	-	8.22	-	
	03/13/2014	37.39	27.56	-	-	-	-	9.83	-	
	03/20/2014	37.39	27.15	-	-	-	-	10.24	-	
	03/27/2014	37.39	27.40	-	-	-	-	9.99	-	
	04/03/2014	37.39	26.28	26.26	0.02	0.10	-	11.12	-	
	04/08/2014	37.39	26.52	-	-	-	-	10.87	-	
	04/17/2014	37.39	26.85	-	-	-	-	10.54	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-11 (cont.)	04/22/2014	37.39	27.09	-	-	-	-	10.30	-	
	04/29/2014	37.39	27.39	-	-	-	-	10.00	-	
	05/05/2014	37.39	26.26	26.24	0.02	-	-	11.14	-	
	05/12/2014	37.39	26.97	-	-	-	-	10.42	-	
	05/19/2014	37.39	25.91	25.90	0.01	-	-	11.49	-	
	06/02/2014	37.39	26.32	26.31	0.01	-	-	11.08	-	
	06/09/2014	37.39	25.23	-	-	-	-	12.16	-	
	06/16/2014	37.39	25.35	25.36	0.01	-	-	12.05	-	
	06/23/2014	37.39	26.55	-	-	-	-	10.84	-	
	07/02/2014	37.39	26.91	TRACE	TRACE	-	-	10.48	-	
	07/07/2014	37.39	27.08	-	-	-	37.10	10.31	-	
	07/14/2014	37.39	26.95	TRACE	TRACE	-	-	10.44	-	
	07/24/2014	37.39	26.88	-	-	-	-	10.51	-	
	07/31/2014	37.39	27.10	-	-	-	37.02	10.29	-	
	08/05/2014	Overdrilled and replaced with MW-31								
MW-31 / RW-31	08/08/2014	31.23	27.31	-	-	-	36.35	3.92	-	
	08/11/2014	31.23	26.88	-	-	-	-	4.35	-	
	08/15/2014	31.23	27.00	-	-	-	-	4.23	-	
	08/16/2014	31.23	26.92	-	-	-	35.00	4.31	-	
	08/18/2014	31.23	27.11	-	-	-	-	4.12	-	
	08/25/2014	31.23	26.90	-	-	-	-	4.33	-	
	09/02/2014	31.23	27.31	-	-	-	-	3.92	-	
	09/15/2014	31.23	27.18	-	-	-	-	4.05	-	
	09/22/2014	31.23	27.05	-	-	-	-	4.18	-	
	10/01/2014	31.23	27.21	-	-	-	35.50	4.02	-	
	10/10/2014	31.23	27.02	-	-	-	-	4.21	-	
	10/20/2014	31.23	27.40	-	-	-	35.50	3.83	-	
	10/27/2014	31.23	27.43	-	-	-	-	3.80	-	
	11/07/2014	31.23	24.23	-	-	-	-	7.00	-	
	11/12/2014	31.23	27.18	-	-	-	-	4.05	-	
	11/21/2014	31.23	28.03	-	-	-	-	3.20	-	
	11/26/2014	31.23	27.39	-	-	-	-	3.84	-	
	12/05/2014	31.23	27.33	-	-	-	-	3.90	-	
	12/11/2014	31.23	27.14	-	-	-	-	4.09	-	
	12/16/2014	31.23	27.15	-	-	-	-	4.08	-	
	12/23/2014	31.23	27.02	-	-	-	-	4.21	-	
	12/30/2014	31.23	27.61	-	-	-	-	3.62	-	
	01/09/2015	31.23	27.42	-	-	-	-	3.81	-	
	01/16/2015	31.23	27.26	-	-	-	-	3.97	-	
	01/19/2015	31.23	27.20	-	-	-	-	4.03	-	
	01/26/2015	31.23	27.18	-	-	-	-	4.05	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-31 / RW-31 (cont.)	02/03/2015	31.23	27.81	-	-	-	35.49	3.42	-	
	02/09/2015	31.23	27.18	-	-	-	-	4.05	-	
	02/18/2015	31.23	27.34	-	-	-	-	3.89	-	
	02/24/2015	31.23	27.27	-	-	-	-	3.96	13:09	
	02/25/2015	31.23	27.50	-	-	-	35.52	3.73	10:28	
	03/04/2015	31.23	27.45	-	-	-	-	3.78	14:02	
	03/11/2015	31.23	26.78	-	-	-	-	4.45	12:29	
	03/18/2015	31.23	27.13	-	-	-	-	4.10	10:52	
	03/26/2015	31.23	26.99	-	-	-	35.50	4.24	10:46	
	04/02/2015	31.23	27.04	-	-	-	35.45	4.19	11:04	
	04/08/2015	31.23	27.27	-	-	-	35.42	3.96	9:32	
	04/13/2015	31.23	27.35	-	-	-	-	3.88	10:25	
	04/23/2015	31.23	26.67	-	-	-	35.45	4.56	11:27	
	04/29/2015	31.23	26.97	-	-	-	35.40	4.26	13:34	
	05/04/2015	31.23	26.75	-	-	-	-	4.48	11:20	
	05/11/2015	31.23	26.65	-	-	-	35.40	4.58	14:55	
	05/13/2015	31.23	27.35	-	-	-	-	3.88	9:47	
	05/21/2015	31.23	26.87	-	-	-	35.50	4.36	12:06	
	05/28/2015	31.23	27.31	-	-	-	35.40	3.92	11:23	
	06/02/2015	31.23	26.87	-	-	-	-	4.36	12:48	
	06/09/2015	31.23	26.71	-	-	-	-	4.52	10:14	
	06/16/2015	31.23	26.68	-	-	-	-	4.55	11:11	
	06/26/2015	31.23	26.58	-	-	-	35.20	4.65	9:20	
	07/01/2015	31.23	26.02	-	-	-	-	5.21	12:00	
	07/08/2015	31.23	26.26	-	-	-	-	4.97	10:48	
	07/13/2015	31.23	25.88	-	-	-	-	5.35	9:13	
	07/20/2015	31.23	26.22	-	-	-	-	5.01	8:58	
	07/28/2015	31.23	26.31	-	-	-	35.56	4.92	10:22	
	08/04/2015	31.23	29.82	-	-	-	35.42	1.41	12:09	
	08/05/2015	31.23	26.78	-	-	-	35.47	4.45	8:22	
	08/11/2015	31.23	25.93	-	-	-	35.43	5.30	9:48	
	08/18/2015	31.23	26.56	-	-	-	-	4.67	9:56	
	08/24/2015	31.23	26.55	-	-	-	-	4.68	10:00	
	09/02/2015	31.23	26.87	-	-	-	35.42	4.36	9:20	
	09/09/2015	31.23	26.61	-	-	-	35.47	4.62	10:03	
	09/17/2015	31.23	26.96	-	-	-	35.50	4.27	10:01	
	09/23/2015	31.23	26.82	-	-	-	-	4.41	10:18	
	09/28/2015	31.23	26.29	-	-	-	35.44	4.94	9:35	
	10/05/2015	31.23	26.11	-	-	-	35.42	5.12	9:02	
	11/10/2015	31.23	26.61	-	-	-	-	4.62	12:47	
	12/01/2015	31.23	26.27	-	-	-	-	4.96	13:47	
	01/27/2016	31.23	26.24	-	-	-	-	4.99	10:06	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-31 / RW-31 (cont.)	02/15/2016	31.23	27.21	-	-	-	-	4.02	9:49	O&M event attempted measurement but obstruction prevented pump in well pump in well pump in well pump in well
	03/14/2016	31.23	26.76	-	-	-	-	4.47	9:33	
	03/30/2016	31.23	32.98	-	-	-	-	-1.75	-	
	04/21/2016	31.23	33.03	-	-	-	-	-1.80	10:27	
	05/23/2016	31.23	NR	-	-	-	-	NM	11:13	
	06/21/2016	31.23	33.05	-	-	-	-	-1.82	10:00	
	07/21/2016	31.23	33.05	-	-	-	-	-1.82	9:48	
	08/24/2016	31.23	27.31	-	-	-	-	3.92	10:05	
	08/25/2016	31.23	-	-	-	-	-	-	-	
	09/22/2016	31.23	27.60	-	-	-	-	3.63	13:15	
MW-33	08/08/2014	30.93	27.91	-	-	-	35.41	3.02	-	
	08/11/2014	30.93	27.41	-	-	-	-	3.52	-	
	08/15/2014	30.93	26.98	-	-	-	34.45	3.95	-	
	08/18/2014	30.93	26.76	-	-	-	-	4.17	-	
	08/25/2014	30.93	26.47	-	-	-	-	4.46	-	
	09/02/2014	30.93	26.87	-	-	-	-	4.06	-	
	09/15/2014	30.93	26.73	-	-	-	-	4.20	-	
	09/22/2014	30.93	26.59	-	-	-	-	4.34	-	
	10/01/2014	30.93	26.79	-	-	-	34.47	4.14	-	
	10/10/2014	30.93	26.60	-	-	-	-	4.33	-	
	10/20/2014	30.93	26.96	-	-	-	34.47	3.97	-	
	02/24/2015	30.93	26.99	-	-	-	-	3.94	13:05	
	02/25/2015	30.93	27.03	-	-	-	34.45	3.90	10:08	
	05/11/2015	30.93	26.22	-	-	-	34.40	4.71	14:54	
	05/13/2015	30.93	26.90	-	-	-	34.40	4.03	9:45	
	08/04/2015	30.93	25.91	-	-	-	34.39	5.02	12:14	
	08/05/2015	30.93	26.43	-	-	-	34.42	4.50	8:26	
	12/01/2015	30.93	26.37	-	-	-	34.40	4.56	13:35	
	03/14/2016	30.93	26.59	-	-	-	34.46	4.34	10:21	
	05/23/2016	30.93	26.58	-	-	-	34.40	4.35	10:49	
	08/24/2016	30.93	26.80	-	-	-	34.40	4.13	9:35	
MW-51S	08/08/2014	30.81	21.15	-	-	-	25.27	9.66	-	
	08/11/2014	30.81	21.27	-	-	-	-	9.54	-	
	08/15/2014	30.81	21.17	-	-	-	25.30	9.64	-	
	08/18/2014	30.81	21.23	-	-	-	-	9.58	-	
	08/25/2014	30.81	21.34	-	-	-	-	9.47	-	
	09/02/2014	30.81	21.38	-	-	-	-	9.43	-	
	09/15/2014	30.81	21.46	-	-	-	-	9.35	-	
	09/22/2014	30.81	21.48	-	-	-	-	9.33	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-51S (cont.)	09/24/2014	30.81	21.49	-	-	-	-	9.32	-	
	10/01/2014	30.81	21.32	TRACE	TRACE	-	25.30	9.49	-	
	10/10/2014	30.81	21.53	-	-	-	-	9.28	-	
	10/13/2014	30.81	21.52	-	-	-	-	9.29	-	
	10/20/2014	30.81	21.58	-	-	-	25.33	9.23	-	
	10/27/2014	30.81	21.64	-	-	-	-	9.17	-	
	11/07/2014	30.81	21.53	-	-	-	-	9.28	-	
	11/12/2014	30.81	21.66	-	-	-	-	9.15	-	
	11/21/2014	30.81	21.73	-	-	-	-	9.08	-	
	12/05/2014	30.81	21.64	-	-	-	-	9.17	-	
	12/11/2014	30.81	21.72	-	-	-	-	9.09	-	
	12/16/2014	30.81	21.78	-	-	-	-	9.03	-	
	12/23/2014	30.81	21.83	-	-	-	-	8.98	-	
	12/30/2014	30.81	21.87	-	-	-	-	8.94	-	
	01/09/2015	30.81	21.89	-	-	-	-	8.92	-	
	01/16/2015	30.81	21.80	-	-	-	-	9.01	-	
	01/19/2015	30.81	21.87	-	-	-	-	8.94	-	
	01/26/2015	30.81	21.82	-	-	-	-	8.99	-	
	02/03/2015	30.81	22.00	-	-	-	25.21	8.81	-	
	02/09/2015	30.81	21.92	-	-	-	-	8.89	-	
	02/18/2015	30.81	21.92	-	-	-	-	8.89	-	
	02/24/2015	30.81	21.96	-	-	-	25.33	8.85	16:00	
	03/11/2015	30.81	21.67	-	-	-	-	9.14	12:48	
	03/18/2015	30.81	21.71	-	-	-	-	9.10	11:08	
	03/26/2015	30.81	21.76	-	-	-	25.30	9.05	11:45	
	04/02/2015	30.81	21.80	-	-	-	25.30	9.01	11:27	
	04/08/2015	30.81	21.75	-	-	-	25.19	9.06	8:55	
	04/13/2015	30.81	21.87	-	-	-	-	8.94	10:44	
	04/23/2015	30.81	21.89	-	-	-	25.25	8.92	11:59	
	04/29/2015	30.81	21.88	-	-	-	25.25	8.93	14:26	
	05/04/2015	30.81	21.89	-	-	-	-	8.92	11:43	
	05/11/2015	30.81	21.93	-	-	-	24.50	8.88	10:45	
	05/13/2015	30.81	21.95	-	-	-	-	8.86	10:00	
	05/21/2015	30.81	21.68	-	-	-	25.35	9.13	12:12	
	05/28/2015	30.81	21.93	-	-	-	25.30	8.88	11:47	
	06/09/2015	30.81	21.85	-	-	-	-	8.96	10:34	
	06/16/2015	30.81	21.79	-	-	-	-	9.02	11:27	
	06/26/2015	30.81	21.62	-	-	-	-	9.19	10:35	
	07/08/2015	30.81	21.33	-	-	-	-	9.48	11:40	
	07/13/2015	30.81	21.62	-	-	-	-	9.19	9:41	
	07/20/2015	30.81	21.57	-	-	-	-	9.24	9:19	
	07/28/2015	30.81	21.37	-	-	-	25.35	9.44	11:29	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-51S (cont.)	08/04/2015	30.81	21.21	-	-	-	25.30	9.60	12:02	
	08/05/2015	30.81	21.25	-	-	-	25.30	9.56	9:12	
	08/11/2015	30.81	21.28	-	-	-	25.31	9.53	10:14	
	08/18/2015	30.81	21.22	-	-	-	-	9.59	10:19	
	08/24/2015	30.81	21.27	-	-	-	-	9.54	10:30	
	09/02/2015	30.81	21.35	-	-	-	25.30	9.46	9:54	
	09/09/2015	30.81	21.42	-	-	-	25.32	9.39	10:32	
	09/17/2015	30.81	21.52	-	-	-	25.43	9.29	10:32	
	09/23/2015	30.81	21.48	-	-	-	-	9.33	10:53	
	09/28/2015	30.81	21.56	-	-	-	25.30	9.25	9:44	
	10/05/2015	30.81	21.55	-	-	-	25.61	9.26	9:21	
	11/10/2015	30.81	21.67	-	-	-	-	9.14	13:14	
	12/01/2015	30.81	21.80	-	-	-	25.30	9.01	10:48	
	01/27/2016	30.81	21.95	-	-	-	-	8.86	10:36	
	02/15/2016	30.81	21.31	-	-	-	-	9.50	10:18	
	03/14/2016	30.81	21.23	-	-	-	25.30	9.58	12:45	
	04/21/2016	30.81	22.04	-	-	-	25.30	8.77	10:58	
	05/23/2016	30.81	21.93	-	-	-	25.21	8.88	11:20	
	05/24/2016	30.81	21.77	-	-	-	25.28	9.04	10:08	
	06/21/2016	30.81	22.20	-	-	-	-	8.61	11:00	
	07/21/2016	30.81	21.27	-	-	-	-	9.54	11:08	
	08/24/2016	30.81	21.89	-	-	-	25.30	8.92	10:45	
	08/25/2016	30.81	21.60	-	-	-	25.45	9.21	11:05	
MW-51 / RW-51	07/25/2014	30.97	27.25	-	-	-	35.95	3.72	-	
	08/08/2014	30.97	27.00	TRACE	TRACE	-	36.48	3.97	-	
	08/11/2014	30.97	26.70	-	-	-	-	4.27	-	
	08/15/2014	30.97	27.30	-	-	-	-	3.67	-	
	08/16/2014	30.97	26.99	TRACE	TRACE	-	34.65	3.98	-	
	08/18/2014	30.97	26.94	TRACE	TRACE	-	-	4.03	-	
	08/25/2014	30.97	26.59	TRACE	TRACE	-	-	4.38	-	
	09/02/2014	30.97	26.93	TRACE	TRACE	-	-	4.04	-	
	09/15/2014	30.97	26.88	26.85	0.03	TRACE	-	4.12	-	
	09/22/2014	30.97	26.83	26.80	0.03	TRACE	-	4.17	-	
	09/24/2014	30.97	27.19	27.15	0.04	-	-	3.82	-	
	10/01/2014	30.97	26.93	TRACE	TRACE	-	36.15	4.04	-	
	10/10/2014	30.97	26.84	26.81	0.03	-	-	4.16	-	
	10/13/2014	30.97	27.01	26.94	0.07	-	-	4.02	-	
	10/20/2014	30.97	27.05	27.03	0.02	TRACE	-	3.94	-	
	10/27/2014	30.97	27.16	27.12	0.04	TRACE	-	3.85	-	
	11/07/2014	30.97	27.11	27.07	0.04	TRACE	-	3.90	-	
	11/12/2014	30.97	26.92	26.90	0.02	TRACE	-	4.07	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-51 / RW-51 (cont.)	11/21/2014	30.97	27.57	27.50	0.07	TRACE	-	3.46	-	
	11/26/2014	30.97	27.20	27.17	0.03	TRACE	-	3.80	-	
	12/05/2014	30.97	26.98	26.96	0.02	TRACE	-	4.01	-	
	12/11/2014	30.97	26.88	26.87	0.01	TRACE	-	4.10	-	
	12/16/2014	30.97	26.83	26.80	0.03	TRACE	-	4.17	-	
	12/23/2014	30.97	26.83	TRACE	TRACE	TRACE	-	4.14	-	
	12/30/2014	30.97	27.28	27.22	0.06	TRACE	-	3.74	-	
	01/09/2015	30.97	27.20	27.15	0.05	TRACE	-	3.81	-	
	01/16/2015	30.97	26.95	26.91	0.04	TRACE	-	4.06	-	
	01/19/2015	30.97	26.88	26.83	0.05	TRACE	-	4.13	-	
	01/26/2015	30.97	26.98	26.92	0.06	TRACE	-	4.04	-	
	02/03/2015	30.97	27.52	27.45	0.07	-	36.15	3.51	-	LNAPL not manually bailed
	02/09/2015	30.97	26.93	26.91	0.02	-	-	4.06	-	LNAPL not manually bailed
	02/18/2015	30.97	27.07	27.02	0.05	-	-	3.94	-	LNAPL not manually bailed
	02/24/2015	30.97	27.07	27.06	0.01	TRACE	-	3.91	13:46	LNAPL not manually bailed
	03/04/2015	30.97	27.24	27.17	0.07	-	-	3.79	14:25	LNAPL not manually bailed
	03/11/2015	30.97	26.68	26.65	0.03	-	-	4.32	12:51	LNAPL not manually bailed
	03/18/2015	30.97	26.94	26.84	0.10	-	-	4.12	11:11	LNAPL not manually bailed
	03/26/2015	30.97	26.74	26.60	0.14	-	36.10	4.35	11:50	LNAPL not manually bailed
	04/02/2015	30.97	27.78	27.75	0.03	-	36.05	3.22	11:46	LNAPL not manually bailed
	04/08/2015	30.97	27.15	27.02	0.13	-	36.11	3.93	9:00	LNAPL not manually bailed
	04/13/2015	30.97	27.09	26.98	0.11	-	-	3.98	10:47	LNAPL not manually bailed
	04/23/2015	30.97	26.42	26.35	0.07	-	36.05	4.61	12:17	LNAPL not manually bailed
	04/29/2015	30.97	26.71	26.60	0.11	-	36.00	4.36	14:39	LNAPL not manually bailed
	05/04/2015	30.97	26.54	26.48	0.06	-	-	4.48	11:46	LNAPL not manually bailed
	05/11/2015	30.97	26.44	26.40	0.04	-	-	4.57	15:00	LNAPL not manually bailed
	05/13/2015	30.97	27.31	27.10	0.21	0.03	-	3.84	12:35	
	05/21/2015	30.97	26.74	26.71	0.03	-	-	4.26	12:10	LNAPL not manually bailed
	05/28/2015	30.97	27.10	26.95	0.15	-	36.05	4.00	11:58	LNAPL not manually bailed
	06/02/2015	30.97	26.85	26.82	0.03	-	-	4.15	13:07	LNAPL not manually bailed
	06/09/2015	30.97	26.75	26.72	0.03	-	-	4.25	10:37	LNAPL not manually bailed
	06/16/2015	30.97	26.57	26.54	0.03	-	-	4.43	11:30	LNAPL not manually bailed
	06/26/2015	30.97	26.44	26.31	0.13	-	36.00	4.64	11:23	LNAPL not manually bailed
	07/01/2015	30.97	25.86	25.85	0.01	-	-	5.12	12:30	LNAPL not manually bailed
	07/08/2015	30.97	26.28	26.05	0.23	0.05	-	4.89	11:54	
	07/13/2015	30.97	26.03	25.90	0.13	-	-	5.05	9:46	HIT event
	07/20/2015	30.97	25.97	25.92	0.05	TRACE	-	5.04	9:52	
	07/28/2015	30.97	26.16	26.10	0.06	TRACE	36.18	4.86	11:55	
	08/04/2015	30.97	26.11	26.02	0.09	0.01	-	4.94	12:28	
	08/11/2015	30.97	25.78	25.70	0.08	0.01	36.14	5.26	11:07	
	08/18/2015	30.97	27.29	27.23	0.06	TRACE	-	3.73	10:43	
	08/24/2015	30.97	26.18	26.16	0.02	TRACE	-	4.81	10:46	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-51 / RW-51 (cont.)	09/02/2015	30.97	26.42	26.40	0.02	0.01	36.10	4.57	10:50	LNAPL not manually bailed LNAPL not manually bailed LNAPL not manually bailed pump in well pump in well pump in well O&M event pump in well pump in well pump in well
	09/09/2015	30.97	26.35	26.27	0.08	0.02	36.12	4.69	10:35	
	09/17/2015	30.97	26.61	-	-	-	36.14	4.36	10:54	
	09/23/2015	30.97	26.49	26.47	0.02	TRACE	-	4.50	11:06	
	09/28/2015	30.97	26.00	TRACE	TRACE	-	36.10	4.97	10:01	
	10/05/2015	30.97	26.67	-	-	-	36.15	4.30	12:15	
	11/10/2015	30.97	26.52	26.48	0.04	-	-	4.49	13:42	
	12/01/2015	30.97	26.57	26.55	0.02	-	-	4.42	13:53	
	01/27/2016	30.97	26.86	26.73	0.13	-	-	4.22	10:48	
	02/15/2016	30.97	27.22	27.14	0.08	-	-	3.82	10:23	
	03/14/2016	30.97	26.72	26.63	0.09	-	-	4.33	10:25	
	03/30/2016	30.97	33.60	-	-	-	-	-2.63	-	
	04/21/2016	30.97	33.00	-	-	-	-	-2.03	10:13	
	05/23/2016	30.97	33.31	-	-	-	34.52	-2.34	11:30	
	06/21/2016	30.97	33.00	-	-	-	-	-2.03	11:05	
	07/21/2016	30.97	33.70	-	-	-	-	-2.73	11:05	
	08/24/2016	30.97	32.95	-	-	-	-	-1.98	11:03	
	09/22/2016	30.97	33.35	-	-	-	-	-2.38	13:00	
MW-52	08/15/2014	30.17	28.11	-	-	-	35.78	2.06	-	Well flooded
	08/18/2014	30.17	26.07	-	-	-	-	4.10	-	
	08/25/2014	30.17	25.76	-	-	-	-	4.41	-	
	09/02/2014	30.17	26.15	-	-	-	-	4.02	-	
	09/15/2014	30.17	25.99	-	-	-	-	4.18	-	
	09/22/2014	30.17	26.00	-	-	-	-	4.17	-	
	10/01/2014	30.17	26.03	-	-	-	35.65	4.14	-	
	10/10/2014	30.17	26.07	-	-	-	-	4.10	-	
	10/20/2014	30.17	26.24	-	-	-	35.64	3.93	-	
	05/11/2015	30.17	25.81	-	-	-	35.65	4.36	14:45	
	05/12/2015	30.17	26.10	-	-	-	-	4.07	9:50	
	08/04/2015	30.17	25.21	-	-	-	35.55	4.96	12:01	
	08/05/2015	30.17	25.68	-	-	-	35.49	4.49	9:47	
	12/01/2015	30.17	NR	-	-	-	-	-	-	
	03/14/2016	30.17	26.61	-	-	-	35.30	3.56	9:10	
	05/23/2016	30.17	26.29	-	-	-	35.22	3.88	10:40	
	08/24/2016	30.17	26.38	-	-	-	35.30	3.79	9:46	
MW-70	08/15/2014	30.86	26.63	-	-	-	34.95	4.23	-	
	08/18/2014	30.86	26.61	-	-	-	-	4.25	-	
	08/25/2014	30.86	26.25	-	-	-	-	4.61	-	
	09/02/2014	30.86	26.68	-	-	-	-	4.18	-	
	09/15/2014	30.86	26.63	-	-	-	-	4.23	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-70 (cont.)	09/22/2014	30.86	26.47	-	-	-	-	4.39	-	
	10/01/2014	30.86	26.66	-	-	-	34.88	4.20	-	
	10/10/2014	30.86	26.57	-	-	-	-	4.29	-	
	10/20/2014	30.86	26.79	-	-	-	34.90	4.07	-	
	02/24/2015	30.86	26.62	-	-	-	-	4.24	13:00	
	05/11/2015	30.86	26.02	-	-	-	35.15	4.84	14:55	
	05/12/2015	30.86	26.21	-	-	-	-	4.65	14:05	
	08/04/2015	30.86	25.73	-	-	-	35.16	5.13	12:28	
	08/05/2015	30.86	26.10	-	-	-	35.05	4.76	9:55	
	12/01/2015	30.86	26.23	-	-	-	35.05	4.63	13:32	
	03/14/2016	30.86	26.45	-	-	-	35.11	4.41	9:45	
	05/23/2016	30.86	26.71	-	-	-	35.05	4.15	10:22	
	08/24/2016	30.86	26.64	-	-	-	35.05	4.22	9:52	
TW-08S	12/18/2013	36.75	DRY	-	-	-	-	-	-	
	01/08/2014	36.75	DRY	-	-	-	-	-	-	
	03/07/2014	36.75	24.14	-	-	-	-	12.61	-	
	03/13/2014	36.75	24.06	-	-	-	-	12.69	-	
	03/20/2014	36.75	24.37	-	-	-	-	12.38	-	
	03/27/2014	36.75	24.54	-	-	-	-	12.21	-	
	04/03/2014	36.75	24.26	-	-	-	-	12.49	-	
	04/08/2014	36.75	23.85	-	-	-	-	12.90	-	
	04/17/2014	36.75	24.13	-	-	-	-	12.62	-	
	04/22/2014	36.75	23.92	-	-	-	-	12.83	-	
	04/29/2014	36.75	23.91	-	-	-	-	12.84	-	
	05/05/2014	36.75	22.89	-	-	-	-	13.86	-	
	05/12/2014	36.75	23.02	-	-	-	-	13.73	-	
	05/19/2014	36.75	22.90	-	-	-	-	13.85	-	
	06/02/2014	36.75	23.24	-	-	-	-	13.51	-	
	06/09/2014	36.75	23.21	-	-	-	-	13.54	-	
	06/16/2014	36.75	22.40	-	-	-	-	14.35	-	
	06/23/2014	36.75	22.41	-	-	-	-	14.34	-	
	07/02/2014	36.75	22.40	-	-	-	-	14.35	-	
	07/07/2014	36.75	22.65	-	-	-	25.85	14.10	-	
	07/14/2014	36.75	23.23	-	-	-	-	13.52	-	
	07/24/2014	36.75	23.09	-	-	-	-	13.66	-	
	07/31/2014	36.75	23.26	-	-	-	25.82	13.49	-	
	08/07/2014	Overdrilled and replaced with MW-72S								
MW-72S / RW-72S	08/08/2014	30.63	23.33	-	-	-	25.30	7.30	-	
	08/11/2014	30.63	22.85	-	-	-	-	7.78	-	
	08/15/2014	30.63	21.35	-	-	-	23.90	9.28	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-72S / RW-72S (cont.)	08/18/2014	30.63	21.34	-	-	-	-	9.29	-	
	08/25/2014	30.63	21.41	-	-	-	-	9.22	-	
	09/02/2014	30.63	21.45	-	-	-	-	9.18	-	
	09/15/2014	30.63	21.54	-	-	-	-	9.09	-	
	09/22/2014	30.63	21.56	-	-	-	-	9.07	-	
	10/01/2014	30.63	21.63	-	-	-	23.90	9.00	-	
	10/10/2014	30.63	21.69	-	-	-	-	8.94	-	
	10/20/2014	30.63	21.73	-	-	-	23.88	8.90	-	
	10/27/2014	30.63	21.80	-	-	-	-	8.83	-	
	11/07/2014	30.63	21.83	-	-	-	-	8.80	-	
	11/12/2014	30.63	21.88	-	-	-	-	8.75	-	
	11/21/2014	30.63	22.04	-	-	-	-	8.59	-	
	11/26/2014	30.63	22.10	-	-	-	-	8.53	-	
	12/05/2014	30.63	22.23	-	-	-	-	8.40	-	
	12/11/2014	30.63	22.11	-	-	-	-	8.52	-	
	12/16/2014	30.63	22.00	-	-	-	-	8.63	-	
	12/23/2014	30.63	21.99	-	-	-	-	8.64	-	
	12/30/2014	30.63	21.98	-	-	-	-	8.65	-	
	01/09/2015	30.63	21.94	-	-	-	-	8.69	-	
	01/16/2015	30.63	21.93	-	-	-	-	8.70	-	
	01/19/2015	30.63	21.88	-	-	-	-	8.75	-	
	01/26/2015	30.63	21.78	-	-	-	-	8.85	-	
	02/03/2015	30.63	21.79	-	-	-	23.93	8.84	-	
	02/09/2015	30.63	21.77	-	-	-	-	8.86	-	
	02/18/2015	30.63	21.85	-	-	-	-	8.78	-	
	02/24/2015	30.63	21.90	-	-	-	23.89	8.73	15:53	
	02/25/2015	30.63	21.87	-	-	-	23.75	8.76	14:10	
	03/04/2015	30.63	21.79	-	-	-	-	8.84	13:45	
	03/11/2015	30.63	21.75	-	-	-	-	8.88	12:12	
	03/18/2015	30.63	21.70	-	-	-	-	8.93	10:35	
	03/26/2015	30.63	21.73	-	-	-	23.90	8.90	11:10	
	04/02/2015	30.63	21.78	-	-	-	23.90	8.85	10:55	
	04/08/2015	30.63	21.82	-	-	-	23.87	8.81	9:35	
	04/13/2015	30.63	21.86	-	-	-	-	8.77	10:08	
	04/23/2015	30.63	21.86	-	-	-	23.87	8.77	11:12	
	04/29/2015	30.63	21.85	-	-	-	23.85	8.78	13:56	
	05/04/2015	30.63	21.84	-	-	-	-	8.79	11:06	
	05/11/2015	30.63	21.91	-	-	-	23.90	8.72	10:48	
	05/13/2015	30.63	21.90	-	-	-	-	8.73	9:57	
	05/21/2015	30.63	21.88	-	-	-	23.90	8.75	11:47	
	05/28/2015	30.63	22.04	-	-	-	23.90	8.59	11:27	
	06/02/2015	30.63	22.03	-	-	-	-	8.60	12:30	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-72S / RW-72S (cont.)	06/09/2015	30.63	21.67	-	-	-	-	8.96	9:56	Obstruction at TDW
	06/16/2015	30.63	21.68	-	-	-	-	8.95	10:50	
	06/26/2015	30.63	21.55	-	-	-	23.80	9.08	10:17	
	07/01/2015	30.63	21.38	-	-	-	-	9.25	11:45	
	08/04/2015	30.63	21.55	-	-	-	23.90	9.08	12:38	
	08/05/2015	30.63	21.51	-	-	-	23.90	9.12	9:25	
	12/01/2015	30.63	24.65	-	-	-	26.17	5.98	11:26	
	03/14/2016	30.63	23.71	-	-	-	26.02	6.92	12:25	
	05/23/2016	30.63	25.75	-	-	-	-	4.88	11:43	
	05/25/2016	30.63	24.22	-	-	-	25.85	6.41	-	
	06/21/2016	30.63	26.04	-	-	-	-	4.59	10:17	
	07/21/2016	30.63	26.02	-	-	-	-	4.61	10:04	
	08/24/2016	30.63	25.60	-	-	-	26.15	5.03	11:40	
	08/25/2016	30.63	23.95	-	-	-	-	6.68	13:00	
	09/22/2016	30.63	26.07	-	-	-	26.13	4.56	12:16	
MW-72 / RW-72	08/08/2014	31.06	26.97	-	-	-	34.55	4.09	-	
	08/11/2014	31.06	26.85	-	-	-	-	4.21	-	
	08/15/2014	31.06	27.43	-	-	-	-	3.63	-	
	08/16/2014	31.06	27.05	-	-	-	34.43	4.01	-	
	08/18/2014	31.06	27.00	-	-	-	-	4.06	-	
	08/25/2014	31.06	26.66	-	-	-	-	4.40	-	
	09/02/2014	31.06	27.11	-	-	-	-	3.95	-	
	09/15/2014	31.06	27.02	-	-	-	-	4.04	-	
	09/22/2014	31.06	26.88	-	-	-	-	4.18	-	
	10/01/2014	31.06	27.10	-	-	-	34.48	3.96	-	
	10/10/2014	31.06	26.94	-	-	-	-	4.12	-	
	10/20/2014	31.06	27.19	-	-	-	34.43	3.87	-	
	10/27/2014	31.06	27.34	-	-	-	-	3.72	-	
	11/07/2014	31.06	27.04	-	-	-	-	4.02	-	
	11/12/2014	31.06	27.12	-	-	-	-	3.94	-	
	11/21/2014	31.06	27.82	-	-	-	-	3.24	-	
	11/26/2014	31.06	27.36	-	-	-	-	3.70	-	
	12/05/2014	31.06	27.01	-	-	-	-	4.05	-	
	12/11/2014	31.06	27.03	-	-	-	-	4.03	-	
	12/16/2014	31.06	26.91	-	-	-	-	4.15	-	
	12/23/2014	31.06	26.89	-	-	-	-	4.17	-	
	12/30/2014	31.06	27.36	-	-	-	-	3.70	-	
	01/09/2015	31.06	27.27	-	-	-	-	3.79	-	
	01/16/2015	31.06	27.03	-	-	-	-	4.03	-	
	01/19/2015	31.06	26.98	-	-	-	-	4.08	-	
	01/26/2015	31.06	26.96	-	-	-	-	4.10	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-72 / RW-72 (cont.)	02/03/2015	31.06	27.65	-	-	-	34.19	3.41	-	
	02/09/2015	31.06	27.14	-	-	-	-	3.92	-	
	02/18/2015	31.06	27.11	-	-	-	-	3.95	-	
	02/24/2015	31.06	27.27	-	-	-	-	3.79	13:35	
	02/25/2015	31.06	27.33	-	-	-	34.28	3.73	9:50	
	03/04/2015	31.06	27.17	-	-	-	-	3.89	13:48	
	03/11/2015	31.06	26.98	-	-	-	-	4.08	12:15	
	03/18/2015	31.06	26.94	-	-	-	-	4.12	10:38	
	03/26/2015	31.06	26.78	-	-	-	34.10	4.28	11:13	
	04/02/2015	31.06	26.86	-	-	-	34.15	4.20	10:57	
	04/08/2015	31.06	27.20	-	-	-	33.98	3.86	9:40	
	04/13/2015	31.06	27.11	-	-	-	-	3.95	10:11	
	04/23/2015	31.06	26.61	-	-	-	34.13	4.45	11:15	
	04/29/2015	31.06	26.76	-	-	-	33.95	4.30	14:00	
	05/04/2015	31.06	26.60	-	-	-	-	4.46	11:09	
	05/11/2015	31.06	26.55	-	-	-	33.90	4.51	14:58	
	05/13/2015	31.06	27.12	-	-	-	-	3.94	9:55	
	05/21/2015	31.06	26.81	-	-	-	34.04	4.25	11:49	
	05/28/2015	31.06	27.05	-	-	-	34.00	4.01	11:28	
	06/02/2015	31.06	26.68	-	-	-	-	4.38	12:33	
	06/09/2015	31.06	26.46	-	-	-	-	4.60	10:00	
	06/16/2015	31.06	26.48	-	-	-	-	4.58	10:53	
	06/26/2015	31.06	26.42	-	-	-	34.00	4.64	10:19	
	07/01/2015	31.06	25.91	-	-	-	-	5.15	11:48	
	08/04/2015	31.06	26.19	-	-	-	34.14	4.87	12:35	
	08/05/2015	31.06	26.61	-	-	-	34.26	4.45	9:22	
	12/01/2015	31.06	26.68	-	-	-	-	4.38	13:44	
	03/14/2016	31.06	26.87	-	-	-	-	4.19	9:05	pump in well
	03/30/2016	31.06	31.47	-	-	-	-	-0.41	-	O&M event
	04/21/2016	31.06	31.45	-	-	-	-	-0.39	10:22	
	05/23/2016	31.06	31.50	-	-	-	-	-0.44		
	06/21/2016	31.06	31.50	-	-	-	-	-0.44	10:21	
	07/21/2016	31.06	31.51	-	-	-	-	-0.45	10:01	
	08/04/2016	31.06	-	-	-	-	-	-	-	pump in well uninstalled pump to use in MW-14 due to increasing LNAPL levels in MW-14
	08/24/2016	31.06	27.21	-	-	-	33.00	3.85	11:43	
	08/25/2016	31.06	27.42	-	-	-	33.18	3.64	11:06	
	09/22/2016	31.06	26.54	-	-	-	-	4.52	14:10	
MW-100S	08/15/2014	31.06	21.32	-	-	-	24.22	9.74	-	
	08/18/2014	31.06	21.28	-	-	-	-	9.78	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-100S (cont.)	08/25/2014	31.06	21.31	-	-	-	-	9.75	-	
	09/02/2014	31.06	21.39	-	-	-	-	9.67	-	
	09/15/2014	31.06	21.39	-	-	-	-	9.67	-	
	09/22/2014	31.06	21.52	-	-	-	-	9.54	-	
	10/01/2014	31.06	21.62	-	-	-	24.16	9.44	-	
	10/10/2014	31.06	21.61	-	-	-	-	9.45	-	
	10/20/2014	31.06	21.67	-	-	-	24.17	9.39	-	
	02/24/2015	31.06	21.75	-	-	-	24.18	9.31	15:18	
	05/11/2015	31.06	21.55	-	-	-	24.20	9.51	9:55	
	08/04/2015	31.06	20.66	-	-	-	24.15	10.40	12:44	
	08/05/2015	31.06	20.70	-	-	-	24.15	10.36	10:03	
	12/01/2015	31.06	21.57	-	-	-	24.16	9.49	11:38	
	03/14/2016	31.06	21.41	-	-	-	24.20	9.65	9:40	
	05/23/2016	31.06	21.33	-	-	-	24.31	9.73	10:46	
	08/24/2016	31.06	21.11	-	-	-	24.24	9.95	11:41	
MW-100	08/15/2014	30.78	26.80	-	-	-	36.90	3.98	-	
	08/18/2014	30.78	26.66	-	-	-	-	4.12	-	
	08/25/2014	30.78	26.26	-	-	-	-	4.52	-	
	09/02/2014	30.78	26.70	-	-	-	-	4.08	-	
	09/15/2014	30.78	26.65	-	-	-	-	4.13	-	
	09/22/2014	30.78	26.48	-	-	-	-	4.30	-	
	10/01/2014	30.78	26.69	-	-	-	36.68	4.09	-	
	10/10/2014	30.78	26.60	-	-	-	-	4.18	-	
	10/20/2014	30.78	26.86	-	-	-	36.58	3.92	-	
	02/24/2015	30.78	26.88	-	-	-	36.61	3.90	13:08	
	02/25/2015	30.78	26.87	-	-	-	36.62	3.91	11:32	
	05/11/2015	30.78	26.17	-	-	-	36.60	4.61	14:57	
	08/04/2015	30.78	25.80	-	-	-	36.80	4.98	12:31	
	08/05/2015	30.78	26.22	-	-	-	36.61	4.56	9:59	
	12/01/2015	30.78	26.25	-	-	-	36.35	4.53	13:24	
	03/14/2016	30.78	26.54	-	-	-	36.46	4.24	9:54	
	05/23/2016	30.78	26.74	-	-	-	36.69	4.04	10:28	
	08/24/2016	30.78	26.72	-	-	-	36.42	4.06	11:44	
MW-102	08/15/2014	29.72	29.91	-	-	-	36.64	-0.19	-	
	08/18/2014	29.72	29.81	-	-	-	-	-0.09	-	
	08/25/2014	29.72	28.40	-	-	-	-	1.32	-	
	09/02/2014	29.72	27.23	-	-	-	-	2.49	-	
	09/15/2014	29.72	24.97	-	-	-	-	4.75	-	
	09/22/2014	29.72	24.83	-	-	-	-	4.89	-	
	10/01/2014	29.72	24.73	-	-	-	36.45	4.99	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-102 (cont.)	10/10/2014	29.72	24.66	-	-	-	-	5.06	-	Vegetation overgrown - could not access well to gauge
	10/20/2014	29.72	24.78	-	-	-	36.44	4.94	-	
	05/11/2015	29.72	24.44	-	-	-	36.40	5.28	15:01	
	08/04/2015	29.72	23.39	-	-	-	36.43	6.33	12:35	
	08/05/2015	29.72	23.50	-	-	-	36.42	6.22	10:14	
	12/01/2015	29.72	22.61	-	-	-	31.80	7.11	13:52	
	03/14/2016	29.72	24.11	-	-	-	36.41	5.61	10:04	
	05/23/2016	29.72	23.33	-	-	-	36.40	6.39	10:15	
	08/24/2016	29.72	NR	-	-	-	-	-	-	
MW-103	07/24/2014	11.07	7.87	-	-	-	-	3.20	-	
	08/08/2014	11.07	4.61	-	-	-	15.06	6.46	-	
	08/11/2014	11.07	4.63	-	-	-	-	6.44	-	
	08/15/2014	11.07	4.26	-	-	-	14.95	6.81	-	
	08/18/2014	11.07	4.48	-	-	-	-	6.59	-	
	08/25/2014	11.07	4.45	-	-	-	-	6.62	-	
	09/02/2014	11.07	4.50	-	-	-	-	6.57	-	
	09/15/2014	11.07	4.63	-	-	-	-	6.44	-	
	09/22/2014	11.07	4.76	-	-	-	-	6.31	-	
	10/01/2014	11.07	4.85	-	-	-	14.88	6.22	-	
	10/10/2014	11.07	4.93	-	-	-	-	6.14	-	
	10/20/2014	11.07	4.70	-	-	-	14.88	6.37	-	
	02/24/2015	11.07	5.02	-	-	-	-	6.05	15:27	
	02/26/2015	11.07	5.21	-	-	-	14.90	5.86	11:53	
	05/11/2015	11.07	4.67	-	-	-	14.88	6.40	10:20	
	08/04/2015	11.07	3.69	-	-	-	14.88	7.38	10:19	
	08/05/2015	11.07	3.71	-	-	-	14.87	7.36	10:20	
	12/01/2015	11.07	9.70	-	-	-	-	1.37	11:30	
	03/14/2016	11.07	4.15	-	-	-	14.89	6.92	10:08	
	05/23/2016	11.07	4.01	-	-	-	14.80	7.06	11:28	
	08/24/2016	11.07	4.26	-	-	-	14.98	6.81	11:35	
MW-104	07/24/2014	12.00	5.24	-	-	-	-	6.76	-	
	08/08/2014	12.00	4.28	-	-	-	12.05	7.72	-	
	08/11/2014	12.00	4.40	-	-	-	-	7.60	-	
	08/15/2014	12.00	3.95	-	-	-	12.20	8.05	-	
	08/18/2014	12.00	4.22	-	-	-	-	7.78	-	
	08/25/2014	12.00	4.29	-	-	-	-	7.71	-	
	09/02/2014	12.00	4.38	-	-	-	-	7.62	-	
	09/15/2014	12.00	4.52	-	-	-	-	7.48	-	
	09/22/2014	12.00	4.73	-	-	-	-	7.27	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-104 (cont.)	10/01/2014	12.00	4.73	-	-	-	11.98	7.27	-	
	10/10/2014	12.00	4.77	-	-	-	-	7.23	-	
	10/20/2014	12.00	3.98	-	-	-	12.07	8.02	-	
	02/24/2015	12.00	5.43	-	-	-	-	6.57	15:38	
	02/26/2015	12.00	5.70	-	-	-	12.00	6.30	12:07	
	05/11/2015	12.00	4.51	-	-	-	12.10	7.49	10:25	
	08/04/2015	12.00	3.82	-	-	-	12.00	8.18	10:08	
	08/05/2015	12.00	3.85	-	-	-	12.50	8.15	10:23	
	12/01/2015	12.00	4.29	-	-	-	12.05	7.71	11:42	
	03/14/2016	12.00	3.80	-	-	-	11.99	8.20	10:14	
	05/23/2016	12.00	3.72	-	-	-	12.00	8.28	11:28	
	08/24/2016	12.00	4.17	-	-	-	12.12	7.83	11:28	
MW-105	07/24/2014	10.94	2.34	-	-	-	-	8.60	-	
	08/08/2014	10.94	2.15	-	-	-	10.06	8.79	-	
	08/11/2014	10.94	2.39	-	-	-	-	8.55	-	
	08/15/2014	10.94	1.67	-	-	-	9.95	9.27	-	
	08/18/2014	10.94	2.06	-	-	-	-	8.88	-	
	08/25/2014	10.94	2.25	-	-	-	-	8.69	-	
	09/02/2014	10.94	2.24	-	-	-	-	8.70	-	
	09/15/2014	10.94	2.32	-	-	-	-	8.62	-	
	09/22/2014	10.94	2.71	-	-	-	-	8.23	-	
	10/01/2014	10.94	2.57	-	-	-	9.88	8.37	-	
	10/10/2014	10.94	2.70	-	-	-	-	8.24	-	
	10/20/2014	10.94	1.70	-	-	-	9.93	9.24	-	
	05/11/2015	10.94	2.40	-	-	-	9.70	8.54	10:35	
	08/04/2015	10.94	1.65	-	-	-	9.62	9.29	10:15	
	08/05/2015	10.94	1.67	-	-	-	9.60	9.27	10:26	
	12/01/2015	10.94	NR	-	-	-	-	-	-	Well flooded
	03/14/2016	10.94	0.30	-	-	-	9.24	10.64	10:17	
	05/23/2016	10.94	0.91	-	-	-	9.50	10.03	11:36	
	08/24/2016	10.94	1.70	-	-	-	9.22	9.24	11:25	
MW-106	08/08/2014	11.12	8.30	-	-	-	10.27	2.82	-	
	08/11/2014	11.12	8.27	-	-	-	-	2.85	-	
	08/15/2014	11.12	7.63	-	-	-	9.88	3.49	-	
	08/18/2014	11.12	7.58	-	-	-	-	3.54	-	
	08/25/2014	11.12	7.52	-	-	-	-	3.60	-	
	09/02/2014	11.12	7.79	-	-	-	-	3.33	-	
	09/15/2014	11.12	7.90	-	-	-	-	3.22	-	
	09/22/2014	11.12	7.87	-	-	-	-	3.25	-	
	10/01/2014	11.12	7.93	-	-	-	9.88	3.19	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-106 (cont.)	10/10/2014	11.12	7.71	-	-	-	-	3.41	-	
	10/13/2014	11.12	7.92	-	-	-	-	3.20	-	
	10/20/2014	11.12	7.86	-	-	-	9.88	3.26	-	
	10/27/2014	11.12	7.77	-	-	-	-	3.35	-	
	11/07/2014	11.12	7.83	-	-	-	-	3.29	-	
	11/12/2014	11.12	7.88	-	-	-	-	3.24	-	
	11/21/2014	11.12	8.23	-	-	-	-	2.89	-	
	11/26/2014	11.12	8.03	-	-	-	-	3.09	-	
	12/05/2014	11.12	7.21	-	-	-	-	3.91	-	
	12/11/2014	11.12	6.95	-	-	-	-	4.17	-	
	12/16/2014	11.12	7.18	-	-	-	-	3.94	-	
	12/23/2014	11.12	7.31	-	-	-	-	3.81	-	
	12/30/2014	11.12	6.97	-	-	-	-	4.15	-	
	01/09/2015	11.12	7.34	-	-	-	-	3.78	-	
	01/16/2015	11.12	6.88	-	-	-	-	4.24	-	
	01/19/2015	11.12	6.77	-	-	-	-	4.35	-	
	01/26/2015	11.12	5.79	-	-	-	-	5.33	-	
	02/03/2015	11.12	7.24	-	-	-	9.90	3.88	-	
	02/09/2015	11.12	7.42	-	-	-	-	3.70	-	
	02/18/2015	11.12	7.63	-	-	-	-	3.49	-	
	02/24/2015	11.12	7.76	-	-	-	9.84	3.36	13:18	
	02/25/2015	11.12	7.80	-	-	-	9.79	3.32	10:20	
	03/04/2015	11.12	7.57	-	-	-	-	3.55	13:52	
	03/11/2015	11.12	5.17	-	-	-	-	5.95	12:19	
	03/18/2015	11.12	6.39	-	-	-	-	4.73	10:42	
	03/26/2015	11.12	7.02	-	-	-	9.90	4.10	11:02	
	04/02/2015	11.12	7.15	-	-	-	9.85	3.97	10:47	
	04/08/2015	11.12	7.55	-	-	-	9.87	3.57	9:46	
	04/13/2015	11.12	7.63	-	-	-	-	3.49	10:18	
	04/23/2015	11.12	6.70	-	-	-	9.85	4.42	11:00	
	04/29/2015	11.12	7.15	-	-	-	9.85	3.97	13:34	
	05/04/2015	11.12	7.23	-	-	-	-	3.89	11:17	
	05/11/2015	11.12	7.43	-	-	-	9.85	3.69	14:51	
	05/12/2015	11.12	7.50	-	-	-	-	3.62	10:35	
	05/21/2015	11.12	7.62	-	-	-	9.85	3.50	11:55	
	05/28/2015	11.12	7.81	-	-	-	9.80	3.31	11:11	
	06/02/2015	11.12	6.66	-	-	-	-	4.46	12:38	
	06/09/2015	11.12	6.37	-	-	-	-	4.75	10:04	
	06/16/2015	11.12	7.21	-	-	-	-	3.91	11:01	
	06/26/2015	11.12	6.27	-	-	-	9.90	4.85	9:13	
	07/01/2015	11.12	4.77	-	-	-	-	6.35	11:54	
	08/04/2015	11.12	7.42	-	-	-	9.86	3.70	12:19	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-106 (cont.)	12/01/2015	11.12	7.65	-	-	-	9.85	3.47	13:45	
	03/14/2016	11.12	7.33	-	-	-	9.84	3.79	9:10	
	04/21/2016	11.12	7.85	-	-	-	9.80	3.27	9:42	
	05/05/2016	11.12	6.97	-	-	-	-	4.15	12:17	
	05/23/2016	11.12	6.52	-	-	-	9.80	4.60	10:21	
	05/24/2016	11.12	6.26	-	-	-	9.60	4.86	13:00	
	06/21/2016	11.12	7.90	-	-	-	-	3.22	9:45	
	07/21/2016	11.12	7.63	-	-	-	-	3.49	9:37	
	08/24/2016	11.12	7.90	-	-	-	9.60	3.22	9:37	
	08/25/2016	11.12	7.80	-	-	-	-	3.32	14:15	
	09/22/2016	11.12	7.87	-	-	-	-	3.25	14:20	
MW-107	08/08/2014	15.74	10.62	-	-	-	11.57	5.12	-	
	08/11/2014	15.74	9.02	-	-	-	-	6.72	-	
	08/15/2014	15.74	8.94	-	-	-	-	6.80	-	
	08/16/2014	15.74	8.93	-	-	-	11.57	6.81	-	
	08/18/2014	15.74	8.89	-	-	-	-	6.85	-	
	08/25/2014	15.74	8.38	-	-	-	-	7.36	-	
	09/02/2014	15.74	8.43	-	-	-	-	7.31	-	
	09/15/2014	15.74	9.39	-	-	-	-	6.35	-	
	09/22/2014	15.74	9.92	-	-	-	-	5.82	-	
	10/01/2014	15.74	10.32	-	-	-	11.03	5.42	-	
	10/10/2014	15.74	10.53	-	-	-	-	5.21	-	
	10/13/2014	15.74	10.67	-	-	-	-	5.07	-	
	10/20/2014	15.74	8.43	-	-	-	11.04	7.31	-	
	10/27/2014	15.74	7.97	-	-	-	-	7.77	-	
	11/07/2014	15.74	8.32	-	-	-	-	7.42	-	
	11/12/2014	15.74	8.63	-	-	-	-	7.11	-	
	11/21/2014	15.74	9.38	-	-	-	-	6.36	-	
	11/26/2014	15.74	8.93	-	-	-	-	6.81	-	
	12/05/2014	15.74	7.47	-	-	-	-	8.27	-	
	12/11/2014	15.74	7.43	-	-	-	-	8.31	-	
	12/16/2014	15.74	8.28	-	-	-	-	7.46	-	
	12/23/2014	15.74	8.35	-	-	-	-	7.39	-	
	12/30/2014	15.74	8.20	-	-	-	-	7.54	-	
	01/09/2015	15.74	8.03	-	-	-	-	7.71	-	
	01/16/2015	15.74	7.68	-	-	-	-	8.06	-	
	01/19/2015	15.74	6.76	-	-	-	-	8.98	-	
	01/26/2015	15.74	5.84	-	-	-	-	9.90	-	
	02/03/2015	15.74	8.63	-	-	-	11.04	7.11	-	
	02/09/2015	15.74	8.73	-	-	-	-	7.01	-	
	02/18/2015	15.74	9.21	-	-	-	-	6.53	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-107 (cont.)	02/24/2015	15.74	9.78	-	-	-	11.00	5.96	13:23	
	02/25/2015	15.74	9.64	-	-	-	11.00	6.10	11:40	
	03/04/2015	15.74	9.48	-	-	-	-	6.26	13:55	
	03/11/2015	15.74	4.08	-	-	-	-	11.66	12:22	
	03/18/2015	15.74	7.44	-	-	-	-	8.30	10:45	
	03/26/2015	15.74	8.98	-	-	-	11.00	6.76	11:05	
	04/02/2015	15.74	8.63	-	-	-	11.00	7.11	10:49	
	04/08/2015	15.74	9.00	-	-	-	11.00	6.74	9:45	
	04/13/2015	15.74	9.06	-	-	-	-	6.68	10:21	
	04/23/2015	15.74	7.18	-	-	-	11.00	8.56	11:04	
	04/29/2015	15.74	9.14	-	-	-	11.00	6.60	13:39	
	05/04/2015	15.74	9.03	-	-	-	-	6.71	11:14	
	05/11/2015	15.74	9.19	-	-	-	11.00	6.55	14:49	
	05/12/2015	15.74	9.25	-	-	-	-	6.49	10:37	
	05/21/2015	15.74	9.21	-	-	-	11.00	6.53	11:57	
	05/28/2015	15.74	9.27	-	-	-	11.00	6.47	11:13	
	06/02/2015	15.74	3.95	-	-	-	-	11.79	12:41	
	06/09/2015	15.74	6.78	-	-	-	-	8.96	10:07	
	06/16/2015	15.74	9.05	-	-	-	-	6.69	10:58	
	06/26/2015	15.74	6.86	-	-	-	11.00	8.88	9:15	
	07/01/2015	15.74	4.03	-	-	-	-	11.71	11:51	
	08/04/2015	15.74	9.40	-	-	-	11.00	6.34	12:21	
	12/01/2015	15.74	8.80	-	-	-	11.01	6.94	13:47	
	03/14/2016	15.74	8.09	-	-	-	11.03	7.65	9:15	
	05/23/2016	15.74	7.29	-	-	-	10.90	8.45	10:26	
	08/24/2016	15.74	DRY	-	-	-	11.02	-	9:30	
MW-108	08/08/2014	15.61	DRY	-	-	-	9.49	-	-	
	08/11/2014	15.61	DRY	-	-	-	9.52	-	-	
	08/15/2014	15.61	9.01	-	-	-	9.22	6.60	-	
	08/18/2014	15.61	9.07	-	-	-	-	6.54	-	
	08/25/2014	15.61	DRY	-	-	-	9.23	-	-	
	09/02/2014	15.61	DRY	-	-	-	9.23	-	-	
	09/15/2014	15.61	DRY	-	-	-	9.22	-	-	
	09/22/2014	15.61	DRY	-	-	-	-	-	-	
	10/01/2014	15.61	DRY	-	-	-	10.48	-	-	
	10/10/2014	15.61	DRY	-	-	-	-	-	-	
	10/20/2014	15.61	DRY	-	-	-	10.48	-	-	
	05/11/2015	15.61	DRY	-	-	-	9.20	-	14:47	
	05/12/2015	15.61	DRY	-	-	-	-	-	10:40	
	08/04/2015	15.61	DRY	-	-	-	9.21	-	12:27	
	12/01/2015	15.61	DRY	-	-	-	9.21	-	13:49	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-108 (cont.)	03/14/2016	15.61	DRY	-	-	-	9.22	-	9:18	
	05/23/2016	15.61	8.37	-	-	-	9.20	7.24	10:28	
	05/25/2016	15.61	8.34	-	-	-	9.20	7.27	12:13	
	08/24/2016	15.61	DRY	-	-	-	9.23	-	9:32	
	08/25/2016	15.61	DRY	-	-	-	-	-	-	
MW-109S	08/25/2014	19.27	10.06	-	-	-	-	9.21	-	
	09/15/2014	19.27	10.19	-	-	-	-	9.08	-	
	09/22/2014	19.27	10.24	-	-	-	-	9.03	-	
	10/01/2014	19.27	10.33	-	-	-	13.20	8.94	-	
	10/10/2014	19.27	10.47	-	-	-	-	8.80	-	
	10/13/2014	19.27	10.58	-	-	-	-	8.69	-	
	10/20/2014	19.27	10.67	-	-	-	13.20	8.60	-	
	10/27/2014	19.27	10.83	-	-	-	-	8.44	-	
	11/07/2014	19.27	10.76	-	-	-	-	8.51	-	
	11/12/2014	19.27	10.85	-	-	-	-	8.42	-	
	11/21/2014	19.27	11.04	-	-	-	-	8.23	-	
	11/26/2014	19.27	11.02	-	-	-	-	8.25	-	
	02/24/2015	19.27	11.43	-	-	-	13.06	7.84	13:55	
	02/26/2015	19.27	11.36	-	-	-	13.06	7.91	10:40	
	05/11/2015	19.27	11.31	-	-	-	13.20	7.96	15:06	
	05/12/2015	19.27	11.28	-	-	-	13.20	7.99	10:00	
	05/21/2015	19.27	11.40	-	-	-	13.06	7.87	12:34	
MW-109	08/25/2014	19.16	14.59	-	-	-	-	4.57	-	
	09/15/2014	19.16	14.98	-	-	-	-	4.18	-	
	09/22/2014	19.16	14.88	-	-	-	-	4.28	-	
	10/01/2014	19.16	15.07	-	-	-	22.79	4.09	-	
	10/10/2014	19.16	14.96	-	-	-	-	4.20	-	
	10/13/2014	19.16	15.09	-	-	-	-	4.07	-	
	10/20/2014	19.16	15.22	-	-	-	22.72	3.94	-	
	10/27/2014	19.16	15.27	-	-	-	-	3.89	-	
	11/07/2014	19.16	15.07	-	-	-	-	4.09	-	
	11/12/2014	19.16	15.13	-	-	-	-	4.03	-	
	11/21/2014	19.16	15.81	-	-	-	-	3.35	-	
	11/26/2014	19.16	15.33	-	-	-	-	3.83	-	
	02/24/2015	19.16	15.25	-	-	-	22.80	3.91	13:58	
	02/26/2015	19.16	15.25	-	-	-	22.80	3.91	10:44	
	05/11/2015	19.16	14.61	-	-	-	22.84	4.55	15:04	
	05/12/2015	19.16	14.77	-	-	-	22.84	4.39	9:57	
	05/21/2015	19.16	15.23	-	-	-	22.80	3.93	12:36	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-110S	08/25/2014	19.13	10.05	-	-	-	12.70	9.08	-	
	09/15/2014	19.13	10.23	-	-	-	-	8.90	-	
	09/22/2014	19.13	10.28	-	-	-	-	8.85	-	
	10/01/2014	19.13	10.33	-	-	-	12.65	8.80	-	
	10/10/2014	19.13	10.41	-	-	-	-	8.72	-	
	10/20/2014	19.13	10.45	-	-	-	12.66	8.68	-	
	10/27/2014	19.13	10.48	-	-	-	-	8.65	-	
	11/07/2014	19.13	10.50	-	-	-	-	8.63	-	
	11/12/2014	19.13	10.53	-	-	-	-	8.60	-	
	11/21/2014	19.13	10.60	-	-	-	-	8.53	-	
	11/26/2014	19.13	10.60	-	-	-	-	8.53	-	
	02/24/2015	19.13	11.53	-	-	-	12.67	7.60	13:49	
	02/26/2015	19.13	11.59	-	-	-	12.67	7.54	10:33	
	05/11/2015	19.13	12.24	-	-	-	12.65	6.89	14:56	
	05/12/2015	19.13	12.24	-	-	-	12.65	6.89	9:47	
	05/21/2015	19.13	11.55	-	-	-	12.67	7.58	12:38	
MW-110	08/25/2014	19.51	14.70	-	-	-	24.40	4.81	-	
	09/15/2014	19.51	15.11	-	-	-	-	4.40	-	
	09/22/2014	19.51	14.98	-	-	-	-	4.53	-	
	10/01/2014	19.51	15.18	-	-	-	23.33	4.33	-	
	10/10/2014	19.51	15.07	-	-	-	-	4.44	-	
	10/20/2014	19.51	14.35	-	-	-	23.34	5.16	-	
	10/27/2014	19.51	14.39	-	-	-	-	5.12	-	
	11/07/2014	19.51	15.18	-	-	-	-	4.33	-	
	11/12/2014	19.51	15.25	-	-	-	-	4.26	-	
	11/21/2014	19.51	15.97	-	-	-	-	3.54	-	
	11/26/2014	19.51	15.45	-	-	-	-	4.06	-	
	02/24/2015	19.51	15.38	-	-	-	23.36	4.13	13:52	
	02/26/2015	19.51	15.38	-	-	-	23.36	4.13	10:36	
	05/11/2015	19.51	14.74	-	-	-	23.42	4.77	14:54	
	05/12/2015	19.51	14.91	-	-	-	23.42	4.60	9:44	
	05/21/2015	19.51	15.40	-	-	-	23.36	4.11	12:40	
MW-111	10/10/2014	19.17	14.97	-	-	-	-	4.20	-	
	10/20/2014	19.17	14.25	-	-	-	21.97	4.92	-	
	02/24/2015	19.17	15.30	-	-	-	21.96	3.87	13:43	
	02/26/2015	19.17	15.28	-	-	-	21.96	3.89	10:25	
	05/11/2015	19.17	14.66	-	-	-	21.87	4.51	14:51	
	05/12/2015	19.17	14.78	-	-	-	21.87	4.39	9:41	
MW-112S	08/15/2014	19.22	10.31	-	-	-	12.40	8.91	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-112S (cont.)	08/18/2014	19.22	10.22	-	-	-	12.45	9.00	-	
	08/25/2014	19.22	10.29	-	-	-	-	8.93	-	
	09/15/2014	19.22	10.43	-	-	-	-	8.79	-	
	09/22/2014	19.22	10.56	-	-	-	-	8.66	-	
	10/01/2014	19.22	10.58	-	-	-	12.46	8.64	-	
	10/10/2014	19.22	10.64	-	-	-	-	8.58	-	
	10/20/2014	19.22	10.75	-	-	-	12.47	8.47	-	
	02/24/2015	19.22	11.30	-	-	-	12.48	7.92	13:37	
	02/26/2015	19.22	11.34	-	-	-	12.48	7.88	10:19	
	05/11/2015	19.22	11.21	-	-	-	12.44	8.01	15:01	
	05/12/2015	19.22	11.21	-	-	-	12.44	8.01	9:54	
MW-112	08/15/2014	19.08	15.11	-	-	-	22.55	3.97	-	
	08/18/2014	19.08	14.43	-	-	-	22.31	4.65	-	
	08/25/2014	19.08	14.53	-	-	-	-	4.55	-	
	09/02/2014	19.08	NR ³	-	-	-	-	-	-	
	09/15/2014	19.08	14.85	-	-	-	-	4.23	-	
	09/22/2014	19.08	14.77	-	-	-	-	4.31	-	
	10/01/2014	19.08	14.92	-	-	-	22.83	4.16	-	
	10/10/2014	19.08	14.87	-	-	-	-	4.21	-	
	10/20/2014	19.08	15.15	-	-	-	22.83	3.93	-	
	02/24/2015	19.08	15.19	-	-	-	22.75	3.89	13:40	
	02/26/2015	19.08	15.15	-	-	-	22.75	3.93	10:22	
	05/11/2015	19.08	14.52	-	-	-	22.83	4.56	14:59	
	05/12/2015	19.08	14.64	-	-	-	22.83	4.44	9:51	
MW-113	08/25/2014	19.11	14.49	-	-	-	-	4.62	-	
	09/15/2014	19.11	14.96	-	-	-	-	4.15	-	
	09/22/2014	19.11	14.83	-	-	-	-	4.28	-	
	10/01/2014	19.11	15.04	-	-	-	22.95	4.07	-	
	10/10/2014	19.11	14.84	-	-	-	-	4.27	-	
	10/20/2014	19.11	15.20	-	-	-	22.95	3.91	-	
	02/24/2015	19.11	15.24	-	-	-	22.95	3.87	13:46	
	02/26/2015	19.11	15.27	-	-	-	22.95	3.84	10:29	
	05/11/2015	19.11	14.58	-	-	-	22.77	4.53	14:48	
	05/12/2015	19.11	14.81	-	-	-	22.77	4.30	9:38	
MW-114	08/25/2014	19.26	14.62	-	-	-	22.78	4.64	-	
	09/15/2014	19.26	14.89	-	-	-	-	4.37	-	
	09/22/2014	19.26	14.87	-	-	-	-	4.39	-	
	10/01/2014	19.26	14.96	-	-	-	22.77	4.30	-	
	10/10/2014	19.26	15.01	-	-	-	-	4.25	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-114 (cont.)	10/20/2014	19.26	15.29	-	-	-	22.77	3.97	-	
	02/24/2015	19.26	15.25	-	-	-	22.77	4.01	13:34	
	02/26/2015	19.26	15.10	-	-	-	22.77	4.16	10:15	
	05/11/2015	19.26	14.52	-	-	-	22.75	4.74	14:45	
	05/12/2015	19.26	14.51	-	-	-	22.75	4.75	9:35	
MW-121	07/08/2015	31.48	26.52	-	-	-	-	4.96	11:21	
	07/13/2015	31.48	26.14	-	-	-	36.93	5.34	9:28	
	07/20/2015	31.48	26.37	-	-	-	-	5.11	9:25	
	07/28/2015	31.48	26.53	-	-	-	37.06	4.95	11:38	
	08/04/2015	30.88	25.91	-	-	-	36.33	4.97	12:22	
	08/11/2015	30.88	25.58	-	-	-	36.31	5.30	9:59	
	08/18/2015	30.88	26.12	-	-	-	-	4.76	10:23	
	08/24/2015	30.88	26.02	-	-	-	-	4.86	10:23	
	09/02/2015	30.88	26.38	-	-	-	36.31	4.50	9:45	
	09/09/2015	30.88	26.11	-	-	-	36.29	4.77	10:23	
	09/17/2015	30.88	26.51	-	-	-	36.41	4.37	10:27	
	09/23/2015	30.88	26.32	-	-	-	-	4.56	10:43	
	09/28/2015	30.88	26.18	-	-	-	36.25	4.70	9:24	
	10/05/2015	30.88	26.02	-	-	-	36.25	4.86	9:18	
	11/10/2015	30.88	26.62	-	-	-	-	4.26	13:06	
	12/01/2015	30.88	26.48	-	-	-	36.20	4.40	13:56	
	01/27/2016	30.88	26.58	-	-	-	-	4.30	9:44	
	02/15/2016	30.88	27.11	-	-	-	-	3.77	9:30	
	03/14/2016	30.88	26.57	-	-	-	36.28	4.31	8:45	
	04/21/2016	30.88	30.48	-	-	-	-	0.40	9:38	
	05/23/2016	30.88	27.26	-	-	-	37.06	3.62	10:10	
	05/25/2016	30.88	29.73	-	-	-	36.60	1.15	-	
	06/21/2016	30.88	29.17	-	-	-	-	1.71	11:07	
	07/21/2016	30.88	29.57	-	-	-	-	1.31	10:50	
	08/24/2016	30.88	27.56	-	-	-	36.39	3.32	9:26	
	08/25/2016	30.88	26.90	-	-	-	36.35	3.98	11:02	
	09/22/2016	30.88	28.52	-	-	-	-	2.36	14:05	
MW-122	07/08/2015	31.12	25.58	-	-	-	-	5.54	11:32	
	07/13/2015	31.12	25.36	-	-	-	34.72	5.76	9:29	
	07/20/2015	31.12	25.20	-	-	-	-	5.92	9:31	
	07/28/2015	31.12	25.38	-	-	-	34.85	5.74	11:13	
	08/04/2015	31.12	25.54	-	-	-	34.61	5.58	12:24	
	08/11/2015	31.12	25.46	-	-	-	34.79	5.66	9:58	
	08/18/2015	31.12	25.98	-	-	-	-	5.14	10:30	
	08/24/2015	31.12	25.83	-	-	-	-	5.29	10:37	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-122 (cont.)	09/02/2015	31.12	26.21	-	-	-	34.76	4.91	9:41	
	09/09/2015	31.12	26.03	-	-	-	34.78	5.09	10:21	
	09/17/2015	31.12	26.45	-	-	-	34.83	4.67	10:25	
	09/23/2015	31.12	26.18	-	-	-	-	4.94	10:46	
	09/28/2015	31.12	25.98	-	-	-	34.72	5.14	9:48	
	10/05/2015	31.12	25.50	TRACE	TRACE	-	34.72	5.62	9:13	
	11/10/2015	31.12	26.32	-	-	-	-	4.80	13:07	
	12/01/2015	31.12	26.57	-	-	-	34.72	4.55	13:53	
	01/27/2016	31.12	26.63	-	-	-	-	4.49	9:47	
	02/15/2016	31.12	27.05	-	-	-	-	4.07	9:33	
	03/14/2016	31.12	26.47	-	-	-	34.77	4.65	8:50	
	04/21/2016	31.12	27.32	-	-	-	-	3.80	9:42	
	05/23/2016	31.12	27.35	-	-	-	34.82	3.77	10:15	
	05/25/2016	31.12	27.51	-	-	-	34.90	3.61	-	
	06/21/2016	31.12	27.33	-	-	-	-	3.79	11:10	
	07/21/2016	31.12	27.22	-	-	-	-	3.90	10:45	
	08/24/2016	31.12	27.07	-	-	-	34.80	4.05	9:30	
	08/25/2016	31.12	26.93	-	-	-	36.77	4.19	10:58	
	09/22/2016	31.12	27.03	-	-	-	-	4.09	14:00	
MW-123S / RW-123S	07/08/2015	31.09	DRY	-	-	-	24.92	-	11:35	
	07/13/2015	31.09	23.96	-	-	-	24.90	7.13	9:17	
	07/20/2015	31.09	22.37	-	-	-	-	8.72	9:22	
	07/28/2015	31.09	22.15	-	-	-	24.98	8.94	11:05	
	08/04/2015	31.09	22.04	-	-	-	24.91	9.05	13:08	
	08/05/2015	31.09	22.07	-	-	-	24.93	9.02	9:16	
	08/11/2015	31.09	22.04	-	-	-	24.91	9.05	10:10	
	08/18/2015	31.09	22.05	-	-	-	-	9.04	9:50	
	08/24/2015	31.09	22.08	-	-	-	-	9.01	9:53	
	09/02/2015	31.09	22.26	22.25	0.01	TRACE	24.92	8.84	9:28	
	09/09/2015	31.09	22.33	-	-	-	24.92	8.76	10:28	
	09/17/2015	31.09	22.56	-	-	-	24.97	8.53	10:19	
	09/23/2015	31.09	22.57	-	-	-	-	8.52	10:11	
	09/28/2015	31.09	22.59	-	-	-	24.91	8.50	9:30	
	10/05/2015	31.09	22.61	TRACE	TRACE	-	24.92	8.48	9:09	
	11/10/2015	31.09	25.31	-	-	-	-	5.78	12:43	
	12/01/2015	33.54	25.53	-	-	-	27.40	8.01	10:55	
	01/27/2016	33.54	25.76	-	-	-	-	7.78	9:57	
	02/15/2016	33.54	24.93	-	-	-	-	8.61	9:43	
	03/14/2016	33.54	24.35	-	-	-	27.39	9.19	12:00	
	04/21/2016	33.54	25.93	-	-	-	27.16	7.61	10:52	
	05/23/2016	33.54	26.06	-	-	-	27.32	7.48	11:33	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
MW-123S / RW-123S (cont.)	05/24/2016	33.54	25.46	-	-	-	27.50	8.08	8:55	
	06/21/2016	33.54	26.05	-	-	-	-	7.49	10:04	
	07/21/2016	33.54	26.03	-	-	-	-	7.51	9:54	
	08/24/2016	33.54	26.09	-	-	-	27.00	7.45	11:59	
	08/25/2016	33.54	24.11	-	-	-	-	9.43	9:50	
	09/22/2016	33.54	26.14	-	-	-	27.02	7.40	12:48	
RW-1	10/10/2014	31.19	26.93	-	-	-	-	4.26	-	
	10/13/2014	31.19	27.09	-	-	-	-	4.10	-	
	10/20/2014	31.19	27.27	-	-	-	40.65	3.92	-	
	10/27/2014	31.19	27.35	-	-	-	-	3.84	-	
	11/07/2014	31.19	27.10	-	-	-	-	4.09	-	
	11/12/2014	31.19	27.15	-	-	-	-	4.04	-	
	11/21/2014	31.19	27.83	-	-	-	-	3.36	-	
	11/26/2014	31.19	27.42	-	-	-	-	3.77	-	
	12/05/2014	31.19	27.25	-	-	-	-	3.94	-	
	12/11/2014	31.19	27.09	-	-	-	-	4.10	-	
	12/16/2014	31.19	26.98	-	-	-	-	4.21	-	
	12/23/2014	31.19	26.98	-	-	-	-	4.21	-	
	12/30/2014	31.19	27.38	-	-	-	-	3.81	-	
	01/09/2015	31.19	27.37	-	-	-	-	3.82	-	
	01/16/2015	31.19	27.08	-	-	-	-	4.11	-	
	01/19/2015	31.19	27.07	-	-	-	-	4.12	-	
	01/26/2015	31.19	27.03	-	-	-	-	4.16	-	
	02/03/2015	31.19	27.80	-	-	-	40.75	3.39	-	
	02/09/2015	31.19	27.18	-	-	-	-	4.01	-	
	02/18/2015	31.19	27.22	-	-	-	-	3.97	-	
	02/24/2015	31.19	27.42	-	-	-	40.35	3.77	13:49	
	03/04/2015	31.19	27.27	-	-	-	-	3.92	14:12	
	03/11/2015	31.19	26.90	-	-	-	-	4.29	12:42	
	03/18/2015	31.19	27.04	-	-	-	-	4.15	11:02	
	03/26/2015	31.19	26.87	-	-	-	40.70	4.32	11:35	
	04/02/2015	31.19	27.02	-	-	-	40.60	4.17	11:23	
	04/08/2015	31.19	27.30	-	-	-	40.55	3.89	8:45	
	04/13/2015	31.19	27.18	-	-	-	-	4.01	10:38	
	04/23/2015	31.19	26.67	-	-	-	40.65	4.52	11:52	
	04/29/2015	31.19	26.87	-	-	-	40.70	4.32	14:19	
	05/04/2015	31.19	26.72	-	-	-	-	4.47	11:36	
	05/11/2015	31.19	26.70	-	-	-	40.78	4.49	15:03	
	05/12/2015	31.19	26.92	-	-	-	40.63	4.27	14:15	
	05/21/2015	31.19	26.90	-	-	-	40.70	4.29	12:20	
	05/28/2015	31.19	27.11	-	-	-	40.60	4.08	11:43	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
RW-1 (cont.)	06/02/2015	31.19	26.79	-	-	-	-	4.40	13:01	
	06/09/2015	31.19	26.57	-	-	-	-	4.62	10:27	
	06/16/2015	31.19	26.60	-	-	-	-	4.59	11:21	
	06/26/2015	31.19	26.52	-	-	-	40.50	4.67	10:37	
	07/01/2015	31.19	26.07	-	-	-	-	5.12	12:12	
	08/04/2015	31.19	26.30	-	-	-	40.66	4.89	12:16	
	08/05/2015	31.19	26.67	-	-	-	40.65	4.52	9:08	
	12/01/2015	31.19	26.77	-	-	-	40.67	4.42	13:41	
	03/14/2016	31.19	26.95	-	-	-	40.65	4.24	8:40	
	04/21/2016	31.19	27.82	-	-	-	40.69	3.37	9:47	
	05/23/2016	31.19	27.73	-	-	-	41.31	3.46	10:06	
	05/24/2016	31.19	27.89	-	-	-	40.65	3.30	10:15	
	06/21/2016	31.19	27.22	-	-	-	-	3.97	10:53	
	07/21/2016	31.19	27.08	-	-	-	-	4.11	11:00	
	08/24/2016	31.19	27.42	-	-	-	40.70	3.77	10:00	
RW-05S	07/08/2015	31.38	22.72	-	-	-	-	8.66	11:25	
	07/13/2015	31.38	22.57	-	-	-	26.03	8.81	9:34	
	07/20/2015	31.38	21.82	-	-	-	-	9.56	9:28	
	07/28/2015	31.38	21.77	-	-	-	26.07	9.61	11:21	
	08/05/2015	31.38	21.87	-	-	-	26.03	9.51	9:27	
	08/11/2015	31.38	21.95	-	-	-	26.06	9.43	10:05	
	08/18/2015	31.38	22.17	-	-	-	-	9.21	10:27	
	08/24/2015	31.38	22.42	-	-	-	-	8.96	10:20	
	09/02/2015	31.38	22.47	-	-	-	26.05	8.91	9:49	
	09/09/2015	31.38	22.60	-	-	-	26.07	8.78	10:25	
	09/17/2015	31.38	22.69	-	-	-	26.07	8.69	10:30	
	09/23/2015	31.38	22.69	-	-	-	-	8.69	10:37	
	09/28/2015	31.38	22.78	-	-	-	26.07	8.60	9:26	
	10/05/2015	31.38	22.71	-	-	-	26.20	8.67	9:15	
	11/10/2015	31.38	25.07	-	-	-	-	6.31	13:05	
	12/01/2015	33.47	25.36	-	-	-	28.15	8.11	11:51	
	01/27/2016	33.47	26.23	-	-	-	-	7.24	10:40	
	02/15/2016	33.47	25.44	-	-	-	-	8.03	10:27	
	03/14/2016	33.47	25.21	-	-	-	28.20	8.26	11:40	
	04/21/2016	33.47	20.05	-	-	-	27.95	13.42	11:13	
	05/23/2016	33.47	25.78	-	-	-	27.97	7.69	11:24	
	05/24/2016	33.47	25.18	-	-	-	28.10	8.29	9:30	
	06/21/2016	33.47	25.83	-	-	-	-	7.64	10:46	
	07/21/2016	33.47	25.91	-	-	-	-	7.56	10:25	
	08/24/2016	33.47	25.77	-	-	-	27.95	7.70	11:05	
	08/25/2016	33.47	24.14	-	-	-	-	9.33	10:05	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
RW-05S (cont.)	09/22/2016	33.47	23.80	-	-	-	24.48	9.67	12:40	
RW-25S	07/08/2015	30.97	DRY	-	-	-	24.64	-	11:43	LNAPL not manually bailed
	07/13/2015	30.97	DRY	-	-	-	24.65	-	9:39	
	07/20/2015	30.97	DRY	-	-	-	-	-	9:40	
	07/28/2015	30.97	DRY	-	-	-	24.71	-	10:47	
	08/04/2015	30.97	DRY	-	-	-	24.64	-	13:06	
	08/11/2015	30.97	DRY	-	-	-	-	-	11:25	
	08/18/2015	30.97	24.62	-	-	-	-	6.35	10:36	
	08/24/2015	30.97	24.56	-	-	-	-	6.41	10:33	
	09/02/2015	30.97	NR	24.51	-	0.01	24.69	-	10:23	
	09/09/2015	30.97	NR	24.50	-	0.01	24.69	-	11:00	
	09/17/2015	30.97	NR	24.54	-	-	24.65	-	10:50	
	09/23/2015	30.97	24.62	24.50	0.12	0.01	24.62	6.46	10:56	
	09/28/2015	30.97	NR	24.57	TRACE	TRACE	24.65	-	9:55	
	10/05/2015	30.97	NR	24.54	-	TRACE	24.59	-	11:27	
	11/10/2015	30.97	NR	26.28	-	-	26.38	-	13:36	
	12/01/2015	32.70	26.34	26.27	0.07	-	26.36	6.42	11:55	
	01/27/2016	32.70	26.30	26.22	0.08	-	-	6.47	11:04	
	02/15/2016	32.70	25.59	25.42	0.17	-	-	7.26	10:44	
	03/14/2016	32.70	24.45	24.44	0.01	-	-	8.26	13:00	
	04/21/2016	32.70	25.51	25.50	0.01	-	-	7.20	11:45	
	05/23/2016	32.70	25.38	-	-	-	26.28	7.32	11:36	
	05/24/2016	32.70	25.43	25.41	0.02	-	-	7.29	-	
	06/21/2016	32.70	25.38	-	-	-	-	7.32	10:07	
	07/21/2016	32.70	25.39	-	-	-	-	7.31	9:57	
	08/24/2016	32.70	25.35	-	-	-	25.62	7.35	10:52	
	08/25/2016	32.70	24.97	-	-	-	25.61	7.73	-	
	08/30/2016	32.70	25.86	-	-	-	27.36	6.84	11:35	
	09/22/2016	32.70	26.08	-	-	-	26.38	6.62	12:20	
RW-28S	07/08/2015	31.35	26.40	-	-	-	-	4.95	10:42	
	07/13/2015	31.35	25.20	-	-	-	26.66	6.15	9:11	
	07/20/2015	31.35	24.14	-	-	-	-	7.21	8:55	
	07/28/2015	31.35	23.92	-	-	-	26.73	7.43	10:04	
	08/04/2015	31.35	23.97	-	-	-	26.67	7.38	13:21	
	08/05/2015	31.35	24.98	-	-	-	26.66	6.37	8:18	
	08/11/2015	31.35	24.03	-	-	-	26.65	7.32	9:42	
	08/18/2015	31.35	24.13	-	-	-	-	7.22	10:00	
	08/24/2015	31.35	24.18	-	-	-	-	7.17	10:03	
	09/02/2015	31.35	24.31	-	-	-	26.68	7.04	9:10	
	09/09/2015	31.35	24.41	-	-	-	26.65	6.94	9:58	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
RW-28S (cont.)	09/17/2015	31.35	24.55	-	-	-	26.69	6.80	9:51	
	09/23/2015	31.35	24.58	-	-	-	-	6.77	10:21	
	09/28/2015	31.35	24.65	-	-	-	26.60	6.70	9:40	
	10/05/2015	31.35	24.60	-	-	-	26.68	6.75	8:58	
	11/10/2015	31.35	26.71	-	-	-	-	4.64	12:48	
	12/01/2015	32.98	26.91	-	-	-	28.28	6.07	12:34	
	01/27/2016	32.98	27.09	-	-	-	-	5.89	10:10	
	02/15/2016	32.98	25.86	-	-	-	-	7.12	9:51	
	03/14/2016	32.98	25.74	-	-	-	28.30	7.24	12:15	
	04/21/2016	32.98	26.84	-	-	-	28.30	6.14	10:40	
	05/05/2016	32.98	25.65	-	-	-	28.32	7.33	12:52	
	05/23/2016	32.98	25.82	-	-	-	28.32	7.16	12:15	
	05/24/2016	32.98	25.82	-	-	-	28.32	7.16	12:15	
	06/21/2016	32.98	25.65	-	-	-	-	7.33	9:53	
	07/21/2016	32.98	25.71	-	-	-	-	7.27	9:41	
	08/24/2016	32.98	25.62	-	-	-	28.65	7.36	11:54	
	08/25/2016	32.98	26.56	-	-	-	-	6.42	10:55	
	09/22/2016	32.98	25.82	-	-	-	28.35	7.16	12:12	
RW-30S	06/26/2015	31.32	DRY	-	-	-	28.40	-	9:28	
	07/01/2015	31.32	24.02	-	-	-	-	7.30	12:03	
	07/08/2015	31.32	25.39	-	-	-	-	5.93	10:51	
	07/13/2015	31.32	26.60	-	-	-	28.40	4.72	9:12	
	07/20/2015	31.32	26.07	-	-	-	-	5.25	9:01	
	07/28/2015	31.32	26.04	-	-	-	28.48	5.28	10:13	
	08/04/2015	31.32	26.07	-	-	-	28.40	5.25	13:25	
	08/05/2015	31.32	26.05	-	-	-	28.42	5.27	8:20	
	08/11/2015	31.32	26.42	-	-	-	28.44	4.90	9:44	
	08/18/2015	31.32	26.31	-	-	-	-	5.01	9:53	
	08/24/2015	31.32	26.28	-	-	-	-	5.04	9:56	
	09/02/2015	31.32	26.37	26.36	0.01	TRACE	28.45	4.96	9:14	
	09/09/2015	31.32	26.38	-	-	-	28.43	4.94	10:08	
	09/17/2015	31.32	26.52	-	-	-	28.46	4.80	10:05	
	09/23/2015	31.32	26.47	-	-	-	-	4.85	10:15	
	09/28/2015	31.32	26.42	-	-	-	28.41	4.90	9:37	
	10/05/2015	31.32	26.20	-	-	-	28.41	5.12	9:05	
	11/10/2015	31.32	28.73	-	-	-	-	2.59	12:46	
	12/01/2015	33.63	28.99	-	-	-	30.54	4.64	12:36	
	01/27/2016	33.63	29.08	-	-	-	-	4.55	10:01	
	02/15/2016	33.63	29.44	-	-	-	-	4.19	9:47	
	03/14/2016	33.63	28.78	-	-	-	30.60	4.85	12:10	
	04/21/2016	33.63	28.95	-	-	-	29.03	4.68	10:44	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
RW-30S (cont.)	04/27/2016	33.63	29.02	-	-	-	29.12	4.61	10:18	not sampled 2Q2016
	05/05/2016	33.63	29.05	-	-	-	29.10	4.58	12:48	
	05/23/2016	33.63	29.02	-	-	-	29.70	4.61	11:14	
	05/25/2016	33.63	DRY	-	-	-	29.05	-	-	
	06/21/2016	33.63	26.45	-	-	-	-	7.18	9:56	
	07/21/2016	33.63	26.40	-	-	-	-	7.23	9:51	
	08/24/2016	33.63	24.65	-	-	-	29.37	8.98	11:56	
	08/25/2016	33.63	28.88	-	-	-	29.20	4.75	-	
	08/30/2016	33.63	29.65	-	-	-	29.79	3.98	-	
	09/22/2016	33.63	26.60	-	-	-	29.35	7.03	12:07	not enough water to sample not enough water to sample
RW-116S	07/08/2015	31.80	22.48	-	-	-	-	9.32	11:28	
	07/13/2015	31.80	22.03	-	-	-	26.20	9.77	9:24	
	07/20/2015	31.80	21.77	-	-	-	-	10.03	9:10	
	07/28/2015	31.44	21.46	-	-	-	25.90	9.98	10:31	
	08/04/2015	31.44	21.55	-	-	-	25.82	9.89	13:11	
	08/05/2015	31.44	21.57	-	-	-	25.82	9.87	9:05	
	08/11/2015	31.44	21.72	-	-	-	24.88	9.72	10:31	
	08/18/2015	31.44	21.79	-	-	-	-	9.65	10:13	
	08/24/2015	31.44	21.90	-	-	-	-	9.54	10:16	
	09/02/2015	31.44	22.06	-	-	-	25.86	9.38	10:05	
	09/09/2015	31.44	22.18	-	-	-	25.89	9.26	10:12	
	09/17/2015	31.44	22.31	-	-	-	25.89	9.13	10:14	
	09/23/2015	31.44	22.35	-	-	-	-	9.09	10:34	
	09/28/2015	31.44	22.42	-	-	-	25.84	9.02	9:20	
	10/05/2015	31.44	22.47	-	-	-	25.84	8.97	9:31	
	11/10/2015	31.44	25.05	-	-	-	-	6.39	13:03	
	12/01/2015	33.78	25.73	-	-	-	28.20	8.05	11:20	
	01/27/2016	33.78	26.53	-	-	-	-	7.25	10:29	
	02/15/2016	33.78	26.53	-	-	-	-	7.25	10:10	
	03/14/2016	33.78	26.26	-	-	-	28.18	7.52	11:35	
	04/21/2016	33.78	26.33	-	-	-	28.25	7.45	11:18	
	05/23/2016	33.78	26.03	-	-	-	28.25	7.75	11:20	
	05/24/2016	33.78	26.32	-	-	-	28.90	7.46	9:45	
	06/21/2016	33.78	26.06	-	-	-	-	7.72	10:43	
	07/21/2016	33.78	26.02	-	-	-	-	7.76	10:22	
	08/24/2016	33.78	26.02	-	-	-	27.76	7.76	11:08	
	08/25/2016	33.78	25.10	-	-	-	-	8.68	10:15	
	09/22/2016	33.78	26.07	-	-	-	27.82	7.71	12:36	
RW-117S	07/08/2015	31.81	22.53	-	-	-	-	9.28	11:08	
	07/13/2015	31.81	22.27	-	-	-	24.25	9.54	9:22	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
RW-117S (cont.)	07/20/2015	31.81	21.97	-	-	-	-	9.84	9:07	not enough water to sample
	07/28/2015	31.81	21.86	-	-	-	24.34	9.95	9:30	
	08/04/2015	31.81	21.94	-	-	-	24.23	9.87	13:15	
	08/05/2015	31.81	21.96	-	-	-	24.27	9.85	9:20	
	08/11/2015	31.81	22.06	-	-	-	24.30	9.75	10:28	
	08/18/2015	31.81	22.16	-	-	-	-	9.65	10:10	
	08/24/2015	31.81	22.25	-	-	-	-	9.56	10:13	
	09/02/2015	31.81	22.40	-	-	-	24.30	9.41	10:10	
	09/09/2015	31.81	22.51	TRACE	TRACE	TRACE	24.31	9.30	10:10	
	09/17/2015	31.81	22.61	-	-	-	24.31	9.20	10:12	
	09/23/2015	31.81	22.61	-	-	-	-	9.20	10:31	
	09/28/2015	31.81	22.66	-	-	-	24.29	9.15	9:18	
	10/05/2015	31.81	22.76	-	-	-	24.30	9.05	9:34	
	11/10/2015	31.81	25.29	-	-	-	-	6.52	12:59	
	12/01/2015	33.73	25.72	-	-	-	26.13	8.01	11:16	
	01/27/2016	33.73	26.06	-	-	-	-	7.67	10:25	
	02/15/2016	33.73	26.05	-	-	-	-	7.68	10:07	
	03/14/2016	33.73	26.06	-	-	-	26.09	7.67	11:05	
	04/21/2016	33.73	25.74	-	-	-	26.07	7.99	11:38	
	04/27/2016	33.73	25.75	-	-	-	26.08	7.98	10:14	
	05/05/2016	33.73	25.79	-	-	-	26.05	7.94	12:56	
	05/23/2016	33.73	25.70	-	-	-	26.05	8.03	11:16	
	05/24/2016	33.73	DRY	-	-	-	26.07	-	-	
	06/21/2016	33.73	25.70	-	-	-	-	8.03	10:33	
	07/21/2016	33.73	25.67	-	-	-	-	8.06	10:12	
	08/24/2016	33.73	DRY	-	-	-	26.08	-	11:15	
	08/25/2016	33.73	25.52	-	-	-	26.08	8.21	-	
	08/30/2016	33.73	25.97	-	-	-	26.77	7.76	11:10	
	09/22/2016	33.73	25.71	-	-	-	26.18	8.02	12:32	
RW-118S	07/08/2015	31.09	21.79	-	-	-	-	9.30	11:03	
	07/13/2015	31.09	21.64	-	-	-	24.90	9.45	9:20	
	07/20/2015	31.09	21.27	-	-	-	-	9.82	9:04	
	07/28/2015	31.09	21.22	-	-	-	25.00	9.87	9:39	
	08/04/2015	31.09	21.28	-	-	-	24.93	9.81	13:18	
	08/11/2015	31.09	21.44	-	-	-	24.96	9.65	10:33	
	08/18/2015	31.09	21.52	-	-	-	-	9.57	10:07	
	08/24/2015	31.09	21.62	-	-	-	-	9.47	10:10	
	09/02/2015	31.09	21.76	-	-	-	24.97	9.33	10:13	
	09/09/2015	31.09	21.56	-	-	-	24.95	9.53	10:07	
	09/17/2015	31.09	21.96	-	-	-	25.01	9.13	10:10	
	09/23/2015	31.09	21.97	-	-	-	-	9.12	10:28	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
RW-118S (cont.)	09/28/2015	31.09	22.03	-	-	-	24.95	9.06	9:16	
	10/05/2015	31.09	22.68	-	-	-	25.00	8.41	12:20	
	11/10/2015	31.09	22.35	-	-	-	-	8.74	12:55	
	12/01/2015	31.24	22.84	-	-	-	25.08	8.40	13:09	
	01/27/2016	31.24	24.02	-	-	-	-	7.22	10:19	
	02/15/2016	31.24	22.23	-	-	-	-	9.01	9:50	
	03/14/2016	31.24	22.26	-	-	-	25.15	8.98	9:05	
	04/21/2016	31.24	23.85	-	-	-	25.10	7.39	12:06	
	05/23/2016	31.24	23.95	-	-	-	25.15	7.29	11:50	
	05/24/2016	31.24	23.88	-	-	-	25.10	7.36	11:35	
	06/21/2016	31.24	23.95	-	-	-	-	7.29	10:30	
	07/21/2016	31.24	23.92	-	-	-	-	7.32	10:08	
	08/24/2016	31.24	23.91	-	-	-	25.11	7.33	12:05	
	08/25/2016	31.24	23.94	-	-	-	-	7.30	13:30	
	09/22/2016	31.24	23.94	-	-	-	25.17	7.30	12:28	
RW-119S	07/08/2015	30.38	21.80	-	-	-	-	8.58	11:46	
	07/13/2015	30.38	21.83	-	-	-	26.15	8.55	9:32	
	07/20/2015	30.38	21.53	-	-	-	-	8.85	9:34	
	07/28/2015	30.38	21.51	-	-	-	26.25	8.87	9:48	
	08/04/2015	30.38	21.50	-	-	-	26.15	8.88	10:37	
	08/11/2015	30.38	21.53	-	-	-	26.15	8.85	9:53	
	08/18/2015	30.38	21.73	-	-	-	-	8.65	10:33	
	08/24/2015	30.38	21.82	-	-	-	-	8.56	10:40	
	09/02/2015	30.38	22.01	-	-	-	26.17	8.37	9:38	
	09/09/2015	30.38	22.09	-	-	-	26.20	8.29	10:17	
	09/17/2015	30.38	22.34	-	-	-	26.21	8.04	10:22	
	09/23/2015	30.38	22.35	-	-	-	-	8.03	10:49	
	09/28/2015	30.38	22.32	-	-	-	26.20	8.06	9:33	
	10/05/2015	30.38	22.45	-	-	-	26.20	7.93	12:04	
	11/10/2015	30.38	25.50	-	-	-	-	4.88	13:09	
	12/01/2015	33.33	25.65	-	-	-	29.02	7.68	13:03	
	01/27/2016	33.33	25.63	-	-	-	-	7.70	9:50	
	02/15/2016	33.33	26.89	-	-	-	-	6.44	9:36	
	03/14/2016	33.33	25.85	-	-	-	29.20	7.48	9:28	
	04/21/2016	33.33	25.40	-	-	-	29.17	7.93	11:03	
	05/23/2016	33.33	26.20	-	-	-	29.18	7.13	11:30	
	05/24/2016	33.33	25.05	-	-	-	29.50	8.28	9:10	
	06/21/2016	33.33	26.28	-	-	-	-	7.05	11:13	
	07/21/2016	33.33	26.24	-	-	-	-	7.09	10:35	
	08/24/2016	33.33	26.30	-	-	-	29.70	7.03	12:00	
	08/25/2016	33.33	24.82	-	-	-	-	8.51	9:40	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
RW-119S (cont.)	09/22/2016	33.33	26.28	-	-	-	29.28	7.05	12:44	
SP-1	02/24/2015	30.87	27.08	-	-	-	-	3.79	13:59	
SP-2	10/01/2014	NR	27.23	-	-	-	35.45	-	-	
	10/10/2014	NR	27.10	-	-	-	-	-	-	
TW-02	12/18/2013	20.60	15.52	-	-	-	-	5.08	-	
	01/08/2014	20.60	15.08	-	-	-	-	5.52	-	
	03/07/2014	20.60	14.81	-	-	-	-	5.79	-	
	03/13/2014	20.60	14.22	-	-	-	-	6.38	-	
	03/20/2014	20.60	13.39	-	-	-	-	7.21	-	
	03/27/2014	20.60	14.31	-	-	-	-	6.29	-	
	04/03/2014	20.60	13.25	-	-	-	-	7.35	-	
	04/08/2014	20.60	13.74	-	-	-	-	6.86	-	
	04/17/2014	20.60	13.70	-	-	-	-	6.90	-	
	04/22/2014	20.60	13.62	-	-	-	-	6.98	-	
	04/29/2014	20.60	13.96	-	-	-	-	6.64	-	
	05/05/2014	20.60	13.55	-	-	-	-	7.05	-	
	05/12/2014	20.60	14.25	-	-	-	-	6.35	-	
	05/19/2014	20.60	13.63	-	-	-	-	6.97	-	
	05/27/2014	20.60	14.31	-	-	-	-	6.29	-	
	06/02/2014	20.60	14.34	-	-	-	-	6.26	-	
	06/09/2014	20.60	14.71	-	-	-	-	5.89	-	
	06/16/2014	20.60	14.30	-	-	-	-	6.30	-	
	06/23/2014	20.60	14.48	-	-	-	-	6.12	-	
	07/02/2014	20.60	14.77	-	-	-	-	5.83	-	
	07/07/2014	20.60	15.08	-	-	-	21.28	5.52	-	
	07/14/2014	20.60	15.02	-	-	-	-	5.58	-	
	07/31/2014	20.60	15.40	-	-	-	21.22	5.20	-	
	08/08/2014	20.60	15.40	-	-	-	-	5.20	-	
	08/11/2014	20.60	15.28	-	-	-	-	5.32	-	
	08/15/2014	20.60	14.84	-	-	-	21.15	5.76	-	
	08/18/2014	20.60	15.06	-	-	-	-	5.54	-	
	08/25/2014	NR	14.71	-	-	-	-	-	-	
	09/02/2014	NR	15.18	-	-	-	-	-	-	
	09/15/2014	NR	14.90	-	-	-	-	-	-	
	09/22/2014	NR	15.00	-	-	-	-	-	-	
	10/01/2014	NR	15.22	-	-	-	21.12	-	-	
	10/13/2014	NR	14.92	-	-	-	-	-	-	
	10/20/2014	NR	15.10	-	-	-	20.99	-	-	
	02/24/2015	16.11	14.34	-	-	-	-	1.77	15:01	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-02 (cont.)	05/11/2015	16.11	14.38	-	-	-	20.80	1.73	15:18	
	08/04/2015	16.11	15.08	-	-	-	20.87	1.03	12:15	
	12/01/2015	16.11	15.08	-	-	-	20.88	1.03	13:28	
	03/14/2016	16.11	14.32	-	-	-	20.97	1.79	9:40	
	05/23/2016	16.11	13.26	-	-	-	-	2.85	10:37	
	08/24/2016	16.11	14.83	-	-	-	21.20	1.28	10:50	
TW-03	12/18/2013	14.87	9.08	-	-	-	-	5.79	-	
	01/08/2014	14.87	9.42	-	-	-	-	5.45	-	
	03/07/2014	14.87	7.66	-	-	-	-	7.21	-	
	03/13/2014	14.87	8.09	-	-	-	-	6.78	-	
	03/20/2014	14.87	7.50	-	-	-	-	7.37	-	
	03/27/2014	14.87	8.47	-	-	-	-	6.40	-	
	04/03/2014	14.87	6.99	-	-	-	-	7.88	-	
	04/08/2014	14.87	7.64	-	-	-	-	7.23	-	
	04/17/2014	14.87	7.33	-	-	-	-	7.54	-	
	04/22/2014	14.87	7.64	-	-	-	-	7.23	-	
	04/29/2014	14.87	7.36	-	-	-	-	7.51	-	
	05/05/2014	14.87	7.58	-	-	-	-	7.29	-	
	05/12/2014	14.87	7.93	-	-	-	-	6.94	-	
	05/19/2014	14.87	8.42	-	-	-	-	6.45	-	
	05/27/2014	14.87	7.69	-	-	-	-	7.18	-	
	06/02/2014	14.87	8.00	-	-	-	-	6.87	-	
	06/09/2014	14.87	7.77	-	-	-	-	7.10	-	
	06/16/2014	14.87	7.60	-	-	-	-	7.27	-	
	06/23/2014	14.87	7.68	-	-	-	-	7.19	-	
	07/02/2014	14.87	7.97	-	-	-	-	6.90	-	
	07/07/2014	14.87	8.31	-	-	-	13.45	6.56	-	
	07/14/2014	14.87	7.55	-	-	-	-	7.32	-	
	07/25/2014	14.87	8.45	-	-	-	13.30	6.42	-	
	07/31/2014	14.87	8.14	-	-	-	13.35	6.73	-	
	08/08/2014	14.87	8.39	-	-	-	-	6.48	-	
	08/11/2014	14.87	8.12	-	-	-	-	6.75	-	
	08/15/2014	14.87	8.10	-	-	-	13.40	6.77	-	
	08/18/2014	14.87	8.25	-	-	-	-	6.62	-	
	08/25/2014	10.40	7.85	-	-	-	-	2.55	-	
	09/02/2014	10.40	8.52	-	-	-	-	1.88	-	
	09/15/2014	10.40	8.33	-	-	-	-	2.07	-	
	09/22/2014	10.40	8.26	-	-	-	-	2.14	-	
	10/01/2014	10.40	8.35	-	-	-	13.15	2.05	-	
	10/13/2014	10.40	8.18	-	-	-	-	2.22	-	
	10/20/2014	10.40	8.50	-	-	-	13.14	1.90	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-03 (cont.)	02/24/2015	10.40	8.57	-	-	-	-	1.83	14:49	Geosyntec sampling, could not measure
	05/11/2015	10.40	7.74	-	-	-	13.10	2.66	15:23	
	08/04/2015	10.40	7.82	-	-	-	13.14	2.58	12:13	
	12/01/2015	10.40	7.64	-	-	-	13.12	2.76	13:26	
	03/14/2016	10.40	7.95	-	-	-	13.10	2.45	9:45	
	05/05/2016	10.40	7.53	-	-	-	-	2.87	12:21	
	05/23/2016	10.40	8.68	-	-	-	-	1.72	-	
	08/24/2016	10.40	8.70	-	-	-	13.22	1.70	10:45	
	08/25/2016	10.40	8.09	-	-	-	-	2.31	-	
	09/22/2016	10.40	8.18	-	-	-	-	2.22	14:25	Geosyntec measured
TW-04	12/18/2013	13.26	6.25	-	-	-	-	7.01	-	
	01/08/2014	13.26	6.71	-	-	-	-	6.55	-	
	03/07/2014	13.26	6.06	-	-	-	-	7.20	-	
	03/13/2014	13.26	6.26	-	-	-	-	7.00	-	
	03/20/2014	13.26	6.17	-	-	-	-	7.09	-	
	03/27/2014	13.26	6.55	-	-	-	-	6.71	-	
	04/03/2014	13.26	4.64	-	-	-	-	8.62	-	
	04/08/2014	13.26	5.38	-	-	-	-	7.88	-	
	04/17/2014	13.26	5.60	-	-	-	-	7.66	-	
	04/22/2014	13.26	5.56	-	-	-	-	7.70	-	
	04/29/2014	13.26	5.91	-	-	-	-	7.35	-	
	05/05/2014	13.26	5.06	-	-	-	-	8.20	-	
	05/12/2014	13.26	5.82	-	-	-	-	7.44	-	
	05/19/2014	13.26	4.61	-	-	-	-	8.65	-	
	05/27/2014	13.26	5.66	-	-	-	-	7.60	-	
	06/02/2014	13.26	5.83	-	-	-	-	7.43	-	
	06/09/2014	13.26	5.87	-	-	-	-	7.39	-	
	06/16/2014	13.26	5.21	-	-	-	-	8.05	-	
	06/23/2014	13.26	5.68	-	-	-	-	7.58	-	
	07/02/2014	13.26	5.96	-	-	-	-	7.30	-	
	07/07/2014	13.26	6.18	-	-	-	13.77	7.08	-	
	07/14/2014	13.26	5.80	-	-	-	-	7.46	-	
	07/25/2014	13.26	6.20	-	-	-	13.70	7.06	-	
	07/31/2014	13.26	6.08	-	-	-	13.76	7.18	-	
	08/08/2014	13.26	6.21	-	-	-	-	7.05	-	
	08/11/2014	13.26	6.19	-	-	-	-	7.07	-	
	08/15/2014	13.26	5.99	-	-	-	13.75	7.27	-	
	08/18/2014	13.26	5.92	-	-	-	-	7.34	-	
	08/25/2014	9.49	5.87	-	-	-	-	3.62	-	
	09/02/2014	9.49	6.25	-	-	-	-	3.24	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-04 (cont.)	09/15/2014	9.49	6.17	-	-	-	-	3.32	-	
	09/22/2014	9.49	6.20	-	-	-	-	3.29	-	
	10/01/2014	9.49	6.23	-	-	-	13.55	3.26	-	
	10/10/2014	9.49	6.18	-	-	-	-	3.31	-	
	10/13/2014	9.49	6.19	-	-	-	-	3.30	-	
	10/20/2014	9.49	6.28	-	-	-	13.40	3.21	-	
	10/27/2014	9.49	6.04	-	-	-	-	3.45	-	
	11/07/2014	9.49	6.27	-	-	-	-	3.22	-	
	11/12/2014	9.49	6.19	-	-	-	-	3.30	-	
	11/21/2014	9.49	6.78	-	-	-	-	2.71	-	
	11/26/2014	9.49	6.33	-	-	-	-	3.16	-	
	12/05/2014	9.49	5.75	-	-	-	-	3.74	-	
	12/11/2014	9.49	5.60	-	-	-	-	3.89	-	
	12/16/2014	9.49	5.83	-	-	-	-	3.66	-	
	12/23/2014	9.49	5.82	-	-	-	-	3.67	-	
	12/30/2014	9.49	5.73	-	-	-	-	3.76	-	
	01/09/2015	9.49	6.06	-	-	-	-	3.43	-	
	01/16/2015	9.49	5.64	-	-	-	-	3.85	-	
	01/19/2015	9.49	5.37	-	-	-	-	4.12	-	
	01/26/2015	9.49	4.78	-	-	-	-	4.71	-	
	02/03/2015	9.49	6.06	-	-	-	13.21	3.43	-	
	02/09/2015	9.49	6.08	-	-	-	-	3.41	-	
	02/18/2015	9.49	6.19	-	-	-	-	3.30	-	
	02/24/2015	9.49	6.21	-	-	-	-	3.28	15:00	
	03/04/2015	9.49	6.11	-	-	-	-	3.38	11:45	
	03/11/2015	9.49	3.93	-	-	-	-	5.56	12:00	
	03/18/2015	9.49	5.40	-	-	-	-	4.09	10:23	
	03/26/2015	9.49	5.75	-	-	-	13.20	3.74	12:21	
	04/02/2015	9.49	5.85	-	-	-	13.25	3.64	10:28	
	04/08/2015	9.49	6.20	-	-	-	13.25	3.29	10:00	
	04/13/2015	9.49	6.28	-	-	-	-	3.21	9:55	
	04/23/2015	9.49	5.44	-	-	-	13.25	4.05	10:43	
	04/29/2015	9.49	5.85	-	-	-	13.25	3.64	13:15	
	05/04/2015	9.49	5.75	-	-	-	-	3.74	10:50	
	05/11/2015	9.49	5.83	-	-	-	13.20	3.66	15:33	
	05/21/2015	9.49	5.89	-	-	-	13.27	3.60	13:05	
	05/28/2015	9.49	6.28	-	-	-	13.25	3.21	10:55	
	06/02/2015	9.49	5.01	-	-	-	-	4.48	12:15	
	06/09/2015	9.49	5.17	-	-	-	-	4.32	9:45	
	06/16/2015	9.49	5.67	-	-	-	-	3.82	10:35	
	06/26/2015	9.49	4.98	-	-	-	13.20	4.51	8:45	
	07/01/2015	9.49	3.57	-	-	-	-	5.92	11:35	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-04 (cont.)	07/08/2015	9.49	4.57	-	-	-	-	4.92	10:20	
	07/13/2015	9.49	4.28	-	-	-	-	5.21	8:53	
	07/20/2015	9.49	5.32	-	-	-	-	4.17	8:40	
	08/04/2015	9.49	5.62	-	-	-	13.70	3.87	12:02	
	08/18/2015	9.49	5.88	-	-	-	-	3.61	9:20	
	08/24/2015	9.49	5.76	-	-	-	-	3.73	9:40	
	09/02/2015	9.49	5.92	-	-	-	13.20	3.57	11:36	
	09/09/2015	9.49	6.06	-	-	-	13.18	3.43	14:09	
	09/17/2015	9.49	6.11	-	-	-	13.21	3.38	11:48	
	09/23/2015	9.49	6.08	-	-	-	-	3.41	10:00	
	09/28/2015	9.49	5.61	-	-	-	13.08	3.88	10:36	
	10/05/2015	9.49	5.22	-	-	-	13.13	4.27	10:20	
	11/10/2015	9.49	5.92	-	-	-	-	3.57	12:29	
	12/01/2015	9.49	5.78	-	-	-	13.10	3.71	13:20	
	02/15/2016	9.49	6.07	-	-	-	-	3.42	9:05	
	03/14/2016	9.49	5.93	-	-	-	13.11	3.56	9:55	
	04/21/2016	9.49	6.23	-	-	-	-	3.26	9:17	
	05/05/2016	9.49	5.50	-	-	-	-	3.99	12:27	
	05/23/2016	9.49	4.83	-	-	-	-	4.66	10:49	
	06/21/2016	9.49	6.30	-	-	-	-	3.19	9:35	
	07/21/2016	9.49	5.91	-	-	-	-	3.58	9:25	
	08/24/2016	9.49	6.35	-	-	-	13.15	3.14	9:44	
	09/22/2016	9.49	6.20	-	-	-	-	3.29	14:45	
TW-05	12/18/2013	13.73	6.45	-	-	-	-	7.28	-	
	01/08/2014	13.73	6.98	-	-	-	-	6.75	-	
	03/07/2014	13.73	6.34	-	-	-	-	7.39	-	
	03/13/2014	13.73	6.49	-	-	-	-	7.24	-	
	03/20/2014	13.73	6.04	-	-	-	-	7.69	-	
	03/27/2014	13.73	6.68	-	-	-	-	7.05	-	
	04/03/2014	13.73	4.29	-	-	-	-	9.44	-	
	04/08/2014	13.73	5.36	-	-	-	-	8.37	-	
	04/17/2014	13.73	5.33	-	-	-	-	8.40	-	
	04/22/2014	13.73	5.65	-	-	-	-	8.08	-	
	04/29/2014	13.73	6.06	-	-	-	-	7.67	-	
	05/05/2014	13.73	4.91	-	-	-	-	8.82	-	
	05/12/2014	13.73	6.01	-	-	-	-	7.72	-	
	05/19/2014	13.73	4.65	-	-	-	-	9.08	-	
	05/27/2014	13.73	5.91	-	-	-	-	7.82	-	
	06/02/2014	13.73	6.07	-	-	-	-	7.66	-	
	06/09/2014	13.73	6.11	-	-	-	-	7.62	-	
	06/16/2014	13.73	5.28	-	-	-	-	8.45	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-05 (cont.)	06/23/2014	13.73	5.95	-	-	-	-	7.78	-	
	07/02/2014	13.73	6.28	-	-	-	-	7.45	-	
	07/07/2014	13.73	6.49	-	-	-	12.06	7.24	-	
	07/14/2014	13.73	6.06	-	-	-	-	7.67	-	
	07/25/2014	13.73	5.43	-	-	-	12.08	8.30	-	
	07/31/2014	13.73	6.50	-	-	-	12.10	7.23	-	
	08/08/2014	13.73	6.56	-	-	-	-	7.17	-	
	08/11/2014	13.73	6.51	-	-	-	-	7.22	-	
	08/15/2014	13.73	5.91	-	-	-	11.95	7.82	-	
	08/18/2014	13.73	6.14	-	-	-	-	7.59	-	
	08/25/2014	9.64	6.13	-	-	-	-	3.51	-	
	09/02/2014	9.64	6.59	-	-	-	-	3.05	-	
	09/15/2014	9.64	6.57	-	-	-	-	3.07	-	
	09/22/2014	9.64	6.58	-	-	-	-	3.06	-	
	10/01/2014	9.64	6.63	-	-	-	11.74	3.01	-	
	10/10/2014	9.64	6.52	-	-	-	-	3.12	-	
	10/13/2014	9.64	6.58	-	-	-	-	3.06	-	
	10/20/2014	9.64	6.60	-	-	-	12.63	3.04	-	
	10/27/2014	9.64	6.23	-	-	-	-	3.41	-	
	11/07/2014	9.64	6.58	-	-	-	-	3.06	-	
	11/12/2014	9.64	6.56	-	-	-	-	3.08	-	
	11/21/2014	9.64	7.07	-	-	-	-	2.57	-	
	11/26/2014	9.64	6.67	-	-	-	-	2.97	-	
	12/05/2014	9.64	5.57	-	-	-	-	4.07	-	
	12/11/2014	9.64	5.38	-	-	-	-	4.26	-	
	12/16/2014	9.64	5.86	-	-	-	-	3.78	-	
	12/23/2014	9.64	6.08	-	-	-	-	3.56	-	
	12/30/2014	9.64	5.50	-	-	-	-	4.14	-	
	01/09/2015	9.64	6.27	-	-	-	-	3.37	-	
	01/16/2015	9.64	5.48	-	-	-	-	4.16	-	
	01/19/2015	9.64	5.08	-	-	-	-	4.56	-	
	01/26/2015	9.64	4.30	-	-	-	-	5.34	-	
	02/03/2015	9.64	6.20	-	-	-	11.88	3.44	-	
	02/09/2015	9.64	6.38	-	-	-	-	3.26	-	
	02/18/2015	9.64	6.64	-	-	-	-	3.00	-	
	02/24/2015	9.64	6.61	-	-	-	-	3.03	14:57	
	03/04/2015	9.64	6.27	-	-	-	-	3.37	12:15	
	03/11/2015	9.64	3.15	-	-	-	-	6.49	12:03	
	03/18/2015	9.64	4.61	-	-	-	-	5.03	10:26	
	03/26/2015	9.64	5.94	-	-	-	12.10	3.70	12:25	
	04/02/2015	9.64	6.00	-	-	-	12.10	3.64	10:30	
	04/08/2015	9.64	6.41	-	-	-	12.14	3.23	10:05	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-05 (cont.)	04/13/2015	9.64	6.53	-	-	-	-	3.11	9:58	Geosyntec measured
	04/23/2015	9.64	5.48	-	-	-	12.20	4.16	10:45	
	04/29/2015	9.64	5.99	-	-	-	12.20	3.65	13:17	
	05/04/2015	9.64	5.94	-	-	-	-	3.70	10:53	
	05/11/2015	9.64	6.12	-	-	-	12.30	3.52	15:39	
	05/21/2015	9.64	6.15	-	-	-	12.48	3.49	13:07	
	05/28/2015	9.64	6.56	-	-	-	12.50	3.08	10:57	
	06/02/2015	9.64	4.05	-	-	-	-	5.59	12:18	
	06/09/2015	9.64	4.63	-	-	-	-	5.01	9:48	
	06/16/2015	9.64	5.99	-	-	-	-	3.65	10:38	
	06/26/2015	9.64	4.52	-	-	-	12.80	5.12	8:47	
	07/01/2015	9.64	1.82	-	-	-	-	7.82	11:38	
	07/08/2015	9.64	4.22	-	-	-	-	5.42	10:23	
	07/13/2015	9.64	4.24	-	-	-	-	5.40	8:55	
	07/20/2015	9.64	5.64	-	-	-	-	4.00	8:43	
	07/28/2015	9.64	6.01	-	-	-	12.42	3.63	13:15	
	08/04/2015	9.64	6.07	-	-	-	12.32	3.57	12:05	
	08/11/2015	9.64	5.56	-	-	-	12.54	4.08	12:30	
	08/18/2015	9.64	6.28	-	-	-	-	3.36	9:23	
	08/24/2015	9.64	6.23	-	-	-	-	3.41	9:43	
	09/02/2015	9.64	6.32	-	-	-	12.53	3.32	11:33	
	09/09/2015	9.64	6.73	-	-	-	12.55	2.91	14:06	
	09/17/2015	9.64	6.54	-	-	-	12.53	3.10	11:45	
	09/23/2015	9.64	6.41	-	-	-	-	3.23	10:03	
	09/28/2015	9.64	6.01	-	-	-	12.51	3.63	10:38	
	10/05/2015	9.64	5.43	-	-	-	12.54	4.21	10:17	
	11/10/2015	9.64	6.31	-	-	-	-	3.33	12:31	
	12/01/2015	9.64	5.99	-	-	-	12.38	3.65	13:10	
	02/15/2016	9.64	6.34	-	-	-	-	3.30	9:09	
	03/14/2016	9.64	6.22	-	-	-	12.43	3.42	10:00	
	04/21/2016	9.64	6.92	-	-	-	-	2.72	9:21	
	05/05/2016	9.64	5.40	-	-	-	-	4.24	12:30	
	05/23/2016	9.64	5.46	-	-	-	-	4.18	10:55	
	06/21/2016	9.64	7.02	-	-	-	-	2.62	9:38	
	07/21/2016	9.64	6.37	-	-	-	-	3.27	9:28	
	08/24/2016	9.64	6.80	-	-	-	12.85	2.84	9:49	
	08/25/2016	9.64	6.20	-	-	-	-	3.44	-	
	09/22/2016	9.64	6.75	-	-	-	-	2.89	14:40	
TW-06	12/18/2013	13.97	6.21	-	-	-	-	7.76	-	
	01/08/2014	13.97	6.98	-	-	-	-	6.99	-	
	03/07/2014	13.97	6.40	-	-	-	-	7.57	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-06 (cont.)	03/13/2014	13.97	6.62	-	-	-	-	7.35	-	
	03/20/2014	13.97	6.26	-	-	-	-	7.71	-	
	03/27/2014	13.97	6.88	-	-	-	-	7.09	-	
	04/03/2014	13.97	4.81	-	-	-	-	9.16	-	
	04/08/2014	13.97	5.82	-	-	-	-	8.15	-	
	04/17/2014	13.97	5.41	-	-	-	-	8.56	-	
	04/22/2014	13.97	5.90	-	-	-	-	8.07	-	
	04/29/2014	13.97	6.30	-	-	-	-	7.67	-	
	05/05/2014	13.97	4.98	-	-	-	-	8.99	-	
	05/12/2014	13.97	6.18	-	-	-	-	7.79	-	
	05/19/2014	13.97	4.63	-	-	-	-	9.34	-	
	05/27/2014	13.97	6.79	-	-	-	-	7.18	-	
	06/02/2014	13.97	6.24	-	-	-	-	7.73	-	
	06/09/2014	13.97	6.31	-	-	-	-	7.66	-	
	06/16/2014	13.97	5.33	-	-	-	-	8.64	-	
	06/23/2014	13.97	6.12	-	-	-	-	7.85	-	
	07/02/2014	13.97	6.52	-	-	-	-	7.45	-	
	07/07/2014	13.97	6.70	-	-	-	12.60	7.27	-	
	07/14/2014	13.97	6.24	-	-	-	-	7.73	-	
	07/25/2014	13.97	6.65	-	-	-	12.60	7.32	-	
	08/08/2014	13.97	6.81	-	-	-	-	7.16	-	
	08/11/2014	13.97	6.71	-	-	-	-	7.26	-	
	08/15/2014	13.97	6.01	-	-	-	12.70	7.96	-	
	08/18/2014	13.97	6.33	-	-	-	-	7.64	-	
	08/25/2014	9.86	6.37	-	-	-	-	3.49	-	
	09/02/2014	9.86	6.80	-	-	-	-	3.06	-	
	09/15/2014	9.86	6.79	-	-	-	-	3.07	-	
	09/22/2014	9.86	6.77	-	-	-	-	3.09	-	
	10/01/2014	9.86	6.88	-	-	-	12.60	2.98	-	
	10/10/2014	9.86	6.77	-	-	-	-	3.09	-	
	10/13/2014	9.86	6.85	-	-	-	-	3.01	-	
	10/20/2014	9.86	6.76	-	-	-	12.63	3.10	-	
	10/27/2014	9.86	6.39	-	-	-	-	3.47	-	
	11/07/2014	9.86	6.83	-	-	-	-	3.03	-	
	11/12/2014	9.86	6.85	-	-	-	-	3.01	-	
	11/21/2014	9.86	7.28	-	-	-	-	2.58	-	
	11/26/2014	9.86	7.02	-	-	-	-	2.84	-	
	12/05/2014	9.86	5.85	-	-	-	-	4.01	-	
	12/11/2014	9.86	5.75	-	-	-	-	4.11	-	
	12/16/2014	9.86	6.18	-	-	-	-	3.68	-	
	12/23/2014	9.86	6.36	-	-	-	-	3.50	-	
	12/30/2014	9.86	5.85	-	-	-	-	4.01	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-06 (cont.)	01/09/2015	9.86	6.52	-	-	-	-	3.34	-	
	01/16/2015	9.86	5.77	-	-	-	-	4.09	-	
	01/19/2015	9.86	5.46	-	-	-	-	4.40	-	
	01/26/2015	9.86	4.69	-	-	-	-	5.17	-	
	02/03/2015	9.86	6.39	-	-	-	12.58	3.47	-	
	02/09/2015	9.86	6.62	-	-	-	-	3.24	-	
	02/18/2015	9.86	6.89	-	-	-	-	2.97	-	
	02/24/2015	9.86	6.90	-	-	-	-	2.96	14:54	
	03/04/2015	9.86	6.43	-	-	-	-	3.43	13:00	
	03/11/2015	9.86	4.47	-	-	-	-	5.39	12:06	
	03/18/2015	9.86	5.33	-	-	-	-	4.53	10:29	
	03/26/2015	9.86	6.13	-	-	-	12.60	3.73	12:27	
	04/02/2015	9.86	6.20	-	-	-	12.65	3.66	10:32	
	04/08/2015	9.86	6.66	-	-	-	12.62	3.20	10:15	
	04/13/2015	9.86	6.76	-	-	-	-	3.10	10:01	
	04/23/2015	9.86	5.62	-	-	-	12.60	4.24	10:47	
	04/29/2015	9.86	6.22	-	-	-	12.65	3.64	13:19	
	05/04/2015	9.86	6.14	-	-	-	-	3.72	10:56	
	05/11/2015	9.86	6.38	-	-	-	12.70	3.48	15:40	
	05/21/2015	9.86	6.24	-	-	-	12.65	3.62	13:09	
	05/28/2015	9.86	6.79	-	-	-	12.60	3.07	10:59	
	06/02/2015	9.86	4.41	-	-	-	-	5.45	12:21	
	06/09/2015	9.86	5.28	-	-	-	-	4.58	9:51	
	06/16/2015	9.86	6.24	-	-	-	-	3.62	10:41	
	06/26/2015	9.86	5.08	-	-	-	12.70	4.78	8:49	
	07/01/2015	9.86	3.55	-	-	-	-	6.31	11:41	
	07/08/2015	9.86	4.88	-	-	-	-	4.98	10:26	
	07/13/2015	9.86	4.78	-	-	-	-	5.08	8:55	
	07/20/2015	9.86	5.93	-	-	-	-	3.93	8:46	
	07/28/2015	9.86	6.31	-	-	-	12.61	3.55	12:55	
	08/04/2015	9.86	6.34	-	-	-	12.64	3.52	12:07	
	08/11/2015	9.86	6.15	-	-	-	12.64	3.71	12:35	
	08/18/2015	9.86	6.58	-	-	-	-	3.28	9:26	
	08/24/2015	9.86	6.51	-	-	-	-	3.35	9:46	
	09/02/2015	9.86	6.65	-	-	-	12.06	3.21	11:30	
	09/09/2015	9.86	6.02	-	-	-	12.66	3.84	14:03	
	09/17/2015	9.86	6.85	-	-	-	12.69	3.01	11:40	
	09/23/2015	9.86	6.69	-	-	-	-	3.17	10:06	
	09/28/2015	9.86	6.27	-	-	-	12.61	3.59	10:41	
	10/05/2015	9.86	5.70	-	-	-	12.63	4.16	10:13	
	11/10/2015	9.86	6.65	-	-	-	-	3.21	12:32	
	12/01/2015	9.86	6.55	-	-	-	12.62	3.31	13:22	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-06 (cont.)	02/15/2016	9.86	6.60	-	-	-	-	3.26	9:15	Sheen; Elevation change due to well being disturbed during construction activities
	03/14/2016	9.86	6.57	-	-	-	12.63	3.29	10:05	
	04/21/2016	9.99	6.70	-	-	-	12.40	3.29	9:28	
	05/05/2016	9.99	5.52	-	-	-	-	4.47	12:35	
	05/23/2016	9.99	4.77	-	-	-	-	5.22	11:00	
	06/21/2016	9.99	6.93	-	-	-	-	3.06	11:17	
	07/21/2016	9.99	6.12	-	-	-	-	3.87	9:33	
	08/24/2016	9.99	6.88	-	-	-	12.88	3.11	9:54	
	08/25/2016	9.99	6.13	-	-	-	-	3.86	-	
	09/22/2016	9.99	6.89	-	-	-	-	3.10	14:35	
TW-07	12/18/2013	14.00	7.56	-	-	-	-	6.44	-	
	01/08/2014	14.00	7.91	-	-	-	-	6.09	-	
	03/07/2014	14.00	6.91	-	-	-	-	7.09	-	
	03/13/2014	14.00	7.40	-	-	-	-	6.60	-	
	03/20/2014	14.00	6.78	-	-	-	-	7.22	-	
	03/27/2014	14.00	7.56	-	-	-	-	6.44	-	
	04/03/2014	14.00	5.67	-	-	-	-	8.33	-	
	04/08/2014	14.00	6.77	-	-	-	-	7.23	-	
	04/17/2014	14.00	5.51	-	-	-	-	8.49	-	
	04/22/2014	14.00	6.75	-	-	-	-	7.25	-	
	04/29/2014	14.00	6.60	-	-	-	-	7.40	-	
	05/05/2014	14.00	5.41	-	-	-	-	8.59	-	
	05/12/2014	14.00	6.89	-	-	-	-	7.11	-	
	05/19/2014	14.00	6.16	-	-	-	-	7.84	-	
	05/27/2014	14.00	6.70	-	-	-	-	7.30	-	
	06/02/2014	14.00	6.94	-	-	-	-	7.06	-	
	06/09/2014	14.00	7.81	-	-	-	-	6.19	-	
	06/16/2014	14.00	6.47	-	-	-	-	7.53	-	
	06/23/2014	14.00	6.69	-	-	-	-	7.31	-	
	07/02/2014	14.00	7.00	-	-	-	-	7.00	-	
	07/07/2014	14.00	7.27	-	-	-	13.42	6.73	-	
	07/14/2014	14.00	6.70	-	-	-	-	7.30	-	
	07/25/2014	14.00	7.33	-	-	-	13.30	6.67	-	
	07/31/2014	14.00	7.22	-	-	-	13.30	6.78	-	
	08/08/2014	14.00	7.39	-	-	-	-	6.61	-	
	08/11/2014	14.00	7.17	-	-	-	13.20	6.83	-	
	08/15/2014	14.00	7.05	-	-	-	-	6.95	-	
	08/18/2014	14.00	7.14	-	-	-	-	6.86	-	
	08/25/2014	9.88	6.87	-	-	-	-	3.01	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-07 (cont.)	09/02/2014	9.88	7.43	-	-	-	-	2.45	-	Geosyntec measured
	09/15/2014	9.88	7.33	-	-	-	-	2.55	-	
	09/22/2014	9.88	7.28	-	-	-	-	2.60	-	
	10/01/2014	9.88	7.38	-	-	-	12.98	2.50	-	
	10/13/2014	9.88	7.30	-	-	-	-	2.58	-	
	10/20/2014	9.88	7.49	-	-	-	12.97	2.39	-	
	02/24/2015	9.88	7.45	-	-	-	-	2.43	14:52	
	05/11/2015	9.88	6.92	-	-	-	12.70	2.96	15:27	
	08/04/2015	9.88	6.88	-	-	-	12.74	3.00	12:10	
	12/01/2015	9.88	5.97	-	-	-	12.99	3.91	13:24	
	03/14/2016	9.88	7.13	-	-	-	13.05	2.75	9:50	
	05/05/2016	9.88	6.53	-	-	-	-	3.35	12:24	
	05/23/2016	9.88	5.13	-	-	-	-	4.75	10:46	
	08/24/2016	9.88	7.52	-	-	-	13.20	2.36	10:40	
	08/25/2016	9.88	7.19	-	-	-	-	2.69	-	
	09/22/2016	9.88	7.30	-	-	-	-	2.58	14:30	
TW-12S	12/18/2013	38.01	DRY	-	-	-	-	-	-	
	01/08/2014	38.01	DRY	-	-	-	-	-	-	
	03/07/2014	38.01	DRY	-	-	-	-	-	-	
	03/13/2014	38.01	DRY	-	-	-	-	-	-	
	03/20/2014	38.01	DRY	-	-	-	-	-	-	
	03/27/2014	38.01	DRY	-	-	-	-	-	-	
	04/03/2014	38.01	DRY	-	-	-	-	-	-	
	04/08/2014	38.01	DRY	-	-	-	-	-	-	
	04/17/2014	38.01	DRY	-	-	-	-	-	-	
	04/22/2014	38.01	DRY	-	-	-	-	-	-	
	04/29/2014	38.01	DRY	-	-	-	-	-	-	
	05/05/2014	38.01	DRY	-	-	-	-	-	-	
	05/12/2014	38.01	DRY	-	-	-	-	-	-	
	05/19/2014	38.01	DRY	-	-	-	-	-	-	
	06/02/2014	38.01	DRY	-	-	-	-	-	-	
	06/09/2014	38.01	DRY	-	-	-	-	-	-	
	06/16/2014	38.01	26.37	-	-	-	-	11.64	-	
	06/23/2014	38.01	26.37	-	-	-	-	11.64	-	
	07/02/2014	38.01	26.40	-	-	-	-	11.61	-	
	07/07/2014	38.01	26.40	-	-	-	26.60	11.61	-	
	07/14/2014	38.01	26.48	-	-	-	-	11.53	-	
	07/24/2014	38.01	26.48	-	-	-	-	11.53	-	
	07/31/2014	38.01	26.48	-	-	-	26.56	11.53	-	
	08/08/2014	38.01	26.49	-	-	-	26.60	11.52	-	
	08/11/2014	38.01	26.47	-	-	-	-	11.54	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-12S (cont.)	08/15/2014	38.01	26.47	-	-	-	26.58	11.54	-	not enough water to sample not enough water to sample not enough water to sample
	08/18/2014	38.01	26.47	-	-	-	-	11.54	-	
	08/25/2014	38.01	26.47	-	-	-	-	11.54	-	
	09/02/2014	31.33	24.84	-	-	-	24.97	6.49	-	
	09/15/2014	31.33	24.82	-	-	-	-	6.51	-	
	09/22/2014	31.33	24.83	-	-	-	-	6.50	-	
	10/01/2014	31.33	24.81	-	-	-	24.91	6.52	-	
	10/10/2014	31.33	24.82	-	-	-	-	6.51	-	
	10/20/2014	31.33	24.82	-	-	-	24.92	6.51	-	
	02/24/2015	31.33	24.81	-	-	-	-	6.52	15:47	
	05/11/2015	31.33	24.82	-	-	-	24.90	6.51	10:40	
	08/04/2015	31.33	24.78	-	-	-	25.00	6.55	10:25	
	12/01/2015	31.33	24.82	-	-	-	24.92	6.51	11:32	
	03/14/2016	31.33	24.76	-	-	-	25.00	6.57	9:34	
	05/23/2016	31.33	24.75	-	-	-	24.90	6.58	11:19	
	05/25/2016	31.33	24.69	-	-	-	24.91	6.64	12:08	
	08/24/2016	31.33	24.71	-	-	-	24.94	6.62	12:11	
	08/25/2016	31.33	24.72	-	-	-	24.94	6.61	-	
	08/30/2016	31.33	24.73	-	-	-	24.93	6.60	-	
TW-14	01/17/2014	15.55	2.48	-	-	-	-	13.07	-	
	03/07/2014	15.55	2.29	-	-	-	-	13.26	-	
	03/13/2014	15.55	2.55	-	-	-	-	13.00	-	
	03/20/2014	15.55	2.25	-	-	-	-	13.30	-	
	03/27/2014	15.55	2.42	-	-	-	-	13.13	-	
	04/03/2014	15.55	2.31	-	-	-	-	13.24	-	
	04/08/2014	15.55	2.27	-	-	-	-	13.28	-	
	04/17/2014	15.55	2.26	-	-	-	-	13.29	-	
	04/22/2014	15.55	2.48	-	-	-	-	13.07	-	
	04/29/2014	15.55	2.66	-	-	-	-	12.89	-	
	05/05/2014	15.55	2.56	-	-	-	-	12.99	-	
	05/12/2014	15.55	2.58	-	-	-	-	12.97	-	
	05/19/2014	15.55	2.38	-	-	-	-	13.17	-	
	06/02/2014	15.55	2.52	-	-	-	-	13.03	-	
	06/09/2014	15.55	2.50	-	-	-	-	13.05	-	
	06/16/2014	15.55	2.31	-	-	-	-	13.24	-	
	06/23/2014	15.55	2.44	-	-	-	-	13.11	-	
	07/02/2014	15.55	4.63	-	-	-	-	10.92	-	
	07/07/2014	15.55	4.65	-	-	-	7.27	10.90	-	
	07/14/2014	15.55	4.40	-	-	-	-	11.15	-	
	07/24/2014	15.55	4.46	-	-	-	-	11.09	-	
	07/31/2014	15.55	4.63	-	-	-	7.39	10.92	-	

Table 3

GROUNDWATER GAUGING DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Monitoring Well	Date	Top of Casing (ft)	Depth to Water (ft)	Depth to LNAPL (ft)	LNAPL Thickness (ft)	Volume of LNAPL Recovered (gal)	Depth to Bottom - Measured Depth (ft)	Groundwater Elevation (ft)	Time	Comments
TW-14 (cont.)	08/08/2014	15.55	4.43	-	-	-	7.39	11.12	-	
	08/11/2014	15.55	4.57	-	-	-	-	10.98	-	
	08/15/2014	15.55	4.36	-	-	-	7.39	11.19	-	
	08/18/2014	15.55	4.49	-	-	-	-	11.06	-	
	08/25/2014	11.61	3.01	-	-	-	-	8.60	-	
	09/02/2014	11.61	3.03	-	-	-	-	8.58	-	
	09/15/2014	11.61	3.19	-	-	-	-	8.42	-	
	09/22/2014	11.61	3.38	-	-	-	-	8.23	-	
	10/01/2014	11.61	3.50	-	-	-	5.90	8.11	-	
	10/10/2014	11.61	3.67	-	-	-	-	7.94	-	
	10/20/2014	11.61	3.02	-	-	-	5.90	8.59	-	
	02/24/2015	11.61	2.67	-	-	-	-	8.94	15:29	
	02/26/2015	11.61	2.68	-	-	-	5.90	8.93	12:00	
	05/11/2015	11.61	3.28	-	-	-	6.90	8.33	10:30	
	08/04/2015	11.61	3.37	-	-	-	5.98	8.24	10:31	
	08/11/2015	11.61	3.65	-	-	-	6.00	7.96	12:00	
	08/18/2015	11.61	3.83	-	-	-	-	7.78	9:15	
	12/01/2015	11.61	2.76	-	-	-	-	8.85	9:15	
	03/14/2016	11.61	2.80	-	-	-	6.02	8.81	10:11	
	05/23/2016	11.61	2.71	-	-	-	6.00	8.90	11:24	
	08/24/2016	11.61	3.05	-	-	-	-	8.56	-	
										Geosyntec sampling - no time data

Notes:

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

cont. = continued

- = Not available

ft = Feet

gal = gallons

DRY = No / Insufficient water

LNAPL = Light Non-Aqueous Phase Liquid

NA = Not applicable

NR = Not recorded

TRACE = LNAPL thickness is less than 0.01 feet

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	-
	10/20/2014	1.0	6.3	10.1	10.3	-	-	-	-	-	-
	10/22/2014	-	-	-	-	0.80	6.63	17.81	-91.6	369	-
	2/24/2015	8.4	3.0	12.2	26.6	0.10	6.53	16.31	-172.6	724	-
	5/11/2015	64.8	1.6	10.8	27.8	PRODUCT					
	8/4/2015	11.4	8.9	7.2	9.2	PRODUCT					
	3/14/2016	78.8	3.5	10.8	2.2	0.13	6.65	16.46	-104.0	860	-
	4/21/2016	14.8	20.8	0.3	0.1	0.11	6.62	16.14	-57.6	970	-
	5/23/2016	0.0	20.9	0.0	0.0	PRODUCT					
	8/24/2016	1.8	-	-	-	0.76	6.61	16.50	-127.8	1,040	-
	8/30/2016	64.3	22.6	0.1	0.1	-	-	-	-	-	-
MW-05 / RW-05	10/13/2014	15.9	13.0	-	-	PRODUCT					
	10/15/2014	137.0	9.6	-	-	PRODUCT					
	2/24/2015	11.4	1.0	15.9	25.3	PRODUCT					
	5/11/2015	90.2	5.8	11.1	19.6	PRODUCT					
	8/4/2015	71.9	18.2	1.9	2.1	PRODUCT					
	12/1/2015	12.8	2.6	15.1	26.6	PRODUCT					
	3/14/2016	98.8	19.8	0.7	0.4	PRODUCT					
	5/23/2016	0.2	20.8	0.0	0.0	8.46	3.48	16.03	385.0	3,150	-
	8/24/2016	6.4	-	-	-	2.69	6.53	19.98	15.2	640	-
	8/30/2016	47.4	21.6	0.1	10.0	-	-	-	-	-	-
MW-08S	10/13/2014	21.0	14.5	-	-	0.89	6.68	18.18	-123.6	1,488	-
	10/13/2014	-	-	-	-	0.81	6.70	18.26	-108.0	1,386	-

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-08S (cont.)	10/14/2014	-	-	-	-	0.16	6.77	18.18	-129.0	1,424	-
	10/15/2014	8.7	20.4	-	-	0.83	6.68	18.29	-105.8	1,325	-
	10/15/2014	-	-	-	-	0.28	6.66	18.23	-113.1	1,408	-
	10/20/2014	15.9	10.9	6.2	1.9	-	-	-	-	-	-
	10/22/2014	-	-	-	-	1.24	6.59	18.27	-98.8	1,276	-
	2/24/2015	49.3	0.4	13.8	15.4	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.09	6.69	16.81	-137.5	1,236	-
MW-10S / RW-10S	10/13/2014	23.1	17.0	-	-	0.75	6.59	18.17	-117.6	1,202	-
	10/13/2014	-	-	-	-	0.60	6.60	18.20	-113.0	1,185	-
	10/15/2014	8.3	20.4	-	-	0.41	6.54	18.23	-118.5	1,185	-
	10/15/2014	-	-	-	-	0.60	6.56	18.30	-104.5	1,189	-
	10/16/2014	18.5	20.9	-	-	-	-	-	-	-	-
	10/20/2014	25.2	15.2	3.7	0.2	-	-	-	-	-	-
	10/22/2014	-	-	-	-	1.30	6.48	18.44	-72.7	1,002	-
	2/24/2015	54.5	1.0	14.7	3.4	-	-	-	-	-	-
	5/11/2015	22.6	6.5	9.2	7.6	-	-	-	-	-	-
	8/4/2015	53.6	4.2	10.6	7.6	0.02	6.73	16.52	-90.0	1,440	-
	3/14/2016	134.2	19.4	1.2	0.4	0.14	6.59	15.38	-121.4	1,350	-
	4/21/2016	190.3	17.5	2.5	0.5	-	-	-	-	-	-
	5/23/2016	44.3	20.9	0.3	0.0	6.87	3.93	15.87	114.8	1,570	-
	8/24/2016	45.8	-	-	-	-	-	-	-	-	-
	8/30/2016	208.1	20.1	1.2	0.1	6.09	6.45	20.54	65.4	1,410	-
MW-11	10/13/2014	5.4	19.0	-	-	2.30	6.27	18.16	56.2	324	-

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-11 (cont.)	10/13/2014	-	-	-	-	3.23	6.14	18.29	48.6	349	-
	10/15/2014	23.6	15.3	-	-	-	-	-	-	-	-
	10/20/2014	22.0	11.6	6.3	1.9	-	-	-	-	-	-
	10/22/2014	-	-	-	-	0.38	5.73	18.38	160.2	323	-
	2/24/2015	3.2	19.3	3.7	0.1	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.12	5.60	17.83	62.6	370	-
	5/11/2015	0.6	20.6	0.2	0.1	0.07	5.66	17.27	91.2	390	-
	8/4/2015	4.3	2.5	15.0	26.8	0.09	6.66	18.45	-39.8	1,150	-
MW-14/RW-14	10/13/2014	15.9	17.2	-	-	2.79	6.00	18.13	68.0	368	-
	10/20/2014	82.4	14.4	3.7	1.3	-	-	-	-	-	-
	10/22/2014	-	-	-	-	0.26	5.79	18.43	216.2	310	-
	2/24/2015	188.0	14.4	0.9	0.4	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.84	6.25	17.90	-98.6	460	-
	5/11/2015	166.8	18.4	2.4	0.2	0.07	6.22	17.30	-69.6	420	-
	8/4/2015	11.9	17.8	3.2	0.3	0.07	6.72	17.10	-69.4	1,100	-
	3/14/2016	143.4	13.6	5.9	0.8	0.10	6.35	16.95	-84.7	490	-
	4/21/2016	503.7	20.4	1.5	0.8	PRODUCT					
	5/23/2016	132.0	20.8	0.3	0.2	PRODUCT					
	8/24/2016	550.3	-	-	-	7.06	5.76	18.95	103.60	190	-
	8/30/2016	101.8	21.7	0.0	0.1	-	-	-	-	-	-
MW-15S	10/13/2014	34.0	12.4	-	-	0.84	6.32	18.03	-17.1	647	-
	10/20/2014	18.2	2.2	11.6	0.0	-	-	-	-	-	-
	10/22/2014	-	-	-	-	0.88	6.48	17.61	-37.4	989	-

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-16S	10/10/2014	9.0	7.2	-	-	-	-	-	-	-	-
	2/24/2015	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	-
	10/22/2014	-	-	-	-	0.87	5.79	17.75	211.0	681	30,200
	2/24/2015	0.0	20.9	0.3	0.1	2.62	5.92	17.57	101.8	1,010	-
	5/11/2015	-	-	-	-	0.49	5.83	17.05	112.4	830	-
MW-25S	10/13/2014	-	-	-	-	0.96	6.46	18.51	-84.0	914	-
	10/13/2014	13.0	20.3	-	-	-	-	-	-	-	-
	10/15/2014	192.0	19.3	-	-	-	-	-	-	-	-
	10/16/2014	34.4	20.9	-	-	-	-	-	-	-	-
	10/20/2014	30.2	16.6	3.4	0.3	-	-	-	-	-	-
	2/24/2015	127.0	3.6	12.7	2.3	-	-	-	-	-	-
	5/11/2015	51.8	6.5	8.3	6.4	-	-	-	-	-	-
	8/4/2015	70.5	4.4	9.5	4.6	-	-	-	-	-	-
MW-25 / RW-25	10/13/2014	139.0	19.2	-	-	-	-	-	-	-	-
	10/14/2014	79.0	17.5	-	-	-	-	-	-	-	-
	10/15/2014	8.4	20.9	-	-	-	-	-	-	-	-
	10/16/2014	28.2	14.3	-	-	-	-	-	-	-	-
	2/24/2015	121.0	15.4	5.5	1.3	-	-	-	-	-	-
	5/11/2015	263.0	11.6	6.7	0.6	-	-	-	-	-	-
	8/4/2015	118.4	15.8	3.7	0.4	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-25 / RW-25 (cont.)	12/1/2015	79.5	14.7	5.4	1.1	-	-	-	-	-	-
	3/14/2016	6.2	10.9	8.9	3.2	-	-	-	-	-	-
	4/21/2016	50.2	20.9	0.2	0.2	8.30	5.45	16.77	154.2	310	-
	5/23/2016	23.1	20.7	0.1	0.0	6.45	5.54	17.26	142.1	340	-
	8/24/2016	54.8	-	-	-	2.58	5.56	18.78	101.8	300	-
	8/30/2016	79.8	21.7	0.0	0.0	-	-	-	-	-	-
MW-27	10/10/2014	41.5	17.7	-	-	0.28	6.55	17.74	-79.8	1,075	-
	10/15/2014	7.3	20.9	-	-	0.02	6.51	17.97	-36.3	1,057	-
	10/15/2014	21.9	16.1	-	-	1.67	6.37	18.18	44.5	831	-
	10/16/2014	21.9	16.1	-	-	-	-	-	-	-	-
	10/20/2014	25.3	14.3	6.5	8.6	-	-	-	-	-	-
	10/23/2014	-	-	-	-	0.54	6.46	17.97	743.0	153	1,540
	2/24/2015	21.1	2.3	12.2	13.6	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.06	6.61	15.83	-85.6	1,228	-
	5/11/2015	127.3	8.1	7.9	0.0	0.08	6.54	14.84	-110.0	1,300	-
	8/4/2015	28.5	1.3	13.2	16.6	0.03	6.68	15.93	-49.3	1,260	-
	12/1/2015	67.4	2.2	16.9	31.9	0.06	6.57	17.28	-51.5	1,190	-
	3/14/2016	70.8	1.0	15.5	0.6	0.08	6.54	14.77	-142.5	1,390	-
	4/21/2016	123.2	20.3	1.0	0.3	10.15	6.80	14.65	90.9	740	-
	5/23/2016	11.4	20.7	0.3	0.0	4.96	6.79	14.39	30.5	780	-
	8/24/2016	0.8	20.5	0.4	0.0	7.37	6.46	16.42	46.7	1,220	-
MW-31 / RW-31	10/10/2014	120.5	6.2	-	-	0.39	6.97	18.62	-119.7	899	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-31 / RW-31 (cont.)	10/15/2014	62.5	15.0	-	-	0.59	6.83	19.04	-119.9	848	-
	10/15/2014	0.0	20.9	-	-	0.90	6.61	19.57	-47.6	541	-
	10/20/2014	11.8	17.4	1.1	0.3	-	-	-	-	-	-
	10/23/2014	-	-	-	-	0.41	6.98	18.69	-15.9	791	728
	2/24/2015	179.0	2.1	0.2	0.3	0.02	7.08	14.47	-164.3	927	-
	5/11/2015	36.9	5.8	4.1	0.1	0.00	7.06	12.74	-129.3	1,010	-
	8/4/2015	41.3	3.9	5.4	1.7	0.02	7.18	15.92	-13.7	1,010	-
	5/23/2016	-	-	-	-	7.34	6.69	15.56	82.4	620	-
MW-33	10/10/2014	1.4	9.7	-	-	0.68	5.81	17.97	157.4	654	-
	10/15/2014	0.5	19.0	-	-	0.09	5.84	18.30	64.9	633	-
	10/15/2014	0.0	20.9	-	-	0.42	5.86	18.30	92.6	658	-
	10/20/2014	1.0	12.0	5.4	0.0	-	-	-	-	-	-
	10/23/2014	-	-	-	-	2.37	6.05	18.24	186.7	698	1,120
	2/24/2015	0.0	20.6	0.1	0.1	2.35	5.51	15.51	88.7	648	-
	5/11/2015	21.4	19.0	1.0	0.0	0.47	5.69	14.03	88.0	720	-
	8/4/2015	1.4	3.3	8.6	0.0	0.05	6.29	15.84	48.5	780	-
MW-51S	10/13/2014	23.0	5.7	-	-	0.64	6.72	18.32	-120.0	1,457	-
	10/13/2014	1.0	-	-	-	0.75	6.65	18.35	-78.8	1,000	-
	10/14/2014	-	-	-	-	0.33	6.64	18.46	-71.8	1,047	-
	10/15/2014	1.2	20.0	-	-	1.62	6.60	18.43	1.5	566	-
	10/15/2014	-	-	-	-	0.74	6.62	18.45	-84.6	1,122	-
	10/20/2014	22.3	10.6	6.3	1.5	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-51S (cont.)	10/22/2014	-	-	-	-	0.81	6.67	18.47	-93.7	1,153	-
	2/24/2015	9.9	0.9	13.5	27.2	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.08	6.70	16.75	-110.9	1,968	-
	5/11/2015	40.8	1.2	12.1	28.3	0.02	6.74	16.21	-113.3	1,830	-
	8/4/2015	15.2	0.7	13.2	27.5	0.04	6.82	16.33	-96.0	1,440	-
	3/14/2016	62.4	4.8	10.6	0.6	0.27	6.63	16.10	-129.3	2,250	-
	4/21/2016	12.4	13.2	1.6	0.3	0.06	6.65	16.57	-79.9	1,760	-
	5/23/2016	0.0	20.9	0.0	0.0	0.59	6.83	16.74	-96.6	2,290	-
	8/24/2016	1.1	-	-	-	0.70	6.74	18.60	-113.7	2,390	-
	8/30/2016	153.7	21.7	0.1	0.0	-	-	-	-	-	-
MW-51 / RW-51	10/13/2014	135.0	18.0	-	-	-	-	-	-	-	-
	10/15/2014	100.8	14.0	-	-	0.33	6.60	18.57	-86.9	1,014	-
	10/20/2014	31.5	11.6	4.9	3.2	-	-	-	-	-	-
	2/24/2015	35.1	4.7	11.4	6.0	-	-	-	-	-	-
	5/11/2015	100.3	1.2	12.6	5.1	-	-	-	-	-	-
	8/4/2015	104.3	19.6	1.0	1.6	-	-	-	-	-	-
	12/1/2015	18.5	17.8	2.4	1.2	-	-	-	-	-	-
	3/14/2016	30.0	19.0	1.7	0.2	-	-	-	-	-	-
	4/21/2016	59.9	20.9	0.3	0.2	5.13	6.43	16.38	46.7	740	-
	5/23/2016	33.1	20.6	0.3	0.0	5.43	6.57	17.44	19.6	700	-
	8/24/2016	47.0	-	-	-	2.22	6.69	18.70	-44.8	650	-
	8/30/2016	74.9	21.1	0.0	0.0	-	-	-	-	-	-
MW-52	10/10/2014	5.4	16.3	-	-	1.15	5.87	17.51	45.9	465	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-70	10/10/2014	0.3	16.2	-	-	2.12	5.76	17.30	98.7	843	-
	2/24/2015	0.0	17.8	1.3	0.2	1.02	5.53	16.71	-36.2	900	-
	5/11/2015	-	-	-	-	0.40	5.49	16.51	120.7	790	-
	8/4/2015	-	-	-	-	0.46	5.72	16.24	77.5	820	-
MW-72S / RW-72S	10/10/2014	21.7	5.8	-	-	0.55	6.42	18.41	-98.2	1,331	-
	10/15/2014	14.5	14.0	-	-	0.04	6.40	18.56	-85.4	1,340	-
	10/15/2014	-	-	-	-	1.70	6.47	18.70	-53.0	1,246	-
	10/16/2014	95.0	7.8	-	-	-	-	-	-	-	-
	10/20/2014	38.8	9.3	7.4	4.2	-	-	-	-	-	-
	10/22/2014	-	-	-	-	1.92	6.39	17.99	-21.2	904	-
	2/24/2015	30.6	5.4	11.5	1.6	0.09	6.54	16.13	-101.9	1,325	-
	5/11/2015	65.0	6.5	9.4	3.3	0.02	6.49	14.58	-110.6	1,340	-
	8/4/2015	8.0	8.2	6.9	0.4	0.11	6.71	16.20	-56.9	1,710	-
	3/14/2016	21.4	15.6	4.1	0.1	2.16	6.59	15.02	-101.1	1,960	-
	5/23/2016	0.0	20.9	0.2	0.0	NO MEASUREMENTS - BAILER CAUGHT IN WELL (RELEASED NEXT SAMPLE DAY)					
	8/24/2016	28.2	-	-	-	-	-	-	-	-	-
	8/30/2016	13.8	20.8	0.1	0.0	3.09	4.48	25.13	250.70	1,600	-
MW-72 / RW-72	10/10/2014	12.2	6.6	-	-	0.48	5.47	17.86	32.6	743	-
	10/15/2014	14.8	16.8	-	-	0.14	5.41	18.04	110.3	733	-
	10/15/2014	-	-	-	-	2.99	5.75	18.09	108.9	739	-
	10/16/2014	6.9	5.2	-	-	-	-	-	-	-	-

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-72 / RW-72 (cont.)	10/20/2014	10.5	2.0	16.8	13.0	-	-	-	-	-	-
	10/22/2014	-	-	-	-	1.77	5.86	17.73	146.2	533	29,800
	2/24/2015	13.3	14.2	6.9	0.1	0.58	5.48	17.43	82.8	877	-
	5/11/2015	64.5	20.6	0.2	0.0	0.03	5.82	15.99	-21.9	1,080	-
	8/4/2015	6.9	12.7	5.0	3.2	0.02	6.68	16.31	-57.3	1,880	-
	3/14/2016	42.8	19.8	1.0	0.1	0.04	6.62	16.93	-121.3	1,970	-
	4/21/2016	79.2	20.7	0.6	0.2	10.41	5.98	16.45	143.7	660	-
	5/23/2016	0.0	20.9	0.0	0.0	7.92	6.42	16.99	112.8	710	-
	8/24/2016	0.9	20.9	0.1	0.0	4.85	6.63	16.86	72.9	830	-
MW-100S	10/10/2014	6.5	6.8	-	-	0.40	5.62	18.36	11.8	915	-
	2/24/2015	0.0	17.2	3.5	0.2	4.78	5.79	16.07	25.5	160	-
MW-100	10/10/2014	0.3	20.4	-	-	2.23	5.38	17.60	148.8	531	-
	2/24/2015	0.0	20.4	0.6	0.2	1.02	5.53	16.80	27.5	309	-
MW-102	10/10/2014	0.6	17.7	-	-	2.44	6.10	17.15	68.2	295	-
MW-103	10/10/2014	8.5	19.4	-	-	1.72	6.41	19.90	71.6	610	-
	10/23/2014	-	-	-	-	7.32	6.15	19.14	149.3	598	-
	2/24/2015	0.0	19.5	2.4	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	5.27	6.17	5.08	85.9	720	-
	5/11/2015	-	-	-	-	0.13	5.95	12.40	82.3	680	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-104	10/10/2014	5.8	18.9	-	-	1.98	6.90	19.47	6.1	452	-
	10/21/2014	-	-	-	-	2.17	6.93	18.83	102.6	526	3,250
	2/24/2015	0.0	15.1	1.1	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	3.75	7.07	9.30	50.4	496	-
	5/11/2015	-	-	-	-	1.24	6.89	12.25	54.8	740	-
MW-105	10/10/2014	11.5	19.0	-	-	3.96	6.90	19.03	56.8	427	-
	10/21/2014	-	-	-	-	4.47	6.89	19.20	155.1	393	2,520
	5/11/2015	-	-	-	-	0.42	5.38	11.11	98.1	27,900	-
MW-106	10/10/2014	9.2	17.1	-	-	1.20	4.66	18.99	122.5	2,231	-
	10/14/2014	4.3	18.3	-	-	-	-	-	-	-	-
	10/20/2014	0.2	15.5	3.8	0.0	-	-	-	-	-	-
	10/23/2014	-	-	-	-	1.29	5.20	18.35	97.7	1,529	-
	2/24/2015	0.0	7.1	5.4	0.1	1.03	4.63	9.81	62.0	2,156	-
	5/11/2015	0.7	0.2	7.6	0.2	0.03	5.00	11.73	100.8	2,010	-
	8/4/2015	1.0	12.6	4.5	0.0	0.09	5.66	17.62	31.8	2,080	-
	3/14/2016	0.5	19.2	0.7	0.0	0.06	4.76	10.70	113.8	1,740	-
	4/21/2016	24.7	0.1	8.8	2.9	0.06	6.05	12.10	34.8	1,830	-
	5/23/2016	120.4	19.2	0.7	0.3	1.29	3.88	13.24	319.2	1,430	-
	8/24/2016	430.0	20.2	0.2	0.0	5.38	3.93	19.45	192.5	1,680	-
MW-107	10/10/2014	10.5	11.8	-	-	0.62	3.51	18.90	348.4	2,063	-
	10/15/2014	7.3	13.7	-	-	1.51	3.63	19.54	393.0	1,047	-
	10/15/2014	-	-	-	-	2.52	3.76	19.36	428.9	1,117	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-107 (cont.)	10/20/2014	0.3	7.3	9.4	0.0	-	-	-	-	-	-
	10/23/2014	-	-	-	-	3.40	2.90	19.05	480.1	1,462	-
	2/24/2015	0.0	19.3	1.5	0.1	7.33	3.01	11.73	338.5	15,400	-
	5/11/2015	0.8	9.1	6.7	0.0	0.40	3.36	12.51	425.7	2,010	-
	8/4/2015	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	-
	10/20/2014	13.8	3.9	13.2	0.0	-	-	-	-	-	-
	10/21/2014	-	-	-	-	0.35	6.03	18.29	59.2	769	-
	2/24/2015	12.9	1.3	14.9	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	1.35	6.19	13.93	36.7	607	-
	5/11/2015	4.0	13.8	4.8	0.0	0.33	5.96	12.89	124.7	460	-
MW-109	10/10/2014	11.8	19.1	-	-	1.65	6.03	17.98	35.0	247	-
	10/20/2014	0.2	20.8	0.6	0.0	-	-	-	-	-	-
	10/21/2014	-	-	-	-	0.86	5.81	18.04	133.5	261	-
	2/24/2015	6.2	18.5	3.2	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	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	-
	2/24/2015	12.7	4.3	12.8	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	1.65	6.39	13.79	-19.5	849	-

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-110	10/10/2014	13.1	16.4	-	-	1.30	5.39	17.98	117.8	215	-
	2/24/2015	5.8	19.4	1.0	0.4	-	-	-	-	-	-
	2/25/2015	-	-	-	-	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	-
	2/24/2015	0.0	18.7	1.7	0.2	-	-	-	-	-	-
	2/25/2015	-	-	-	-	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	-
	10/20/2014	0.0	12.0	7.9	0.0	-	-	-	-	-	-
	10/21/2014	-	-	-	-	2.50	5.38	18.27	172.9	333	-
	2/24/2015	16.8	6.6	9.7	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	3.92	5.41	13.06	207.5	347	-
	5/11/2015	2.1	16.3	3.3	0.0	3.37	5.21	13.22	197.2	360	-
MW-112	10/10/2014	14.8	16.3	-	-	2.14	5.56	17.93	157.3	162	-
	2/24/2015	12.3	19.2	1.3	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	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	-
	2/24/2015	0.0	19.9	1.6	0.2	-	-	-	-	-	-
	2/25/2015	-	-	-	-	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	-
	10/20/2014	0.1	16.0	2.1	0.1	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
MW-114 (Cont.)	10/21/2014	-	-	-	-	1.23	6.04	17.81	154.1	262	-
	2/24/2015	0.0	20.6	0.3	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	8.72	6.10	12.05	113.7	326	-
	5/11/2015	0.0	19.4	1.0	0.0	3.99	5.99	15.33	199.7	300	-
MW-121	8/4/2015	-	-	-	-	0.02	7.00	17.04	-13.1	890	-
	12/1/2015	14.8	14.8	3.6	15.2	0.04	6.72	17.44	-91.7	880	-
	3/14/2016	7.0	13.0	4.5	17.6	0.02	6.84	17.13	-159.0	850	-
	5/23/2016	251.2	17.6	4.4	0.7	1.54	6.77	17.35	-50.8	1,230	-
	8/24/2016	1,070.0	2.6	14.6	0.6	0.49	6.80	17.89	-126.4	1,300	-
MW-122	8/4/2015	-	-	-	-	0.06	7.04	16.73	-6.3	1,020	-
	12/1/2015	2.2	11.2	4.8	4.8	0.27	6.81	17.06	-86.8	1,130	-
	3/14/2016	5.7	16.2	2.7	1.1	0.11	7.04	16.50	-127.1	1,000	-
	5/23/2016	8.4	20.9	0.1	0.0	0.97	6.81	16.84	-77.1	1,090	-
	8/24/2016	0.4	20.9	0.0	0.0	0.53	6.89	16.99	-127.7	1,040	-
MW-123S / RW-123S	8/4/2015	-	-	-	-	2.66	12.52	16.99	-53.2	15,080	-
	12/1/2015	0.2	17.8	2.0	10.5	0.13	6.63	17.68	-46.3	810	-
	3/14/2016	73.7	16.8	2.9	3.1	0.86	6.50	15.31	-69.7	770	-
	4/21/2016	247.0	16.9	2.5	0.3	7.78	7.21	15.96	21.5	480	-
	5/23/2016	0.5	19.9	0.5	0.2	6.87	7.28	16.23	65.1	520	-
	8/24/2016	56.2	-	-	-	-	-	-	-	-	-
	8/30/2016	167.5	21.6	0.0	0.1	5.25	7.39	20.83	0.6	590	-

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	10/13/2014	130.0	19.0	-	-	1.34	6.92	18.45	136.4	495	-
	10/13/2014	79.0	18.9	-	-	3.41	6.41	18.31	158.0	473	-
	10/14/2014	55.0	18.9	-	-	0.53	6.49	18.46	129.6	475	-
	10/15/2014	80.7	19.3	-	-	1.99	6.29	18.43	60.4	292	-
	10/15/2014	-	-	-	-	1.06	6.31	18.49	96.9	314	-
	10/20/2014	29.2	16.4	3.2	2.4	-	-	-	-	-	-
	10/22/2014	-	-	-	-	2.14	6.50	18.07	85.5	311	-
	2/24/2015	178.0	3.2	4.2	0.2	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.03	6.76	17.88	-86.4	900	-
	12/1/2015	6.9	3.1	8.5	9.5	0.07	6.68	17.28	-57.6	760	-
	3/14/2016	0.1	15.3	3.8	0.0	0.16	6.50	17.06	-89.0	730	-
	4/21/2016	197.4	20.7	0.3	0.2	4.04	6.08	16.83	134.6	240	-
	5/23/2016	0.0	20.9	0.0	0.0	2.36	6.35	17.17	56.0	230	-
	8/24/2016	2.4	20.9	0.1	0.0	2.60	6.38	17.35	28.8	220	-
RW-05S	8/4/2015	-	-	-	-	0.00	8.88	15.65	-469.6	1,960	-
	12/1/2015	193.7	19.2	1.3	3.5	0.04	6.59	17.01	-89.7	1,560	-
	3/14/2016	44.2	20.3	0.6	0.3	1.78	6.63	14.38	-98.0	1,260	-
	4/21/2016	264.4	19.6	1.2	0.3	6.62	7.09	14.94	-27.4	500	-
	5/23/2016	46.1	20.9	0.2	0.0	3.75	6.11	14.74	39.9	710	-
	8/24/2016	48.8	-	-	-	-	-	-	-	-	-
	8/30/2016	11.2	21.3	0.1	0.1	3.47	6.16	21.27	60.9	940	-
RW-25S	8/4/2015	3.9	2.1	14.7	59.9	DRY					
	12/1/2015	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 (cont.)	3/14/2016	55.5	18.8	1.4	0.5	-	-	-	-	-	-
	4/21/2016	117.1	13.3	2.8	0.8	-	-	-	-	-	-
	5/23/2016	72.1	20.9	0.3	0.0	DRY					
	8/24/2016	66.5	-	-	-	-	-	-	-	-	-
	8/30/2016	399.2	19.3	1.2	0.1	2.02	6.70	21.67	-52.6	1,310	-
RW-28S	8/4/2015	48.5	13.8	1.4	0.3	0.17	6.22	16.59	-12.0	1,610	-
	12/1/2015	31.8	17.6	1.6	0.1	0.24	6.50	17.31	-48.20	1,590	-
	3/14/2016	68.8	17.6	2.1	0.2	2.25	6.75	12.79	-86.50	1,330	-
	4/21/2016	9.6	20.8	0.1	0.1	8.47	7.12	15.50	92.30	1,450	-
	5/23/2016	7.4	20.9	0.1	0.0	6.93	7.18	15.77	85.4	1,360	-
	8/24/2016	13.6	-	-	-	-	-	-	-	-	-
	8/30/2016	20.1	21.8	0.0	0.1	5.80	7.10	21.31	45.0	1,400	-
RW-30S	10/10/2014	6.8	7.6	-	-	0.31	6.64	18.50	-59.9	1,155	-
	10/15/2014	15.5	17.2	-	-	-	6.69	19.02	-114.8	1,084	-
	10/15/2014	74.4	10.5	-	-	0.69	6.61	19.43	-60.0	1,030	-
	10/20/2014	2.8	11.5	4.0	0.0	-	-	-	-	-	-
	2/24/2015	16.5	12.8	0.3	0.2	0.40	6.74	14.15	-51.7	742	-
	5/11/2015	49.6	13.4	2.9	0.0	0.81	6.7	13.04	7.0	680	-
	8/4/2015	18.3	16.0	0.5	1.1	1.96	7.12	16.90	-93.7	780	-
	12/1/2015	32.1	15.7	2.6	0.1	0.27	6.75	17.86	-68.4	1,040	-
	3/14/2016	16.4	18.4	2.1	0.3	DRY					
	4/21/2016	122.4	20.2	0.6	0.2	-	-	-	-	-	-
	5/23/2016	36.4	20.6	0.4	0.0	DRY					

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
RW-30S (cont.)	8/24/2016	86.5	-	-	-	-	-	-	-	-	-
	8/30/2016	134.3	21.2	0.3	0.0	DRY					
RW-116S	8/4/2015	3.8	13.8	3.9	0.6	0.07	6.68	16.35	-77.4	1,710	-
	12/1/2015	50.7	18.8	0.6	1.2	0.06	6.62	16.97	-78.7	1,350	-
	3/14/2016	25.1	20.2	0.8	0.2	0.65	6.59	14.49	-92.3	1,150	-
	4/21/2016	157.5	17.9	1.6	0.3	6.24	6.71	14.11	18.4	700	-
	5/23/2016	29.5	20.9	0.1	0.0	7.89	6.56	14.51	55.8	620	-
	8/24/2016	45.7	-	-	-	6.47	3.15	19.33	427.7	1,560	-
	8/30/2016	110.3	22.0	0.0	0.0	-	-	-	-	-	-
RW-117S	8/4/2015	3.2	20.5	0.0	0.0	0.27	6.92	16.29	-76.5	1,740	-
	12/1/2015	422.3	17.3	3.1	2.1	0.06	6.64	17.06	-100.6	1,420	-
	3/14/2016	84.0	19.6	1.2	0.2	DRY					
	4/21/2016	74.5	20.8	0.1	0.2	DRY					
	5/23/2016	54.0	20.9	0.2	0.0	DRY					
	8/24/2016	52.0	-	-	-	DRY					
	8/30/2016	290.6	21.2	0.3	0.0	6.21	5.62	21.90	131.90	1,320	-
RW-118S	8/4/2015	19.6	6.4	7.3	0.1	0.14	6.78	16.32	-59.8	1,350	-
RW-119S	8/4/2015	2.4	12.8	3.4	2.1	0.03	6.69	16.60	-15.9	1,020	-
TW-02	10/13/2014	0.3	17.4	-	-	1.01	6.43	18.32	-	523	-
	10/23/2014	-	-	-	-	0.65	6.70	17.24	-63.8	1,189	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
TW-02 (cont.)	2/24/2015	0.0	19.9	0.3	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	1.56	6.24	8.82	96.2	991	-
	5/11/2015	-	-	-	-	1.62	6.60	21.64	-49.5	1,230	-
	8/5/2015	-	-	-	-	0.27	6.82	18.28	-68.9	792	31.9
	8/24/2016	-	-	-	-	0.34	7.10	17.85	-133.2	849	4.0
TW-03	10/13/2014	0.3	19.5	-	-	1.86	5.73	19.23	-	503	-
	10/23/2014	-	-	-	-	0.71	6.12	18.54	38.1	489	-
	2/24/2015	0.0	3.1	10.4	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.75	6.21	8.92	64.8	609	-
	5/11/2015	0.0	8.5	10.2	0.0	2.03	5.77	20.61	110.5	480	-
	8/4/2015	0.0	7.8	14.3	0.0	0.26	5.40	21.76	80.4	602	70.6
	3/14/2016	0.0	9.2	8.0	0.1	-	-	-	-	-	-
	5/23/2016	WELL OPEN & BEING SAMPLED UPON ARRIVAL & NEVER RECEIVED LOW-FLOW SAMPLING DATA									
	8/24/2016	164.4	-	-	-	-	-	-	-	-	-
	8/25/2016	-	-	-	-	0.24	5.33	22.34	92.4	762	5.87
	8/30/2016	132.6	21.8	0.1	0.0	-	-	-	-	-	-
TW-04	10/13/2014	2.0	19.2	-	-	1.67	5.73	19.08	-	1,344	-
	10/23/2014	-	-	-	-	0.70	5.76	18.95	35.0	1,232	-
	2/24/2015	1.2	15.7	4.4	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	2.36	5.86	6.96	65.1	1,862	-
	5/11/2015	-	-	-	-	1.92	6.19	19.77	-22.7	1,390	-
	8/4/2015	-	-	-	-	0.16	6.23	19.04	-35.7	1,203	210

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
TW-04 (cont.)	8/24/2016	-	-	-	-	0.75	6.17	20.20	-23.4	1,534	6.96
	8/30/2016	77.1	21.6	0.0	0.0	-	-	-	-	-	-
TW-05	10/13/2014	129.3	17.0	-	-	1.26	5.23	18.64	61.2	1,204	-
	10/15/2014	8.7	20.5	-	-	-	-	-	-	-	-
	10/20/2014	16.0	20.6	0.1	0.0	-	-	-	-	-	-
	10/23/2014	-	-	-	-	0.85	5.73	19.04	49.2	1,121	-
	2/24/2015	16.0	11.1	8.6	0.7	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.85	6.19	7.42	37.1	992	-
	5/11/2015	22.1	4.6	12.9	0.0	0.15	5.60	18.61	54.0	800	-
	8/4/2015	8.2	7.2	13.3	0.0	0.38	5.86	19.61	21.5	901	87.0
	3/14/2016	0.3	12.3	6.5	0.0	-	-	-	-	-	-
	5/23/2016	31.7	20.8	0.2	0.0	DID NOT RECEIVE LOW-FLOW SAMPLING DATA					
	8/25/2016	21.2	20.1	0.3	0.0	6.97	6.15	22.25	-1.1	1,303	171
TW-06	10/13/2014	39.8	14.4	-	-	1.31	6.42	18.99	-	983	-
	10/15/2014	78.9	11.0	-	-	1.33	6.54	21.65	-65.0	873	-
	10/15/2014	-	-	-	-	0.31	6.28	19.79	-46.8	986	-
	10/20/2014	0.8	5.4	12.0	0.0	-	-	-	-	-	-
	10/23/2014	-	-	-	-	0.84	6.51	18.95	-68.8	823	-
	2/24/2015	0.7	5.0	8.9	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	0.84	6.75	7.20	-32.9	882	-
	5/11/2015	-	-	-	-	1.33	6.49	18.61	-69.1	710	-
	8/4/2015	-	-	-	-	0.22	6.17	19.07	-36.8	975	30.5
	12/1/2015	4.7	1.1	14.5	0.0	-	-	-	-	-	-

Table 4

HISTORICAL GROUNDWATER FIELD PARAMETERS DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Head Space Photo Ionization Detector (ppm)	Head Space Oxygen (%)	Head Space Carbon Dioxide (%)	Head Space Methane (%)	Dissolved Oxygen (mg/L)	Well pH	Well Temperature (deg C)	ORP (mV)	Specific Conductance (µS/cm)	Turbidity (NTU)
TW-06 (cont.)	3/14/2016	0.0	11.6	4.1	0.1	-	-	-	-	-	-
	4/21/2016	0.6	10.3	5.6	0.2	1.45	6.32	16.91	-24.4	620	-
	5/23/2016	0.0	20.8	0.1	0.0	-	-	-	-	-	-
	5/24/2016	-	-	-	-	0.08	6.62	15.82	-17.3	921	-
	8/24/2016	0.5	16.8	2.4	0.0	-	-	-	-	-	-
	8/25/2016	-	-	-	-	0.17	6.02	21.24	-51.9	1,713	6.70
TW-07	10/13/2014	33.5	16.4	-	-	1.40	4.96	19.08	-	580	-
	10/15/2014	15.6	15.4	-	-	0.40	4.94	20.81	97.9	569	-
	10/20/2014	0.0	14.6	5.0	0.0	-	-	-	-	-	-
	10/23/2014	-	-	-	-	0.41	4.99	19.04	139.5	415	-
	2/24/2015	0.0	14.4	7.2	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	1.53	5.07	7.15	244.8	640	-
	5/11/2015	0.0	9.0	11.0	0.0	2.02	4.70	20.64	202.2	660	-
	8/4/2015	0.0	7.2	16.9	0.0	0.20	4.39	22.88	150.0	629	65.8
	3/14/2016	0.0	18.8	2.3	0.1	-	-	-	-	-	-
	5/23/2016	2.3	19.9	0.7	0.0	-	-	-	-	-	-
	5/24/2016	-	-	-	-	0.90	4.85	15.88	206.9	653	-
	8/24/2016	1.6	-	-	-	-	-	-	-	-	-
	8/25/2016	-	-	-	-	6.99	4.58	24.52	223.9	722	45
	8/30/2016	98.2	21.7	0.0	0.0	-	-	-	-	-	-
TW-12S	10/10/2014	0.8	18.5	-	-	-	-	-	-	-	-
	2/24/2015	0.0	15.0	2.8	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)
TW-14	10/10/2014	2.3	19.5	-	-	-	-	-	-	-	-
	10/20/2014	0.0	20.0	0.7	0.0	-	-	-	-	-	-
	10/23/2014	-	-	-	-	1.99	7.48	19.13	-47.2	562	-
	2/24/2015	0.0	20.3	0.3	0.3	-	-	-	-	-	-
	2/25/2015	-	-	-	-	3.80	7.18	3.96	-6.1	465	-
	5/11/2015	-	-	-	-	1.16	7.14	22.53	-114.6	760	-
	8/6/2015	-	-	-	-	0.73	6.88	24.20	-107.8	828	-
	8/24/2016	-	-	-	-	1.20	7.20	24.48	-58.7	517	1.17

Notes:

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

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-01S	8/15/2014	-	-	-	-	-	-	-	-	-	-	2,670
	10/22/2014	-	-	-	-	-	-	-	-	-	-	23,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	56,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	140,000
MW-08S	8/15/2014	-	-	-	-	-	-	-	-	-	-	7,540
	10/22/2014	-	-	-	-	-	-	-	-	-	-	52,000
	2/26/2015	-	-	-	-	-	-	-	-	-	-	22,000
	5/12/2015	-	-	-	-	-	-	-	-	-	-	27,000
	8/4/2015	-	-	-	-	-	-	-	-	-	-	14,000
	12/2/2015	61	<0.5	5	48	-	-	-	-	30	-	15,000
	3/16/2016	-	-	-	-	-	-	-	-	-	-	20,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	11,000
	5/24/2016	-	-	-	-	-	-	-	-	-	-	8,500
	8/24/2016	-	-	-	-	-	-	-	-	-	-	7,400
MW-10S / RW-10S	8/15/2014	-	-	-	-	-	-	-	-	-	-	36,000
	10/22/2014	-	-	-	-	-	-	-	-	-	-	100,000
	3/14/2016	-	-	-	-	-	-	-	-	-	-	29,000
	5/24/2016	-	-	-	-	-	-	-	-	-	-	270,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	25,000
MW-11	8/16/2014	-	-	-	-	-	-	-	-	-	-	423
	10/22/2014	-	-	-	-	-	-	-	-	-	-	840
	2/26/2015	-	-	-	-	-	-	-	-	-	-	920

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-11 (cont.)	5/12/2015	2	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	-	900
	8/5/2015	-	-	-	-	-	-	-	-	-	-	5,300
	12/2/2015	-	-	-	-	-	-	-	-	-	-	2,000
MW-14 / RW-14	8/15/2014	-	-	-	-	-	-	-	-	-	-	305
	10/22/2014	-	-	-	-	-	-	-	-	-	-	2,100
	2/25/2015	-	-	-	-	-	-	-	-	-	-	6,000
	5/12/2015	-	-	-	-	-	-	-	-	-	-	5,500
	8/5/2015	-	-	-	-	-	-	-	-	-	-	7,300
	12/2/2015	-	-	-	-	-	-	-	-	-	-	1,600
	3/15/2016	-	-	-	-	-	-	-	-	-	-	28,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	15,000
MW-15S	8/15/2014	-	-	-	-	-	-	-	-	-	-	909
	10/22/2014	-	-	-	-	-	-	-	-	-	-	2,800
	2/26/2015	-	-	-	-	-	-	-	-	-	-	2,800
	5/12/2015	-	-	-	-	-	-	-	-	-	-	1,800
	8/4/2015	-	-	-	-	-	-	-	-	-	-	5,900
	12/1/2015	-	-	-	-	-	-	-	-	-	-	4,200
MW-16S	8/16/2014	-	-	-	-	-	-	-	-	-	-	1,720
	9/9/2015	-	-	-	-	-	-	-	-	-	-	100
MW-16	8/15/2014	-	-	-	-	-	-	-	-	-	-	<300
	10/22/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	<20	<45

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-16 (cont.)	2/25/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	<45
	5/12/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-25S	8/15/2014	-	-	-	-	-	-	-	-	-	-	49,000
	12/5/2014	-	-	-	-	-	-	-	-	-	-	840,000
	1/9/2015	-	-	-	-	-	-	-	-	-	-	2,200,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	24,000
MW-25 / RW-25	8/13/2014	-	-	-	-	-	-	-	-	-	-	1,280
	12/5/2014	-	-	-	-	-	-	-	-	-	-	50,000
	1/9/2015	-	-	-	-	-	-	-	-	-	-	56,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	5,800
	5/24/2016	-	-	-	-	-	-	-	-	-	-	3,900
	8/24/2016	-	-	-	-	-	-	-	-	-	-	4,600
MW-27	8/16/2014	-	-	-	-	-	-	-	-	-	-	1,490
	10/23/2014	0.5	<0.5	2	2	<0.5	2	<0.5	<0.5	6	100	1,900
	2/25/2015	<0.5	<0.5	1	0.5	<0.5	<2	<0.5	<0.5	8.3	120	1,700
	5/13/2015	<0.5	<0.5	2	1	<0.5	2 J	<0.5	<0.5	30	260	19,000
	8/5/2015	-	-	-	-	-	-	-	-	-	-	2,100
	12/3/2015	<0.5	<0.5	<0.5	<0.5	-	-	-	-	1.00 J	-	1,700
	3/15/2016	-	-	-	-	-	-	-	-	-	-	33,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	8,400
	5/25/2016	-	-	-	-	-	-	-	-	-	-	18,000

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-27 (cont.)	8/25/2016	-	-	-	-	-	-	-	-	-	-	3,100
MW-30S	8/15/2014	-	-	-	-	-	-	-	-	-	-	7,040
	10/23/2014	<0.5	<0.5	<0.5	<0.5	<0.5	3	<0.5	<0.5	-	25	2,900
	2/25/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	3.9	22	3,500
	5/13/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	3,200
MW-31 / RW-31	8/16/2014	-	-	-	-	-	-	-	-	-	-	27,200
	10/23/2014	<0.5	<0.5	0.6	0.6	<0.5	<2	<0.5	<0.5	4	140	7,200
	2/25/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	2.7	97	1,800
	5/13/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	3 J	120	14,000
	8/5/2015	-	-	-	-	-	-	-	-	-	-	2,400
	12/3/2015	-	-	-	-	-	-	-	-	-	-	1,200
	3/15/2016	-	-	-	-	-	-	-	-	-	-	11,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	440
	5/24/2016	-	-	-	-	-	-	-	-	-	-	1,200
	8/25/2016	-	-	-	-	-	-	-	-	-	-	830
MW-33	8/15/2014	-	-	-	-	-	-	-	-	-	-	440
	10/23/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	<20	<45
	2/25/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	<45
	5/13/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.1	<20	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
	12/3/2015	-	-	-	-	-	-	-	-	-	-	<45

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-51S	8/15/2014	-	-	-	-	-	-	-	-	-	-	1,590
	10/22/2014	-	-	-	-	-	-	-	-	-	-	8,400
	2/26/2015	-	-	-	-	-	-	-	-	-	-	7,100
	5/13/2015	-	-	-	-	-	-	-	-	-	-	17,000
	8/5/2015	-	-	-	-	-	-	-	-	-	-	11,000
	12/2/2015	-	-	-	-	-	-	-	-	-	-	14,000
	3/15/2016	-	-	-	-	-	-	-	-	-	-	67,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	27,000
	5/24/2016	-	-	-	-	-	-	-	-	-	-	11,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	15,000
MW-51 / RW-51	8/11/2014	-	-	-	-	-	-	-	-	-	-	1,180
	8/13/2014	-	-	-	-	-	-	-	-	-	-	1,650
	8/16/2014	-	-	-	-	-	-	-	-	-	-	281,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	2,900
	5/24/2016	-	-	-	-	-	-	-	-	-	-	780
	8/24/2016	-	-	-	-	-	-	-	-	-	-	350
MW-52	8/15/2014	-	-	-	-	-	-	-	-	-	-	<600
	10/22/2014	-	-	-	-	-	-	-	-	-	-	120
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	110
MW-70	8/15/2014	-	-	-	-	-	-	-	-	-	-	<153
	10/21/2014	-	-	-	-	-	-	-	-	-	-	<45

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-70 (cont.)	2/26/2015	-	-	-	-	-	-	-	-	-	-	3,200
	5/12/2015	-	-	-	-	-	-	-	-	-	-	100
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-72S / RW-72S	8/15/2014	-	-	-	-	-	-	-	-	-	-	5,980
	10/22/2014	-	-	-	-	-	-	-	-	-	-	3,300
	2/25/2015	-	-	-	-	-	-	-	-	-	-	3,400
	5/13/2015	13	<0.5	24	<0.5	<0.5	<2	<0.5	<0.5	16.00	-	4,000
	8/5/2015	-	-	-	-	-	-	-	-	-	-	3,700
	12/3/2015	8	<0.5	15	<0.5	-	-	-	-	2.00 J	-	2,100
	3/14/2016	-	-	-	-	-	-	-	-	-	-	8,200
	5/25/2016	-	-	-	-	-	-	-	-	-	-	3,800
	8/25/2016	-	-	-	-	-	-	-	-	-	-	5,300
MW-72 / RW-72	8/11/2014	-	-	-	-	-	-	-	-	-	-	<300
	8/13/2014	-	-	-	-	-	-	-	-	-	-	1,100
	8/16/2014	-	-	-	-	-	-	-	-	-	-	1,340
	10/22/2014	41	<0.5	1	66	0.6	2	<0.5	<0.5	61	480	2,000
	2/25/2015	8	<0.5	<0.5	3	<0.5	<2	<0.5	<0.5	<0.030	65	590
	5/13/2015	13	<0.5	<0.5	6	<0.5	<2	<0.5	<0.5	13.00	120	630
	8/5/2015	-	-	-	-	-	-	-	-	-	-	3,900
	12/3/2015	20	<0.5	29	100	-	-	-	-	26	-	960
	3/15/2016	-	-	-	-	-	-	-	-	-	-	1,200
	4/21/2016	-	-	-	-	-	-	-	-	-	-	350
	5/24/2016	-	-	-	-	-	-	-	-	-	-	360

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-72 / RW-72 (cont.)	8/25/2016	-	-	-	-	-	-	-	-	-	-	330
MW-100S	8/15/2014	-	-	-	-	-	-	-	-	-	-	<300
	10/21/2014	-	-	-	-	-	-	-	-	-	-	<45
	2/26/2015	-	-	-	-	-	-	-	-	-	-	690
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-100	8/15/2014	-	-	-	-	-	-	-	-	-	-	<152
	10/21/2014	-	-	-	-	-	-	-	-	-	-	60
	2/25/2015	-	-	-	-	-	-	-	-	-	-	300
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-102	8/15/2014	-	-	-	-	-	-	-	-	-	-	<1,500
	10/21/2014	-	-	-	-	-	-	-	-	-	-	<45
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-103	8/15/2014	-	-	-	-	-	-	-	-	-	-	479
	10/21/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.02	26	54
	2/26/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.033	<20	<45
	5/12/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	22 J	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-104	8/15/2014	-	-	-	-	-	-	-	-	-	-	1,630
	10/21/2014	<0.5	<0.5	0.7	2	<0.5	<2	<0.5	<0.5	1	59	150
	2/26/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	<45
	5/12/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-105	8/15/2014	-	-	-	-	-	-	-	-	-	-	<1,500
	10/21/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.06	<20	<45
	5/12/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45
	8/5/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-106	8/15/2014	-	-	-	-	-	-	-	-	-	-	89,200
	10/22/2014	<0.5	<0.5	1	<0.5	<0.5	<2	<0.5	<0.5	23	230	2,000
	2/25/2015	<0.5	<0.5	2	<0.5	<0.5	<2	<0.5	<0.5	4.1	130	9,500
	5/12/2015	<0.5	<0.5	5	<0.5	<0.5	<2	<0.5	<0.5	2 J	75	7,800
	8/5/2015	-	-	-	-	-	-	-	-	-	-	2,300
	12/3/2015	<0.5	<0.5	1	<0.5	-	-	-	-	<1	-	3,300
	3/15/2016	-	-	-	-	-	-	-	-	-	-	2,900
	4/21/2016	-	-	-	-	-	-	-	-	-	-	2,000
	5/24/2016	-	-	-	-	-	-	-	-	-	-	1,100
	8/25/2016	-	-	-	-	-	-	-	-	-	-	1,800
MW-107	8/16/2014	-	-	-	-	-	-	-	-	-	-	8,540
	10/22/2014	<0.5	<0.5	2	2	<0.5	<2	<0.5	<0.5	0.9	49	840
	2/25/2015	1	<0.5	0.7	0.7	<0.5	<2	<0.5	<0.5	-	37	480

Table 5

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Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-107 (cont.)	5/12/2015	<0.5	<0.5	2	3	<0.5	<2	<0.5	<0.5	5.00	40 J	150
	8/5/2015	-	-	-	-	-	-	-	-	-	-	280
	12/3/2015	-	-	-	-	-	-	-	-	-	-	730
MW-108	5/25/2016	-	-	-	-	-	-	-	-	-	-	51 J
MW-109S	8/21/2014	-	-	-	-	-	-	-	-	-	-	7,500
	10/20/2014	-	-	-	-	-	-	-	-	-	-	12,000
	2/26/2015	-	-	-	-	-	-	-	-	-	-	1,800
	5/12/2015	<0.5	<0.5	<0.5	<0.5	<0.5	4 J	<0.5	<0.5	<1	-	180
MW-109	8/21/2014	-	-	-	-	-	-	-	-	-	-	<600
	10/20/2014	-	-	-	-	-	-	-	-	-	-	200
	2/26/2015	-	-	-	-	-	-	-	-	-	-	100
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-110S	8/25/2014	-	-	-	-	-	-	-	-	-	-	6,630
	10/20/2014	-	-	-	-	-	-	-	-	-	-	8,500
	2/26/2015	-	-	-	-	-	-	-	-	-	-	6,700
	5/12/2015	-	-	-	-	-	-	-	-	-	-	2,300
MW-110	8/25/2014	-	-	-	-	-	-	-	-	-	-	<153
	10/20/2014	-	-	-	-	-	-	-	-	-	-	<45
	2/26/2015	-	-	-	-	-	-	-	-	-	-	<45
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-111	8/21/2014	-	-	-	-	-	-	-	-	-	-	<600
	10/20/2014	-	-	-	-	-	-	-	-	-	-	<45
	2/26/2015	-	-	-	-	-	-	-	-	-	-	260
	5/12/2015	-	-	-	-	-	-	-	-	-	-	150
MW-112S	8/15/2014	-	-	-	-	-	-	-	-	-	-	<1,500
	10/20/2014	-	-	-	-	-	-	-	-	-	-	380
	2/26/2015	-	-	-	-	-	-	-	-	-	-	<45
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-112	8/15/2014	-	-	-	-	-	-	-	-	-	-	<1,500
	10/20/2014	-	-	-	-	-	-	-	-	-	-	<45
	2/26/2015	-	-	-	-	-	-	-	-	-	-	<45
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-113	8/21/2014	-	-	-	-	-	-	-	-	-	-	<600
	10/20/2014	-	-	-	-	-	-	-	-	-	-	61
	2/26/2015	-	-	-	-	-	-	-	-	-	-	90
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45
MW-114	8/25/2014	-	-	-	-	-	-	-	-	-	-	<600
	10/20/2014	-	-	-	-	-	-	-	-	-	-	<45
	2/26/2015	-	-	-	-	-	-	-	-	-	-	<45
	5/12/2015	-	-	-	-	-	-	-	-	-	-	<45

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
MW-121	8/4/2015	-	-	-	-	-	-	-	-	-	-	9,400
	12/2/2015	2.00	<0.5	8.00	<0.5	-	-	-	-	41.00	-	4,500
	3/15/2016	-	-	-	-	-	-	-	-	-	-	5,500
	5/25/2016	-	-	-	-	-	-	-	-	-	-	12,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	2,400
MW-122	8/4/2015	-	-	-	-	-	-	-	-	-	-	2,000
	12/2/2015	1.00	<0.5	8.00	<0.5	-	-	-	-	<1	-	1,600
	3/15/2016	-	-	-	-	-	-	-	-	-	-	1,800
	5/25/2016	-	-	-	-	-	-	-	-	-	-	4,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	1,900
MW-123S / RW-123S	8/5/2015	-	-	-	-	-	-	-	-	-	-	2,400
	12/1/2015	-	-	-	-	-	-	-	-	-	-	2,500
	3/14/2016	-	-	-	-	-	-	-	-	-	-	13,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	150,000
	5/24/2016	-	-	-	-	-	-	-	-	-	-	100,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	1,200,000
RW-1	10/22/2014	-	-	-	-	-	-	-	-	-	-	30,000
	2/26/2015	-	-	-	-	-	-	-	-	-	-	6,200
	5/12/2015	-	-	-	-	-	-	-	-	-	-	8,400
	8/5/2015	-	-	-	-	-	-	-	-	-	-	2,500
	12/2/2015	-	-	-	-	-	-	-	-	-	-	4,300
	3/15/2016	-	-	-	-	-	-	-	-	-	-	4,300

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
RW-1 (cont.)	4/21/2016	-	-	-	-	-	-	-	-	-	-	2,600
	5/24/2016	-	-	-	-	-	-	-	-	-	-	1,500
	8/24/2016	-	-	-	-	-	-	-	-	-	-	1,500
RW-05S	8/5/2015	-	-	-	-	-	-	-	-	-	-	6,900
	12/2/2015	-	-	-	-	-	-	-	-	-	-	17,000
	3/15/2016	-	-	-	-	-	-	-	-	-	-	15,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	19,000
	5/24/2016	-	-	-	-	-	-	-	-	-	-	59,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	66,000
MW-05/RW-05	5/24/2016	-	-	-	-	-	-	-	-	-	-	62,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	16,000
RW-25S	8/30/2016	-	-	-	-	-	-	-	-	-	-	470,000
RW-28S	8/5/2015	-	-	-	-	-	-	-	-	-	-	2,300
	12/1/2015	-	-	-	-	-	-	-	-	-	-	2,500
	3/14/2016	-	-	-	-	-	-	-	-	-	-	790
	4/21/2016	-	-	-	-	-	-	-	-	-	-	2,300
	5/24/2016	-	-	-	-	-	-	-	-	-	-	3,300
	8/25/2016	-	-	-	-	-	-	-	-	-	-	2,300
RW-30S	8/5/2015	-	-	-	-	-	-	-	-	-	-	890
	12/1/2015	-	-	-	-	-	-	-	-	-	-	1,300

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
RW-30S (cont.)	3/14/2016	-	-	-	-	-	-	-	-	-	-	61,000
RW-116S	8/5/2015	-	-	-	-	-	-	-	-	-	-	7,000
	12/2/2015	-	-	-	-	-	-	-	-	-	-	11,000
	3/14/2016	-	-	-	-	-	-	-	-	-	-	7,600
	4/21/2016	-	-	-	-	-	-	-	-	-	-	3,000
	5/24/2016	-	-	-	-	-	-	-	-	-	-	230,000
	8/25/2016	-	-	-	-	-	-	-	-	-	-	6,200
RW-117S	8/5/2015	-	-	-	-	-	-	-	-	-	-	6,600
	12/1/2015	-	-	-	-	-	-	-	-	-	-	13,000
	8/30/2016	-	-	-	-	-	-	-	-	-	-	4,400
RW-118S	8/5/2015	-	-	-	-	-	-	-	-	-	-	8,200
	12/2/2015	-	-	-	-	-	-	-	-	-	-	11,000
	3/14/2016	-	-	-	-	-	-	-	-	-	-	8,200
	4/21/2016	-	-	-	-	-	-	-	-	-	-	1,100
	5/24/2016	-	-	-	-	-	-	-	-	-	-	1,600
	8/25/2016	-	-	-	-	-	-	-	-	-	-	750
RW-119S	8/5/2015	-	-	-	-	-	-	-	-	-	-	2,700
	12/2/2015	-	-	-	-	-	-	-	-	-	-	2,000
	3/14/2016	-	-	-	-	-	-	-	-	-	-	4,400
	4/21/2016	-	-	-	-	-	-	-	-	-	-	3,300
	5/24/2016	-	-	-	-	-	-	-	-	-	-	2,100

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
RW-119S (cont.)	8/25/2016	-	-	-	-	-	-	-	-	-	-	1,200
TW-01	12/16/2013	14.3	ND	13.1	63.5	1.55	-	-	-	119	-	14,100
	7/7/2014	-	-	-	-	-	-	-	-	-	-	27,400
TW-02	12/16/2013	<0.5	<0.5	<0.5	<0.5	0.791	-	-	-	ND	-	584
	7/7/2014	-	-	-	-	-	-	-	-	-	-	<1,160
	8/15/2014	-	-	-	-	-	-	-	-	-	-	<600
	10/23/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	-	<20	60
	3/4/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.20	<20	<45
	5/13/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	<20	<45
	8/5/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.20	<20	<45
	12/3/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.07	<20	81 J
	3/16/2016	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	<45
	5/25/2016	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	<45
	8/24/2016	-	-	-	-	-	-	-	-	-	-	<45
TW-03	12/16/2013	<0.5	<0.5	<0.5	<0.5	<0.5	-	-	-	ND	-	351
	7/7/2014	-	-	-	-	-	-	-	-	-	-	<1,160
	8/15/2014	-	-	-	-	-	-	-	-	-	-	<1,500
	10/23/2014	0.7	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	-	<20	49
	3/4/2015	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	<20	180
	5/13/2015	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	21 J	200
	8/5/2015	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.20	<20	150
	12/2/2015	0.7 J	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	<20	56 J

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Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
TW-03 (cont.)	3/16/2016	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.1 J	32 J	150
	5/23/2016 ^H	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.1 J	31 J	190
	5/23/2016 ^L	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.1 J	27 J	180
	8/24/2016	-	-	-	-	-	-	-	-	-	-	100
TW-04	12/16/2013	2.2	<0.5	3.45	7.11	<0.5	-	-	-	27.7	-	2,000
	7/7/2014	-	-	-	-	-	-	-	-	-	-	1,270
	8/15/2014	-	-	-	-	-	-	-	-	-	-	1,610
	10/23/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.3	<20	160
	3/4/2015	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	1	27 J	940
	5/13/2015	1 J	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<1	33 J	700
	8/6/2015	0.6 J	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.6	38 J	1,000
	12/2/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	22 J	280
	3/14/2016	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.2	31 J	980
	5/24/2016	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.5	50 J	1,100
	8/24/2016	-	-	-	-	-	-	-	-	-	-	430
TW-05	12/16/2013	7.68	<0.5	62.8	40.3	<0.5	-	-	-	240	-	136,000
	7/7/2014	-	-	-	-	-	-	-	-	-	-	66,300
	8/15/2014	-	-	-	-	-	-	-	-	-	-	271,000
	10/23/2014	4	<0.5	14	<0.5	<0.5	<2	<0.5	<0.5	21	140	29,000
	3/4/2015	2	<0.50	1	<0.5	<0.5	<2	<0.5	<0.5	3	130	2,200
	5/13/2015	3	<0.50	<0.50	<0.5	<0.5	<2	<0.5	<0.5	1 J	44 J	1,100
	8/6/2015	2	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.8	37 J	790
	12/1/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	30 J	330

Table 5

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Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
TW-05 (cont.)	3/14/2016	1	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	0.3	<20	960
	8/24/2016	-	-	-	-	-	-	-	-	-	-	890
TW-06	12/16/2013	1.09	ND	20.3	7.86	ND	-	-	-	174	-	47,000
	7/7/2014	-	-	-	-	-	-	-	-	-	-	113,000
	8/15/2014	-	-	-	-	-	-	-	-	-	-	147,000
	10/23/2014	0.8	<0.5	11	1	<0.5	<2	<0.5	<0.5	5	230	16,000
	3/4/2015	2	<0.5	6	<0.5	<0.5	<2	<0.5	<0.5	<0.030	170	2,200
	5/13/2015	2	<0.5	4	<0.5	<0.5	<2	<0.5	<0.5	4	130	2,300
	8/6/2015	2	<0.5	1	<0.5	<0.5	<2	<0.5	<0.5	2	81	1,400
	12/1/2015	0.8 J	<0.5	1	<0.5	<0.5	<2	<0.5	<0.5	0.8	92	1,300
	3/15/2016	0.8 J	<0.5	3	<0.5	<0.5	<2	<0.5	<0.5	1	110	43,000
	4/21/2016	-	-	-	-	-	-	-	-	-	-	32,000
	5/24/2016	<0.5	<0.5	4	<0.5	<0.5	<2	<0.5	<0.5	1	120	1,800
	8/24/2016	-	-	-	-	-	-	-	-	-	-	1,500
TW-07	12/16/2013	2.38	ND	0.969	ND	ND	-	-	-	34	-	3,290
	7/7/2014	-	-	-	-	-	-	-	-	-	-	41,500
	8/15/2014	-	-	-	-	-	-	-	-	-	-	19,600
	10/23/2014	2	<0.5	0.6	<0.5	<0.5	<2	<0.5	<0.5	6	29	4,700
	3/4/2015	9	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	2.2	46 J	670
	5/13/2015	10	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	3 J	36 J	320
	8/5/2015	7	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	2	57	220
	12/2/2015	3	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	1	<20	110
	3/15/2016	3	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	160

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HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
TW-07 (cont.)	5/24/2016	3	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	20 J	160*
	5/25/2016	-	-	-	-	-	-	-	-	-	-	<45*
	8/25/2016	-	-	-	-	-	-	-	-	-	-	340
TW-08S	7/7/2014	-	-	-	-	-	-	-	-	-	-	29,500
TW-09S	7/7/2014	-	-	-	-	-	-	-	-	-	-	2,330,000
TW-10	12/18/2013	2.51	ND	19.7	4.99	ND	-	-	-	131	-	3,040
	7/7/2014	-	-	-	-	-	-	-	-	-	-	23,400
TW-11	12/18/2013	1.55	0.664	8.3	9.67	0.578	-	-	-	263	-	170,000
	7/7/2014	-	-	-	-	-	-	-	-	-	-	117,000
TW-13	12/18/2013	6.06	ND	44.5	137	ND	-	-	-	239	-	3,580
	7/7/2014	-	-	-	-	-	-	-	-	-	-	17,500
TW-14	1/17/2014	<0.5	<0.5	<0.5	<0.5	0.536	-	-	-	ND	-	2,290
	7/7/2014	-	-	-	-	-	-	-	-	-	-	16,000
	8/15/2014	-	-	-	-	-	-	-	-	-	-	3,900
	10/21/2014	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	-	100	670
	2/26/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.030	73	120
	5/12/2015	1	<0.5	<0.5	<0.5	<0.5	7.00	<0.5	<0.5	<1	220	2,000
	8/13/2015	1	<0.5	<0.5	<0.5	<0.5	9	<0.5	<0.5	<0.08	130	3,700
	12/1/2015	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.04	<20	<45

Table 5

HISTORICAL GROUNDWATER ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes, Total (µg/L)	Methyl tert-butyl ether (µg/L)	tert-Butyl alcohol (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	Naphthalene (µg/L)	TPH-GRO (µg/L)	TPH-DRO (µg/L)
TW-14 (cont.)	3/14/2016	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	<20	54 J
	5/23/2016	<0.5	<0.5	<0.5	<0.5	<0.5	<2	<0.5	<0.5	<0.08	22 J	45 J
	8/24/2016	-	-	-	-	-	-	-	-	-	-	<45

Notes:

MW-108, TW-12S, RW-30S were not sampled because either the wells were dry or there was not enough water to sample.

- = Not available

<# = Less than the method detection limit

µg/L = Micrograms per liter

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

ND = Non-detect

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

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

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

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

(cont.) = continued

*

Two samples for TPH-DRO were collected from TW-07. The first sample was collected by Geosyntec for the purpose of analyzing all parameters at this location for quality control purposes (MS/MSD). A second sample was also collected by GES as part of their routine monitoring program. The results reported for TW-07 were 160 J+ micrograms per Liter (µg/L) and <45 µg/L. The difference between the two results is less than twice the reporting limit and therefore deemed valid as received.

Table 6

HISTORICAL GROUNDWATER BIOSTIMULATION ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Methane (µg/L)	Sulfate as SO ₄ (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO ₃)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-01S	10/22/2014	4,200	130	0.044 J	0.037 J	306	31.4	-
	3/16/2016	4,500	27.9	<0.040	0.017 J	367	9.3	14.5
	8/25/2016	1,200	257	<0.040	<0.015	226	15.1	10.4
MW-10S / RW-10S	10/22/2014	1,100	33.1	<0.040	0.037 J	461	62.8	-
	3/14/2016	1,800	193	<0.040	0.088	427	129	4.04
	5/24/2016	11	716	<0.040	<0.015	0.7 J	31.2	4.85
	8/25/2016	<3.0	824	0.076 J	<0.015	25.5	5.1	3.6
MW-11	10/22/2014	120	71.9	<0.040	<0.015	55	0.059	-
	2/26/2015	200	79.8	<0.040	<0.015	39	0.37	1.64
	5/12/2015	280	70.5	<0.040	<0.015	40.8	0.75	1.73
	8/6/2015	450	118	<0.040	0.049 J	356	21.9	5.67
MW-14 / RW-14	2/25/2015	230	51.4	0.7	<0.015	63	2.5	8.66
	5/12/2015	660	44.3	0.6	0.023 J	76.8	6.3	8.54
	8/6/2015	1,800	45.9	0.15	0.11	304	18	15.1
	3/15/2016	5,800	23.8	<0.040	0.050 J	171	22.2	6.81
	8/25/2016	<3.0	42.5	1.8	<0.015	10.9	0.12	0.485
MW-27	12/3/2015	2,500	112	<0.040	<0.015	424	33.4	10.9
	3/15/2016	6,100	214	<0.040	0.022 J	439	34	10.3
	5/25/2016	<3.0	452	<0.040	<0.015	44.3	4.4	6.85
	8/25/2016	<3.0	604	<0.040	<0.015	16.3	1.3	12.4
MW-31 / RW-31	10/23/2014	4,300	57.2	<0.040	<0.015	416	2.6	-
	2/25/2015	5,000	69.7	<0.040	<0.015	487	9.3	9.84
	5/13/2015	5,700	70.1	<0.040	<0.015	510	15.4	10.8
	8/5/2015	5,400	85.3	<0.040	<0.015	482	10	5.52
MW-33	10/23/2014	43	253	1.9	<0.015	119	0.068	-
	2/25/2015	9.8	235	2.5	<0.015	55.6	0.030 J	1.23
	5/13/2015	7.3	254	2	<0.015	81.7	0.075	0.975
	8/5/2015	17	253	1.8	<0.015	97.7	<0.010	0.605
MW-51S	10/22/2014	7,100	36.3	0.047 J	<0.015	564	28.7	-
	2/26/2015	8,900	6.2	<0.040	0.12	518	82.4	4.49
	5/13/2015	11,000	<1.5	<0.040	0.2	676	77.3	1.74
	8/6/2015	10,000	26.1	<0.040	0.046	480	48.3	1.03
	3/15/2016	13,000	535	<0.040	0.049 J	585	69	4.64
	5/24/2016	3,800	884	<0.040	0.039 J	335	32	3.46

Table 6

HISTORICAL GROUNDWATER BIOSTIMULATION ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Methane (µg/L)	Sulfate as SO ₄ (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO ₃)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-51S (cont.)	8/25/2016	1,700	895	<0.040	0.11	354	22	10.3
MW-70	2/26/2015	<3.0	361	0.71	<0.015	35.1	0.048 J	2.62
	5/12/2015	3.4 J	357	0.7	<0.015	40.7	<0.50	6.13
	8/6/2015	<3.0	365	0.73	<0.015	29.6	0.089	1.29
MW-72S / RW-72S	10/22/2014	4,400	80.3	0.093 J	0.019 J	328	9.1	-
	2/25/2015	3,600	64.5	<0.040	<0.015	615	16.7	8.49
	5/13/2015	4,100	130	<0.040	0.097	597	24.6	8.46
	8/5/2015	2,300	207	<0.040	0.067	697	30.7	11.7
	3/14/2016	310	508	<0.040	0.054	543	71.4	16.7
	5/25/2016	20	1,500	<0.040	<0.015	<0.7	51.9	34.8
	8/25/2016	15	982	<0.040	<0.015	<1.7	78.9	24.5
MW-72 / RW-72	10/22/2014	2,200	389	<0.040	<0.015	65.5	0.33	-
	2/25/2015	490	396	<0.040	<0.015	72.7	4.8	18.8
	5/13/2015	540	434	<0.040	0.057	101	10.8	17.5
	8/5/2015	1,400	393	<0.040	<0.015	548	14.3	13.5
	5/24/2016	<3.0	246	0.25	<0.015	24	0.073	1.72
	8/25/2016	<3.0	351	0.12	<0.015	25.1	0.085	3.6
MW-106	2/25/2015	260	1600	<0.040	0.021 J	<7.0	122	2.23
	5/12/2015	960	1160	<0.040	0.15	<0.70	50.1	1.49
	8/5/2015	2,100	1,010	<0.040	<0.015	35.1	32.7	1.38
	3/15/2016	1,600	1,250	<0.040	0.016 J	<0.70	25.1	1.67
	5/24/2016	3 J	1,310	<0.040	<0.015	<0.7	4.4	2.69
	8/25/2016	<3.0	1,270	<0.040	<0.015	<1.7	3.3	1.42
MW-109S	10/20/2014	1,000	18.8	<0.040	0.037 J	368	8	-
	2/26/2015	140	55.4	<0.040	<0.015	196	3.1	2.64
	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	-
	2/26/2015	<3.0	86.7	2.3	<0.015	13.3	0.029 J	0.649
	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	-
	2/26/2015	<3.0	42.7	1.7	<0.015	68	0.016 J	0.102
	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

Table 6

HISTORICAL GROUNDWATER BIOSTIMULATION ANALYTICAL DATA SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

Well ID	Sample Date	Methane (µg/L)	Sulfate as SO ₄ (mg/L)	Nitrate Nitrogen (mg/L)	Nitrite Nitrogen (mg/L)	Alkalinity, Carbonate (mg/L as CaCO ₃)	Ferrous Iron (mg/L)	Manganese (mg/L)
MW-121 (cont.)	5/25/2016	3,300	115	<0.040	<0.015	374	81.4	22
	8/25/2016	100	186	<0.040	<0.015	331	14.5	12.6
MW-122	12/2/2015	1,000	94.3	<0.040	<0.015	451	7.2	13.1
	5/25/2016	450	188	0.048 J	<0.015	300	90.8	16.3
	8/25/2016	280	182	<0.040	<0.015	272	9.1	4.12
TW-03	3/4/2015	2,500	269	<0.040	0.083	49.7	29.7	5.24
	5/13/2015	2,200	298	<0.040	0.13	39	24.6	4.32
	8/6/2015	1,800	289	<0.040	0.07	<0.70	32.3	4.61
	3/16/2016	1,600	345	<0.040	0.029 J	24.7	21.9	4.99
	5/23/2016	410	365	<0.040	0.043 J	31.2	29.1	7.88
	8/25/2016	220	276	<0.040	<0.015	16.7	40.7	6.86
TW-05	3/4/2015	2,800	367	<0.040	0.13	89.4	72.6	5.28
	5/13/2015	1,300	463	0.052 J	0.18	66.2	58.6	4.77
	8/6/2015	3,000	388	-	-	-	-	-
	8/13/2015	-	-	<0.040	0.091	16.1	84.5	3.55
	3/14/2016	460	410	0.12	0.042 J	114	41.5	3.05
	8/25/2016	NA	515	<0.040	<0.015	68.7	54.5	4.91
TW-06	12/2/2015	7,000	279	<0.040	0.027 J	194	58.4	1.93
	3/15/2016	3,600	224	<0.040	0.039 J	128	53.9	1.46
	5/24/2016	3,400	402	<0.040	0.036 J	72	46	2.1
	8/25/2016	NA	931	<0.040	0.017 J	36	144	6.32
TW-07	3/4/2015	1,300	258	<0.040	0.034 J	1.6 J	14.1	4.3
	5/13/2015	800	323	<0.040	0.046 J	1.1 J	9.5	5.62
	8/6/2015	2,700	304	<0.040	0.018 J	2.7	8.7	4.51

Notes:

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

- = No Data

NA = Not Analyzed

<# = Less than the method detection limit of #

µg/L = Micrograms per liter

mg/L = Milligrams per liter

Table 7

TOTAL PHASE EXTRACTION OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation			Vapor Recovery							Groundwater Recovery		
	Period (days)	Operating Days	Operating Hours	Applied Vacuum	Vapor Flow Rate	PID Reading	Influent C1-C10 Hydrocarbon Concentration	Hydrocarbon Recovery Per Day	Hydrocarbon Recovery Per Period	Cumulative Hydrocarbon Recovery	Average Groundwater Flow Rate	Monthly Groundwater Recovery	Cummulative Groundwater Recovery
				(in. Hg)	(scfm)	(ppm-v)	(mg/m ³)	(lbs/day)	(lbs)	(lbs)	(gpm)	(gal)	(gal)
March 14, 2016	-	-	-	15.8	325	-	830	-	-	-	-	2,572	539
March 15, 2016	0.1	0.1	2	14.5	340	-		25.4	2.1	2	0.7		627
March 16, 2016	0.3	0.3	10	14.0	340	150		25.4	8.5	11	0.5		875
March 17, 2016	0.4	0.4	19	13.7	360	313		26.9	10.1	21	0.2		993
March 21, 2016	1.3	1.3	49	15.1	320	189		23.9	29.8	50	0.2		1,358
March 24, 2016	3	2.5	108	-	-	-		-	-	-	0.2		1,920
March 30, 2016	6	5.4	238	15.1	360	210		26.9	212	262	0.1		2,572
Q1 2016	11	10		14.7	341	216			262		0.2	2,572	
April 7, 2016	8.0	7.8	426	14.7	350	120	135	4.2	33	295	0.1	4,671	4,207
April 13, 2016	6.0	5.9	568	13.7	380	71	-	21.7	129	424	0.1		5,375
April 20, 2016	7.0	6.3	718	14.7	360	63	-	18.0	113	537	0.1		6,431
April 27, 2016	7.0	5.5	851	15.1	330	59	-	15.7	87	624	0.1		7,243
May 5, 2016	8.0	7.7	1035	15.7	330	105	74	2.2	17	640	0.1	4,121	8,530
May 18, 2016	13.0	8.9	1248	14.4	350	48	-	13.4	119	759	0.1		10,084
May 25, 2016	7.0	4.8	1362	15.3	340	-	-	2.3	11	770	0.2		11,364
June 8, 2016	14.0	8.8	1573	16.5	340	37	0	0.0	0	770	0.2	5,196	13,273
June 21, 2016	13.0	12.6	1876	15.2	360	24	-	7.0	89	859	0.2		16,560
Q2 2016	83	68		15.0	349	66			597		0.1	13,988	
July 12, 2016	21.0	21.0	2379	15.8	350	44	<53	12.3	259	1118	0.2	9,218	23,064
July 21, 2016	9.0	8.8	2589	16.3	330	80	-	21.2	186	1303	0.2		25,778
August 4, 2016	14.0	14.0	2926	16.5	350	26	70	2.2	31	1334	0.3	10,131	31,745
August 15, 2016	11.0	7.4	3103	16.0	350		-	2.2	16	1350	0.4		35,795
August 17, 2016	2.0	0.2	3108	14.5	325	46	-	12.1	3	1353	0.4		35,909
September 1, 2016	15.0	10.7	3365	15.8	340	34	71	2.2	23	1376	0.2	11,516	39,684
September 22, 2016	21.0	20.8	3865	16.6	345	24	-	6.6	136	1513	0.2		45,749
September 30, 2016	8.0	8.0	4056	-	345	-	-	2.2	18	1530	0.1		47,425
Q3 2016	101	91		15.9	342	42			671		0.2	30,865	

Notes:

PID - photoionization detector
in. Hg - inches of mercury

mg/m³ - milligrams per cubic meter
lbs - pounds



Table 7

TOTAL PHASE EXTRACTION OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

scfm - standard cubic feet per minute

gal - gallons

ppm-v - parts per million by volume

gpm - gallons per minute

Bold hydrocarbon recovery per day values indicate the result is from analytical results (sum of C1-C4 and >C4-C10 hydrocarbons). Other a PID reading is used.

Estimate of TPE vapor >C4-C10 hydrocarbon recovery using analytical results in units of mg/m³:

Pounds = Vapor Flow Rate (scfm) x Influent >C4-C10 Hydrocarbons (mg/m³) x Period (days) x c

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

Estimate of hydrocarbon recovery per day using PID reading:

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

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

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

c = conversion factors, 1440 min/day, 2.2E-6 lb/mg, 1 m³ /35.3 ft³

Estimate of recovery using analytical results in units of mg/L:

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

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

Table 8

PUMP AND TREAT OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation			Groundwater Recovery			Recovery Wells											
	Period (days)	Operating Days	Operating Hours	Average Groundwater Flow Rate	Monthly Groundwater Recovery	Cumulative Groundwater Recovery	RW-05		RW-25		RW-31		RW-51		RW-72		RW-14	
				(gpm)	(gal)	(gal)	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute	Cumulative Pump Cycles	Cycles per Minute
March 14, 2016	-	-	-	-	43,907	536	692	-	6,213	-	3,309	-	5,987	-	4,157	-		
March 15, 2016	0.2	0.2	6	0.5		729	1,120	1.8	10,090	16	9,063	24	10,880	20	7,307	13		
March 16, 2016	0.4	0.4	15	4.6		3,220	1,299	0.3	14,530	8	11,994	5	15,925	9	8,755	3		
March 17, 2016	0.3	0.3	22	3.3		4,595	1,436	0.3	21,226	16	16,785	11	23,056	17	9,825	3		
March 21, 2016	1.3	1.3	54	1.1		6,677	1,505	0.0	31,176	5	18,124	1	29,238	3	16,073	3		
March 24, 2016	3.0	2.3	108	1.8		12,539	1,625	0.0	-	-	-	-	-	-	-	-		
March 30, 2016	6.0	5.2	232	4.2		43,907	11,823	1.4	212,345	17	151,623	12	205,395	16	39,882	2		
Q1 2016	11	10		3.2	43,907		11,823	0.9	212,345	15	151,623	11	205,395	15	39,882	3		
April 7, 2016	8	7.8	418	3.3	117,175	81,177	17,696	0.5	430,776	20	244,598	8	431,044	20	51,551	1.0		
April 13, 2016	6	5.5	551	3.6		109,780	26,045	1.0	589,447	20	347,559	13	591,420	20	62,240	1.3		
April 20, 2016	7	6.3	701	3.1		137,844	34,325	0.9	773,123	20	355,229	1	775,119	20	69,772	0.8		
April 27, 2016	7	5.1	824	3.1		161,082	37,883	0.5	918,471	20	407,031	7	921,715	20	80,116	1.4		
May 5, 2016	8	7.5	1,005	3.0	87,572	193,885	39,826	0.2	1,138,059	20	471,149	6	1,136,789	20	90,455	1.0		
May 10, 2016	5	1.1	1,031	3.1		198,662	40,882	0.7	1,168,873	20	500,383	19	1,167,296	20	91,887	0.9		
May 18, 2016	8	7.2	1,204	2.7		226,298	60,355	1.9	1,387,605	21	525,551	2	1,381,275	21	97,943	0.6		
May 25, 2016	7	6.5	1,360	2.4		248,654	-	-	-	-	-	-	-	-	-	-		
June 2, 2016	8	5.5	1,493	2.1	61,464	265,336	90,911	1.8	1,760,840	22	777,780	15	1,743,745	21	112,951	0.0		
June 8, 2016	6	3.3	1,571	2.1		275,335	97,569	1.4	1,861,909	22	844,068	14	1,841,688	21	117,805	1.0		
June 14, 2016	6.0	6.0	1,714	1.9		291,227	110,555	1.5	2,069,338	24	948,955	12	2,035,824	23	127,548	1.1		
June 21, 2016	7.0	6.8	1,877	1.9		310,118	143,720	3.4	2,299,257	24	1,075,182	13	2,259,050	23	137,772	1.0		
Q2 2016	83	69		2.7	266,211		131,897	1.3	2,086,912	21	923,559	9	2,053,655	21	97,890	1		
July 12, 2016	21	21.0	2,380	2.2	90,967	375,524	621,945	15.8	3,046,598	25	1,501,331	14	2,963,874	23	163,265	0.8		
July 21, 2016	9	8.8	2,591	2.0		401,085	965,118	27.1	3,336,362	23	1,703,585	16	3,245,984	22	172,720	0.7		
August 4, 2016	14	14.0	2,927	2.0	66,632	441,884	1,504,724	26.8	3,784,552	22	2,035,460	16	3,692,700	22	188,936	0.8	188,936	-
August 15, 2016	11	8.0	3,118	2.2		466,850	1,780,380	24.1	3,986,072	18	2,200,705	14	3,916,870	20			274,167	7.4
August 17, 2016	2	0.2	3,123	2.9		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	97,504	499,541	2,110,116	18.4	4,141,750	8	2,252,093	3	4,205,454	16			456,696	10.2
September 22, 2016	21	21.0	3,921	1.6		547,172	2,402,720	9.7	4,809,103	22	2,252,895	0	4,833,693	21			700,754	8.1
September 30, 2016	8	7.8	4,108	1.6		565,221	2,404,744	0.2	-	-	2,253,087	0	-				-	-
Q3 2016	101	93		1.9	255,103		2,261,024	16.9	2,509,846	20	1,177,905	9	2,574,643	21	51,164	1	511,818	9

Notes:

gal - gallons

gpm - gallons per minute

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

Table 9

BIOSPARGE OPERATIONAL SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	Operation		Biosparge Injection Points														
	Period (days)	Operating Days	SP-01	SP-02	SP-03	SP-04	SP-05	SP-06	SP-07	SP-08	SP-09	SP-10	SP-11	SP-12	SP-13	SP-14	SP-15
			Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow	Flow
			(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)	(scfm)
March 15, 2016	0.0	0.0	0.8	0.7	0.6	0.8	0.8	0.6	0.8	0.7							
March 16, 2016	0.4	0.4	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7							
March 17, 2016	0.9	0.9	0.7	0.75	0.7	0.7	0.7	0.7	0.75	0.75							
March 21, 2016	1.3	1.3	1.0	1.0	1.0	1.0	1.2	1.1	1.0	1.0							
March 30, 2016	9.0	8.3	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8							
Q1 2016	12	11	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8							
April-16	28	27.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8							
May-16	28	23.4	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
June-16	27	22.7	0.8	0.75	0.8	0.8	0.8	0.75	0.75	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Q2 2016	83	73	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
July-16	30	30.0	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.5	0.5	0.5	0.5	0.5	0.5	0.5
August-16	27	22.2	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
September-16	44	42.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0	0
Q3 2016	101	95	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.4	0.4	0.4	0.4	0.4	0.3	0.3

Notes:

scfm - standard cubic feet per minute

Table 10

HYDROCARBON RECOVERY SUMMARY

Potomac River Generating Station
1400 North Royal St
Alexandria, VA

DATE	TPE			P&T			LNAPL		Cumulative Hydrocarbon Recovery					
	Monthly Groundwater Recovery	Dissolved-Phase TPH-DRO Concentration	Monthly TPH-DRO Recovery	Monthly Groundwater Recovery	Dissolved-Phase TPH-DRO Concentration	Monthly TPH-DRO Recovery	LNAPL Thickness in Drum ¹	Monthly Recovered LNAPL	Dissolved-Phase		Liquid-Phase	Vapor-Phase ²	Total	
									TPE	P&T				
	(gal)	(mg/L)	(lbs)	(gal)	(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						

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

¹ - LNAPL drum includes LNAPL bailed previously during well gauge and bail events² - Vapor-Phase recovery values are calculated withing the Total Phase Extraction Operational Summary Table*Italics* - May LNAPL recovery includes LNAPL removed from the oil/water separator during a cleaning event.Estimate of dissolved-phase recovery using analytical results in units of mg/L:

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

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

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

drum diameter = 1.875 feet

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



ATTACHMENT A

WASTE DOCUMENTATION

TRIUMVIRATE ENVIRONMENTAL BILL OF LADING

Page 1 of 1

STRAIGHT BILL OF LADING

BOL Document Number: BOL330519

ORIGINAL - NOT NEGOTIABLE

TRANSPORTER:

1 Triumvirate Environmental, Inc.
2

US EPA ID Number:

MAC300016672

Phone:

800-966-9282

GENERATOR:

NRG
GenOn - Po River
1400 North Royal Street
Alexandria, VA 22314

US EPA ID Number:

VAD000731588

Phone:

703-838-3701

FACILITY:

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

US EPA ID Number:

MDD093002384

Phone:

(410) 636-3700

Received:

(Print Name)

(Signature)

(Date)

HM	Description of Articles or Proper Shipping Name	Containers			Unit	
		No.	Size	Type	Weight	Wt/Vol.
	Non-RCRA, Non-DOT Regulated Materials - Liquids (Petroleum Impacted Water) 13920-20020A	0 0 1	x	Tanker TT	350	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:

GENERATOR:

NRG
GenOn - Po River

Print Name

Signature

Date

x *Rachel E. Ulmer* x *[Signature]* 8-30-16

TRANSPORTER:

1 Triumvirate Environmental, Inc.

[Signature] *[Signature]* 8-30-16

ER #: (800) 966-9282

ERIP: Triumvirate Environmental

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

(410) 636-3700

DAY: TuesdayDATE: 8-30-16ARRIVAL TIME: 7 amTRIUMVIRATE
ENVIRONMENTAL☒ Baltimore, MD Office 410-636-3700 ☐ Ashland, VA Office 540-288-1176SHEET: 1OF: 1JOB CONTACT: NIG Po River

JOB PHONE: _____

JOB DESCRIPTION: Onsite support for GESSUPERVISOR: Andy LesliePROJECT MGR: Craig ChildersCHANGE ORDER: YES ☐ NO ☒

LABOR: S = SUPERVISOR, F = FOREMAN, E = EQUIPMENT OPERATOR, T = TECHNICIAN

Position	Employee Name	Unit #	Pre-Trip / Load	Travel To Job	Onsite	Travel From Job	Lunch / Break	Office / Compliance	Total Time
S	A. Leslie	7018	5	1.5	5.0	1.5		5	
E	M. Morgan	1025	5	1.5	5.0	1.5		5	

EQUIPMENT / PURCHASES

Type	Unit #	Start Time	Stop Time	Total Hours	Rental Co. / Supplier	Purchase Order No.
Vac Truck	7018	5 am				
Utility TK	1025	5 am				
Grass Wash	603	5 am				

WASTE INFORMATION

Destination	Amount	Shipping Document #	Taken to Destination	Left on Site
1500 Carbon Ave Bait Md				
Liquid Bulk	350 GLS.	301 330519	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sludge Bulk	GLS.		<input type="checkbox"/>	<input type="checkbox"/>
Bags of Debris / PPE	Each		<input type="checkbox"/>	<input type="checkbox"/>
Liquid	Drums		<input type="checkbox"/>	<input type="checkbox"/>
Solid	Drums		<input type="checkbox"/>	<input type="checkbox"/>
	Pounds		<input type="checkbox"/>	<input type="checkbox"/>
	TNS./YDS.		<input type="checkbox"/>	<input type="checkbox"/>
Other			<input type="checkbox"/>	<input type="checkbox"/>

TRIUMVIRATE

PRINT NAME: Andy LeslieSIGNATURE: Andy LeslieDATE: 8-30-16

CUSTOMER

PRINT NAME: x Royal WilliamsSIGNATURE: xDATE: 8-30-16

Field Services Supplies & Equipment

Job # 330519

Supply Name	Units of Measure	Units Used	Supply Name	Units of Measure	Units Used	Supply Name	Units of Measure	Units Used
CLEANERS			MATERIALS			PUMPS		
Chemical Cleaner (Marchem 55)	Gal.		ADS Disposable Hose	Roll		1" Double Diaphragm	Hour	
Mirachem	Gal.		Clor-D-Tect Kit	Kit		2" Double Diaphragm	Hour	
Zep Orange Cleaner	Gal.		Containment Pool	Each		3" Double Diaphragm	Hour	
			Curlex Matting	Roll		1" Double Diaphragm – Chemical	Hour	
CONTAINERS			Duct Tape	Roll		2" Double Diaphragm – Chemical	Hour	
5 Gallon Pail	Each		Filter Mesh Fence Cloth	Foot		Submersible Pump	Hour	
20 Gallon Fiber Drum	Each		Grass Seed	Pound		2" Trash Pump	Hour	
30 Gallon Fiber Drum	Each		Hay/Straw	Bale		3" Trash Pump	Hour	
55 Gallon Poly Drum	Each		"<10" PCB Decon Solution	Gal.				
55 Gallon Steel Reconditioned Drum	Each		PCB Kit	Kit		SAFETY EQUIPMENT		
85 Gallon Overpack Drum	Each		Plastic Bags – Heavy Duty	Box		Air Bottles	Each	
			Plastic Rolls (20' X 100')	Roll		Confined Space Entry Gear – Air	Day	
EQUIPMENT			Roll Off Liners	Each		Confined Space Entry Gear – No Air	Day	
Explosion Proof Lights	Each		Safety Lifeline & Harness	Each		Respirator Cartridges	Set	
Gasoline Generator	Hour		Sisal Rope 50 Foot	Roll		Tank Fan	Day	
Hand Tools	Day		Top Soil	Bag		Copus Blower	Day	
Light Stand	Each		Wiping Rags – Lint Free	Box		HEPA/Mercury Vacuum	Day	
						HEPA/Mercury Filters	Each	
GLOVES			PROTECTIVE CLOTHING			Mercury Recovery Kits	Each	
Black PVC	Pair	2	CPF I, II, III, IV	Each				
Glove Liners – Cloth	Pair		PVC Vinyl Boots – Pullover	Pair		SORBENTS		
Latex	Pair/Box		Poly Coated Tyvek Coveralls	Each		Chemical Pads	Bale	
N-Dex	Pair/Box		Rain Suit	Each		Grey Industrial Mat	Roll	
Nitrile	Pair		Saran Coated Tyvek	Each		Oil Snare/Snare on Rope	Bale	
			White Tyvek Coveralls	Each		Sorbent Boom	Bale	
METERS						Sorbent Pads	Bale	
Jerome Meter	Each		OTHER			Sorbent Sweep	Each	
LEL Meter	Each					Sta-Dri	Bag	
PID Meter	Each					Vermiculite	Bag	

TRIUMVIRATE

CUSTOMER

PRINT NAME Anthony Esire DATE 8.30.16

PRINT NAME x Ronald Ulman DATE 8.30.16

SIGNATURE Anthony Esire

SIGNATURE x [Signature]



ATTACHMENT B

**LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY
DOCUMENTATION – AUGUST 24-25 & 30, 2016 MONITORING EVENT**

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: September 16, 2016

Project: NRG PRGS

Submittal Date: 08/31/2016
Group Number: 1702079
PO Number: NRG PRGS
Release Number: 0402919
State of Sample Origin: VA

Client Sample Description

RW-117S Grab Groundwater
RW-25S Grab Groundwater

Lancaster Labs

(LL) #

8560173

8560174

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

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

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

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: RW-117S Grab Groundwater
NRG - PRGS

LL Sample # WW 8560173
LL Group # 1702079
Account # 08390

Project Name: NRG PRGS

Collected: 08/30/2016 11:10

GES, Inc.

Submitted: 08/31/2016 14:25

Suite A

Reported: 09/16/2016 15:39

1350 Blair Dr

Odenton MD 21113

R117S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	4,400	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162460006A	09/06/2016 19:46	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162460006A	09/03/2016 05:40	Maria Davenport	1

Sample Description: RW-25S Grab Groundwater
NRG - PRGS

LL Sample # WW 8560174
LL Group # 1702079
Account # 08390

Project Name: NRG PRGS

Collected: 08/30/2016 11:35

GES, Inc.

Submitted: 08/31/2016 14:25

Suite A

Reported: 09/16/2016 15:39

1350 Blair Dr

Odenton MD 21113

RW25S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	470,000	45	20

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162460006A	09/08/2016 12:57	Amy Lehr	20
12059	Microextraction - DRO (waters)	SW-846 3511	1	162460006A	09/03/2016 05:40	Maria Davenport	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 15:39

Group Number: 1702079

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 162460006A	Sample number(s): 8560173-8560174	
DRO C10-C28	N.D.	45

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162460006A	Sample number(s): 8560173-8560174								
DRO C10-C28	2660	1864.27	2650	2049.31	70	77	69-115	9	20

Surrogate Quality Control

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

Analysis Name: DRO micro-ext 8015B
Batch number: 162460006A

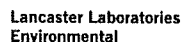
	Orthoterphenyl
8560173	88
8560174	678*
Blank	96
LCS	99
LCSD	101
Limits:	42-160

*- Outside of specification

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

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

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



Acct. # 8390 Group # 1702079 Sample # 8560173-74

[illegible]

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>08/31/2016 14:25</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

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

Unpacked by Karen Diem (3060) at 15:36 on 08/31/2016

Samples Chilled Details

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

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	1.1	DT	Wet	Y	Loose	N

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: September 08, 2016

Project: NRG PRGS

Submittal Date: 08/26/2016
Group Number: 1700266
PO Number: NRG PRGS
Release Number: 0402919
State of Sample Origin: VA

Client Sample Description

MW-08S Grab Groundwater
RW-1 Grab Groundwater

Lancaster Labs

(LL) #

8551180

8551181


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

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

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

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW-08S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551180
LL Group # 1700266
Account # 08390

Project Name: NRG PRGS

Collected: 08/24/2016 13:50 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/08/2016 16:38

1350 Blair Dr

Odenton MD 21113

PR08S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	7,400	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	09/01/2016 15:54	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: RW-1 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551181
LL Group # 1700266
Account # 08390

Project Name: NRG PRGS

Collected: 08/24/2016 14:00 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/08/2016 16:38

1350 Blair Dr

Odenton MD 21113

PRR01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	1,500	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	09/01/2016 16:22	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/08/2016 16:38

Group Number: 1700266

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 162420008A		Sample number(s): 8551180-8551181
DRO C10-C28	N.D.	45

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162420008A									
DRO C10-C28	2680	2005.13	2670	2170.89	75	81	69-115	8	20

Surrogate Quality Control

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

Analysis Name: DRO micro-ext 8015B
Batch number: 162420008A

	Orthoterphenyl
8551180	94
8551181	73
Blank	100
LCS	100
LCSD	101
Limits:	42-160

*- Outside of specification

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

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

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



**Lancaster Laboratories
Environmental**

Environmental Analysis Request/Chain of Custody

Acct. # 8390 Group # 1700266 Sample # 8551180-81

[illegible]

Client: Groundwater & Env**Delivery and Receipt Information**

Delivery Method: ELLE Courier Arrival Timestamp: 08/26/2016 18:30
Number of Packages: 2 Number of Projects: 1
State/Province of Origin: VA

Arrival Condition Summary

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

VOA Vial IDs (Headspace \geq 6mm): TW-3, TW-05, TW-06

Unpacked by Cory Jeremiah (10469) at 20:31 on 08/26/2016

Samples Chilled Details

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

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	1.9	DT	Wet	Y	Bagged	N
2	DT146	1.8	DT	Wet	Y	Bagged	N

Container Quantity Discrepancy Details

Sample ID on COC	Container Qty. Received	Container Qty. on COC	Comments
TW-06	8	9	Different COC. LF 8/30/16
TW-05	9	8	

Explanation of Symbols and Abbreviations

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

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

Laboratory Data Qualifiers:

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

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

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: September 12, 2016

Project: NRG PRGS

Submittal Date: 08/26/2016
Group Number: 1700264
PO Number: NRG PRGS
Release Number: 0402919
State of Sample Origin: VA

Client Sample Description

MW-25 Grab Groundwater
MW-51 Grab Groundwater

Lancaster Labs

(LL) #

8551175

8551176

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

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

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

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW-25 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551175
LL Group # 1700264
Account # 08390

Project Name: NRG PRGS

Collected: 08/24/2016 13:45 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/12/2016 15:20

1350 Blair Dr

Odenton MD 21113

PR025

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	4,600	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	09/01/2016 14:31	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: MW-51 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551176
LL Group # 1700264
Account # 08390

Project Name: NRG PRGS

Collected: 08/24/2016 13:50 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/12/2016 15:20

1350 Blair Dr

Odenton MD 21113

PR051

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	350	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	09/01/2016 15:30	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/12/2016 15:20

Group Number: 1700264

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 162420008A	Sample number(s): 8551175-8551176	
DRO C10-C28	N.D.	45

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162420008A	Sample number(s): 8551175-8551176								
DRO C10-C28	2680	2005.13	2670	2170.89	75	81	69-115	8	20

Surrogate Quality Control

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

Analysis Name: DRO micro-ext 8015B
Batch number: 162420008A

	Orthoterphenyl
8551175	95
8551176	111
Blank	100
LCS	100
LCSD	101
Limits:	42-160

*- Outside of specification

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

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

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



**Lancaster Laboratories
Environmental**

Environmental Analysis Request/Chain of Custody

Acct. # 8390 Group # 1700264 Sample # 8551175

[illegible]

Client: Groundwater & Env**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>08/26/2016 18:30</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

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

VOA Vial IDs (Headspace \geq 6mm): TW-3, TW-05, TW-06

Unpacked by Cory Jeremiah (10469) at 20:31 on 08/26/2016

Samples Chilled Details

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

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	1.9	DT	Wet	Y	Bagged	N
2	DT146	1.8	DT	Wet	Y	Bagged	N

Container Quantity Discrepancy Details

Sample ID on COC	Container Qty. Received	Container Qty. on COC	Comments
TW-06	8	9	
TW-05	9	8	

Explanation of Symbols and Abbreviations

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

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

Laboratory Data Qualifiers:

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

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

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: September 19, 2016

Project: NRG PRGS

Submittal Date: 08/26/2016

Group Number: 1700263

PO Number: NRG PRGS

Release Number: 0402919

State of Sample Origin: VA

Client Sample DescriptionRW-119S Grab Groundwater
RW-123S Grab Groundwater
RW-05S Grab Groundwater
RW-116S Grab Groundwater
RW-10S Grab Groundwater
RW-72S Grab Groundwater
RW-28S Grab Groundwater
RW-118S Grab Groundwater
RW-106 Grab Groundwater
RW-14 Grab Groundwater
TW-06 Grab Groundwater
TW-05 Grab Groundwater

Lancaster Labs

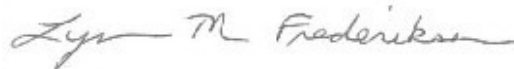
(LL) #8551163
8551164
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8551174

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

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

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

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: RW-119S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551163
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 09:40 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR119

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

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 19:10	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: RW-123S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551164
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 09:50 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR123

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	1,200,000	45	100

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	09/01/2016 18:20	Christine E Dolman	100
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: RW-05S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551165
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 10:05 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR05S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	66,000	45	5

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	09/01/2016 18:43	Christine E Dolman	5
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: RW-116S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551166
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 10:15 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR116

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	6,200	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 19:58	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: RW-10S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551167
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 11:55 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR10S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	25,000	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	3.60	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	824	30.0	100
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	0.076 J	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	25.5	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	5.1	0.20	20

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 16:01	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 20:21	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:38	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131B	09/03/2016 07:19	Drew M Gerhart	100
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:40	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:34	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 08:08	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	20

Sample Description: RW-72S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551168
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:00 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR72S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	15	3.0	1
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	5,300	45	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method hold time. Results from the re-extraction are within limits. The hold time had expired prior to the re-extraction; therefore, all results are reported from the original extract. Similar results were obtained in both extract.					
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	24.5	0.0180	10
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	982	60.0	200
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	N.D.	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	78.9	2.0	200

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 16:20	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 20:45	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/09/2016 12:01	Joanne M Gates	10

Sample Description: RW-72S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551168
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:00 by JP

GES, Inc.

Suite A

Submitted: 08/26/2016 18:30

1350 Blair Dr

Reported: 09/19/2016 10:51

Odenton MD 21113

PR72S

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131B	08/31/2016 19:42	Drew M Gerhart	200
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:41	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:36	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009202A	09/01/2016 02:33	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	200

Sample Description: RW-28S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551169
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 10:55 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR28S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	2,300	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 21:08	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: RW-118S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551170
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:30 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR118

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	750	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 21:32	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1

Sample Description: RW-106 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551171
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:15 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR106

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	1,800	45	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method hold time. Results from the re-extraction are within limits. The hold time had expired prior to the re-extraction; therefore, all results are reported from the original extract. Similar results were obtained in both extract.					
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	1.42	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	1,270	60.0	200
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	N.D.	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	3.3	0.20	20

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 16:38	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 21:56	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:45	Suzanne M Will	1

Sample Description: RW-106 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551171
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:15 by JP

GES, Inc.

Suite A

Submitted: 08/26/2016 18:30

1350 Blair Dr

Reported: 09/19/2016 10:51

Odenton MD 21113

PR106

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131B	08/31/2016 20:26	Drew M Gerhart	200
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:43	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:37	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204B	09/01/2016 06:48	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	20

Sample Description: RW-14 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551172
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:40 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PR014

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	15,000	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	0.485	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	42.5	1.5	5
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	1.8	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	10.9	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	0.12	0.010	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 16:56	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420008A	08/31/2016 22:20	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420008A	08/31/2016 07:00	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:48	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131B	08/31/2016 20:41	Drew M Gerhart	5
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:45	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:41	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 07:53	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	1

Sample Description: TW-06 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551173
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:00 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PRT06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals					
07058	Manganese	SW-846 6010B 7439-96-5	mg/l 6.32	mg/l 0.0018	1
Wet Chemistry					
00228	Sulfate	EPA 300.0 14808-79-8	mg/l 931	mg/l 30.0	100
00220	Nitrate Nitrogen	EPA 353.2 14797-55-8	mg/l N.D.	mg/l 0.040	1
00219	Nitrite Nitrogen	14797-65-0	0.017 J	0.015	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997 n.a.	mg/l as CaCO3 36.0	mg/l as CaCO3 1.7	1
08344	Ferrous Iron	SM 3500-Fe B 1997 n.a.	mg/l 144	mg/l 2.0	200

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07058	Manganese	SW-846 6010B	1	162521848003	09/09/2016 16:25	Cindy M Gehman	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162521848003	09/09/2016 06:55	Lisa J Cooke	1
00228	Sulfate	EPA 300.0	1	16244667131B	09/03/2016 07:33	Drew M Gerhart	100
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:47	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:39	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 06:31	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	200

Sample Description: TW-05 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551174
LL Group # 1700263
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 11:00 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/19/2016 10:51

1350 Blair Dr

Odenton MD 21113

PRT05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals					
07058	Manganese	SW-846 6010B 7439-96-5	mg/l 4.91	mg/l 0.0018	1
Wet Chemistry					
00228	Sulfate	EPA 300.0 14808-79-8	mg/l 515	mg/l 30.0	100
00220	Nitrate Nitrogen	EPA 353.2 14797-55-8	mg/l N.D.	mg/l 0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997 n.a.	mg/l as CaCO3 68.7	mg/l as CaCO3 1.7	1
08344	Ferrous Iron	SM 3500-Fe B 1997 n.a.	mg/l 54.5	mg/l 1.0	100

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07058	Manganese	SW-846 6010B	1	162521848003	09/09/2016 16:29	Cindy M Gehman	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162521848003	09/09/2016 06:55	Lisa J Cooke	1
00228	Sulfate	EPA 300.0	1	16244667131B	08/31/2016 21:40	Drew M Gerhart	100
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:48	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101A	08/27/2016 10:14	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 08:45	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	100

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/19/2016 10:51

Group Number: 1700263

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 162420022A	Sample number(s): 8551167-8551168,8551171-8551172	
Methane	N.D.	3.0
Batch number: 162420008A	Sample number(s): 8551163-8551172	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 162511848004	Sample number(s): 8551167-8551168,8551171-8551172	
Manganese	N.D.	0.0018
Batch number: 162521848003	Sample number(s): 8551173-8551174	
Manganese	N.D.	0.0018
Batch number: 16240105101A	Sample number(s): 8551174	
Nitrite Nitrogen	N.D.	0.015
Batch number: 16240105101B	Sample number(s): 8551167-8551168,8551171-8551173	
Nitrite Nitrogen	N.D.	0.015
Batch number: 16244667131B	Sample number(s): 8551167-8551168,8551171-8551174	
Sulfate	N.D.	0.30
Batch number: 16248106103B	Sample number(s): 8551167-8551168,8551171-8551174	
Nitrate Nitrogen	N.D.	0.040
Batch number: 16247144601A	Sample number(s): 8551167-8551168,8551171-8551174	
Ferrous Iron	N.D.	0.010
	mg/l as CaCO3	mg/l as CaCO3
Batch number: 16244009202A	Sample number(s): 8551168	
Total Alkalinity to pH 4.5	N.D.	1.7
Batch number: 16244009204A	Sample number(s): 8551167,8551172-8551174	
Total Alkalinity to pH 4.5	N.D.	1.7
Batch number: 16244009204B	Sample number(s): 8551171	
Total Alkalinity to pH 4.5	N.D.	1.7

LCS/LCSD

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

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/19/2016 10:51

Group Number: 1700263

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 162420022A Methane	Sample number(s): 8551167-8551168, 8551171-8551172				99	102	85-115	3	20
	59.8 ug/l	59.14 ug/l	59.8 ug/l	60.72 ug/l					
Batch number: 162420008A DRO C10-C28	Sample number(s): 8551163-8551172				75	81	69-115	8	20
	2680 mg/l	2005.13 mg/l	2670 mg/l	2170.89 mg/l					
Batch number: 162511848004 Manganese	Sample number(s): 8551167-8551168, 8551171-8551172				105		80-120		
	0.500	0.523							
Batch number: 162521848003 Manganese	Sample number(s): 8551173-8551174				104		80-120		
	0.500	0.522							
Batch number: 16240105101A Nitrite Nitrogen	Sample number(s): 8551174				100		90-110		
	0.700	0.700							
Batch number: 16240105101B Nitrite Nitrogen	Sample number(s): 8551167-8551168, 8551171-8551173				100		90-110		
	0.700	0.700							
Batch number: 16244667131B Sulfate	Sample number(s): 8551167-8551168, 8551171-8551174				99		90-110		
	7.50	7.42							
Batch number: 16248106103B Nitrate Nitrogen	Sample number(s): 8551167-8551168, 8551171-8551174				106		90-110		
	2.50	2.64							
Batch number: 16247144601A Ferrous Iron	Sample number(s): 8551167-8551168, 8551171-8551174				100		93-105		
	0.400	0.399							
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 16244009202A Total Alkalinity to pH 4.5	Sample number(s): 8551168				94		84-110		
	188	177.52							
Batch number: 16244009204A Total Alkalinity to pH 4.5	Sample number(s): 8551167, 8551172-8551174				94		84-110		
	188	176.12							
Batch number: 16244009204B Total Alkalinity to pH 4.5	Sample number(s): 8551171				94		84-110		
	188	176.12							

MS/MSD

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

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

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/19/2016 10:51

Group Number: 1700263

MS/MSD

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

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 162511848004 Manganese	Sample number(s): 8551167-8551168, 8551171-8551172 0.0490	0.500	0.578	0.500	0.570	UNSPK: P549016 106	104	75-125	1	20
Batch number: 162521848003 Manganese	Sample number(s): 8551173-8551174 N.D.	0.500	0.493	0.500	0.495	UNSPK: P553826 99	99	75-125	0	20
Batch number: 16240105101A Nitrite Nitrogen	Sample number(s): 8551174 N.D.	0.200	0.209			UNSPK: P550803 105		90-110		
Batch number: 16240105101B Nitrite Nitrogen	Sample number(s): 8551167-8551168, 8551171-8551173 N.D.	0.200	0.128			UNSPK: P551162 64*		90-110		
Batch number: 16244667131B Sulfate	Sample number(s): 8551167-8551168, 8551171-8551174 42.53	50	95.63			UNSPK: 8551172 106		90-110		
Batch number: 16248106103B Nitrate Nitrogen	Sample number(s): 8551167-8551168, 8551171-8551174 0.115	1.00	1.22			UNSPK: P551158 111*		90-110		
Batch number: 16247144601A Ferrous Iron	Sample number(s): 8551167-8551168, 8551171-8551174 4.58	8.00	12.33	8.00	12.45	UNSPK: P565427 97	98	93-105	1	6
Batch number: 16244009202A Total Alkalinity to pH 4.5	Sample number(s): 8551168 99.28	188	263			UNSPK: P549683 87		84-110		
Batch number: 16244009204A Total Alkalinity to pH 4.5	Sample number(s): 8551167, 8551172-8551174 36.04	188	87.9			UNSPK: 8551173 28*		84-110		
Batch number: 16244009204B Total Alkalinity to pH 4.5	Sample number(s): 8551171 36.04	188	87.9			UNSPK: 8551173 28*		84-110		

Laboratory Duplicate

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 162511848004 Manganese	Sample number(s): 8551167-8551168, 8551171-8551172 0.0490	0.0541	10	20
Batch number: 162521848003 Manganese	Sample number(s): 8551173-8551174 N.D.	N.D.	0 (1)	20

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/19/2016 10:51

Group Number: 1700263

Laboratory Duplicate (continued)

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 16240105101A Nitrite Nitrogen	Sample number(s): 8551174 BKG: P550803 N.D.	N.D.	0 (1)	20
Batch number: 16240105101B Nitrite Nitrogen	Sample number(s): 8551167-8551168,8551171-8551173 BKG: P551162 N.D.	N.D.	0 (1)	20
Batch number: 16244667131B Sulfate	Sample number(s): 8551167-8551168,8551171-8551174 BKG: 8551172 42.53	42.58	0	15
Batch number: 16248106103B Nitrate Nitrogen	Sample number(s): 8551167-8551168,8551171-8551174 BKG: P551158 0.115	0.106	9* (1)	2
	mg/l	mg/l		
Batch number: 16247144601A Ferrous Iron	Sample number(s): 8551167-8551168,8551171-8551174 BKG: P565427 4.58	4.80	5 (1)	5
	mg/l as CaCO3	mg/l as CaCO3		
Batch number: 16244009202A Total Alkalinity to pH 4.5	Sample number(s): 8551168 BKG: P549683 99.28	98.48	1	5
Batch number: 16244009204A Total Alkalinity to pH 4.5	Sample number(s): 8551167,8551172-8551174 BKG: 8551173 36.04	35.01	3	5
Batch number: 16244009204B Total Alkalinity to pH 4.5	Sample number(s): 8551171 BKG: 8551171 N.D.	N.D.	0 (1)	5

Surrogate Quality Control

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

Analysis Name: DRO micro-ext 8015B
Batch number: 162420008A

Orthoterphenyl	
8551163	100
8551164	1893*
8551165	139
8551166	108
8551167	87
8551168	40*
8551169	54
8551170	96
8551171	35*
8551172	124
Blank	100
LCS	100
LCSD	101

*- Outside of specification

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

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

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

Quality Control SummaryClient Name: GES, Inc.
Reported: 09/19/2016 10:51

Group Number: 1700263

Surrogate Quality Control

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

Limits: 42-160

Analysis Name: Methane
Batch number: 162420022A

Propene

8551167	98
8551168	98
8551171	97
8551172	98
Blank	98
LCS	94
LCSD	100

Limits: 44-123

*- Outside of specification

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

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

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

Environmental Analysis Request/Chain of Custody



Lancaster Laboratories
Environmental

Acct. # 8390 Group # 1700263 Sample # 8551163-74

Client: Groundwater & Env. Services, Inc.				Matrix		Analyses Requested												For Lab Use Only	
Project Name/#: NRG PRGS		Site ID #: NRG PRGS		<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface		Preservation Codes												SF #: _____	
Project Manager: Ashley Bell		P.O. #: 0402919		<input type="checkbox"/> Potable <input type="checkbox"/> NPDES														SCR #: _____	
Sampler: _____		PWSID #: _____		<input type="checkbox"/> Water <input type="checkbox"/> Other: _____															
Phone #: 800-220-3606 x 3704		Quote #: 212032A																	
State where sample(s) were collected: 1400 North Royal St., Alexandria, VA																			
Sample Identification		Date	Time	Grab	Composite	Soil	Water	Other	Total # of Containers	TPH-DRO C10-C28 (SW-846 8015B)	BTEX: Naphthalene (SW-846 8260B)	Alkalinity (SM 2320B)	Nitrate NO3-1 & Nitrite NO2- (EPA 353.2)	Manganese Mn2+ (EPA 6010B)	Ferrous Iron Fe2+ (SM 3500-Fe B modified-1997)	Sulfate SO42- (EPA 300.0)	Methane (RSKSOP-175 modified)	Remarks	
RW-114s		8/25/16	9:40	X			X		2	X									
RW-123s			9:50						2	X									
RW-05s			10:05						2	X									
RW-116s			10:15						2	X									
RW-10s			11:55						11	X		X	X	X	X	X	X		
RW-72s			13:00						11	X		X	X	X	X	X	X		
RW-28s			10:55						2	X									
RW-118s			13:30						2	X									
MW-106			14:15						11	X		X	X	X	X	X	X		
RW-14			14:40						12	X		X	X	X	X	X	X		
TW-06			13:00						9 th	X		X	X	X	X	X	X		
TW-05			11:00						8 th	X		X	X	X	X	X	X		
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Relinquished by: _____		Date		Time		Received by: _____		Date		Time					
(Rush TAT is subject to laboratory approval and surcharges.)				_____		8/25/16		17:50		Denise Wooding		8-26-16		0800					
Date results are needed: _____				Relinquished by: _____		Date		Time		Received by: _____		Date		Time					
Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>				_____		8/26/16		1331		_____		8-26-16		1331					
E-mail Address: <u>mdlabs@gesonline.com & ges@equisonline.com</u>				Relinquished by: _____		Date		Time		Received by: _____		Date		Time					
Phone: _____				_____		8-26-16		1830		_____		_____		_____					
Data Package Options (please check if required)				Relinquished by: _____		Date		Time		Received by: _____		Date		Time					
Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>				_____		_____		_____		_____		_____		_____					
Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>				_____		_____		_____		_____		_____		_____					
Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>				_____		_____		_____		_____		_____		_____					
NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B				Relinquished by Commercial Carrier: _____		Date		Time		Received by: _____		Date		Time					
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: <u>GES EQEDD</u>				_____		_____		_____		_____		_____		_____					
EQEDD Name: <u>NRG PRGS.Lab report #.25800.EQEDD.zip</u>				UPS _____ FedEx _____ Other _____		_____		_____		_____		_____		_____					
										Temperature upon receipt <u>18.14</u> °C									

Client: Groundwater & Env**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>08/26/2016 18:30</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>1</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

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

VOA Vial IDs (Headspace \geq 6mm): TW-3, TW-05, TW-06

Unpacked by Cory Jeremiah (10469) at 20:31 on 08/26/2016

Samples Chilled Details

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

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	1.9	DT	Wet	Y	Bagged	N
2	DT146	1.8	DT	Wet	Y	Bagged	N

Container Quantity Discrepancy Details

Sample ID on COC	Container Qty. Received	Container Qty. on COC	Comments
TW-06	8	9	
TW-05	9	8	

Explanation of Symbols and Abbreviations

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

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

Laboratory Data Qualifiers:

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

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

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

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

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

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

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

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

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: September 16, 2016

Project: NRG PRGS

Submittal Date: 08/26/2016

Group Number: 1700262

PO Number: NRG PRGS

Release Number: 0402919

State of Sample Origin: VA

Client Sample DescriptionMW-121 Grab Groundwater
MW-122 Grab Groundwater
MW-01S Grab Groundwater
MW-51S Grab Groundwater
MW-25S Grab Groundwater
MW-72 Grab Groundwater
MW-27 Grab Groundwater
RW-05 Grab Groundwater
RW-31 Grab Groundwater
TW-03 Grab Groundwater

Lancaster Labs

(LL) #8551153
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8551162

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

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

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

Respectfully Submitted,



Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: MW-121 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551153
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:00 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PR121

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	100	3.0	1
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	2,400	45	1
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	12.6	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	186	6.0	20
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	331	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	14.5	0.50	50

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 13:34	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 20:18	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:10	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131A	09/03/2016 06:49	Drew M Gerhart	20
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103A	09/04/2016 21:20	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101A	08/27/2016 10:16	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 09:15	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	50

Sample Description: MW-122 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551154
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:15 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PR122

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	280	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	1,900	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	4.12	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	182	15.0	50
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	272	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	9.1	0.50	50

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 13:53	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 20:42	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:13	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131A	08/31/2016 17:58	Drew M Gerhart	50
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103A	09/04/2016 21:22	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101A	08/27/2016 10:17	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 08:58	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	50

Sample Description: MW-01S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551155
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:30 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PR01S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous	RSKSOP-175 modified		ug/l	ug/l	
07105	Methane	74-82-8	1,200	15	5
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858	DRO C10-C28	n.a.	140,000	45	20
Metals	SW-846 6010B		mg/l	mg/l	
07058	Manganese	7439-96-5	10.4	0.0018	1
Wet Chemistry	EPA 300.0		mg/l	mg/l	
00228	Sulfate	14808-79-8	257	15.0	50
	EPA 353.2		mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
	SM 2320 B-1997		mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	226	1.7	1
	SM 3500-Fe B 1997		mg/l	mg/l	
08344	Ferrous Iron	n.a.	15.1	1.0	100

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/31/2016 12:56	Johanna C Kennedy	5
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/02/2016 00:14	Christine E Dolman	20
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:16	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131A	09/03/2016 07:04	Drew M Gerhart	50
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103A	09/04/2016 21:24	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:19	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 07:32	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	100

Sample Description: MW-51S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551156
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:45 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PR51S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous					
07105	Methane	RSKSOP-175 modified 74-82-8	ug/l 1,700	ug/l 30	10
GC Petroleum Hydrocarbons					
12858	DRO C10-C28	SW-846 8015B n.a.	15,000	45	1
The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method hold time. Results from the re-extraction are within limits. The hold time had expired prior to the re-extraction; therefore, all results are reported from the original extract. Similar results were obtained in both extracts.					
Metals					
07058	Manganese	SW-846 6010B 7439-96-5	mg/l 10.3	mg/l 0.0018	1
Wet Chemistry					
00228	Sulfate	EPA 300.0 14808-79-8	mg/l 895	mg/l 60.0	200
00220	Nitrate Nitrogen	EPA 353.2 14797-55-8	mg/l N.D.	mg/l 0.040	1
00219	Nitrite Nitrogen	14797-65-0	0.11	0.015	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997 n.a.	mg/l as CaCO3 354	mg/l as CaCO3 1.7	1
08344	Ferrous Iron	SM 3500-Fe B 1997 n.a.	mg/l 22.0	mg/l 1.0	100

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/31/2016 13:15	Johanna C Kennedy	10
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 21:05	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:20	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1

Sample Description: MW-51S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551156
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 13:45 by JP

GES, Inc.

Suite A

Submitted: 08/26/2016 18:30

1350 Blair Dr

Reported: 09/16/2016 17:26

Odenton MD 21113

PR51S

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
00228	Sulfate	EPA 300.0	1	16244667131A	08/31/2016 18:28	Drew M Gerhart	200
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103A	09/04/2016 21:26	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:21	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 07:07	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	100

Sample Description: MW-25S Grab Groundwater
NRG - PRGS

LL Sample # WW 8551157
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:00 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PR25S

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	24,000	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 21:29	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1

Sample Description: MW-72 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551158
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:15 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PR072

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	330	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	3.60	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	351	15.0	50
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	0.12	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	25.1	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	0.085	0.010	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 15:06	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 21:52	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:29	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131A	08/31/2016 18:42	Drew M Gerhart	50
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:27	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:22	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 06:59	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	1

Sample Description: MW-27 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551159
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:30 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PR027

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous		RSKSOP-175 modified	ug/l	ug/l	
07105	Methane	74-82-8	N.D.	3.0	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	3,100	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07058	Manganese	7439-96-5	12.4	0.0018	1
Wet Chemistry		EPA 300.0	mg/l	mg/l	
00228	Sulfate	14808-79-8	604	15.0	50
		EPA 353.2	mg/l	mg/l	
00220	Nitrate Nitrogen	14797-55-8	N.D.	0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
		SM 2320 B-1997	mg/l as CaCO3	mg/l as CaCO3	
12150	Total Alkalinity to pH 4.5	n.a.	16.3	1.7	1
		SM 3500-Fe B 1997	mg/l	mg/l	
08344	Ferrous Iron	n.a.	1.3	0.050	5

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 15:24	Johanna C Kennedy	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 22:16	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:32	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131B	08/31/2016 18:57	Drew M Gerhart	50
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:33	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:24	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009202A	09/01/2016 02:21	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	5

Sample Description: RW-05 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551160
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:45 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PRR05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	16,000	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 22:40	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1

Sample Description: RW-31 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551161
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 15:00 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PRR31

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	830	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162420007A	09/01/2016 23:03	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162420007A	08/30/2016 07:55	Maria Davenport	1

Sample Description: TW-03 Grab Groundwater
NRG - PRGS

LL Sample # WW 8551162
LL Group # 1700262
Account # 08390

Project Name: NRG PRGS

Collected: 08/25/2016 14:45 by JP

GES, Inc.

Submitted: 08/26/2016 18:30

Suite A

Reported: 09/16/2016 17:26

1350 Blair Dr

Odenton MD 21113

PRT03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Miscellaneous					
07105	Methane	RSKSOP-175 modified 74-82-8	ug/l 220	ug/l 3.0	1
Metals					
07058	Manganese	SW-846 6010B 7439-96-5	mg/l 6.86	mg/l 0.0018	1
Wet Chemistry					
00228	Sulfate	EPA 300.0 14808-79-8	mg/l 276	mg/l 15.0	50
00220	Nitrate Nitrogen	EPA 353.2 14797-55-8	mg/l N.D.	mg/l 0.040	1
00219	Nitrite Nitrogen	14797-65-0	N.D.	0.015	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997 n.a.	mg/l as CaCO3 16.7	mg/l as CaCO3 1.7	1
08344	Ferrous Iron	SM 3500-Fe B 1997 n.a.	mg/l 40.7	mg/l 1.0	100

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07105	Methane	RSKSOP-175 modified	1	162420022A	08/29/2016 15:43	Johanna C Kennedy	1
07058	Manganese	SW-846 6010B	1	162511848004	09/08/2016 17:35	Suzanne M Will	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162511848004	09/08/2016 06:40	James L Mertz	1
00228	Sulfate	EPA 300.0	1	16244667131B	08/31/2016 19:12	Drew M Gerhart	50
00220	Nitrate Nitrogen	EPA 353.2	1	16248106103B	09/04/2016 21:38	Joseph E McKenzie	1
00219	Nitrite Nitrogen	EPA 353.2	1	16240105101B	08/27/2016 10:26	Brianna A White	1
12150	Total Alkalinity to pH 4.5	SM 2320 B-1997	1	16244009204A	09/01/2016 08:51	Brandon P Costik	1
08344	Ferrous Iron	SM 3500-Fe B 1997	1	16247144601A	09/03/2016 05:20	Daniel S Smith	100

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 17:26

Group Number: 1700262

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: 162420022A	Sample number(s): 8551153-8551156,8551158-8551159,8551162	
Methane	N.D.	3.0
Batch number: 162420007A	Sample number(s): 8551153-8551161	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 162511848004	Sample number(s): 8551153-8551156,8551158-8551159,8551162	
Manganese	N.D.	0.0018
Batch number: 16240105101A	Sample number(s): 8551153-8551154	
Nitrite Nitrogen	N.D.	0.015
Batch number: 16240105101B	Sample number(s): 8551155-8551156,8551158-8551159,8551162	
Nitrite Nitrogen	N.D.	0.015
Batch number: 16244667131A	Sample number(s): 8551153-8551156,8551158	
Sulfate	N.D.	0.30
Batch number: 16244667131B	Sample number(s): 8551159,8551162	
Sulfate	N.D.	0.30
Batch number: 16248106103A	Sample number(s): 8551153-8551156	
Nitrate Nitrogen	N.D.	0.040
Batch number: 16248106103B	Sample number(s): 8551158-8551159,8551162	
Nitrate Nitrogen	N.D.	0.040
Batch number: 16247144601A	Sample number(s): 8551153-8551156,8551158-8551159,8551162	
Ferrous Iron	N.D.	0.010
	mg/l as CaCO3	mg/l as CaCO3
Batch number: 16244009202A	Sample number(s): 8551159	
Total Alkalinity to pH 4.5	N.D.	1.7
Batch number: 16244009204A	Sample number(s): 8551153-8551156,8551158,8551162	
Total Alkalinity to pH 4.5	N.D.	1.7

LCS/LCSD

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

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 17:26

Group Number: 1700262

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 162420022A Methane	Sample number(s): 8551153-8551156,8551158-8551159,8551162								
	59.8	59.14	59.8	60.72	99	102	85-115	3	20
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162420007A DRO C10-C28	Sample number(s): 8551153-8551161								
	2650	2137.25			81		69-115		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 162511848004 Manganese	Sample number(s): 8551153-8551156,8551158-8551159,8551162								
	0.500	0.523			105		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16240105101A Nitrite Nitrogen	Sample number(s): 8551153-8551154								
	0.700	0.700			100		90-110		
Batch number: 16240105101B Nitrite Nitrogen	Sample number(s): 8551155-8551156,8551158-8551159,8551162								
	0.700	0.700			100		90-110		
Batch number: 16244667131A Sulfate	Sample number(s): 8551153-8551156,8551158								
	7.50	7.42			99		90-110		
Batch number: 16244667131B Sulfate	Sample number(s): 8551159,8551162								
	7.50	7.42			99		90-110		
Batch number: 16248106103A Nitrate Nitrogen	Sample number(s): 8551153-8551156								
	2.50	2.64			106		90-110		
Batch number: 16248106103B Nitrate Nitrogen	Sample number(s): 8551158-8551159,8551162								
	2.50	2.64			106		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16247144601A Ferrous Iron	Sample number(s): 8551153-8551156,8551158-8551159,8551162								
	0.400	0.399			100		93-105		
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 16244009202A Total Alkalinity to pH 4.5	Sample number(s): 8551159								
	188	177.52			94		84-110		
Batch number: 16244009204A Total Alkalinity to pH 4.5	Sample number(s): 8551153-8551156,8551158,8551162								
	188	176.12			94		84-110		

MS/MSD

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

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

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 17:26

Group Number: 1700262

MS/MSD

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

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 162420007A DRO C10-C28	Sample number(s): 8551153-8551161 N.D.	2700	2203.95	2700	2186.92	82	81	69-115	1	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 162511848004 Manganese	Sample number(s): 8551153-8551156,8551158-8551159,8551162 0.0490	0.500	0.578	0.500	0.570	106	104	75-125	1	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16240105101A Nitrite Nitrogen	Sample number(s): 8551153-8551154 N.D.	0.200	0.209			105		90-110		
Batch number: 16240105101B Nitrite Nitrogen	Sample number(s): 8551155-8551156,8551158-8551159,8551162 N.D.	0.200	0.128			64*		90-110		
Batch number: 16244667131A Sulfate	Sample number(s): 8551153-8551156,8551158 8.16	50	58.05			100		90-110		
Batch number: 16244667131B Sulfate	Sample number(s): 8551159,8551162 42.53	50	95.63			106		90-110		
Batch number: 16248106103A Nitrate Nitrogen	Sample number(s): 8551153-8551156 0.707	1.00	1.75			104		90-110		
Batch number: 16248106103B Nitrate Nitrogen	Sample number(s): 8551158-8551159,8551162 0.115	1.00	1.22			111*		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16247144601A Ferrous Iron	Sample number(s): 8551153-8551156,8551158-8551159,8551162 4.58	8.00	12.33	8.00	12.45	97	98	93-105	1	6
	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3	mg/l as CaCO3					
Batch number: 16244009202A Total Alkalinity to pH 4.5	Sample number(s): 8551159 99.28	188	263			87		84-110		
Batch number: 16244009204A Total Alkalinity to pH 4.5	Sample number(s): 8551153-8551156,8551158,8551162 36.04	188	87.9			28*		84-110		

Laboratory Duplicate

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 162511848004 Manganese	Sample number(s): 8551153-8551156,8551158-8551159,8551162 0.0490	BKG: P549016 0.0541	10	20

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 17:26

Group Number: 1700262

Laboratory Duplicate

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
	mg/l	mg/l		
Batch number: 16240105101A Nitrite Nitrogen	Sample number(s): 8551153-8551154 BKG: P550803 N.D.	N.D.	0 (1)	20
Batch number: 16240105101B Nitrite Nitrogen	Sample number(s): 8551155-8551156,8551158-8551159,8551162 BKG: 8551162 N.D.	N.D.	0 (1)	20
Batch number: 16244667131A Sulfate	Sample number(s): 8551153-8551156,8551158 BKG: P558799 8.16	8.05	1 (1)	15
Batch number: 16244667131B Sulfate	Sample number(s): 8551159,8551162 BKG: P551172 42.53	42.58	0	15
Batch number: 16248106103A Nitrate Nitrogen	Sample number(s): 8551153-8551156 BKG: P534038 0.707	0.701	1	2
Batch number: 16248106103B Nitrate Nitrogen	Sample number(s): 8551158-8551159,8551162 BKG: 8551158 0.115	0.106	9* (1)	2
	mg/l	mg/l		
Batch number: 16247144601A Ferrous Iron	Sample number(s): 8551153-8551156,8551158-8551159,8551162 BKG: P565427 4.58	4.80	5 (1)	5
	mg/l as CaCO3	mg/l as CaCO3		
Batch number: 16244009202A Total Alkalinity to pH 4.5	Sample number(s): 8551159 BKG: P549683 99.28	98.48	1	5
Batch number: 16244009204A Total Alkalinity to pH 4.5	Sample number(s): 8551153-8551156,8551158,8551162 BKG: P551173 36.04	35.01	3	5

Surrogate Quality Control

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

Analysis Name: DRO micro-ext 8015B
Batch number: 162420007A

Orthoterphenyl	
8551153	101
8551154	98
8551155	463*
8551156	11*
8551157	137
8551158	105
8551159	68
8551160	77
8551161	57

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 17:26

Group Number: 1700262

Surrogate Quality Control

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

Orthoterphenyl	
Blank	111
LCS	102
MS	101
MSD	89
Limits:	42-160

Analysis Name: Methane
Batch number: 162420022A

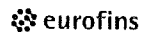
Propene	
8551153	91
8551154	91
8551155	92
8551156	101
8551158	97
8551159	98
8551162	96
Blank	98
LCS	94
LCSD	100
Limits:	44-123

*- Outside of specification

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

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

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



**Lancaster Laboratories
Environmental**

Environmental Analysis Request/Chain of Custody

Acct. # 8390 Group # 1700262 Sample # 8551153-62

Client: Groundwater & Env. Services, Inc.			Matrix			Analyses Requested												For Lab Use Only											
Project Name/ #: NRG PRGS		Site ID #: NRG PRGS		<input type="checkbox"/> Sediment <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Surface		Preservation Codes												SF #: _____											
Project Manager: Ashley Bell		P.O. #: 0402919		<input type="checkbox"/> Potable <input type="checkbox"/> NPDES <input type="checkbox"/> Surface														SCR #: _____											
Sampler: Jeff Plummer		PWSID #:		<input type="checkbox"/> Water <input type="checkbox"/> Other:														Preservation Codes											
Phone #: 800-220-3606 x 3704		Quote #: 212032A																H = HCl T = Thiosulfate											
State where sample(s) were collected: 1400 North Royal St., Alexandria, VA																		N = HNO ₃ B = NaOH											
																		S = H ₂ SO ₄ P = H ₃ PO ₄											
																		O = Other											
Sample Identification				Collection		Grab		Composite		Soil		Water		Other:		Total # of Containers		Remarks											
Date		Time																											
MW-121		8-25-16 1300		X																									
MW-122		1315																											
MW-015		1330																											
MW-515		1345																											
MW-255		1400																											
MW-72		1415																											
MW-27		1430																											
RW-05		1445																											
RW-31		1500		X																									
TW-03		8-25-16 1445		X																									
Turnaround Time Requested (TAT) (please check): Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>				Relinquished by: Jeff Plummer				Date: 8-26-16		Time: 0915		Received by: Denise Woodry				Date: 8-26-16		Time: 0915											
(Rush TAT is subject to laboratory approval and surcharges.)				Relinquished by: Denise Woodry				Date: 8-26-16		Time: 1331		Received by: Jeff Plummer				Date: 8-26-16		Time: 1331											
Date results are needed:				Relinquished by: Denise Woodry				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
Rush results requested by (please check): E-Mail <input checked="" type="checkbox"/> Phone <input type="checkbox"/>				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
E-mail Address: mdlabs@gesonline.com & ges@equisonline.com				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
Phone: [Blank]				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
Data Package Options (please check if required)				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
Type I (Validation/non-CLP) <input type="checkbox"/> MA MCP <input type="checkbox"/>				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
Type III (Reduced non-CLP) <input type="checkbox"/> CT RCP <input type="checkbox"/>				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
Type VI (Raw Data Only) <input type="checkbox"/> TX TRRP-13 <input type="checkbox"/>				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
NYSDEC Category <input type="checkbox"/> A or <input type="checkbox"/> B				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
EDD Required? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, format: GES.EQEDD				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
EQEDD Name: NRG PRGS.Lab report #.25800.EQEDD.zip				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
UPS _____ FedEx _____ Other _____				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											
Temperature upon receipt 18-1.9 °C				Relinquished by: [Signature]				Date: 8-26-16		Time: 1830		Received by: [Signature]				Date: 8-26-16		Time: 1830											

Client: Groundwater & Env**Delivery and Receipt Information**

Delivery Method: ELLE Courier Arrival Timestamp: 08/26/2016 18:30
Number of Packages: 2 Number of Projects: 1
State/Province of Origin: VA

Arrival Condition Summary

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

VOA Vial IDs (Headspace \geq 6mm): TW-3, TW-05, TW-06

Unpacked by Cory Jeremiah (10469) at 20:31 on 08/26/2016

Samples Chilled Details

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

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT146	1.9	DT	Wet	Y	Bagged	N
2	DT146	1.8	DT	Wet	Y	Bagged	N

Container Quantity Discrepancy Details

Sample ID on COC	Container Qty. Received	Container Qty. on COC	Comments
TW-06	8	9	Different COC. LF 8/30/16
TW-05	9	8	

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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

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



ATTACHMENT C

LABORATORY ANALYTICAL REPORTS AND CHAIN OF CUSTODY DOCUMENTATION – SYSTEM SAMPLING

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: August 23, 2016

Project: NRG PRGS

Submittal Date: 08/05/2016

Group Number: 1691740

PO Number: NRG PRGS

Release Number: 0402896

State of Sample Origin: VA

Client Sample DescriptionEffluent Grab Groundwater
Post OWS Grab Groundwater
P&T Influent Grab Groundwater
TPE Influent Grab Groundwater

Lancaster Labs

(LL) #

8511845

8511846

8511847

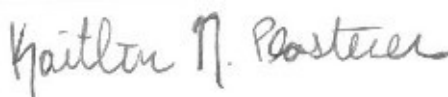
8511848

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

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

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

Respectfully Submitted,

Kaitlin N. Plasterer
Specialist

(717) 556-7323

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8511845
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:30 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NREFF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Volatiles	EPA 624	ug/l	ug/l	
10371	Acrolein	107-02-8	N.D.	5	1
10371	Acrylonitrile	107-13-1	N.D.	0.5	1
10371	Benzene	71-43-2	N.D.	0.5	1
10371	Bromodichloromethane	75-27-4	N.D.	0.5	1
10371	Bromoform	75-25-2	N.D.	0.5	1
10371	Bromomethane	74-83-9	N.D.	0.5	1
10371	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10371	Chlorobenzene	108-90-7	N.D.	0.5	1
10371	Chloroethane	75-00-3	N.D.	0.5	1
10371	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.5	1
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10371	Chloroform	67-66-3	N.D.	0.5	1
10371	Chloromethane	74-87-3	N.D.	0.5	1
10371	Dibromochloromethane	124-48-1	N.D.	0.5	1
10371	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10371	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10371	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10371	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10371	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10371	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10371	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10371	Ethylbenzene	100-41-4	N.D.	0.5	1
10371	Methylene Chloride	75-09-2	N.D.	0.5	1
10371	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10371	Tetrachloroethene	127-18-4	2	0.5	1
10371	Toluene	108-88-3	N.D.	0.5	1
10371	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10371	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10371	Trichloroethene	79-01-6	0.9 J	0.5	1
10371	Vinyl Chloride	75-01-4	N.D.	0.5	1

The holding time was not met for acrolein and acrylonitrile under Method 624 in the EPA Method Update Rule. The sample was submitted to the laboratory with insufficient time remaining in the holding time. The holding time was met for the remaining analytes.

GC/MS	Semivolatiles	EPA 625	ug/l	ug/l	
10334	Acenaphthene	83-32-9	0.4 J	0.3	1
10334	Acenaphthylene	208-96-8	N.D.	0.3	1
10334	Anthracene	120-12-7	N.D.	0.2	1
10334	Benidine	92-87-5	N.D.	20	1
10334	Benzo(a)anthracene	56-55-3	N.D.	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8511845
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:30 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NREFF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles EPA 625		ug/l	ug/l	
10334	bis(2-Chloroethyl) ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl) ether	39638-32-9	N.D.	0.3	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	N.D.	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	1	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	10	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	1,2-Diphenylhydrazine	122-66-7	N.D.	0.2	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	10	1	1
10334	Fluoranthene	206-44-0	0.3 J	0.3	1
10334	Fluorene	86-73-7	0.8 J	0.3	1
10334	Hexachlorobenzene	118-74-1	N.D.	1	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitrosodimethylamine	62-75-9	N.D.	2	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	1 J	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	1

The recovery for a target analyte(s) in the Laboratory Control

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8511845
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:30 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NREFF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted and the QC is again outside of the acceptance limits. The data is reported from the initial trial.					
Pesticides/PCBs		EPA 608	ug/l	ug/l	
07572	Aldrin	309-00-2	N.D.	0.0016	1
07572	Alpha BHC	319-84-6	N.D.	0.0029	1
07572	Beta BHC	319-85-7	N.D.	0.027	1
07572	Gamma BHC - Lindane	58-89-9	N.D.	0.022	1
07572	Chlordane	57-74-9	N.D.	0.065	1
07572	p,p-DDD	72-54-8	0.010 J	0.0043	1
07572	p,p-DDE	72-55-9	0.012 J	0.0041	1
07572	p,p-DDT	50-29-3	0.013 J	0.0042	1
07572	Delta BHC	319-86-8	0.010	0.0031	1
07572	Dieldrin	60-57-1	N.D.	0.0066	1
07572	Endosulfan I	959-98-8	0.0070 J	0.0041	1
07572	Endosulfan II	33213-65-9	N.D.	0.0089	1
07572	Endosulfan Sulfate	1031-07-8	N.D.	0.0041	1
07572	Endrin	72-20-8	0.010 J	0.0057	1
07572	Endrin Aldehyde	7421-93-4	N.D.	0.016	1
07572	Heptachlor	76-44-8	N.D.	0.0045	1
07572	Heptachlor Epoxide	1024-57-3	N.D.	0.0021	1
06030	PCB-1016	12674-11-2	N.D.	0.081	1
06030	PCB-1221	11104-28-2	N.D.	0.081	1
06030	PCB-1232	11141-16-5	N.D.	0.081	1
06030	PCB-1242	53469-21-9	N.D.	0.081	1
06030	PCB-1248	12672-29-6	N.D.	0.081	1
06030	PCB-1254	11097-69-1	N.D.	0.081	1
06030	PCB-1260	11096-82-5	N.D.	0.12	1
06030	Total PCBs	1336-36-3	N.D.	0.081	1
07572	Toxaphene	8001-35-2	N.D.	0.24	1

Reporting limits were raised due to interference from the sample matrix.

GC Petroleum		SW-846 8015B	ug/l	ug/l	
Hydrocarbons					
12858	DRO C10-C28	n.a.	4,400	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0097	1
07049	Cadmium	7440-43-9	0.00057 J	0.00049	1
07051	Chromium	7440-47-3	0.0018 J	0.0018	1
07053	Copper	7440-50-8	0.0277	0.0041	1
07055	Lead	7439-92-1	N.D.	0.0062	1
07060	Molybdenum	7439-98-7	N.D.	0.0017	1
07061	Nickel	7440-02-0	0.0270	0.0028	1
07066	Silver	7440-22-4	N.D.	0.0019	1
07072	Zinc	7440-66-6	0.0622	0.0054	1
		SW-846 7470A	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000050	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8511845
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:30 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NREFF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry					
		EPA 335.4	mg/l	mg/l	
00237	Total Cyanide (water)	57-12-5	N.D.	0.0050	1
		EPA 1664A	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	1.5 J	1.4	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8511845
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:30 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NREFF

CAT No.	Analysis Name	CAS Number	Result	EDL	Dilution Factor
Dioxins/Furans					
	EPA 1613B October 1994		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	N.D.	0.318	1
Labeled Compounds					
	%Rec	Windows			
13C12-2378-TCDD	84	25 - 164			

Dioxins/Furans Data Qualifiers:

<i>B</i>	<i>Detected in Method Blank</i>
<i>U</i>	<i>Undetected</i>
<i>J</i>	<i>Estimated concentration between Estimated Detection Limit and Minimum Reporting Level</i>
<i>E</i>	<i>Exceeds calibration range</i>
<i>C</i>	<i>Confirmed quantitation on secondary GC column</i>
<i>Q</i>	<i>EMPC - Estimated Maximum Possible Concentration</i>
<i>F</i>	<i>Interference is present</i>
<i>S</i>	<i>Saturation of detection signal</i>

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8511845
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:30 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NREFF

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10371	TTO VOCs 624	EPA 624	1	U162221AA	08/09/2016 19:04	Linda C Pape	1
10334	Method 625	EPA 625	1	16224WAF625	08/12/2016 12:29	Linda M Hartenstine	1
08108	625 Water Extraction	EPA 625	1	16224WAF625	08/11/2016 17:00	Ryan A Schafran	1
06030	PCBs w/ OC Pests 608	EPA 608	1	162230002A	08/11/2016 23:01	Kirby B Turner	1
07572	Pests (Charged with PCBs 608)	EPA 608	1	162230003A	08/20/2016 13:48	Jamie L Brillhart	1
11960	Method 608 PCB Water Ext.	EPA 608	1	162230002A	08/10/2016 22:35	Karen L Beyer	1
10241	Method 608 Water Extraction	EPA 608	1	162230003A	08/10/2016 22:35	Karen L Beyer	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162190012A	08/11/2016 01:38	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162190012A	08/08/2016 08:06	Maria Davenport	1
10915	Dioxins/Furans in Water - 1613	EPA 1613B October 1994	1	16221003	08/09/2016 19:46	Michael A Ziegler	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B October 1994	1	16221003	08/08/2016 14:55	Alex L Barton	1
07035	Arsenic	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07049	Cadmium	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07051	Chromium	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07053	Copper	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07055	Lead	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07060	Molybdenum	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07061	Nickel	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07066	Silver	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
07072	Zinc	SW-846 6010B	1	162211848001	08/09/2016 01:49	Elaine F Stoltzfus	1
00259	Mercury	SW-846 7470A	1	162225713005	08/11/2016 07:02	Damary Valentin	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162211848001	08/08/2016 17:05	JoElla L Rice	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	162225713005	08/10/2016 08:45	Ann Borg	1
00237	Total Cyanide (water)	EPA 335.4	1	16229102102A	08/17/2016 01:17	Joseph E McKenzie	1
00492	Cyanide Water Distillation	EPA 335.4	1	16229102102A	08/16/2016 19:00	Barbara A Washington	1
08079	HEM (oil & grease)	EPA 1664A	1	16230807901A	08/17/2016 08:03	Yolunder Y Bunch	1

EDL = Estimated Detection Limit

Sample Description: Post OWS Grab Groundwater
NRG PRGS

LL Sample # WW 8511846
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:45 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NROWS

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	18,000	45	1
	Wet Chemistry	EPA 1664A	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	10.9	1.4	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162190012A	08/11/2016 02:02	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162190012A	08/08/2016 08:06	Maria Davenport	1
08079	HEM (oil & grease)	EPA 1664A	1	16230807901A	08/17/2016 08:03	Yolunder Y Bunch	1

Sample Description: P&T Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8511847
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 11:00 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NRPIN

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	6,700	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162190012A	08/11/2016 02:25	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	162190012A	08/08/2016 08:06	Maria Davenport	1

Sample Description: TPE Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8511848
LL Group # 1691740
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 10:55 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/23/2016 15:44

1350 Blair Dr

Odenton MD 21113

NRTIN

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
	GC Petroleum Hydrocarbons	SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	83,000	45	10

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162190012A	08/11/2016 11:53	Amy Lehr	10
12059	Microextraction - DRO (waters)	SW-846 3511	1	162190012A	08/08/2016 08:06	Maria Davenport	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: U162221AA	Sample number(s): 8511845	
Acrolein	N.D.	5
Acrylonitrile	N.D.	0.5
Benzene	N.D.	0.5
Bromodichloromethane	N.D.	0.5
Bromoform	N.D.	0.5
Bromomethane	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
Chlorobenzene	N.D.	0.5
Chloroethane	N.D.	0.5
2-Chloroethyl Vinyl Ether	N.D.	0.5
Chloroform	N.D.	0.5
Chloromethane	N.D.	0.5
Dibromochloromethane	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
1,1-Dichloroethene	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Methylene Chloride	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Toluene	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Trichloroethene	N.D.	0.5
Vinyl Chloride	N.D.	0.5
Batch number: 16224WAF625	Sample number(s): 8511845	
Acenaphthene	N.D.	0.3
Acenaphthylene	N.D.	0.3
Anthracene	N.D.	0.2
Benzidine	N.D.	20
Benzo(a)anthracene	N.D.	0.2
Benzo(a)pyrene	N.D.	0.3
Benzo(b)fluoranthene	N.D.	0.3
Benzo(g,h,i)perylene	N.D.	0.2
Benzo(k)fluoranthene	N.D.	0.3
4-Bromophenyl-phenylether	N.D.	0.3
Butylbenzylphthalate	N.D.	0.8
Di-n-butylphthalate	N.D.	0.5

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
4-Chloro-3-methylphenol	N.D.	0.3
bis (2-Chloroethoxy) methane	N.D.	0.5
bis (2-Chloroethyl) ether	N.D.	0.4
bis (2-Chloroisopropyl) ether	N.D.	0.3
2-Chloronaphthalene	N.D.	0.2
2-Chlorophenol	N.D.	0.3
4-Chlorophenyl-phenylether	N.D.	0.3
Chrysene	N.D.	0.2
Dibenz (a,h) anthracene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.3
1,3-Dichlorobenzene	N.D.	0.3
1,4-Dichlorobenzene	N.D.	0.3
3,3'-Dichlorobenzidine	N.D.	0.8
2,4-Dichlorophenol	N.D.	0.3
Diethylphthalate	N.D.	0.3
2,4-Dimethylphenol	N.D.	0.3
Dimethylphthalate	N.D.	1
4,6-Dinitro-2-methylphenol	N.D.	4
2,4-Dinitrophenol	N.D.	10
2,4-Dinitrotoluene	N.D.	0.4
2,6-Dinitrotoluene	N.D.	0.3
1,2-Diphenylhydrazine	N.D.	0.2
bis (2-Ethylhexyl) phthalate	N.D.	1
Fluoranthene	N.D.	0.3
Fluorene	N.D.	0.3
Hexachlorobenzene	N.D.	1
Hexachlorobutadiene	N.D.	0.8
Hexachlorocyclopentadiene	N.D.	2
Hexachloroethane	N.D.	0.4
Indeno (1,2,3-cd) pyrene	N.D.	0.3
Isophorone	N.D.	0.3
Naphthalene	N.D.	0.2
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	0.4
4-Nitrophenol	N.D.	5
N-Nitrosodimethylamine	N.D.	2
N-Nitroso-di-n-propylamine	N.D.	0.4
N-Nitrosodiphenylamine	N.D.	0.3
Di-n-octylphthalate	N.D.	0.5
Pentachlorophenol	N.D.	3
Phenanthrene	N.D.	0.2
Phenol	N.D.	0.4
Pyrene	N.D.	0.2
1,2,4-Trichlorobenzene	N.D.	0.3
2,4,6-Trichlorophenol	N.D.	0.7
Batch number: 162230002A	Sample number(s): 8511845	
PCB-1016	N.D.	0.080
PCB-1221	N.D.	0.080
PCB-1232	N.D.	0.080
PCB-1242	N.D.	0.080
PCB-1248	N.D.	0.080

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
PCB-1254	N.D.	0.080
PCB-1260	N.D.	0.12
Total PCBs	N.D.	0.080
Batch number: 162230003A	Sample number(s): 8511845	
Aldrin	N.D.	0.0016
Alpha BHC	N.D.	0.0026
Beta BHC	N.D.	0.0039
Gamma BHC - Lindane	N.D.	0.0020
Chlordane	N.D.	0.064
p,p-DDD	N.D.	0.0042
p,p-DDE	N.D.	0.0040
p,p-DDT	N.D.	0.0042
Delta BHC	N.D.	0.0030
Dieldrin	N.D.	0.0041
Endosulfan I	N.D.	0.0041
Endosulfan II	N.D.	0.0088
Endosulfan Sulfate	N.D.	0.0040
Endrin	N.D.	0.0056
Endrin Aldehyde	N.D.	0.016
Heptachlor	N.D.	0.0021
Heptachlor Epoxide	N.D.	0.0021
Toxaphene	N.D.	0.24
Batch number: 162190012A	Sample number(s): 8511845-8511848	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 162211848001	Sample number(s): 8511845	
Arsenic	N.D.	0.0097
Cadmium	N.D.	0.00049
Chromium	N.D.	0.0018
Copper	N.D.	0.0041
Lead	N.D.	0.0062
Molybdenum	N.D.	0.0017
Nickel	N.D.	0.0028
Silver	N.D.	0.0019
Zinc	N.D.	0.0054
Batch number: 162225713005	Sample number(s): 8511845	
Mercury	N.D.	0.000050
Batch number: 16229102102A	Sample number(s): 8511845	
Total Cyanide (water)	N.D.	0.0050
Batch number: 16230807901A	Sample number(s): 8511845-8511846	
HEM (oil & grease)	N.D.	1.4
Analysis Name	Result	EDL
	pg/l	pg/l
Batch number: 16221003	Sample number(s): 8511845	
2378-TCDD	N.D.	0.472

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: U162221AA Sample number(s): 8511845									
Acrolein	150	140.91	150	135.92	94	91	60-120	4	30
Acrylonitrile	100	98.51	100	90.67	99	91	61-120	8	30
Benzene	20	21.83	20	20.47	109	102	80-120	6	30
Bromodichloromethane	20	21.63	20	20.6	108	103	77-120	5	30
Bromoform	20	20.96	20	19.32	105	97	66-125	8	30
Bromomethane	20	19.6	20	18.31	98	92	69-120	7	30
Carbon Tetrachloride	20	22.59	20	21.14	113	106	72-128	7	30
Chlorobenzene	20	22.15	20	20.93	111	105	80-120	6	30
Chloroethane	20	20.24	20	18.87	101	94	65-120	7	30
2-Chloroethyl Vinyl Ether	20	15.36	20	14.6	77	73	54-133	5	30
Chloroform	20	21.62	20	20.08	108	100	80-120	7	30
Chloromethane	20	17.87	20	17.48	89	87	64-120	2	30
Dibromochloromethane	20	21.21	20	19.45	106	97	78-120	9	30
1,1-Dichloroethane	20	22.1	20	20.47	110	102	75-123	8	30
1,2-Dichloroethane	20	21.47	20	20.11	107	101	74-120	7	30
1,1-Dichloroethene	20	21.3	20	20.5	107	103	69-122	4	30
trans-1,2-Dichloroethene	20	21.16	20	19.94	106	100	80-125	6	30
1,2-Dichloropropane	20	21.74	20	20.32	109	102	80-120	7	30
cis-1,3-Dichloropropene	20	20.76	20	19.66	104	98	80-120	5	30
trans-1,3-Dichloropropene	20	20.73	20	19.62	104	98	80-120	6	30
Ethylbenzene	20	23.54	20	21.96	118	110	80-120	7	30
Methylene Chloride	20	20.8	20	19.36	104	97	75-120	7	30
1,1,2,2-Tetrachloroethane	20	21.05	20	19.48	105	97	80-120	8	30
Tetrachloroethene	20	21.52	20	20.68	108	103	77-122	4	30
Toluene	20	22.54	20	20.9	113	105	80-120	8	30
1,1,1-Trichloroethane	20	22.29	20	20.88	111	104	72-120	7	30
1,1,2-Trichloroethane	20	21.76	20	20.19	109	101	80-120	7	30
Trichloroethene	20	22.07	20	20.54	110	103	80-120	7	30
Vinyl Chloride	20	18.93	20	18.29	95	91	68-120	3	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16224WAF625 Sample number(s): 8511845									
Acenaphthene	12.5	11.37	12.5	11.24	91	90	71-118	1	30
Acenaphthylene	12.5	11.62	12.5	11.27	93	90	70-121	3	30
Anthracene	12.5	11.2	12.5	10.63	90	85	80-114	5	30
Benzidine	62.5	20.44	62.5	18.28	33	29	21-107	11	30
Benzo(a)anthracene	12.5	12	12.5	11.41	96	91	76-117	5	30
Benzo(a)pyrene	12.5	10.19	12.5	9.78	81	78	76-112	4	30
Benzo(b)fluoranthene	12.5	11.27	12.5	11.03	90	88	80-120	2	30
Benzo(g,h,i)perylene	12.5	9.67	12.5	9.54	77	76	76-120	1	30
Benzo(k)fluoranthene	12.5	11.27	12.5	10.8	90	86	75-121	4	30
4-Bromophenyl-phenylether	12.5	11.18	12.5	10.27	89	82	75-118	8	30
Butylbenzylphthalate	12.5	11.4	12.5	10.96	91	88	80-125	4	30
Di-n-butylphthalate	12.5	11.25	12.5	10.69	90	86	77-116	5	30
4-Chloro-3-methylphenol	12.5	10.84	12.5	11.07	87	89	72-116	2	30
bis(2-Chloroethoxy)methane	12.5	10.98	12.5	11.16	88	89	67-122	2	30

*- Outside of specification

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
bis(2-Chloroethyl) ether	12.5	10.94	12.5	10.74	88	86	74-111	2	30
bis(2-Chloroisopropyl) ether	12.5	11.05	12.5	11.08	88	89	74-116	0	30
2-Chloronaphthalene	12.5	10.4	12.5	10.28	83	82	41-144	1	30
2-Chlorophenol	12.5	10.88	12.5	10.78	87	86	68-117	1	30
4-Chlorophenyl-phenylether	12.5	11.02	12.5	10.87	88	87	76-115	1	30
Chrysene	12.5	11.79	12.5	11.66	94	93	81-118	1	30
Dibenz(a,h)anthracene	12.5	9.91	12.5	10.24	79	82	77-119	3	30
1,2-Dichlorobenzene	12.5	9.67	12.5	9.51	77	76	32-111	2	30
1,3-Dichlorobenzene	12.5	8.80	12.5	9.05	70	72	24-107	3	30
1,4-Dichlorobenzene	12.5	9.63	12.5	9.27	77	74	26-108	4	30
3,3'-Dichlorobenzidine	12.5	9.52	12.5	9.40	76	75	10-103	1	30
2,4-Dichlorophenol	12.5	10.24	12.5	10.87	82	87	79-114	6	30
Diethylphthalate	12.5	10.9	12.5	10.87	87	87	39-137	0	30
2,4-Dimethylphenol	12.5	8.30	12.5	7.46	66*	60*	72-110	11	30
Dimethylphthalate	12.5	10.91	12.5	10.58	87	85	33-136	3	30
4,6-Dinitro-2-methylphenol	12.5	9.23	12.5	9.51	74	76	74-120	3	30
2,4-Dinitrophenol	25	13.06	25	13.24	52	53	50-128	1	30
2,4-Dinitrotoluene	12.5	10.26	12.5	10.37	82*	83*	85-117	1	30
2,6-Dinitrotoluene	12.5	11.07	12.5	10.67	89	85	80-115	4	30
1,2-Diphenylhydrazine	12.5	12.37	12.5	11.39	99	91	73-119	8	30
bis(2-Ethylhexyl)phthalate	12.5	11.32	12.5	10.8	91	86	77-118	5	30
Fluoranthene	12.5	10.69	12.5	10.41	86	83	77-111	3	30
Fluorene	12.5	11.4	12.5	11.13	91	89	80-116	2	30
Hexachlorobenzene	12.5	11.1	12.5	10.15	89	81	75-116	9	30
Hexachlorobutadiene	12.5	8.58	12.5	8.39	69	67	11-113	2	30
Hexachlorocyclopentadiene	25	2.43	25	2.70	10*	11*	24-128	11	30
Hexachloroethane	12.5	8.67	12.5	8.95	69	72	11-105	3	30
Indeno(1,2,3-cd)pyrene	12.5	10.06	12.5	9.88	80	79	76-115	2	30
Isophorone	12.5	10.54	12.5	10.44	84	83	78-120	1	30
Naphthalene	12.5	10.93	12.5	10.64	87	85	52-115	3	30
Nitrobenzene	12.5	11.27	12.5	11.04	90	88	73-113	2	30
2-Nitrophenol	12.5	10.3	12.5	10.19	82*	82*	83-109	1	30
4-Nitrophenol	12.5	10.94	12.5	10.12	88*	81	10-83	8	30
N-Nitrosodimethylamine	12.5	7.11	12.5	7.11	57	57	28-81	0	30
N-Nitroso-di-n-propylamine	12.5	10.75	12.5	10.7	86	86	78-110	1	30
N-Nitrosodiphenylamine	12.5	11.9	12.5	11.39	95	91	77-116	4	30
Di-n-octylphthalate	12.5	10.35	12.5	10.3	83	82	79-125	1	30
Pentachlorophenol	12.5	8.34	12.5	7.51	67	60	57-116	10	30
Phenanthrene	12.5	11.18	12.5	10.82	89	87	78-112	3	30
Phenol	12.5	6.66	12.5	6.92	53	55	14-69	4	30
Pyrene	12.5	11.85	12.5	11.34	95	91	78-117	4	30
1,2,4-Trichlorobenzene	12.5	10.01	12.5	9.80	80	78	31-118	2	30
2,4,6-Trichlorophenol	12.5	11.19	12.5	10.69	90	86	83-120	5	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162230002A	Sample number(s): 8511845								
PCB-1016	5.05	3.94	5.05	4.48	78	89	60-117	13	30
PCB-1260	5.04	4.06	5.04	4.95	81	98	57-134	20	30
Batch number: 162230003A	Sample number(s): 8511845								

*- Outside of specification

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

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Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Aldrin	0.102	0.0580	0.102	0.0602	57	59	28-119	4	30
Alpha BHC	0.100	0.0605	0.100	0.0610	61	61	47-132	1	30
Beta BHC	0.102	0.0640	0.102	0.0651	63	64	56-125	2	30
Gamma BHC - Lindane	0.100	0.0669	0.100	0.0685	67	69	51-132	2	30
p,p-DDD	0.198	0.125	0.198	0.126	63	63	53-131	0	30
p,p-DDE	0.204	0.117	0.204	0.120	57	59	51-129	3	30
p,p-DDT	0.198	0.120	0.198	0.121	61	61	42-136	1	30
Delta BHC	0.102	0.0651	0.102	0.0663	64	65	57-131	2	30
Dieldrin	0.198	0.121	0.198	0.123	61	62	54-126	2	30
Endosulfan I	0.100	0.0632	0.100	0.0644	63	64	51-118	2	30
Endosulfan II	0.203	0.125	0.203	0.127	62	63	54-124	2	30
Endosulfan Sulfate	0.201	0.138	0.201	0.138	69	69	41-133	0	30
Endrin	0.200	0.120	0.200	0.123	60	62	35-143	2	30
Endrin Aldehyde	0.207	0.118	0.207	0.119	57	57	40-135	1	30
Heptachlor	0.100	0.0595	0.100	0.0625	60	63	38-111	5	30
Heptachlor Epoxide	0.102	0.0647	0.102	0.0657	63	64	56-132	1	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162190012A	Sample number(s): 8511845-8511848								
DRO C10-C28	2710	2070.24	2670	2163.49	76	81	69-115	4	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 162211848001	Sample number(s): 8511845								
Arsenic	0.150	0.150			100		80-120		
Cadmium	0.0500	0.0512			102		80-120		
Chromium	0.200	0.198			99		80-120		
Copper	0.250	0.252			101		80-120		
Lead	0.150	0.154			103		80-120		
Molybdenum	2.00	2.05			102		80-120		
Nickel	0.500	0.512			102		80-120		
Silver	0.0500	0.0515			103		80-120		
Zinc	0.500	0.500			100		80-120		
Batch number: 162225713005	Sample number(s): 8511845								
Mercury	0.00100	0.000953			95		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16229102102A	Sample number(s): 8511845								
Total Cyanide (water)	0.200	0.205			103		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16230807901A	Sample number(s): 8511845-8511846								
HEM (oil & grease)	40	37.4	40	35.5	94	89	78-114	5	11
Analysis Name	OPR Spike Added pg/l	OPR Conc pg/l	OPRD Spike Added pg/l	OPRD Conc pg/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 16221003	Sample number(s): 8511845								
2378-TCDD	200	189.31			95		67-158		

*- Outside of specification

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

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Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

MS/MSD

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

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 162211848001	Sample number(s): 8511845 UNSPK: P512363									
Arsenic	N.D.	0.150	0.155	0.150	0.163	103	109	75-125	5	20
Cadmium	N.D.	0.0500	0.0468	0.0500	0.0475	94	95	75-125	1	20
Chromium	N.D.	0.200	0.195	0.200	0.195	97	98	75-125	0	20
Copper	N.D.	0.250	0.254	0.250	0.257	102	103	75-125	1	20
Lead	N.D.	0.150	0.140	0.150	0.143	93	95	75-125	2	20
Molybdenum	0.00240	2.00	1.92	2.00	2.04	96	102	75-125	6	20
Nickel	0.00348	0.500	0.477	0.500	0.484	95	96	75-125	1	20
Silver	N.D.	0.0500	0.0495	0.0500	0.0520	99	104	75-125	5	20
Zinc	N.D.	0.500	0.496	0.500	0.504	99	101	75-125	2	20
Batch number: 162225713005	Sample number(s): 8511845 UNSPK: P511559									
Mercury	N.D.	0.00100	0.00101	0.00100	0.000920	101	92	80-120	10	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16229102102A	Sample number(s): 8511845 UNSPK: P512487									
Total Cyanide (water)	N.D.	0.200	0.196			98		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16230807901A	Sample number(s): 8511845-8511846 UNSPK: P511540									
HEM (oil & grease)	N.D.	41.7	30.42			73*		78-114		

Laboratory Duplicate

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 162211848001	Sample number(s): 8511845 BKG: P512363			
Arsenic	N.D.	N.D.	0 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	N.D.	N.D.	0 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Lead	N.D.	N.D.	0 (1)	20
Molybdenum	0.00240	N.D.	200* (1)	20
Nickel	0.00348	N.D.	200* (1)	20
Silver	N.D.	N.D.	0 (1)	20
Zinc	N.D.	N.D.	0 (1)	20
Batch number: 162225713005	Sample number(s): 8511845 BKG: P511559			
Mercury	N.D.	N.D.	0 (1)	20

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

Laboratory Duplicate (continued)

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 16229102102A	Sample number(s): 8511845 BKG: P512487			
Total Cyanide (water)	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

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

Analysis Name: TTO VOCs 624
Batch number: U162221AA

	1,2-Dichloroethane-d4	Fluorobenzene	4-Bromofluorobenzene
8511845	102	94	89
Blank	102	94	89
LCS	101	100	99
LCSD	98	101	99
Limits:	78-118	88-107	80-118

Analysis Name: Method 625
Batch number: 16224WAF625

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol
8511845	82	84	76	20	25	40
Blank	87	83	86	46	64	80
LCS	88	90	91	51	66	81
LCSD	86	88	88	52	69	81
Limits:	60-119	62-116	55-124	10-75	10-105	11-154

Analysis Name: PCBs w/ OC Pests 608
Batch number: 162230002A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8511845	55	64
Blank	84	68
LCS	87	28
LCSD	101	96
Limits:	33-137	10-148

Analysis Name: Pests (Charged with PCBs 608)
Batch number: 162230003A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8511845	102	76
Blank	74	60
LCS	53	35
LCSD	54	27*

*- Outside of specification

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

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

Quality Control SummaryClient Name: GES, Inc.
Reported: 08/23/2016 15:44

Group Number: 1691740

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

Limits: 29-129 32-149

Analysis Name: DRO micro-ext 8015B
Batch number: 162190012A

Orthoterphenyl	
8511845	123
8511846	145
8511847	120
8511848	281*
Blank	90
LCS	91
LCSD	79

Limits: 42-160

Analysis Name: Dioxins/Furans in Water - 1613
Batch number: 16221003

13C12-2378-TCDD	
8511845	84
Blank	76
OPR	86

Limits: 25-164

*- Outside of specification

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

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

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



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1691740 Sample # 8511845-48

Environmental Analysis Request/Chain of Custody

[illegible]

Client: GES**Delivery and Receipt Information**

Delivery Method: ELLE Courier Arrival Timestamp: 08/05/2016 16:45
Number of Packages: 3 Number of Projects: 2

Arrival Condition Summary

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

*Unpacked by Karen Diem (3060) at 19:12 on 08/05/2016***Samples Chilled Details**

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

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	0.8	DT	Wet	Y	Loose	N
2	DT131	1.2	DT	Wet	Y	Loose	N
3	DT131	1.0	DT	Wet	Y	Loose	N

Explanation of Symbols and Abbreviations

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

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

Laboratory Data Qualifiers:

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

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: August 12, 2016

Project: NRG PRGS

Submittal Date: 08/05/2016

Group Number: 1691721

PO Number: NRG PRGS

Release Number: 0402859

State of Sample Origin: VA

Client Sample Description

TPE Vapor Grab Air

Lancaster Labs

(LL) #

8511745

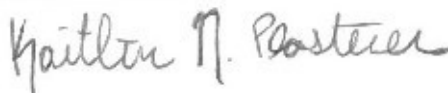
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Kaitlin N. Plasterer
Specialist

(717) 556-7323

Sample Description: TPE Vapor Grab Air
NRG PRGS - Alexandria, VA

LL Sample # AQ 8511745
LL Group # 1691721
Account # 08390

Project Name: NRG PRGS

Collected: 08/04/2016 11:15 by JP

GES, Inc.

Submitted: 08/05/2016 16:45

Suite A

Reported: 08/12/2016 15:50

1350 Blair Dr

Odenton MD 21113

CAT No.	Analysis Name	CAS Number	Result	Limit of Quantitation	Dilution Factor
Volatiles in Air		EPA 18 mod/EPA 25 mod	mg/m3	mg/m3	
07090	Benzene	71-43-2	< 3	3	1
07090	C1-C4 Hydrocarbons as propane	n.a.	21	18	1
07090	>C4-C10 Hydrocarbons hexane	n.a.	49	35	1
07090	Ethylbenzene	100-41-4	< 4	4	1
07090	Toluene	108-88-3	< 4	4	1
07090	Xylene (total)	1330-20-7	< 9	9	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/C1-C4/>C4-C10	EPA 18 mod/EPA 25 mod	1	M1622230AA	08/09/2016 13:42	Alexander D Sechrist	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 08/12/2016 15:50

Group Number: 1691721

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

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

Method Blank

Analysis Name	Result	LOQ
	mg/m3	mg/m3
Batch number: M1622230AA	Sample number(s): 8511745	
Benzene	< 3	3
C1-C4 Hydrocarbons as propane	< 18	18
>C4-C10 Hydrocarbons hexane	< 35	35
Ethylbenzene	< 4	4
Toluene	< 4	4
Xylene (total)	< 9	9

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/m3	mg/m3	mg/m3	mg/m3					
Batch number: M1622230AA	Sample number(s): 8511745								
Benzene	31.95	29.72	31.95	29.55	93	92	71-116	1	30
Ethylbenzene	43.42	41.28	43.42	41.21	95	95	59-144	0	30
Toluene	37.69	44.77	37.69	45.38	119	120	77-143	1	30
Xylene (total)	130.27	123.58	130.27	122.14	95	94	58-148	1	30

*- Outside of specification

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

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

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

Environmental Analysis Request/Chain of Custody



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1691721 Sample # 8511745

[illegible]

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>08/05/2016 16:45</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>1</u>

Arrival Condition Summary

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

Unpacked by Karen Diem (3060) at 18:42 on 08/05/2016

Explanation of Symbols and Abbreviations

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

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

Laboratory Data Qualifiers:

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

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

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

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

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: July 25, 2016

Project: NRG PRGS

Submittal Date: 07/13/2016
Group Number: 1682409
PO Number: NRG PRGS
Release Number: 0402859
State of Sample Origin: VA

Client Sample Description

TPE Vapor Grab Vapor

Lancaster Labs

(LL) #

8473331

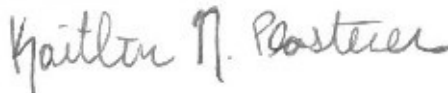
The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Kaitlin N. Plasterer
Specialist

(717) 556-7323

Sample Description: TPE Vapor Grab Vapor
NRG PRGS - Alexandria, VA

LL Sample # AQ 8473331
LL Group # 1682409
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 12:45 by JP

GES, Inc.

Suite A

Submitted: 07/13/2016 17:55

1350 Blair Dr

Reported: 07/25/2016 15:54

Odenton MD 21113

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

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/C1-C4/>C4-C10	EPA 18 mod/EPA 25 mod	1	M1619730AA	07/15/2016 18:51	Alexander D Sechrist	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/25/2016 15:54

Group Number: 1682409

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

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

Method Blank

Analysis Name	Result	LOQ
	mg/m3	mg/m3
Batch number: M1619730AA	Sample number(s): 8473331	
Benzene	< 3	3
C1-C4 Hydrocarbons as propane	< 18	18
>C4-C10 Hydrocarbons hexane	< 35	35
Ethylbenzene	< 4	4
Toluene	< 4	4
Xylene (total)	< 9	9

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/m3	mg/m3	mg/m3	mg/m3					
Batch number: M1619730AA	Sample number(s): 8473331								
Benzene	31.95	27.89	31.95	27.75	87	87	71-116	0	30
Ethylbenzene	43.42	39.49	43.42	39.06	91	90	59-144	1	30
Toluene	37.69	42.99	37.69	42.28	114	112	77-143	2	30
Xylene (total)	130.27	116.53	130.27	112.75	89	87	58-148	3	30

*- Outside of specification

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

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

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



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1682409 Sample # 8473331

Environmental Analysis Request/Chain of Custody

[illegible]

Client: Groundwater & Env. Services

NRG PRGS

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>07/13/2016 17:55</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

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

Unpacked by Cory Jeremiah (10469) at 18:31 on 07/13/2016

Samples Chilled Details: NRG PRGS

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

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT131	1.9	DT	Wet	Y	Bagged	N
2	DT131	1.3	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

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

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

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- B - Analyte detected in the blank
- C - Result confirmed by reanalysis
- E - Concentration exceeds the calibration range
- J (or G, I, X) - estimated value \geq the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
- P - Concentration difference between the primary and confirmation column $>40\%$. The lower result is reported.
- U - Analyte was not detected at the value indicated
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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: July 28, 2016

Project: NRG PRGS

Submittal Date: 07/13/2016
Group Number: 1682408
PO Number: NRG PRGS
Release Number: 0402896
State of Sample Origin: VA

Client Sample Description

Effluent Grab Groundwater
Post OWS Grab Groundwater
P&T Influent Grab Groundwater
TPE Influent Grab Groundwater

Lancaster Labs

(LL) #

8473327

8473328

8473329

8473330

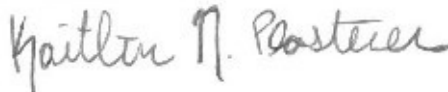
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Electronic Copy To GES, Inc.-MD
Electronic Copy To GES, Inc.-MD

Attn: Anne Ashley Bell
Attn: Data Distribution

Respectfully Submitted,



Kaitlin N. Plasterer
Specialist

(717) 556-7323

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8473327
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:00 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGEF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Volatiles	EPA 624	ug/l	ug/l	
10371	Acrolein	107-02-8	N.D.	5	1
10371	Acrylonitrile	107-13-1	N.D.	0.5	1
10371	Benzene	71-43-2	N.D.	0.5	1
10371	Bromodichloromethane	75-27-4	N.D.	0.5	1
10371	Bromoform	75-25-2	N.D.	0.5	1
10371	Bromomethane	74-83-9	N.D.	0.5	1
10371	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10371	Chlorobenzene	108-90-7	N.D.	0.5	1
10371	Chloroethane	75-00-3	N.D.	0.5	1
10371	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.5	1
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10371	Chloroform	67-66-3	N.D.	0.5	1
10371	Chloromethane	74-87-3	N.D.	0.5	1
10371	Dibromochloromethane	124-48-1	N.D.	0.5	1
10371	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10371	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10371	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10371	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10371	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10371	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10371	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10371	Ethylbenzene	100-41-4	N.D.	0.5	1
10371	Methylene Chloride	75-09-2	N.D.	0.5	1
10371	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10371	Tetrachloroethene	127-18-4	2	0.5	1
10371	Toluene	108-88-3	N.D.	0.5	1
10371	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10371	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10371	Trichloroethene	79-01-6	0.7 J	0.5	1
10371	Vinyl Chloride	75-01-4	N.D.	0.5	1
GC/MS	Semivolatiles	EPA 625	ug/l	ug/l	
10334	Acenaphthene	83-32-9	0.9 J	0.3	1
10334	Acenaphthylene	208-96-8	0.3 J	0.3	1
10334	Anthracene	120-12-7	0.7 J	0.2	1
10334	Benzidine	92-87-5	N.D.	19	1
10334	Benzo(a)anthracene	56-55-3	0.3 J	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1
10334	bis(2-Chloroethyl)ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl)ether	39638-32-9	N.D.	0.3	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8473327
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:00 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGEF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles EPA 625		ug/l	ug/l	
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	0.3 J	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	0.9	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	9	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	1,2-Diphenylhydrazine	122-66-7	N.D.	0.2	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	28	0.9	1
10334	Fluoranthene	206-44-0	0.6 J	0.3	1
10334	Fluorene	86-73-7	2 J	0.3	1
10334	Hexachlorobenzene	118-74-1	N.D.	0.9	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	Naphthalene	91-20-3	0.7 J	0.2	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitrosodimethylamine	62-75-9	N.D.	2	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	3 J	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	2 J	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8473327
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:00 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGEF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
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The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Pesticides/PCBs		EPA 608	ug/l		
07572	Aldrin	309-00-2	N.D.	0.0016	1
07572	Alpha BHC	319-84-6	N.D.	0.0026	1
07572	Beta BHC	319-85-7	N.D.	0.0040	1
07572	Gamma BHC - Lindane	58-89-9	0.0059 J	0.0020	1
07572	Chlordane	57-74-9	N.D.	0.066	1
07572	p,p-DDD	72-54-8	0.019	0.0043	1
07572	p,p-DDE	72-55-9	0.0082 J	0.0041	1
07572	p,p-DDT	50-29-3	0.0067 J	0.0043	1
07572	Delta BHC	319-86-8	N.D.	0.0031	1
07572	Dieldrin	60-57-1	N.D.	0.0042	1
07572	Endosulfan I	959-98-8	N.D.	0.0042	1
07572	Endosulfan II	33213-65-9	N.D.	0.0090	1
07572	Endosulfan Sulfate	1031-07-8	N.D.	0.0041	1
07572	Endrin	72-20-8	N.D.	0.0057	1
07572	Endrin Aldehyde	7421-93-4	N.D.	0.016	1
07572	Heptachlor	76-44-8	N.D.	0.0021	1
07572	Heptachlor Epoxide	1024-57-3	N.D.	0.0021	1
06030	PCB-1016	12674-11-2	N.D.	0.082	1
06030	PCB-1221	11104-28-2	N.D.	0.082	1
06030	PCB-1232	11141-16-5	N.D.	0.082	1
06030	PCB-1242	53469-21-9	N.D.	0.082	1
06030	PCB-1248	12672-29-6	N.D.	0.082	1
06030	PCB-1254	11097-69-1	N.D.	0.082	1
06030	PCB-1260	11096-82-5	N.D.	0.12	1
06030	Total PCBs	1336-36-3	N.D.	0.082	1
07572	Toxaphene	8001-35-2	N.D.	0.25	1

The recovery for the sample surrogate(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken:

The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.

Reporting limits were raised due to interference from the sample matrix.

GC Petroleum		SW-846 8015B	ug/l		
Hydrocarbons					
12858	DRO C10-C28	n.a.	17,000	45	1
The surrogate data is outside the QC limits due to unresolvable matrix problems evident in the sample chromatogram.					

Metals		SW-846 6010B	mg/l		
07035	Arsenic	7440-38-2	N.D.	0.0097	1
07049	Cadmium	7440-43-9	N.D.	0.00049	1
07051	Chromium	7440-47-3	0.0030 J	0.0018	1
07053	Copper	7440-50-8	0.159	0.0041	1
07055	Lead	7439-92-1	N.D.	0.0062	1
07060	Molybdenum	7439-98-7	N.D.	0.0017	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8473327
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:00 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGEF

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Metals					
		SW-846 6010B	mg/l	mg/l	
07061	Nickel	7440-02-0	0.0314	0.0028	1
07066	Silver	7440-22-4	N.D.	0.0019	1
07072	Zinc	7440-66-6	0.165	0.0054	1
		SW-846 7470A	mg/l	mg/l	
00259	Mercury	7439-97-6	0.000085 J	0.000050	1
Wet Chemistry					
		EPA 335.4	mg/l	mg/l	
00237	Total Cyanide (water)	57-12-5	N.D.	0.0050	1
		EPA 1664A	mg/l	mg/l	
08079	HEM (oil & grease)	n.a.	12.1	1.4	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8473327
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:00 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGEF

CAT No.	Analysis Name	CAS Number	Result	EDL	Dilution Factor
Dioxins/Furans					
	EPA 1613B October 1994		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	N.D.	0.260	1
Labeled Compounds					
	%Rec	Windows			
13C12-2378-TCDD	90	25 - 164			

Dioxins/Furans Data Qualifiers:

<i>B</i>	<i>Detected in Method Blank</i>
<i>U</i>	<i>Undetected</i>
<i>J</i>	<i>Estimated concentration between Estimated Detection Limit and Minimum Reporting Level</i>
<i>E</i>	<i>Exceeds calibration range</i>
<i>C</i>	<i>Confirmed quantitation on secondary GC column</i>
<i>Q</i>	<i>EMPC - Estimated Maximum Possible Concentration</i>
<i>F</i>	<i>Interference is present</i>
<i>S</i>	<i>Saturation of detection signal</i>

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8473327
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:00 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGEF

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10371	TTO VOCs 624	EPA 624	1	U161961AA	07/14/2016 13:35	Joshua S Hess	1
10334	Method 625	EPA 625	1	16198WAO625	07/21/2016 01:10	Catherine E Bachman	1
08108	625 Water Extraction	EPA 625	1	16198WAO625	07/18/2016 21:00	Nicholas W Shroyer	1
06030	PCBs w/ OC Pests 608	EPA 608	1	161970006A	07/17/2016 21:30	Kirby B Turner	1
07572	Pests (Charged with PCBs 608)	EPA 608	1	161970005A	07/21/2016 09:25	Lisa A Reinert	1
11960	Method 608 PCB Water Ext.	EPA 608	1	161970006A	07/15/2016 18:00	Ryan A Schafran	1
10241	Method 608 Water Extraction	EPA 608	1	161970005A	07/15/2016 18:00	Ryan A Schafran	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	161970015A	07/18/2016 12:18	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	161970015A	07/16/2016 07:40	Maria Davenport	1
10915	Dioxins/Furans in Water - 1613	EPA 1613B October 1994	1	16196003	07/15/2016 20:27	Michael A Ziegler	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B October 1994	1	16196003	07/14/2016 08:50	Brett M Weidman	1
07035	Arsenic	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07049	Cadmium	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07051	Chromium	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07053	Copper	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07055	Lead	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07060	Molybdenum	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07061	Nickel	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07066	Silver	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
07072	Zinc	SW-846 6010B	1	161961848001	07/15/2016 23:39	Matthew R Machtinger	1
00259	Mercury	SW-846 7470A	1	161965713005	07/15/2016 07:22	Damary Valentin	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	161961848001	07/14/2016 17:00	JoElla L Rice	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	161965713005	07/14/2016 18:30	JoElla L Rice	1
00237	Total Cyanide (water)	EPA 335.4	1	16201102101A	07/20/2016 00:29	Joseph E McKenzie	1
00492	Cyanide Water Distillation	EPA 335.4	1	16201102101A	07/19/2016 14:10	Barbara A Washington	1

EDL = Estimated Detection Limit

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8473327
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:00 by JP

GES, Inc.

Suite A

Submitted: 07/13/2016 17:55

1350 Blair Dr

Reported: 07/28/2016 09:19

Odenton MD 21113

NRGEF

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
08079	HEM (oil & grease)	EPA 1664A	1	16201807903A	07/19/2016 18:12	Michelle L Lalli	1

Sample Description: Post OWS Grab Groundwater
NRG PRGS

LL Sample # WW 8473328
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:15 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGOW

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons					
12858	DRO C10-C28	n.a.	47,000	45	1
Wet Chemistry					
08079	HEM (oil & grease)	n.a.	40.2	1.4	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	161970015A	07/18/2016 12:41	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	161970015A	07/16/2016 07:40	Maria Davenport	1
08079	HEM (oil & grease)	EPA 1664A	1	16201807903A	07/19/2016 18:12	Michelle L Lalli	1

Sample Description: P&T Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8473329
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:20 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGPT

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	23,000	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	161970015A	07/18/2016 13:05	Christine E Dolman	1
12059	Microextraction - DRO (waters)	SW-846 3511	1	161970015A	07/16/2016 07:40	Maria Davenport	1

Sample Description: TPE Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8473330
LL Group # 1682408
Account # 08390

Project Name: NRG PRGS

Collected: 07/12/2016 11:25 by JP

GES, Inc.

Submitted: 07/13/2016 17:55

Suite A

Reported: 07/28/2016 09:19

1350 Blair Dr

Odenton MD 21113

NRGTP

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	73,000	45	5

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	161970015A	07/18/2016 15:49	Christine E Dolman	5
12059	Microextraction - DRO (waters)	SW-846 3511	1	161970015A	07/16/2016 07:40	Maria Davenport	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: U161961AA	Sample number(s): 8473327	
Acrolein	N.D.	5
Acrylonitrile	N.D.	0.5
Benzene	N.D.	0.5
Bromodichloromethane	N.D.	0.5
Bromoform	N.D.	0.5
Bromomethane	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
Chlorobenzene	N.D.	0.5
Chloroethane	N.D.	0.5
2-Chloroethyl Vinyl Ether	N.D.	0.5
Chloroform	N.D.	0.5
Chloromethane	N.D.	0.5
Dibromochloromethane	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
1,1-Dichloroethene	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Methylene Chloride	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Toluene	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Trichloroethene	N.D.	0.5
Vinyl Chloride	N.D.	0.5
Batch number: 16198WAO625	Sample number(s): 8473327	
Acenaphthene	N.D.	0.3
Acenaphthylene	N.D.	0.3
Anthracene	N.D.	0.2
Benzidine	N.D.	20
Benzo(a)anthracene	N.D.	0.2
Benzo(a)pyrene	N.D.	0.3
Benzo(b)fluoranthene	N.D.	0.3
Benzo(g,h,i)perylene	N.D.	0.2
Benzo(k)fluoranthene	N.D.	0.3
4-Bromophenyl-phenylether	N.D.	0.3
Butylbenzylphthalate	N.D.	0.8
Di-n-butylphthalate	N.D.	0.5

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
4-Chloro-3-methylphenol	N.D.	0.3
bis (2-Chloroethoxy) methane	N.D.	0.5
bis (2-Chloroethyl) ether	N.D.	0.4
bis (2-Chloroisopropyl) ether	N.D.	0.3
2-Chloronaphthalene	N.D.	0.2
2-Chlorophenol	N.D.	0.3
4-Chlorophenyl-phenylether	N.D.	0.3
Chrysene	N.D.	0.2
Dibenz (a,h) anthracene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.3
1,3-Dichlorobenzene	N.D.	0.3
1,4-Dichlorobenzene	N.D.	0.3
3,3'-Dichlorobenzidine	N.D.	0.8
2,4-Dichlorophenol	N.D.	0.3
Diethylphthalate	N.D.	0.3
2,4-Dimethylphenol	N.D.	0.3
Dimethylphthalate	N.D.	1
4,6-Dinitro-2-methylphenol	N.D.	4
2,4-Dinitrophenol	N.D.	10
2,4-Dinitrotoluene	N.D.	0.4
2,6-Dinitrotoluene	N.D.	0.3
1,2-Diphenylhydrazine	N.D.	0.2
bis (2-Ethylhexyl) phthalate	N.D.	1
Fluoranthene	N.D.	0.3
Fluorene	N.D.	0.3
Hexachlorobenzene	N.D.	1
Hexachlorobutadiene	N.D.	0.8
Hexachlorocyclopentadiene	N.D.	2
Hexachloroethane	N.D.	0.4
Indeno (1,2,3-cd) pyrene	N.D.	0.3
Isophorone	N.D.	0.3
Naphthalene	N.D.	0.2
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	0.4
4-Nitrophenol	N.D.	5
N-Nitrosodimethylamine	N.D.	2
N-Nitroso-di-n-propylamine	N.D.	0.4
N-Nitrosodiphenylamine	N.D.	0.3
Di-n-octylphthalate	N.D.	0.5
Pentachlorophenol	N.D.	3
Phenanthrene	N.D.	0.2
Phenol	N.D.	0.4
Pyrene	N.D.	0.2
1,2,4-Trichlorobenzene	N.D.	0.3
2,4,6-Trichlorophenol	N.D.	0.7
Batch number: 161970005A	Sample number(s): 8473327	
Aldrin	N.D.	0.0016
Alpha BHC	N.D.	0.0026
Beta BHC	0.0041 J	0.0039
Gamma BHC - Lindane	N.D.	0.0020
Chlordane	N.D.	0.064

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
p,p-DDD	N.D.	0.0042
p,p-DDE	N.D.	0.0040
p,p-DDT	N.D.	0.0042
Delta BHC	N.D.	0.0030
Dieldrin	N.D.	0.0041
Endosulfan I	N.D.	0.0041
Endosulfan II	N.D.	0.0088
Endosulfan Sulfate	N.D.	0.0040
Endrin	N.D.	0.0056
Endrin Aldehyde	N.D.	0.016
Heptachlor	N.D.	0.0021
Heptachlor Epoxide	N.D.	0.0021
Toxaphene	N.D.	0.24
Batch number: 161970006A	Sample number(s): 8473327	
PCB-1016	N.D.	0.080
PCB-1221	N.D.	0.080
PCB-1232	N.D.	0.080
PCB-1242	N.D.	0.080
PCB-1248	N.D.	0.080
PCB-1254	N.D.	0.080
PCB-1260	N.D.	0.12
Total PCBs	N.D.	0.080
Batch number: 161970015A	Sample number(s): 8473327-8473330	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 161961848001	Sample number(s): 8473327	
Arsenic	N.D.	0.0097
Cadmium	N.D.	0.00049
Chromium	N.D.	0.0018
Copper	N.D.	0.0041
Lead	N.D.	0.0062
Molybdenum	N.D.	0.0017
Nickel	N.D.	0.0028
Silver	N.D.	0.0019
Zinc	N.D.	0.0054
Batch number: 161965713005	Sample number(s): 8473327	
Mercury	0.000069 J	0.000050
Batch number: 16201102101A	Sample number(s): 8473327	
Total Cyanide (water)	N.D.	0.0050
Batch number: 16201807903A	Sample number(s): 8473327-8473328	
HEM (oil & grease)	1.5 J	1.4
Analysis Name	Result	EDL
	pg/l	pg/l
Batch number: 16196003	Sample number(s): 8473327	
2378-TCDD	N.D.	0.266

*- Outside of specification

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

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Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: U161961AA Sample number(s): 8473327									
Acrolein	150	136.58	150	137.89	91	92	60-120	1	30
Acrylonitrile	100	76.28	100	76.82	76	77	61-120	1	30
Benzene	20	21.27	20	21.23	106	106	80-120	0	30
Bromodichloromethane	20	21.43	20	20.92	107	105	77-120	2	30
Bromoform	20	19.37	20	18.65	97	93	66-125	4	30
Bromomethane	20	18.73	20	18.84	94	94	69-120	1	30
Carbon Tetrachloride	20	19.78	20	20.16	99	101	72-128	2	30
Chlorobenzene	20	19.87	20	19.62	99	98	80-120	1	30
Chloroethane	20	18.65	20	19.38	93	97	65-120	4	30
2-Chloroethyl Vinyl Ether	20	15.42	20	15.55	77	78	54-133	1	30
Chloroform	20	19.74	20	19.68	99	98	80-120	0	30
Chloromethane	20	16.07	20	17.26	80	86	64-120	7	30
Dibromochloromethane	20	19.52	20	18.65	98	93	78-120	5	30
1,1-Dichloroethane	20	19.34	20	19.19	97	96	75-123	1	30
1,2-Dichloroethane	20	20.93	20	20.56	105	103	74-120	2	30
1,1-Dichloroethene	20	17.85	20	17.84	89	89	69-122	0	30
trans-1,2-Dichloroethene	20	18.53	20	18.46	93	92	80-125	0	30
1,2-Dichloropropane	20	21.71	20	21.32	109	107	80-120	2	30
cis-1,3-Dichloropropene	20	18.4	20	18.06	92	90	80-120	2	30
trans-1,3-Dichloropropene	20	18.41	20	18.21	92	91	80-120	1	30
Ethylbenzene	20	19.13	20	18.96	96	95	80-120	1	30
Methylene Chloride	20	17.45	20	17.06	87	85	75-120	2	30
1,1,2,2-Tetrachloroethane	20	20.34	20	19.64	102	98	80-120	4	30
Tetrachloroethene	20	19.64	20	19.31	98	97	77-122	2	30
Toluene	20	19.08	20	18.75	95	94	80-120	2	30
1,1,1-Trichloroethane	20	19.2	20	19.26	96	96	72-120	0	30
1,1,2-Trichloroethane	20	19.6	20	19.43	98	97	80-120	1	30
Trichloroethene	20	20.95	20	21.09	105	105	80-120	1	30
Vinyl Chloride	20	16.59	20	17.89	83	89	68-120	8	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16198WAO625 Sample number(s): 8473327									
Acenaphthene	50	47.82	50	47.14	96	94	71-118	1	30
Acenaphthylene	50	47.26	50	45.79	95	92	70-121	3	30
Anthracene	50	46.21	50	46.5	92	93	80-114	1	30
Benzidine	250	153.27	250	155.7	61	62	21-107	2	30
Benzo(a)anthracene	50	48.18	50	47.17	96	94	76-117	2	30
Benzo(a)pyrene	50	46.86	50	45.91	94	92	76-112	2	30
Benzo(b)fluoranthene	50	45.3	50	44.57	91	89	80-120	2	30
Benzo(g,h,i)perylene	50	47.6	50	47.35	95	95	76-120	1	30
Benzo(k)fluoranthene	50	54.24	50	51.74	108	103	75-121	5	30
4-Bromophenyl-phenylether	50	46.96	50	48.38	94	97	75-118	3	30
Butylbenzylphthalate	50	48.88	50	48.26	98	97	80-125	1	30
Di-n-butylphthalate	50	49.91	50	47.68	100	95	77-116	5	30
4-Chloro-3-methylphenol	50	49.08	50	47.17	98	94	72-116	4	30
bis(2-Chloroethoxy)methane	50	47.95	50	47.05	96	94	67-122	2	30

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
bis(2-Chloroethyl)ether	50	44.71	50	44.48	89	89	74-111	1	30
bis(2-Chloroisopropyl)ether	50	44.33	50	44.38	89	89	74-116	0	30
2-Chloronaphthalene	50	50.32	50	51.06	101	102	41-144	1	30
2-Chlorophenol	50	45.77	50	46.32	92	93	68-117	1	30
4-Chlorophenyl-phenylether	50	47.47	50	47.41	95	95	76-115	0	30
Chrysene	50	50.75	50	48.79	101	98	81-118	4	30
Dibenz(a,h)anthracene	50	48.42	50	48.14	97	96	77-119	1	30
1,2-Dichlorobenzene	50	37.55	50	38.25	75	76	32-111	2	30
1,3-Dichlorobenzene	50	35.2	50	36.52	70	73	24-107	4	30
1,4-Dichlorobenzene	50	37.07	50	36.75	74	74	26-108	1	30
3,3'-Dichlorobenzidine	50	34.85	50	33.92	70	68	10-103	3	30
2,4-Dichlorophenol	50	50.64	50	48.7	101	97	79-114	4	30
Diethylphthalate	50	47.97	50	46.49	96	93	39-137	3	30
2,4-Dimethylphenol	50	41.55	50	40.21	83	80	72-110	3	30
Dimethylphthalate	50	43.51	50	42	87	84	33-136	4	30
4,6-Dinitro-2-methylphenol	50	49.06	50	48.05	98	96	74-120	2	30
2,4-Dinitrophenol	100	105.2	100	98.47	105	98	50-128	7	30
2,4-Dinitrotoluene	50	49.5	50	48.41	99	97	85-117	2	30
2,6-Dinitrotoluene	50	48.29	50	46.83	97	94	80-115	3	30
1,2-Diphenylhydrazine	50	48.75	50	48.36	98	97	73-119	1	30
bis(2-Ethylhexyl)phthalate	50	47.4	50	46.4	95	93	77-118	2	30
Fluoranthene	50	47.55	50	45.88	95	92	77-111	4	30
Fluorene	50	47.78	50	46.31	96	93	80-116	3	30
Hexachlorobenzene	50	47.86	50	47.54	96	95	75-116	1	30
Hexachlorobutadiene	50	35.11	50	33.82	70	68	11-113	4	30
Hexachlorocyclopentadiene	100	39.29	100	38.85	39	39	24-128	1	30
Hexachloroethane	50	32.55	50	33.63	65	67	11-105	3	30
Indeno(1,2,3-cd)pyrene	50	46.41	50	46.2	93	92	76-115	0	30
Isophorone	50	46.68	50	45.04	93	90	78-120	4	30
Naphthalene	50	42.82	50	42.09	86	84	52-115	2	30
Nitrobenzene	50	45.59	50	44.9	91	90	73-113	2	30
2-Nitrophenol	50	47.1	50	46.41	94	93	83-109	1	30
4-Nitrophenol	50	22.19	50	21.67	44	43	10-83	2	30
N-Nitrosodimethylamine	50	22.83	50	24.98	46	50	28-81	9	30
N-Nitroso-di-n-propylamine	50	47.12	50	47.6	94	95	78-110	1	30
N-Nitrosodiphenylamine	50	48.12	50	47.49	96	95	77-116	1	30
Di-n-octylphthalate	50	52.39	50	49.74	105	99	79-125	5	30
Pentachlorophenol	50	51.94	50	48.41	104	97	57-116	7	30
Phenanthrene	50	47.23	50	46.77	94	94	78-112	1	30
Phenol	50	19.26	50	19.19	39	38	14-69	0	30
Pyrene	50	47.36	50	46.63	95	93	78-117	2	30
1,2,4-Trichlorobenzene	50	40.61	50	39.27	81	79	31-118	3	30
2,4,6-Trichlorophenol	50	47.91	50	47.77	96	96	83-120	0	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 161970005A	Sample number(s): 8473327								
Aldrin	0.102	0.0765	0.102	0.0626	75	61	28-119	20	30
Alpha BHC	0.0980	0.0880	0.0980	0.0836	90	85	47-132	5	30
Beta BHC	0.102	0.0914	0.102	0.0870	90	85	56-125	5	30
Gamma BHC - Lindane	0.0980	0.0935	0.0980	0.0883	95	90	51-132	6	30

*- Outside of specification

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Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
p,p-DDD	0.198	0.181	0.198	0.171	91	86	53-131	6	30
p,p-DDE	0.204	0.178	0.204	0.168	87	82	51-129	6	30
p,p-DDT	0.198	0.174	0.198	0.163	88	82	42-136	7	30
Delta BHC	0.102	0.0928	0.102	0.0884	91	87	57-131	5	30
Dieldrin	0.198	0.178	0.198	0.168	90	85	54-126	5	30
Endosulfan I	0.0980	0.0890	0.0980	0.0852	91	87	51-118	4	30
Endosulfan II	0.203	0.177	0.203	0.156	87	77	54-124	13	30
Endosulfan Sulfate	0.201	0.181	0.201	0.167	90	83	41-133	8	30
Endrin	0.202	0.181	0.202	0.169	90	84	35-143	7	30
Endrin Aldehyde	0.207	0.166	0.207	0.151	80	73	40-135	9	30
Heptachlor	0.0980	0.0812	0.0980	0.0746	83	76	38-111	9	30
Heptachlor Epoxide	0.102	0.0947	0.102	0.0881	93	86	56-132	7	30
Batch number: 161970006A	Sample number(s): 8473327								
PCB-1016	5.05	4.25	5.05	4.24	84	84	60-117	0	30
PCB-1260	5.04	4.10	5.04	4.04	81	80	57-134	2	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 161970015A	Sample number(s): 8473327-8473330								
DRO C10-C28	2650	2275.96	2660	2146.65	86	81	69-115	6	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 161961848001	Sample number(s): 8473327								
Arsenic	0.150	0.162			108		80-120		
Cadmium	0.0500	0.0511			102		80-120		
Chromium	0.200	0.200			100		80-120		
Copper	0.250	0.272			109		80-120		
Lead	0.150	0.151			100		80-120		
Molybdenum	2.00	2.02			101		80-120		
Nickel	0.500	0.516			103		80-120		
Silver	0.0500	0.0498			100		80-120		
Zinc	0.500	0.497			99		80-120		
Batch number: 161965713005	Sample number(s): 8473327								
Mercury	0.00100	0.00106			106		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16201102101A	Sample number(s): 8473327								
Total Cyanide (water)	0.200	0.189	0.200	0.189	95	94	90-110	0	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16201807903A	Sample number(s): 8473327-8473328								
HEM (oil & grease)	40	38.3	40	37.2	96	93	78-114	3	11
Analysis Name	OPR Spike Added pg/l	OPR Conc pg/l	OPRD Spike Added pg/l	OPRD Conc pg/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 16196003	Sample number(s): 8473327								
2378-TCDD	200	185.21			93		67-158		

*- Outside of specification

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

MS/MSD

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

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 161961848001	Sample number(s): 8473327 UNSPK: P472468									
Arsenic	N.D.	0.150	0.170	0.150	0.180	113	120	75-125	6	20
Cadmium	N.D.	0.0500	0.0482	0.0500	0.0501	96	100	75-125	4	20
Chromium	N.D.	0.200	0.197	0.200	0.192	98	96	75-125	2	20
Copper	N.D.	0.250	0.264	0.250	0.263	106	105	75-125	0	20
Lead	N.D.	0.150	0.141	0.150	0.148	94	99	75-125	5	20
Molybdenum	0.00284	2.00	2.02	2.00	2.10	101	105	75-125	4	20
Nickel	N.D.	0.500	0.481	0.500	0.499	96	100	75-125	4	20
Silver	N.D.	0.0500	0.0507	0.0500	0.0489	101	98	75-125	4	20
Zinc	N.D.	0.500	0.497	0.500	0.517	99	103	75-125	4	20
Batch number: 161965713005	Sample number(s): 8473327 UNSPK: P472468									
Mercury	0.0000520	0.00100	0.00111	0.00100	0.00106	106	101	80-120	5	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16201102101A	Sample number(s): 8473327 UNSPK: P473404									
Total Cyanide (water)	N.D.	0.200	0.200			100		90-110		
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16201807903A	Sample number(s): 8473327-8473328 UNSPK: P480257									
HEM (oil & grease)	N.D.	43	38.71			90		78-114		

Laboratory Duplicate

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 161961848001	Sample number(s): 8473327 BKG: P472468			
Arsenic	N.D.	N.D.	0 (1)	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	N.D.	N.D.	0 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Lead	N.D.	N.D.	0 (1)	20
Molybdenum	0.00284	N.D.	200* (1)	20
Nickel	N.D.	N.D.	0 (1)	20
Silver	N.D.	N.D.	0 (1)	20
Zinc	N.D.	N.D.	0 (1)	20
Batch number: 161965713005	Sample number(s): 8473327 BKG: P472468			
Mercury	0.0000520	0.0000670	25* (1)	20

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

Laboratory Duplicate (continued)

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 16201102101A Total Cyanide (water)	Sample number(s): 8473327 BKG: P473404 N.D.	N.D.	0 (1)	20
Batch number: 16201807903A HEM (oil & grease)	Sample number(s): 8473327-8473328 BKG: P480257 N.D.	N.D.	0 (1)	18

Surrogate Quality Control

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

Analysis Name: TTO VOCs 624
Batch number: U161961AA

	1,2-Dichloroethane-d4	Fluorobenzene	4-Bromofluorobenzene
8473327	100	95	83
Blank	105	97	80
LCS	96	104	92
LCSD	100	105	92
Limits:	78-118	88-107	80-118

Analysis Name: Method 625
Batch number: 16198WA0625

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol
8473327	85	89	83	2*	5*	27
Blank	92	90	90	34	55	105
LCS	91	92	94	38	58	96
LCSD	91	92	95	40	60	94
Limits:	60-119	62-116	55-124	10-75	10-105	11-154

Analysis Name: Pests (Charged with PCBs 608)
Batch number: 161970005A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8473327	20*	26*
Blank	60	39
LCS	72	47
LCSD	67	54
Limits:	29-129	32-149

Analysis Name: PCBs w/ OC Pests 608
Batch number: 161970006A

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 07/28/2016 09:19

Group Number: 1682408

Surrogate Quality Control (continued)

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

	Tetrachloro-m-xylene	Decachlorobiphenyl
8473327	21*	32
Blank	88	39
LCS	84	61
LCSD	88	64
Limits:	33-137	10-148

Analysis Name: DRO micro-ext 8015B
Batch number: 161970015A

	Orthoterphenyl
8473327	172*
8473328	226*
8473329	175*
8473330	518*
Blank	102
LCS	95
LCSD	102
Limits:	42-160

Analysis Name: Dioxins/Furans in Water - 1613
Batch number: 16196003

	13C12-2378-TCDD
8473327	90
Blank	95
OPR	86
Limits:	25-164

*- Outside of specification

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

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

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



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1682408 Sample # 8473327-30

Environmental Analysis Request/Chain of Custody

[illegible]

Client: Groundwater & Env. Services**NRG PRGS****Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>07/13/2016 17:55</u>
Number of Packages:	<u>2</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

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

*Unpacked by Cory Jeremiah (10469) at 18:31 on 07/13/2016***Samples Chilled Details: NRG PRGS***Thermometer Types: DT = Digital (Temp. Bottle) IR = Infrared (Surface Temp) All Temperatures in °C.*

<u>Cooler #</u>	<u>Thermometer ID</u>	<u>Corrected Temp</u>	<u>Therm. Type</u>	<u>Ice Type</u>	<u>Ice Present?</u>	<u>Ice Container</u>	<u>Elevated Temp?</u>
1	DT131	1.9	DT	Wet	Y	Bagged	N
2	DT131	1.3	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

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

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

Laboratory Data Qualifiers:

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

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

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

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

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

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

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

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

ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: September 16, 2016

Project: NRG PRGSSubmittal Date: 09/02/2016
Group Number: 1703226
PO Number: NRG PRGS
Release Number: 0402896
State of Sample Origin: VAClient Sample DescriptionEffluent Grab Groundwater
Effluent Grab Groundwater
Post OWS Grab Groundwater
P&T Influent Grab Groundwater

Lancaster Labs

(LL) #

8565578

8565579

8565580

8565581

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

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

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

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8565578
LL Group # 1703226
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 11:15 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/16/2016 04:54

1350 Blair Dr

Odenton MD 21113

N--P1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Volatiles	EPA 624	ug/l	ug/l	
10371	Acrolein	107-02-8	N.D.	5	1
10371	Acrylonitrile	107-13-1	N.D.	0.5	1
10371	Benzene	71-43-2	N.D.	0.5	1
10371	Bromodichloromethane	75-27-4	N.D.	0.5	1
10371	Bromoform	75-25-2	N.D.	0.5	1
10371	Bromomethane	74-83-9	N.D.	0.5	1
10371	Carbon Tetrachloride	56-23-5	N.D.	0.5	1
10371	Chlorobenzene	108-90-7	N.D.	0.5	1
10371	Chloroethane	75-00-3	N.D.	0.5	1
10371	2-Chloroethyl Vinyl Ether	110-75-8	N.D.	0.5	1
2-Chloroethyl vinyl ether may not be recovered if acid was used to preserve this sample.					
10371	Chloroform	67-66-3	N.D.	0.5	1
10371	Chloromethane	74-87-3	N.D.	0.5	1
10371	Dibromochloromethane	124-48-1	N.D.	0.5	1
10371	1,1-Dichloroethane	75-34-3	N.D.	0.5	1
10371	1,2-Dichloroethane	107-06-2	N.D.	0.5	1
10371	1,1-Dichloroethene	75-35-4	N.D.	0.5	1
10371	trans-1,2-Dichloroethene	156-60-5	N.D.	0.5	1
10371	1,2-Dichloropropane	78-87-5	N.D.	0.5	1
10371	cis-1,3-Dichloropropene	10061-01-5	N.D.	0.5	1
10371	trans-1,3-Dichloropropene	10061-02-6	N.D.	0.5	1
10371	Ethylbenzene	100-41-4	N.D.	0.5	1
10371	Methylene Chloride	75-09-2	N.D.	0.5	1
10371	1,1,2,2-Tetrachloroethane	79-34-5	N.D.	0.5	1
10371	Tetrachloroethene	127-18-4	2	0.5	1
10371	Toluene	108-88-3	N.D.	0.5	1
10371	1,1,1-Trichloroethane	71-55-6	N.D.	0.5	1
10371	1,1,2-Trichloroethane	79-00-5	N.D.	0.5	1
10371	Trichloroethene	79-01-6	N.D.	0.5	1
10371	Vinyl Chloride	75-01-4	N.D.	0.5	1

The holding time was not met for acrolein and acrylonitrile under Method 624 in the EPA Method Update Rule. The sample was submitted to the laboratory with insufficient time remaining in the holding time. The holding time was met for the remaining analytes.

GC/MS	Semivolatiles	EPA 625	ug/l	ug/l	
10334	Acenaphthene	83-32-9	N.D.	0.3	1
10334	Acenaphthylene	208-96-8	N.D.	0.3	1
10334	Anthracene	120-12-7	N.D.	0.2	1
10334	Benidine	92-87-5	N.D.	19	1
10334	Benzo(a)anthracene	56-55-3	N.D.	0.2	1
10334	Benzo(a)pyrene	50-32-8	N.D.	0.3	1
10334	Benzo(b)fluoranthene	205-99-2	N.D.	0.3	1
10334	Benzo(g,h,i)perylene	191-24-2	N.D.	0.2	1
10334	Benzo(k)fluoranthene	207-08-9	N.D.	0.3	1
10334	4-Bromophenyl-phenylether	101-55-3	N.D.	0.3	1
10334	Butylbenzylphthalate	85-68-7	N.D.	0.8	1
10334	Di-n-butylphthalate	84-74-2	N.D.	0.5	1
10334	4-Chloro-3-methylphenol	59-50-7	N.D.	0.3	1
10334	bis(2-Chloroethoxy)methane	111-91-1	N.D.	0.5	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8565578
LL Group # 1703226
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 11:15 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/16/2016 04:54

1350 Blair Dr

Odenton MD 21113

N--P1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC/MS	Semivolatiles EPA 625		ug/l	ug/l	
10334	bis(2-Chloroethyl) ether	111-44-4	N.D.	0.4	1
10334	bis(2-Chloroisopropyl) ether	39638-32-9	N.D.	0.3	1
	Bis(2-chloroisopropyl) ether CAS #39638-32-9 and 2,2'-Oxybis(1-chloropropane) CAS #108-60-1 cannot be separated chromatographically. The reported result represents the combined total of both compounds.				
10334	2-Chloronaphthalene	91-58-7	N.D.	0.2	1
10334	2-Chlorophenol	95-57-8	N.D.	0.3	1
10334	4-Chlorophenyl-phenylether	7005-72-3	N.D.	0.3	1
10334	Chrysene	218-01-9	N.D.	0.2	1
10334	Dibenz(a,h)anthracene	53-70-3	N.D.	0.4	1
10334	1,2-Dichlorobenzene	95-50-1	N.D.	0.3	1
10334	1,3-Dichlorobenzene	541-73-1	N.D.	0.3	1
10334	1,4-Dichlorobenzene	106-46-7	N.D.	0.3	1
10334	3,3'-Dichlorobenzidine	91-94-1	N.D.	0.8	1
10334	2,4-Dichlorophenol	120-83-2	N.D.	0.3	1
10334	Diethylphthalate	84-66-2	N.D.	0.3	1
10334	2,4-Dimethylphenol	105-67-9	N.D.	0.3	1
10334	Dimethylphthalate	131-11-3	N.D.	1	1
10334	4,6-Dinitro-2-methylphenol	534-52-1	N.D.	4	1
10334	2,4-Dinitrophenol	51-28-5	N.D.	10	1
10334	2,4-Dinitrotoluene	121-14-2	N.D.	0.4	1
10334	2,6-Dinitrotoluene	606-20-2	N.D.	0.3	1
10334	1,2-Diphenylhydrazine	122-66-7	N.D.	0.2	1
10334	bis(2-Ethylhexyl)phthalate	117-81-7	3 J	1	1
10334	Fluoranthene	206-44-0	N.D.	0.3	1
10334	Fluorene	86-73-7	N.D.	0.3	1
10334	Hexachlorobenzene	118-74-1	N.D.	1	1
10334	Hexachlorobutadiene	87-68-3	N.D.	0.8	1
10334	Hexachlorocyclopentadiene	77-47-4	N.D.	2	1
10334	Hexachloroethane	67-72-1	N.D.	0.4	1
10334	Indeno(1,2,3-cd)pyrene	193-39-5	N.D.	0.3	1
10334	Isophorone	78-59-1	N.D.	0.3	1
10334	Naphthalene	91-20-3	N.D.	0.2	1
10334	Nitrobenzene	98-95-3	N.D.	0.5	1
10334	2-Nitrophenol	88-75-5	N.D.	0.4	1
10334	4-Nitrophenol	100-02-7	N.D.	5	1
10334	N-Nitrosodimethylamine	62-75-9	N.D.	2	1
10334	N-Nitroso-di-n-propylamine	621-64-7	N.D.	0.4	1
10334	N-Nitrosodiphenylamine	86-30-6	N.D.	0.3	1
	N-nitrosodiphenylamine decomposes in the GC inlet forming diphenylamine. The result reported for N-nitrosodiphenylamine represents the combined total of both compounds.				
10334	Di-n-octylphthalate	117-84-0	N.D.	0.5	1
10334	Pentachlorophenol	87-86-5	N.D.	3	1
10334	Phenanthrene	85-01-8	N.D.	0.2	1
10334	Phenol	108-95-2	N.D.	0.4	1
10334	Pyrene	129-00-0	0.7 J	0.2	1
10334	1,2,4-Trichlorobenzene	120-82-1	N.D.	0.3	1
10334	2,4,6-Trichlorophenol	88-06-2	N.D.	0.7	1

The recovery for a target analyte(s) in the Laboratory Control

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8565578
LL Group # 1703226
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 11:15 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/16/2016 04:54

1350 Blair Dr

Odenton MD 21113

N--P1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Spike(s) is outside the QC acceptance limits as noted on the QC Summary. The following corrective action was taken: The sample was re-extracted outside the method required holding time and the QC is compliant. All results are reported from the first trial. Similar results were obtained in both trials.					
Pesticides/PCBs		EPA 608	ug/l	ug/l	
07572	Aldrin	309-00-2	N.D.	0.0016	1
07572	Alpha BHC	319-84-6	N.D.	0.0026	1
07572	Beta BHC	319-85-7	0.018	0.0040	1
07572	Gamma BHC - Lindane	58-89-9	0.0039 J	0.0020	1
07572	Chlordane	57-74-9	N.D.	0.066	1
07572	p,p-DDD	72-54-8	N.D.	0.0043	1
07572	p,p-DDE	72-55-9	N.D.	0.0041	1
07572	p,p-DDT	50-29-3	N.D.	0.0043	1
07572	Delta BHC	319-86-8	N.D.	0.0031	1
07572	Dieldrin	60-57-1	N.D.	0.0042	1
07572	Endosulfan I	959-98-8	N.D.	0.0042	1
07572	Endosulfan II	33213-65-9	N.D.	0.0090	1
07572	Endosulfan Sulfate	1031-07-8	N.D.	0.0041	1
07572	Endrin	72-20-8	N.D.	0.0057	1
07572	Endrin Aldehyde	7421-93-4	N.D.	0.016	1
07572	Heptachlor	76-44-8	0.0029 J	0.0021	1
07572	Heptachlor Epoxide	1024-57-3	N.D.	0.0021	1
06030	PCB-1016	12674-11-2	N.D.	0.082	1
06030	PCB-1221	11104-28-2	N.D.	0.082	1
06030	PCB-1232	11141-16-5	N.D.	0.082	1
06030	PCB-1242	53469-21-9	N.D.	0.082	1
06030	PCB-1248	12672-29-6	N.D.	0.082	1
06030	PCB-1254	11097-69-1	N.D.	0.082	1
06030	PCB-1260	11096-82-5	N.D.	0.12	1
06030	Total PCBs	1336-36-3	N.D.	0.082	1
07572	Toxaphene	8001-35-2	N.D.	0.25	1
GC Petroleum Hydrocarbons		SW-846 8015B	ug/l	ug/l	
12858	DRO C10-C28	n.a.	1,200	45	1
Metals		SW-846 6010B	mg/l	mg/l	
07035	Arsenic	7440-38-2	N.D.	0.0097	1
07049	Cadmium	7440-43-9	N.D.	0.00049	1
07051	Chromium	7440-47-3	N.D.	0.0018	1
07053	Copper	7440-50-8	0.0113	0.0041	1
07055	Lead	7439-92-1	N.D.	0.0062	1
07060	Molybdenum	7439-98-7	N.D.	0.0017	1
07061	Nickel	7440-02-0	0.0175	0.0028	1
07066	Silver	7440-22-4	N.D.	0.0019	1
07072	Zinc	7440-66-6	0.0394	0.0054	1
		SW-846 7470A	mg/l	mg/l	
00259	Mercury	7439-97-6	N.D.	0.000050	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8565578
LL Group # 1703226
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 11:15 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/16/2016 04:54

1350 Blair Dr

Odenton MD 21113

N--P1

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
Wet Chemistry					
00237	Total Cyanide (water)	57-12-5	N.D.	0.0050	1
EPA 335.4					
08079	HEM (oil & grease)	n.a.	2.1 J	1.4	1
EPA 1664A					

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10371	TTO VOCs 624	EPA 624	1	M162501AA	09/06/2016 13:08	Joshua S Hess	1
10334	Method 625	EPA 625	1	16250WAC625	09/09/2016 23:07	Linda M Hartenstine	1
08108	625 Water Extraction	EPA 625	1	16250WAC625	09/06/2016 21:45	Nicholas W Shroyer	1
06030	PCBs w/ OC Pests 608	EPA 608	1	162500019A	09/07/2016 21:44	Jessica L Miller	1
07572	Pests (Charged with PCBs 608)	EPA 608	1	162500020A	09/12/2016 23:30	Lisa A Reinert	1
11960	Method 608 PCB Water Ext.	EPA 608	1	162500019A	09/06/2016 17:00	Ryan A Schafran	1
10241	Method 608 Water Extraction	EPA 608	1	162500020A	09/06/2016 17:00	Ryan A Schafran	1
12858	DRO micro-ext 8015B	SW-846 8015B	1	162510010A	09/08/2016 15:43	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	162510010A	09/07/2016 09:20	Wanda F Oswald	1
07035	Arsenic	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07049	Cadmium	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07051	Chromium	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07053	Copper	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07055	Lead	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07060	Molybdenum	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07061	Nickel	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07066	Silver	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
07072	Zinc	SW-846 6010B	1	162541848004	09/12/2016 21:20	Suzanne M Will	1
00259	Mercury	SW-846 7470A	1	162545713004	09/13/2016 18:17	Parker D Lindstrom	1
01848	ICP-WW, 3005A (tot rec) - U3	SW-846 3005A	1	162541848004	09/12/2016 08:30	Lisa J Cooke	1
05713	WW SW846 Hg Digest	SW-846 7470A	1	162545713004	09/12/2016 19:00	JoElla L Rice	1
00237	Total Cyanide (water)	EPA 335.4	1	16259102101A	09/15/2016 12:28	Dein K Bernot	1
00492	Cyanide Water Distillation	EPA 335.4	2	16259102101A	09/15/2016 08:50	Nancy J Shoop	1
08079	HEM (oil & grease)	EPA 1664A	1	16258807901A	09/14/2016 01:19	Cassandra N Morgan	1

Sample Description: Effluent Grab Groundwater
NRG PRGS

LL Sample # WW 8565579
LL Group # 1703226
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 11:15 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/16/2016 04:54

1350 Blair Dr

Odenton MD 21113

N--P2

CAT No.	Analysis Name	CAS Number	Result	EDL	Dilution Factor
Dioxins/Furans					
	EPA 1613B October 1994		pg/l	pg/l	
10915	2378-TCDD	1746-01-6	N.D.	0.0931	1
Labeled Compounds					
	%Rec	Windows			
13C12-2378-TCDD	108	25 - 164			

Dioxins/Furans Data Qualifiers:

<i>B</i>	<i>Detected in Method Blank</i>
<i>U</i>	<i>Undetected</i>
<i>J</i>	<i>Estimated concentration between Estimated Detection Limit and Minimum Reporting Level</i>
<i>E</i>	<i>Exceeds calibration range</i>
<i>C</i>	<i>Confirmed quantitation on secondary GC column</i>
<i>Q</i>	<i>EMPC - Estimated Maximum Possible Concentration</i>
<i>F</i>	<i>Interference is present</i>
<i>S</i>	<i>Saturation of detection signal</i>

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
10915	Dioxins/Furans in Water - 1613	EPA 1613B October 1994	1	16250004	09/10/2016 01:46	Joseph D Anderson	1
10914	Dioxins/Furans in Water - SepF	EPA 1613B October 1994	1	16250004	09/06/2016 08:20	Tyler K Daley	1

Sample Description: Post OWS Grab Groundwater
NRG PRGS

LL Sample # WW 8565580
LL Group # 1703226
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 11:30 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/16/2016 04:54

1350 Blair Dr

Odenton MD 21113

N--P3

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons					
12858	DRO C10-C28	n.a.	21,000	45	1
Wet Chemistry					
08079	HEM (oil & grease)	n.a.	7.2	1.4	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162510010A	09/08/2016 16:06	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	162510010A	09/07/2016 09:20	Wanda F Oswald	1
08079	HEM (oil & grease)	EPA 1664A	1	16259807901A	09/15/2016 01:13	Cassandra N Morgan	1

Sample Description: P&T Influent Grab Groundwater
NRG PRGS

LL Sample # WW 8565581
LL Group # 1703226
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 11:40 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/16/2016 04:54

1350 Blair Dr

Odenton MD 21113

N--P4

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
GC Petroleum Hydrocarbons	SW-846 8015B		ug/l	ug/l	
12858 DRO C10-C28		n.a.	5,400	45	1

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
12858	DRO micro-ext 8015B	SW-846 8015B	1	162510010A	09/08/2016 16:30	Amy Lehr	1
12059	Microextraction - DRO (waters)	SW-846 3511 Rev 1, July 2014	1	162510010A	09/07/2016 09:20	Wanda F Oswald	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

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

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

Method Blank

Analysis Name	Result	MDL
	ug/l	ug/l
Batch number: M162501AA	Sample number(s): 8565578	
Acrolein	N.D.	5
Acrylonitrile	N.D.	0.5
Benzene	N.D.	0.5
Bromodichloromethane	N.D.	0.5
Bromoform	N.D.	0.5
Bromomethane	N.D.	0.5
Carbon Tetrachloride	N.D.	0.5
Chlorobenzene	N.D.	0.5
Chloroethane	N.D.	0.5
2-Chloroethyl Vinyl Ether	N.D.	0.5
Chloroform	N.D.	0.5
Chloromethane	N.D.	0.5
Dibromochloromethane	N.D.	0.5
1,1-Dichloroethane	N.D.	0.5
1,2-Dichloroethane	N.D.	0.5
1,1-Dichloroethene	N.D.	0.5
trans-1,2-Dichloroethene	N.D.	0.5
1,2-Dichloropropane	N.D.	0.5
cis-1,3-Dichloropropene	N.D.	0.5
trans-1,3-Dichloropropene	N.D.	0.5
Ethylbenzene	N.D.	0.5
Methylene Chloride	N.D.	0.5
1,1,2,2-Tetrachloroethane	N.D.	0.5
Tetrachloroethene	N.D.	0.5
Toluene	N.D.	0.5
1,1,1-Trichloroethane	N.D.	0.5
1,1,2-Trichloroethane	N.D.	0.5
Trichloroethene	N.D.	0.5
Vinyl Chloride	N.D.	0.5
Batch number: 16250WAC625	Sample number(s): 8565578	
Acenaphthene	N.D.	0.3
Acenaphthylene	N.D.	0.3
Anthracene	N.D.	0.2
Benzidine	N.D.	20
Benzo(a)anthracene	N.D.	0.2
Benzo(a)pyrene	N.D.	0.3
Benzo(b)fluoranthene	N.D.	0.3
Benzo(g,h,i)perylene	N.D.	0.2
Benzo(k)fluoranthene	N.D.	0.3
4-Bromophenyl-phenylether	N.D.	0.3
Butylbenzylphthalate	N.D.	0.8
Di-n-butylphthalate	N.D.	0.5

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
4-Chloro-3-methylphenol	N.D.	0.3
bis (2-Chloroethoxy) methane	N.D.	0.5
bis (2-Chloroethyl) ether	N.D.	0.4
bis (2-Chloroisopropyl) ether	N.D.	0.3
2-Chloronaphthalene	N.D.	0.2
2-Chlorophenol	N.D.	0.3
4-Chlorophenyl-phenylether	N.D.	0.3
Chrysene	N.D.	0.2
Dibenz (a,h) anthracene	N.D.	0.4
1,2-Dichlorobenzene	N.D.	0.3
1,3-Dichlorobenzene	N.D.	0.3
1,4-Dichlorobenzene	N.D.	0.3
3,3'-Dichlorobenzidine	N.D.	0.8
2,4-Dichlorophenol	N.D.	0.3
Diethylphthalate	N.D.	0.3
2,4-Dimethylphenol	N.D.	0.3
Dimethylphthalate	N.D.	1
4,6-Dinitro-2-methylphenol	N.D.	4
2,4-Dinitrophenol	N.D.	10
2,4-Dinitrotoluene	N.D.	0.4
2,6-Dinitrotoluene	N.D.	0.3
1,2-Diphenylhydrazine	N.D.	0.2
bis (2-Ethylhexyl) phthalate	N.D.	1
Fluoranthene	N.D.	0.3
Fluorene	N.D.	0.3
Hexachlorobenzene	N.D.	1
Hexachlorobutadiene	N.D.	0.8
Hexachlorocyclopentadiene	N.D.	2
Hexachloroethane	N.D.	0.4
Indeno (1,2,3-cd) pyrene	N.D.	0.3
Isophorone	N.D.	0.3
Naphthalene	N.D.	0.2
Nitrobenzene	N.D.	0.5
2-Nitrophenol	N.D.	0.4
4-Nitrophenol	N.D.	5
N-Nitrosodimethylamine	N.D.	2
N-Nitroso-di-n-propylamine	N.D.	0.4
N-Nitrosodiphenylamine	N.D.	0.3
Di-n-octylphthalate	N.D.	0.5
Pentachlorophenol	N.D.	3
Phenanthrene	N.D.	0.2
Phenol	N.D.	0.4
Pyrene	N.D.	0.2
1,2,4-Trichlorobenzene	N.D.	0.3
2,4,6-Trichlorophenol	N.D.	0.7
Batch number: 162500019A	Sample number(s): 8565578	
PCB-1016	N.D.	0.080
PCB-1221	N.D.	0.080
PCB-1232	N.D.	0.080
PCB-1242	N.D.	0.080
PCB-1248	N.D.	0.080

*- Outside of specification

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

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Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

Method Blank (continued)

Analysis Name	Result	MDL
	ug/l	ug/l
PCB-1254	N.D.	0.080
PCB-1260	N.D.	0.12
Total PCBs	N.D.	0.080
Batch number: 162500020A	Sample number(s): 8565578	
Aldrin	N.D.	0.0016
Alpha BHC	N.D.	0.0026
Beta BHC	N.D.	0.0039
Gamma BHC - Lindane	N.D.	0.0020
Chlordane	N.D.	0.064
p,p-DDD	N.D.	0.0042
p,p-DDE	N.D.	0.0040
p,p-DDT	N.D.	0.0042
Delta BHC	N.D.	0.0030
Dieldrin	N.D.	0.0041
Endosulfan I	N.D.	0.0041
Endosulfan II	N.D.	0.0088
Endosulfan Sulfate	N.D.	0.0040
Endrin	N.D.	0.0056
Endrin Aldehyde	N.D.	0.016
Heptachlor	N.D.	0.0021
Heptachlor Epoxide	N.D.	0.0021
Toxaphene	N.D.	0.24
Batch number: 162510010A	Sample number(s): 8565578, 8565580-8565581	
DRO C10-C28	N.D.	45
	mg/l	mg/l
Batch number: 162541848004	Sample number(s): 8565578	
Arsenic	N.D.	0.0097
Cadmium	N.D.	0.00049
Chromium	N.D.	0.0018
Copper	N.D.	0.0041
Lead	N.D.	0.0062
Molybdenum	N.D.	0.0017
Nickel	N.D.	0.0028
Silver	N.D.	0.0019
Zinc	N.D.	0.0054
Batch number: 162545713004	Sample number(s): 8565578	
Mercury	N.D.	0.000050
Batch number: 16259102101A	Sample number(s): 8565578	
Total Cyanide (water)	N.D.	0.0050
Batch number: 16258807901A	Sample number(s): 8565578	
HEM (oil & grease)	N.D.	1.4
Batch number: 16259807901A	Sample number(s): 8565580	
HEM (oil & grease)	N.D.	1.4
Analysis Name	Result	EDL
	pg/l	pg/l
Batch number: 16250004	Sample number(s): 8565579	

*- Outside of specification

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

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Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

Method Blank (continued)

Analysis Name	Result	EDL
	pg/l	pg/l
2378-TCDD	0.102 J	0.0818

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: M162501AA	Sample number(s): 8565578								
Acrolein	150	156.43	150	157.72	104	105	60-120	1	30
Acrylonitrile	100	88.52	100	89.72	89	90	61-120	1	30
Benzene	20	21.82	20	21.67	109	108	80-120	1	30
Bromodichloromethane	20	22.11	20	21.9	111	110	77-120	1	30
Bromoform	20	19.2	20	18.31	96	92	66-125	5	30
Bromomethane	20	25.3	20	25.05	126*	125*	69-120	1	30
Carbon Tetrachloride	20	21.89	20	22.12	109	111	72-128	1	30
Chlorobenzene	20	19.88	20	19.5	99	98	80-120	2	30
Chloroethane	20	24.57	20	24.25	123*	121*	65-120	1	30
2-Chloroethyl Vinyl Ether	20	15.55	20	15.66	78	78	54-133	1	30
Chloroform	20	21.43	20	21.3	107	106	80-120	1	30
Chloromethane	20	20.18	20	20.7	101	103	64-120	3	30
Dibromochloromethane	20	20.08	20	19.48	100	97	78-120	3	30
1,1-Dichloroethane	20	22.77	20	22.87	114	114	75-123	0	30
1,2-Dichloroethane	20	20.97	20	21.05	105	105	74-120	0	30
1,1-Dichloroethene	20	21.17	20	20.69	106	103	69-122	2	30
trans-1,2-Dichloroethene	20	22.08	20	21.9	110	110	80-125	1	30
1,2-Dichloropropane	20	21.28	20	21.11	106	106	80-120	1	30
cis-1,3-Dichloropropene	20	18.67	20	18.41	93	92	80-120	1	30
trans-1,3-Dichloropropene	20	18.84	20	18.22	94	91	80-120	3	30
Ethylbenzene	20	18.68	20	18.33	93	92	80-120	2	30
Methylene Chloride	20	21.33	20	20.64	107	103	75-120	3	30
1,1,2,2-Tetrachloroethane	20	20.69	20	20.57	103	103	80-120	1	30
Tetrachloroethene	20	20.03	20	19.5	100	98	77-122	3	30
Toluene	20	19.01	20	18.47	95	92	80-120	3	30
1,1,1-Trichloroethane	20	21.13	20	21.27	106	106	72-120	1	30
1,1,2-Trichloroethane	20	20.24	20	20.21	101	101	80-120	0	30
Trichloroethene	20	21.29	20	21.18	106	106	80-120	0	30
Vinyl Chloride	20	21.15	20	20.55	106	103	68-120	3	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 16250WAC625	Sample number(s): 8565578								
Acenaphthene	50	46.85	50	44.69	94	89	71-118	5	30
Acenaphthylene	50	44.76	50	43.33	90	87	70-121	3	30
Anthracene	50	46.17	50	44.21	92	88	80-114	4	30
Benidine	250	128.79	250	132.98	52	53	21-107	3	30
Benzo(a)anthracene	50	47.18	50	44.47	94	89	76-117	6	30
Benzo(a)pyrene	50	46.87	50	44.08	94	88	76-112	6	30
Benzo(b)fluoranthene	50	48.21	50	44.78	96	90	80-120	7	30

*- Outside of specification

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

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Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Benzo(g,h,i)perylene	50	50.67	50	47.29	101	95	76-120	7	30
Benzo(k)fluoranthene	50	45.95	50	44.5	92	89	75-121	3	30
4-Bromophenyl-phenylether	50	47.23	50	46.61	94	93	75-118	1	30
Butylbenzylphthalate	50	50.08	50	47.89	100	96	80-125	4	30
Di-n-butylphthalate	50	47.48	50	45.09	95	90	77-116	5	30
4-Chloro-3-methylphenol	50	41.83	50	40.56	84	81	72-116	3	30
bis(2-Chloroethoxy)methane	50	45.88	50	45.12	92	90	67-122	2	30
bis(2-Chloroethyl)ether	50	45.1	50	42.12	90	84	74-111	7	30
bis(2-Chloroisopropyl)ether	50	42.9	50	39.79	86	80	74-116	8	30
2-Chloronaphthalene	50	42.04	50	40.29	84	81	41-144	4	30
2-Chlorophenol	50	41.31	50	38.28	83	77	68-117	8	30
4-Chlorophenyl-phenylether	50	45.66	50	44.5	91	89	76-115	3	30
Chrysene	50	48.09	50	46.5	96	93	81-118	3	30
Dibenz(a,h)anthracene	50	50.99	50	47.73	102	95	77-119	7	30
1,2-Dichlorobenzene	50	32.14	50	30.52	64	61	32-111	5	30
1,3-Dichlorobenzene	50	28.38	50	27.69	57	55	24-107	2	30
1,4-Dichlorobenzene	50	30.14	50	28.28	60	57	26-108	6	30
3,3'-Dichlorobenzidine	50	42.11	50	40.64	84	81	10-103	4	30
2,4-Dichlorophenol	50	46.99	50	44.96	94	90	79-114	4	30
Diethylphthalate	50	43.56	50	40.38	87	81	39-137	8	30
2,4-Dimethylphenol	50	37.1	50	36.03	74	72	72-110	3	30
Dimethylphthalate	50	35.72	50	30.59	71	61	33-136	15	30
4,6-Dinitro-2-methylphenol	50	48.92	50	44.95	98	90	74-120	8	30
2,4-Dinitrophenol	100	72.88	100	65.36	73	65	50-128	11	30
2,4-Dinitrotoluene	50	44.89	50	45.55	90	91	85-117	1	30
2,6-Dinitrotoluene	50	45.96	50	45.15	92	90	80-115	2	30
1,2-Diphenylhydrazine	50	48.26	50	46.57	97	93	73-119	4	30
bis(2-Ethylhexyl)phthalate	50	50.5	50	48.94	101	98	77-118	3	30
Fluoranthene	50	44.62	50	42.46	89	85	77-111	5	30
Fluorene	50	45.73	50	44.09	91	88	80-116	4	30
Hexachlorobenzene	50	46.54	50	45.65	93	91	75-116	2	30
Hexachlorobutadiene	50	26.98	50	26.85	54	54	11-113	0	30
Hexachlorocyclopentadiene	100	10.09	100	8.18	10*	8*	24-128	21	30
Hexachloroethane	50	26.45	50	25.12	53	50	11-105	5	30
Indeno(1,2,3-cd)pyrene	50	49.46	50	46.45	99	93	76-115	6	30
Isophorone	50	44.72	50	43.07	89	86	78-120	4	30
Naphthalene	50	39.1	50	37.26	78	75	52-115	5	30
Nitrobenzene	50	44.73	50	43.68	89	87	73-113	2	30
2-Nitrophenol	50	47.5	50	45.94	95	92	83-109	3	30
4-Nitrophenol	50	27.53	50	26.6	55	53	10-83	3	30
N-Nitrosodimethylamine	50	24.95	50	24.3	50	49	28-81	3	30
N-Nitroso-di-n-propylamine	50	45.68	50	42.38	91	85	78-110	7	30
N-Nitrosodiphenylamine	50	47.86	50	46.15	96	92	77-116	4	30
Di-n-octylphthalate	50	52.41	50	50.08	105	100	79-125	5	30
Pentachlorophenol	50	44.61	50	39.48	89	79	57-116	12	30
Phenanthrene	50	44.46	50	42.58	89	85	78-112	4	30
Phenol	50	16.85	50	15.7	34	31	14-69	7	30
Pyrene	50	49.45	50	47.95	99	96	78-117	3	30
1,2,4-Trichlorobenzene	50	34.21	50	32.21	68	64	31-118	6	30
2,4,6-Trichlorophenol	50	50.06	50	48.23	100	96	83-120	4	30

*- Outside of specification

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Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: 162500019A	Sample number(s): 8565578								
PCB-1016	5.05	5.05	5.05	4.85	100	96	60-117	4	30
PCB-1260	5.04	4.69	5.04	4.42	93	88	57-134	6	30
Batch number: 162500020A	Sample number(s): 8565578								
Aldrin	0.102	0.0670	0.102	0.0688	66	67	28-119	3	30
Alpha BHC	0.100	0.104	0.100	0.0920	104	92	47-132	12	30
Beta BHC	0.102	0.0932	0.102	0.0854	91	84	56-125	9	30
Gamma BHC - Lindane	0.100	0.0881	0.100	0.0816	88	82	51-132	8	30
p,p-DDD	0.198	0.173	0.198	0.162	87	82	53-131	7	30
p,p-DDE	0.204	0.167	0.204	0.157	82	77	51-129	6	30
p,p-DDT	0.198	0.165	0.198	0.156	83	79	42-136	5	30
Delta BHC	0.102	0.103	0.102	0.0949	101	93	57-131	9	30
Dieldrin	0.198	0.173	0.198	0.162	87	82	54-126	6	30
Endosulfan I	0.100	0.0887	0.100	0.0797	89	80	51-118	11	30
Endosulfan II	0.203	0.178	0.203	0.169	88	83	54-124	5	30
Endosulfan Sulfate	0.201	0.179	0.201	0.174	89	87	41-133	3	30
Endrin	0.200	0.171	0.200	0.168	86	84	35-143	2	30
Endrin Aldehyde	0.207	0.161	0.207	0.157	78	76	40-135	3	30
Heptachlor	0.100	0.0817	0.100	0.0763	82	76	38-111	7	30
Heptachlor Epoxide	0.102	0.0979	0.102	0.0910	96	89	56-132	7	30
	ug/l	ug/l	ug/l	ug/l					
Batch number: 162510010A	Sample number(s): 8565578, 8565580-8565581								
DRO C10-C28	2640	2091.57	2660	2073.95	79	78	69-115	1	20
	mg/l	mg/l	mg/l	mg/l					
Batch number: 162541848004	Sample number(s): 8565578								
Arsenic	0.150	0.152			101		80-120		
Cadmium	0.0500	0.0521			104		80-120		
Chromium	0.200	0.207			103		80-120		
Copper	0.250	0.261			104		80-120		
Lead	0.150	0.155			103		80-120		
Molybdenum	2.00	2.07			103		80-120		
Nickel	0.500	0.522			104		80-120		
Silver	0.0500	0.0521			104		80-120		
Zinc	0.500	0.510			102		80-120		
Batch number: 162545713004	Sample number(s): 8565578								
Mercury	0.00100	0.000952			95		80-120		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16259102101A	Sample number(s): 8565578								
Total Cyanide (water)	0.200	0.200			100		90-110		
	mg/l	mg/l	mg/l	mg/l					
Batch number: 16258807901A	Sample number(s): 8565578								
HEM (oil & grease)	40	33.6	40	35	84	88	78-114	4	11
Batch number: 16259807901A	Sample number(s): 8565580								

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

LCS/LCSD (continued)

Analysis Name	LCS Spike Added mg/l	LCS Conc mg/l	LCSD Spike Added mg/l	LCSD Conc mg/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
HEM (oil & grease)	40	34.7	40	35.6	87	89	78-114	3	11
Analysis Name	OPR Spike Added pg/l	OPR Conc pg/l	OPRD Spike Added pg/l	OPRD Conc pg/l	OPR %REC	OPRD %REC	OPR/OPRD Limits	RPD	RPD Max
Batch number: 16250004 2378-TCDD	Sample number(s): 8565579 200	200.17			100		67-158		

MS/MSD

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

Analysis Name	Unspiked Conc mg/l	MS Spike Added mg/l	MS Conc mg/l	MSD Spike Added mg/l	MSD Conc mg/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 162541848004	Sample number(s): 8565578 UNSPK: P572804									
Arsenic	0.110	0.150	0.289	0.150	0.279	120	113	75-125	4	20
Cadmium	N.D.	0.0500	0.0474	0.0500	0.0464	95	93	75-125	2	20
Chromium	0.00306	0.200	0.209	0.200	0.204	103	101	75-125	2	20
Copper	N.D.	0.250	0.292	0.250	0.286	117	114	75-125	2	20
Lead	N.D.	0.150	0.142	0.150	0.134	95	89	75-125	6	20
Molybdenum	0.0126	2.00	2.05	2.00	2.00	102	99	75-125	3	20
Nickel	0.00446	0.500	0.478	0.500	0.458	95	91	75-125	4	20
Silver	N.D.	0.0500	0.0637	0.0500	0.0614	127*	123	75-125	4	20
Zinc	0.0105	0.500	0.588	0.500	0.557	115	109	75-125	5	20
Batch number: 162545713004	Sample number(s): 8565578 UNSPK: P558117									
Mercury	N.D.	0.00100	0.000925	0.00100	0.000910	92	91	80-120	2	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16259102101A	Sample number(s): 8565578 UNSPK: P575893									
Total Cyanide (water)	N.D.	0.200	0.207	0.200	0.207	104	104	90-110	0	20
	mg/l	mg/l	mg/l	mg/l	mg/l					
Batch number: 16258807901A	Sample number(s): 8565578 UNSPK: 8565578									
HEM (oil & grease)	2.08	41.7	45.63			104		78-114		
Batch number: 16259807901A	Sample number(s): 8565580 UNSPK: P566169									
HEM (oil & grease)	N.D.	41.7	37.4			90		78-114		

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Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

Laboratory Duplicate

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

Analysis Name	BKG Conc mg/l	DUP Conc mg/l	DUP RPD	DUP RPD Max
Batch number: 162541848004	Sample number(s): 8565578 BKG: P572804			
Arsenic	0.110	0.113	3	20
Cadmium	N.D.	N.D.	0 (1)	20
Chromium	0.00306	0.00337	10 (1)	20
Copper	N.D.	N.D.	0 (1)	20
Lead	N.D.	N.D.	0 (1)	20
Molybdenum	0.0126	0.00660	62* (1)	20
Nickel	0.00446	0.00582	26* (1)	20
Silver	N.D.	N.D.	0 (1)	20
Zinc	0.0105	0.0393	116* (1)	20
Batch number: 162545713004	Sample number(s): 8565578 BKG: P558117			
Mercury	N.D.	N.D.	0 (1)	20
	mg/l	mg/l		
Batch number: 16259102101A	Sample number(s): 8565578 BKG: P575893			
Total Cyanide (water)	N.D.	N.D.	0 (1)	20

Surrogate Quality Control

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

Analysis Name: TTO VOCs 624
Batch number: M162501AA

	1,2-Dichloroethane-d4	Fluorobenzene	4-Bromofluorobenzene
8565578	108	93	89
Blank	109	94	84
LCS	108	100	95
LCSD	108	100	92
Limits:	78-118	88-107	80-118

Analysis Name: Method 625
Batch number: 16250WAC625

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14	Phenol-d6	2-Fluorophenol	2,4,6-Tribromophenol
8565578	82	84	68	2*	5*	27
Blank	86	80	88	28	44	97
LCS	90	93	93	35	52	91
LCSD	89	93	92	35	49	91
Limits:	60-119	62-116	55-124	10-75	10-105	11-154

Analysis Name: PCBs w/ OC Pests 608
Batch number: 162500019A

*- Outside of specification

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

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

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

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/16/2016 04:54

Group Number: 1703226

Surrogate Quality Control (continued)

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

	Tetrachloro-m-xylene	Decachlorobiphenyl
8565578	85	89
Blank	93	95
LCS	103	36
LCSD	99	19
Limits:	33-137	10-148

Analysis Name: Pests (Charged with PCBs 608)
Batch number: 162500020A

	Tetrachloro-m-xylene	Decachlorobiphenyl
8565578	67	73
Blank	75	88
LCS	76	58
LCSD	68	60
Limits:	29-129	32-149

Analysis Name: DRO micro-ext 8015B
Batch number: 162510010A

	Orthoterphenyl
8565578	122
8565580	147
8565581	115
Blank	105
LCS	100
LCSD	106
Limits:	42-160

Analysis Name: Dioxins/Furans in Water - 1613
Batch number: 16250004

	13C12-2378-TCDD
8565579	108
Blank	114
OPR	94
Limits:	25-164

*- Outside of specification

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

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



**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1703226 Sample # 8565578-81

Environmental Analysis Request/Chain of Custody

[illegible]

Client: GES**Delivery and Receipt Information**

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>09/02/2016 18:48</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

Arrival Condition Summary

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

VOA Vial IDs (Headspace \geq 6mm): P&T INFLUENT

Unpacked by Karen Diem (3060) at 20:37 on 09/02/2016

Samples Chilled Details

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

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT131	2.8	DT	Wet	Y	Bagged	N

Explanation of Symbols and Abbreviations

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

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

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers		Inorganic Qualifiers	
A	TIC is a possible aldol-condensation product	B	Value is $<$ CRDL, but \geq IDL
B	Analyte was also detected in the blank	E	Estimated due to interference
C	Pesticide result confirmed by GC/MS	M	Duplicate injection precision not met
D	Compound quantitated on a diluted sample	N	Spike sample not within control limits
E	Concentration exceeds the calibration range of the instrument	S	Method of standard additions (MSA) used for calculation
N	Presumptive evidence of a compound (TICs only)	U	Compound was not detected
P	Concentration difference between primary and confirmation columns $>25\%$	W	Post digestion spike out of control limits
U	Compound was not detected	*	Duplicate analysis not within control limits
X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

Analytical test results meet all requirements of NELAC unless otherwise noted under the individual analysis.

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

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff. This report shall not be reproduced except in full, without the written approval of the laboratory.

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

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ANALYTICAL RESULTS

Prepared by:

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

Prepared for:

GES, Inc.
Suite A
1350 Blair Dr
Odenton MD 21113

Report Date: September 15, 2016

Project: NRG PRGSSubmittal Date: 09/02/2016
Group Number: 1703204
PO Number: NRG PRGS
Release Number: 0402859
State of Sample Origin: VAClient Sample Description

TPE Vapor Grab Air

Lancaster Labs

(LL) #


8565488

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

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

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

Respectfully Submitted,

Lynn M. Frederiksen
Principal Specialist Group Leader

(717) 556-7255

Sample Description: TPE Vapor Grab Air
NRG PRGS - Alexandria, VA

LL Sample # AQ 8565488
LL Group # 1703204
Account # 08390

Project Name: NRG PRGS

Collected: 09/01/2016 12:10 by JP

GES, Inc.

Submitted: 09/02/2016 18:48

Suite A

Reported: 09/15/2016 13:08

1350 Blair Dr

Odenton MD 21113

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

Sample Comments

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

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
07090	BTEX/C1-C4/>C4-C10	EPA 18 mod/EPA 25 mod	1	M1625030AA	09/06/2016 13:37	Alexander D Sechrist	1

Quality Control Summary

Client Name: GES, Inc.
Reported: 09/15/2016 13:08

Group Number: 1703204

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

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

Method Blank

Analysis Name	Result	LOQ
	mg/m3	mg/m3
Batch number: M1625030AA	Sample number(s): 8565488	
Benzene	< 3	3
C1-C4 Hydrocarbons as propane	< 18	18
>C4-C10 Hydrocarbons hexane	< 35	35
Ethylbenzene	< 4	4
Toluene	< 4	4
Xylene (total)	< 9	9

LCS/LCSD

Analysis Name	LCS Spike Added	LCS Conc	LCSD Spike Added	LCSD Conc	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
	mg/m3	mg/m3	mg/m3	mg/m3					
Batch number: M1625030AA	Sample number(s): 8565488								
Benzene	31.95	28.05	31.95	27.18	88	85	71-116	3	30
Ethylbenzene	43.42	40.7	43.42	38.79	94	89	59-144	5	30
Toluene	37.69	41.67	37.69	41.17	111	109	77-143	1	30
Xylene (total)	130.27	122.27	130.27	114.36	94	88	58-148	7	30

*- Outside of specification

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

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**Lancaster Laboratories
Environmental**

Acct. # 8390 Group # 1703204 Sample # 8565488

[illegible]

Client: GES

Delivery and Receipt Information

Delivery Method:	<u>ELLE Courier</u>	Arrival Timestamp:	<u>09/02/2016 18:48</u>
Number of Packages:	<u>1</u>	Number of Projects:	<u>2</u>
State/Province of Origin:	<u>VA</u>		

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

Unpacked by Karen Diem (3060) at 20:37 on 09/02/2016

Explanation of Symbols and Abbreviations

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umhos/cm	micromhos/cm	ng	nanogram(s)
C	degrees Celsius	F	degrees Fahrenheit
meq	milliequivalents	lb.	pound(s)
g	gram(s)	kg	kilogram(s)
µg	microgram(s)	mg	milligram(s)
mL	milliliter(s)	L	liter(s)
m3	cubic meter(s)	µL	microliter(s)
		pg/L	picogram/liter
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>	greater than		
J	estimated value – The result is \geq the Method Detection Limit (MDL) and $<$ the Limit of Quantitation (LOQ).		
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X,Y,Z	Defined in case narrative	+	Correlation coefficient for MSA <0.995

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