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2023 First Semiannual Groundwater/Surface Water Quality Monitoring and Special Groundwater Quality Assessment Report

Mineral Springs Road Former MGP Site (NYSDEC #V00195)
West Seneca, New York

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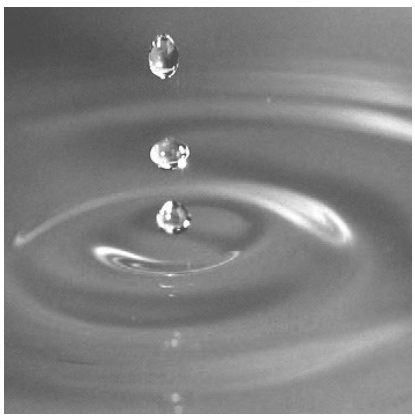

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1. INTRODUCTION

This report presents a summary of groundwater and surface water quality monitoring results for the 2023 First Semiannual monitoring event at the National Fuel Gas Mineral Springs facility at 365 Mineral Springs Road in West Seneca, New York (Site). The site is a former manufactured gas plant (MGP) and implements ongoing operations and maintenance which includes groundwater and surface water quality monitoring. The report also includes an assessment of groundwater quality at four monitoring well locations requested by the New York State Department of Environmental Conservation (NYSDEC or Department) on February 27, 2023. The purpose of the groundwater assessment is discussed in Section 1.1.

1.1 Background

The Site is currently an active National Fuel Gas service center consisting of approximately 81 acres and includes seven active buildings, numerous parking areas, pipeline equipment and staging areas, and undeveloped areas. The site location and site layout are shown in **Figures 1 and 2**, respectively.

National Fuel completed remedial construction which included source removal and containment in 2001 under a Voluntary Cleanup Agreement (VCA) No. B9-0538-98-08 between National Fuel and the New York State Department of Environmental Conservation (NYSDEC). Remedial and engineering control features include perimeter fencing, six asphalt caps, a clay cap, an HDPE cap, and a capped drainage feature consisting of both clay and HDPE caps. National Fuel performs operations and maintenance (O&M) activities for the remedy in accordance with the Final Engineering Report, Volume II – Operations and Maintenance (O&M) Plan, dated May 2002 (O&M Plan). The O&M Plan specifies groundwater and surface water quality monitoring conducted on a semiannual basis. An assessment of institutional and engineering controls is summarized each year in a Site Management Periodic Review Report (PRR). The 2022 PRR was submitted to the NYSDEC on December 13, 2022.

Following receipt of NYSDEC comments, the 2022 PRR was revised and re-submitted on February 2, 2023. The Department reviewed the revised PRR and issued a response letter dated February 27, 2023 disapproving the 2022 PRR and requested a groundwater assessment of previously detected concentrations of volatile organic compounds (VOCs) benzene-toluene-ethylbenzene-xylenes (BTEX) and polycyclic aromatic hydrocarbons (PAHs) at on-Site wells MW-7 and MW-19 and total and free cyanide at wells MW-12 and MW-16 (see **Figure** 2 for well locations). A conference call held between the Department, National Fuel, and GEI on March 9, 2023 and an approach was discussed and agreed upon for the on-site groundwater assessment.

GEI transmitted a draft work plan to the Department based on the discussed approach for the On-Site Groundwater Quality Monitoring Assessment, revised the plan per Department comments and transmitted the final to NYSDEC on March 31, 2023. NYSDEC approved the Groundwater Quality Monitoring Assessment (Groundwater Assessment) scope of work on the same day and included a conditional approval of the 2022 PRR pending completion of the groundwater assessment. The groundwater assessment activities are discussed in Section 3.0.

1.2 Site Conditions

The Site is relatively flat lying. An unnamed surface water drainage feature, classified as a Class D stream, is situated along the southern site boundary, and flows in a westward direction. The stream drains into a 72-inch diameter culvert pipe that connects to the 78-inch diameter storm sewer below Calais Street. This sewer eventually discharges stream flow with stormwater and Combined Sewer Overflows (CSOs) into the Buffalo River. The sewer system discharging to the Buffalo River is part of the City of Buffalo Sewer Authority's system located near the intersection of Mineral Springs Road and Ogden Street.

The stratigraphy of the site in order of occurrence is:

- soil fill (4 to 8 feet in thickness)
- approximately 10 feet of a laterally extensive clay (referred to as the upper confining clay layer {UCL})
- silt, sand, and gravel
- a lower confining clay layer (LCL), and bedrock.

Overburden groundwater is typically encountered 5 to 12 feet below ground surface and fluctuates approximately 2 feet seasonally. Overburden groundwater flow is generally to the north and northwest toward Mineral Springs Road, Calais Street, and the Buffalo River. Average overburden groundwater velocity across the site was calculated to be approximately 0.06 feet per day (22 feet per year).

2. MONITORING NETWORK AND SAMPLING METHODS

Groundwater monitoring well and surface water sampling locations are shown on **Figure** 2. The groundwater monitoring wells were installed during and following completion of remedial construction and are screened to monitor groundwater flowing in the lower UCL and the silt, sand, and gravel layer. The O&M Plan specifies groundwater sample collection and analysis from 13 on-site and off-site monitoring wells. In addition, the determination for accumulated Dense Non-Aqueous Phase Liquid (DNAPL) in Recovery Well #1 (RTW-1) and purging of accumulated liquid, if present, is included in the groundwater monitoring program. Consistent with the O&M Plan, groundwater samples were collected using low-flow sampling methods with peristaltic pumps.

Surface water sample locations identified in the O&M Plan include SW-01 and SW-02 situated upstream and downstream of the facility. On July 7, 2020, a staff gauge was installed at SW-02 to facilitate the collection of surface water elevation data at the upstream sampling location. The staff gauge was damaged during the winter of 2022-2023 and the surface water elevation at SW-02 was manually surveyed for the First Semiannual 2023 sampling event. The staff gauge will be reinstalled and surveyed prior to the second semiannual 2023 groundwater sampling event.

Groundwater and surface water samples for the 2023 First Semiannual monitoring event were collected on May 3 and 4, 2023 by a GEI sampling team. Monitoring was consistent with sampling procedures described in the O&M Plan. **Table 1** summarizes sampling location, the established sample analysis for each monitoring well, Quality Control sample analysis, and current reference elevations. A synoptic round of water levels was measured in monitoring wells on May 2, 2023, and water levels were recorded prior to purging and sampling. Groundwater elevations are summarized in **Table 2**. Groundwater elevations were generally between two and three feet higher during the May 2023 sampling event when compared to the 2022 summer sampling event and most groundwater elevations were one to two feet lower this event when compared to the spring event monitored in 2022. The surface water elevation at upstream location SW-02 was 1.97 feet higher (586.14 FASL versus 584.17 FASL) during the first semiannual event. The surface water elevation in the stream at downstream locations SW-01 was 3.15 feet higher this event compared to the First 2022 Semiannual Monitoring event.

Field measured parameters for wells sampled for the 2023 First Semiannual event were periodically recorded during purging and include temperature, pH, Oxidation-Reduction Potential (ORP), electrical conductance, and turbidity. A summary of final field measured

parameters is included in **Table 3**. All samples were placed in coolers and iced during same day transport under chain-of-custody to the analytical laboratory (Eurofins Test America) located in Amherst, New York. Final laboratory analytical data reports were made available to GEI on June 1, 2023, and subsequently evaluated for data usability. Field sampling logs for the 2023 First Semiannual sampling event are provided in **Appendix A**.

3. 2023 GROUNDWATER ASSESSMENT

3.1 Groundwater Assessment Activities

GEI conducted the Groundwater Assessment between May 1 and May 4, 2023 in accordance with the NYSDEC-approved March 2023 Scope of Work. Specific field activities are described in the following sections.

3.1.1 Monitoring Well Integrity Assessment

The as-built well construction records for each monitoring well of interest were reviewed and compared to field conditions to document appropriate well depth, well casing integrity, and inspection of surface seals. Completed monitoring well condition summary forms are included in **Appendix B** to document monitoring well integrity. The field-measured depths of monitoring wells MW-7, MW-12 and MW-16 were consistent with as-built monitoring well construction logs. However, the depth of well MW-19 was found to be approximately 1.5 feet shallow when compared to the well construction log. The obstruction was determined to be two one-foot disposable bailers that were found stuck at the base of the well screen during well development and was removed prior to redevelopment. Each monitoring well had minimal sediment accumulation at the base of the screen. The protective casings or surface well covers, PVC risers, and surface seals were found to be in acceptable condition during the inspection with the exception of the following:

- The PVC riser and protective casing at location MW-12 was found to be slightly bent apparently struck during mowing of the Eastern Swale HDPE Cap, however the damage does not currently impact the ability of the well to yield representative groundwater samples and is suitable for monitoring purposes. As a measure to improve long-term viability, repairs to both the protective steel casing and PVC are recommended with the addition of surface protection by placing concrete blocks or barriers on the vegetated HDPE cap around the well for added protection.

- A bolt is missing on the flush-mount surface well cover at location MW-7. A new replacement bolt will be installed prior to the next sampling event.

None of the monitoring wells required decommissioning and replacement.

3.1.2 Well Redevelopment

Prior to well redevelopment, the existing down-hole tubing in each monitoring well was removed, placed in plastic garbage bags, and disposed of in the on-site dumpster near

Building 14. A three-foot clear PVC bailer was placed to the well bottom to check for DNAPL presence. No DNAPL was observed in any monitoring well. Each monitoring well of interest was redeveloped consistent with the March 2023 Groundwater Assessment Scope of Work and included well purging using a combination of disposable and stainless-steel bailers and a submersible Whale pump. Water quality parameters were measured during well redevelopment, including pH, specific conductance, temperature, dissolved oxygen, oxidation-reduction potential and turbidity. Monitoring well redevelopment logs are provided as **Appendix C** and summarized in **Tables 4A through 4D**. More than 10 well volumes were removed from each well during redevelopment. The volume purged from each well during re-development is summarized below:

Well ID	Well Volume (gallons)	Approximate Volume Purged (gallons)
MW-7	1.8	34
MW-12	1.5	25
MW-16	2.5	30
MW-19	3.2	55

Purge water was discharged into 5-gallon pails and subsequently transferred to 55-gallon drums for short-term storage prior to characterization and proper disposal as specified in the Groundwater Quality Assessment work plan. A slight petroleum-like odor was noted during the redevelopment of monitoring wells MW-7 and MW-19. No LNAPL or DNAPL was observed in any well during redevelopment.

3.1.3 Well Sampling

As described in the work plan, each of the redeveloped wells was sampled using a 1.5" diameter, clear PVC bailer the day following the completion of redevelopment and a second sample was collected from each redeveloped well on the following day, using low flow (peristaltic) methods. The low-flow sample collected from each redeveloped well during the Groundwater Assessment served as the routine groundwater sample for the 2023 First Semi-Annual Groundwater Sampling event. New downhole tubing was installed in each well and a minimum of one well volume was purged using low flow methods and water quality parameters described in Section 3.1.2 were recorded. The new tubing intake was installed approximately 1-foot from the bottom of each monitoring well based on well screen length and the geologic formation present.

The groundwater samples were collected into the appropriate laboratory-provided sampling containers. Sample collection and well re-development dates and times are included in Tables 3, 4A, and 4B. The sample containers were labeled, placed in a laboratory-supplied cooler, and packed on ice (to maintain a temperature of 4˚ C). Samples were delivered to Eurofins-Buffalo laboratory for analysis. The laboratory maintains a NYSDOH ELAP certification for the parameters tested for at Mineral Springs. Chain-of-custody procedures were followed using the chain-of-custody form. Monitoring wells were sampled for the following parameters:

Monitoring Well	Testing Parameters
MW-07 and MW-19	BTEX (USEPA SW846 8260C)
	17 PAHs (USEPA SW846 8270D)
MW-12 and MW-16	Cyanide, Total (USEPA SW846 9012B)
	Cyanide, Free (USEPA SW846 9016)

Groundwater sampling results for both samples collected using a bailer and low-flow sampling methods are discussed in Section 5.

4. LABORATORY METHODS AND QUALITY CONTROL

Laboratory data usability for samples collected for both the Groundwater Assessment and First 2023 Semiannual Monitoring event was conducted and is described below.

4.1 Laboratory Methods

Samples were analyzed for BTEX volatile organic compounds (VOCs) by SW-846 method 8260C, polycyclic aromatic hydrocarbon (PAH) semi-volatile organic compounds (SVOCs) by SW-846 Method 8270D, total cyanide by SW-846 Method 9012B, and free cyanide by SW-846 Method 9016. Surface water samples and groundwater well MW-11A were analyzed for suspended solids (TSS) by Standard Methods to assess the influence of particulates on cyanide detections. Except for free cyanide, water samples were analyzed by Eurofins Test America Laboratories, Inc. (Eurofins) of Amherst, New York. Free cyanide analyses were performed by Eurofins Test America of Edison, New Jersey. Each laboratory maintains NYSDOH ELAP certifications.

4.2 Laboratory Quality Control

The laboratory data package (Level 2) is included in **Appendix D**. A Level 4 data package was also provided and was reviewed during GEI data validation and preparation of the data usability report (DUSR). Overall quality assurance and quality control (QA/QC) measures were taken to ensure the reliability of the data generated during the sampling event. These measures include the submittal of trip blanks and the collection of a blind duplicate sample. Equipment blanks were not required since dedicated sampling equipment was used.

The specific methodologies employed in obtaining the analytical results refer to the following USEPA references.

- "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (SW-846), Third Edition, September 1994, USEPA Office of Solid Waste.
- 40CFR Part 136 "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act", October 26, 1984 USEPA.

The data validation was performed on the Level 4 data package based on the Standard Operating Procedure (SOP) HW-33 (Revision 3) Low/Medium Volatile Data Validation (March 2013), SOP HW-35 (Revision 2) Semivolatile Data Validation (March 2013), and

SOP 2c (Revision 15), SOP for the Evaluation of Cyanide for the Contract Laboratory Program (December 2012), modified for the SW-846 methodologies utilized.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Internal Standard Results
- Laboratory Control Sample (LCS) Results
- Field Duplicate Results
- Quantitation Limits and Data Assessment
- Sample Quantitation and Compound Identification

Blind duplicate samples were collected at sampling location well MW-23 and submitted for analyses with the sample delivery group to assess laboratory precision. Laboratory accuracy was assessed through analysis of surrogate spike recoveries.

A data usability review is provided in **Appendix E**. Validation actions were necessary for the non-detect results for naphthalene in samples MW-10 RE, MW-11A RE, SW-01 RE, SW-02 RE and MW-13 RE due to laboratory blank contamination in the original sample. Reanalysis was necessary due to low level instrument blank contamination and samples were reanalyzed outside of hold time. Each sample was subsequently flagged as estimated (UJ). Results for total cyanide in samples MW-17, MW-12 RE and MW-16 RE were flagged as estimated (J) due to low bias following exceedance of holding times. The positive results for total cyanide in several samples were flagged as estimated (J) due to high bias when compared with instrument blanks. Other data appear usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers. Laboratory reporting limits (RLs) for some individual analytes were elevated in samples MW-07, MW-19, and MW-17 which required dilutions due to elevated concentrations of analytes or matrix interference. As a result, (RLs) were above their respective groundwater quality standard/guidance values (GWQS/GV) for on-site wells MW-07 and MW-19 and upgradient well MW-17. However, laboratory minimum detection limits (MDLs) were below water

quality comparison criteria and J-qualified values were not reported. Similarly, individual PAH constituent RLs were elevated where dilutions were required due to high analyte concentrations. No deviations from analytic protocol that affected the acceptability of the results were reported by the laboratories.

5. ON-SITE GROUNDWATER ASSESSMENT SAMPLING RESULTS

The groundwater analytical results for wells redeveloped and sampled using a bailer and low flow sampling methods collected during the Groundwater Assessment sampling event are summarized in **Table 5A** with sample results for the First 2023 Semiannual Monitoring Event. Results for the Groundwater Assessment event are compared to the NYSDEC Technical Operational and Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998) (herein referred to as GWQS/GV or groundwater standards or water quality comparison criteria). Sampling results for the four on-site wells included in the Groundwater Assessment are summarized by post-redevelopment sampling method and COCs in the tables below.

Monitoring Well	BTEX (ug/L)		PAHs (ug/L)	
	Bailer	Low Flow	Bailer	Low Flow
MW-07	2,746	2,606	3,503	3,130
MW-19	3,543	4,610	1,327	3,200

Monitoring Well	Total CN (ug/L)		Free CN (ug/L)	
	Bailer	Low Flow	Bailer	Low Flow
MW-12	580	720 J	3.3 J	13.3
MW-16	2,300 J	3,100	12.5	59.1

A discussion of post redevelopment groundwater sampling results for each well is provided below.

5.1 MW-7 Sampling Comparison

A time-series concentration plot of historical BTEX and PAH concentrations in MW-7 is provided on **Figure 3**. Following well redevelopment at MW-7, results for BTEX analysis were similar between both the bailer and low flow sampling (2,746 ug/L and 2,606 ug/L,

respectively). Similarly, PAH results were similar between the two sampling methods yielding 3,503 ug/L for the bailer sample and 3,130 ug/L for the low flow sample. BTEX and PAH concentrations from the groundwater assessment sampling were similar to those detected over the past 10-year period. These results suggest that BTEX and PAH presence in groundwater in the vicinity of MW-7 is at a near-steady state. Monitoring well MW-10 which is located downgradient does not exhibit impacts from the elevated concentrations at MW-7 indicating a localized impact in the area of well MW-7. As shown in Table 5A, each individual BTEX constituent was detected above GWQS/GV, while only the PAH compounds acenaphthene and naphthalene were detected above GWQS/GVs.

5.2 MW-12 Sampling Comparison

A time-series concentration plot of historical total and free cyanide concentrations in MW-12 is provided on **Figure 4**. Following well redevelopment at MW-12, results for total cyanide analysis were similar for both the bailer and low flow sampling (580 ug/L and 720 J ug/L, respectively). These concentrations are above the total cyanide GWQS/GV. While sampling results are similar for both sampling methods, the post redevelopment sample results are lower than results obtained over the past 5 years with the bailer sample closer to lower total cyanide concentrations reported 10 years ago. Free cyanide concentrations at MW-12 were low for both sampling methods, with the bailer sample yielding a concentration of 3.3 J ug/L and the low flow sample yielding a concentration of 13.3 ug/L. A groundwater GWQS/GV does not exist for free cyanide.

5.3 MW-16 Sampling Comparison

The historic time-series concentrations plot of total and free cyanide in well MW-16 is provided on **Figure 5**. Total cyanide concentrations have exhibited an increasing concentration trend over the past 10-year time period (note the change in trend in 2021 on Figure 5). The rise in concentration correlates with a rising water level condition in the in the adjacent un-named stream that parallels the southern boundary of the Site which began around 2013. A blockage in the stormwater culvert adjacent to the railroad track embankment where the stream flows below ground to the Buffalo River has caused surface water to back up in the stream, causing "losing stream" conditions where surface water is recharging Site groundwater in the vicinity of MW-16. It is believed that the elevated surface water condition is directly influencing the cyanide concentrations detected at well MW-16. Maintenance records indicate that a minor blockage of the culvert was last removed in 2012 which correlates with the beginning of the increasing total cyanide concentration trend. The total cyanide concentration in the sample collected from the bailer was 2,300 ug/L compared to 3,100 ug/L in the low-flow sample. These concentrations are above the total cyanide GWQS/GV. As shown in **Figure** 5, both post redevelopment samples reflect a significant decrease in total cyanide concentration compared to the last several sampling

events. Similarly, the free cyanide sample collected from the bailer yielded a concentration of 12.5 ug/L versus a concentration of 59.1 ug/L from the low flow sample. A groundwater GWQS/GV does not exist for free cyanide.

During redevelopment, approximately 30 gallons were purged from well MW-16 which may have temporarily influenced the chemistry in the immediate vicinity of the well resulting in a lower total cyanide concentration for both sampling methods. The variability in total cyanide and free cyanide concentrations between the two methods may be representative of back-diffusion of cyanide into groundwater from the capped waste material over the 24-hour time period between sampling events. It is recommended that additional evaluation of the re-equilibrium geochemistry is conducted during the next sampling event.

5.4 MW-19 Sampling Comparison

Historical time-series concentration plots for total BTEX and total PAHs in well MW-19 are presented on **Figure 6**. The total BTEX concentration in the bailer-collected sample was 3,543 ug/L, which is the lowest concentration recorded at the well since sampling occurred in the late 1990s. The total BTEX concentration in the low flow sample was slightly higher at 4,610 ug/L but remains at the low end of the range of detected concentrations. Similarly, the total PAH concentration in the bailer sample collected from MW-19 was at the lowest concentration recorded (1,327 ug/L). The total PAH concentration in the low-flow sample was similar to the prior semiannual monitoring event and remains at the low end of the range of concentrations detected over the past 10 years.

Approximately 55 gallons of groundwater were removed from well MW-19 during redevelopment which likely temporarily influenced the groundwater chemistry in the direct vicinity of MW-19. The lower BTEX and PAH concentrations detected in the bailer-collected sample likely reflect the influence from groundwater with lower BTEX/PAH concentrations being drawn toward the well screen due to the induced change in the hydraulic gradient caused by well purging. The low-flow sample that was collected approximately 24-hours after the bailer sample yielded BTEX and PAH concentrations that were more comparable to recent historic results, and likely represents a rebound following back-diffusion of these compounds saturated zone near the well. As shown in Table 5A, benzene, ethylbenzene, and total xylene were detected above GWQS/GV and only the PAH compound naphthalene was detected above GWQS/GVs.

6. EVALUATION OF SEMIANNUAL MONITORING RESULTS

The groundwater analytical results for samples collected during the May 2023 First Semi-Annual Sampling Event are presented in **Tables 5A and 5B**. Surface water sample results are summarized in **Table 6**. Results for the monitoring event are compared to the NYSDEC Technical Operational and Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998) which are the GWQS/GVs. Historical time-series total BTEX and total PAH concentration plots for groundwater and surface water sample IDs are provided in **Appendix F**. Historical time series plots for individual BTEX compounds and the PAH, naphthalene will be presented with comparisons to GWQS/GVs in the 2023 Second Semiannual Report and 2023 Periodic Review Report (PRR). Monitoring results are discussed below.

6.1 Groundwater Elevations and Flow

A potentiometric surface map of groundwater elevations for the upper water-bearing zone at the site is provided on **Figure 7**. The groundwater flow direction occurs predominantly to the north and northwest. The surface water elevation in the Class D stream at SW-02 was higher than the head in nearby well MW-11A (586.14 FASL and 584.26 FASL, respectively) indicating "losing stream conditions" where surface water is recharging groundwater infiltrating at the base grade of the stream at this location. The surface water elevation in the stream at SW-01 was slightly higher than nearby well MW-16 (585.95 FASL and 584.13 FASL, respectively) also indicating "losing stream conditions" at this location.

6.2 Constituents Detected in Groundwater

Monitoring well locations provide groundwater quality data for on-site areas near former MGP residual remediation areas and near the site perimeter at both on-site and off-site monitoring locations. For purposes of evaluating the 2023 First Semiannual groundwater monitoring results, the low flow sampling analytical data obtained during the Groundwater Quality Assessment are used in the assessment of groundwater quality (i.e., results from low flow sampling methods are discussed in the summary below). Groundwater quality in each of these areas is described below. As established in the O&M Plan for the Mineral Springs Facility, the lists of analytes are specific to each well. The list of analytes is presented in Table 1.

On-Site Areas

A summary of groundwater analytical data for "On-Site" areas is provided in **Table 5A**. Monitoring wells MW-07, MW-10, MW-11A, and MW-19 assess on-site groundwater quality of subsurface soils impacted with hydrocarbon MGP residuals. BTEX compounds were not detected at MW-10. BTEX compounds were detected above the NYSDEC Groundwater Standards in MW-07, MW-11A and MW-19. As presented in Section 4, some analyte reporting levels were elevated above their respective groundwater quality GWQS/GV. BTEX compound detections were similar to historical concentrations in each of these wells.

PAH compounds were detected in well MW-07 (naphthalene and acenaphthene) and well MW-19 (naphthalene) at concentrations above water quality comparison criteria. Well MW-11A includes analysis for total and free cyanide, plus analysis for TSS in support of the assessment of past cyanide detections in surface water. Total cyanide was detected at 200 µg/L which did not exceed the NYS groundwater standard and is within the range of the last ten monitoring events. Free cyanide was detected at a concentration of 2.3 J µg/L. The TSS concentration in well MW-11A was 39.2 mg/L indicating a low number of suspended solids in the sample.

Monitoring wells MW-12 and MW-16 assess on-site groundwater quality at locations of capped areas with known subsurface fill mixed with MGP purifier box residuals. Groundwater samples from these two wells were sampled using low flow sampling methods and analyzed for total and free cyanide. Total cyanide concentrations were 720 J µg/L at MW-12 and 3100 J µg/L at MW-16; each is above water quality comparison criteria. The concentration detected during this event at well MW-12 (720 µg/L) was lower than historic five-year average, but within the historic range of concentrations detected in the well. The concentration at well MW-16 was lower than the prior six sampling events but the concentration remains elevated when compared with historic levels. The monitoring well is screened in the saturated zone containing MGP residual materials below an engineered clay capped area. Free cyanide concentrations were 13.3 µg/L at MW-12 and 59.1 µg/L at MW-16 (a NYSDEC Groundwater Standard for free cyanide has not been established). Concentrations of free cyanide in both wells were within the range of prior detections. An assessment of the data trends will be presented and discussed in the 2023 Periodic Review Report (PRR).

Site Perimeter

A summary of groundwater analytical data for "Site perimeter" areas is provided in **Table 5B**. Monitoring well MW-17 assesses upgradient groundwater quality and wells MW-13, MW-14, MW-20, MW-21, MW-22, and MW-23 monitor downgradient water quality with

MW-20 and MW-21 monitoring cyanide concentrations at off-site locations. VOCs and PAHs were not detected at any site perimeter area sampling locations.

Total cyanide was detected at a concentration of 27 J µg/L in upgradient well MW-17 and is considered representative of background. Total cyanide was detected in downgradient wells MW-14, MW-20, MW-21 and MW-22 at concentrations above water quality comparison criteria (200 µg/L) at concentrations ranging from 410 µg/L to 870 J µg/L. The total cyanide concentration detected in each of these wells was within the range of historic concentrations and no increasing trends are noted.

Free cyanide was detected in perimeter monitoring wells MW-14, MW-20, MW-21 MW-22 and MW-23. Concentrations ranged from 4.9 J µg/L to 13.5 J µg/L and were flagged as laboratory estimated concentrations during the data validation process due to each sample being analyzed outside of the specified holding time by the laboratory. An assessment of the data trends will be discussed in the 2023 PRR.

6.3 Constituents Detected in Surface Water

Two surface water samples (SW-01 and SW-02) were collected from the unnamed NYSDEC Class D Stream flowing along the south side of the site. These surface water sampling locations monitor the effectiveness of the containment engineering controls of the Eastern Drainage Ditch Cap and monitor the concentrations of constituents of concern in surface water downstream of the Site. The collected samples were analyzed for BTEX and PAH compounds, as well as total and free cyanide. Samples were also collected at each surface water sampling location and analyzed for total suspended solids (TSS) to evaluate a potential correlation between suspended solids (TSS) and total/free cyanide results.

BTEX and PAH compounds were not detected in surface water samples. Total cyanide was not detected in either surface water sample. Free cyanide was detected at a laboratory qualified (estimated) concentration of 2.3 J µg/L at downstream location SW-01 and was not detected in the upstream sample. The free cyanide detected concentration at SW-01 is within the range of historic detected concentrations and well below surface water regulatory criteria.

Total Suspended Solids were not detected in either the upstream or downstream sample at a laboratory detection limit of 4.0 mg/L.

6.4 DNAPL Recovery Test Well

On May 2 2023, the Recovery System at RTW-1 was gauged using a threaded steel rod to assess whether DNAPL had accumulated since the August 2022 sampling event. No visual staining was observed on the rod bottom. Rigid tubing was lowered to the base of the well and pumped using peristaltic methods. Approximately two liters of water were evacuated.

The water contained only trace DNAPL in the form of "blebs", visually estimated to be less than 1% of total volume. Based on the testing performed, passive DNAPL accumulation was not identified during the May 2023 monitoring event.

7. SUMMARY AND RECOMMENDATIONS

7.1 First Semiannual Sampling Summary

A summary of May 2023 field testing and water quality monitoring in on-site remediated areas, perimeter areas, and on-site surface water is provided below:

Groundwater:

- Groundwater elevations were generally between two and three feet higher during the May 2023 sampling event when compared to the 2022 summer sampling event and most groundwater elevations were one to two feet lower this event when compared to the spring event monitored in 2022. Groundwater flow directions remained in a north and northwest direction.

On-Site Areas:

- BTEX compounds continue to be detected above GWQS/GVs at wells MW-07, MW-19, and MW-11A (marginally as benzene was the sole compound detected (2.7 ug/L). BTEX compound detections were within the range of concentrations detected over the past 10 years in each of the wells. Low concentrations of PAHs were detected in wells MW-7 and MW-19 but above water quality comparison criteria. PAH detections were within the range of concentrations detected over the past 10 years. Based on historic and recent monitoring data for wells downgradient from these locations, the groundwater impacts are local to the well.

- Total cyanide concentrations at wells MW-12 and MW-16 were above water quality comparison criteria but detected at concentrations lower than those reported over the past 4 to 5 years. As discussed in Section 5.3, purging during well redevelopment may have influenced the local water quality in those areas. At MW-16, the total cyanide concentration is well below the peak level observed in the spring of 2021. Free cyanide concentrations at each location were within the range of historic concentrations. As identified in surface water sampling results for the downstream sample location SW-1, the proximity of elevated cyanide concentrations at MW-16 do not appear to be significantly affecting surface water quality in the stream (see Section 6.3).

Perimeter Areas:

- BTEX and PAH compounds were not detected in the four Site perimeter and upgradient groundwater wells tested for those parameters during the May 2023 sampling event.

- Total cyanide was detected at upgradient well MW-17 indicating the constituent is present in background groundwater (27 J µg/L).

- Total cyanide was detected in downgradient wells MW-14, MW-20, MW-21 and MW-22 at concentrations above water quality comparison criteria (200 µg/L) at concentrations ranging from 410 µg/L to 870 J µg/L. The total cyanide concentration detected in each of these wells was within the range of historic concentrations and no increasing trends are noted.

- Free cyanide was detected in perimeter monitoring wells MW-14, MW-20, MW-21 MW-22 and MW-23. Concentrations ranged from 4.9 J µg/L to 13.5 µg/L. The detection at location MW-14 was flagged as laboratory estimated concentrations during the data validation process due to each sample being analyzed outside of the specified holding time by the laboratory. Detected concentrations were consistent with historic results.

Surface Water:

- The surface water elevation of the Class D stream was low indicating "losing stream conditions" at both the upstream and downstream measurement locations in May 2023. Accumulated debris at the culvert entry is causing the backup of surface water. National Fuel is working with National Grid to gain Right-of-Entry access to work beneath National Grid's high voltage power lines to clear the debris that is causing the higher than normal water levels.

- Neither BTEX or PAH compounds were detected in Site upstream or downstream surface water samples during the May 2023 sampling event. Total cyanide was not detected in either the upstream or downstream surface water sample.

- Total Suspended Solids were not detected in either the upstream or downstream sample at a laboratory detection limit of 4.0 mg/L.

- Free cyanide was detected at a concentration of 2.3 J µg/L at downstream location SW-01 and was not detected in the upstream sample. The result was consistent with historic detections.

- Testing results for this event indicate site groundwater has no significant impact on surface water quality.

DNAPL accumulation was not identified in RTW-1 during the May 2023 monitoring event.

A discussion of historical concentration trends and overall groundwater and surface water quality will be included in the 2023 PRR. Monitoring results indicate no immediate response actions appear to be warranted.

7.2 Groundwater Assessment Summary

The results of the monitoring well integrity assessment indicate that each of the four monitoring wells reflects the as-installed construction documented in well logs and each well is in acceptable condition to appropriately monitor groundwater at the facility. Minor repairs to the protective casing at well MW-12 and the well cover at well MW-7 are necessary and will be completed later this year. Neither condition affects the quality of groundwater samples collected from the wells. The redevelopment activities completed at each monitoring well indicated adequate groundwater yield and recovery of the monitored formation and no blockage or flow restriction was noted in any well. DNAPL was not present in the any of the tested wells.

The comparison of analytical results for bailer and low flow sample collection methods identified similar concentrations in well MW-7 (BTEX and PAHs) and MW-12 (Total and Free Cyanide) and were consistent with prior testing results, likely indicating stable constituent concentrations in the vicinity of each well. The bailer-collected sample concentrations from well MW-16 (Total and Free Cyanide) and MW-12 (BTEX and PAHs) were comparatively lower than the low flow sample results, suggesting that constituent back diffusion occurs from capped MGP waste residuals which locally affects water quality samples collected from the wells.

7.3 Recommendations

The Groundwater Quality Assessment conducted at wells MW-7, MW-12, MW-16, and MW-19 assisted in understanding the behavior of COCs in the saturated zone. Testing suggests the potential impact from back diffusion and its effect on sample quality as measured by the difference in COC concentrations in bailer-collected samples after purging and those collected by low flow sampling methods. National Fuel feels an additional round of sample collection using purging and bailer sample collection methods (as described in the NYSDEC-approved On-Site Groundwater Quality Assessment Work Plan, (March 2023) in the four wells will provide additional information to understand the effects of back diffusion on sample quality. These samples would be collected after low flow sampling is conducted as described in the O&M Plan during the 2023 Second Semiannual Monitoring event. A

comprehensive assessment of groundwater quality in these four areas will be discussed in the 2023 Periodic Review Report (PRR) and will include additional recommendations regarding on-Site groundwater quality. To further assess the effects from constituent back-diffusion at monitoring well location MW-16, an additional low-flow sample will be collected on the following day after the initial low-flow/bailer samples are collected. This third sampling result is intended to further evaluate the potential rebound in cyanide concentration theorized to occur. A comprehensive assessment of groundwater quality in these four areas will be discussed in the 2023 PRR and will include additional recommendations regarding on-Site groundwater quality.

As mentioned in Section 5.3, the entrance to the stormwater culvert will be inspected during future groundwater monitoring events and the accumulation of debris with the potential to cause back-up of surface water in the unnamed stream will be removed. National Fuel will work with National Grid on a case-by-case basis to gain Right-of-Entry access to the culvert for debris mitigation efforts. Groundwater monitoring will continue on a semi-annual basis to evaluate the effect of lower surface water elevations on cyanide concentrations at location MW-16.

Tables

Table 1. 2023 First Semiannual Monitoring Water Sampling Summary
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Location	Cyanide, Total USEPA SW846 9014	Cyanide, Free USEPA SW846 9016	BTEX USEPA SW846 8260C	PAHs USEPA SW846 8270D	TSS SM2540D	Specific Conductivity Field Measurement	Water Elevation	Benchmark Elevation (ft. MSL, top of PVC casing)
Upgradient Site Perimeter								
MW-17	x	x	x	x		x	x	587.28
Downgradient Site Perimeter								
MW-13	x	x	x	x		x	x	591.85
MW-14	x	x				x	x	589.53
MW-15							x	590.93
MW-20	x	x				x	x	587.06
MW-21	x	x				x	x	587.84
MW-22	x	x				x	x	592.50
MW-23	x	x	x	x		x	x	589.28
Onsite Purifier Residuals Impacted Areas								
MW-12	x	x				x	x	591.40
MW-16	x	x				x	x	588.99
Onsite Hydrocarbon Impacted Areas								
MW-07			x	x		x	x	587.01
MW-10			x	x		x	x	587.61
MW-11A	x	x	x	x	x	x	x	589.78
MW-19			x	x		x	x	589.83
Onsite Surface Water								
SW-01	x	x	x	x	x	x	x	top of headwall = 587.0
SW-02	x	x	x	x	x	x	x [2]	SG-2 "0" - 581.67
SW-03 [2,3]	x [2]	x [2]			x [2]	x [2]		
SW-04 [2,3]	x [2]	x [2]			x [2]	x [2]		
SW-05 [2,3]	x [2]	x [2]			x [2]	x [2]		
QA/QC Samples (frequency)								
Trip Blank			x					(one per shipment)
Field Duplicate	x	x	x	x				(one per event)
Equipment Blank	x	x	x	x				(one per event)
DNAPL Recovery								
RTW-1	No Sample Collection							(purge well of accumulated DNAPL)
Total	17	17	12	11	12	18	16	
Container, Preservative	250 mL plastic, NaOH	250 mL plastic amber, NaOH	40 mL VOA vial, HCl (x3)	250 mL glass amber, NP (x2)	500 mL plastic, unpreserved			

Notes:
1. Elevations are from the 2007 survey, except for MW-20, which was resurveyed in August 2009 due to a repair.
2. Supplemental sampling at this location was conducted in August 2017, April 2018, August 2018, April 2019 and August 2019.
3. Supplemental sampling at this location discontinued in 2020 and thereafter.

Table 2. Groundwater and Surface Water Elevations
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Well ID	TOR Elevation[1]	April 17, 2018 (FIRST SEMIANNUAL 2018)		August 15, 2018 (SECOND SEMIANNUAL 2018)		April 17, 2019 (FIRST SEMIANNUAL 2019)		August 20, 2019 (SECOND SEMIANNUAL 2019)		April 15, 2020 (FIRST SEMIANNUAL 2020)	
		Depth	Elevation	Depth	Elevation	Depth	Elevation	Depth	Elevation	Depth	Elevation
MW-07	587.01	4.80	582.21	7.15	579.86	4.48	582.53	6.12	580.89	4.53	582.48
MW-10	587.61	6.40	581.21	7.64	579.97	6.28	581.33	7.09	580.52	5.61	582.00
MW-11A	589.78	8.15	581.63	9.02	580.76	6.43	583.35	7.67	582.11	6.80	582.98
MW-12	591.40	10.06	581.34	11.65	579.75	11.63	579.77	10.80	580.60	9.50	581.90
MW-13	591.85	10.56	581.29	13.54	578.31	11.40	580.45	13.20	578.65	11.52	580.33
MW-14	589.53	10.70	578.83	11.93	577.60	10.48	579.05	11.77	577.76	10.47	579.06
MW-15	590.93	10.40	580.53	11.60	579.33	9.37	581.56	10.79	580.14	9.60	581.33
MW-16	588.99	8.70	580.29	9.65	579.34	5.80	583.19	7.05	581.94	6.06	582.93
MW-17	587.28	3.98	583.30	6.69	580.59	3.98	583.30	5.28	582.00	4.40	582.88
MW-19	589.83	7.58	582.25	9.80	580.03	7.73	582.10	8.94	580.89	7.70	582.13
MW-20	587.06	6.38	580.68	10.16	576.90	7.14	579.92	9.70	577.36	7.23	579.83
MW-21	587.84	8.42	579.42	11.06	576.78	9.27	578.57	10.85	576.99	9.54	578.30
MW-22	592.50	10.41	582.09	12.95	579.55	11.42	581.08	12.24	580.26	10.84	581.66
MW-23	589.28	10.22	579.06	11.53	577.75	10.18	579.10	11.22	578.06	10.12	579.16
SW-01	587.0 (Top Headwall)	3.08	583.92	na[2]	na	3.28	583.72	5.10	581.90	4.25	582.75
SW-02	See note (3)	1.89	583.52	0.82	581.58	0.86	583.95	0.40	582.51	0.06	582.92
RTW-1	na	8.98	na	10.52	na	8.35	na	10.28	na	8.73	na

Notes:

[1] TOR (top of riser for monitoring wells) measured in feet; distance above sea level.

[2] location inaccessible due to debris at headwall measurement point.

[3] Staff Gauge used for surface water elevation damaged during winter 2022-23. Replacement staff gauge will be installed for 2SA 2023 gauging event. May 2023 surface water elevation surveyed by GEI.

na = not available.

Table 2. Groundwater and Surface Water Elevations
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Well ID	TOR Elevation[1]	August 6, 2020 (SECOND SEMIANNUAL 2020)		August 9, 2021 (SECOND SEMIANNUAL 2021)		April 19, 2022 (FIRST SEMIANNUAL 2022)		August 17, 2022 (SECOND SEMIANNUAL 2022)		May 2, 2023 (FIRST SEMIANNUAL 2023)	
		Depth	Elevation	Depth	Elevation	Depth	Elevation	Depth	Elevation	Depth	Elevation
MW-07	587.01	5.96	581.05	5.76	581.25	4.60	582.41	6.99	580.02	3.70	583.31
MW-10	587.61	7.00	580.61	7.05	580.56	5.85	581.76	7.57	580.04	5.00	582.61
MW-11A	589.78	8.36	581.42	8.38	581.40	6.70	583.08	9.18	580.60	5.52	584.26
MW-12	591.40	11.00	580.40	11.03	580.37	9.75	581.65	11.97	579.43	8.57	582.83
MW-13	591.85	12.93	578.92	12.97	578.88	12.02	579.83	13.82	578.03	10.81	581.04
MW-14	589.53	11.49	578.04	11.45	578.08	10.69	578.84	12.11	577.42	10.25	579.28
MW-15	590.93	10.96	579.97	10.75	580.18	9.72	581.21	11.83	579.10	9.11	581.82
MW-16	588.99	7.65	581.34	7.77	581.22	6.41	582.58	8.60	580.39	4.86	584.13
MW-17	587.28	6.00	581.28	6.18	581.10	4.70	582.58	6.82	580.46	2.95	584.33
MW-19	589.83	9.15	580.68	9.15	580.68	7.76	582.07	10.16	579.67	6.99	582.84
MW-20	587.06	9.22	577.84	9.30	577.76	7.52	579.54	10.27	576.79	7.23	579.83
MW-21	587.84	10.63	577.21	10.65	577.19	9.89	577.95	11.20	576.64	9.44	578.40
MW-22	592.50	12.29	580.21	12.31	580.19	11.05	581.45	13.24	579.26	10.24	582.26
MW-23	589.28	11.17	578.11	11.14	578.14	10.33	578.95	11.69	577.59	10.83	578.45
SW-01	587.0 (Top Headwall)	6.20	580.80	na[2]	na	4.20	582.80	na[2]	na	1.05	585.95
SW-02	See note (3)	0.14	581.81	dry	<581.67'	2.50	584.17	0.90	582.57	--	na
RTW-1	na	8.30	na	8.64	na	7.75	na	11.02	na	8.59	na

Notes:

[1] TOR (top of riser for monitoring wells) measured in feet; distance above sea level.

[2] location inaccessible due to debris at headwall measurement point.

[3] Staff Gauge used for surface water elevation damaged during winter 2022-23. Replacement staff gauge will be installed for 2SA 2023 gauging event. May 2023 surface water elevation surveyed by GEI.

na = not available.

Table 3. Field Measured Parameters-First Semiannual 2023 Groundwater Sampling Event
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Well ID	Sampling Date	Sampling Time	pH (standard units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (ntu)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (ppm)	Comments
Groundwater Monitoring Wells									
MW-07 (1)	05/04/23	8:15	6.24	1.53	11.1	3.60	18.7	1.74	petroleum-type odor
MW-10	05/02/23	9:30	6.54	1.89	11.6	3.27	-47.6	0.35	
MW-11A	05/02/23	14:30	6.59	1.11	9.1	3.50	9.6	0.75	
MW-12 (1)	05/04/23	9:30	6.81	4.02	10.4	3.80	68.6	2.36	
MW-13	05/03/23	10:50	9.42	0.51	10.1	0.99	-27.4	0.25	
MW-14	05/02/23	11:10	6.42	2.62	12.2	4.42	-91.4	0.10	
MW-16 (1)	05/04/23	9:20	6.88	2.79	11.1	4.45	43.3	0.63	
MW-17	05/03/23	12:35	6.68	1.58	8.4	1.89	-40.8	2.66	
MW-19 (1)	05/04/23	10:50	6.4	1.23	10.3	4.81	-42.7	0.25	
MW-20	05/02/23	13:45	6.35	2.21	10.2	3.91	-77.7	0.16	
MW-21	05/02/23	15:10	6.39	3.26	10.8	4.43	-62.9	0.10	
MW-22	05/02/23	14:00	6.51	2.06	11.2	3.80	-26.2	0.75	
MW-23	05/02/23	12:25	6.59	6.55	11.9	4.67	94.9	3.76	Field Duplicate
Surface Water Sampling Locations*									
SW-01	05/03/23	9:20	--	1.04	--	--	--	--	downstream
SW-02	05/03/23	8:40	--	1.03	--	--	--	--	upstream

Notes:
* Surface water sampling locations are field measured for specific conductance concentrations only.
(1) Groundwater parameters were recorded during low-flow sampling following well redevelopment.

Table 4A. Field Measured Parameters of MW-07 Redevelopment
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Well ID	Date	Time	Method	Total Volume (g)	pH (standard units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (ntu)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (ppm)	Comments
Groundwater Monitoring Wells											
MW-07	05/01/23	11:18	plastic/ss bailer	20.40	7.10	1.655	11.2	40.60	-109.9	1.41	Slight petroleum odor
MW-07	05/02/23	9:00	whale pump	34.40	6.35	1.66	10.3	10.70	-124.1	8.27	
MW-07	05/03/23	11:45	plastic/ss bailer	36.40	6.65	1.74	10.7	3.80	-121.6	6.24	Sampled at this time
MW-07	05/04/23	8:15	peristaltic pump	38.4	6.24	1.53	11.1	3.60	18.7	1.74	Sampled at this time

Table 4B. Field Measured Parameters of MW-12 Redevelopment
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Well ID	Date	Time	Method	Total Volume (g)	pH (standard units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (ntu)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (ppm)	Comments
Groundwater Monitoring Wells											
MW-12	05/02/23	12:35	whale pump	25.00	6.15	4.04	10.8	3.27	31.8	6.09	
MW-12	05/03/23	12:15	bailer	27.00	6.17	4.12	10.5	4.86	27.6	5.74	Sample collected at this time
MW-12	05/04/23	9:25	persistaltic pump	28.50	6.81	4.02	10.4	3.80	68.6	2.36	Sample collected at 9:30. Clear

Table 4C. Field Measured Parameters of MW-16 Redevelopment
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Well ID	Date	Time	Method	Total Volume (g)	pH (standard units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (ntu)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (ppm)	Comments
Groundwater Monitoring Wells											
MW-16	05/01/23	13:00	ss bailer	20.00	4.43	3.17	11.2	OR	134.6	5.64	Slight odor, quick recovery
MW-16	05/02/23	12:15	whale pump	30.00	4.78	2.24	11.2	6.58	113.6	6.46	
MW-16	05/03/23	11:15	ss bailer	32.50	4.56	2.19	10.8	4.70	111.7	5.75	Sampled at this time
MW-16	05/04/23	9:15	peristaltic pump	35.5	6.88	2.791	11.1	4.45	43.3	0.63	Sample collected at 9:20

Table 4D. Field Measured Parameters of MW-19 Redevelopment
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
West Seneca, New York

Well ID	Date	Time	Method	Total Volume (g)	pH (standard units)	Specific Conductance (mS/cm)	Temperature (°C)	Turbidity (ntu)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (ppm)	Comments
Groundwater Monitoring Wells											
MW-19	05/01/23	13:30	ss bailer	15.00	6.57	1.416	11.0	OR	-100.7	2.46	slight petroleum odor, (2) 1 foot plastic bailers found in well
MW-19	05/02/23	14:00	whale pump	55.00	NA	NA	NA	NA	NA	NA	dark-grey formation sand heavily present during development
MW-19	05/03/23	12:30	ss bailer	58.50	6.48	1.316	11.2	3.91	-38.6	2.48	Sample taken at this time
MW-19	05/04/23	10:47	peristaltic pump	60.25	6.4	1.229	10.3	4.81	-42.7	0.25	Sample taken at 1050

Table 5A. Groundwater Analytical Summary- On-Site Areas
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
Mineral Springs, NY

			Location Name	MW-07	MW-07	MW-10	MW-11A	MW-12	MW-12	MW-16	MW-16	MW-19	MW-19
			Sample Name	MW-07 BAILER	MW-07	MW-10	MW-11A	MW-12 BAILER	MW-12	MW-16 BAILER	MW-16	MW-19 BAILER	MW-19
			Start Depth	5	5	5	3	5	5	8	8	15	15
			End Depth	15	15	15	18	15	15	18	18	25	25
			Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft	ft	ft
			Sample Date	5/3/2023	5/4/2023	5/2/2023	5/2/2023	5/3/2023	5/4/2023	5/3/2023	5/4/2023	5/3/2023	5/4/2023
			Parent Sample										
Analyte	**Units**	**CAS No.**	**NYS AWQS**										
BTEX	ug/L												
Benzene		71-43-2	1	**1200**	**1100**	1 U	**2.7**					**3200**	**4200**
Toluene		108-88-3	5	**16 J**	**16 J**	1 U	2 U					50 U	100 U
Ethylbenzene		100-41-4	5	**1100**	**1100**	1 U	2 U					**290**	**410**
Total Xylene		1330-20-7	5	**430**	**390**	2 U	4 U					**53 J**	200 U
Total BTEX (ND=0)		TBTEX_ND0	NE	**2746**	**2606**	ND	**2.7**					**3543**	**4610**
PAH17	ug/L												
Acenaphthene		83-32-9	20*	**160**	**140**	0.52 U	**2.1**					**0.88**	100 U
Acenaphthylene		208-96-8	NE	**3.5**	52 U	0.52 U	**1.3**					0.5 U	100 U
Anthracene		120-12-7	50*	**6.2 J**	52 U	0.52 U	0.5 U					0.5 U	100 U
Benzo(a)anthracene		56-55-3	0.002*	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
Benzo(b)fluoranthene		205-99-2	0.002*	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
Benzo(k)fluoranthene		207-08-9	0.002*	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
Benzo(g,h,i)perylene		191-24-2	NE	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
Benzo(a)pyrene		50-32-8	ND	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
Chrysene		218-01-9	0.002*	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
Dibenz(a,h)anthracene		53-70-3	NE	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
Fluoranthene		206-44-0	50*	**0.68 J**	52 U	0.52 U	0.5 U					0.5 U	100 U
Fluorene		86-73-7	50*	**46**	52 U	0.52 U	0.5 U					0.5 U	100 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	0.5 U	52 U	0.52 U	0.5 U					0.5 U	100 U
2-Methylnaphthalene		91-57-6	NE	**350**	**290**	0.52 U	0.5 U					**26**	100 U
Naphthalene		91-20-3	10*	**2900**	**2700**	0.5 UJ	0.5 UJ					**1300**	**3200**
Phenanthrene		85-01-8	50*	**36**	52 U	0.52 U	0.5 U					0.5 U	100 U
Pyrene		129-00-0	50*	**0.9**	52 U	0.52 U	0.5 U					0.5 U	100 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	**3503**	**3130**	ND	**3.4**					**1327**	**3200**
Cyanides	ug/L												
Free Cyanide		FREECN	NE				**2.3 J**	**3.3 J**	**13.3**	**12.5**	**59.1**		
Total Cyanide		57-12-5	200				**200**	**580**	**720 J**	**2300 J**	**3100 J**		
Other													
Total Suspended Solids	ug/L	TSS	NE				**39200**						

Table 5B. Groundwater Analytical Summary- Perimeter Areas
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
Mineral Springs, NY

			Location Name	MW-13	MW-14	MW-17	MW-20	MW-21	MW-22	MW-23	MW-23
			Sample Name	MW-13	MW-14	MW-17	MW-20	MW-21	MW-22	MW-23	Duplicate
			Start Depth	10	10	7	10	10	10	5	5
			End Depth	20	20	17	20	20	20	20	20
			Depth Unit	ft	ft	ft	ft	ft	ft	ft	ft
			Sample Date	5/3/2023	5/2/2023	5/3/2023	5/2/2023	5/2/2023	5/2/2023	5/2/2023	5/2/2023
			Parent Sample								MW-23
Analyte	**Units**	**CAS No.**	**NYS AWQS**								
BTEX	ug/L										
Benzene		71-43-2	1	1 U		2 U				1 U	1 U
Toluene		108-88-3	5	1 U		2 U				1 U	1 U
Ethylbenzene		100-41-4	5	1 U		2 U				1 U	1 U
Total Xylene		1330-20-7	5	2 U		4 U				2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND		ND				ND	ND
PAH17	ug/L										
Acenaphthene		83-32-9	20*	0.52 U		2.7 U				0.54 U	0.52 U
Acenaphthylene		208-96-8	NE	0.52 U		2.7 U				0.54 U	0.52 U
Anthracene		120-12-7	50*	0.52 U		2.7 U				0.54 U	0.52 U
Benzo(a)anthracene		56-55-3	0.002*	0.52 U		2.7 U				0.54 U	0.52 U
Benzo(b)fluoranthene		205-99-2	0.002*	0.52 U		2.7 U				0.54 U	0.52 U
Benzo(k)fluoranthene		207-08-9	0.002*	0.52 U		2.7 U				0.54 U	0.52 U
Benzo(g,h,i)perylene		191-24-2	NE	0.52 U		2.7 U				0.54 U	0.52 U
Benzo(a)pyrene		50-32-8	ND	0.52 U		2.7 U				0.54 U	0.52 U
Chrysene		218-01-9	0.002*	0.52 U		2.7 U				0.54 U	0.52 U
Dibenz(a,h)anthracene		53-70-3	NE	0.52 U		2.7 U				0.54 U	0.52 U
Fluoranthene		206-44-0	50*	0.52 U		2.7 U				0.54 U	0.52 U
Fluorene		86-73-7	50*	0.52 U		2.7 U				0.54 U	0.52 U
Indeno(1,2,3-cd)pyrene		193-39-5	0.002*	0.52 U		2.7 U				0.54 U	0.52 U
2-Methylnaphthalene		91-57-6	NE	0.52 U		2.7 U				0.54 U	0.52 U
Naphthalene		91-20-3	10*	0.5 UJ		2.7 U				0.54 U	0.52 U
Phenanthrene		85-01-8	50*	0.52 U		2.7 U				0.54 U	0.52 U
Pyrene		129-00-0	50*	0.52 U		2.7 U				0.54 U	0.52 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND		ND				ND	ND
Cyanides	ug/L										
Free Cyanide		FREECN	NE	5 U	**4.9 J**	5 U	**5.9**	**8.9**	**13.5**	**6.5**	**8.5**
Total Cyanide		57-12-5	200	10 U	**610**	**27 J**	**870 J**	**410**	**440**	**150**	**140**

Tables 5A and 5B. Groundwater Analytical Summary- Notes
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
Mineral Springs, NY

Notes:
Analytes in blue are not detected in any sample
ug/L = micrograms per liter or parts per billion (ppb)

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polycyclic Aromatic Hydrocarbon

Total BTEX and Total PAHs are calculated using detects only.
Total PAH17 is calculated using the list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, 2-Methylnaphthalene, Phenanthrene, and Pyrene

NYS AWQS = New York State Ambient Water Quality Standards and Guidance Values for GA groundwater
* indicates the value is a guidance value and not a standard

CAS No. = Chemical Abstracts Service Number
MGP = Manufactured Gas Plant
ND = Not Detected
NE = Not Established
NYSDEC = New York State Department of Environmental Conservation

Bolding indicates a detected result concentration
Gray shading and bolding indicates that the detected result value exceeds the NYS AWQS
Blue shading indicates wells that were redeveloped and sampled as part of the Groundwater Assessment

Validation Qualifiers:
J = The result is an estimated value.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

Table 6. Surfacewater Analysis Results
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
Mineral Springs, NY

			Location Name	SW-01	SW-02
			Sample Name	SW-01	SW-02
			Sample Date	5/3/2023	5/3/2023
Analyte	Units	CAS No.	Class D Stream		
BTEX	ug/L				
Benzene		71-43-2	10	1 U	1 U
Toluene		108-88-3	6000	1 U	1 U
Ethylbenzene		100-41-4	150	1 U	1 U
Total Xylene		1330-20-7	590	2 U	2 U
Total BTEX (ND=0)		TBTEX_ND0	NE	ND	ND
PAH17	ug/L				
Acenaphthene		83-32-9	48	0.5 U	0.53 U
Acenaphthylene		208-96-8	NE	0.5 U	0.53 U
Anthracene		120-12-7	35	0.5 U	0.53 U
Benzo(a)anthracene		56-55-3	0.23	0.5 U	0.53 U
Benzo(b)fluoranthene		205-99-2	NE	0.5 U	0.53 U
Benzo(k)fluoranthene		207-08-9	NE	0.5 U	0.53 U
Benzo(g,h,i)perylene		191-24-2	NE	0.5 U	0.53 U
Benzo(a)pyrene		50-32-8	0.0012	0.5 U	0.53 U
Chrysene		218-01-9	NE	0.5 U	0.53 U
Dibenz(a,h)anthracene		53-70-3	NE	0.5 U	0.53 U
Fluoranthene		206-44-0	NE	0.5 U	0.53 U
Fluorene		86-73-7	4.8	0.5 U	0.53 U
Indeno(1,2,3-cd)pyrene		193-39-5	NE	0.5 U	0.53 U
2-Methylnaphthalene		91-57-6	42	0.5 U	0.53 U
Naphthalene		91-20-3	110	0.5 UJ	0.5 UJ
Phenanthrene		85-01-8	45	0.5 U	0.53 U
Pyrene		129-00-0	42	0.5 U	0.53 U
Total PAH (17) (ND=0)		TPAH17_ND0	NE	ND	ND
Cyanides	ug/L				
Free Cyanide		FREECN	9000	**2.3 J**	5 U
Total Cyanide		57-12-5	9000	10 U	10 U
Other					
Total Suspended Solids	ug/L	TSS	NE	4000 U	4000 U

Table 6. Surfacewater Analysis Results
Mineral Springs Road MGP Site
National Fuel Gas Distribution Corporation
Mineral Springs, NY

Notes:
Analytes in blue are not detected in any sample
ug/L = micrograms per liter or parts per billion (ppb)

BTEX = Benzene, Toluene, Ethylbenzene, and Xylenes
PAH = Polycyclic Aromatic Hydrocarbon

Total BTEX and Total PAHs are calculated using detects only.
Total PAH16 is calculated using the EPA16 list of analytes: Acenaphthene, Acenaphthylene, Anthracene, Benz[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz[a,h]anthracene, Fluoranthene, Fluorene, Indeno[1,2,3-cd]pyrene, Naphthalene, Phenanthrene, and Pyrene
Total PAH17 is calculated using the EPA16 list of analytes plus 2-Methylnaphthalene

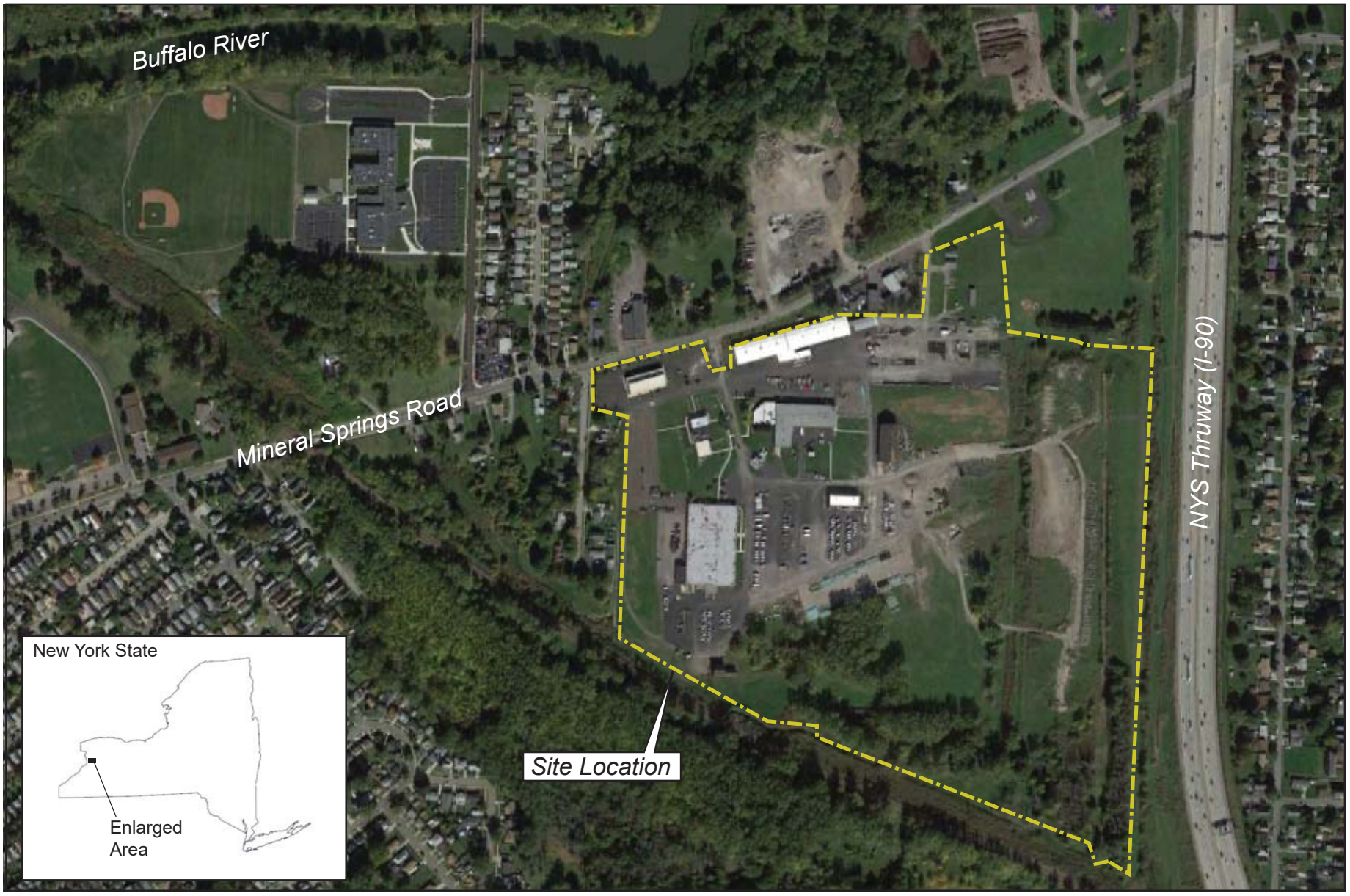
NYS AWQS = New York State Ambient Water Quality Standards and Guidance Values for GA groundwater
* indicates the value is a guidance value and not a standard

CAS No. = Chemical Abstracts Service Number
MGP = Manufactured Gas Plant
ND = Not Detected
NE = Not Established

Bolding indicates a detected result concentration

Validation Qualifiers:
J = The result is an estimated value.
U = The result was not detected above the reporting limit.
UJ = The results was not detected at or above the reporting limit shown and the reporting limit is estimated.

Figures



Notes:
Aerial Imagery Sourced from Google Maps (http://www.maps.google.com) dated 2016.

National Fuel Gas Corporation
Mineral Springs Facility

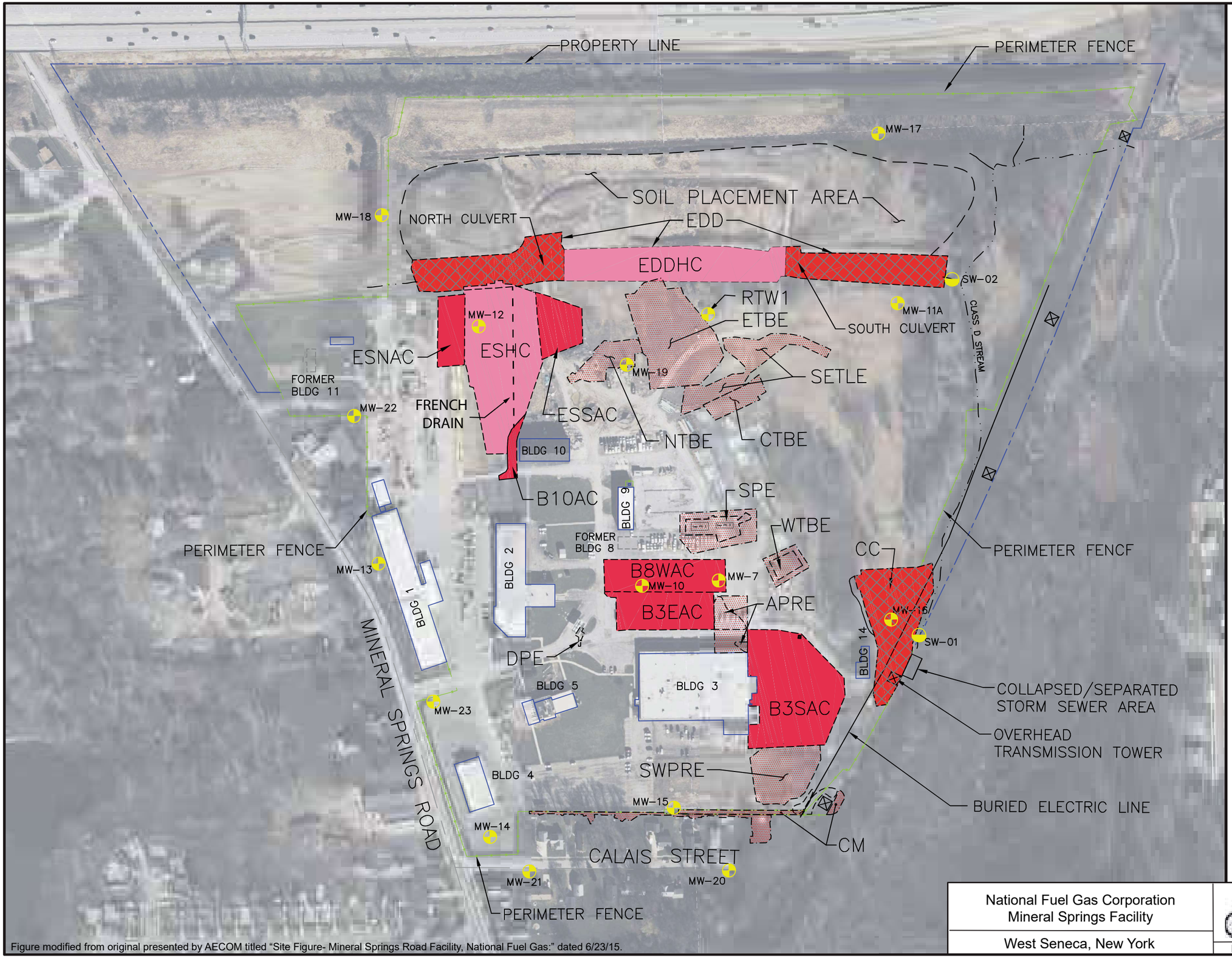
West Seneca, New York

GEI Consultants

Project 2300298

SITE LOCATION

August 2023 Figure 1



LEGEND

	EXISTING STRUCTURE
	REMEDIAL CONSTRUCTION
	FORMER STRUCTURE
	EXISTING EXCAVATION LIMITS
MW-7	MONITORING WELLS
SW-01	SURFACE WATER SAMPLE LOCATION
	(ASTERISK INDICATES HISTORIC SUPPLEMENTAL UPSTREAM SUFACE WATER SAMPLING LOCATION)
APRE	ADDITIONAL PURIFIER RESIDUALS EXCAVATION
B3EAC	BUILDING 3 EAST ASPHALT CAP
B3SAC	BUILDING 3 SOUTH ASPHALT CAP
B8WAC	BUILDING 8 WEST ASPHALT CAP
B10AC	BUILDING 10 ASPHALT CAP
CC	CLAY CAP
CM	CORRECTIVE MEASURE WEST PROPERTY LINE
CTBE	CENTRAL TAR BOILS EXCAVATION
DPE	DIESEL PAD EXCAVATION
EDD	EASTERN DRAINAGE DITCH
ESHC	EASTERN SWALE HDPE CAP
ESNAC	EASTERN SWALE NORTH ASPHALT CAP
ESSAC	EASTERN SWALE SOUTH ASPHALT CAP
ETBE	EASTERN TAR BOILS EXCAVATION
NTBE	NORTHERN TAR BOILS EXCAVATION
RTW1	RECOVERY TEST WELL AND DNAPL SHED
SETLE	SOUTHEASTERN TAR LENSES EXCAVATION
SPE	SEPARATOR PITS EXCAVATION
SWPRE	SOUTHWEST RESIDUALS EXCAVATION
WTBE	WESTERN TAR BOILS EXCAVATION
	CLAY CAP
	ASPHALT CAP
	HDPE (High Density Polyethylene) CAP
	REMEDIAL EXCAVATION

PREVIOUSLY REMEDIATED AREAS ARE SHADED RED

150 0 300

GRAPHIC SCALE IN FEET

Figure modified from original presented by AECOM titled “Site Figure- Mineral Springs Road Facility, National Fuel Gas:” dated 6/23/15.

National Fuel Gas Corporation
Mineral Springs Facility

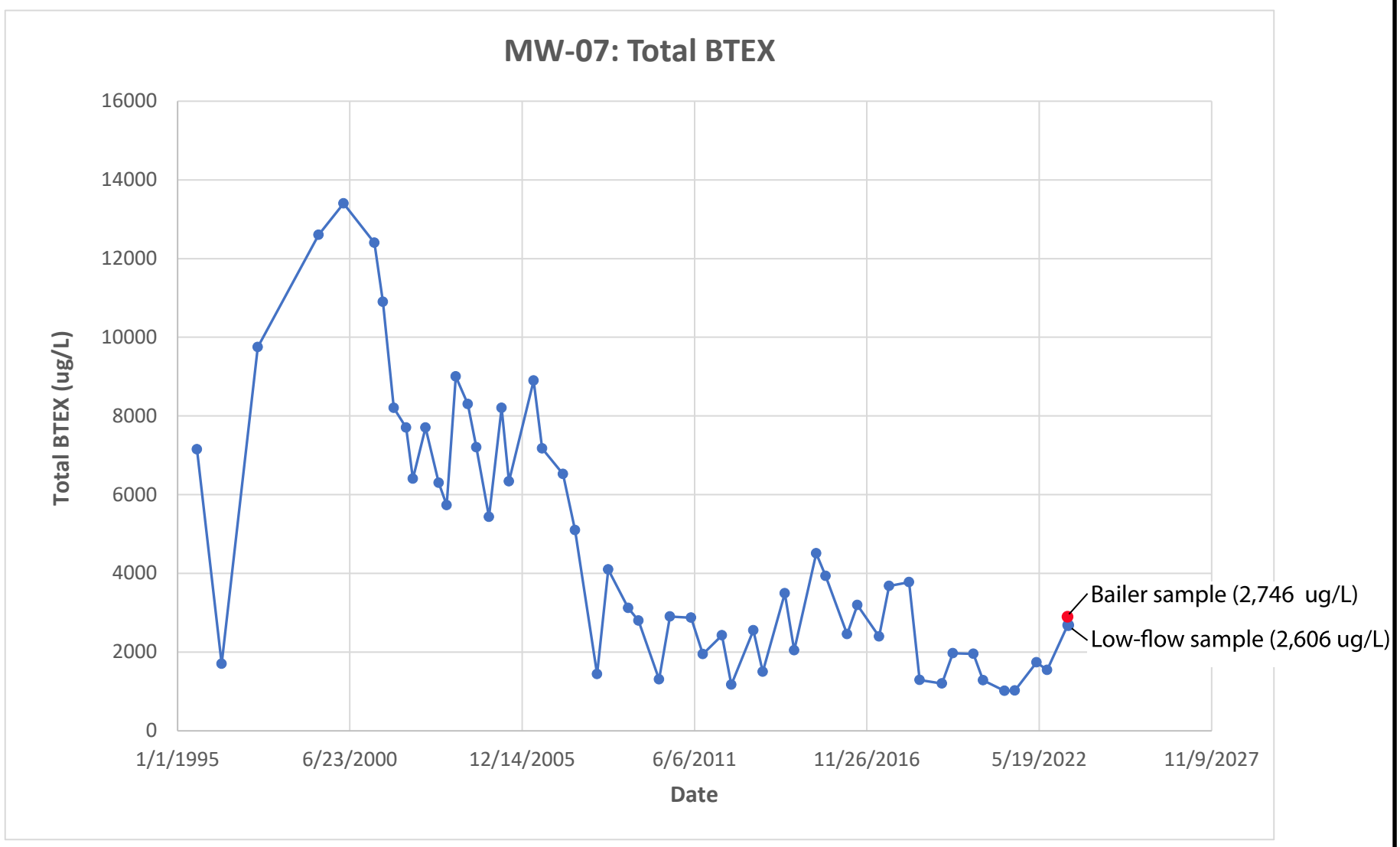
West Seneca, New York

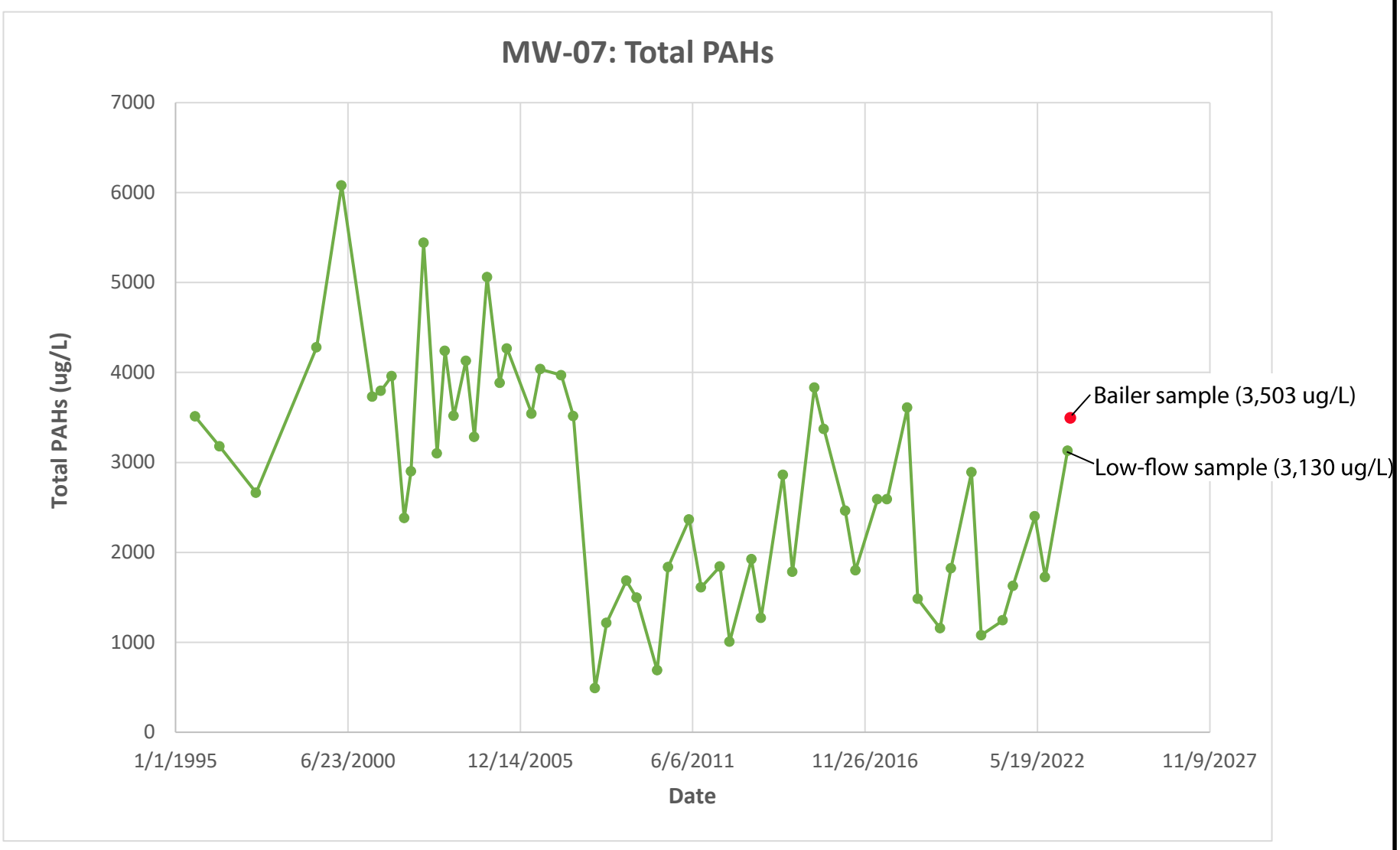
GEI

Project 2300298

SITE LAYOUT

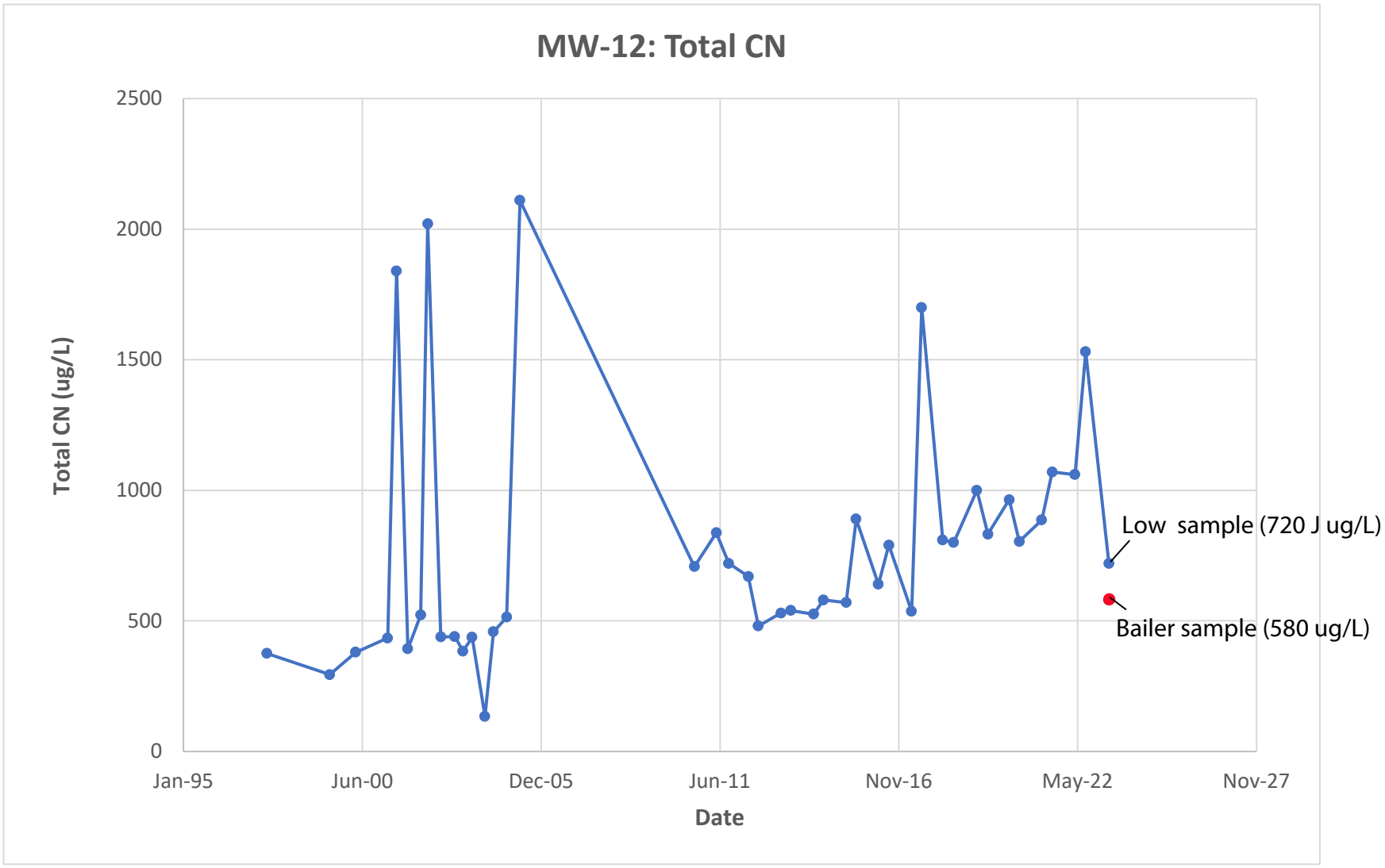
August 2023 Figure 2

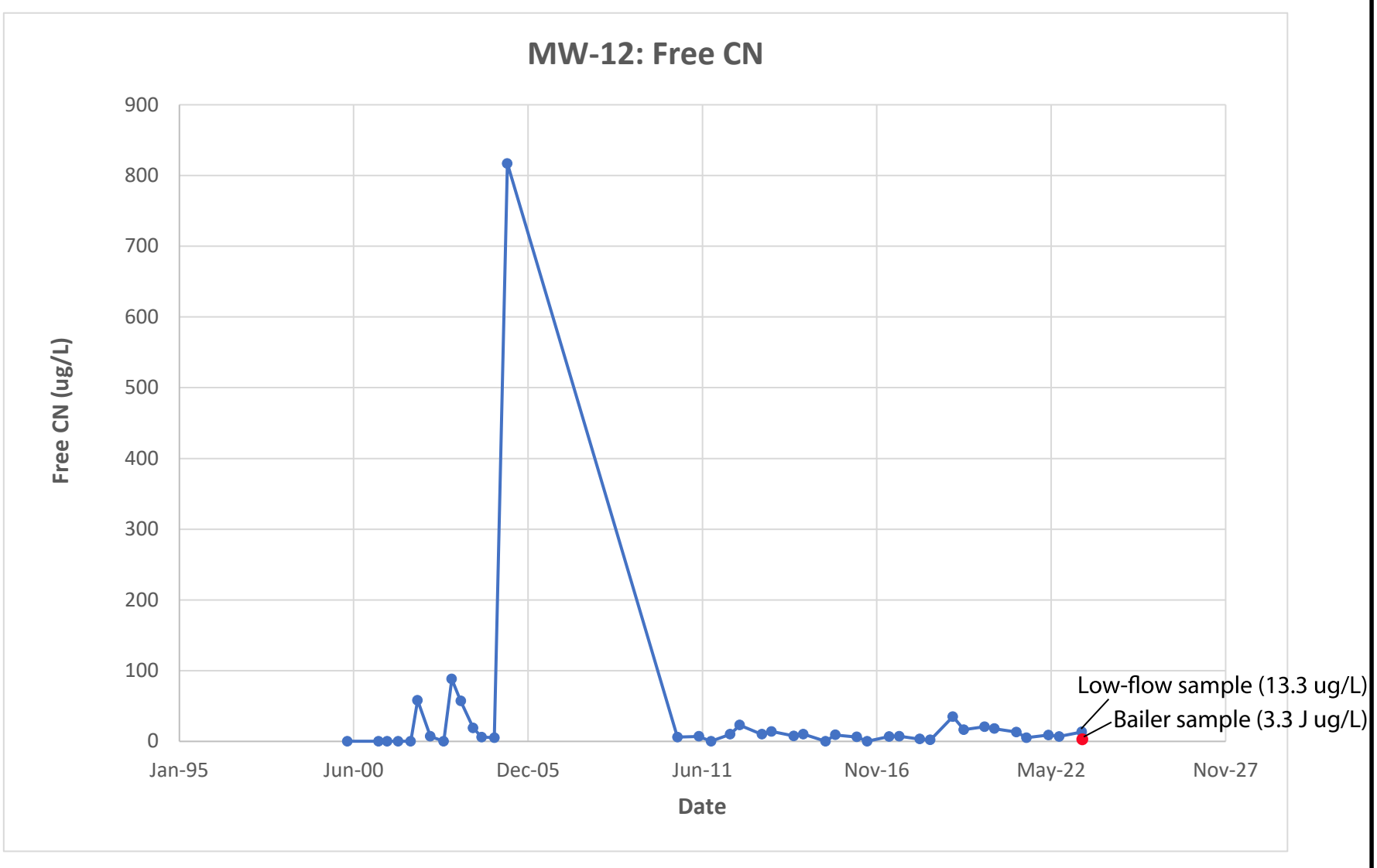




Note:
May 2023 bailer and low-flow samples were both collected after well redevelopment.

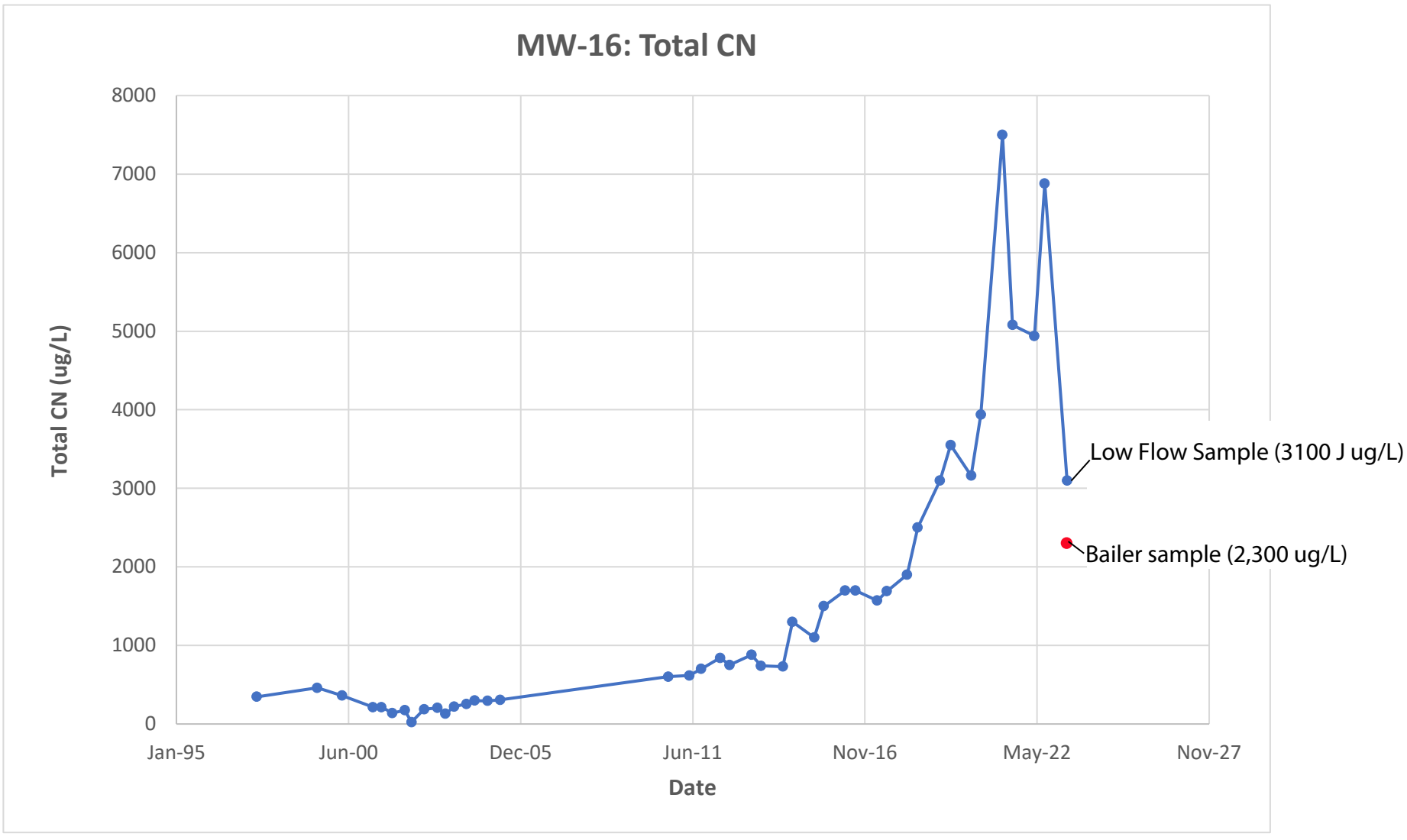
National Fuel Gas Corporation Mineral Springs Facility	GEI Consultants	TIME-SERIES PLOTS MW-7
West Seneca, New York	Project 2300298	August 2023 Figure 3

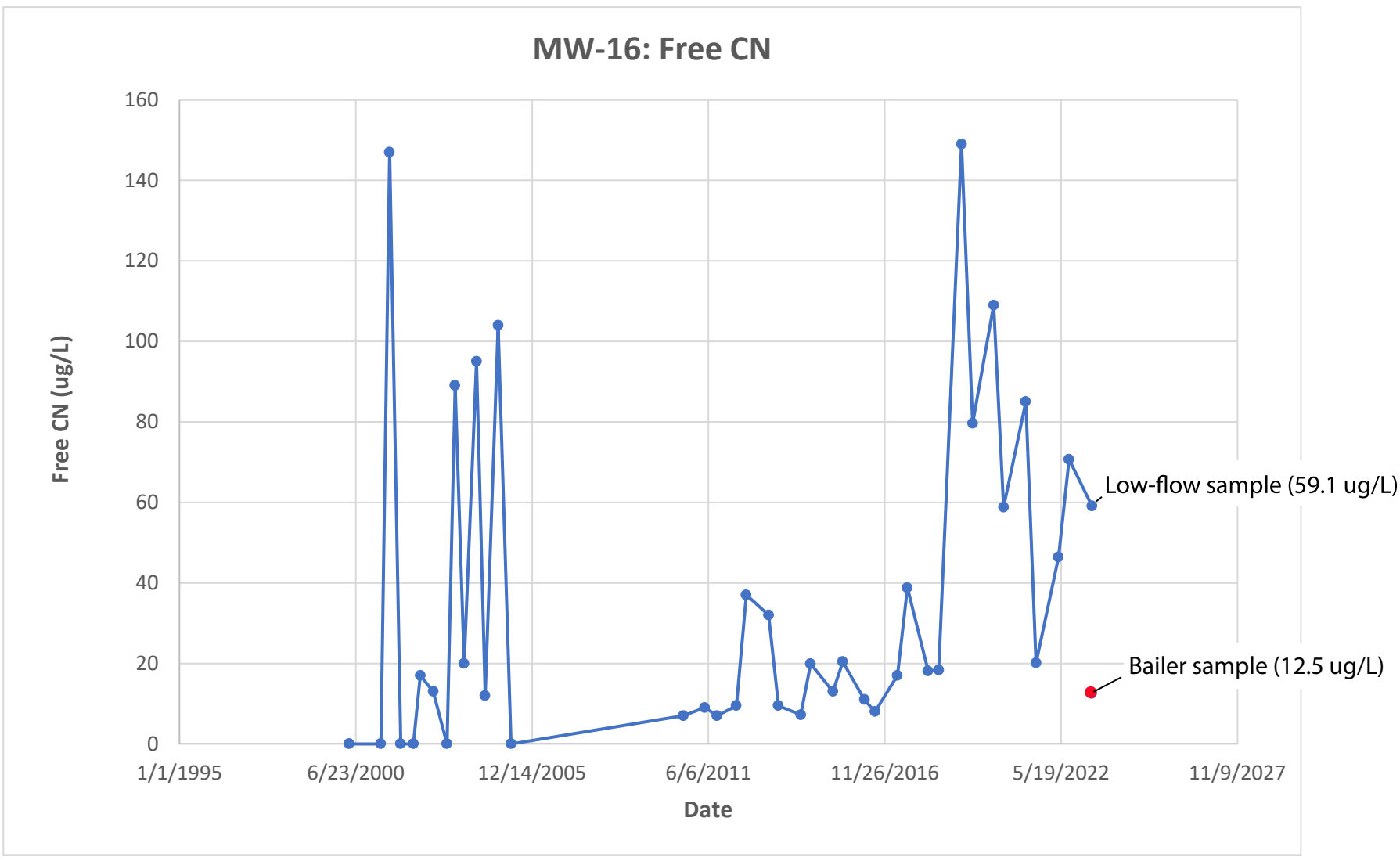




Note:
May 2023 bailer and low-flow samples were both collected after well redevelopment.

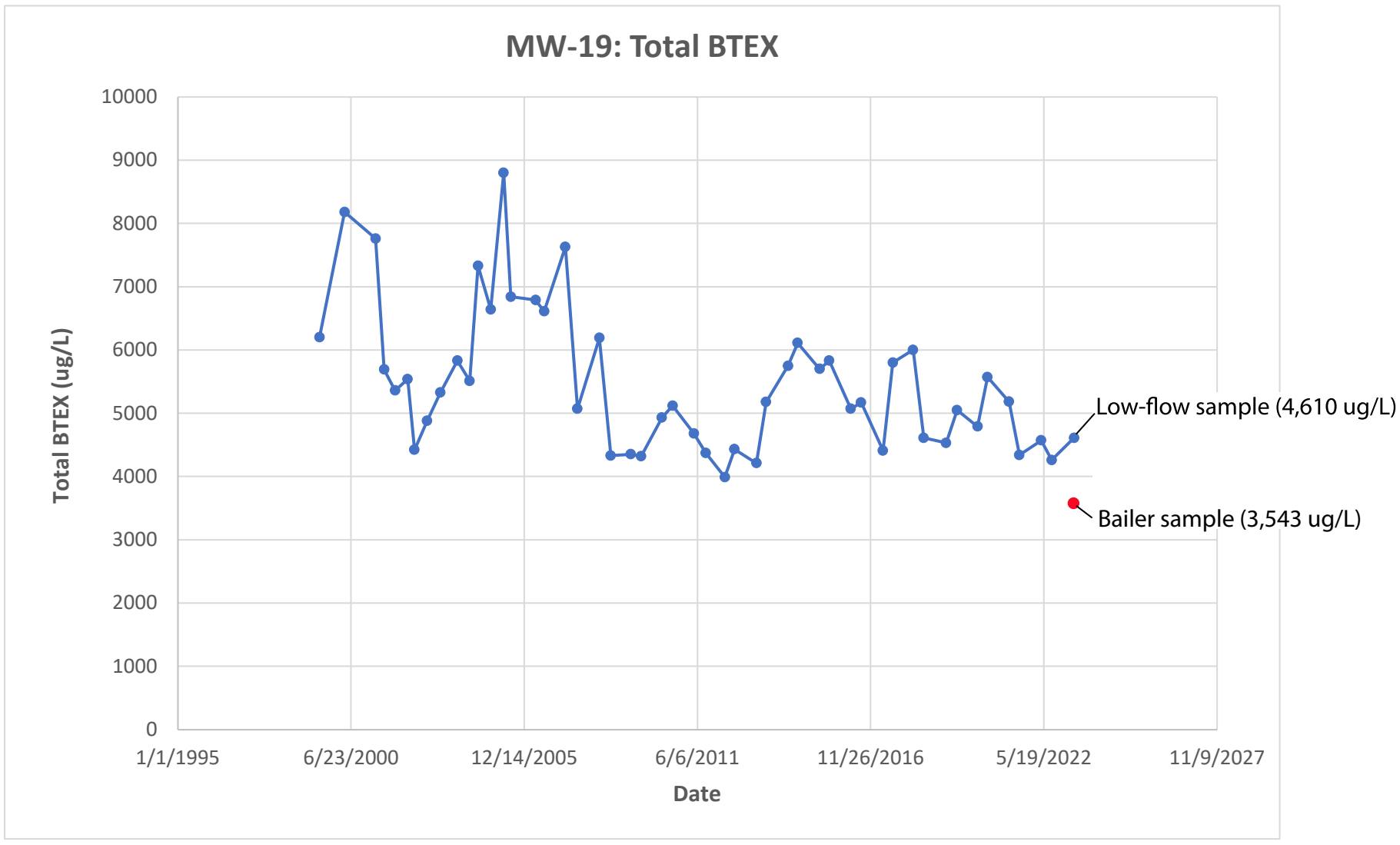
National Fuel Gas Corporation Mineral Springs Facility	GEI Consultants	TIME-SERIES PLOTS MW-12
West Seneca, New York	Project 2300298	August 2023 Figure 4

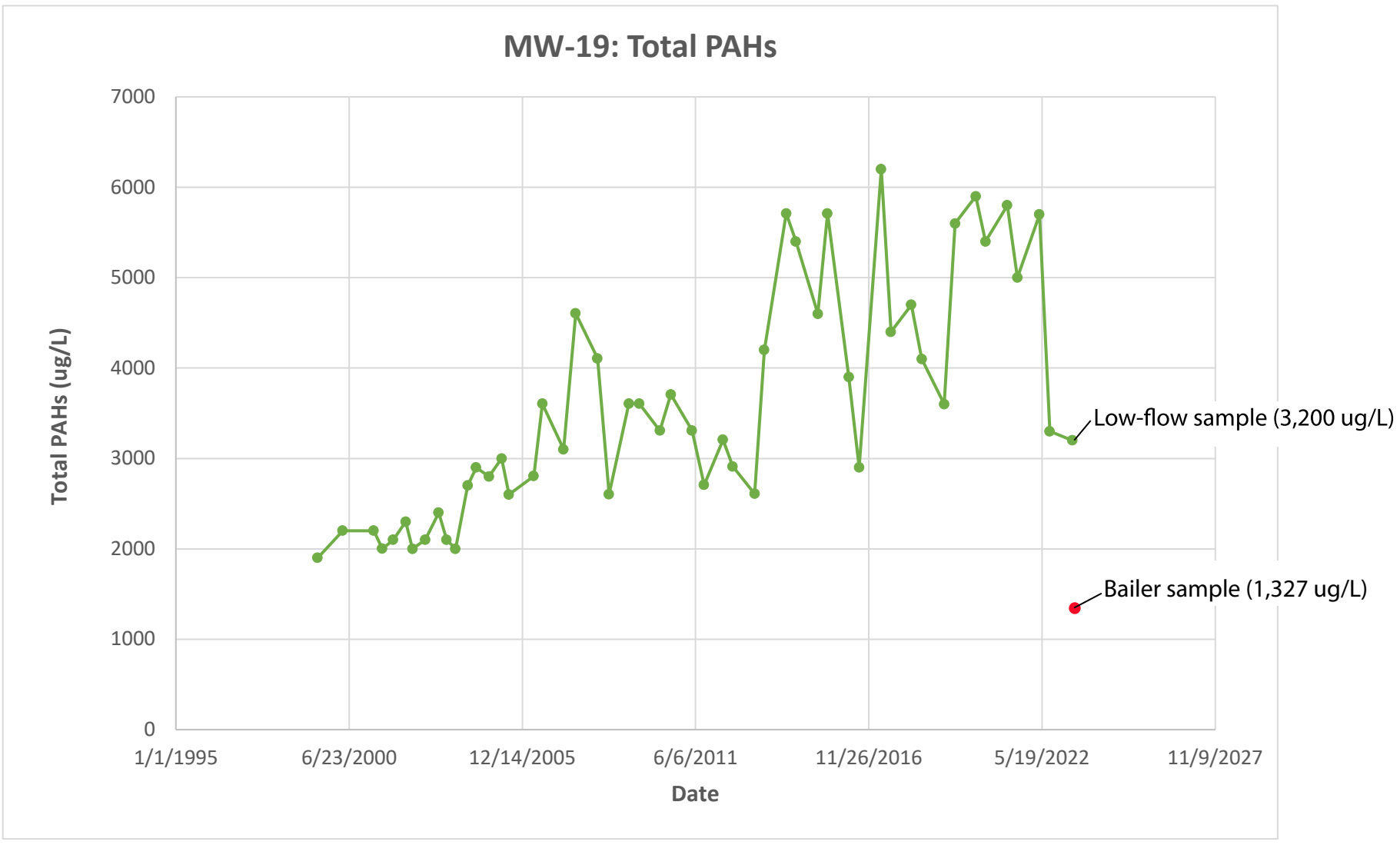




Note:
May 2023 bailer and low-flow samples were both collected after well redevelopment.

National Fuel Gas Corporation Mineral Springs Facility	GEI Consultants	TIME-SERIES PLOTS MW-16
West Seneca, New York	Project 2300298	August 2023 Figure 5





Note:
May 2023 bailer and low-flow samples were both collected after well redevelopment.

National Fuel Gas Corporation Mineral Springs Facility	GEI Consultants	TIME-SERIES PLOTS MW-19
West Seneca, New York	Project 2300298	August 2023 Figure 6

PROPERTY LINE
PERIMETER FENCE
584
MW–17
(584.33)
SOIL PLACEMENT AREA
MW–18
NORTH CULVERT
EDD
583
EDDHC
SW–02
(586.14)
(584.26)
MW–11A
SOUTH CULVERT
CLASS D STREAM
RTW1
ETBE
MW–12
(582.83)
ESNAC
FSHC
(582.84)
MW–19
SETLE
FORMER
BLDG 11
ESSAC
MW–22
(582.26)
582
NTBE
CTBE
BLDG 10
B10AC
SPE
BLDG 9
3
WTBE
FORMER
BLDG 8
PERIMETER FENCE
(581.04)
581
MW–13
580
BLDG 1
BLDG 2
B8WAC
MW–10
(582.61)
MW–7
(583.31)
579
B3EAC
AP E
CC
MW–16
(584.13)
SW–01
(585.95)
MINERAL SPRINGS ROAD
DPE
BLDG 14
584
BLDG 5
BLDG 3
(578.45)
MW–23
B3SAC
COLLAPSED/SEPARATED
STORM SEWER AREA
583
OVERHEAD
TRANSMISSION TOWER
BLDG 4
SWPRE
(581.82)
MW–15
582
BURIED ELECTRIC LINE
MW–14
581
(579.28)
CM
CALAIS STREET
580
(578.40)
MW–21
(579.83)
MW–20
579
PERIMETER FENCE

LEGEND

- EXISTING STRUCTURE
- REMEDIAL CONSTRUCTION
- FORMER STRUCTURE
- EXISTING EXCAVATION LIMITS
- MW–7 — MONITORING WELLS
- SW–01 — SURFACE WATER SAMPLE LOCATION
- (ASTERISK INDICATES HISTORIC SUPPLEMENTAL UPSTREAM SUFACE WATER SAMPLING LOCATION)
- (582.68) — GROUNDWATER ELEVATION (FASL, 8/17/2022)
- (NA) — MONITORING LOCATION WAS DRY OR INACESSIBLE
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

APRE	ADDITIONAL PURIFIER RESIDUALS EXCAVATION
B3EAC	BUILDING 3 EAST ASPHALT CAP
B3SAC	BUILDING 3 SOUTH ASPHALT CAP
B8WAC	BUILDING 8 WEST ASPHALT CAP
B10AC	BUILDING 10 ASPHALT CAP
CC	CLAY CAP
CM	CORRECTIVE MEASURE WEST PROPERTY LINE
CTBE	CENTRAL TAR BOILS EXCAVATION
DPE	DIESEL PAD EXCAVATION
EDD	EASTERN DRAINAGE DITCH
ESHC	EASTERN SWALE HDPE CAP
ESNAC	EASTERN SWALE NORTH ASPHALT CAP
ESSAC	EASTERN SWALE SOUTH ASPHALT CAP
ETBE	EASTERN TAR BOILS EXCAVATION
NTBE	NORTHERN TAR BOILS EXCAVATION
RTW1	RECOVERY TEST WELL AND DNAPL SHED
SETLE	SOUTHEASTERN TAR LENSES EXCAVATION
SPE	SEPARATOR PITS EXCAVATION
SWPRE	SOUTHWEST RESIDUALS EXCAVATION
WTBE	WESTERN TAR BOILS EXCAVATION

- CLAY CAP
- ASPHALT CAP
- HDPE (High Density Polyethylene) CAP
- REMEDIAL EXCAVATION

PREVIOUSLY REMEDIATED AREAS ARE SHADED RED

150 0 300

GRAPHIC SCALE IN FEET

Figure modified from original presented by AECOM titled “Site Figure- Mineral Springs Road Facility, National Fuel Gas:” dated 6/23/15.

National Fuel Gas Corporation
Mineral Springs Facility
West Seneca, New York

GEI Consultants
Project 2300298

GROUNDWATER POTENTIOMETRIC SURFACE MAP-Spring 2023
August 2023 Figure 7

Appendix A

Monitoring Well Sampling Logs

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-10

Date: 5/2/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: low flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 5.01

Casing type/dia.: 2 in

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
0855	0	11.1	6.64	2.005	24.7	1.55	9.77	
0902	.5	11.4	6.52	2.012	9.6	1.00	8.81	
0907	1.0	11.3	6.51	1.985	-8.1	0.71	6.81	
0916	1.25	11.4	6.52	1.954	-24.3	0.48	4.52	
0921	2.00	11.5	6.54	1.921	-38.2	0.49	3.45	
0927	2.5	11.6	6.54	1.887	-47.6	0.35	3.27	
		Sample taken @ 0930						
		DTW after sampling : 5.90'						
		3 gallons purged						

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-11A

Date: 5/2/2023

Field Personnel: MAC

Method of Purging/ Sampling: low flow sampling

~~Well Depth (ft btoc)~~ DTW: 5.52 (513)

Depth to Water (ft btoc): 5.63 (512)

Casing type/dia.: 2"

Well Volume (g):

Time	Total Volume (g)	Temp (°F) °C	pH	Cond (µs/cm) mS	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1410	initial	9.2	6.57	1.020	18.6	4.82	10.6	Clear
1415	0.5	9.3	6.58	1.070	23.2	1.88	4.8	
1420	1.0	9.1	6.59	1.100	10.4	0.99	3.7	
1430	1.5	9.1	6.59	1.100	9.6	0.75	3.5	
			Sample collected @				1430	
							(1450)	
SW-02 - 2.40'								
MW-11A - 2.46'				RTW 1 - 7.65 DTW				
SW-02 (412) - 7.05'								
SW-02 (513) - 6.10'								

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP Site

Well ID: MW-13

Date 5/3/2023

Field Personnel J. Prygon

Method of Purging/ Sampling low flow sampling

Well Depth (ft btoc)

Depth to Water (ft btoc) 10.81'

Casing type/dia. 2 in

Well Volume (g)

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1023	0.0	9.7	9.54	0.506	-24.1	1.84	4.7	
1028	0.25	9.9	9.62	0.500	-14.4	0.92	2.8	
1033	0.50	10.2	9.59	~~0.0~~ 0.500	-17.8	0.48	2.5	
1038	0.75	10.2	9.53	0.501	-20.8	0.36	1.4	
1043	1.25	10.2	9.46	0.507	-25.6	0.29	1.38	
1048	1.50	10.1	9.42	0.505	-27.4	0.25	0.99	
		Sampled @ 1050						

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-14

Date: 5/2/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: low flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 10.25

Casing type/dia.: 2 in

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1020	0	11.1	6.45	2.534	-60.4	0.76	87.9	Pungent odor
1025	.25	11.3	6.36	2.610	-70.5	0.43	46.2	
1030	.3	11.5	6.37	2.616	-77.3	0.34	24.0	
1035	.5	11.8	6.41	2.626	-81.6	0.27	17.8	
1040	1.0	11.9	6.41	2.624	-83.9	0.21	13.4	
1045	1.5	12.0	6.47	2.626	-86.6	0.24	11.6	
1050	2.0	11.9	6.43	2.630	-88.3	0.16	13.02	
1055	2.25	12.0	6.43	2.629	-91.2	0.13	7.50	
1100	2.5	12.1	6.42	2.624	-90.7	0.10	7.52	
1105	2.75	12.2	6.42	2.620	-91.4	0.10	4.42	
		Samples collected @ 1110						
		DTW after sampling : 12.59'						

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP Site

Well ID: MW-17

Date: 5/3/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: low-flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 2.95

Casing type/dia.: 2 in

Well Volume (g):

-28.4

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1155	.25	7.9	6.83	1.728	~~-2.84~~	3.46	3.57	Bubbles entrained
1200	.75	8.1	6.80	1.710	-34.5	2.72	4.75	in sampling line
1205	1.25	8.1	6.70	1.680	-38.6	2.55	4.53	
1210	1.75	8.1	6.68	1.643	-40.7	2.52	2.76	
1215	2.25	8.2	6.66	1.616	-41.1	2.37	5.56	
1220	2.75	8.3	6.67	1.601	-41.3	2.44	3.39	
1225	3.25	8.4	6.69	1.576	-40.9	2.51	2.88	
1230	4.00	8.4	6.68	1.576	-40.8	2.66	1.89	
		4.25 gallons			removed			
		sampled @ 1235						

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-20

Date 5/2/2023

Field Personnel J. Prygon

Method of Purging/ Sampling low flow sampling

Well Depth (ft btoc)

Depth to Water (ft btoc) 7.23'

Casing type/dia. 2"

Well Volume (g)

Time	Total Volume (g)	Temp (°C)	pH	Cond (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1315	0.0	10.2	6.40	2.196	-54.3	1.29	9.9	pungent odor
1320	0.25	10.2	6.36	2.204	-64.2	0.55	8.97	
1325	0.75	10.1	6.35	2.206	-69.2	0.36	6.12	
1330	1.25	10.1	6.35	2.207	-71.8	0.25	6.10	
1335	1.75	10.1	6.35	2.208	-74.7	0.19	3.88	
1340	2.00	10.2	6.35	2.207	-77.7	0.16	3.91	
		sample taken @ 1345						
		DTW after sampling : 7.26'						
		~ 2.3 gallons purged						

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-21

Date: 5/2/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: low flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 9.44'

Casing type/dia.: 2"

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1433	0.0	10.9	6.34	3.207	-27.6	0.96	96.6	
1443	1.25	11.0	6.35	3.243	-52.1	0.25	31.7	
1448	2.00	10.9	6.36	3.253	-53.8	0.18	11.1	
1453	2.50	11.0	6.37	3.259	-57.2	0.15	10.99	
1458	3.00	10.8	6.37	3.262	-60.2	0.11	6.52	
1503	3.25	10.8	6.39	3.261	-62.9	0.10	4.43	
			Sample taken @ 1510					
			DTW after sampling: 9.45'					
			~4 gallons purged					

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-22

Date: 5/2/2023

Field Personnel: MAC

Method of Purging/ Sampling: Low flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 10.24'

Casing type/dia.: 2"

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1320	int.	10.5	6.42	1.300	48.4	2.83	9.2	Clear
1330	0.59	11.2	6.51	2.030	9.7	1.69	6.6	
1340	1.09	11.2	6.52	2.050	-24.7	1.16	4.3	
1345	1.59	11.2	6.52	2.060	-25.7	0.86	4.2	
1350	2.09	11.2	6.51	2.060	-26.2	0.75	3.8	
				Sample collected				
				@ 1400				

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-23

Date: 5/2/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: low flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 10.83'

Casing type/dia.: 2"

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1150	0.0	12.0	6.59	6.66	57.0	3.91	44.3	
1155	0.3	12.2	6.59	6.66	76.8	3.81	15.1	
1200	0.75	12.1	6.59	6.65	85.7	3.70	9.79	
1205	1.00	12.2	6.58	6.66	92.1	3.62	9.35	
1210	1.5	12.0	6.61	6.65	75.6	4.06	6.41	YSI shutoff
1215	2.0	12.1	6.59	6.63	87.2	3.76	4.92	
1220	2.3	11.9	6.59	6.55	94.9	3.76	4.67	
		Samples taken @ 1225						
		DTW after sampling: 10.86'						
		~3 gallons purged						

Appendix B

Monitoring Well Condition Summary Forms

GEI Consultants

Well Condition Summary Form

Facility: NFG Mineral Springs Well/Piezometer Name: MW-7

Evaluator: M. Cummings Evaluation Date: 5/1/2023

	Y	N	N/A
Is the well's location appropriately shown on a facility map?	✓		
Is the well adequately flagged if hard to find?			✓
Is the well elevation information inscribed at or on the well correct?		✓	
Is the well: ☒ flush with surface? ☐ above ground?	✓		
Is the well free of physical damage?	✓		
Is the well labeled on the inside?		✓	
Is the well labeled on the outside?		✓	
Does the well have protective posts, if necessary?		✓	
Do above ground wells have weep holes at the base of the protective casing?			✓
Does the area around the well appear clean?	✓		
Is the casing secure (attempt to move along two perpendicular axes)?	✓		
Is the surface seal void of differential erosion around and under the base?	✓		
Is the surface seal free of cracks that might affect the integrity of the seal?	✓		
Is the surface seal sloped to prevent ponding around the well?	✓		
Is the well free from standing or ponded water?	✓		
Is the well locked to prevent unauthorized access?	✓		
Is the protective casing cap void of large gaps which would breach security?	✓		
Is the locking cap free of rust?	✓		
Is there a survey mark on the riser/wellhead assembly cap?		✓	
Is the riser cap vented?		✓	
Is the annular space free of animal/insect nests?		✓	
Is the annular space appropriately filled with filtering material?		✓	
If a pump, can it be lifted a few inches? (do not test prior to sampling)		✓	
Is the well free of kinks or bends?		✓	

COMMENTS: Missing a bolt, bolt mount broken

Tubing: 11.7' bgs DTW: 3.55' bgs hard bottom 14.8' below top of PVC

GEI Consultants

Well Condition Summary Form

Facility: NFG Mineral Springs Well/Piezometer Name: MW-12

Evaluator: M. Cummings Evaluation Date: 5/1/2023

	Y	N	N/A
Is the well's location appropriately shown on a facility map?	✓		
Is the well adequately flagged if hard to find?			✓
Is the well elevation information inscribed at or on the well correct?		✓	
Is the well: ☐ flush with surface? ☒ above ground?			
Is the well free of physical damage?		✓	
Is the well labeled on the inside?		✓	
Is the well labeled on the outside?		✓	
Does the well have protective posts, if necessary?		✓	
Do above ground wells have weep holes at the base of the protective casing?			
Does the area around the well appear clean?	✓		
Is the casing secure (attempt to move along two perpendicular axes)?			
Is the surface seal void of differential erosion around and under the base?			✓
Is the surface seal free of cracks that might affect the integrity of the seal?			✓
Is the surface seal sloped to prevent ponding around the well?			✓
Is the well free from standing or ponded water?	✓		
Is the well locked to prevent unauthorized access?	✓		
Is the protective casing cap void of large gaps which would breach security?	✓		
Is the locking cap free of rust?		✓	
Is there a survey mark on the riser/wellhead assembly cap?		✓	
Is the riser cap vented?		✓	
Is the annular space free of animal/insect nests?	✓		
Is the annular space appropriately filled with filtering material?		✓	
If a pump, can it be lifted a few inches? (do not test prior to sampling)			✓
Is the well free of kinks or bends?		✓	

COMMENTS: riser bent and protective casing bent

Pump intake: 14' BTOC DTW: 8.75' BTOC Haw bottom: 18.3' BTOC

Stickup height: 1.65'

GEI Consultants

Well Condition Summary Form

Facility: NFG Mineral Springs Well/Piezometer Name: MW-16

Evaluator: M. Cummings Evaluation Date: 5/1/2023

	Y	N	N/A
Is the well's location appropriately shown on a facility map?	✓		
Is the well adequately flagged if hard to find?	✓		
Is the well elevation information inscribed at or on the well correct?		✓	
Is the well: ☐ flush with surface? ☒ above ground?			
Is the well free of physical damage?	✓		
Is the well labeled on the inside?		✓	
Is the well labeled on the outside?		✓	
Does the well have protective posts, if necessary?			✓
Do above ground wells have weep holes at the base of the protective casing?			
Does the area around the well appear clean?	✓		
Is the casing secure (attempt to move along two perpendicular axes)?	✓		
Is the surface seal void of differential erosion around and under the base?			✓
Is the surface seal free of cracks that might affect the integrity of the seal?			✓
Is the surface seal sloped to prevent ponding around the well?			✓
Is the well free from standing or ponded water?	✓		
Is the well locked to prevent unauthorized access?	✓		
Is the protective casing cap void of large gaps which would breach security?		✓	
Is the locking cap free of rust?		✓	
Is there a survey mark on the riser/wellhead assembly cap?		✓	
Is the riser cap vented?		✓	
Is the annular space free of animal/insect nests?	✓		
Is the annular space appropriately filled with filtering material?		✓	
If a pump, can it be lifted a few inches? (do not test prior to sampling)			✓
Is the well free of kinks or bends?	✓		

COMMENTS: Tubing intake: 19.5' BTOC
Hard bottom DTB: 20.05 BTOC
Stickup: 0.8'

GEI

Well Condition Summary Form

Facility: NFG Mineral Springs Well/Piezometer Name: MW-19

Evaluator: M. Cummings Evaluation Date: 5/1/2023

	Y	N	N/A
Is the well's location appropriately shown on a facility map?	✓		
Is the well adequately flagged if hard to find?		✓	
Is the well elevation information inscribed at or on the well correct?			
Is the well: ☐ flush with surface? ☒ above ground?			
Is the well free of physical damage?	✓		
Is the well labeled on the inside?		✓	
Is the well labeled on the outside?		✓	
Does the well have protective posts, if necessary?			✓
Do above ground wells have weep holes at the base of the protective casing?		✓	
Does the area around the well appear clean?	✓		
Is the casing secure (attempt to move along two perpendicular axes)?	✓		
Is the surface seal void of differential erosion around and under the base?	✓		
Is the surface seal free of cracks that might affect the integrity of the seal?	✓		
Is the surface seal sloped to prevent ponding around the well?		✓	
Is the well free from standing or ponded water?	✓		
Is the well locked to prevent unauthorized access?	✓		
Is the protective casing cap void of large gaps which would breach security?	✓		
Is the locking cap free of rust?	✓		
Is there a survey mark on the riser/wellhead assembly cap?		✓	
Is the riser cap vented?	✓		
Is the annular space free of animal/insect nests?	✓		
Is the annular space appropriately filled with filtering material?		✓	
If a pump, can it be lifted a few inches? (do not test prior to sampling)			✓
Is the well free of kinks or bends?	✓		

COMMENTS: measured depth: 23'
Two one-foot disposable bailers were removed during development

Appendix C

Monitoring Well Redevelopment Logs

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP Site

Well ID: MW-7

Date: 5/1/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: post redevelopment sampling

Well Depth (ft btoc): 14.80

Depth to Water (ft btoc): 3.55

Casing type/dia.: 2 in

Well Volume (g): (14.80 - 3.55) * .16 = 1.8 gallons

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
0953	0	10.7	5.95	3.881	-1.7	5.93	32.5	Petroleum type odor* / No NAPL
1004	1.8	10.5	6.82	0.1822	-6.9	3.62	55.7	DTW: 3.55 with bailer
1014	3.6	10.9	6.52	~~2.16~~ 2.613	-59.2	2.46	63.8	DTW: 5.11 approx 4.67 2-3 min later
1023	5.4	11.0	6.60	2.166	-81.8	5.47	69.6	DTW: 5.22 @ 1023 3.55 @ 1027
1033	7.2	11.0	6.59	1.956	-95.5	2.71	51.9	
1050	9.0	11.3	~~7.23~~	~~0.00~~	-69.4	2.18	78.8	pH: 6.64, cond: 2.159
1058	10.8	11.2	6.62	2.591	-78.5	3.11	84.3	
1110	12.6	11.4	6.69	1.708	-102.9	1.33	44.3	(* weathered gas / diesel)
1118	14.4	11.2	7.10	1.655	-109.9	1.41	40.6	
5/2 900	20.4 + 14 = 34.49	10.3	6.55	1.66	-124.1	5.27	10.7	6 more gallons
5/3 1145	2.09	10.7	6.65	1.74	-121.6	6.24	3.8	removed. no
								readings due to
								high turbidity
								DTW: 8.51 after 6 gallons

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP Site

Well ID: MW-7

Date: 5/4/2023

Field Personnel: MAC

Method of Purging/ Sampling: low-flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 3.70

Casing type/dia.: 2"

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
745	initial	11.0	6.04	1.74	134.7	4.13	4.5	Clear
755	0.5	11.1	6.14	1.66	81.71	2.45	3.7	light petroleum*
805	1.0	11.1	6.19	1.59	49.4	1.87	3.9	odor
810	1.5	11.1	6.24	1.51	21.0	1.43	4.1	
815	2.0	11.1	6.24	1.53	18.7	1.74	3.6	(* weathered gas / diesel)
				sample collected @ 815				

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-12

Date: 5/2/2023

Field Personnel: MAC

Method of Purging/ Sampling: post redevelopment sampling

Well Depth (ft btoc): 18.3

Depth to Water (ft btoc): 8.57

Casing type/dia.: 2" PVC

Well Volume (g): 1.55

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1210	59	10.2	5.83	4.68	117.3	8.79	36.9	little iron
1214	109	10.5	6.16	4.38	33.2	5.33	5.21	staining, slight odor
1218	159	10.6	6.21	4.17	18.5	5.07	3.07	
1230	209	10.7	6.10	4.10	24.9	7.33	4.64	
1235	259	10.8	6.15	4.04	31.8	6.09	3.27	
1215	2.09	10.5	6.17	4.12	27.6	5.74	4.86	collected at 1215

573

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name:	Well ID:
Mineral Springs Road Former MGP site	MW-12

Date: 5/4/2023

Field Personnel: MAC

Method of Purging/ Sampling: low flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 8.85

Casing type/dia.: 2" PVC

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
910	0.0 g	10.3	6.74	4.12	153.8	3.86	5.1	clear
915	0.5 g	10.3	6.77	4.11	105.0	3.94	3.8	
920	1.0 g	10.4	6.79	4.07	76.3	2.49	4.2	
925	1.5 g	10.4	6.81	4.02	68.6	2.36	3.8	
			Sample collected @ 930					

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-16

Date: 5/1/2023

SW-01 DTW : 1.05 5/3/2023

Well Depth (ft btoc): 20.15

Field Personnel: MAC

Depth to Water (ft btoc): 4.80 (5/1) 4.86 (5/3)

Method of Purging/ Sampling: Post redevelopment sampling

Casing type/dia.: 2" PVC

Well Volume (g): (20.15 - 4.80) * .16 = 2.59

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1015	initial	10.3	3.97	3.55	245.7	4.57	10.75	
1019	2.5	10.6	4.15	3.55	112.9	2.92	OR	slight odor
1027	5.0	11.2	4.34	3.38	121.7	4.19	OR	
1100	7.5	11.1	4.25	3.14	121.6	5.26	80.6	quick recovery
1130	10.0	11.1	4.34	3.11	152.6	6.14	43.6	
1150	12.5	11.2	4.41	3.13	158.6	6.17	51.5	
1230	15.0	11.2	4.44	3.14	147.6	5.24	OR	very silty (coming from bottom)
1245	17.5	11.3	4.35	3.21	125.7	4.15	OR	
1300	20.0	11.2	4.43	3.17	134.6	5.64	OR	
5/2 1000	30.0	11.2	4.78	2.24	113.6	6.46	6.58	whole pump (+10g)
5/3 1115	2.59	10.8	4.56	2.19	111.7	5.75	4.7	clear, collected @ 1115

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name:	Well ID:
Mineral Springs Road Former MGP site	MW-16

Date 5/4/2023

Field Personnel J. Prygon

Method of Purging/ Sampling low-flow sampling

Well Depth (ft btoc)

Depth to Water (ft btoc) 4.86

Casing type/dia. 2 in

Well Volume (g)

Time	Total Volume (g)	Temp (°C)	pH	Cond (mS/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
0830	0.1	10.8	6.23	3.055	89.5	2.27	11.0	Pungent odor
0835	0.25	11.0	6.57	3.066	76.0	1.13	8.98	Slight Sheen
0840	0.5	11.0	6.62	3.003	83.6	1.08	8.76	
0845	1.0	11.0	6.68	2.943	78.1	0.79	7.92	
0850	1.5	11.0	6.74	2.910	74.0	0.81	7.61	
0855	1.75	11.1	6.78	2.871	69.7	0.66	7.12	
0900	2.00	11.0	6.82	2.848	64.3	0.71	6.38	
0905	2.50	11.0	6.83	2.813	57.7	0.63	5.73	
0910	2.75	11.1	6.84	2.800	51.0	0.66	5.36	
0915	3.00	11.1	6.88	2.791	43.3	0.63	4.45	
			Sampled @ 0920				DTW: 5.44'	
			3.0 gallons removed					

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-19

Date: 5/1/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: post redevelopment sampling

Well Depth (ft btoc): 27.1

Depth to Water (ft btoc): 7.23

Casing type/dia.: 2 in

Well Volume (g): 3.24

	Time	Total Volume (g)	Temp (°F) C	pH	Cond (µs/cm) M	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
5/1	1254	0.0	11.2	6.62	1.215	-95.4	1.34	27.5	slight petroleum* odor
	1330	15 g	11.0	6.57	1.416	-100.7	2.46	OR	1 foot plastic (2)
5/2	1400	55 g	remove	40 g	w/ whale	pump. very	silty		bailer found in
			w/ formation		sand entering		well screen		well. 6 well
5/3	1230	+3.5	11.2	6.48	1.316	-38.6	2.48	3.91	volumes removed.
									Dark-grey
									formation sand
									heavily present
									during development.
									High turbidity.
									(* weathered gas / diesel)

Monitoring Well Development / Sampling Log

GEI Consultants

Site Name: Mineral Springs Road Former MGP site

Well ID: MW-19

Date: 5/4/2023

Field Personnel: J. Prygon

Method of Purging/ Sampling: low flow sampling

Well Depth (ft btoc):

Depth to Water (ft btoc): 6.99

Casing type/dia.: 2 in

Well Volume (g):

Time	Total Volume (g)	Temp (°C)	pH	Cond (µs/cm)	ORP (mV)	D.O. (mg/L)	Turbidity (NTU)	Comments
1017	0.0	10.9	5.93	1.237	-3.0	6.42	49.0	bubbles in
1022	0.1	10.5	6.29	1.234	-31.4	1.11	38.8	tubing. problem
1027	0.25	10.5	6.35	1.232	-38.3	0.53	41.8	fixed
1032	0.50	10.5	6.38	1.234	-41.6	0.34	15.4	
1037	1.0	10.5	6.41	1.231	-43.3	0.25	16.9	
1042	1.5	10.4	6.40	1.229	-43.7	0.21	17.9	
1044	1.75	10.3	6.40	1.229	-42.7	0.25	4.81	
		sampled @ 1050				2 gallons removed		

Appendix D

Laboratory Data Package (Level 2)

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Richard Frappa
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100 Sylvan Parkway
Suite 400
Amherst, New York 14228

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JOB DESCRIPTION

GEI, Mineral Springs

JOB NUMBER

480-208518-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

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Table of Contents

Definitions/Glossary

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

Job ID: 480-208518-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-208518-1

Comments
No additional comments.

Receipt
The samples were received on 5/3/2023 1:40 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 12.7º C.

GC/MS VOA
Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D_LL_PAH: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-668289 and analytical batch 480-668859 recovered outside control limits for the following analytes: Anthracene, Chrysene and Fluoranthene; MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2).

Method 8270D_LL_PAH: The method blank for preparation batch 480-668289 and analytical batch 480-668859 contained Naphthalene above the reporting limit (RL). Associated samples were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank: MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2).

Method 8270D_LL_PAH: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2). Elevated reporting limits (RLs) are provided: MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2).

Method 8270D_LL_PAH: The method blank for preparation batch 480-668289 and analytical batch 480-669100 contained Naphthalene above the reporting limit (RL). Associated samples were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank: MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2).

Method 8270D_LL_PAH: The following samples required a dilution due to the abundance of target analytes: MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D_LL_PAH: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-668289 and analytical batch 480-669100 recovered outside control limits for the following analytes: Anthracene, Chrysene and Fluoranthene; MW-07 BAILER (480-208518-1) and MW-19 BAILER (480-208518-2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Methods 335.4, 9012B: The method blank (MB) and/or continuing calibration blank (CCB) for analytical batch 480-669722 contained Cyanide, Total above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.MW-12 BAILER (480-208518-3) and MW-16 BAILER (480-208518-4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 480-668289.

Job ID: 480-208518-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-07 BAILER — Lab Sample ID: 480-208518-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1200		20	8.2	ug/L	20		8260C	Total/NA
Ethylbenzene	1100		20	15	ug/L	20		8260C	Total/NA
Toluene	16	J	20	10	ug/L	20		8260C	Total/NA
Xylenes, Total	430		40	13	ug/L	20		8260C	Total/NA
2-Methylnaphthalene	230	E	0.50	0.38	ug/L	1		8270D_LL_PAH	Total/NA
Acenaphthene	120	E	0.50	0.30	ug/L	1		8270D_LL_PAH	Total/NA
Acenaphthylene	3.5		0.50	0.34	ug/L	1		8270D_LL_PAH	Total/NA
Anthracene	6.2	*1	0.50	0.39	ug/L	1		8270D_LL_PAH	Total/NA
Fluoranthene	0.68	*1	0.50	0.36	ug/L	1		8270D_LL_PAH	Total/NA
Fluorene	46		0.50	0.37	ug/L	1		8270D_LL_PAH	Total/NA
Naphthalene	400	E B	0.50	0.42	ug/L	1		8270D_LL_PAH	Total/NA
Phenanthrene	36		0.50	0.38	ug/L	1		8270D_LL_PAH	Total/NA
Pyrene	0.90		0.50	0.36	ug/L	1		8270D_LL_PAH	Total/NA
2-Methylnaphthalene - DL	350		25	19	ug/L	50		8270D_LL_PAH	Total/NA
Acenaphthene - DL	160		25	15	ug/L	50		8270D_LL_PAH	Total/NA
Fluorene - DL	44		25	19	ug/L	50		8270D_LL_PAH	Total/NA
Naphthalene - DL	2900	B	25	21	ug/L	50		8270D_LL_PAH	Total/NA
Phenanthrene - DL	24	J	25	19	ug/L	50		8270D_LL_PAH	Total/NA

Client Sample ID: MW-19 BAILER — Lab Sample ID: 480-208518-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3200		50	21	ug/L	50		8260C	Total/NA
Ethylbenzene	290		50	37	ug/L	50		8260C	Total/NA
Xylenes, Total	53	J	100	33	ug/L	50		8260C	Total/NA
2-Methylnaphthalene	26		0.50	0.38	ug/L	1		8270D_LL_PAH	Total/NA
Acenaphthene	0.88		0.50	0.30	ug/L	1		8270D_LL_PAH	Total/NA
Naphthalene	260	E B	0.50	0.42	ug/L	1		8270D_LL_PAH	Total/NA
2-Methylnaphthalene - DL	27		25	19	ug/L	50		8270D_LL_PAH	Total/NA
Naphthalene - DL	1300	B	25	21	ug/L	50		8270D_LL_PAH	Total/NA

Client Sample ID: MW-12 BAILER — Lab Sample ID: 480-208518-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.58	B ^2	0.020	0.0082	mg/L	2		9012B	Total/NA
Cyanide, Free	3.3	J	5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: MW-16 BAILER — Lab Sample ID: 480-208518-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	2.3	B ^2	0.25	0.10	mg/L	25		9012B	Total/NA
Cyanide, Free	12.5		5.0	2.3	ug/L	1		9016	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-07 BAILER

Date Collected: 05/03/23 11:45
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-1

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1200**		20	8.2	ug/L			05/05/23 17:32	20
Ethylbenzene	**1100**		20	15	ug/L			05/05/23 17:32	20
Toluene	**16**	**J**	20	10	ug/L			05/05/23 17:32	20
Xylenes, Total	**430**		40	13	ug/L			05/05/23 17:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*05/05/23 17:32*	*20*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/05/23 17:32*	*20*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*05/05/23 17:32*	*20*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/05/23 17:32*	*20*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**230**	**E**	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:52	1
Acenaphthene	**120**	**E**	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:52	1
Acenaphthylene	**3.5**		0.50	0.34	ug/L		05/05/23 07:32	05/11/23 01:52	1
Anthracene	**6.2**	***1**	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 01:52	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 01:52	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:52	1
Fluoranthene	**0.68**	***1**	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:52	1
Fluorene	**46**		0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:52	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 01:52	1
Naphthalene	**400**	**E B**	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 01:52	1
Phenanthrene	**36**		0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:52	1
Pyrene	**0.90**		0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*86*		*48 - 120*	*05/05/23 07:32*	*05/11/23 01:52*	*1*
Nitrobenzene-d5 (Surr)	*75*		*46 - 120*	*05/05/23 07:32*	*05/11/23 01:52*	*1*
p-Terphenyl-d14 (Surr)	*42*		*24 - 136*	*05/05/23 07:32*	*05/11/23 01:52*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**350**		25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Acenaphthene	**160**		25	15	ug/L		05/05/23 07:32	05/11/23 14:35	50
Acenaphthylene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 14:35	50
Anthracene	25	U *1	25	20	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[a]anthracene	25	U	25	20	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[a]pyrene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[b]fluoranthene	25	U	25	15	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[g,h,i]perylene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[k]fluoranthene	25	U	25	4.3	ug/L		05/05/23 07:32	05/11/23 14:35	50
Chrysene	25	U *1	25	16	ug/L		05/05/23 07:32	05/11/23 14:35	50
Dibenz(a,h)anthracene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 14:35	50
Fluoranthene	25	U *1	25	18	ug/L		05/05/23 07:32	05/11/23 14:35	50

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-07 BAILER
Date Collected: 05/03/23 11:45
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-1
Matrix: Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	**44**		25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Indeno[1,2,3-cd]pyrene	25	U	25	22	ug/L		05/05/23 07:32	05/11/23 14:35	50
Naphthalene	**2900**	**B**	25	21	ug/L		05/05/23 07:32	05/11/23 14:35	50
Phenanthrene	**24**	**J**	25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Pyrene	25	U	25	18	ug/L		05/05/23 07:32	05/11/23 14:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*37*	*S1-*	*48 - 120*	*05/05/23 07:32*	*05/11/23 14:35*	*50*
Nitrobenzene-d5 (Surr)	*67*		*46 - 120*	*05/05/23 07:32*	*05/11/23 14:35*	*50*
p-Terphenyl-d14 (Surr)	*37*		*24 - 136*	*05/05/23 07:32*	*05/11/23 14:35*	*50*

Client Sample ID: MW-19 BAILER

Date Collected: 05/03/23 12:30
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-2

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3200**		50	21	ug/L			05/05/23 17:55	50
Ethylbenzene	**290**		50	37	ug/L			05/05/23 17:55	50
Toluene	50	U	50	26	ug/L			05/05/23 17:55	50
Xylenes, Total	**53**	**J**	100	33	ug/L			05/05/23 17:55	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*05/05/23 17:55*	*50*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/05/23 17:55*	*50*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/05/23 17:55*	*50*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/05/23 17:55*	*50*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**26**		0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:20	1
Acenaphthene	**0.88**		0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:20	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/11/23 02:20	1
Anthracene	0.50	U *1	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 02:20	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 02:20	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:20	1
Fluoranthene	0.50	U *1	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:20	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:20	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 02:20	1
Naphthalene	**260**	**E B**	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 02:20	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:20	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*48 - 120*	*05/05/23 07:32*	*05/11/23 02:20*	*1*
Nitrobenzene-d5 (Surr)	*65*		*46 - 120*	*05/05/23 07:32*	*05/11/23 02:20*	*1*
p-Terphenyl-d14 (Surr)	*45*		*24 - 136*	*05/05/23 07:32*	*05/11/23 02:20*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**27**		25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Acenaphthene	25	U	25	15	ug/L		05/05/23 07:32	05/11/23 21:30	50
Acenaphthylene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 21:30	50
Anthracene	25	U *1	25	20	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[a]anthracene	25	U	25	20	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[a]pyrene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[b]fluoranthene	25	U	25	15	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[g,h,i]perylene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[k]fluoranthene	25	U	25	4.3	ug/L		05/05/23 07:32	05/11/23 21:30	50
Chrysene	25	U *1	25	16	ug/L		05/05/23 07:32	05/11/23 21:30	50
Dibenz(a,h)anthracene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 21:30	50
Fluoranthene	25	U *1	25	18	ug/L		05/05/23 07:32	05/11/23 21:30	50

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-19 BAILER
Date Collected: 05/03/23 12:30
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-2
Matrix: Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Indeno[1,2,3-cd]pyrene	25	U	25	22	ug/L		05/05/23 07:32	05/11/23 21:30	50
Naphthalene	**1300**	**B**	25	21	ug/L		05/05/23 07:32	05/11/23 21:30	50
Phenanthrene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Pyrene	25	U	25	18	ug/L		05/05/23 07:32	05/11/23 21:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*35*	*S1-*	*48 - 120*	*05/05/23 07:32*	*05/11/23 21:30*	*50*
Nitrobenzene-d5 (Surr)	*60*		*46 - 120*	*05/05/23 07:32*	*05/11/23 21:30*	*50*
p-Terphenyl-d14 (Surr)	*45*		*24 - 136*	*05/05/23 07:32*	*05/11/23 21:30*	*50*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-12 BAILER

Date Collected: 05/03/23 12:15
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.58	B ^2	0.020	0.0082	mg/L			05/16/23 09:45	2
Cyanide, Free (SW846 9016)	3.3	J	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-16 BAILER

Date Collected: 05/03/23 11:15
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-4

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	2.3	B ^2	0.25	0.10	mg/L			05/16/23 09:47	25
Cyanide, Free (SW846 9016)	12.5		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Surrogate Summary

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-208518-1	MW-07 BAILER	104	100	105	103
480-208518-2	MW-19 BAILER	99	98	98	100
LCS 480-668363/6	Lab Control Sample	100	97	98	99
MB 480-668363/9	Method Blank	100	100	98	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(24-136)
480-208518-1	MW-07 BAILER	86	75	42
480-208518-1 - DL	MW-07 BAILER	37 S1-	67	37
480-208518-2	MW-19 BAILER	85	65	45
480-208518-2 - DL	MW-19 BAILER	35 S1-	60	45
LCS 480-668289/2-A	Lab Control Sample	101	90	88
LCSD 480-668289/3-A	Lab Control Sample Dup	87	81	73
MB 480-668289/1-A	Method Blank	85	70	69

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-668363/9
Matrix: Water
Analysis Batch: 668363

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 15:22	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 15:22	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 15:22	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 15:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*05/05/23 15:22*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*05/05/23 15:22*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/05/23 15:22*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/05/23 15:22*	*1*

Lab Sample ID: LCS 480-668363/6
Matrix: Water
Analysis Batch: 668363

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	25.0	26.1		ug/L		104	71 - 124
Ethylbenzene	25.0	26.6		ug/L		106	77 - 123
Toluene	25.0	26.4		ug/L		106	80 - 122
Xylenes, Total	50.0	52.2		ug/L		104	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: MB 480-668289/1-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/10/23 22:11	1
Acenaphthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/10/23 22:11	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/10/23 22:11	1
Anthracene	0.50	U	0.50	0.39	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/10/23 22:11	1
Chrysene	0.50	U	0.50	0.32	ug/L		05/05/23 07:32	05/10/23 22:11	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/10/23 22:11	1
Fluoranthene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/10/23 22:11	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/10/23 22:11	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/10/23 22:11	1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: MB 480-668289/1-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	0.524		0.50	0.42	ug/L		05/05/23 07:32	05/10/23 22:11	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/10/23 22:11	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/10/23 22:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*48 - 120*	*05/05/23 07:32*	*05/10/23 22:11*	*1*
Nitrobenzene-d5 (Surr)	*70*		*46 - 120*	*05/05/23 07:32*	*05/10/23 22:11*	*1*
p-Terphenyl-d14 (Surr)	*69*		*24 - 136*	*05/05/23 07:32*	*05/10/23 22:11*	*1*

Lab Sample ID: LCS 480-668289/2-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 668289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	32.0	32.4		ug/L		101	48 - 120
Acenaphthene	32.0	32.1		ug/L		100	60 - 120
Acenaphthylene	32.0	36.7		ug/L		115	63 - 120
Anthracene	32.0	35.7		ug/L		111	69 - 131
Benzo[a]anthracene	32.0	32.4		ug/L		101	62 - 142
Benzo[a]pyrene	32.0	31.1		ug/L		97	46 - 156
Benzo[b]fluoranthene	32.0	31.4		ug/L		98	50 - 149
Benzo[g,h,i]perylene	32.0	29.7		ug/L		93	34 - 189
Benzo[k]fluoranthene	32.0	31.2		ug/L		98	47 - 147
Chrysene	32.0	32.8		ug/L		102	69 - 140
Dibenz(a,h)anthracene	32.0	29.9		ug/L		93	35 - 176
Fluoranthene	32.0	35.1		ug/L		110	67 - 133
Fluorene	32.0	33.8		ug/L		105	66 - 129
Indeno[1,2,3-cd]pyrene	32.0	30.1		ug/L		94	57 - 161
Naphthalene	32.0	30.6		ug/L		96	48 - 120
Phenanthrene	32.0	34.4		ug/L		107	67 - 130
Pyrene	32.0	34.7		ug/L		108	58 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*101*		*48 - 120*
Nitrobenzene-d5 (Surr)	*90*		*46 - 120*
p-Terphenyl-d14 (Surr)	*88*		*24 - 136*

Lab Sample ID: LCSD 480-668289/3-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 668289

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Methylnaphthalene	32.0	28.6		ug/L		89	48 - 120	12	21
Acenaphthene	32.0	27.2		ug/L		85	60 - 120	16	24
Acenaphthylene	32.0	31.3		ug/L		98	63 - 120	16	18
Anthracene	32.0	30.4	*1	ug/L		95	69 - 131	16	15
Benzo[a]anthracene	32.0	27.8		ug/L		87	62 - 142	15	15
Benzo[a]pyrene	32.0	27.0		ug/L		84	46 - 156	14	15

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: LCSD 480-668289/3-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 668289

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[b]fluoranthene			32.0	28.2		ug/L		88	50 - 149	11	15
Benzo[g,h,i]perylene			32.0	25.5		ug/L		80	34 - 189	15	15
Benzo[k]fluoranthene			32.0	26.2		ug/L		82	47 - 147	17	22
Chrysene			32.0	27.5	*1	ug/L		86	69 - 140	17	15
Dibenz(a,h)anthracene			32.0	25.9		ug/L		81	35 - 176	14	15
Fluoranthene			32.0	29.8	*1	ug/L		93	67 - 133	17	15
Fluorene			32.0	28.9		ug/L		90	66 - 129	15	15
Indeno[1,2,3-cd]pyrene			32.0	26.0		ug/L		81	57 - 161	15	15
Naphthalene			32.0	27.8		ug/L		87	48 - 120	10	29
Phenanthrene			32.0	30.4		ug/L		95	67 - 130	12	15
Pyrene			32.0	30.2		ug/L		94	58 - 136	14	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*87*		*48 - 120*
Nitrobenzene-d5 (Surr)	*81*		*46 - 120*
p-Terphenyl-d14 (Surr)	*73*		*24 - 136*

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-669722/133
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0115		0.010	0.0041	mg/L			05/16/23 14:27	1

Lab Sample ID: MB 480-669722/21
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00860	J	0.010	0.0041	mg/L			05/16/23 09:29	1

Lab Sample ID: MB 480-669722/49
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00960	J	0.010	0.0041	mg/L			05/16/23 10:41	1

Lab Sample ID: LCS 480-669722/134
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.255		mg/L		102	90 - 110		

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LCS 480-669722/23
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.250		mg/L		100	90 - 110

Lab Sample ID: LCS 480-669722/50
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.246		mg/L		99	90 - 110

Method: 9016 - Cyanide, Free

Lab Sample ID: MB 460-908261/1-A
Matrix: Water
Analysis Batch: 908379

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 908261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Lab Sample ID: LCS 460-908261/2-A
Matrix: Water
Analysis Batch: 908379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 908261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Free	50.0	50.71		ug/L		101	56 - 120

Lab Sample ID: DLCK 460-908379/10
Matrix: Water
Analysis Batch: 908379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Free	2.00	5.0	U	ug/L		103	36 - 171

GC/MS VOA

Analysis Batch: 668363

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208518-1	MW-07 BAILER	Total/NA	Water	8260C	
480-208518-2	MW-19 BAILER	Total/NA	Water	8260C	
MB 480-668363/9	Method Blank	Total/NA	Water	8260C	
LCS 480-668363/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 668289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208518-1 - DL	MW-07 BAILER	Total/NA	Water	3510C	
480-208518-1	MW-07 BAILER	Total/NA	Water	3510C	
480-208518-2 - DL	MW-19 BAILER	Total/NA	Water	3510C	
480-208518-2	MW-19 BAILER	Total/NA	Water	3510C	
MB 480-668289/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-668289/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-668289/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 668859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208518-1	MW-07 BAILER	Total/NA	Water	8270D_LL_PAH	668289
480-208518-2	MW-19 BAILER	Total/NA	Water	8270D_LL_PAH	668289
MB 480-668289/1-A	Method Blank	Total/NA	Water	8270D_LL_PAH	668289
LCS 480-668289/2-A	Lab Control Sample	Total/NA	Water	8270D_LL_PAH	668289
LCSD 480-668289/3-A	Lab Control Sample Dup	Total/NA	Water	8270D_LL_PAH	668289

Analysis Batch: 669100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208518-1 - DL	MW-07 BAILER	Total/NA	Water	8270D_LL_PAH	668289
480-208518-2 - DL	MW-19 BAILER	Total/NA	Water	8270D_LL_PAH	668289

General Chemistry

Analysis Batch: 669722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208518-3	MW-12 BAILER	Total/NA	Water	9012B	
480-208518-4	MW-16 BAILER	Total/NA	Water	9012B	
MB 480-669722/133	Method Blank	Total/NA	Water	9012B	
MB 480-669722/21	Method Blank	Total/NA	Water	9012B	
MB 480-669722/49	Method Blank	Total/NA	Water	9012B	
LCS 480-669722/134	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669722/23	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669722/50	Lab Control Sample	Total/NA	Water	9012B	

Prep Batch: 908261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208518-3	MW-12 BAILER	Total/NA	Water	9016	
480-208518-4	MW-16 BAILER	Total/NA	Water	9016	
MB 460-908261/1-A	Method Blank	Total/NA	Water	9016	
LCS 460-908261/2-A	Lab Control Sample	Total/NA	Water	9016	

QC Association Summary

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

General Chemistry

Analysis Batch: 908379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208518-3	MW-12 BAILER	Total/NA	Water	9016	908261
480-208518-4	MW-16 BAILER	Total/NA	Water	9016	908261
MB 460-908261/1-A	Method Blank	Total/NA	Water	9016	908261
DLCK 460-908379/10	Lab Control Sample	Total/NA	Water	9016	
LCS 460-908261/2-A	Lab Control Sample	Total/NA	Water	9016	908261

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-07 BAILER

Lab Sample ID: 480-208518-1
Matrix: Water
Date Collected: 05/03/23 11:45
Date Received: 05/03/23 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	668363	ATG	EET BUF	05/05/23 17:32
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 01:52
Total/NA	Prep	3510C	DL		668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH	DL	50	669100	JMM	EET BUF	05/11/23 14:35

Client Sample ID: MW-19 BAILER

Lab Sample ID: 480-208518-2
Matrix: Water
Date Collected: 05/03/23 12:30
Date Received: 05/03/23 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		50	668363	ATG	EET BUF	05/05/23 17:55
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 02:20
Total/NA	Prep	3510C	DL		668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH	DL	50	669100	JMM	EET BUF	05/11/23 21:30

Client Sample ID: MW-12 BAILER

Lab Sample ID: 480-208518-3
Matrix: Water
Date Collected: 05/03/23 12:15
Date Received: 05/03/23 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		2	669722	CLT	EET BUF	05/16/23 09:45
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: MW-16 BAILER

Lab Sample ID: 480-208518-4
Matrix: Water
Date Collected: 05/03/23 11:15
Date Received: 05/03/23 13:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		25	669722	CLT	EET BUF	05/16/23 09:47
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D_LL_PAH	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	EET BUF
9012B	Cyanide, Total and/or Amenable	SW846	EET BUF
9016	Cyanide, Free	SW846	EET EDI
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
9016	Cyanide, Preparation	SW846	EET EDI

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-208518-1	MW-07 BAILER	Water	05/03/23 11:45	05/03/23 13:40
480-208518-2	MW-19 BAILER	Water	05/03/23 12:30	05/03/23 13:40
480-208518-3	MW-12 BAILER	Water	05/03/23 12:15	05/03/23 13:40
480-208518-4	MW-16 BAILER	Water	05/03/23 11:15	05/03/23 13:40

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone 716-691-2600 Fax 716-691-7991

Chain of Custody Record

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Client Information	Sampler: M. Cummings	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-184648-39071 1
Client Contact: Brad Walker	Phone: 716-572-4362	E-Mail: John Schove@et eurofinsus com	State of Origin:	Page: Page 1 of 1
Company: National Fuel Gas Supply Corporation	PWSID:			Job #:

Address: 6363 Main Street	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Williamsville	TAT Requested (days): STD		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
State, Zip: NY, 14221-5887	Compliance Project: Δ Yes Δ No		
Phone: 716-857-7247(Tel)	PO #: Purchase Order not required		Other:
Email: walkerb@natfuel.com	WO #:		
Project Name: GEI, Mineral Springs	Project #: 48008324		
Site: New York	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	9016 - Cyanide, Free	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	A	B	B		
MW-07 - bailer	5/3/23	1145	G	Water			X	X				
MW-19 - bailer		1230		Water			X	X				
MW-12 - bailer		1215		Water					X	X		
MW-16 - bailer		1115		Water					X	X		

480-208518 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/3/2023 1340	GET			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	5-3-23 1340	TMB

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 1.7 #1 ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-80375.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - New York		Job #: 480-208518-1
Address: 777 New Durham Road, ,	Due Date Requested: 5/16/2023			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: GEI, Mineral Springs	Project #: 48008324			
Site: Mineral Springs	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016/9016_Prep Cyanide, Free	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-12 BAILER (480-208518-3)	5/3/23	12:15 Eastern		Water			X	1	
MW-16 BAILER (480-208518-4)	5/3/23	11:15 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Fedex				
Relinquished by:	Date/Time: 5-4-23 1800	Company JAB	Received by:	Date/Time: 5/5/23 10:15	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2059263	Cooler Temperature(s) °C and Other Remarks:

IR19 2.0i 120c

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208518-1

Login Number: 208518
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GEI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208518-1

Login Number: 208518
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 05/05/23 12:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Richard Frappa
GEI Consultants, Inc.
100 Sylvan Parkway
Suite 400
Amherst, New York 14228
Generated 6/1/2023 7:38:30 PM

JOB DESCRIPTION

Semi Annual
SDG NUMBER 480-208476-1
Semi Annual Sampling (April)

JOB NUMBER

480-208476-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

Generated
6/1/2023 7:38:30 PM

Authorized for release by
Rebecca Jones, Project Management Assistant I
Rebecca.Jones@et.eurofinsus.com
Designee for
John Schove, Project Manager II
John.Schove@et.eurofinsus.com
(716)504-9838

Table of Contents

Definitions/Glossary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC/MS Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
^+	Continuing Calibration Verification (CCV) is outside acceptance limits, high biased.
^2	Calibration Blank (ICB and/or CCB) is outside acceptance limits.
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
H	Sample was prepped or analyzed beyond the specified holding time. This does not meet regulatory requirements.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-208476-1

Laboratory: Eurofins Buffalo

Narrative

Job Narrative
480-208476-1

Comments
No additional comments.

Receipt
The samples were received on 5/2/2023 4:11 PM, 5/3/2023 1:40 PM and 5/4/2023 11:50 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.7º C, 4.8º C and 5.3º C.

GC/MS VOA
Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-11A (480-208476-7). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-17 (480-208520-3). Elevated reporting limits (RLs) are provided.

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-07 (480-208567-1) and MW-19 (480-208567-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method 8270D_LL_PAH: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-07 (480-208567-1) and MW-19 (480-208567-2). Elevated reporting limits (RLs) are provided.

Method 8270D_LL_PAH: The following sample was diluted due to color, appearance, and viscosity: MW-17 (480-208520-3). Elevated reporting limits (RL) are provided.

Method 8270D_LL_PAH: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-668289 and analytical batch 480-668859 recovered outside control limits for the following analytes: Anthracene, Chrysene and Fluoranthene; MW-10 (480-208476-1), MW-23 (480-208476-3), MW-11A (480-208476-7), Duplicate (480-208476-8), EB (480-208476-9), SW-01 (480-208520-1), SW-02 (480-208520-2), MW-17 (480-208520-3), MW-13 (480-208520-4), MW-07 (480-208567-1) and MW-19 (480-208567-2).

Method 8270D_LL_PAH: The following sample was diluted due to the abundance of target analytes: MW-19 (480-208567-2). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270D_LL_PAH: The following sample required a dilution due to the abundance of target analytes: MW-07 (480-208567-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270D_LL_PAH: The method blank for preparation batch 480-668289 contained Naphthalene above the reporting limit (RL). None of the samples associated with this method blank contained the target compound above the RL; therefore, re-extraction and/or re-analysis of samples were not performed: MW-23 (480-208476-3), Duplicate (480-208476-8), EB (480-208476-9) and MW-17 (480-208520-3).

Method 8270D_LL_PAH: The method blank for preparation batch 480-668289 and analytical batch 480-668859 contained Naphthalene above the reporting limit (RL). Associated samples were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank: MW-07 (480-208567-1) and MW-19 (480-208567-2).

Method 8270D_LL_PAH: The method blank for preparation batch 480-668289 and analytical batch 480-668859 had recoveries above the reporting limit (RL) for Napthalene, with detects in the associated samples. The associated sample(s) was re-prepared and/or re-analyzed outside holding time in preparation batch 480-669345 and analytical batch 480-669481 and Napthalene recovery was below

Job ID: 480-208476-1 (Continued)

Laboratory: Eurofins Buffalo (Continued)

the RL. Both sets of data have been reported: MW-10 (480-208476-1), MW-11A (480-208476-7), SW-01 (480-208520-1), SW-02 (480-208520-2) and MW-13 (480-208520-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

General Chemistry
Methods 335.4, 9012B: The initial calibration blank (ICB), method blank (MB) and continuing calibration blank (CCB) for analytical batch 480-669455 contained Cyanide, Total above the reporting limit (RL). All reported samples associated with these were ND for this analyte ; therefore, re-analysis of samples was not performed.EB (480-208476-9)

Method 9012B: The continuing calibration blank (CCB) for analytical batch 480-669584 contained Cyanide above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed: MW-14 (480-208476-2), MW-23 (480-208476-3), MW-20 (480-208476-4), MW-21 (480-208476-5), MW-22 (480-208476-6), MW-11A (480-208476-7) and Duplicate (480-208476-8).

Methods 335.4, 9012B: The method blank (MB) and/or continuing calibration blank (CCB) for analytical batch 480-669584 contained Cyanide, Total above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.MW-14 (480-208476-2), MW-23 (480-208476-3), MW-20 (480-208476-4), MW-21 (480-208476-5), MW-22 (480-208476-6), MW-11A (480-208476-7), Duplicate (480-208476-8), SW-01 (480-208520-1), SW-02 (480-208520-2) and MW-13 (480-208520-4)

Method 9012B: Reanalysis of the following samples were performed outside of the analytical holding time due to sample requiring a dilution to bring within calibration range : MW-12 (480-208567-3) and MW-16 (480-208567-4). Both sets of data are reported.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with preparation batch 480-668289.

Method 3510C: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 480-669345.

Method 3510C: The following samples were re-prepared outside of preparation holding time due to contamination in the MB: MW-10 (480-208476-1), MW-11A (480-208476-7), SW-01 (480-208520-1), SW-02 (480-208520-2) and MW-13 (480-208520-4).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-10 — Lab Sample ID: 480-208476-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.2	B	0.52	0.44	ug/L	1		8270D_LL_PAH	Total/NA

Client Sample ID: MW-14 — Lab Sample ID: 480-208476-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.61	B ^2	0.020	0.0082	mg/L	2		9012B	Total/NA
Cyanide, Free	4.9	J	5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: MW-23 — Lab Sample ID: 480-208476-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.15	B ^2 F1	0.010	0.0041	mg/L	1		9012B	Total/NA
Cyanide, Free	6.5		5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: MW-20 — Lab Sample ID: 480-208476-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.87	B ^2	0.10	0.041	mg/L	10		9012B	Total/NA
Cyanide, Free	5.9		5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: MW-21 — Lab Sample ID: 480-208476-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.41	B ^2	0.020	0.0082	mg/L	2		9012B	Total/NA
Cyanide, Free	8.9		5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: MW-22 — Lab Sample ID: 480-208476-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.44	B ^2	0.020	0.0082	mg/L	2		9012B	Total/NA
Cyanide, Free	13.5		5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: MW-11A — Lab Sample ID: 480-208476-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.7		2.0	0.82	ug/L	2		8260C	Total/NA
Acenaphthene	2.1		0.50	0.30	ug/L	1		8270D_LL_PAH	Total/NA
Acenaphthylene	1.3		0.50	0.34	ug/L	1		8270D_LL_PAH	Total/NA
Naphthalene	1.7	B	0.50	0.42	ug/L	1		8270D_LL_PAH	Total/NA
Acenaphthene - RE	1.5	H	0.50	0.30	ug/L	1		8270D_LL_PAH	Total/NA
Acenaphthylene - RE	0.76	H	0.50	0.34	ug/L	1		8270D_LL_PAH	Total/NA
Cyanide, Total	0.20	B ^2	0.010	0.0041	mg/L	1		9012B	Total/NA
Cyanide, Free	2.3	J	5.0	2.3	ug/L	1		9016	Total/NA
Total Suspended Solids	39.2		4.0	4.0	mg/L	1		SM 2540D	Total/NA

Client Sample ID: Duplicate — Lab Sample ID: 480-208476-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.14	B ^2	0.010	0.0041	mg/L	1		9012B	Total/NA
Cyanide, Free	8.5		5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: EB — Lab Sample ID: 480-208476-9

No Detections.

This Detection Summary does not include radiochemical test results.

Eurofins Buffalo

Detection Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: SW-01 — Lab Sample ID: 480-208520-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.2	B	0.50	0.42	ug/L	1		8270D_LL_PAH	Total/NA
Cyanide, Free	2.3	J	5.0	2.3	ug/L	1		9016	Total/NA

Client Sample ID: SW-02 — Lab Sample ID: 480-208520-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	1.2	B	0.53	0.45	ug/L	1		8270D_LL_PAH	Total/NA

Client Sample ID: MW-17 — Lab Sample ID: 480-208520-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.027	H B ^+	0.010	0.0041	mg/L	1		9012B	Total/NA

Client Sample ID: MW-13 — Lab Sample ID: 480-208520-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Naphthalene	2.7	B	0.52	0.44	ug/L	1		8270D_LL_PAH	Total/NA

Client Sample ID: TB — Lab Sample ID: 480-208520-5

No Detections.

Client Sample ID: MW-07 — Lab Sample ID: 480-208567-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1100		20	8.2	ug/L	20		8260C	Total/NA
Ethylbenzene	1100		20	15	ug/L	20		8260C	Total/NA
Toluene	16	J	20	10	ug/L	20		8260C	Total/NA
Xylenes, Total	390		40	13	ug/L	20		8260C	Total/NA
2-Methylnaphthalene	290		52	40	ug/L	100		8270D_LL_PAH	Total/NA
Acenaphthene	140		52	31	ug/L	100		8270D_LL_PAH	Total/NA
Naphthalene	2700	B	52	44	ug/L	100		8270D_LL_PAH	Total/NA

Client Sample ID: MW-19 — Lab Sample ID: 480-208567-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	4200		100	41	ug/L	100		8260C	Total/NA
Ethylbenzene	410		100	74	ug/L	100		8260C	Total/NA
Naphthalene	3200	B	100	88	ug/L	200		8270D_LL_PAH	Total/NA

Client Sample ID: MW-12 — Lab Sample ID: 480-208567-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	0.69	B ^2	0.010	0.0041	mg/L	1		9012B	Total/NA
Cyanide, Free	13.3		5.0	2.3	ug/L	1		9016	Total/NA
Cyanide, Total - RA	0.72	H B	0.020	0.0082	mg/L	2		9012B	Total/NA

Client Sample ID: MW-16 — Lab Sample ID: 480-208567-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyanide, Total	2.9	B ^2	0.010	0.0041	mg/L	1		9012B	Total/NA
Cyanide, Free	59.1		5.0	2.3	ug/L	1		9016	Total/NA
Cyanide, Total - RA	3.1	H B	0.10	0.041	mg/L	10		9012B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-208567-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-10

Date Collected: 05/02/23 09:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-1

Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 05:30	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 05:30	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 05:30	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*05/04/23 05:30*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/04/23 05:30*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/04/23 05:30*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/04/23 05:30*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/10/23 23:35	1
Acenaphthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/10/23 23:35	1
Acenaphthylene	0.52	U	0.52	0.35	ug/L		05/05/23 07:32	05/10/23 23:35	1
Anthracene	0.52	U *1	0.52	0.41	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[a]anthracene	0.52	U	0.52	0.42	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[a]pyrene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[b]fluoranthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[g,h,i]perylene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[k]fluoranthene	0.52	U	0.52	0.089	ug/L		05/05/23 07:32	05/10/23 23:35	1
Chrysene	0.52	U *1	0.52	0.33	ug/L		05/05/23 07:32	05/10/23 23:35	1
Dibenz(a,h)anthracene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/10/23 23:35	1
Fluoranthene	0.52	U *1	0.52	0.38	ug/L		05/05/23 07:32	05/10/23 23:35	1
Fluorene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/10/23 23:35	1
Indeno[1,2,3-cd]pyrene	0.52	U	0.52	0.46	ug/L		05/05/23 07:32	05/10/23 23:35	1
Naphthalene	**1.2**	**B**	0.52	0.44	ug/L		05/05/23 07:32	05/10/23 23:35	1
Phenanthrene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/10/23 23:35	1
Pyrene	0.52	U	0.52	0.38	ug/L		05/05/23 07:32	05/10/23 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*		*48 - 120*	*05/05/23 07:32*	*05/10/23 23:35*	*1*
Nitrobenzene-d5 (Surr)	*80*		*46 - 120*	*05/05/23 07:32*	*05/10/23 23:35*	*1*
p-Terphenyl-d14 (Surr)	*59*		*24 - 136*	*05/05/23 07:32*	*05/10/23 23:35*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 14:48	1
Acenaphthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 14:48	1
Acenaphthylene	0.50	U H	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 14:48	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 14:48	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 14:48	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 14:48	1
Fluoranthene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 14:48	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-10
Date Collected: 05/02/23 09:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-1
Matrix: Ground Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 14:48	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 14:48	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 14:48	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 14:48	1
Pyrene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*96*		*48 - 120*	*05/12/23 15:06*	*05/15/23 14:48*	*1*
Nitrobenzene-d5 (Surr)	*77*		*46 - 120*	*05/12/23 15:06*	*05/15/23 14:48*	*1*
p-Terphenyl-d14 (Surr)	*52*		*24 - 136*	*05/12/23 15:06*	*05/15/23 14:48*	*1*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-14

Date Collected: 05/02/23 11:10
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-2

Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.61	B ^2	0.020	0.0082	mg/L			05/15/23 11:24	2
Cyanide, Free (SW846 9016)	4.9	J	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample ID: MW-23

Date Collected: 05/02/23 12:25
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-3

Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 05:52	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 05:52	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 05:52	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/04/23 05:52*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*05/04/23 05:52*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/04/23 05:52*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/04/23 05:52*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.54	U	0.54	0.41	ug/L		05/05/23 07:32	05/11/23 00:03	1
Acenaphthene	0.54	U	0.54	0.33	ug/L		05/05/23 07:32	05/11/23 00:03	1
Acenaphthylene	0.54	U	0.54	0.37	ug/L		05/05/23 07:32	05/11/23 00:03	1
Anthracene	0.54	U *1	0.54	0.42	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[a]anthracene	0.54	U	0.54	0.43	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[a]pyrene	0.54	U	0.54	0.36	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[b]fluoranthene	0.54	U	0.54	0.33	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[g,h,i]perylene	0.54	U	0.54	0.40	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[k]fluoranthene	0.54	U	0.54	0.092	ug/L		05/05/23 07:32	05/11/23 00:03	1
Chrysene	0.54	U *1	0.54	0.35	ug/L		05/05/23 07:32	05/11/23 00:03	1
Dibenz(a,h)anthracene	0.54	U	0.54	0.36	ug/L		05/05/23 07:32	05/11/23 00:03	1
Fluoranthene	0.54	U *1	0.54	0.39	ug/L		05/05/23 07:32	05/11/23 00:03	1
Fluorene	0.54	U	0.54	0.40	ug/L		05/05/23 07:32	05/11/23 00:03	1
Indeno[1,2,3-cd]pyrene	0.54	U	0.54	0.48	ug/L		05/05/23 07:32	05/11/23 00:03	1
Naphthalene	0.54	U	0.54	0.46	ug/L		05/05/23 07:32	05/11/23 00:03	1
Phenanthrene	0.54	U	0.54	0.41	ug/L		05/05/23 07:32	05/11/23 00:03	1
Pyrene	0.54	U	0.54	0.39	ug/L		05/05/23 07:32	05/11/23 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*48 - 120*	*05/05/23 07:32*	*05/11/23 00:03*	*1*
Nitrobenzene-d5 (Surr)	*68*		*46 - 120*	*05/05/23 07:32*	*05/11/23 00:03*	*1*
p-Terphenyl-d14 (Surr)	*49*		*24 - 136*	*05/05/23 07:32*	*05/11/23 00:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.15**	**B ^2 F1**	0.010	0.0041	mg/L			05/15/23 11:45	1
Cyanide, Free (SW846 9016)	**6.5**		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-20

Date Collected: 05/02/23 13:45
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-4

Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.87	B ^2	0.10	0.041	mg/L			05/15/23 11:27	10
Cyanide, Free (SW846 9016)	5.9		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-21

Date Collected: 05/02/23 15:10
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-5

Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.41	B ^2	0.020	0.0082	mg/L			05/15/23 11:29	2
Cyanide, Free (SW846 9016)	8.9		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-22

Date Collected: 05/02/23 14:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-6

Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.44	B ^2	0.020	0.0082	mg/L			05/15/23 11:32	2
Cyanide, Free (SW846 9016)	13.5		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample ID: MW-11A

Date Collected: 05/02/23 14:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-7

Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.7**		2.0	0.82	ug/L			05/04/23 06:14	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			05/04/23 06:14	2
Toluene	2.0	U	2.0	1.0	ug/L			05/04/23 06:14	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			05/04/23 06:14	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*05/04/23 06:14*	*2*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/04/23 06:14*	*2*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*05/04/23 06:14*	*2*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/04/23 06:14*	*2*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 00:30	1
Acenaphthene	**2.1**		0.50	0.30	ug/L		05/05/23 07:32	05/11/23 00:30	1
Acenaphthylene	**1.3**		0.50	0.34	ug/L		05/05/23 07:32	05/11/23 00:30	1
Anthracene	0.50	U *1	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 00:30	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 00:30	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 00:30	1
Fluoranthene	0.50	U *1	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 00:30	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 00:30	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 00:30	1
Naphthalene	**1.7**	**B**	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 00:30	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 00:30	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*95*		*48 - 120*	*05/05/23 07:32*	*05/11/23 00:30*	*1*
Nitrobenzene-d5 (Surr)	*81*		*46 - 120*	*05/05/23 07:32*	*05/11/23 00:30*	*1*
p-Terphenyl-d14 (Surr)	*61*		*24 - 136*	*05/05/23 07:32*	*05/11/23 00:30*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:15	1
Acenaphthene	**1.5**	**H**	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:15	1
Acenaphthylene	**0.76**	**H**	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 15:15	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 15:15	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 15:15	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:15	1
Fluoranthene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:15	1

Client Sample ID: MW-11A

Date Collected: 05/02/23 14:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-7

Matrix: Ground Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:15	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 15:15	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 15:15	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:15	1
Pyrene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*		*48 - 120*	*05/12/23 15:06*	*05/15/23 15:15*	*1*
Nitrobenzene-d5 (Surr)	*78*		*46 - 120*	*05/12/23 15:06*	*05/15/23 15:15*	*1*
p-Terphenyl-d14 (Surr)	*52*		*24 - 136*	*05/12/23 15:06*	*05/15/23 15:15*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.20**	**B ^2**	0.010	0.0041	mg/L			05/15/23 11:53	1
Cyanide, Free (SW846 9016)	**2.3**	**J**	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	**39.2**		4.0	4.0	mg/L			05/08/23 15:44	1

Client Sample ID: Duplicate

Date Collected: 05/02/23 00:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-8

Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 06:36	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 06:36	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 06:36	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/04/23 06:36*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/04/23 06:36*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/04/23 06:36*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/04/23 06:36*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 00:58	1
Acenaphthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 00:58	1
Acenaphthylene	0.52	U	0.52	0.35	ug/L		05/05/23 07:32	05/11/23 00:58	1
Anthracene	0.52	U *1	0.52	0.41	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[a]anthracene	0.52	U	0.52	0.42	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[a]pyrene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[b]fluoranthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[g,h,i]perylene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[k]fluoranthene	0.52	U	0.52	0.089	ug/L		05/05/23 07:32	05/11/23 00:58	1
Chrysene	0.52	U *1	0.52	0.33	ug/L		05/05/23 07:32	05/11/23 00:58	1
Dibenz(a,h)anthracene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 00:58	1
Fluoranthene	0.52	U *1	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 00:58	1
Fluorene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 00:58	1
Indeno[1,2,3-cd]pyrene	0.52	U	0.52	0.46	ug/L		05/05/23 07:32	05/11/23 00:58	1
Naphthalene	0.52	U	0.52	0.44	ug/L		05/05/23 07:32	05/11/23 00:58	1
Phenanthrene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 00:58	1
Pyrene	0.52	U	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*48 - 120*	*05/05/23 07:32*	*05/11/23 00:58*	*1*
Nitrobenzene-d5 (Surr)	*75*		*46 - 120*	*05/05/23 07:32*	*05/11/23 00:58*	*1*
p-Terphenyl-d14 (Surr)	*45*		*24 - 136*	*05/05/23 07:32*	*05/11/23 00:58*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.14**	**B ^2**	0.010	0.0041	mg/L			05/15/23 11:56	1
Cyanide, Free (SW846 9016)	**8.5**		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample ID: EB

Date Collected: 05/02/23 13:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-9

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 06:59	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 06:59	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 06:59	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 06:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/04/23 06:59*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/04/23 06:59*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/04/23 06:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/04/23 06:59*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:25	1
Acenaphthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:25	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/11/23 01:25	1
Anthracene	0.50	U *1	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 01:25	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 01:25	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:25	1
Fluoranthene	0.50	U *1	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:25	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:25	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 01:25	1
Naphthalene	0.50	U	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 01:25	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:25	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*87*		*48 - 120*	*05/05/23 07:32*	*05/11/23 01:25*	*1*
Nitrobenzene-d5 (Surr)	*72*		*46 - 120*	*05/05/23 07:32*	*05/11/23 01:25*	*1*
p-Terphenyl-d14 (Surr)	*68*		*24 - 136*	*05/05/23 07:32*	*05/11/23 01:25*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/12/23 18:22	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample ID: SW-01
Date Collected: 05/03/23 09:20
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-1
Matrix: Surface Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 18:56	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 18:56	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 18:56	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/05/23 18:56*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/05/23 18:56*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/05/23 18:56*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/05/23 18:56*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:47	1
Acenaphthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:47	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/11/23 02:47	1
Anthracene	0.50	U *1	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 02:47	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 02:47	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:47	1
Fluoranthene	0.50	U *1	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:47	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:47	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 02:47	1
Naphthalene	**2.2**	**B**	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 02:47	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:47	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*48 - 120*	*05/05/23 07:32*	*05/11/23 02:47*	*1*
Nitrobenzene-d5 (Surr)	*73*		*46 - 120*	*05/05/23 07:32*	*05/11/23 02:47*	*1*
p-Terphenyl-d14 (Surr)	*55*		*24 - 136*	*05/05/23 07:32*	*05/11/23 02:47*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:43	1
Acenaphthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:43	1
Acenaphthylene	0.50	U H	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 15:43	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 15:43	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 15:43	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:43	1
Fluoranthene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:43	1

Client Sample ID: SW-01

Date Collected: 05/03/23 09:20
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-1

Matrix: Surface Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:43	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 15:43	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 15:43	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:43	1
Pyrene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*48 - 120*	*05/12/23 15:06*	*05/15/23 15:43*	*1*
Nitrobenzene-d5 (Surr)	*79*		*46 - 120*	*05/12/23 15:06*	*05/15/23 15:43*	*1*
p-Terphenyl-d14 (Surr)	*62*		*24 - 136*	*05/12/23 15:06*	*05/15/23 15:43*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/15/23 13:00	1
Cyanide, Free (SW846 9016)	**2.3**	**J**	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	4.0	U	4.0	4.0	mg/L			05/09/23 15:20	1

Client Sample ID: SW-02

Date Collected: 05/03/23 08:40
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-2

Matrix: Surface Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 19:19	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 19:19	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 19:19	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/05/23 19:19*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/05/23 19:19*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/05/23 19:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/05/23 19:19*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.53	U	0.53	0.40	ug/L		05/05/23 07:32	05/11/23 03:14	1
Acenaphthene	0.53	U	0.53	0.32	ug/L		05/05/23 07:32	05/11/23 03:14	1
Acenaphthylene	0.53	U	0.53	0.36	ug/L		05/05/23 07:32	05/11/23 03:14	1
Anthracene	0.53	U *1	0.53	0.41	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[a]anthracene	0.53	U	0.53	0.43	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[a]pyrene	0.53	U	0.53	0.35	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[b]fluoranthene	0.53	U	0.53	0.32	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[g,h,i]perylene	0.53	U	0.53	0.39	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[k]fluoranthene	0.53	U	0.53	0.090	ug/L		05/05/23 07:32	05/11/23 03:14	1
Chrysene	0.53	U *1	0.53	0.34	ug/L		05/05/23 07:32	05/11/23 03:14	1
Dibenz(a,h)anthracene	0.53	U	0.53	0.35	ug/L		05/05/23 07:32	05/11/23 03:14	1
Fluoranthene	0.53	U *1	0.53	0.38	ug/L		05/05/23 07:32	05/11/23 03:14	1
Fluorene	0.53	U	0.53	0.39	ug/L		05/05/23 07:32	05/11/23 03:14	1
Indeno[1,2,3-cd]pyrene	0.53	U	0.53	0.47	ug/L		05/05/23 07:32	05/11/23 03:14	1
Naphthalene	**1.2**	**B**	0.53	0.45	ug/L		05/05/23 07:32	05/11/23 03:14	1
Phenanthrene	0.53	U	0.53	0.40	ug/L		05/05/23 07:32	05/11/23 03:14	1
Pyrene	0.53	U	0.53	0.38	ug/L		05/05/23 07:32	05/11/23 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*98*		*48 - 120*	*05/05/23 07:32*	*05/11/23 03:14*	*1*
Nitrobenzene-d5 (Surr)	*82*		*46 - 120*	*05/05/23 07:32*	*05/11/23 03:14*	*1*
p-Terphenyl-d14 (Surr)	*63*		*24 - 136*	*05/05/23 07:32*	*05/11/23 03:14*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:10	1
Acenaphthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:10	1
Acenaphthylene	0.50	U H	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 16:10	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 16:10	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 16:10	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:10	1
Fluoranthene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:10	1

Client Sample ID: SW-02

Date Collected: 05/03/23 08:40
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-2

Matrix: Surface Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:10	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 16:10	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 16:10	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:10	1
Pyrene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*101*		*48 - 120*	*05/12/23 15:06*	*05/15/23 16:10*	*1*
Nitrobenzene-d5 (Surr)	*83*		*46 - 120*	*05/12/23 15:06*	*05/15/23 16:10*	*1*
p-Terphenyl-d14 (Surr)	*61*		*24 - 136*	*05/12/23 15:06*	*05/15/23 16:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/15/23 13:08	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	4.0	U	4.0	4.0	mg/L			05/09/23 15:20	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-17
Date Collected: 05/03/23 12:35
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-3
Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.0	U	2.0	0.82	ug/L			05/05/23 19:41	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			05/05/23 19:41	2
Toluene	2.0	U	2.0	1.0	ug/L			05/05/23 19:41	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			05/05/23 19:41	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*05/05/23 19:41*	*2*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/05/23 19:41*	*2*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*05/05/23 19:41*	*2*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/05/23 19:41*	*2*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Acenaphthene	2.7	U	2.7	1.6	ug/L		05/05/23 07:32	05/11/23 03:42	5
Acenaphthylene	2.7	U	2.7	1.8	ug/L		05/05/23 07:32	05/11/23 03:42	5
Anthracene	2.7	U *1	2.7	2.1	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[a]anthracene	2.7	U	2.7	2.1	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[a]pyrene	2.7	U	2.7	1.8	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[b]fluoranthene	2.7	U	2.7	1.6	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[g,h,i]perylene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[k]fluoranthene	2.7	U	2.7	0.45	ug/L		05/05/23 07:32	05/11/23 03:42	5
Chrysene	2.7	U *1	2.7	1.7	ug/L		05/05/23 07:32	05/11/23 03:42	5
Dibenz(a,h)anthracene	2.7	U	2.7	1.8	ug/L		05/05/23 07:32	05/11/23 03:42	5
Fluoranthene	2.7	U *1	2.7	1.9	ug/L		05/05/23 07:32	05/11/23 03:42	5
Fluorene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Indeno[1,2,3-cd]pyrene	2.7	U	2.7	2.3	ug/L		05/05/23 07:32	05/11/23 03:42	5
Naphthalene	2.7	U	2.7	2.2	ug/L		05/05/23 07:32	05/11/23 03:42	5
Phenanthrene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Pyrene	2.7	U	2.7	1.9	ug/L		05/05/23 07:32	05/11/23 03:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*93*		*48 - 120*	*05/05/23 07:32*	*05/11/23 03:42*	*5*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*05/05/23 07:32*	*05/11/23 03:42*	*5*
p-Terphenyl-d14 (Surr)	*64*		*24 - 136*	*05/05/23 07:32*	*05/11/23 03:42*	*5*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.027**	**H B ^+**	0.010	0.0041	mg/L			05/25/23 17:28	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample ID: MW-13
Date Collected: 05/03/23 10:50
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-4
Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 20:03	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 20:03	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 20:03	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*05/05/23 20:03*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/05/23 20:03*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/05/23 20:03*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/05/23 20:03*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 04:09	1
Acenaphthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 04:09	1
Acenaphthylene	0.52	U	0.52	0.35	ug/L		05/05/23 07:32	05/11/23 04:09	1
Anthracene	0.52	U *1	0.52	0.41	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[a]anthracene	0.52	U	0.52	0.42	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[a]pyrene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[b]fluoranthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[g,h,i]perylene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[k]fluoranthene	0.52	U	0.52	0.089	ug/L		05/05/23 07:32	05/11/23 04:09	1
Chrysene	0.52	U *1	0.52	0.33	ug/L		05/05/23 07:32	05/11/23 04:09	1
Dibenz(a,h)anthracene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 04:09	1
Fluoranthene	0.52	U *1	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 04:09	1
Fluorene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 04:09	1
Indeno[1,2,3-cd]pyrene	0.52	U	0.52	0.46	ug/L		05/05/23 07:32	05/11/23 04:09	1
Naphthalene	**2.7**	**B**	0.52	0.44	ug/L		05/05/23 07:32	05/11/23 04:09	1
Phenanthrene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 04:09	1
Pyrene	0.52	U	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*110*		*48 - 120*	*05/05/23 07:32*	*05/11/23 04:09*	*1*
Nitrobenzene-d5 (Surr)	*89*		*46 - 120*	*05/05/23 07:32*	*05/11/23 04:09*	*1*
p-Terphenyl-d14 (Surr)	*69*		*24 - 136*	*05/05/23 07:32*	*05/11/23 04:09*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:38	1
Acenaphthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:38	1
Acenaphthylene	0.50	U H	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 16:38	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 16:38	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 16:38	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:38	1
Fluoranthene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:38	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-13
Date Collected: 05/03/23 10:50
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-4
Matrix: Ground Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:38	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 16:38	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 16:38	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:38	1
Pyrene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*48 - 120*	*05/12/23 15:06*	*05/15/23 16:38*	*1*
Nitrobenzene-d5 (Surr)	*81*		*46 - 120*	*05/12/23 15:06*	*05/15/23 16:38*	*1*
p-Terphenyl-d14 (Surr)	*54*		*24 - 136*	*05/12/23 15:06*	*05/15/23 16:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/15/23 13:13	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: TB
Date Collected: 05/03/23 00:00
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-5
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 20:26	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 20:26	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 20:26	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*05/05/23 20:26*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/05/23 20:26*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/05/23 20:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/05/23 20:26*	*1*

Client Sample ID: MW-07

Date Collected: 05/04/23 08:15
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-1

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1100**		20	8.2	ug/L			05/05/23 21:32	20
Ethylbenzene	**1100**		20	15	ug/L			05/05/23 21:32	20
Toluene	**16**	**J**	20	10	ug/L			05/05/23 21:32	20
Xylenes, Total	**390**		40	13	ug/L			05/05/23 21:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*05/05/23 21:32*	*20*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/05/23 21:32*	*20*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*05/05/23 21:32*	*20*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/05/23 21:32*	*20*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**290**		52	40	ug/L		05/05/23 07:32	05/11/23 04:37	100
Acenaphthene	**140**		52	31	ug/L		05/05/23 07:32	05/11/23 04:37	100
Acenaphthylene	52	U	52	35	ug/L		05/05/23 07:32	05/11/23 04:37	100
Anthracene	52	U *1	52	41	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[a]anthracene	52	U	52	42	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[a]pyrene	52	U	52	34	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[b]fluoranthene	52	U	52	31	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[g,h,i]perylene	52	U	52	39	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[k]fluoranthene	52	U	52	8.9	ug/L		05/05/23 07:32	05/11/23 04:37	100
Chrysene	52	U *1	52	33	ug/L		05/05/23 07:32	05/11/23 04:37	100
Dibenz(a,h)anthracene	52	U	52	34	ug/L		05/05/23 07:32	05/11/23 04:37	100
Fluoranthene	52	U *1	52	38	ug/L		05/05/23 07:32	05/11/23 04:37	100
Fluorene	52	U	52	39	ug/L		05/05/23 07:32	05/11/23 04:37	100
Indeno[1,2,3-cd]pyrene	52	U	52	46	ug/L		05/05/23 07:32	05/11/23 04:37	100
Naphthalene	**2700**	**B**	52	44	ug/L		05/05/23 07:32	05/11/23 04:37	100
Phenanthrene	52	U	52	40	ug/L		05/05/23 07:32	05/11/23 04:37	100
Pyrene	52	U	52	38	ug/L		05/05/23 07:32	05/11/23 04:37	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*17*	*S1-*	*48 - 120*	*05/05/23 07:32*	*05/11/23 04:37*	*100*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*05/05/23 07:32*	*05/11/23 04:37*	*100*
p-Terphenyl-d14 (Surr)	*48*		*24 - 136*	*05/05/23 07:32*	*05/11/23 04:37*	*100*

Client Sample ID: MW-19

Date Collected: 05/04/23 10:50
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-2

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4200**		100	41	ug/L			05/05/23 21:54	100
Ethylbenzene	**410**		100	74	ug/L			05/05/23 21:54	100
Toluene	100	U	100	51	ug/L			05/05/23 21:54	100
Xylenes, Total	200	U	200	66	ug/L			05/05/23 21:54	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*05/05/23 21:54*	*100*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/05/23 21:54*	*100*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*05/05/23 21:54*	*100*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/05/23 21:54*	*100*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	100	U	100	79	ug/L		05/05/23 07:32	05/11/23 05:04	200
Acenaphthene	100	U	100	63	ug/L		05/05/23 07:32	05/11/23 05:04	200
Acenaphthylene	100	U	100	71	ug/L		05/05/23 07:32	05/11/23 05:04	200
Anthracene	100	U *1	100	81	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[a]anthracene	100	U	100	83	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[a]pyrene	100	U	100	69	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[b]fluoranthene	100	U	100	63	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[g,h,i]perylene	100	U	100	77	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[k]fluoranthene	100	U	100	18	ug/L		05/05/23 07:32	05/11/23 05:04	200
Chrysene	100	U *1	100	67	ug/L		05/05/23 07:32	05/11/23 05:04	200
Dibenz(a,h)anthracene	100	U	100	69	ug/L		05/05/23 07:32	05/11/23 05:04	200
Fluoranthene	100	U *1	100	75	ug/L		05/05/23 07:32	05/11/23 05:04	200
Fluorene	100	U	100	77	ug/L		05/05/23 07:32	05/11/23 05:04	200
Indeno[1,2,3-cd]pyrene	100	U	100	92	ug/L		05/05/23 07:32	05/11/23 05:04	200
Naphthalene	**3200**	**B**	100	88	ug/L		05/05/23 07:32	05/11/23 05:04	200
Phenanthrene	100	U	100	79	ug/L		05/05/23 07:32	05/11/23 05:04	200
Pyrene	100	U	100	75	ug/L		05/05/23 07:32	05/11/23 05:04	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*0*	*S1-*	*48 - 120*	*05/05/23 07:32*	*05/11/23 05:04*	*200*
Nitrobenzene-d5 (Surr)	*60*		*46 - 120*	*05/05/23 07:32*	*05/11/23 05:04*	*200*
p-Terphenyl-d14 (Surr)	*53*		*24 - 136*	*05/05/23 07:32*	*05/11/23 05:04*	*200*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-12

Date Collected: 05/04/23 09:30
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.69	B ^2	0.010	0.0041	mg/L			05/16/23 10:06	1
Cyanide, Free (SW846 9016)	13.3		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.72	H B	0.020	0.0082	mg/L			05/30/23 12:02	2

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-16

Date Collected: 05/04/23 09:20
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-4

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	2.9	B ^2	0.010	0.0041	mg/L			05/16/23 10:09	1
Cyanide, Free (SW846 9016)	59.1		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	3.1	H B	0.10	0.041	mg/L			05/30/23 12:05	10

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: TRIP BLANK

Date Collected: 05/04/23 00:00
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-5

Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 22:17	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 22:17	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 22:17	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/05/23 22:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/05/23 22:17*	*1*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*05/05/23 22:17*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/05/23 22:17*	*1*

Surrogate Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Ground Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-208476-1	MW-10	104	91	103	100
480-208476-3	MW-23	101	92	99	96
480-208476-7	MW-11A	96	90	97	99
480-208476-8	Duplicate	101	91	100	100
480-208520-3	MW-17	94	97	94	97
480-208520-4	MW-13	100	91	101	99

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Surface Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-208520-1	SW-01	98	90	101	99
480-208520-2	SW-02	102	89	102	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-208476-9	EB	101	97	98	98
480-208520-5	TB	99	90	98	98
480-208567-1	MW-07	108	89	91	97
480-208567-2	MW-19	99	90	92	96
480-208567-5	TRIP BLANK	101	89	87	97
LCS 480-668087/4	Lab Control Sample	97	92	102	100
LCS 480-668347/32	Lab Control Sample	103	88	95	95
LCS 480-668349/6	Lab Control Sample	95	97	95	99
MB 480-668087/6	Method Blank	102	92	98	100
MB 480-668347/8	Method Blank	106	88	95	96
MB 480-668349/8	Method Blank	98	90	98	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

Surrogate Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Ground Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(24-136)
480-208476-1	MW-10	94	80	59
480-208476-1 - RE	MW-10	96	77	52
480-208476-3	MW-23	83	68	49
480-208476-7	MW-11A	95	81	61
480-208476-7 - RE	MW-11A	94	78	52
480-208476-8	Duplicate	88	75	45
480-208520-3	MW-17	93	76	64
480-208520-4	MW-13	110	89	69
480-208520-4 - RE	MW-13	97	81	54

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Surface Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(24-136)
480-208520-1	SW-01	88	73	55
480-208520-1 - RE	SW-01	97	79	62
480-208520-2	SW-02	98	82	63
480-208520-2 - RE	SW-02	101	83	61

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(24-136)
480-208476-9	EB	87	72	68
480-208567-1	MW-07	17 S1-	76	48
480-208567-2	MW-19	0 S1-	60	53
LCS 480-668289/2-A	Lab Control Sample	101	90	88
LCS 480-669345/2-A	Lab Control Sample	94	87	80
LCSD 480-668289/3-A	Lab Control Sample Dup	87	81	73
LCSD 480-669345/3-A	Lab Control Sample Dup	96	88	85
MB 480-668289/1-A	Method Blank	85	70	69
MB 480-669345/1-A	Method Blank	98	79	74

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-668087/6
Matrix: Water
Analysis Batch: 668087

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/03/23 23:32	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/03/23 23:32	1
Toluene	1.0	U	1.0	0.51	ug/L			05/03/23 23:32	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/03/23 23:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/03/23 23:32*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*05/03/23 23:32*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/03/23 23:32*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/03/23 23:32*	*1*

Lab Sample ID: LCS 480-668087/4
Matrix: Water
Analysis Batch: 668087

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	25.0	27.4		ug/L		110	71 - 124
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
Toluene	25.0	26.9		ug/L		108	80 - 122
Xylenes, Total	50.0	53.5		ug/L		107	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*77 - 120*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*75 - 123*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: MB 480-668347/8
Matrix: Water
Analysis Batch: 668347

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 13:51	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 13:51	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 13:51	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 13:51	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*05/05/23 13:51*	*1*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*		*05/05/23 13:51*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*05/05/23 13:51*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/05/23 13:51*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-668347/32
Matrix: Water
Analysis Batch: 668347

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			25.0	23.6		ug/L		94	71 - 124		
Ethylbenzene			25.0	21.2		ug/L		85	77 - 123		
Toluene			25.0	22.5		ug/L		90	80 - 122		
Xylenes, Total			50.0	42.2		ug/L		84	76 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*88*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: MB 480-668349/8
Matrix: Water
Analysis Batch: 668349

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 13:55	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 13:55	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 13:55	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 13:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/05/23 13:55*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/05/23 13:55*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/05/23 13:55*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/05/23 13:55*	*1*

Lab Sample ID: LCS 480-668349/6
Matrix: Water
Analysis Batch: 668349

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			25.0	23.0		ug/L		92	71 - 124		
Ethylbenzene			25.0	22.2		ug/L		89	77 - 123		
Toluene			25.0	22.7		ug/L		91	80 - 122		
Xylenes, Total			50.0	45.2		ug/L		90	76 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*95*		*75 - 123*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Lab Sample ID: MB 480-668289/1-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 668289

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/10/23 22:11	1
Acenaphthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/10/23 22:11	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/10/23 22:11	1
Anthracene	0.50	U	0.50	0.39	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/10/23 22:11	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/10/23 22:11	1
Chrysene	0.50	U	0.50	0.32	ug/L		05/05/23 07:32	05/10/23 22:11	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/10/23 22:11	1
Fluoranthene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/10/23 22:11	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/10/23 22:11	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/10/23 22:11	1
Naphthalene	0.524		0.50	0.42	ug/L		05/05/23 07:32	05/10/23 22:11	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/10/23 22:11	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/10/23 22:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*48 - 120*	*05/05/23 07:32*	*05/10/23 22:11*	*1*
Nitrobenzene-d5 (Surr)	*70*		*46 - 120*	*05/05/23 07:32*	*05/10/23 22:11*	*1*
p-Terphenyl-d14 (Surr)	*69*		*24 - 136*	*05/05/23 07:32*	*05/10/23 22:11*	*1*

Lab Sample ID: LCS 480-668289/2-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 668289

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	32.0	32.4		ug/L		101	48 - 120
Acenaphthene	32.0	32.1		ug/L		100	60 - 120
Acenaphthylene	32.0	36.7		ug/L		115	63 - 120
Anthracene	32.0	35.7		ug/L		111	69 - 131
Benzo[a]anthracene	32.0	32.4		ug/L		101	62 - 142
Benzo[a]pyrene	32.0	31.1		ug/L		97	46 - 156
Benzo[b]fluoranthene	32.0	31.4		ug/L		98	50 - 149
Benzo[g,h,i]perylene	32.0	29.7		ug/L		93	34 - 189
Benzo[k]fluoranthene	32.0	31.2		ug/L		98	47 - 147
Chrysene	32.0	32.8		ug/L		102	69 - 140
Dibenz(a,h)anthracene	32.0	29.9		ug/L		93	35 - 176
Fluoranthene	32.0	35.1		ug/L		110	67 - 133
Fluorene	32.0	33.8		ug/L		105	66 - 129
Indeno[1,2,3-cd]pyrene	32.0	30.1		ug/L		94	57 - 161
Naphthalene	32.0	30.6		ug/L		96	48 - 120
Phenanthrene	32.0	34.4		ug/L		107	67 - 130
Pyrene	32.0	34.7		ug/L		108	58 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*101*		*48 - 120*

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: LCS 480-668289/2-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 668289

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*90*		*46 - 120*
p-Terphenyl-d14 (Surr)	*88*		*24 - 136*

Lab Sample ID: LCSD 480-668289/3-A
Matrix: Water
Analysis Batch: 668859

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 668289

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Methylnaphthalene			32.0	28.6		ug/L		89	48 - 120	12	21
Acenaphthene			32.0	27.2		ug/L		85	60 - 120	16	24
Acenaphthylene			32.0	31.3		ug/L		98	63 - 120	16	18
Anthracene			32.0	30.4	*1	ug/L		95	69 - 131	16	15
Benzo[a]anthracene			32.0	27.8		ug/L		87	62 - 142	15	15
Benzo[a]pyrene			32.0	27.0		ug/L		84	46 - 156	14	15
Benzo[b]fluoranthene			32.0	28.2		ug/L		88	50 - 149	11	15
Benzo[g,h,i]perylene			32.0	25.5		ug/L		80	34 - 189	15	15
Benzo[k]fluoranthene			32.0	26.2		ug/L		82	47 - 147	17	22
Chrysene			32.0	27.5	*1	ug/L		86	69 - 140	17	15
Dibenz(a,h)anthracene			32.0	25.9		ug/L		81	35 - 176	14	15
Fluoranthene			32.0	29.8	*1	ug/L		93	67 - 133	17	15
Fluorene			32.0	28.9		ug/L		90	66 - 129	15	15
Indeno[1,2,3-cd]pyrene			32.0	26.0		ug/L		81	57 - 161	15	15
Naphthalene			32.0	27.8		ug/L		87	48 - 120	10	29
Phenanthrene			32.0	30.4		ug/L		95	67 - 130	12	15
Pyrene			32.0	30.2		ug/L		94	58 - 136	14	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*87*		*48 - 120*
Nitrobenzene-d5 (Surr)	*81*		*46 - 120*
p-Terphenyl-d14 (Surr)	*73*		*24 - 136*

Lab Sample ID: MB 480-669345/1-A
Matrix: Water
Analysis Batch: 669481

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669345

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 13:26	1
Acenaphthene	0.50	U	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 13:26	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 13:26	1
Anthracene	0.50	U	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 13:26	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 13:26	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 13:26	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 13:26	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 13:26	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 13:26	1
Chrysene	0.50	U	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 13:26	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 13:26	1
Fluoranthene	0.50	U	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 13:26	1

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: MB 480-669345/1-A
Matrix: Water
Analysis Batch: 669481

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 669345

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 13:26	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 13:26	1
Naphthalene	0.50	U	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 13:26	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 13:26	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 13:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*98*		*48 - 120*	*05/12/23 15:06*	*05/15/23 13:26*	*1*
Nitrobenzene-d5 (Surr)	*79*		*46 - 120*	*05/12/23 15:06*	*05/15/23 13:26*	*1*
p-Terphenyl-d14 (Surr)	*74*		*24 - 136*	*05/12/23 15:06*	*05/15/23 13:26*	*1*

Lab Sample ID: LCS 480-669345/2-A
Matrix: Water
Analysis Batch: 669481

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 669345

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Methylnaphthalene	32.0	31.4		ug/L		98	48 - 120
Acenaphthene	32.0	30.4		ug/L		95	60 - 120
Acenaphthylene	32.0	34.4		ug/L		107	63 - 120
Anthracene	32.0	34.1		ug/L		106	69 - 131
Benzo[a]anthracene	32.0	31.5		ug/L		98	62 - 142
Benzo[a]pyrene	32.0	30.8		ug/L		96	46 - 156
Benzo[b]fluoranthene	32.0	30.5		ug/L		95	50 - 149
Benzo[g,h,i]perylene	32.0	29.3		ug/L		92	34 - 189
Benzo[k]fluoranthene	32.0	29.6		ug/L		93	47 - 147
Chrysene	32.0	31.8		ug/L		100	69 - 140
Dibenz(a,h)anthracene	32.0	29.7		ug/L		93	35 - 176
Fluoranthene	32.0	34.5		ug/L		108	67 - 133
Fluorene	32.0	32.0		ug/L		100	66 - 129
Indeno[1,2,3-cd]pyrene	32.0	29.7		ug/L		93	57 - 161
Naphthalene	32.0	29.1		ug/L		91	48 - 120
Phenanthrene	32.0	31.9		ug/L		100	67 - 130
Pyrene	32.0	32.9		ug/L		103	58 - 136

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*94*		*48 - 120*
Nitrobenzene-d5 (Surr)	*87*		*46 - 120*
p-Terphenyl-d14 (Surr)	*80*		*24 - 136*

Lab Sample ID: LCSD 480-669345/3-A
Matrix: Water
Analysis Batch: 669481

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 669345

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
2-Methylnaphthalene	32.0	31.9		ug/L		100	48 - 120	2	21
Acenaphthene	32.0	31.3		ug/L		98	60 - 120	3	24
Acenaphthylene	32.0	35.5		ug/L		111	63 - 120	3	18
Anthracene	32.0	34.7		ug/L		108	69 - 131	2	15

Method: 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH (Continued)

Lab Sample ID: LCSD 480-669345/3-A
Matrix: Water
Analysis Batch: 669481

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 669345

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzo[a]anthracene			32.0	33.0		ug/L		103	62 - 142	5	15
Benzo[a]pyrene			32.0	31.3		ug/L		98	46 - 156	2	15
Benzo[b]fluoranthene			32.0	31.8		ug/L		100	50 - 149	4	15
Benzo[g,h,i]perylene			32.0	30.1		ug/L		94	34 - 189	3	15
Benzo[k]fluoranthene			32.0	30.0		ug/L		94	47 - 147	1	22
Chrysene			32.0	32.9		ug/L		103	69 - 140	3	15
Dibenz(a,h)anthracene			32.0	29.9		ug/L		93	35 - 176	1	15
Fluoranthene			32.0	35.3		ug/L		110	67 - 133	2	15
Fluorene			32.0	32.9		ug/L		103	66 - 129	3	15
Indeno[1,2,3-cd]pyrene			32.0	30.1		ug/L		94	57 - 161	2	15
Naphthalene			32.0	29.2		ug/L		91	48 - 120	0	29
Phenanthrene			32.0	32.3		ug/L		101	67 - 130	1	15
Pyrene			32.0	33.5		ug/L		105	58 - 136	2	25

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*96*		*48 - 120*
Nitrobenzene-d5 (Surr)	*88*		*46 - 120*
p-Terphenyl-d14 (Surr)	*85*		*24 - 136*

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-669455/103
Matrix: Water
Analysis Batch: 669455

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0134		0.010	0.0041	mg/L			05/12/23 16:49	1

Lab Sample ID: MB 480-669455/131
Matrix: Water
Analysis Batch: 669455

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0132		0.010	0.0041	mg/L			05/12/23 18:04	1

Lab Sample ID: MB 480-669455/75
Matrix: Water
Analysis Batch: 669455

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0119		0.010	0.0041	mg/L			05/12/23 15:35	1

Lab Sample ID: HLCS 480-669455/22
Matrix: Water
Analysis Batch: 669455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.385		mg/L		96	90 - 110		

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LCS 480-669455/104
Matrix: Water
Analysis Batch: 669455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.233		mg/L		93	90 - 110

Lab Sample ID: LCS 480-669455/132
Matrix: Water
Analysis Batch: 669455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.245		mg/L		98	90 - 110

Lab Sample ID: LCS 480-669455/76
Matrix: Water
Analysis Batch: 669455

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.224		mg/L		90	90 - 110

Lab Sample ID: MB 480-669584/21
Matrix: Water
Analysis Batch: 669584

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00950	J	0.010	0.0041	mg/L			05/15/23 11:09	1

Lab Sample ID: MB 480-669584/49
Matrix: Water
Analysis Batch: 669584

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0145		0.010	0.0041	mg/L			05/15/23 12:23	1

Lab Sample ID: MB 480-669584/77
Matrix: Water
Analysis Batch: 669584

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0142		0.010	0.0041	mg/L			05/15/23 13:40	1

Lab Sample ID: HLCS 480-669584/22
Matrix: Water
Analysis Batch: 669584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.391		mg/L		98	90 - 110

Lab Sample ID: LCS 480-669584/23
Matrix: Water
Analysis Batch: 669584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.250		mg/L		100	90 - 110

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: LCS 480-669584/50
Matrix: Water
Analysis Batch: 669584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.241		mg/L		96	90 - 110

Lab Sample ID: LCS 480-669584/78
Matrix: Water
Analysis Batch: 669584

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.242		mg/L		97	90 - 110

Lab Sample ID: 480-208476-3 MS
Matrix: Ground Water
Analysis Batch: 669584

Client Sample ID: MW-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.15	B ^2 F1	0.100	0.236	F1	mg/L		88	90 - 110

Lab Sample ID: 480-208520-1 MS
Matrix: Surface Water
Analysis Batch: 669584

Client Sample ID: SW-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.010	U	0.100	0.0895		mg/L		90	90 - 110

Lab Sample ID: 480-208476-3 DU
Matrix: Ground Water
Analysis Batch: 669584

Client Sample ID: MW-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.15	B ^2 F1	0.144		mg/L		2	15

Lab Sample ID: 480-208520-1 DU
Matrix: Surface Water
Analysis Batch: 669584

Client Sample ID: SW-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Cyanide, Total	0.010	U	0.010	U	mg/L		NC	15

Lab Sample ID: MB 480-669722/21
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00860	J	0.010	0.0041	mg/L			05/16/23 09:29	1

Lab Sample ID: MB 480-669722/77
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0108		0.010	0.0041	mg/L			05/16/23 11:58	1

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: HLCS 480-669722/22
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.403		mg/L		101	90 - 110		

Lab Sample ID: LCS 480-669722/23
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.250		mg/L		100	90 - 110		

Lab Sample ID: LCS 480-669722/78
Matrix: Water
Analysis Batch: 669722

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.244		mg/L		97	90 - 110		

Lab Sample ID: 480-208520-1 MS
Matrix: Surface Water
Analysis Batch: 669722

Client Sample ID: SW-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	0.010	U F1	0.100	0.0864	F1	mg/L		86	90 - 110		

Lab Sample ID: MB 480-671026/105
Matrix: Water
Analysis Batch: 671026

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00650	J ^+	0.010	0.0041	mg/L			05/25/23 17:19	1

Lab Sample ID: MB 480-671026/77
Matrix: Water
Analysis Batch: 671026

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00630	J	0.010	0.0041	mg/L			05/25/23 16:04	1

Lab Sample ID: HLCS 480-671026/22
Matrix: Water
Analysis Batch: 671026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.400		mg/L		100	90 - 110		

Lab Sample ID: LCS 480-671026/106
Matrix: Water
Analysis Batch: 671026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.239	^+	mg/L		96	90 - 110		

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: LCS 480-671026/78
Matrix: Water
Analysis Batch: 671026

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.249		mg/L		99	90 - 110		

Lab Sample ID: MB 480-671322/103
Matrix: Water
Analysis Batch: 671322

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00980	J	0.010	0.0041	mg/L			05/30/23 15:01	1

Lab Sample ID: MB 480-671322/47
Matrix: Water
Analysis Batch: 671322

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0127		0.010	0.0041	mg/L			05/30/23 12:31	1

Lab Sample ID: HLCS 480-671322/22
Matrix: Water
Analysis Batch: 671322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.399		mg/L		100	90 - 110		

Lab Sample ID: LCS 480-671322/104
Matrix: Water
Analysis Batch: 671322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.240		mg/L		96	90 - 110		

Lab Sample ID: LCS 480-671322/23
Matrix: Water
Analysis Batch: 671322

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.246		mg/L		98	90 - 110		

Method: 9016 - Cyanide, Free

Lab Sample ID: MB 460-908261/1-A
Matrix: Water
Analysis Batch: 908379

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 908261

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Free	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Method: 9016 - Cyanide, Free (Continued)

Lab Sample ID: LCS 460-908261/2-A
Matrix: Water
Analysis Batch: 908379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 908261

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Free	50.0	50.71		ug/L		101	56 - 120

Lab Sample ID: DLCK 460-908379/10
Matrix: Water
Analysis Batch: 908379

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	DLCK Result	DLCK Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Free	2.00	5.0	U	ug/L		103	36 - 171

Method: SM 2540D - Solids, Total Suspended (TSS)

Lab Sample ID: MB 480-668656/1
Matrix: Water
Analysis Batch: 668656

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			05/08/23 15:44	1

Lab Sample ID: LCS 480-668656/2
Matrix: Water
Analysis Batch: 668656

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	256	251.6		mg/L		98	88 - 110

Lab Sample ID: MB 480-668792/1
Matrix: Water
Analysis Batch: 668792

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids	1.0	U	1.0	1.0	mg/L			05/09/23 15:20	1

Lab Sample ID: LCS 480-668792/2
Matrix: Water
Analysis Batch: 668792

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Total Suspended Solids	266	250.0		mg/L		94	88 - 110

Lab Sample ID: 480-208520-1 DU
Matrix: Surface Water
Analysis Batch: 668792

Client Sample ID: SW-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Suspended Solids	4.0	U	4.0	U	mg/L		NC	10

GC/MS VOA

Analysis Batch: 668087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-1	MW-10	Total/NA	Ground Water	8260C	
480-208476-3	MW-23	Total/NA	Ground Water	8260C	
480-208476-7	MW-11A	Total/NA	Ground Water	8260C	
480-208476-8	Duplicate	Total/NA	Ground Water	8260C	
480-208476-9	EB	Total/NA	Water	8260C	
MB 480-668087/6	Method Blank	Total/NA	Water	8260C	
LCS 480-668087/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 668347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208567-1	MW-07	Total/NA	Water	8260C	
480-208567-2	MW-19	Total/NA	Water	8260C	
480-208567-5	TRIP BLANK	Total/NA	Water	8260C	
MB 480-668347/8	Method Blank	Total/NA	Water	8260C	
LCS 480-668347/32	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 668349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208520-1	SW-01	Total/NA	Surface Water	8260C	
480-208520-2	SW-02	Total/NA	Surface Water	8260C	
480-208520-3	MW-17	Total/NA	Ground Water	8260C	
480-208520-4	MW-13	Total/NA	Ground Water	8260C	
480-208520-5	TB	Total/NA	Water	8260C	
MB 480-668349/8	Method Blank	Total/NA	Water	8260C	
LCS 480-668349/6	Lab Control Sample	Total/NA	Water	8260C	

GC/MS Semi VOA

Prep Batch: 668289

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-1	MW-10	Total/NA	Ground Water	3510C	
480-208476-3	MW-23	Total/NA	Ground Water	3510C	
480-208476-7	MW-11A	Total/NA	Ground Water	3510C	
480-208476-8	Duplicate	Total/NA	Ground Water	3510C	
480-208476-9	EB	Total/NA	Water	3510C	
480-208520-1	SW-01	Total/NA	Surface Water	3510C	
480-208520-2	SW-02	Total/NA	Surface Water	3510C	
480-208520-3	MW-17	Total/NA	Ground Water	3510C	
480-208520-4	MW-13	Total/NA	Ground Water	3510C	
480-208567-1	MW-07	Total/NA	Water	3510C	
480-208567-2	MW-19	Total/NA	Water	3510C	
MB 480-668289/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-668289/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-668289/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 668859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-1	MW-10	Total/NA	Ground Water	8270D_LL_PAH	668289
480-208476-3	MW-23	Total/NA	Ground Water	8270D_LL_PAH	668289
480-208476-7	MW-11A	Total/NA	Ground Water	8270D_LL_PAH	668289
480-208476-8	Duplicate	Total/NA	Ground Water	8270D_LL_PAH	668289

GC/MS Semi VOA (Continued)

Analysis Batch: 668859 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-9	EB	Total/NA	Water	8270D_LL_PAH	668289
480-208520-1	SW-01	Total/NA	Surface Water	8270D_LL_PAH	668289
480-208520-2	SW-02	Total/NA	Surface Water	8270D_LL_PAH	668289
480-208520-3	MW-17	Total/NA	Ground Water	8270D_LL_PAH	668289
480-208520-4	MW-13	Total/NA	Ground Water	8270D_LL_PAH	668289
480-208567-1	MW-07	Total/NA	Water	8270D_LL_PAH	668289
480-208567-2	MW-19	Total/NA	Water	8270D_LL_PAH	668289
MB 480-668289/1-A	Method Blank	Total/NA	Water	8270D_LL_PAH	668289
LCS 480-668289/2-A	Lab Control Sample	Total/NA	Water	8270D_LL_PAH	668289
LCSD 480-668289/3-A	Lab Control Sample Dup	Total/NA	Water	8270D_LL_PAH	668289

Prep Batch: 669345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-1 - RE	MW-10	Total/NA	Ground Water	3510C	
480-208476-7 - RE	MW-11A	Total/NA	Ground Water	3510C	
480-208520-1 - RE	SW-01	Total/NA	Surface Water	3510C	
480-208520-2 - RE	SW-02	Total/NA	Surface Water	3510C	
480-208520-4 - RE	MW-13	Total/NA	Ground Water	3510C	
MB 480-669345/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-669345/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-669345/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

Analysis Batch: 669481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-1 - RE	MW-10	Total/NA	Ground Water	8270D_LL_PAH	669345
480-208476-7 - RE	MW-11A	Total/NA	Ground Water	8270D_LL_PAH	669345
480-208520-1 - RE	SW-01	Total/NA	Surface Water	8270D_LL_PAH	669345
480-208520-2 - RE	SW-02	Total/NA	Surface Water	8270D_LL_PAH	669345
480-208520-4 - RE	MW-13	Total/NA	Ground Water	8270D_LL_PAH	669345
MB 480-669345/1-A	Method Blank	Total/NA	Water	8270D_LL_PAH	669345
LCS 480-669345/2-A	Lab Control Sample	Total/NA	Water	8270D_LL_PAH	669345
LCSD 480-669345/3-A	Lab Control Sample Dup	Total/NA	Water	8270D_LL_PAH	669345

General Chemistry

Analysis Batch: 668656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-7	MW-11A	Total/NA	Ground Water	SM 2540D	
MB 480-668656/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-668656/2	Lab Control Sample	Total/NA	Water	SM 2540D	

Analysis Batch: 668792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208520-1	SW-01	Total/NA	Surface Water	SM 2540D	
480-208520-2	SW-02	Total/NA	Surface Water	SM 2540D	
MB 480-668792/1	Method Blank	Total/NA	Water	SM 2540D	
LCS 480-668792/2	Lab Control Sample	Total/NA	Water	SM 2540D	
480-208520-1 DU	SW-01	Total/NA	Surface Water	SM 2540D	

General Chemistry

Analysis Batch: 669455

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-9	EB	Total/NA	Water	9012B	
MB 480-669455/103	Method Blank	Total/NA	Water	9012B	
MB 480-669455/131	Method Blank	Total/NA	Water	9012B	
MB 480-669455/75	Method Blank	Total/NA	Water	9012B	
HLCS 480-669455/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669455/104	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669455/132	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669455/76	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 669584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-2	MW-14	Total/NA	Ground Water	9012B	
480-208476-3	MW-23	Total/NA	Ground Water	9012B	
480-208476-4	MW-20	Total/NA	Ground Water	9012B	
480-208476-5	MW-21	Total/NA	Ground Water	9012B	
480-208476-6	MW-22	Total/NA	Ground Water	9012B	
480-208476-7	MW-11A	Total/NA	Ground Water	9012B	
480-208476-8	Duplicate	Total/NA	Ground Water	9012B	
480-208520-1	SW-01	Total/NA	Surface Water	9012B	
480-208520-2	SW-02	Total/NA	Surface Water	9012B	
480-208520-4	MW-13	Total/NA	Ground Water	9012B	
MB 480-669584/21	Method Blank	Total/NA	Water	9012B	
MB 480-669584/49	Method Blank	Total/NA	Water	9012B	
MB 480-669584/77	Method Blank	Total/NA	Water	9012B	
HLCS 480-669584/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669584/23	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669584/50	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669584/78	Lab Control Sample	Total/NA	Water	9012B	
480-208476-3 MS	MW-23	Total/NA	Ground Water	9012B	
480-208520-1 MS	SW-01	Total/NA	Surface Water	9012B	
480-208476-3 DU	MW-23	Total/NA	Ground Water	9012B	
480-208520-1 DU	SW-01	Total/NA	Surface Water	9012B	

Analysis Batch: 669722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208567-3	MW-12	Total/NA	Water	9012B	
480-208567-4	MW-16	Total/NA	Water	9012B	
MB 480-669722/21	Method Blank	Total/NA	Water	9012B	
MB 480-669722/77	Method Blank	Total/NA	Water	9012B	
HLCS 480-669722/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669722/23	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-669722/78	Lab Control Sample	Total/NA	Water	9012B	
480-208520-1 MS	SW-01	Total/NA	Surface Water	9012B	

Analysis Batch: 671026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208520-3	MW-17	Total/NA	Ground Water	9012B	
MB 480-671026/105	Method Blank	Total/NA	Water	9012B	
MB 480-671026/77	Method Blank	Total/NA	Water	9012B	
HLCS 480-671026/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-671026/106	Lab Control Sample	Total/NA	Water	9012B	

General Chemistry (Continued)

Analysis Batch: 671026 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-671026/78	Lab Control Sample	Total/NA	Water	9012B	

Analysis Batch: 671322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208567-3 - RA	MW-12	Total/NA	Water	9012B	
480-208567-4 - RA	MW-16	Total/NA	Water	9012B	
MB 480-671322/103	Method Blank	Total/NA	Water	9012B	
MB 480-671322/47	Method Blank	Total/NA	Water	9012B	
HLCS 480-671322/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-671322/104	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-671322/23	Lab Control Sample	Total/NA	Water	9012B	

Prep Batch: 908261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-2	MW-14	Total/NA	Ground Water	9016	
480-208476-3	MW-23	Total/NA	Ground Water	9016	
480-208476-4	MW-20	Total/NA	Ground Water	9016	
480-208476-5	MW-21	Total/NA	Ground Water	9016	
480-208476-6	MW-22	Total/NA	Ground Water	9016	
480-208476-7	MW-11A	Total/NA	Ground Water	9016	
480-208476-8	Duplicate	Total/NA	Ground Water	9016	
480-208476-9	EB	Total/NA	Water	9016	
480-208520-1	SW-01	Total/NA	Surface Water	9016	
480-208520-2	SW-02	Total/NA	Surface Water	9016	
480-208520-3	MW-17	Total/NA	Ground Water	9016	
480-208520-4	MW-13	Total/NA	Ground Water	9016	
480-208567-3	MW-12	Total/NA	Water	9016	
480-208567-4	MW-16	Total/NA	Water	9016	
MB 460-908261/1-A	Method Blank	Total/NA	Water	9016	
LCS 460-908261/2-A	Lab Control Sample	Total/NA	Water	9016	

Analysis Batch: 908379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-208476-2	MW-14	Total/NA	Ground Water	9016	908261
480-208476-3	MW-23	Total/NA	Ground Water	9016	908261
480-208476-4	MW-20	Total/NA	Ground Water	9016	908261
480-208476-5	MW-21	Total/NA	Ground Water	9016	908261
480-208476-6	MW-22	Total/NA	Ground Water	9016	908261
480-208476-7	MW-11A	Total/NA	Ground Water	9016	908261
480-208476-8	Duplicate	Total/NA	Ground Water	9016	908261
480-208476-9	EB	Total/NA	Water	9016	908261
480-208520-1	SW-01	Total/NA	Surface Water	9016	908261
480-208520-2	SW-02	Total/NA	Surface Water	9016	908261
480-208520-3	MW-17	Total/NA	Ground Water	9016	908261
480-208520-4	MW-13	Total/NA	Ground Water	9016	908261
480-208567-3	MW-12	Total/NA	Water	9016	908261
480-208567-4	MW-16	Total/NA	Water	9016	908261
MB 460-908261/1-A	Method Blank	Total/NA	Water	9016	908261
DLCK 460-908379/10	Lab Control Sample	Total/NA	Water	9016	
LCS 460-908261/2-A	Lab Control Sample	Total/NA	Water	9016	908261

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-10
Date Collected: 05/02/23 09:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668087	LCH	EET BUF	05/04/23 05:30
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/10/23 23:35
Total/NA	Prep	3510C	RE		669345	LSC	EET BUF	05/12/23 15:06
Total/NA	Analysis	8270D_LL_PAH	RE	1	669481	JMM	EET BUF	05/15/23 14:48

Client Sample ID: MW-14
Date Collected: 05/02/23 11:10
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		2	669584	CLT	EET BUF	05/15/23 11:24
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: MW-23
Date Collected: 05/02/23 12:25
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668087	LCH	EET BUF	05/04/23 05:52
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 00:03
Total/NA	Analysis	9012B		1	669584	CLT	EET BUF	05/15/23 11:45
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: MW-20
Date Collected: 05/02/23 13:45
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		10	669584	CLT	EET BUF	05/15/23 11:27
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: MW-21
Date Collected: 05/02/23 15:10
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-5
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		2	669584	CLT	EET BUF	05/15/23 11:29
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-22
Date Collected: 05/02/23 14:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-6
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		2	669584	CLT	EET BUF	05/15/23 11:32
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: MW-11A
Date Collected: 05/02/23 14:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-7
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	668087	LCH	EET BUF	05/04/23 06:14
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 00:30
Total/NA	Prep	3510C	RE		669345	LSC	EET BUF	05/12/23 15:06
Total/NA	Analysis	8270D_LL_PAH	RE	1	669481	JMM	EET BUF	05/15/23 15:15
Total/NA	Analysis	9012B		1	669584	CLT	EET BUF	05/15/23 11:53
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05
Total/NA	Analysis	SM 2540D		1	668656	CRM	EET BUF	05/08/23 15:44

Client Sample ID: Duplicate
Date Collected: 05/02/23 00:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-8
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668087	LCH	EET BUF	05/04/23 06:36
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 00:58
Total/NA	Analysis	9012B		1	669584	CLT	EET BUF	05/15/23 11:56
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: EB
Date Collected: 05/02/23 13:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668087	LCH	EET BUF	05/04/23 06:59
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 01:25
Total/NA	Analysis	9012B		1	669455	CLT	EET BUF	05/12/23 18:22
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: SW-01
Date Collected: 05/03/23 09:20
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-1
Matrix: Surface Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668349	CDC	EET BUF	05/05/23 18:56
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 02:47
Total/NA	Prep	3510C	RE		669345	LSC	EET BUF	05/12/23 15:06
Total/NA	Analysis	8270D_LL_PAH	RE	1	669481	JMM	EET BUF	05/15/23 15:43
Total/NA	Analysis	9012B		1	669584	CLT	EET BUF	05/15/23 13:00
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05
Total/NA	Analysis	SM 2540D		1	668792	CRM	EET BUF	05/09/23 15:20

Client Sample ID: SW-02
Date Collected: 05/03/23 08:40
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-2
Matrix: Surface Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668349	CDC	EET BUF	05/05/23 19:19
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 03:14
Total/NA	Prep	3510C	RE		669345	LSC	EET BUF	05/12/23 15:06
Total/NA	Analysis	8270D_LL_PAH	RE	1	669481	JMM	EET BUF	05/15/23 16:10
Total/NA	Analysis	9012B		1	669584	CLT	EET BUF	05/15/23 13:08
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05
Total/NA	Analysis	SM 2540D		1	668792	CRM	EET BUF	05/09/23 15:20

Client Sample ID: MW-17
Date Collected: 05/03/23 12:35
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		2	668349	CDC	EET BUF	05/05/23 19:41
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		5	668859	JMM	EET BUF	05/11/23 03:42
Total/NA	Analysis	9012B		1	671026	CLT	EET BUF	05/25/23 17:28
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: MW-13
Date Collected: 05/03/23 10:50
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668349	CDC	EET BUF	05/05/23 20:03

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-13
Date Collected: 05/03/23 10:50
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-4
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		1	668859	JMM	EET BUF	05/11/23 04:09
Total/NA	Prep	3510C	RE		669345	LSC	EET BUF	05/12/23 15:06
Total/NA	Analysis	8270D_LL_PAH	RE	1	669481	JMM	EET BUF	05/15/23 16:38
Total/NA	Analysis	9012B		1	669584	CLT	EET BUF	05/15/23 13:13
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: TB
Date Collected: 05/03/23 00:00
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668349	CDC	EET BUF	05/05/23 20:26

Client Sample ID: MW-07
Date Collected: 05/04/23 08:15
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		20	668347	LCH	EET BUF	05/05/23 21:32
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		100	668859	JMM	EET BUF	05/11/23 04:37

Client Sample ID: MW-19
Date Collected: 05/04/23 10:50
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		100	668347	LCH	EET BUF	05/05/23 21:54
Total/NA	Prep	3510C			668289	SMP	EET BUF	05/05/23 07:32
Total/NA	Analysis	8270D_LL_PAH		200	668859	JMM	EET BUF	05/11/23 05:04

Client Sample ID: MW-12
Date Collected: 05/04/23 09:30
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		1	669722	CLT	EET BUF	05/16/23 10:06
Total/NA	Analysis	9012B	RA	2	671322	CLT	EET BUF	05/30/23 12:02
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Lab Chronicle

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-16

Date Collected: 05/04/23 09:20
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	9012B		1	669722	CLT	EET BUF	05/16/23 10:09
Total/NA	Analysis	9012B	RA	10	671322	CLT	EET BUF	05/30/23 12:05
Total/NA	Prep	9016			908261	IAA	EET EDI	05/10/23 13:41
Total/NA	Analysis	9016		1	908379	VBG	EET EDI	05/10/23 20:05

Client Sample ID: TRIP BLANK

Date Collected: 05/04/23 00:00
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	668347	LCH	EET BUF	05/05/23 22:17

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-24

Laboratory: Eurofins Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0818	01-30-24
DE Haz. Subst. Cleanup Act (HSCA)	State	N/A	01-01-24
Georgia	State	12028 (NJ)	06-30-23
Massachusetts	State	M-NJ312	06-30-23
New Jersey	NELAP	12028	06-30-23
New York	NELAP	11452	04-01-24
Pennsylvania	NELAP	68-00522	03-01-24
Rhode Island	State	LAO00376	12-30-23
USDA	US Federal Programs	P330-20-00244	11-03-23

Method Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D_LL_PAH	Semivolatile Organic Compounds (GC/MS) Low level PAH	SW846	EET BUF
9012B	Cyanide, Total and/or Amenable	SW846	EET BUF
9016	Cyanide, Free	SW846	EET EDI
SM 2540D	Solids, Total Suspended (TSS)	SM	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF
9016	Cyanide, Preparation	SW846	EET EDI

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater"

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

EET EDI = Eurofins Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-208476-1	MW-10	Ground Water	05/02/23 09:30	05/02/23 16:11
480-208476-2	MW-14	Ground Water	05/02/23 11:10	05/02/23 16:11
480-208476-3	MW-23	Ground Water	05/02/23 12:25	05/02/23 16:11
480-208476-4	MW-20	Ground Water	05/02/23 13:45	05/02/23 16:11
480-208476-5	MW-21	Ground Water	05/02/23 15:10	05/02/23 16:11
480-208476-6	MW-22	Ground Water	05/02/23 14:00	05/02/23 16:11
480-208476-7	MW-11A	Ground Water	05/02/23 14:30	05/02/23 16:11
480-208476-8	Duplicate	Ground Water	05/02/23 00:00	05/02/23 16:11
480-208476-9	EB	Water	05/02/23 13:00	05/02/23 16:11
480-208520-1	SW-01	Surface Water	05/03/23 09:20	05/03/23 13:40
480-208520-2	SW-02	Surface Water	05/03/23 08:40	05/03/23 13:40
480-208520-3	MW-17	Ground Water	05/03/23 12:35	05/03/23 13:40
480-208520-4	MW-13	Ground Water	05/03/23 10:50	05/03/23 13:40
480-208520-5	TB	Water	05/03/23 00:00	05/03/23 13:40
480-208567-1	MW-07	Water	05/04/23 08:15	05/04/23 11:50
480-208567-2	MW-19	Water	05/04/23 10:50	05/04/23 11:50
480-208567-3	MW-12	Water	05/04/23 09:30	05/04/23 11:50
480-208567-4	MW-16	Water	05/04/23 09:20	05/04/23 11:50
480-208567-5	TRIP BLANK	Water	05/04/23 00:00	05/04/23 11:50

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins
Environment Testing

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Brad Walker	Phone: 716-572-4362	Schove, John R		480-184649-32131.2
Company: National Fuel Gas Supply Corporation	PWSID	E-Mail: John.Schove@et.eurofinsus.com	State of Origin	Page: Page 2 of 2
Address: 6363 Main Street	Due Date Requested:			Job #
City: Williamsville	TAT Requested (days): STD			
State, Zip: NY, 14221-5887	Compliance Project: Δ Yes Δ No			
Phone: 716-857-7247(Tel)	PO #: Purchase Order not required			
Email: walkerb@natfuel.com	WO #			
Project Name: GEI, Mineral Springs/ Event Desc: Semi Annual Sampling (April)	Project #: 48008324			
Site: New York	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016 - Cyanide, Free	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	2540D - Total Suspended Solids	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note:
		Preservation Code:					B	N	A	N	B		
[redacted]9 MW-10	5/2/23	0930	G	Water					X				
[redacted] MW-14		1110		Water			X				X		
[redacted] MW-23		1225		Water			X	X	X		X		
[redacted] MW-20		1345		Water			X				X		
[redacted] MW-21		1510		Water			X				X		
[redacted] MW-22	~~5/1/23~~	1400		Water			X				X		
[redacted] MW-11A		1430		Water			X	X	X	X	X		
DUP				Water			X	X	X		X		
EB		1300		Water			X	X	X		X		

480-208476 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1				[signature]	5/2/23 1611	TA
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.7 W ICE

Ver: 06/08/2021

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins

Client Information

Client Contact: Brad Walker	Sampler: M. Cummings	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-184649-32131 1
Company: National Fuel Gas Supply Corporation	Phone: 716-572-4362	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 2
Address: 6363 Main Street	PWSID:			Job #
City: Williamsville	Due Date Requested:			
State, Zip: NY, 14221-5887	TAT Requested (days): STD			
Phone: 716-857-7247(Tel)	Compliance Project: Δ Yes Δ No			
Email: walkerb@natfuel.com	PO #: Purchase Order not required			
Project Name: GEI Mineral Springs/ Event Desc: Semi Annual Sampling (April)	WO #:			
Site: New York	Project #: 48008324			
	SSOW#:			

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016 - Cyanide, Free	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	2540D - Total Suspended Solids	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	A	N	B		
[redacted]	~~5/3/23~~		—	Water									
[redacted]	~~5/3/23~~		—	Water									
SW-01	5/3/23	0920	G	Water			X	X	X	X	X		
SW-02		0840		Water			X	X	X	X	X		
MW-17		1235		Water			X	X	X		X		
MW-13		1050		Water			X	X	X		X		
TRIP BLANK		—		Water					X				
[redacted]				Water									
[redacted]				Water									
[redacted]				Water									
[redacted]				Water									

480-208520 Chain of Custody

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Possible Hazard Identification

☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time	Method of Shipment	
Relinquished by: [signature]	Date/Time: 5/3/2023 1340	Company: GEI	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time: 5-3-23 1340	Company: TAS
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks	18# I	

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins

Client Information	Sampler	Lab PM	Carrier Tracking No(s)	COC No
Client Contact: Brad Walker	Phone: 716-572-4362	Schove, John R	State of Origin	480-184648-39071 1
Company: National Fuel Gas Supply Corporation	PWSID	E-Mail: John.Schove@et.eurofinsus.com		Page: Page 1 of 1
Address: 6363 Main Street	Due Date Requested:			Job #
City: Williamsville	TAT Requested (days): STD			
State, Zip: NY, 14221-5887	Compliance Project: Δ Yes Δ No			
Phone: 716-857-7247(Tel)	PO #: Purchase Order not required			
Email: walkerb@natfuel.com	WO #			
Project Name: GEI, Mineral Springs	Project #: 48008324			
Site: New York	SSOW#			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	9016 - Cyanide, Free	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note:
		Preservation Code:					N	A	B	B		
MW-07	5/4/23	815	G	Water			X	X				
MW-19		1050		Water			X	X				
MW-12		930		Water					X	X		
MW-16		0920		Water					X	X		
TRIP BLANK		—						X				

480-208567 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	5/4/2023 1145	GEI			
2				Received by: [signature]		
3					5-4-23 1150	TAL

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 5.3 # 1716

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-80312.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - New York		Job #: 480-208476-1
Address: 777 New Durham Road, ,	Due Date Requested: 5/15/2023			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: GEI, Mineral Springs	Project #: 48008324			
Site: Mineral Springs	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016/9016_Prep Cyanide, Free	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-14 (480-208476-2)	5/2/23	11:10 Eastern		Water			X	1	
MW-23 (480-208476-3)	5/2/23	12:25 Eastern		Water			X	1	
MW-20 (480-208476-4)	5/2/23	13:45 Eastern		Water			X	1	
MW-21 (480-208476-5)	5/2/23	15:10 Eastern		Water			X	1	
MW-22 (480-208476-6)	5/2/23	14:00 Eastern		Water			X	1	
MW-11A (480-208476-7)	5/2/23	14:30 Eastern		Water			X	1	
Duplicate (480-208476-8)	5/2/23	Eastern		Water			X	1	
EB (480-208476-9)	5/2/23	13:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Fedex			
Relinquished by:	Date/Time: 5-3-23 1800	Company: TAS	Received by: Bhavisha	Date/Time: 5/4/23 1010	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2059252	Cooler Temperature(s) °C and Other Remarks: IR19 1.5c 1.1c

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-80376.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - New York		Job #: 480-208476-1
Address: 777 New Durham Road, ,	Due Date Requested: 5/17/2023			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Semi Annual	Project #: 48008324			
Site: Mineral Springs	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016/9016_Prep Cyanide, Free	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SW-01 (480-208520-1)	5/3/23	09:20 Eastern		Water			X	1	
SW-02 (480-208520-2)	5/3/23	08:40 Eastern		Water			X	1	
MW-17 (480-208520-3)	5/3/23	12:35 Eastern		Water			X	1	
MW-13 (480-208520-4)	5/3/23	10:50 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Fedex			
Relinquished by:	Date/Time: 5-4-23 1800	Company THB	Received by: B Harris	Date/Time: 5/5/23 10:15	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company	

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2059263	Cooler Temperature(s) °C and Other Remarks: IR:9 2.0 c 12.0 c

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-80418.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - New York		Job #: 480-208567-1
Address: 777 New Durham Road, ,	Due Date Requested: 5/17/2023			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: GEI, Mineral Springs	Project #: 48008324			
Site: Mineral Springs	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016/9016_Prep Cyanide, Free	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-12 (480-208567-3)	5/4/23	09:30 Eastern		Water			X	1	
MW-16 (480-208567-4)	5/4/23	09:20 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 2052284			Cooler Temperature(s) °C and Other Remarks:	2.7°/2.7° IR9	

0.5/0.5, 3.1°/3.6°, 1-9/1-9

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208476-1
SDG Number: 480-208476-1

Login Number: 208476
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	NFG
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208476-1
SDG Number: 480-208476-1

Login Number: 208476
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 05/04/23 12:14 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208476-1
SDG Number: 480-208476-1

Login Number: 208520
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GEI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208476-1
SDG Number: 480-208476-1

Login Number: 208520
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 05/05/23 12:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208476-1
SDG Number: 480-208476-1

Login Number: 208567
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GEI
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: GEI Consultants, Inc.

Job Number: 480-208476-1
SDG Number: 480-208476-1

Login Number: 208567
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins Edison
List Creation: 05/08/23 12:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix E

Data Usability Summary Review

Site: Mineral Springs MGP
Laboratory: Eurofins, Amherst, NY
Report Numbers: 480-208476, 480-208520, 480-208567, and 480-208518
Reviewer: Lorie MacKinnon/GEI Consultants
Date: June 23, 2023

Samples Reviewed and Evaluation Summary

FIELD ID	LAB ID	FRACTIONS VALIDATED
MW-10	480-208476-01	BTEX, PAH
MW-14	480-208476-02	Total/Free Cyanide
MW-23	480-208476-03	BTEX, PAH, Total/Free Cyanide
MW-20	480-208476-04	Total/Free Cyanide
MW-21	480-208476-05	Total/Free Cyanide
MW-22	480-208476-06	Total/Free Cyanide
MW-11A	480-208476-07	BTEX, PAH, Total/Free Cyanide, TSS
Duplicate	480-208476-08	BTEX, PAH, Total/Free Cyanide
EB	480-208476-09	BTEX, PAH, Total/Free Cyanide
SW-01	480-208520-01	BTEX, PAH, Total/Free Cyanide, TSS
SW-02	480-208520-02	BTEX, PAH, Total/Free Cyanide, TSS
MW-17	480-208520-03	BTEX, PAH, Total/Free Cyanide
MW-13	480-208520-04	BTEX, PAH, Total/Free Cyanide
TB	480-208520-05	BTEX
MW-07	480-208567-01	BTEX, PAH
MW-19	480-208567-02	BTEX, PAH
MW-12	480-208567-03	Total/Free Cyanide
MW-16	480-208567-04	Total/Free Cyanide
TB	480-208567-05	BTEX
MW-07 BAILER	480-208518-01	BTEX, PAH
MW-19 BAILER	480-208518-02	BTEX, PAH
MW-12 BAILER	480-208518-03	Total/Free Cyanide
MW-16 BAILER	480-208518-04	Total/Free Cyanide

Associated QC Samples:
Equipment blank/Trip blanks: EB, TB, TB
Field duplicate pair: MW-23/Duplicate

The above-listed aqueous samples, equipment blank, and trip blank samples were collected on May 2, 3, and 4, 2023 and were analyzed for BTEX volatile organic compounds (VOCs) by SW-846 method 8260C, polynuclear aromatic hydrocarbon (PAH) semivolatile organic compounds (SVOCs) by SW-846 method 8270D, total cyanide by SW-846 method 9012B, free cyanide by SW-846 method 9016, and total suspended solids (TSS) by Standard Methods SM2540D. The data validation was performed based on the following USEPA Region 2 Documents: Standard Operating Procedure (SOP) HW-35A (Revision 1) *Semivolatile Data Validation* (September 2016), SOP HW-33A (Revision 1) *Low/Medium Volatile Data Validation* (September 2016), and

SOP 3c (Revision 1), *SOP for the Evaluation of Cyanide for the Contract Laboratory Program* (September 2016), as well as by the methods referenced by the data package and professional and technical judgment.

The data were evaluated based on the following parameters:

- Data Completeness
- Holding Times and Sample Preservation
- Initial and Continuing Calibrations
- Blanks
- Surrogate Recoveries
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) Results
- Laboratory Duplicate Results
- Internal Standard Results
- Laboratory Control Sample (LCS) Results
- Field Duplicate Results
- Quantitation Limits
- Sample Quantitation and Compound Identification

In general, all data appear usable as reported or usable with minor qualification due to sample matrix or laboratory quality control outliers. Select results were qualified due to hold time exceedances, laboratory blank contamination results, LCS/LSCD precision outliers, and low level uncertainty for levels below the reporting limit. These results were considered valid; even though some were qualified as discussed below.

The validation findings were based on the following information.

Data Completeness

The data packages were complete as received by the laboratory with the following exception: The VOC tune and initial calibration verification results for initial calibration performed on instrument HP5973S on 05/04/23 was missing. The information was requested and a revised data report 480-208518 was received for review.

Holding Times and Sample Preservation

All hold time and preservative criteria were met except where noted below. Due to low level blank contamination, select samples were re-extracted or re-analyzed outside of hold time.

Sample	Affected analyte	Hold Time Exceedance	Criteria	Validation Actions
MW-10 RE	Naphthalene	3 days	7 days	Due to associated naphthalene laboratory blank contamination in the
MW-11A RE		3 days		

Sample	Affected analyte	Hold Time Exceedance	Criteria	Validation Actions
SW-01 RE		2 days		original analysis, the reanalysis was chosen for reporting purposes. Estimate (UJ) the nondetect results for naphthalene from these re-extraction analyses.
SW-02 RE		2 days		
MW-13 RE		2 days		
MW-17	Total Cyanide	8 days	14 days	Estimate (J) positive result for total cyanide in sample MW-17; Low bias.
MW-12 RE		12 days		The samples were analyzed at dilutions out of hold time to bring results within the calibration range. Estimate (J) the positive results for total cyanide in samples MW-12 and MW-16; Low bias.
MW-16 RE		12 days		

Initial and Continuing Calibrations

All initial and continuing calibration criteria were met.

Blanks

Contamination was not detected in the associated method and instrument blank samples and equipment and trip blank samples except where noted below. Evaluation was performed before the application of dilution factors.

Analyte	Blank ID	Maximum Concentration	2X Action Level	10X Action Level	Validation Actions
Naphthalene	Method MB 480-668289	0.524 ug/L	1.05 ug/L	5.2 ug/L	Naphthalene was detected below the 10X blank level in samples MW-10, MW-11A, SW-01, SW-02, and MW-13. Validation action was not taken as the results for naphthalene in these samples were reported from the re-extraction analyses for these samples.
Associated Samples: MW-10, MW-23, MW-11A, Duplicate, EB, SW-01, SW-02, MW-17, MW-13, MW-07, MW-19, MW-07 BAILER, MW-19 BAILER					
Total Cyanide	05/12 Instrument blanks	0.015 mg/L	0.030 mg/L	0.15 mg/L	Validation actions were not required.
Associated sample: EB					
Total Cyanide	05/15 Instrument blanks	0.0145 mg/L	0.029 mg/L	0.145 mg/L	Estimate (J) the positive result for total cyanide in sample MW-20 (DL) as estimated (J); High bias.
Associated samples: MW-14, MW-23, MW-20 DL, MW-21, MW-22, MW-11A, Duplicate, SW-01, SW-02, MW-13					
Total Cyanide	05/16 Instrument blanks	0.0116 mg/L	0.023 mg/L	0.116 mg/L	Estimate (J) the positive result for total cyanide in sample MW-16 BAILER as estimated (J); High bias.
Associated samples: MW-12 BAILER DL, MW-16 BAILER DL					
Total Cyanide	05/16 Instrument blanks	0.033 mg/L	0.066 mg/L	0.33 mg/L	Validation actions were not required; reanalysis results were chosen for reporting purposes.
Associated samples: MW-12, MW-16					

Analyte	Blank ID	Maximum Concentration	2X Action Level	10X Action Level	Validation Actions
Total Cyanide	05/25 Instrument blanks	0.0094 mg/L	0.019 mg/L	0.094 mg/L	Estimate (J) the positive result for total cyanide in sample MW-17 as estimated (J); High bias.
Associated sample: MW-17					
Total Cyanide	05/30 Instrument blanks	0.0098 mg/L	0.020 mg/L	0.098 mg/L	Validation actions were not required.
Associated samples: MW-12 RE, MW-16 RE					

Blank Actions: If the sample result is < RL; report the result as nondetect (U) at the reporting limit (RL).
If the sample result is > RL and 2x Blank contamination; professional judgement was taken to report the result as nondetect (U) at the reported value.
If the sample result is ≥ RL and < 10x Action Level; professional judgment was taken to report the sample result as estimated (J); biased high.
If the sample result is nondetect or > 10x Action Level; validation action is not required.

Surrogate Recoveries

All surrogate recovery criteria were met for samples analyzed at dilutions less than 10.

MS/MSD Results

MS/MSD analyses were performed on samples MW-23 and SW-01 for total cyanide. All validation recovery criteria were met.

Batch MS/MSDs were performed on non-project samples for all other analyses. These results were not used to qualify project samples due to differences in matrix, type, etc.

Laboratory Duplicate Results

Laboratory duplicate analyses were performed on samples MW-23 and SW-01 for total cyanide and sample SW-01 for total suspended solids. Criteria were met.

Internal Standard Results

All criteria were met.

LCS/LCSD Results

All recovery and precision criteria were met except where noted below.

LCS ID	Analyte	Recovery (%)	RPD (%)	Control Limits (%)	Validation Action/Bias
SVOCs					
LCS\LCSD 480-668289	Anthracene	-	16	15	Estimate (J) the positive results for anthracene and fluoranthene in sample MW-07 BAILER; Indeterminate bias. Validation action was not required for the remaining samples as the affected compounds were not detected and therefore were not affected by the high precision results.
	Fluoranthene	-	17	15	
	Chrysene	-	17	15	Validation action was not required as the affected compounds were not detected in the associated samples and therefore were not affected by the high precision results.
Associated samples: MW-10, MW-23, MW-11A, Duplicate, EB, SW-01, SW-02, MW-17, MW-13, MW-07, MW-19, MW-07 BAILER, MW-19 BAILER					
- Criteria met					

Field Duplicate Results

Samples MW-23 and Duplicate were submitted as the field duplicate pair with this sample set. The following table summarizes the RPDs of the detected analytes in the field duplicate pair, which were within the acceptance criteria.

Analyte	MW-23	Duplicate	RPD (%)
Total Cyanide	0.15 mg/L	0.14 mg/L	6.9
Free Cyanide	6.5 ug/L	8.5 ug/L	26.7
NC – Not calculable Criteria: When both results are ≥5x the RL, RPDs must be <30%. When results are < 5x the RL, professional judgement was taken to estimate results if the absolute difference between the original and field duplicate > 2xRL.			

Quantitation Limits

Results were reported which were below the reporting limit (RL) and above the method detection limit (MDL). These results were qualified as estimated (J) by the laboratory.

The following table lists the sample dilutions and analyses which were performed and reported.

Sample	VOC Analysis Reported	SVOC Analysis Reported	Total Cyanide Analysis Reported
MW-10	NR	Report result for naphthalene from the re-extraction analysis (5/15). Report all other compounds from initial analysis.	NR
MW-14	NR	NR	2-fold dilution
MW-20	NR	NR	10-fold dilution
MW-21	NR	NR	2-fold dilution
MW-22	NR	NR	2-fold dilution

Sample	VOC Analysis Reported	SVOC Analysis Reported	Total Cyanide Analysis Reported
MW-11A	A 2-fold dilution was performed due to sample foaming when purged.	Report result for naphthalene from the re-extraction analysis (5/15). Report all other compounds from initial analysis.	NR
SW-01	NR	Report result for naphthalene from the re-extraction analysis (5/15). Report all other compounds from initial analysis.	NR
SW-02	NR	Report result for naphthalene from the re-extraction analysis (5/15). Report all other compounds from initial analysis.	NR
MW-17	A 2-fold dilution was performed due to sample foaming when purged.	A 5-fold dilution was performed.	NR
MW-13	NR	Report result for naphthalene from the re-extraction analysis (5/15). Report all other compounds from initial analysis.	NR
MW-07	A 20-fold dilution was performed due to high levels.	A 100-fold dilution was performed due to high levels.	NR
MW-19	A 100-fold dilution was performed due to high levels.	A 200-fold dilution was performed due to high levels.	NR
MW-12	NR	NR	Report 2-fold dilution analyzed on 5/30.
MW-16	NR	NR	Report 2-fold dilution analyzed on 5/30.
MW-07 BAILER	A 20-fold dilution was performed due to high levels.	The sample was analyzed undiluted and at 50-fold dilution. The results were combined to report all results within the calibration range and the lowest possible reporting limits.	NR
MW-19 BAILER	A 50-fold dilution was performed due to high levels.	The sample was analyzed undiluted and at 50-fold dilution. The results were combined to report all results within the calibration range and the lowest possible reporting limits.	NR
MW-12 BAILER	NR	NR	2-fold dilution
MW-16 BAILER	NR	NR	25-fold dilution
NR – Dilution was not required or analysis not performed on sample.			

Sample Quantitation and Compound Identification

Calculations were spot-checked; no discrepancies were noted. A comparison of total and free cyanide results was performed. All sample total cyanide results exceeded those of the free cyanide.

DATA VALIDATION QUALIFIERS

U - The analyte was analyzed for, but due to blank contamination was flagged as nondetect (U). The result is usable as a nondetect.

J - Data are flagged (J) when a QC analysis fails outside the primary acceptance limits. The qualified "J" data are not excluded from further review or consideration. However, only one flag (J) is applied to a sample result, even though several associated QC analyses may fail. The 'J' data may be biased high or low or the direction of the bias may be indeterminable.

UJ - The analyte was not detected above the reported sample quantitation limit. Data are flagged (UJ) when a QC analysis fails outside the primary acceptance limits. The qualified "UJ" data are not excluded from further review or consideration. However, only one flag is applied to a sample result, even though several associated QC analyses may fail. The 'UJ' data may be biased low.

NJ - The analysis indicates the presence of a compound that has been "tentatively identified" (N) and the associated numerical value represents its approximate (J) concentration.

R - Data rejected (R) on the basis of an unacceptable QC analysis should be excluded from further review or consideration. Data are rejected when associated QC analysis results exceed the expanded control limits of the QC criteria. The rejected data are known to contain significant errors based on documented information. The data user must not use the rejected data to make environmental decisions. The presence or absence of the analyte cannot be verified.

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-10
Date Collected: 05/02/23 09:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-1
Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 05:30	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 05:30	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 05:30	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 05:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*05/04/23 05:30*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/04/23 05:30*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*05/04/23 05:30*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/04/23 05:30*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/10/23 23:35	1
Acenaphthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/10/23 23:35	1
Acenaphthylene	0.52	U	0.52	0.35	ug/L		05/05/23 07:32	05/10/23 23:35	1
Anthracene	0.52	U *	0.52	0.41	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[a]anthracene	0.52	U	0.52	0.42	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[a]pyrene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[b]fluoranthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[g,h,i]perylene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/10/23 23:35	1
Benzo[k]fluoranthene	0.52	U	0.52	0.089	ug/L		05/05/23 07:32	05/10/23 23:35	1
Chrysene	0.52	U *	0.52	0.33	ug/L		05/05/23 07:32	05/10/23 23:35	1
Dibenz(a,h)anthracene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/10/23 23:35	1
Fluoranthene	0.52	U *	0.52	0.38	ug/L		05/05/23 07:32	05/10/23 23:35	1
Fluorene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/10/23 23:35	1
Indeno[1,2,3-cd]pyrene	0.52	U	0.52	0.46	ug/L		05/05/23 07:32	05/10/23 23:35	1
Naphthalene do not report	1.2 ~~B~~ J		0.52	0.44	ug/L		05/05/23 07:32	05/10/23 23:35	1
Phenanthrene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/10/23 23:35	1
Pyrene	0.52	U	0.52	0.38	ug/L		05/05/23 07:32	05/10/23 23:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*		*48 - 120*	*05/05/23 07:32*	*05/10/23 23:35*	*1*
Nitrobenzene-d5 (Surr)	*80*		*46 - 120*	*05/05/23 07:32*	*05/10/23 23:35*	*1*
p-Terphenyl-d14 (Surr)	*59*		*24 - 136*	*05/05/23 07:32*	*05/10/23 23:35*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50 ~~U H~~ UJ		0.50	0.38	ug/L		05/12/23 15:06	05/15/23 14:48	1
Acenaphthene	0.50 U H		0.50	0.30	ug/L		05/12/23 15:06	05/15/23 14:48	1
Acenaphthylene	0.50 U H		0.50	0.34	ug/L		05/12/23 15:06	05/15/23 14:48	1
Anthracene	0.50 U H		0.50	0.39	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[a]anthracene	0.50 U H		0.50	0.40	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[a]pyrene	0.50 U H		0.50	0.33	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[b]fluoranthene	0.50 U H		0.50	0.30	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[g,h,i]perylene	0.50 U H		0.50	0.37	ug/L		05/12/23 15:06	05/15/23 14:48	1
Benzo[k]fluoranthene	0.50 U H		0.50	0.085	ug/L		05/12/23 15:06	05/15/23 14:48	1
Chrysene	0.50 U H		0.50	0.32	ug/L		05/12/23 15:06	05/15/23 14:48	1
Dibenz(a,h)anthracene	0.50 U H		0.50	0.33	ug/L		05/12/23 15:06	05/15/23 14:48	1
Fluoranthene	0.50 ~~U H~~ UJ		0.50	0.36	ug/L		05/12/23 15:06	05/15/23 14:48	1

Report Naphthalene only from Re

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-10
Date Collected: 05/02/23 09:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-1
Matrix: Ground Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H UJ	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 14:48	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 14:48	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 14:48	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 14:48	1
Pyrene	0.50	U H UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 14:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*96*		*48 - 120*	*05/12/23 15:06*	*05/15/23 14:48*	*1*
Nitrobenzene-d5 (Surr)	*77*		*46 - 120*	*05/12/23 15:06*	*05/15/23 14:48*	*1*
p-Terphenyl-d14 (Surr)	*52*		*24 - 136*	*05/12/23 15:06*	*05/15/23 14:48*	*1*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-14
Date Collected: 05/02/23 11:10
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-2
Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.61	~~B A2~~	0.020	0.0082	mg/L			05/15/23 11:24	2
Cyanide, Free (SW846 9016)	4.9	J	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample ID: MW-23

Date Collected: 05/02/23 12:25
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-3

Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 05:52	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 05:52	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 05:52	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 05:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/04/23 05:52*	*1*
4-Bromofluorobenzene (Surr)	*92*		*73 - 120*		*05/04/23 05:52*	*1*
Dibromofluoromethane (Surr)	*99*		*75 - 123*		*05/04/23 05:52*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/04/23 05:52*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.54	U	0.54	0.41	ug/L		05/05/23 07:32	05/11/23 00:03	1
Acenaphthene	0.54	U	0.54	0.33	ug/L		05/05/23 07:32	05/11/23 00:03	1
Acenaphthylene	0.54	U	0.54	0.37	ug/L		05/05/23 07:32	05/11/23 00:03	1
Anthracene	0.54	U *1	0.54	0.42	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[a]anthracene	0.54	U	0.54	0.43	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[a]pyrene	0.54	U	0.54	0.36	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[b]fluoranthene	0.54	U	0.54	0.33	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[g,h,i]perylene	0.54	U	0.54	0.40	ug/L		05/05/23 07:32	05/11/23 00:03	1
Benzo[k]fluoranthene	0.54	U	0.54	0.092	ug/L		05/05/23 07:32	05/11/23 00:03	1
Chrysene	0.54	U *1	0.54	0.35	ug/L		05/05/23 07:32	05/11/23 00:03	1
Dibenz(a,h)anthracene	0.54	U	0.54	0.36	ug/L		05/05/23 07:32	05/11/23 00:03	1
Fluoranthene	0.54	U *1	0.54	0.39	ug/L		05/05/23 07:32	05/11/23 00:03	1
Fluorene	0.54	U	0.54	0.40	ug/L		05/05/23 07:32	05/11/23 00:03	1
Indeno[1,2,3-cd]pyrene	0.54	U	0.54	0.48	ug/L		05/05/23 07:32	05/11/23 00:03	1
Naphthalene	0.54	U	0.54	0.46	ug/L		05/05/23 07:32	05/11/23 00:03	1
Phenanthrene	0.54	U	0.54	0.41	ug/L		05/05/23 07:32	05/11/23 00:03	1
Pyrene	0.54	U	0.54	0.39	ug/L		05/05/23 07:32	05/11/23 00:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*83*		*48 - 120*	*05/05/23 07:32*	*05/11/23 00:03*	*1*
Nitrobenzene-d5 (Surr)	*68*		*46 - 120*	*05/05/23 07:32*	*05/11/23 00:03*	*1*
p-Terphenyl-d14 (Surr)	*49*		*24 - 136*	*05/05/23 07:32*	*05/11/23 00:03*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.15**	~~B A2 F1~~	0.010	0.0041	mg/L			05/15/23 11:45	1
Cyanide, Free (SW846 9016)	**6.5**		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-20
Date Collected: 05/02/23 13:45
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-4
Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.87	~~B ^2~~ J	0.10	0.041	mg/L			05/15/23 11:27	10
Cyanide, Free (SW846 9016)	5.9		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-21
Date Collected: 05/02/23 15:10
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-5
Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.41	~~B^2~~	0.020	0.0082	mg/L			05/15/23 11:29	2
Cyanide, Free (SW846 9016)	8.9		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-22
Date Collected: 05/02/23 14:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-6
Matrix: Ground Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.44	~~B^2~~	0.020	0.0082	mg/L			05/15/23 11:32	2
Cyanide, Free (SW846 9016)	13.5		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-11A
Date Collected: 05/02/23 14:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-7
Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**2.7**		2.0	0.82	ug/L			05/04/23 06:14	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			05/04/23 06:14	2
Toluene	2.0	U	2.0	1.0	ug/L			05/04/23 06:14	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			05/04/23 06:14	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*05/04/23 06:14*	*2*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/04/23 06:14*	*2*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*05/04/23 06:14*	*2*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/04/23 06:14*	*2*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 00:30	1
Acenaphthene	**2.1**		0.50	0.30	ug/L		05/05/23 07:32	05/11/23 00:30	1
Acenaphthylene	**1.3**		0.50	0.34	ug/L		05/05/23 07:32	05/11/23 00:30	1
Anthracene	0.50	U *i*	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 00:30	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 00:30	1
Chrysene	0.50	U *i*	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 00:30	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 00:30	1
Fluoranthene	0.50	U *i*	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 00:30	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 00:30	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 00:30	1
Naphthalene do not report	~~1.7~~	~~B~~ J	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 00:30	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 00:30	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 00:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*95*		*48 - 120*	*05/05/23 07:32*	*05/11/23 00:30*	*1*
Nitrobenzene-d5 (Surr)	*81*		*46 - 120*	*05/05/23 07:32*	*05/11/23 00:30*	*1*
p-Terphenyl-d14 (Surr)	*61*		*24 - 136*	*05/05/23 07:32*	*05/11/23 00:30*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	~~U H~~ UJ	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:15	1
Acenaphthene	**1.5**	~~H~~ J	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:15	1
Acenaphthylene	**0.76**	~~H~~ J	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 15:15	1
Anthracene	0.50	~~U H~~ UJ	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:15	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 15:15	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 15:15	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:15	1
Fluoranthene	0.50	~~U H~~ UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:15	1

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Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-11A
Date Collected: 05/02/23 14:30
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-7
Matrix: Ground Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H UJ	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:15	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 15:15	1
Naphthalene	0.50	U H UJ	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 15:15	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:15	1
Pyrene	0.50	U H UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*94*		*46 - 120*	*05/12/23 15:06*	*05/15/23 15:15*	*1*
Nitrobenzene-d5 (Surr)	*78*		*46 - 120*	*05/12/23 15:06*	*05/15/23 15:15*	*1*
p-Terphenyl-d14 (Surr)	*52*		*24 - 136*	*05/12/23 15:06*	*05/15/23 15:15*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.20**	~~B^2~~	0.010	0.0041	mg/L			05/15/23 11:53	1
Cyanide, Free (SW846 9016)	**2.3**	**J**	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	**39.2**		4.0	4.0	mg/L			05/08/23 15:44	1

Client Sample ID: Duplicate
Date Collected: 05/02/23 00:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-8
Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 06:36	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 06:36	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 06:36	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 06:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/04/23 06:36*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/04/23 06:36*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*05/04/23 06:36*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/04/23 06:36*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 00:58	1
Acenaphthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 00:58	1
Acenaphthylene	0.52	U	0.52	0.35	ug/L		05/05/23 07:32	05/11/23 00:58	1
Anthracene	0.52	U *f*	0.52	0.41	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[a]anthracene	0.52	U	0.52	0.42	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[a]pyrene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[b]fluoranthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[g,h,i]perylene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 00:58	1
Benzo[k]fluoranthene	0.52	U	0.52	0.089	ug/L		05/05/23 07:32	05/11/23 00:58	1
Chrysene	0.52	U *f*	0.52	0.33	ug/L		05/05/23 07:32	05/11/23 00:58	1
Dibenz(a,h)anthracene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 00:58	1
Fluoranthene	0.52	U *f*	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 00:58	1
Fluorene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 00:58	1
Indeno[1,2,3-cd]pyrene	0.52	U	0.52	0.46	ug/L		05/05/23 07:32	05/11/23 00:58	1
Naphthalene	0.52	U	0.52	0.44	ug/L		05/05/23 07:32	05/11/23 00:58	1
Phenanthrene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 00:58	1
Pyrene	0.52	U	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 00:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*48 - 120*	*05/05/23 07:32*	*05/11/23 00:58*	*1*
Nitrobenzene-d5 (Surr)	*75*		*46 - 120*	*05/05/23 07:32*	*05/11/23 00:58*	*1*
p-Terphenyl-d14 (Surr)	*45*		*24 - 136*	*05/05/23 07:32*	*05/11/23 00:58*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.14**	~~B^2~~	0.010	0.0041	mg/L			05/15/23 11:56	1
Cyanide, Free (SW846 9016)	**8.5**		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample ID: EB
Date Collected: 05/02/23 13:00
Date Received: 05/02/23 16:11

Lab Sample ID: 480-208476-9
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/04/23 06:59	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/04/23 06:59	1
Toluene	1.0	U	1.0	0.51	ug/L			05/04/23 06:59	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/04/23 06:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/04/23 06:59*	*1*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/04/23 06:59*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/04/23 06:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/04/23 06:59*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:25	1
Acenaphthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:25	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/11/23 01:25	1
Anthracene	0.50	U	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:25	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 01:25	1
Chrysene	0.50	U	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 01:25	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:25	1
Fluoranthene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:25	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:25	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 01:25	1
Naphthalene	0.50	U	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 01:25	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:25	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*87*		*48 - 120*	*05/05/23 07:32*	*05/11/23 01:25*	*1*
Nitrobenzene-d5 (Surr)	*72*		*46 - 120*	*05/05/23 07:32*	*05/11/23 01:25*	*1*
p-Terphenyl-d14 (Surr)	*68*		*24 - 136*	*05/05/23 07:32*	*05/11/23 01:25*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/12/23 18:22	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: SW-01
Date Collected: 05/03/23 09:20
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-1
Matrix: Surface Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 18:56	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 18:56	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 18:56	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 18:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*05/05/23 18:56*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/05/23 18:56*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/05/23 18:56*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/05/23 18:56*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:47	1
Acenaphthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:47	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/11/23 02:47	1
Anthracene	0.50	U *1	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:47	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 02:47	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 02:47	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:47	1
Fluoranthene	0.50	U *1	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:47	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:47	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 02:47	1
Naphthalene do not report	2.2	B J	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 02:47	1
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:47	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*88*		*48 - 120*	*05/05/23 07:32*	*05/11/23 02:47*	*1*
Nitrobenzene-d5 (Surr)	*73*		*46 - 120*	*05/05/23 07:32*	*05/11/23 02:47*	*1*
p-Terphenyl-d14 (Surr)	*55*		*24 - 136*	*05/05/23 07:32*	*05/11/23 02:47*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H UJ	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:43	1
Acenaphthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:43	1
Acenaphthylene	0.50	U H	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 15:43	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:43	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 15:43	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 15:43	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 15:43	1
Fluoranthene	0.50	U H UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:43	1

report Naphthalene only From Re

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: SW-01
Date Collected: 05/03/23 09:20
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-1
Matrix: Surface Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 15:43	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 15:43	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 15:43	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 15:43	1
Pyrene	0.50	U H	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 15:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*48 - 120*	*05/12/23 15:06*	*05/15/23 15:43*	*1*
Nitrobenzene-d5 (Surr)	*79*		*46 - 120*	*05/12/23 15:06*	*05/15/23 15:43*	*1*
p-Terphenyl-d14 (Surr)	*62*		*24 - 136*	*05/12/23 15:06*	*05/15/23 15:43*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/15/23 13:00	1
Cyanide, Free (SW846 9016)	**2.3**	**J**	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	4.0	U	4.0	4.0	mg/L			05/09/23 15:20	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: SW-02
Date Collected: 05/03/23 08:40
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-2
Matrix: Surface Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 19:19	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 19:19	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 19:19	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 19:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*05/05/23 19:19*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/05/23 19:19*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*05/05/23 19:19*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/05/23 19:19*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.53	U	0.53	0.40	ug/L		05/05/23 07:32	05/11/23 03:14	1
Acenaphthene	0.53	U	0.53	0.32	ug/L		05/05/23 07:32	05/11/23 03:14	1
Acenaphthylene	0.53	U	0.53	0.36	ug/L		05/05/23 07:32	05/11/23 03:14	1
Anthracene	0.53	U *J	0.53	0.41	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[a]anthracene	0.53	U	0.53	0.43	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[a]pyrene	0.53	U	0.53	0.35	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[b]fluoranthene	0.53	U	0.53	0.32	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[g,h,i]perylene	0.53	U	0.53	0.39	ug/L		05/05/23 07:32	05/11/23 03:14	1
Benzo[k]fluoranthene	0.53	U	0.53	0.090	ug/L		05/05/23 07:32	05/11/23 03:14	1
Chrysene	0.53	U *J	0.53	0.34	ug/L		05/05/23 07:32	05/11/23 03:14	1
Dibenz(a,h)anthracene	0.53	U	0.53	0.35	ug/L		05/05/23 07:32	05/11/23 03:14	1
Fluoranthene	0.53	U *J	0.53	0.38	ug/L		05/05/23 07:32	05/11/23 03:14	1
Fluorene	0.53	U	0.53	0.39	ug/L		05/05/23 07:32	05/11/23 03:14	1
Indeno[1,2,3-cd]pyrene	0.53	U	0.53	0.47	ug/L		05/05/23 07:32	05/11/23 03:14	1
~~Naphthalene~~ do not report	~~1.2~~	~~B~~ J	0.53	0.45	ug/L		05/05/23 07:32	05/11/23 03:14	1
Phenanthrene	0.53	U	0.53	0.40	ug/L		05/05/23 07:32	05/11/23 03:14	1
Pyrene	0.53	U	0.53	0.38	ug/L		05/05/23 07:32	05/11/23 03:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*98*		*48 - 120*	*05/05/23 07:32*	*05/11/23 03:14*	*1*
Nitrobenzene-d5 (Surr)	*82*		*46 - 120*	*05/05/23 07:32*	*05/11/23 03:14*	*1*
p-Terphenyl-d14 (Surr)	*63*		*24 - 136*	*05/05/23 07:32*	*05/11/23 03:14*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H UJ	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:10	1
Acenaphthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:10	1
Acenaphthylene	0.50	U H	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 16:10	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:10	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 16:10	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 16:10	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:10	1
Fluoranthene	0.50	U H UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:10	1

report only Naphthalene From - Re

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: SW-02
Date Collected: 05/03/23 08:40
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-2
Matrix: Surface Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	~~U H~~ UJ	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:10	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 16:10	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 16:10	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:10	1
Pyrene	0.50	~~U H~~ UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*101*		*48 - 120*	*05/12/23 15:06*	*05/15/23 16:10*	*1*
Nitrobenzene-d5 (Surr)	*83*		*46 - 120*	*05/12/23 15:06*	*05/15/23 16:10*	*1*
p-Terphenyl-d14 (Surr)	*61*		*24 - 136*	*05/12/23 15:06*	*05/15/23 16:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/15/23 13:08	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total Suspended Solids (SM 2540D)	4.0	U	4.0	4.0	mg/L			05/09/23 15:20	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-17
Date Collected: 05/03/23 12:35
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-3
Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	2.0	U	2.0	0.82	ug/L			05/05/23 19:41	2
Ethylbenzene	2.0	U	2.0	1.5	ug/L			05/05/23 19:41	2
Toluene	2.0	U	2.0	1.0	ug/L			05/05/23 19:41	2
Xylenes, Total	4.0	U	4.0	1.3	ug/L			05/05/23 19:41	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*05/05/23 19:41*	*2*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*		*05/05/23 19:41*	*2*
Dibromofluoromethane (Surr)	*94*		*75 - 123*		*05/05/23 19:41*	*2*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/05/23 19:41*	*2*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Acenaphthene	2.7	U	2.7	1.6	ug/L		05/05/23 07:32	05/11/23 03:42	5
Acenaphthylene	2.7	U	2.7	1.8	ug/L		05/05/23 07:32	05/11/23 03:42	5
Anthracene	2.7	U *	2.7	2.1	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[a]anthracene	2.7	U	2.7	2.1	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[a]pyrene	2.7	U	2.7	1.8	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[b]fluoranthene	2.7	U	2.7	1.6	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[g,h,i]perylene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Benzo[k]fluoranthene	2.7	U	2.7	0.45	ug/L		05/05/23 07:32	05/11/23 03:42	5
Chrysene	2.7	U *	2.7	1.7	ug/L		05/05/23 07:32	05/11/23 03:42	5
Dibenz(a,h)anthracene	2.7	U	2.7	1.8	ug/L		05/05/23 07:32	05/11/23 03:42	5
Fluoranthene	2.7	U *	2.7	1.9	ug/L		05/05/23 07:32	05/11/23 03:42	5
Fluorene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Indeno[1,2,3-cd]pyrene	2.7	U	2.7	2.3	ug/L		05/05/23 07:32	05/11/23 03:42	5
Naphthalene	2.7	U	2.7	2.2	ug/L		05/05/23 07:32	05/11/23 03:42	5
Phenanthrene	2.7	U	2.7	2.0	ug/L		05/05/23 07:32	05/11/23 03:42	5
Pyrene	2.7	U	2.7	1.9	ug/L		05/05/23 07:32	05/11/23 03:42	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*93*		*48 - 120*	*05/05/23 07:32*	*05/11/23 03:42*	*5*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*05/05/23 07:32*	*05/11/23 03:42*	*5*
p-Terphenyl-d14 (Surr)	*64*		*24 - 136*	*05/05/23 07:32*	*05/11/23 03:42*	*5*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.027**	~~H B ^+~~ J	0.010	0.0041	mg/L			05/25/23 17:28	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-13
Date Collected: 05/03/23 10:50
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-4
Matrix: Ground Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 20:03	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 20:03	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 20:03	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*		*05/05/23 20:03*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*05/05/23 20:03*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*05/05/23 20:03*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/05/23 20:03*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 04:09	1
Acenaphthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 04:09	1
Acenaphthylene	0.52	U	0.52	0.35	ug/L		05/05/23 07:32	05/11/23 04:09	1
Anthracene	0.52	U J	0.52	0.41	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[a]anthracene	0.52	U	0.52	0.42	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[a]pyrene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[b]fluoranthene	0.52	U	0.52	0.31	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[g,h,i]perylene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 04:09	1
Benzo[k]fluoranthene	0.52	U	0.52	0.089	ug/L		05/05/23 07:32	05/11/23 04:09	1
Chrysene	0.52	U J	0.52	0.33	ug/L		05/05/23 07:32	05/11/23 04:09	1
Dibenz(a,h)anthracene	0.52	U	0.52	0.34	ug/L		05/05/23 07:32	05/11/23 04:09	1
Fluoranthene	0.52	U J	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 04:09	1
Fluorene	0.52	U	0.52	0.39	ug/L		05/05/23 07:32	05/11/23 04:09	1
Indeno[1,2,3-cd]pyrene	0.52	U	0.52	0.46	ug/L		05/05/23 07:32	05/11/23 04:09	1
Naphthalene do not report	2.7	B J	0.52	0.44	ug/L		05/05/23 07:32	05/11/23 04:09	1
Phenanthrene	0.52	U	0.52	0.40	ug/L		05/05/23 07:32	05/11/23 04:09	1
Pyrene	0.52	U	0.52	0.38	ug/L		05/05/23 07:32	05/11/23 04:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*110*		*48 - 120*	*05/05/23 07:32*	*05/11/23 04:09*	*1*
Nitrobenzene-d5 (Surr)	*89*		*46 - 120*	*05/05/23 07:32*	*05/11/23 04:09*	*1*
p-Terphenyl-d14 (Surr)	*69*		*24 - 136*	*05/05/23 07:32*	*05/11/23 04:09*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	0.50	U H UJ	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:38	1
Acenaphthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:38	1
Acenaphthylene	0.50	U H	0.50	0.34	ug/L		05/12/23 15:06	05/15/23 16:38	1
Anthracene	0.50	U H	0.50	0.39	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[a]anthracene	0.50	U H	0.50	0.40	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[a]pyrene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[b]fluoranthene	0.50	U H	0.50	0.30	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[g,h,i]perylene	0.50	U H	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:38	1
Benzo[k]fluoranthene	0.50	U H	0.50	0.085	ug/L		05/12/23 15:06	05/15/23 16:38	1
Chrysene	0.50	U H	0.50	0.32	ug/L		05/12/23 15:06	05/15/23 16:38	1
Dibenz(a,h)anthracene	0.50	U H	0.50	0.33	ug/L		05/12/23 15:06	05/15/23 16:38	1
Fluoranthene	0.50	U H UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:38	1

report only naphthalene from Re

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-13
Date Collected: 05/03/23 10:50
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-4
Matrix: Ground Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - RE (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	0.50	U H UJ	0.50	0.37	ug/L		05/12/23 15:06	05/15/23 16:38	1
Indeno[1,2,3-cd]pyrene	0.50	U H	0.50	0.44	ug/L		05/12/23 15:06	05/15/23 16:38	1
Naphthalene	0.50	U H	0.50	0.42	ug/L		05/12/23 15:06	05/15/23 16:38	1
Phenanthrene	0.50	U H	0.50	0.38	ug/L		05/12/23 15:06	05/15/23 16:38	1
Pyrene	0.50	U H UJ	0.50	0.36	ug/L		05/12/23 15:06	05/15/23 16:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*97*		*48 - 120*	*05/12/23 15:06*	*05/15/23 16:38*	*1*
Nitrobenzene-d5 (Surr)	*81*		*46 - 120*	*05/12/23 15:06*	*05/15/23 16:38*	*1*
p-Terphenyl-d14 (Surr)	*54*		*24 - 136*	*05/12/23 15:06*	*05/15/23 16:38*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.010	U	0.010	0.0041	mg/L			05/15/23 13:13	1
Cyanide, Free (SW846 9016)	5.0	U	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: TB
Date Collected: 05/03/23 00:00
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208520-5
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 20:26	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 20:26	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 20:26	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 20:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*05/05/23 20:26*	*1*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/05/23 20:26*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/05/23 20:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*05/05/23 20:26*	*1*

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-07
Date Collected: 05/04/23 08:15
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-1
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1100**		20	8.2	ug/L			05/05/23 21:32	20
Ethylbenzene	**1100**		20	15	ug/L			05/05/23 21:32	20
Toluene	**16**	J	20	10	ug/L			05/05/23 21:32	20
Xylenes, Total	**390**		40	13	ug/L			05/05/23 21:32	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*05/05/23 21:32*	*20*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/05/23 21:32*	*20*
Dibromofluoromethane (Surr)	*91*		*75 - 123*		*05/05/23 21:32*	*20*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/05/23 21:32*	*20*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**290**		52	40	ug/L		05/05/23 07:32	05/11/23 04:37	100
Acenaphthene	**140**		52	31	ug/L		05/05/23 07:32	05/11/23 04:37	100
Acenaphthylene	52	U	52	35	ug/L		05/05/23 07:32	05/11/23 04:37	100
Anthracene	52	U *1	52	41	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[a]anthracene	52	U	52	42	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[a]pyrene	52	U	52	34	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[b]fluoranthene	52	U	52	31	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[g,h,i]perylene	52	U	52	39	ug/L		05/05/23 07:32	05/11/23 04:37	100
Benzo[k]fluoranthene	52	U	52	8.9	ug/L		05/05/23 07:32	05/11/23 04:37	100
Chrysene	52	U *1	52	33	ug/L		05/05/23 07:32	05/11/23 04:37	100
Dibenz(a,h)anthracene	52	U	52	34	ug/L		05/05/23 07:32	05/11/23 04:37	100
Fluoranthene	52	U *1	52	38	ug/L		05/05/23 07:32	05/11/23 04:37	100
Fluorene	52	U	52	39	ug/L		05/05/23 07:32	05/11/23 04:37	100
Indeno[1,2,3-cd]pyrene	52	U	52	46	ug/L		05/05/23 07:32	05/11/23 04:37	100
Naphthalene	**2700**	B	52	44	ug/L		05/05/23 07:32	05/11/23 04:37	100
Phenanthrene	52	U	52	40	ug/L		05/05/23 07:32	05/11/23 04:37	100
Pyrene	52	U	52	38	ug/L		05/05/23 07:32	05/11/23 04:37	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*17*	*S1-*	*48 - 120*	*05/05/23 07:32*	*05/11/23 04:37*	*100*
Nitrobenzene-d5 (Surr)	*76*		*46 - 120*	*05/05/23 07:32*	*05/11/23 04:37*	*100*
p-Terphenyl-d14 (Surr)	*48*		*24 - 136*	*05/05/23 07:32*	*05/11/23 04:37*	*100*

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-19
Date Collected: 05/04/23 10:50
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-2
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**4200**		100	41	ug/L			05/05/23 21:54	100
Ethylbenzene	**410**		100	74	ug/L			05/05/23 21:54	100
Toluene	100	U	100	51	ug/L			05/05/23 21:54	100
Xylenes, Total	200	U	200	66	ug/L			05/05/23 21:54	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*05/05/23 21:54*	*100*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*		*05/05/23 21:54*	*100*
Dibromofluoromethane (Surr)	*92*		*75 - 123*		*05/05/23 21:54*	*100*
Toluene-d8 (Surr)	*96*		*80 - 120*		*05/05/23 21:54*	*100*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	100	U	100	79	ug/L		05/05/23 07:32	05/11/23 05:04	200
Acenaphthene	100	U	100	63	ug/L		05/05/23 07:32	05/11/23 05:04	200
Acenaphthylene	100	U	100	71	ug/L		05/05/23 07:32	05/11/23 05:04	200
Anthracene	100	U *	100	81	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[a]anthracene	100	U	100	83	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[a]pyrene	100	U	100	69	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[b]fluoranthene	100	U	100	63	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[g,h,i]perylene	100	U	100	77	ug/L		05/05/23 07:32	05/11/23 05:04	200
Benzo[k]fluoranthene	100	U	100	18	ug/L		05/05/23 07:32	05/11/23 05:04	200
Chrysene	100	U *	100	67	ug/L		05/05/23 07:32	05/11/23 05:04	200
Dibenz(a,h)anthracene	100	U	100	69	ug/L		05/05/23 07:32	05/11/23 05:04	200
Fluoranthene	100	U *	100	75	ug/L		05/05/23 07:32	05/11/23 05:04	200
Fluorene	100	U	100	77	ug/L		05/05/23 07:32	05/11/23 05:04	200
Indeno[1,2,3-cd]pyrene	100	U	100	92	ug/L		05/05/23 07:32	05/11/23 05:04	200
Naphthalene	**3200**	B	100	88	ug/L		05/05/23 07:32	05/11/23 05:04	200
Phenanthrene	100	U	100	79	ug/L		05/05/23 07:32	05/11/23 05:04	200
Pyrene	100	U	100	75	ug/L		05/05/23 07:32	05/11/23 05:04	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*0*	*S1-*	*48 - 120*	*05/05/23 07:32*	*05/11/23 05:04*	*200*
Nitrobenzene-d5 (Surr)	*60*		*46 - 120*	*05/05/23 07:32*	*05/11/23 05:04*	*200*
p-Terphenyl-d14 (Surr)	*53*		*24 - 136*	*05/05/23 07:32*	*05/11/23 05:04*	*200*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-12
Date Collected: 05/04/23 09:30
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.69	B A2 J	0.010	0.0041	mg/L			05/16/23 10:06	1
Cyanide, Free (SW846 9016)	13.3		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.72	H B J	0.020	0.0082	mg/L			05/30/23 12:02	2

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: MW-16
Date Collected: 05/04/23 09:20
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	2.9	B A2 J	0.010	0.0041	mg/L			05/16/23 10:09	1
Cyanide, Free (SW846 9016)	59.1		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	3.1	H B J	0.10	0.041	mg/L			05/30/23 12:05	10

Client: GEI Consultants, Inc.
Project/Site: Semi Annual

Job ID: 480-208476-1
SDG: 480-208476-1

Client Sample ID: TRIP BLANK
Date Collected: 05/04/23 00:00
Date Received: 05/04/23 11:50

Lab Sample ID: 480-208567-5
Matrix: Water

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0	0.41	ug/L			05/05/23 22:17	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			05/05/23 22:17	1
Toluene	1.0	U	1.0	0.51	ug/L			05/05/23 22:17	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			05/05/23 22:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*05/05/23 22:17*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*05/05/23 22:17*	*1*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*05/05/23 22:17*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*05/05/23 22:17*	*1*

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298
Phone 716-691-2600 Fax 716-691-7991

Chain of Custody Record

eurofins

Client Information

Client Contact: Brad Walker	Sampler: M. Cummings
Company: National Fuel Gas Supply Corporation	Phone: 716-572-4312
Address: 6363 Main Street	PWSID:
City: Williamsville	Due Date Requested:
State, Zip: NY 14221-5887	TAT Requested (days): STD
Phone: 716-857-7247(Tel)	Compliance Project: Yes No
Email: walkerb@natfuel.com	PO #: Purchase Order not required
Project Name: GEI Mineral Springs/ Event Desc: Semi Annual Sampling (April)	WO #:
Site: New York	Project #: 48008324
	SSOW#:

Lab PM: Schove, John R	Carrier Tracking No(s):
E-Mail: John.Schove@et.eurofinsus.com	State of Origin:
	COC No: 480-184649-32131.2
	Page: Page 2 of 2
	Job #:

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Oil/Waste, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016 - Cyanide, Free	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	25480 - Total Suspended Solids	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	A	N	B		
[redacted] MW-10	5/2/23	0930	G	Water					X				
[redacted] MW-14		1110		Water			X				X		
[redacted] MW-23		1225		Water			X	X	X		X		
[redacted] MW-20		1345		Water			X				X		
[redacted] MW-21		1510		Water			X				X		
[redacted] MW-22	~~5/1/23~~	1400		Water			X				X		
[redacted] MW-11A		1430		Water			X	X	X	X	X		
DUP				Water			X	X	X		X		
EB		1300		Water			X	X	X		X		

480-208476 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
			[signature]	5/2/23 1611	TA
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.7 #1 ICE

Ver: 06/08/2021

6/1/2023

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins

Client Information

Client Contact: Brad Walker
Company: National Fuel Gas Supply Corporation
Address: 6363 Main Street
City: Williamsville
State, Zip: NY, 14221-5887
Phone: 716-857-7247 (Tel)
Email: walkerb@natfuel.com
Project Name: GEI Mineral Springs/ Event Desc: Semi Annual Sampling (April)
Site: New York

Sampler: M. Cummings
Phone: 716-572-4362
PWSID:
Due Date Requested:
TAT Requested (days): STD
Compliance Project: Yes No
PO #: Purchase Order not required
WO #:
Project #: 48008324
SSOW#:

Lab PM: Schove, John R
E-Mail: John.Schove@et.eurofinsus.com
Carrier Tracking No(s):
State of Origin:

COC No: 480-184649-32131.1
Page: Page 1 of 2
Job #:

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016 - Cyanide, Free	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	2540D - Total Suspended Solids	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note
			Preservation Code:				B	N	A	N	B		
~~SW-01~~	~~5/3/23~~		—	Water									
~~SW-02~~	~~5/3/23~~		—	Water									
SW-01	5/3/23	0920	G	Water			X	X	X	X	X		
SW-02		0940		Water			X	X	X	X	X		
MW-17		1235		Water			X	X	X		X		
MW-13		1050		Water			X	X	X		X		
TRIP BLANK		—		Water					X				
				Water									
				Water									
				Water									
				Water									
	✓		✓	Water									

480-208520 Chain of Custody

Possible Hazard Identification
Non-Hazard, Flammable, Skin Irritant, Poison B, Unknown, Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Return To Client, Disposal By Lab, Archive For: Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:
Date:
Time:
Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/3/2023 1340	GEI			
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				5/3/23 1340	TAS

Custody Seals Intact: Yes No
Custody Seal No:
Cooler Temperature(s) °C and Other Remarks: (B#1 ICE)

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins

Client Information			
Client Contact: Brad Walker	Sampler: M. Cummings	Lab PM: Schove, John R	Carrier Tracking No(s):
Company: National Fuel Gas Supply Corporation	Phone: 716-572-4362	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:
Address: 6363 Main Street	PWSID:		COC No: 480-184648-39071.1
City: Williamsville	Due Date Requested:		Page: Page 1 of 1
State, Zip: NY, 14221-5887	TAT Requested (days): STD		Job #:
Phone: 716-857-7747(Tel)	Compliance Project: Yes / No		
Email: walkerb@natfuel.com	PO #: Purchase Order not required		
Project Name: GEI, Mineral Springs	WO #:		
Site: New York	Project #: 48008324		
	SSOW#:		

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	9016 - Cyanide, Free	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note:
				Preservation Code:			N	A	B	B		
MW-07	5/4/23	815	G	Water			X	X				
MW-19		1050		Water			X	X				
MW-12		930		Water					X	X		
MW-16		0920		Water					X	X		
TRIP BLANK		–						X				

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

480-208567 Chain of Custody

Possible Hazard Identification: ☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month): ☐ Return To Client ☒ Disposal By Lab ☐ Archive For ___ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment:

Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/4/2023 1145	GEI	[signature]	5-4-23 1150	TA/B

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 5.3 #1 ICE

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-80312.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast		Accreditations Required (See note): NELAP - New York		Job #: 480-208476-1
Address: 777 New Durham Road,	Due Date Requested: 5/15/2023			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: GEI, Mineral Springs	Project #: 48008324			
Site: Mineral Springs	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify); Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Organism, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9016/9014_Prep Cyanide, Free	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-14 (480-208476-2)	5/2/23	11:10 Eastern		Water			X	1	
MW-23 (480-208476-3)	5/2/23	12:25 Eastern		Water			X	1	
MW-20 (480-208476-4)	5/2/23	13:45 Eastern		Water			X	1	
MW-21 (480-208476-5)	5/2/23	15:10 Eastern		Water			X	1	
MW-22 (480-208476-6)	5/2/23	14:00 Eastern		Water			X	1	
MW-11A (480-208476-7)	5/2/23	14:30 Eastern		Water			X	1	
Duplicate (480-208476-8)	5/2/23	Eastern		Water			X	1	
EB (480-208476-9)	5/2/23	13:00 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: Fedex
Relinquished by:	Date/Time: 5-3-23 1800	Company: TAT	Received by: Bhavisha
Relinquished by:	Date/Time:	Company:	Received by:
Relinquished by:	Date/Time:	Company:	Received by:

Date/Time: 5/4/23 10:05 Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No: 2059252	Cooler Temperature(s) °C and Other Remarks: IR19 1.5c 11.5c

Ver: 06/08/2021

6/1/2023

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins
Environment Testing

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-80376.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast,		Accreditations Required (See note): NELAP - New York		Job #: 480-208476-1
Address: 777 New Durham Road,	Due Date Requested: 5/17/2023			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: Semi Annual	Project #: 48008324			
Site: Mineral Springs	SSOW#:			

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify), Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9015/9016_Prep Cyanide, Free	Total Number of containers	Special Instructions/Note:
			Preservation Code						
SW-01 (480-208520-1)	5/3/23	09:20 Eastern		Water			X	1	
SW-02 (480-208520-2)	5/3/23	08:40 Eastern		Water			X	1	
MW-17 (480-208520-3)	5/3/23	12:35 Eastern		Water			X	1	
MW-13 (480-208520-4)	5/3/23	10:50 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ___ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: FedEx
Relinquished by:	Date/Time: 5-4-23 1800	Company: TAB	Received by:	Date/Time: 5/5/23 10:15	Company
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No: 2059263	Cooler Temperature(s) °C and Other Remarks: 12.9 2.0 C 12.6 C

Ver: 06/08/2021

Eurofins Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-80418 1
Client Contact: Shipping/Receiving	Phone	E Mail: John.Schove@et.eurofinsus.com	State of Origin: New York	Page: Page 1 of 1
Company: Eurofins Environment Testing Northeast		Accreditations Required (See note): NELAP - New York		Job #: 480-208567-1
Address: 777 New Durham Road,	Due Date Requested: 5/17/2023			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817	PO #			
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	WO #			
Email:	Project #: 48008324			
Project Name: GEI Mineral Springs	SSOW#			
Site: Mineral Springs				

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Y - Trizma, Z - other (specify)
Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Oil, Tissue, Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9015/9016_Prep Cyanide, Free	Total Number of containers	Special Instructions/Note:
			Preservation Code						
MW-12 (480-208567-3)	5/4/23	09:30 Eastern		Water			X	1	
MW-16 (480-208567-4)	5/4/23	09:20 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing Northeast, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing Northeast, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing Northeast, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing Northeast, LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For ____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1		5-5-23 1200	JAB		5/6/23 9:30	ETA
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No: 209284	Cooler Temperature(s) °C and Other Remarks: 2.7°/2.7° IR9

0.5°/0.5°, 3.1°/3.1°, 1.9/1.9

Ver: 06/08/2021

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-07 BAILER

Lab Sample ID: 480-208518-1
Matrix: Water

Date Collected: 05/03/23 11:45
Date Received: 05/03/23 13:40

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1200		20	8.2	ug/L			05/05/23 17:32	20
Ethylbenzene	1100		20	15	ug/L			05/05/23 17:32	20
Toluene	16	J	20	10	ug/L			05/05/23 17:32	20
Xylenes, Total	430		40	13	ug/L			05/05/23 17:32	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		05/05/23 17:32	20
4-Bromofluorobenzene (Surr)	100		73 - 120		05/05/23 17:32	20
Dibromofluoromethane (Surr)	105		75 - 123		05/05/23 17:32	20
Toluene-d8 (Surr)	103		80 - 120		05/05/23 17:32	20

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	~~230~~	~~E~~ 350	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:52	+ 50
Acenaphthene	~~120~~	~~E~~ 160	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:52	+ 50
Acenaphthylene	3.5		0.50	0.34	ug/L		05/05/23 07:32	05/11/23 01:52	1
Anthracene	6.2	~~+~~ J	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:52	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 01:52	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 01:52	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 01:52	1
Fluoranthene	0.68	~~+~~ J	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:52	1
Fluorene	46		0.50	0.37	ug/L		05/05/23 07:32	05/11/23 01:52	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 01:52	1
Naphthalene	~~400~~	~~E B~~ 2900	0.50	0.42	ug/L		05/05/23 07:32	05/11/23 01:52	+ 50
Phenanthrene	36		0.50	0.38	ug/L		05/05/23 07:32	05/11/23 01:52	1
Pyrene	0.90		0.50	0.36	ug/L		05/05/23 07:32	05/11/23 01:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl (Surr)	86		48 - 120	05/05/23 07:32	05/11/23 01:52	1
Nitrobenzene-d5 (Surr)	75		46 - 120	05/05/23 07:32	05/11/23 01:52	1
p-Terphenyl-d14 (Surr)	42		24 - 136	05/05/23 07:32	05/11/23 01:52	1

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	350		25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Acenaphthene	160		25	15	ug/L		05/05/23 07:32	05/11/23 14:35	50
Acenaphthylene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 14:35	50
Anthracene	25	U *1	25	20	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[a]anthracene	25	U	25	20	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[a]pyrene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[b]fluoranthene	25	U	25	15	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[g,h,i]perylene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Benzo[k]fluoranthene	25	U	25	4.3	ug/L		05/05/23 07:32	05/11/23 14:35	50
Chrysene	25	U *1	25	16	ug/L		05/05/23 07:32	05/11/23 14:35	50
Dibenz(a,h)anthracene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 14:35	50
Fluoranthene	25	U *1	25	18	ug/L		05/05/23 07:32	05/11/23 14:35	50

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-07 BAILER
Date Collected: 05/03/23 11:45
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-1
Matrix: Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	44		25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Indeno[1,2,3-cd]pyrene	25	U	25	22	ug/L		05/05/23 07:32	05/11/23 14:35	50
Naphthalene	2900	B	25	21	ug/L		05/05/23 07:32	05/11/23 14:35	50
Phenanthrene	24	J	25	19	ug/L		05/05/23 07:32	05/11/23 14:35	50
Pyrene	25	U	25	18	ug/L		05/05/23 07:32	05/11/23 14:35	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	37	S1-	48 - 120	05/05/23 07:32	05/11/23 14:35	50
Nitrobenzene-d5 (Surr)	67		46 - 120	05/05/23 07:32	05/11/23 14:35	50
p-Terphenyl-d14 (Surr)	37		24 - 136	05/05/23 07:32	05/11/23 14:35	50

Client Sample ID: MW-19 BAILER

Lab Sample ID: 480-208518-2
Matrix: Water

Date Collected: 05/03/23 12:30
Date Received: 05/03/23 13:40

Method: SW846 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3200**		50	21	ug/L			05/05/23 17:55	50
Ethylbenzene	**290**		50	37	ug/L			05/05/23 17:55	50
Toluene	50	U	50	26	ug/L			05/05/23 17:55	50
Xylenes, Total	**53**	**J**	100	33	ug/L			05/05/23 17:55	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*77 - 120*		*05/05/23 17:55*	*50*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*05/05/23 17:55*	*50*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*05/05/23 17:55*	*50*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/05/23 17:55*	*50*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**26**		0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:20	1
Acenaphthene	**0.88**		0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:20	1
Acenaphthylene	0.50	U	0.50	0.34	ug/L		05/05/23 07:32	05/11/23 02:20	1
Anthracene	0.50	U *1	0.50	0.39	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[a]anthracene	0.50	U	0.50	0.40	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[a]pyrene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[b]fluoranthene	0.50	U	0.50	0.30	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[g,h,i]perylene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:20	1
Benzo[k]fluoranthene	0.50	U	0.50	0.085	ug/L		05/05/23 07:32	05/11/23 02:20	1
Chrysene	0.50	U *1	0.50	0.32	ug/L		05/05/23 07:32	05/11/23 02:20	1
Dibenz(a,h)anthracene	0.50	U	0.50	0.33	ug/L		05/05/23 07:32	05/11/23 02:20	1
Fluoranthene	0.50	U *1	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:20	1
Fluorene	0.50	U	0.50	0.37	ug/L		05/05/23 07:32	05/11/23 02:20	1
Indeno[1,2,3-cd]pyrene	0.50	U	0.50	0.44	ug/L		05/05/23 07:32	05/11/23 02:20	1
Naphthalene	~~260~~ **E B** 1300		0.50	0.42	ug/L		05/05/23 07:32	05/11/23 02:20	50X
Phenanthrene	0.50	U	0.50	0.38	ug/L		05/05/23 07:32	05/11/23 02:20	1
Pyrene	0.50	U	0.50	0.36	ug/L		05/05/23 07:32	05/11/23 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*48 - 120*	*05/05/23 07:32*	*05/11/23 02:20*	*1*
Nitrobenzene-d5 (Surr)	*65*		*46 - 120*	*05/05/23 07:32*	*05/11/23 02:20*	*1*
p-Terphenyl-d14 (Surr)	*45*		*24 - 136*	*05/05/23 07:32*	*05/11/23 02:20*	*1*

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Methylnaphthalene	**27**		25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Acenaphthene	25	U	25	15	ug/L		05/05/23 07:32	05/11/23 21:30	50
Acenaphthylene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 21:30	50
Anthracene	25	U *1	25	20	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[a]anthracene	25	U	25	20	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[a]pyrene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[b]fluoranthene	25	U	25	15	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[g,h,i]perylene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Benzo[k]fluoranthene	25	U	25	4.3	ug/L		05/05/23 07:32	05/11/23 21:30	50
Chrysene	25	U *1	25	16	ug/L		05/05/23 07:32	05/11/23 21:30	50
Dibenz(a,h)anthracene	25	U	25	17	ug/L		05/05/23 07:32	05/11/23 21:30	50
Fluoranthene	25	U *1	25	18	ug/L		05/05/23 07:32	05/11/23 21:30	50

Client Sample ID: MW-19 BAILER
Date Collected: 05/03/23 12:30
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-2
Matrix: Water

Method: SW846 8270D_LL_PAH - Semivolatile Organic Compounds (GC/MS) Low level PAH - DL (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Indeno[1,2,3-cd]pyrene	25	U	25	22	ug/L		05/05/23 07:32	05/11/23 21:30	50
Naphthalene	**1300**	**B**	25	21	ug/L		05/05/23 07:32	05/11/23 21:30	50
Phenanthrene	25	U	25	19	ug/L		05/05/23 07:32	05/11/23 21:30	50
Pyrene	25	U	25	18	ug/L		05/05/23 07:32	05/11/23 21:30	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*35*	*S1-*	*48 - 120*	*05/05/23 07:32*	*05/11/23 21:30*	*50*
Nitrobenzene-d5 (Surr)	*60*		*46 - 120*	*05/05/23 07:32*	*05/11/23 21:30*	*50*
p-Terphenyl-d14 (Surr)	*45*		*24 - 136*	*05/05/23 07:32*	*05/11/23 21:30*	*50*

Client Sample Results

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-12 BAILER
Date Collected: 05/03/23 12:15
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-3
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	0.58	~~B A2~~	0.020	0.0082	mg/L			05/16/23 09:45	2
Cyanide, Free (SW846 9016)	3.3	J	5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

Client: GEI Consultants, Inc.
Project/Site: GEI, Mineral Springs

Job ID: 480-208518-1

Client Sample ID: MW-16 BAILER
Date Collected: 05/03/23 11:15
Date Received: 05/03/23 13:40

Lab Sample ID: 480-208518-4
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	2.3	~~B A2~~ J	0.25	0.10	mg/L			05/16/23 09:47	25
Cyanide, Free (SW846 9016)	12.5		5.0	2.3	ug/L		05/10/23 13:41	05/10/23 20:05	1

6

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins

Client Information	Sampler: M. Cummings	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-184646-39071.1
Client Contact: Brad Walker	Phone: 716-572-4362	E-Mail: John.Schove@et.eurofinsus.com	State of Origin:	Page: Page 1 of 1
Company: National Fuel Gas Supply Corporation	PWSID:	Analysis Requested		Job #:
Address: 6363 Main Street	Due Date Requested:			Preservation Codes: A - HCL; B - NaOH; C - Zn Acetate; D - Nitric Acid; E - NaHSO4; F - MeOH; G - Amchlor; H - Ascorbic Acid; I - Ice; J - DI Water; K - EDTA; L - EDA; M - Hexane; N - None; O - AsNaO2; P - Na2O4S; Q - Na2SO3; R - Na2S2O3; S - H2SO4; T - TSP Dodecahydrate; U - Acetone; V - MCAA; W - pH 4-5; Y - Trizma; Z - other (specify)
City: Williamsville	TAT Requested (days): 5 D			
State, Zip: NY, 14221-5887	Compliance Project: ☐ Yes ☐ No			
Phone: 716-857-7247(Tel)	PO #: Purchase Order not required			
Email: walkerb@natfuel.com	WO #:			
Project Name: GEI, Mineral Springs	Project #: 48008324			
Site: New York	SSOW#:			Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Solid, Wastewater, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_LL_PAH - PAH - 8270	8260C - BTEX - 8260	9016 - Cyanide, Free	9012B - Cyanide, Total	Total Number of containers	Special Instructions/Note
			Preservation Code:				N	A	B	B		
MW-07 - bailer	5/3/23	1145	G	Water			X	X				
MW-19 - bailer		1230		Water			X	X				
MW-12 - bailer		1215		Water					X	X		
MW-16 - bailer		1115		Water					X	X		

480-208518 Chain of Custody

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ Return To Client ☒ Disposal By Lab ☐ Archive For: Months
Deliverable Requested: I, II, III, IV, Other (specify)	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

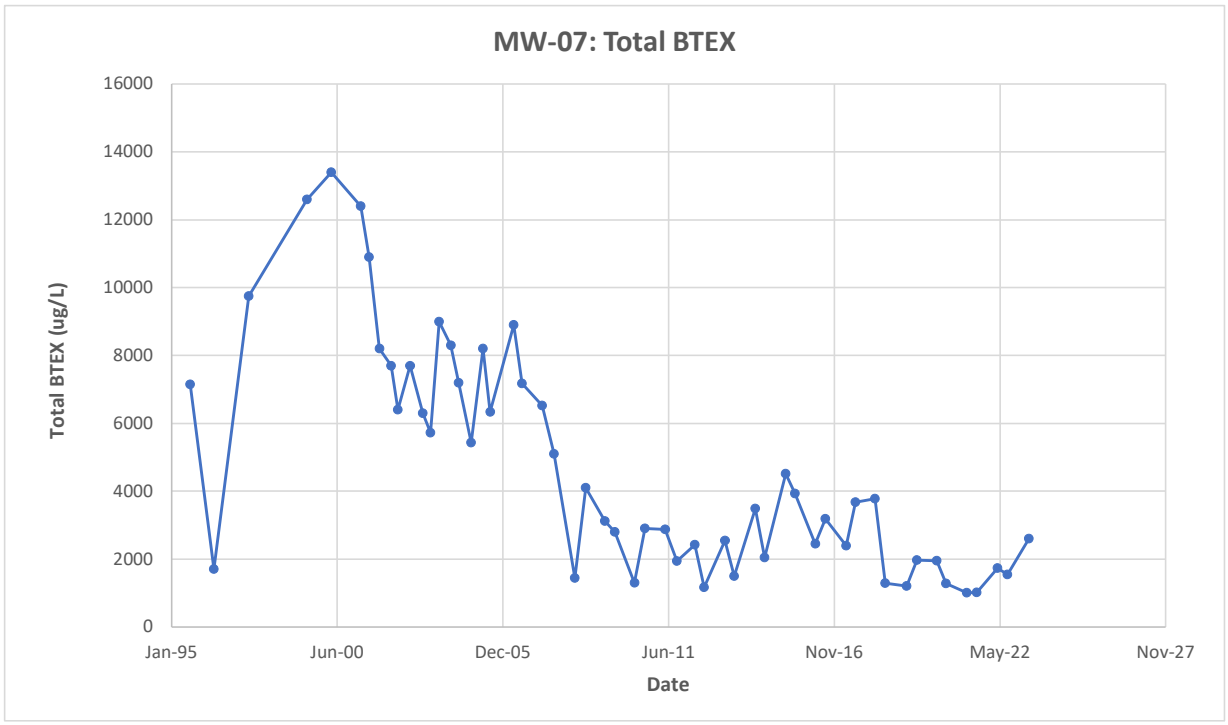
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
[signature]	5/31/2023 1340	GEI	[signature]		
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
Relinquished by	Date/Time	Company	Received by	Date/Time	Company
				5-3-23 1340	TMB

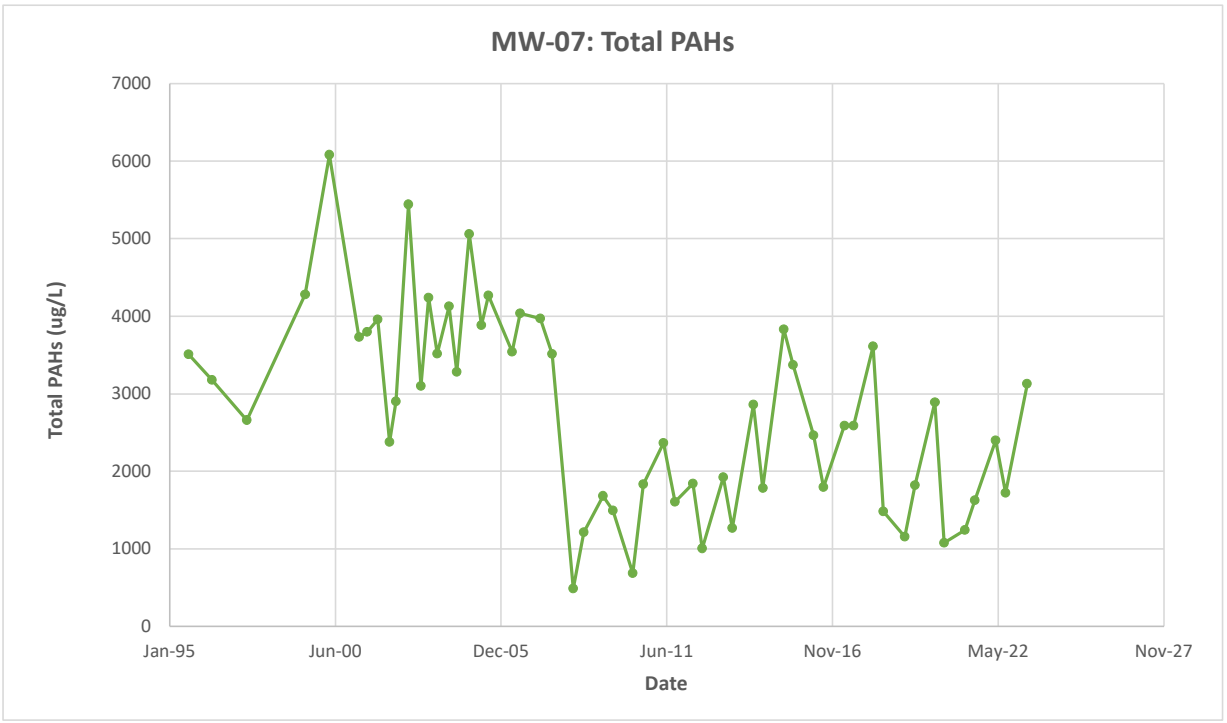
Custody Seals Intact: ☐ Yes ☐ No	Custody Seal No:	Cooler Temperature(s) °C and Other Remarks: 1.7 # 1.7 C

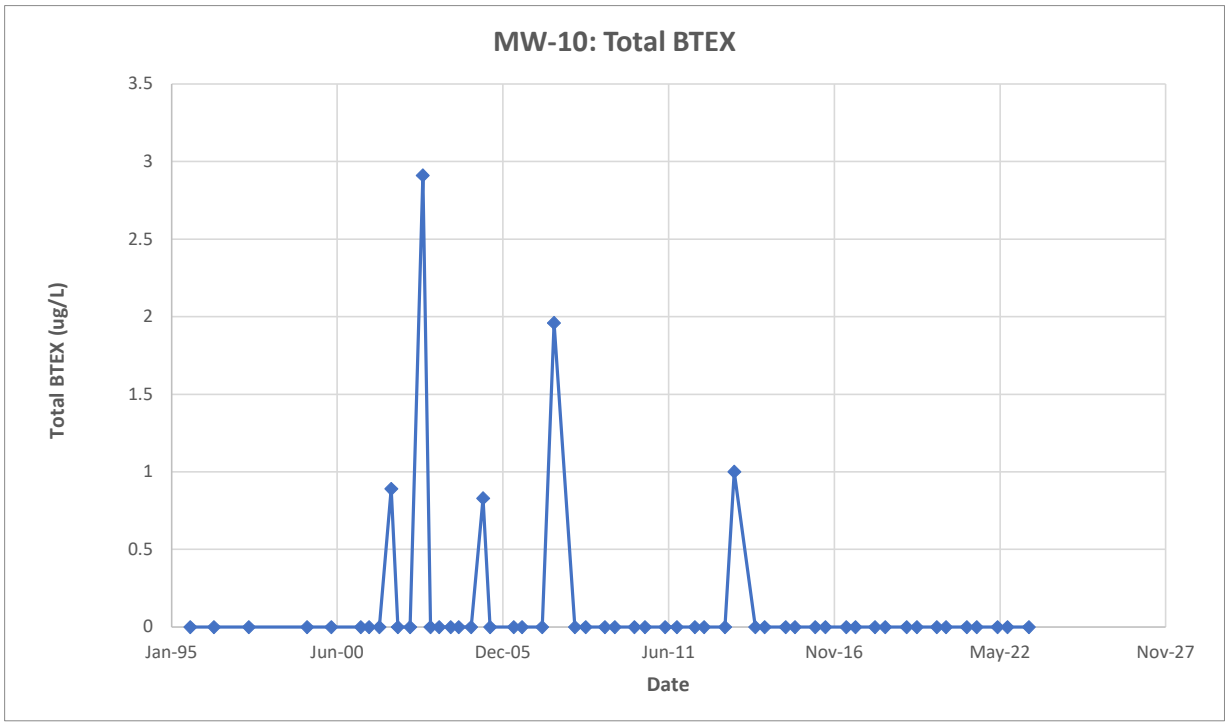
Ver: 06/08/2021

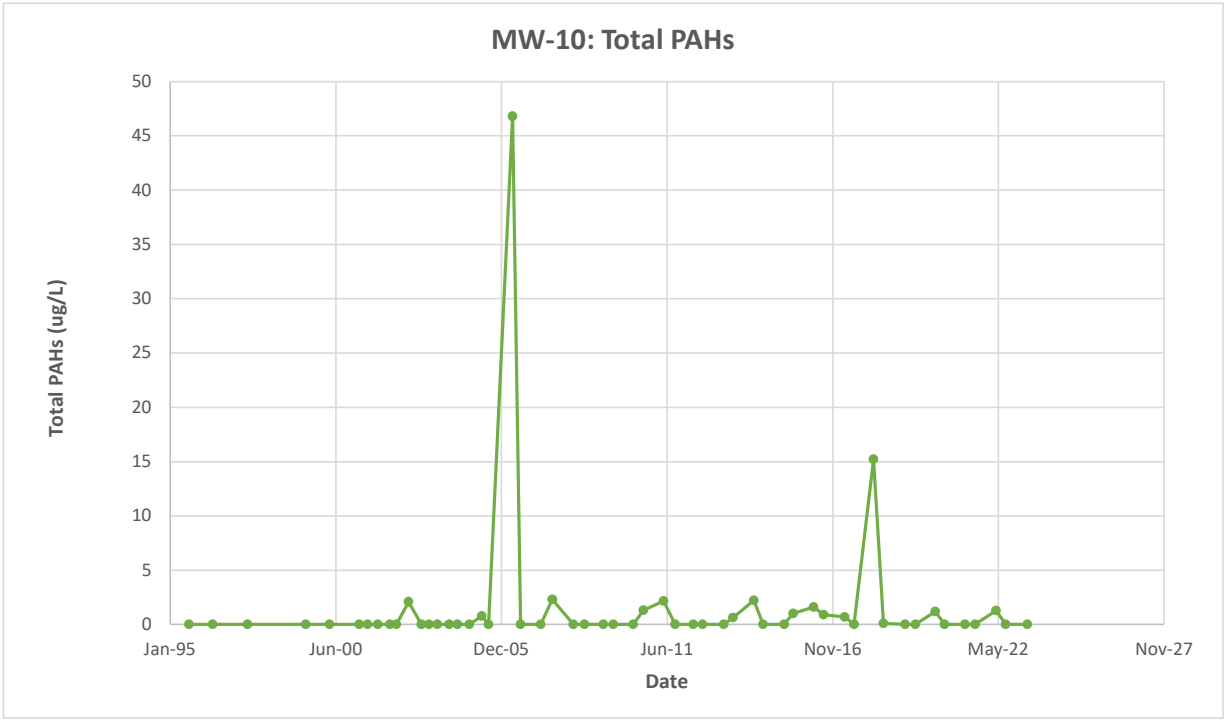
Appendix F

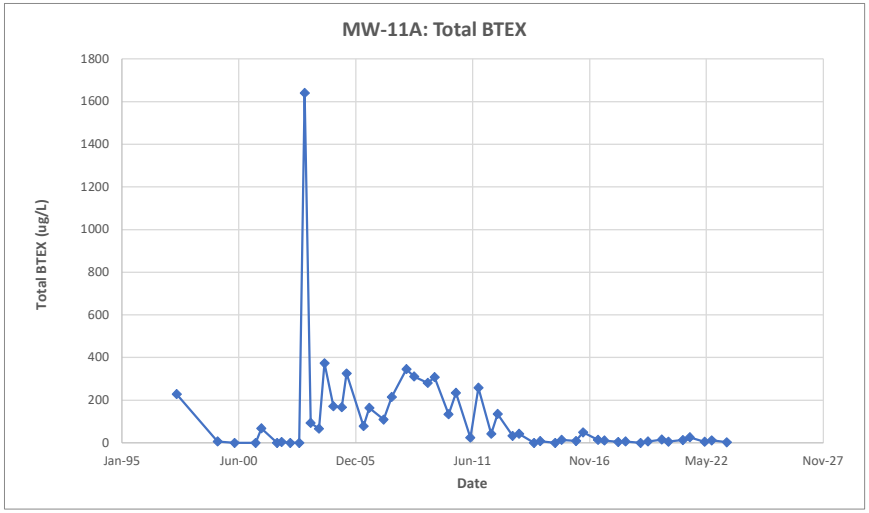
Historic Time-Series Concentration Plots

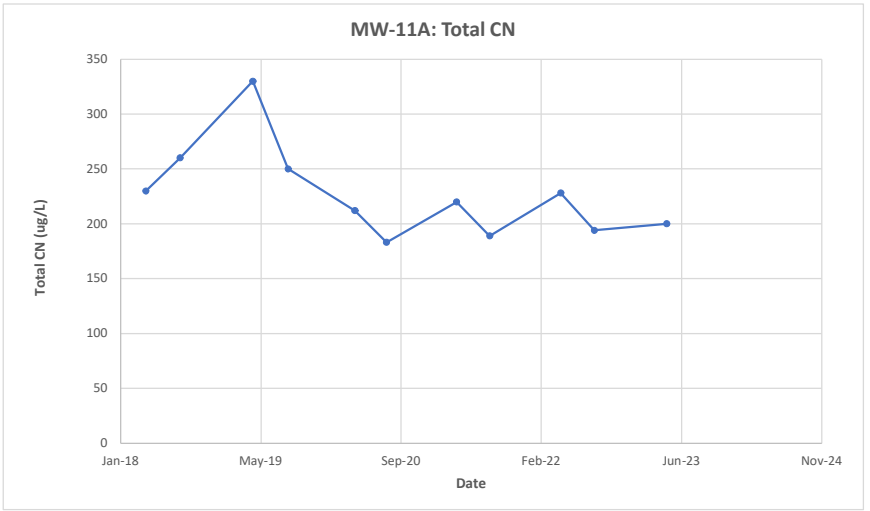

MW-07: Total BTEX
Total BTEX (ug/L)
16000
14000
12000
10000
8000
6000
4000
2000
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

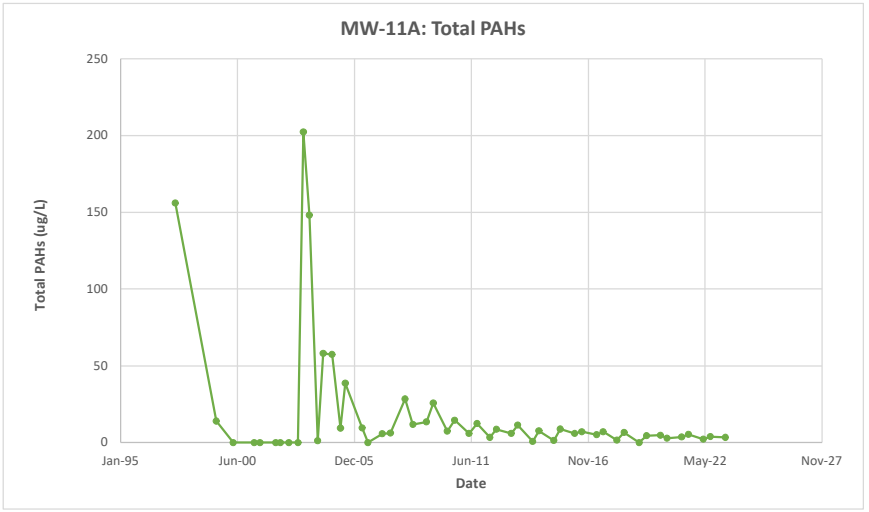

MW-07: Total PAHs
Total PAHs (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

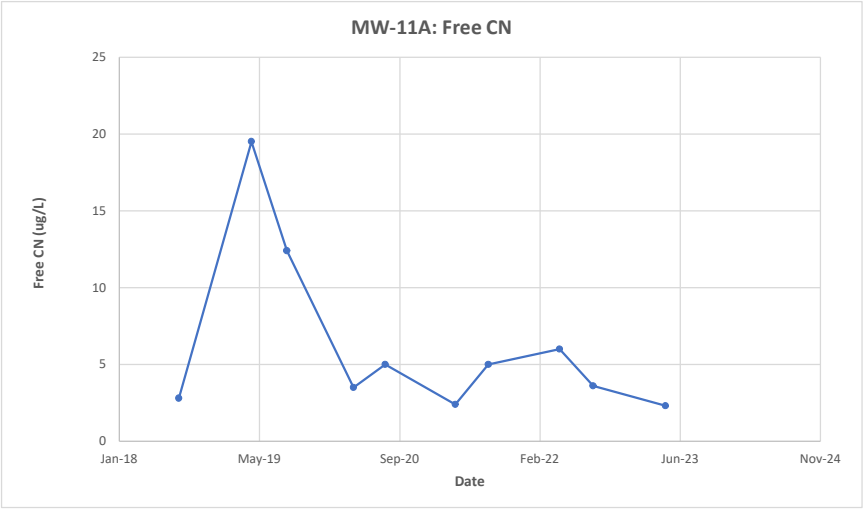

MW-10: Total BTEX
Total BTEX (ug/L)
3.5
3
2.5
2
1.5
1
0.5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

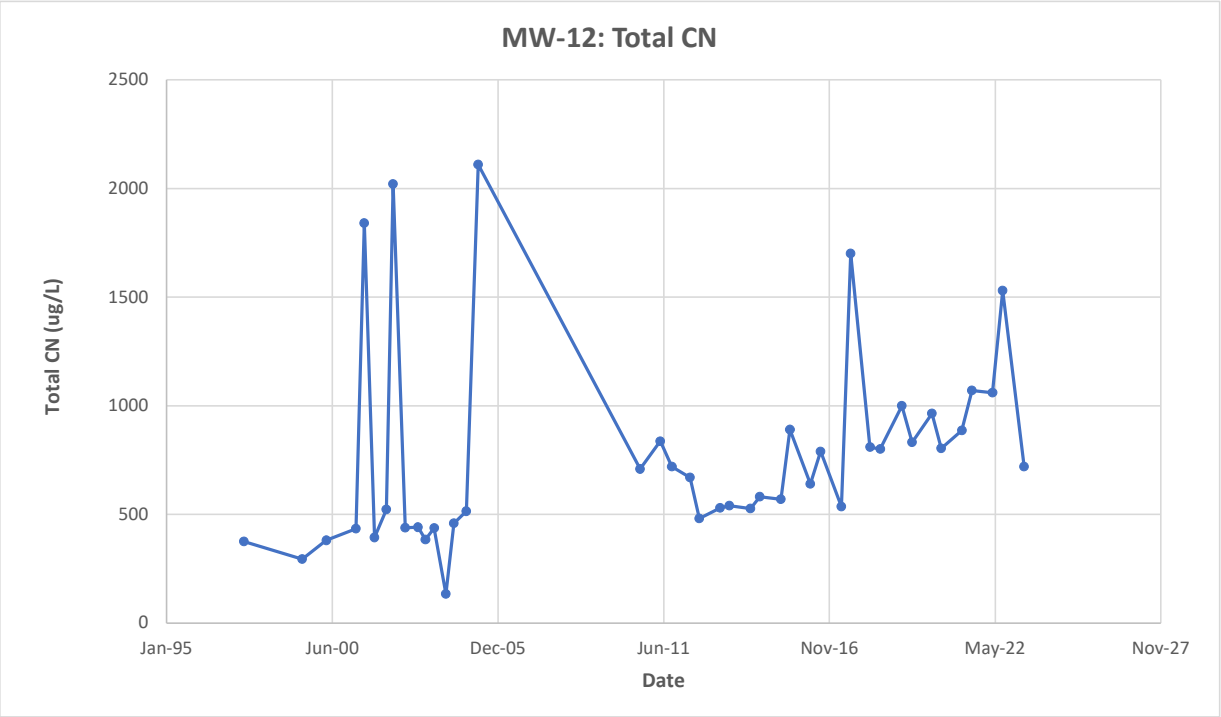

MW-10: Total PAHs
Total PAHs (ug/L)
50
45
40
35
30
25
20
15
10
5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

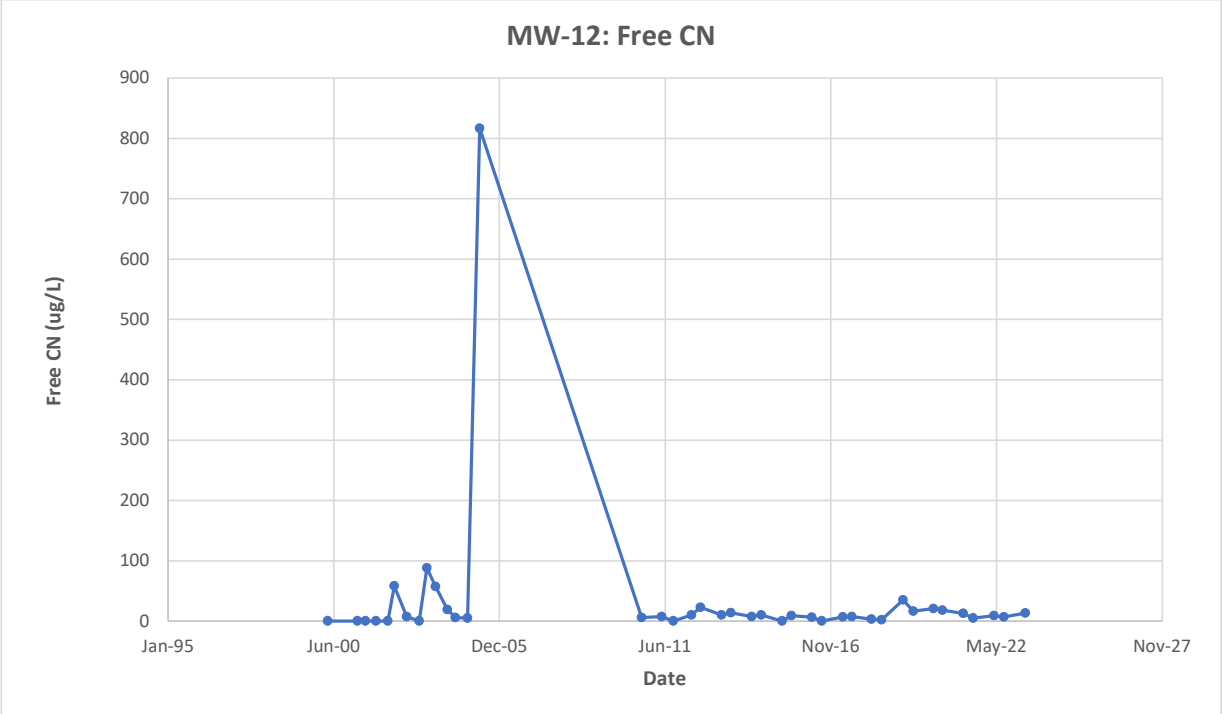

MW-11A: Total BTEX
Total BTEX (ug/L)
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

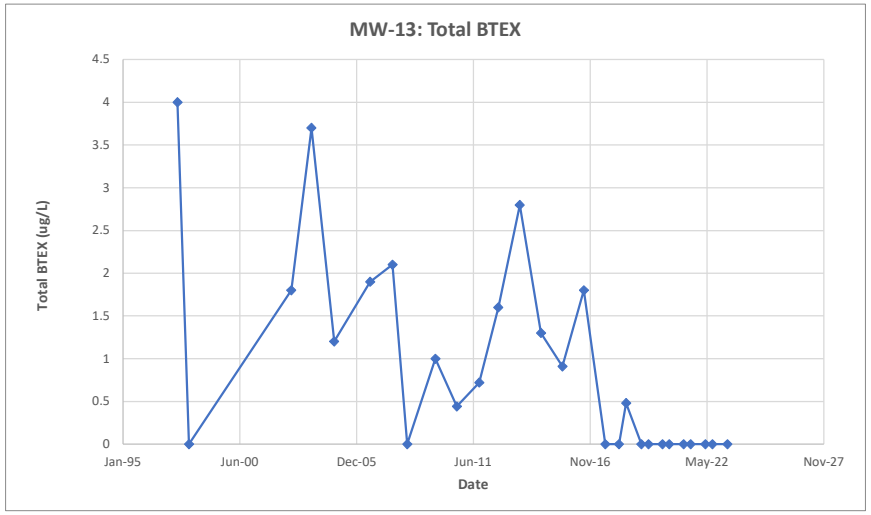

MW-11A: Total CN
Total CN (ug/L)
350
300
250
200
150
100
50
0
Jan-18
May-19
Sep-20
Feb-22
Jun-23
Nov-24
Date

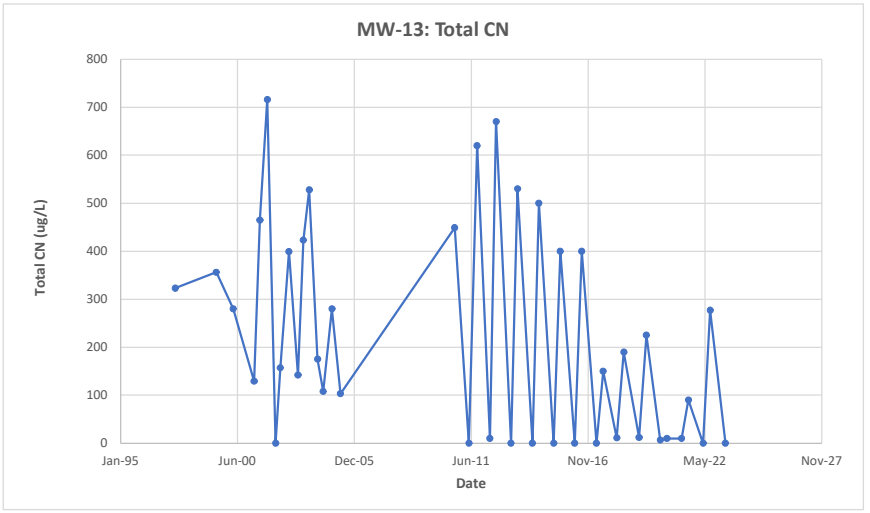

MW-11A: Total PAHs
Total PAHs (ug/L)
250
200
150
100
50
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

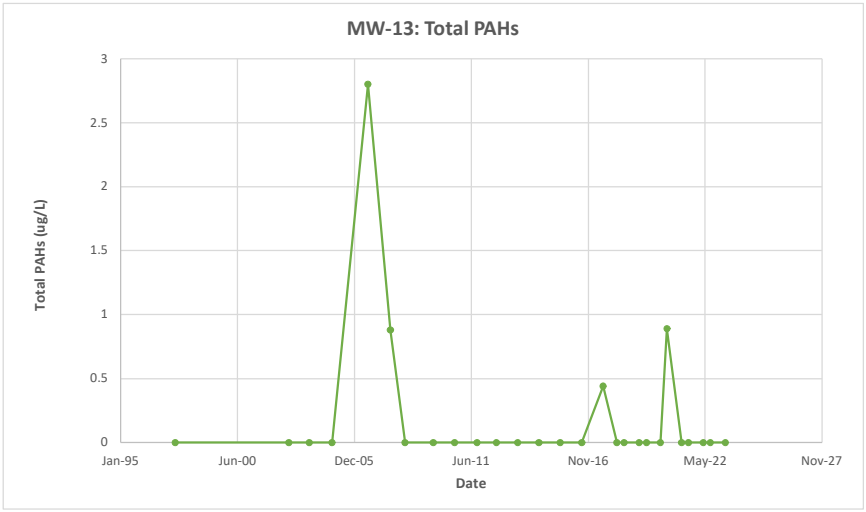

MW-11A: Free CN
Free CN (ug/L)
25
20
15
10
5
0
Jan-18
May-19
Sep-20
Feb-22
Jun-23
Nov-24
Date

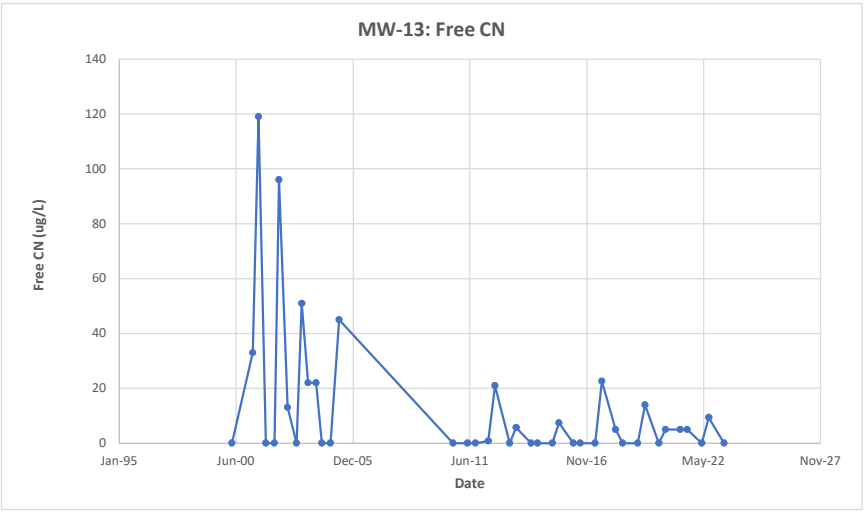

MW-12: Total CN
Total CN (ug/L)
2500
2000
1500
1000
500
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

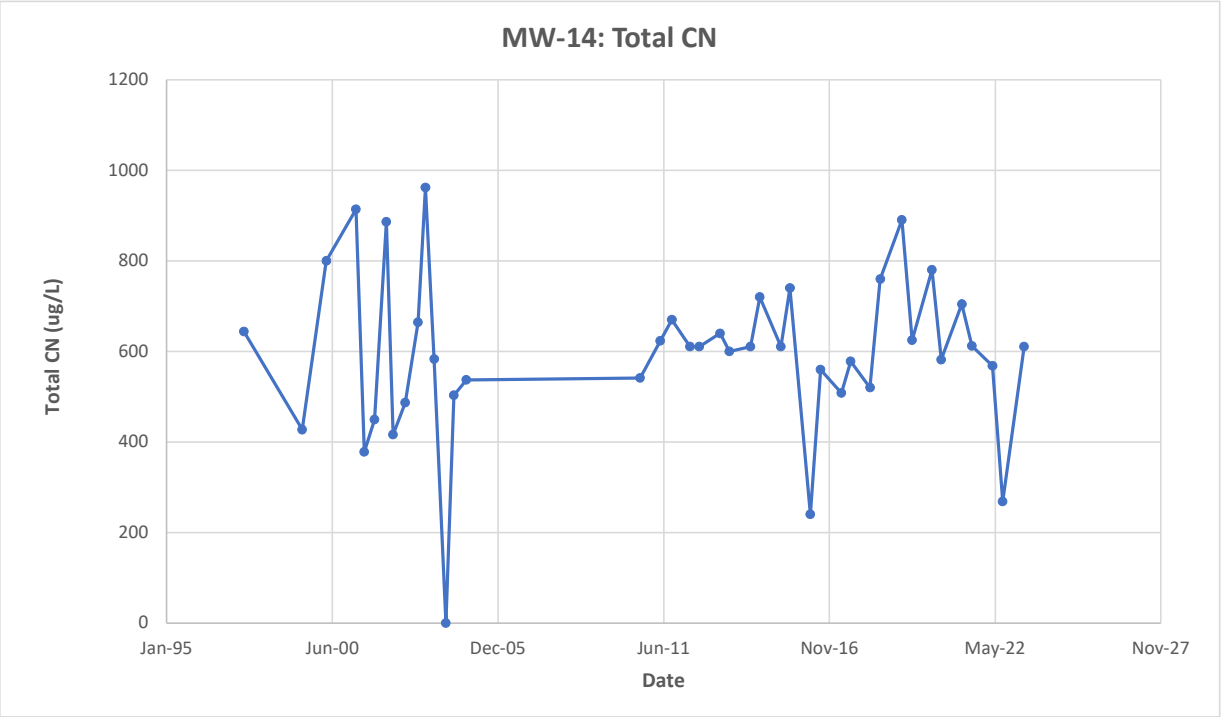

MW-12: Free CN
Free CN (ug/L)
900
800
700
600
500
400
300
200
100
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

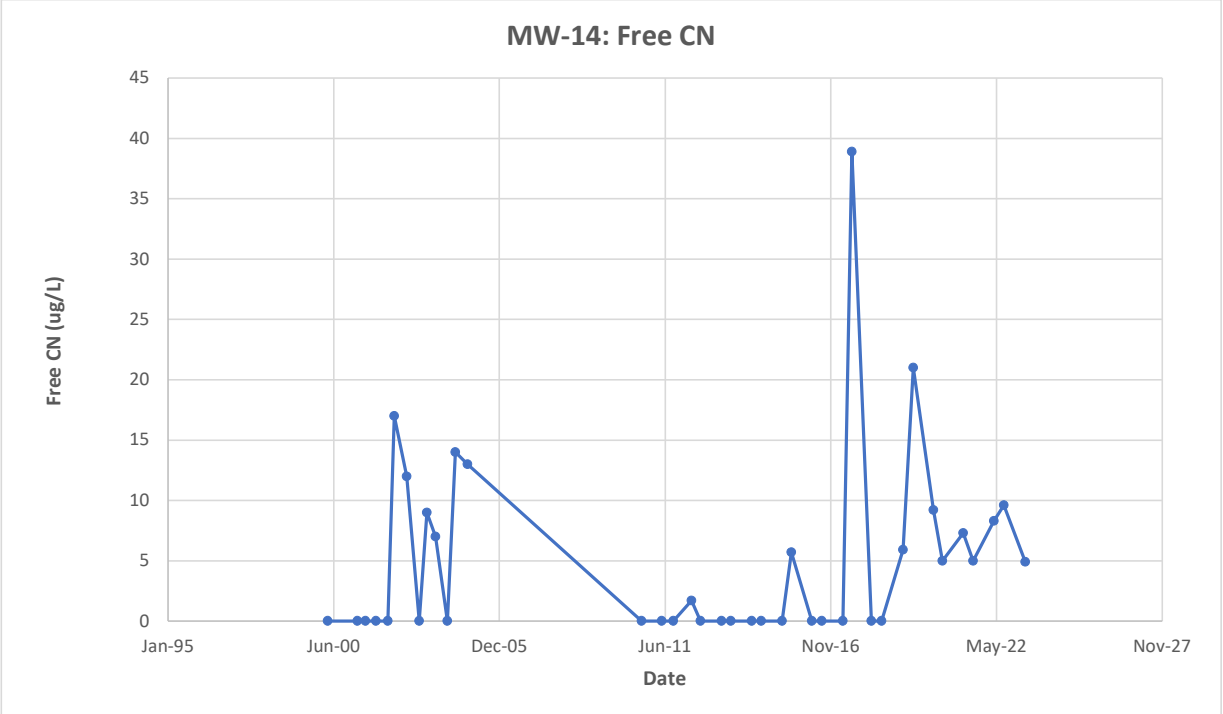

MW-13: Total BTEX
Total BTEX (ug/L)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

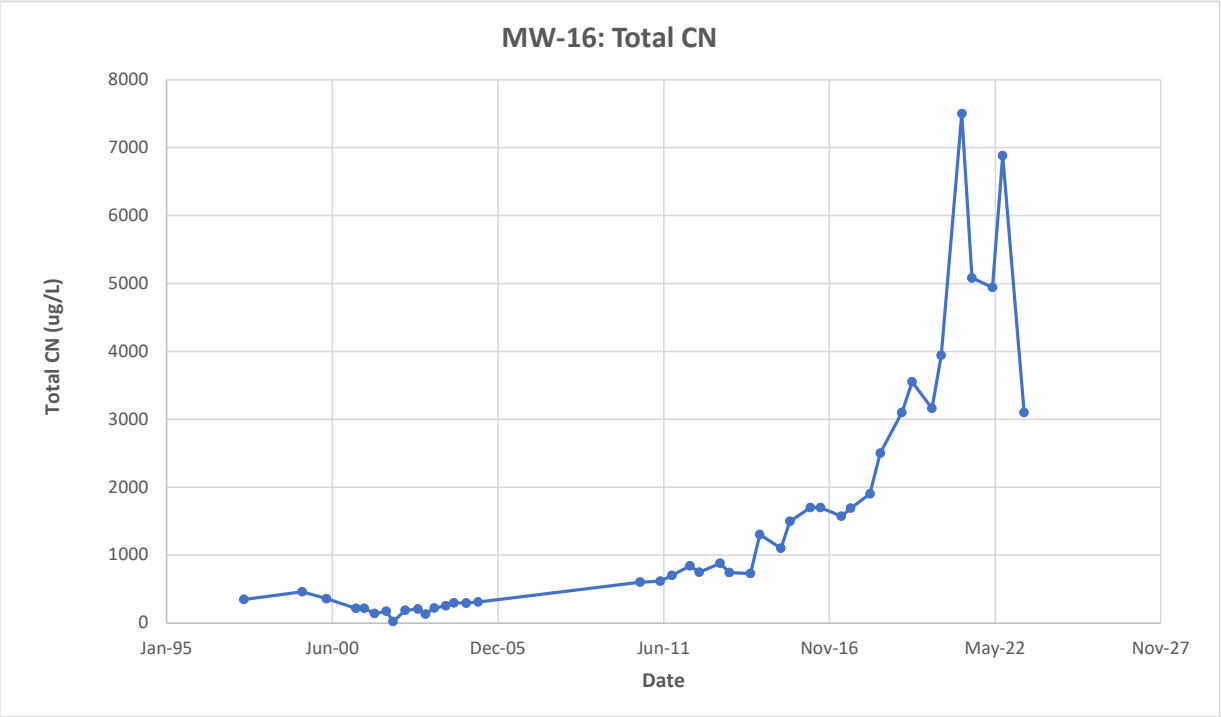

MW-13: Total CN
Total CN (ug/L)
800
700
600
500
400
300
200
100
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

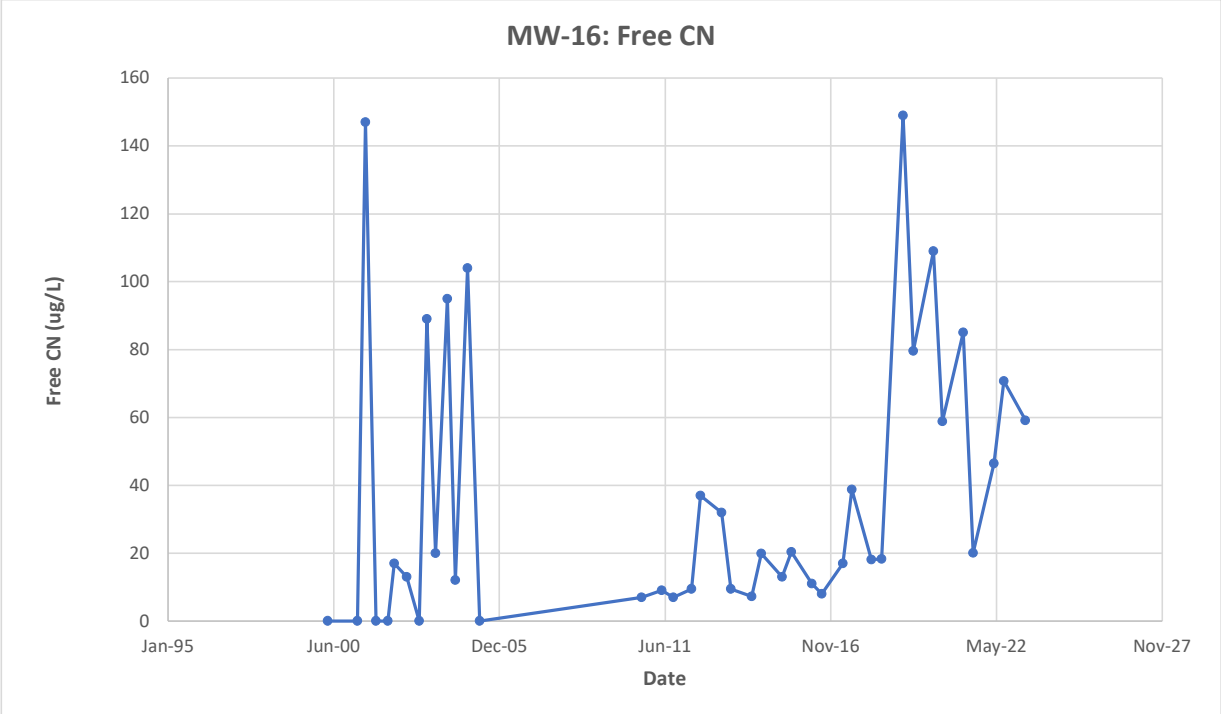

MW-13: Total PAHs
Total PAHs (ug/L)
3
2.5
2
1.5
1
0.5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

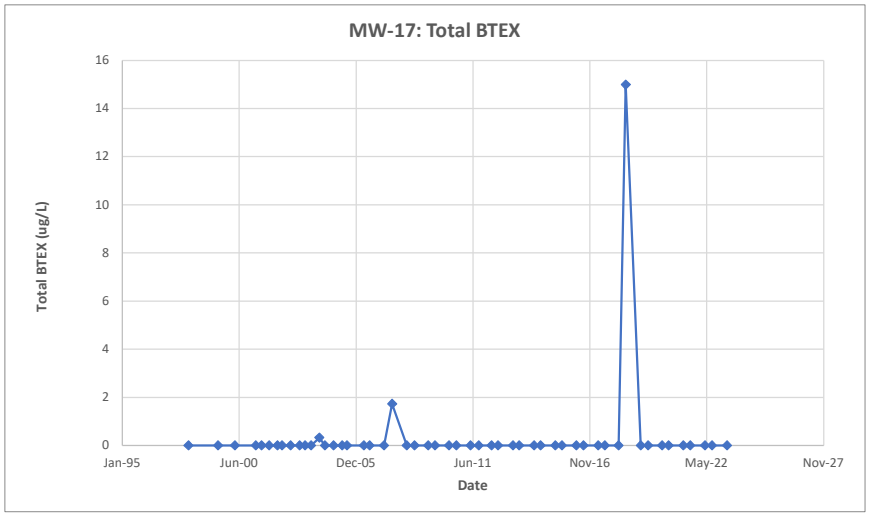

MW-13: Free CN
Free CN (ug/L)
140
120
100
80
60
40
20
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

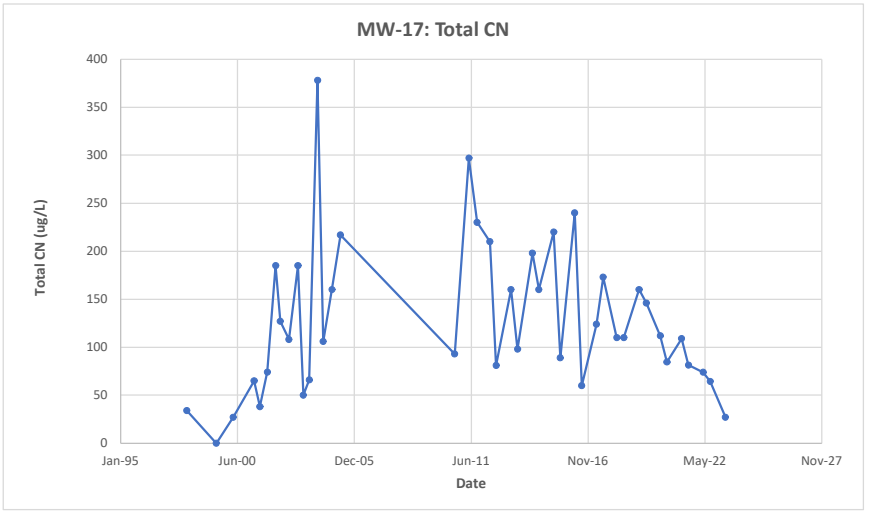

MW-14: Total CN
Total CN (ug/L)
1200
1000
800
600
400
200
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

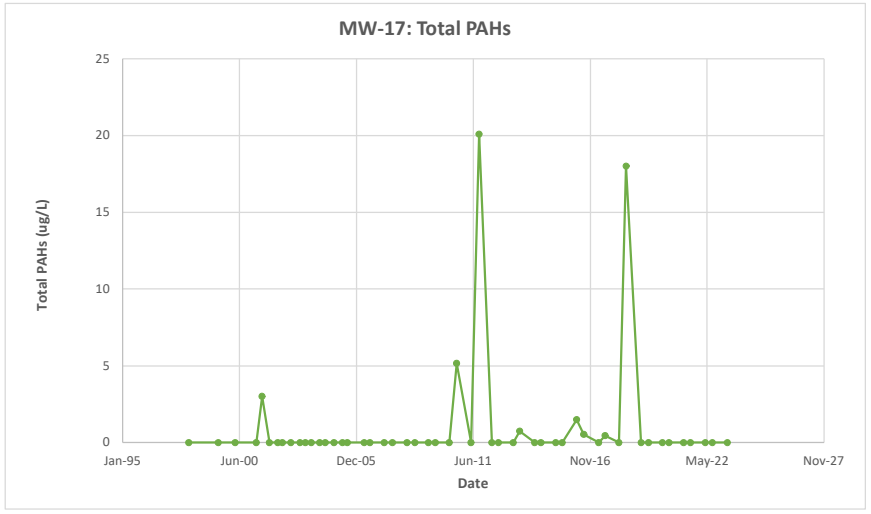

MW-14: Free CN
Free CN (ug/L)
45
40
35
30
25
20
15
10
5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

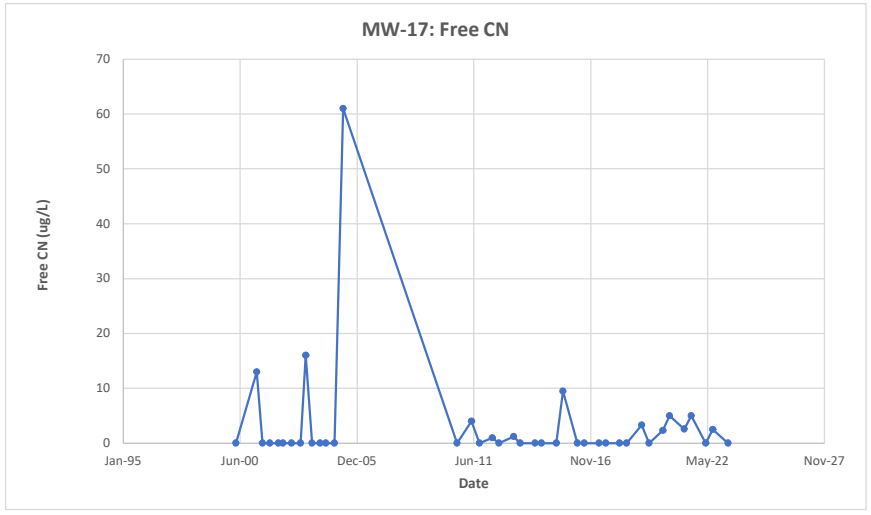

MW-16: Total CN
Total CN (ug/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

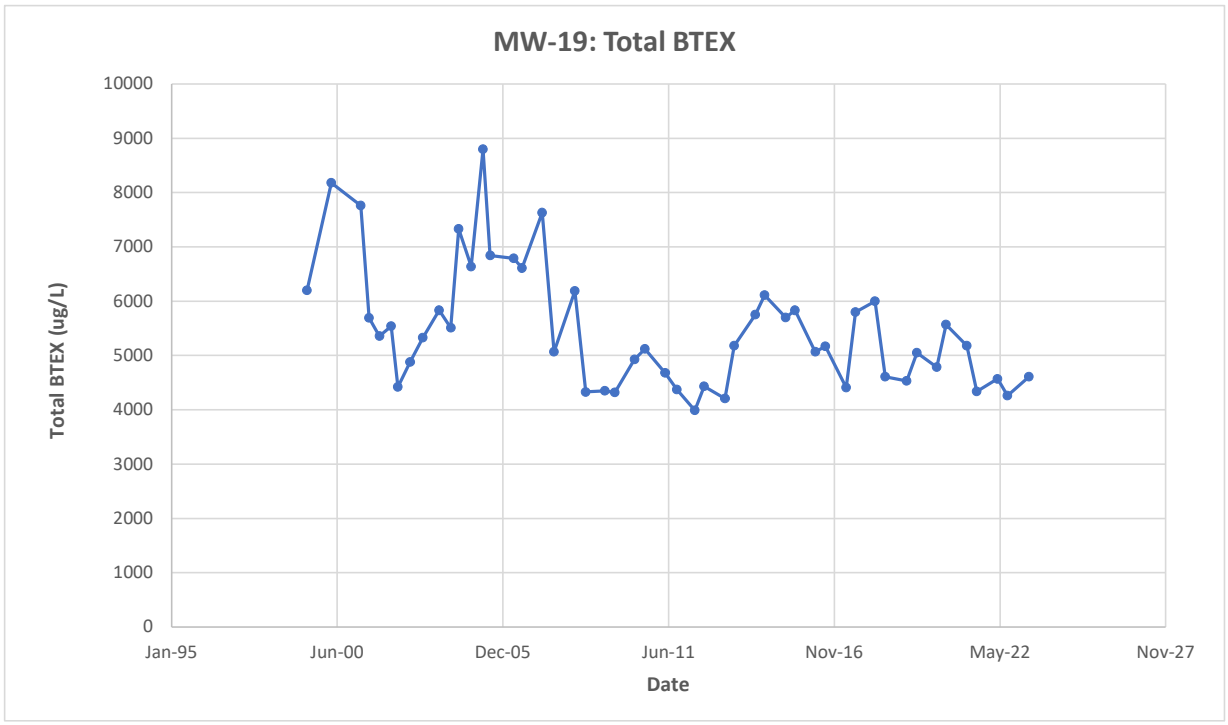

MW-16: Free CN
Free CN (ug/L)
160
140
120
100
80
60
40
20
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

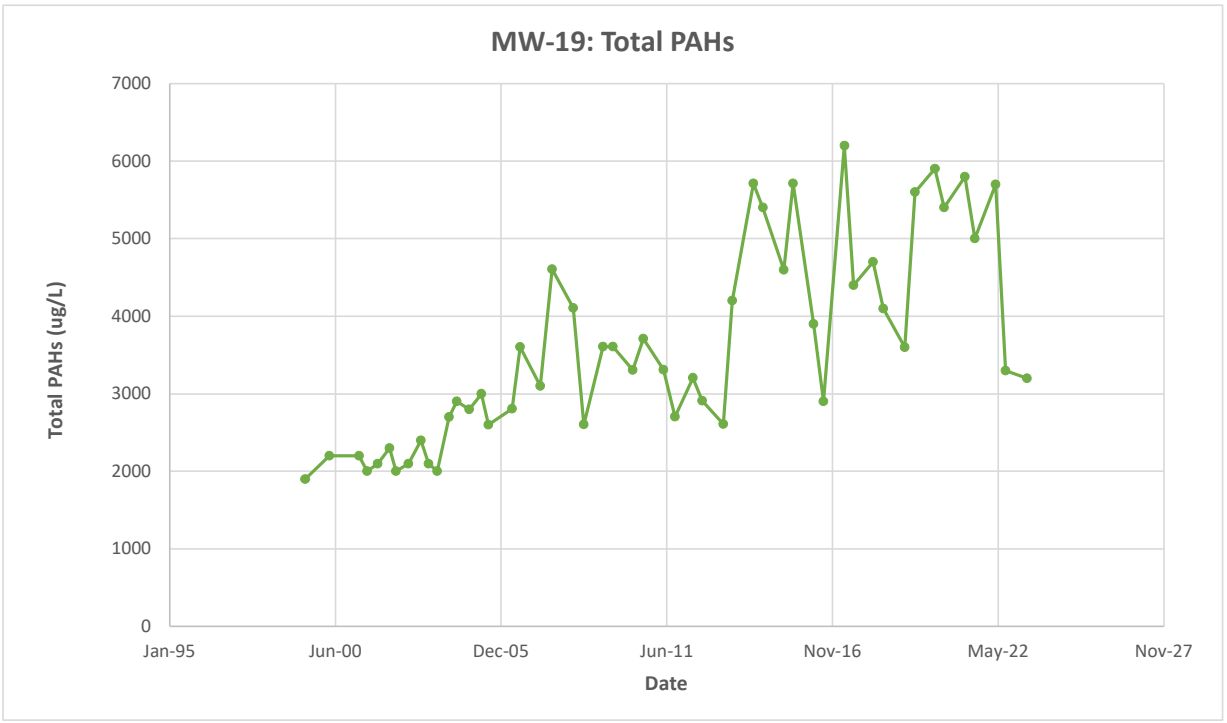

MW-17: Total BTEX
Total BTEX (ug/L)
0
2
4
6
8
10
12
14
16
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

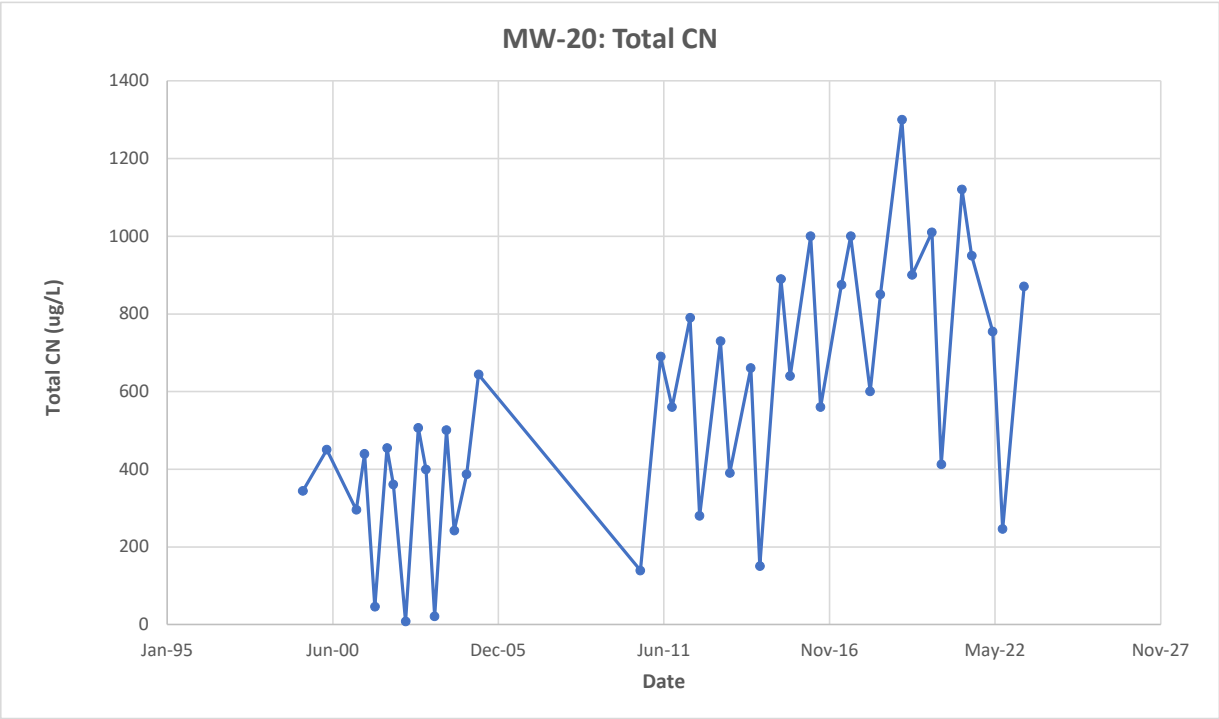

MW-17: Total CN
Total CN (ug/L)
0
50
100
150
200
250
300
350
400
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

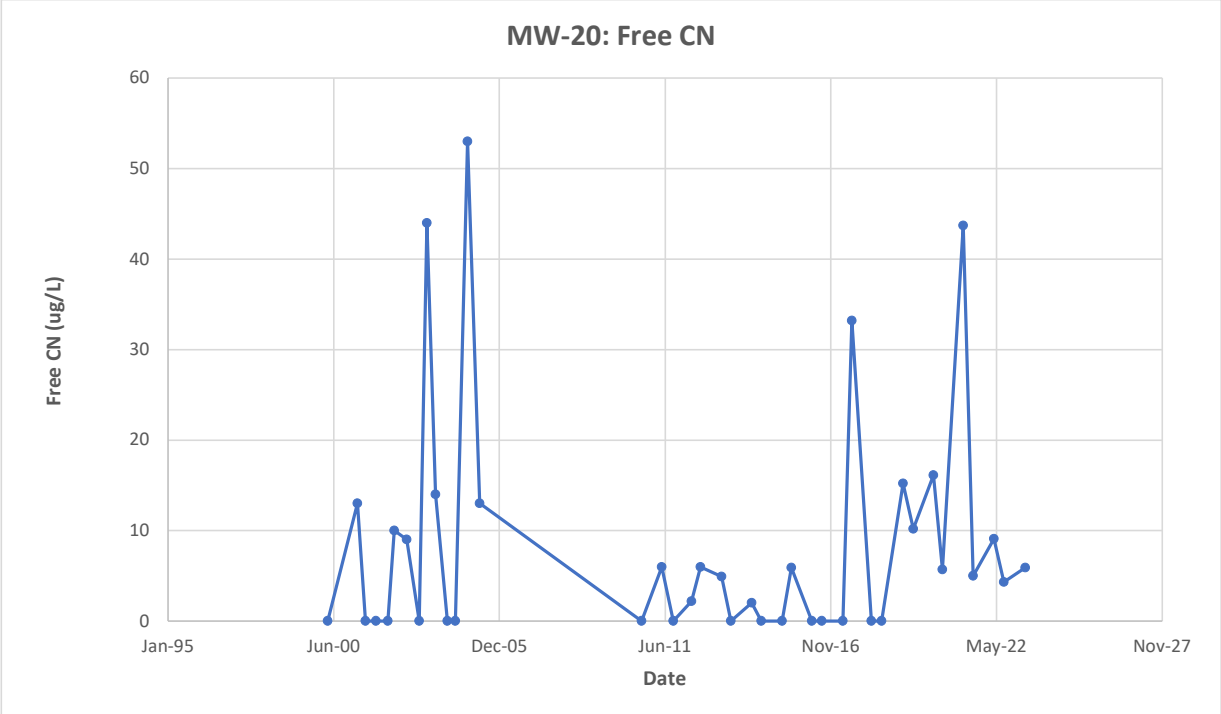

MW-17: Total PAHs
Total PAHs (ug/L)
0
5
10
15
20
25
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

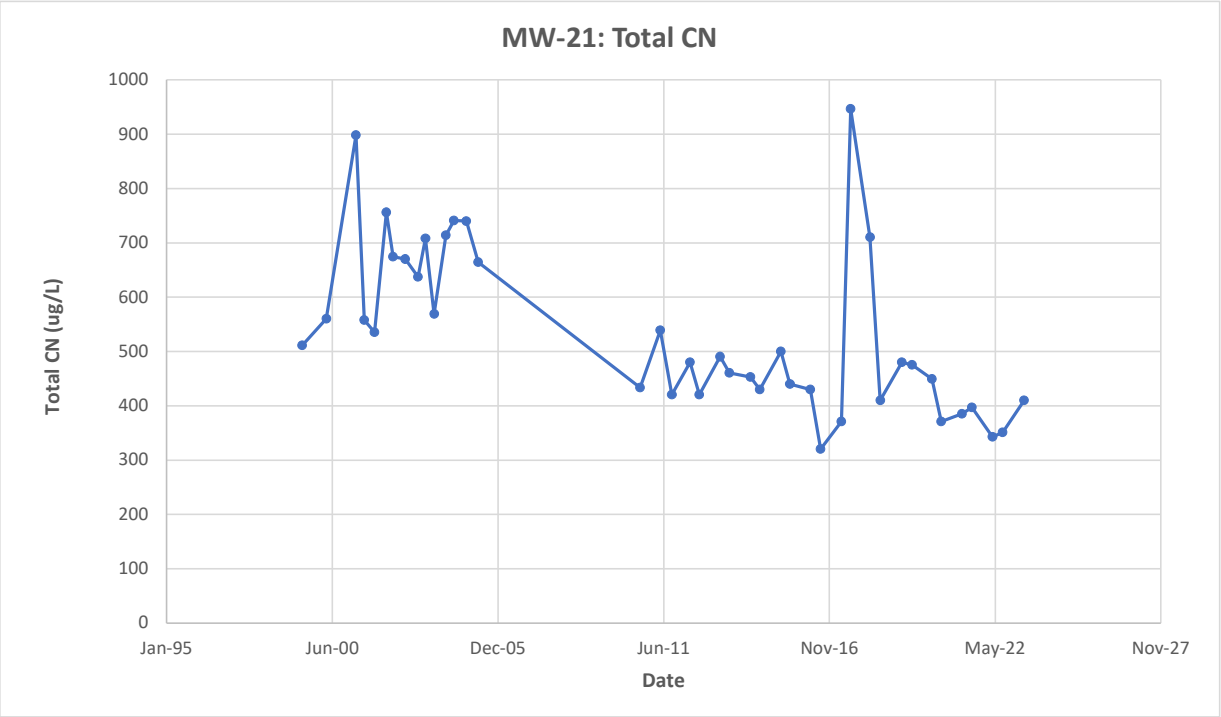

MW-17: Free CN
Free CN (ug/L)
0
10
20
30
40
50
60
70
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

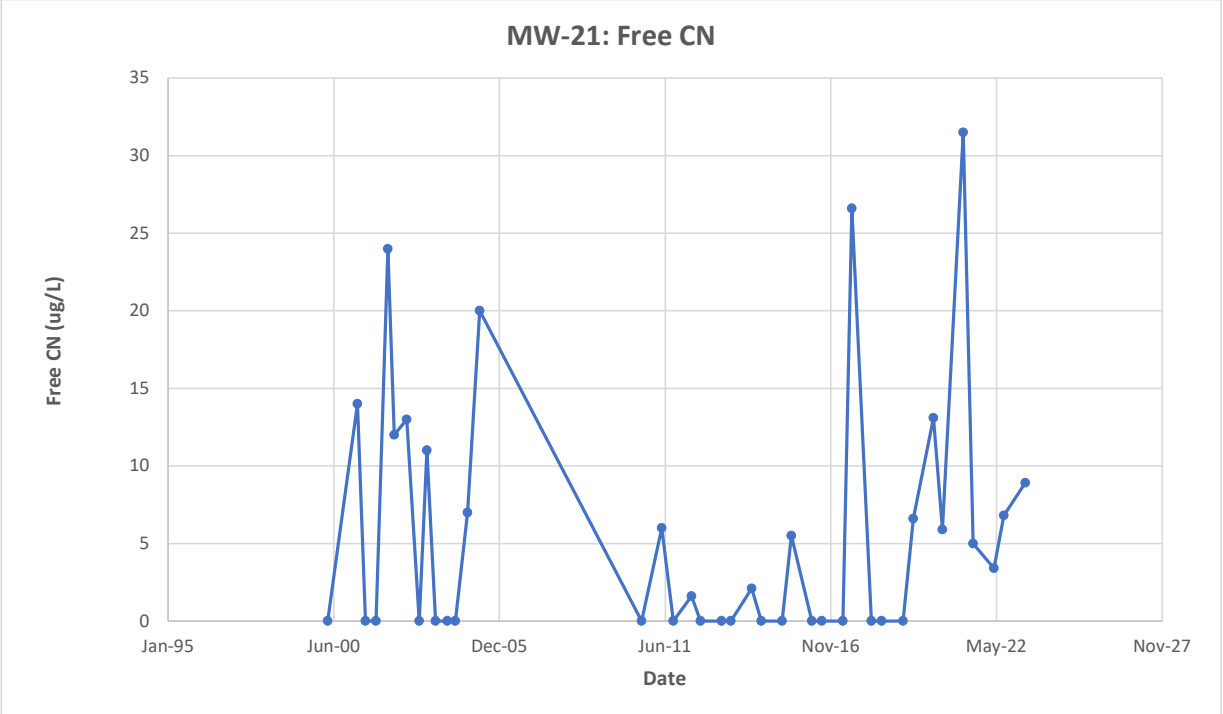

MW-19: Total BTEX
Total BTEX (ug/L)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

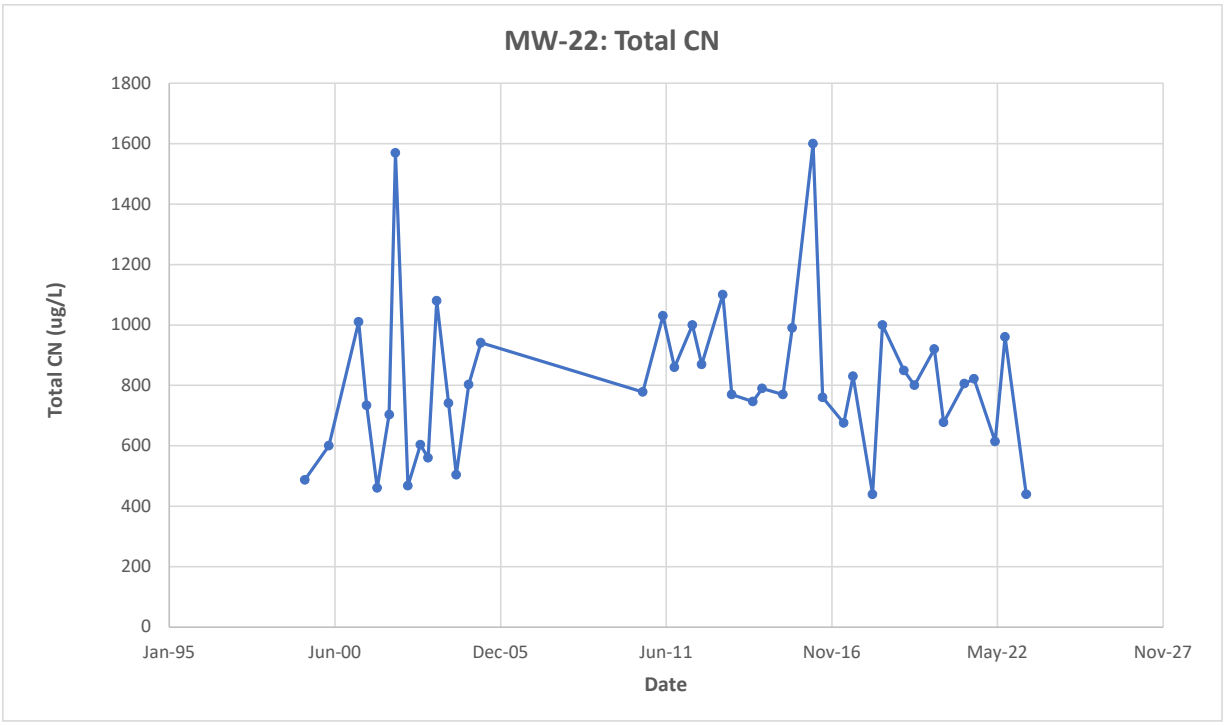

MW-19: Total PAHs
Total PAHs (ug/L)
7000
6000
5000
4000
3000
2000
1000
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

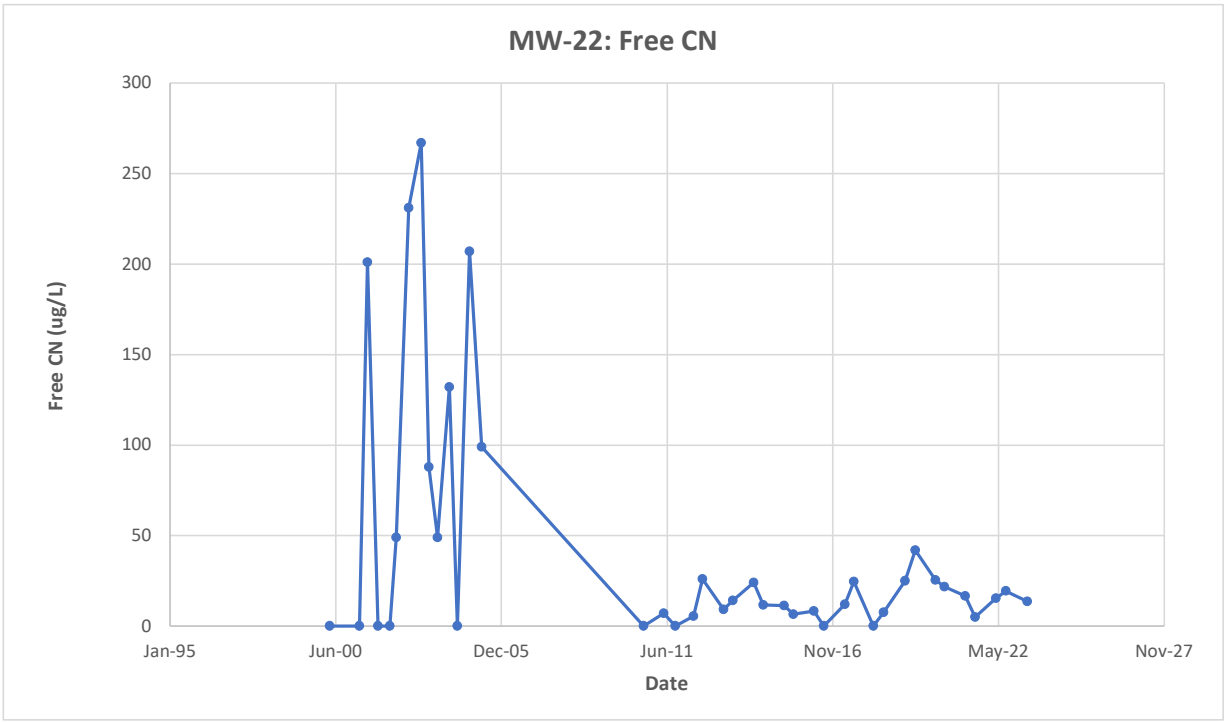

MW-20: Total CN
Total CN (ug/L)
1400
1200
1000
800
600
400
200
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

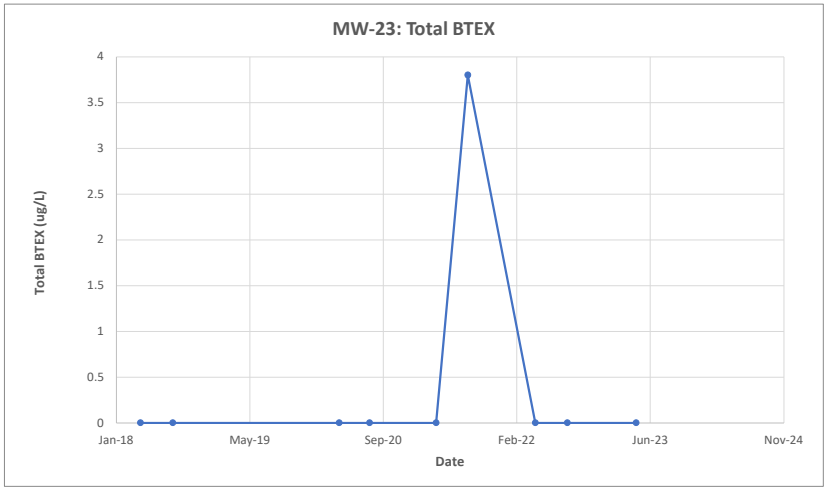

MW-20: Free CN
Free CN (ug/L)
60
50
40
30
20
10
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

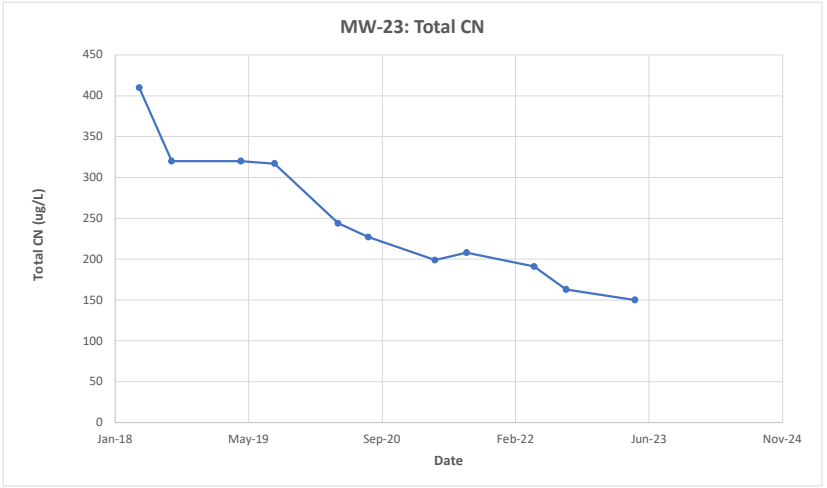

MW-21: Total CN
Total CN (ug/L)
1000
900
800
700
600
500
400
300
200
100
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

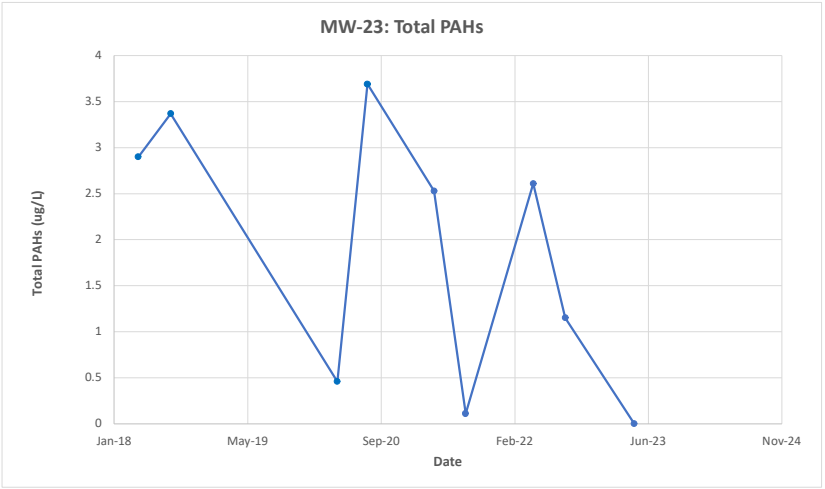

MW-21: Free CN
Free CN (ug/L)
35
30
25
20
15
10
5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

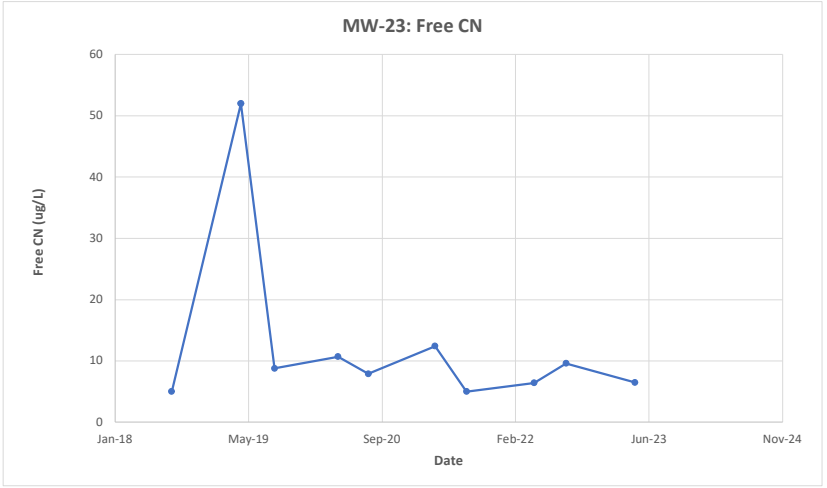

MW-22: Total CN
Total CN (ug/L)
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

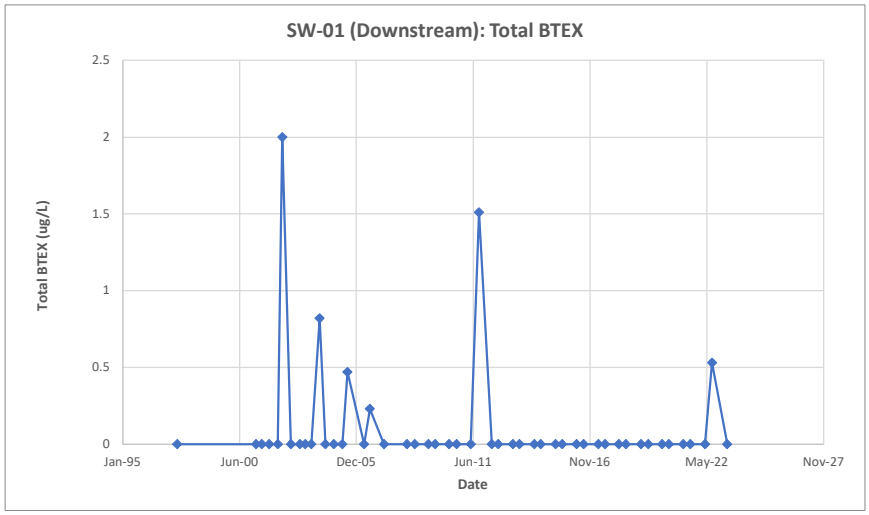

MW-22: Free CN
Free CN (ug/L)
300
250
200
150
100
50
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

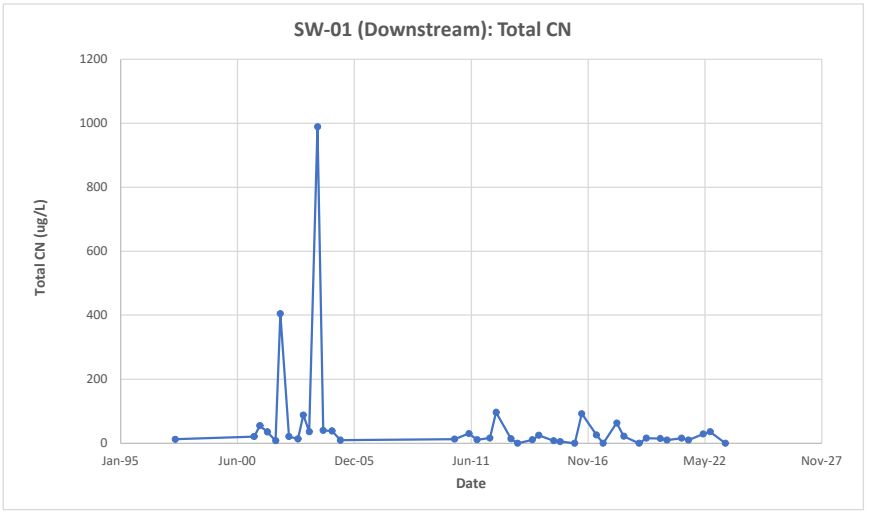

MW-23: Total BTEX
Total BTEX (ug/L)
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan-18
May-19
Sep-20
Feb-22
Jun-23
Nov-24
Date

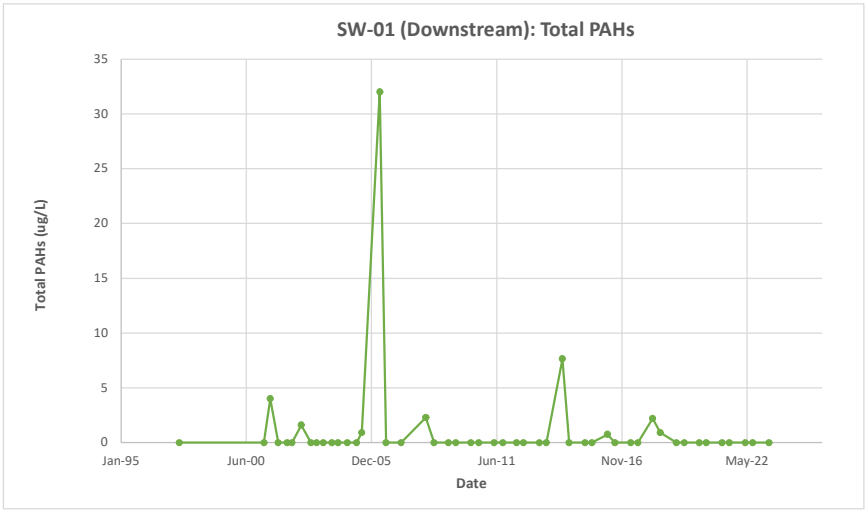

MW-23: Total CN
Total CN (ug/L)
450
400
350
300
250
200
150
100
50
0
Jan-18
May-19
Sep-20
Feb-22
Jun-23
Nov-24
Date

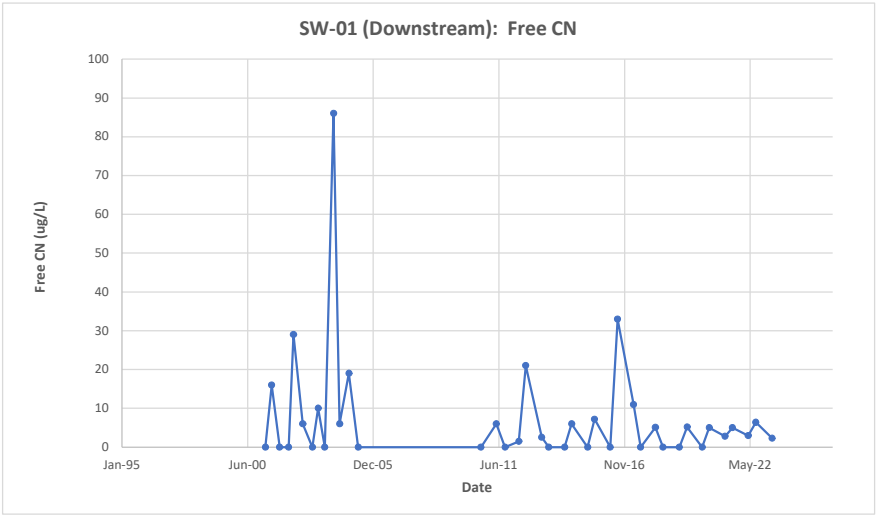

MW-23: Total PAHs
Total PAHs (ug/L)
4
3.5
3
2.5
2
1.5
1
0.5
0
Jan-18
May-19
Sep-20
Feb-22
Jun-23
Nov-24
Date

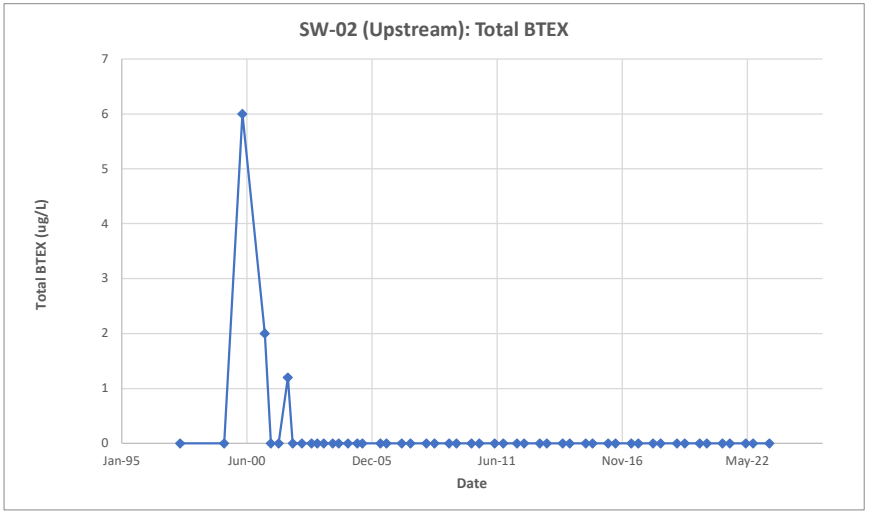

MW-23: Free CN
Free CN (ug/L)
60
50
40
30
20
10
0
Jan-18
May-19
Sep-20
Feb-22
Jun-23
Nov-24
Date

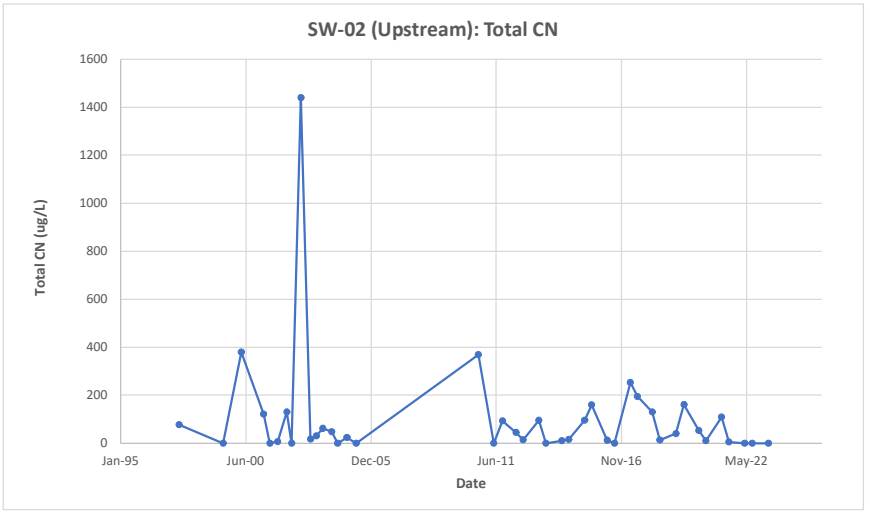

SW-01 (Downstream): Total BTEX
Total BTEX (ug/L)
2.5
2
1.5
1
0.5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

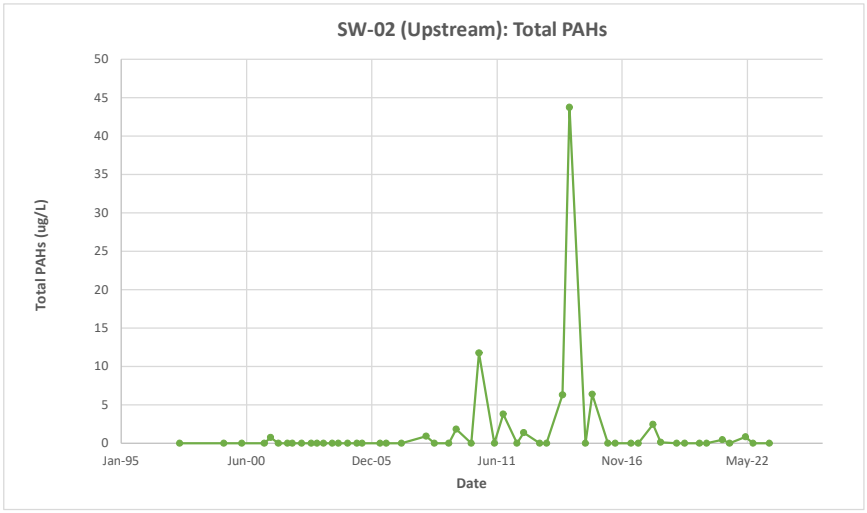

SW-01 (Downstream): Total CN
Total CN (ug/L)
1200
1000
800
600
400
200
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Nov-27
Date

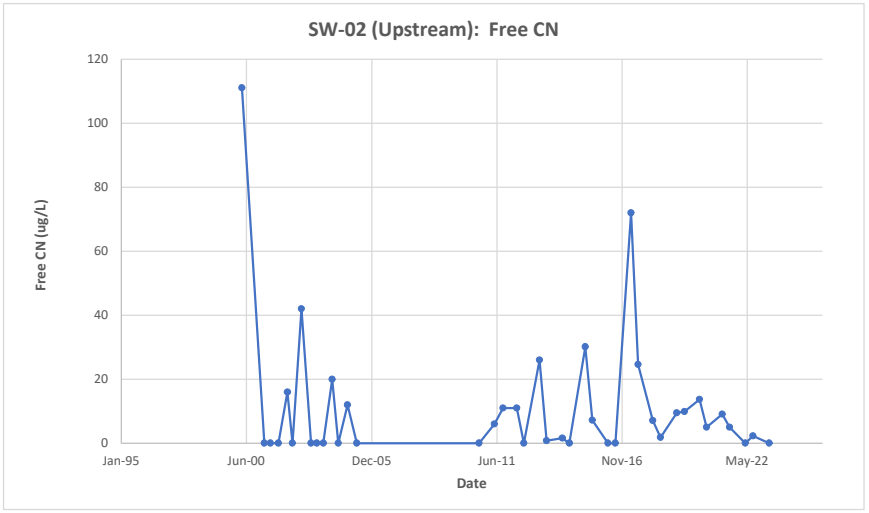

SW-01 (Downstream): Total PAHs
Total PAHs (ug/L)
35
30
25
20
15
10
5
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Date


SW-01 (Downstream): Free CN
Free CN (ug/L)
100
90
80
70
60
50
40
30
20
10
0
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Date


SW-02 (Upstream): Total BTEX
Total BTEX (ug/L)
0
1
2
3
4
5
6
7
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Date


SW-02 (Upstream): Total CN
Total CN (ug/L)
0
200
400
600
800
1000
1200
1400
1600
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Date


SW-02 (Upstream): Total PAHs
Total PAHs (ug/L)
0
5
10
15
20
25
30
35
40
45
50
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Date


SW-02 (Upstream): Free CN
Free CN (ug/L)
0
20
40
60
80
100
120
Jan-95
Jun-00
Dec-05
Jun-11
Nov-16
May-22
Date