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June 24, 2022

Project 0078000050.04.\*\*\*\*

Mr. Michael Squire Assistant Engineer New York State Department of Environmental Conservation 625 Broadway Albany, NY 12233

Subject: Groundwater Monitoring Report—January Through July 2022

National Grid Former Albion MGP Site Albion, New York

Case #837012

Dear Mr. Squire:

Wood Environment & Infrastructure Solutions, Inc. is submitting the subject report on behalf of our client, National Grid. This report presents the results of monitoring activities conducted during the period from January through July 2022.

Please contact either of the undersigned if you have any questions or require additional information.

Sincerely,

Wood Environment & Infrastructure Solutions, Inc.

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Enclosure

cc: Brian Stearns - National Grid

Steve Stucker - National Grid

Devin Shay - Groundwater & Environmental Services, Inc.



# GROUNDWATER MONITORING REPORT JULY THROUGH DECEMBER 2021

National Grid Former Albion MGP Site Albion, New York

Prepared for:

**National Grid** 

300 Erie Blvd West Syracuse, New York 13202

Prepared by:

**Wood Environment & Infrastructure Solutions, Inc.** 

180 Grand Avenue, Suite 1100 Oakland, California 94612

June 2022

Project No. 0078000050.04.\*\*\*\*



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# GROUNDWATER MONITORING REPORT JANUARY THROUGH JUNE 2022

National Grid Former Albion MGP Site Albion, New York

### 1.0 INTRODUCTION

This report summarizes groundwater monitoring and sampling activities performed by Wood Environment & Infrastructure Solutions, Inc. ("Wood"), on behalf of National Grid Corporation ("National Grid"), during the period from January through June 2022 ("reporting period") at the Former Albion Manufactured Gas Plant (MGP), Site Identification Number 837012, in Albion, New York (the site; Figure 1). Groundwater monitoring and sampling activities were performed in accordance with the *Monitoring and Sampling Plan* (Wood, 2018), as summarized in Table 1.

Activities performed at the site during the reporting period include the following:

- Collection of depth to groundwater measurements and groundwater samples at site monitoring wells; and
- Inspection of the site Engineering Control (i.e., soil cap) and Institutional Controls (i.e., land use).

Groundwater elevation and analytical results for the reporting period are generally consistent with historical data. No damages or changes to land use were observed during the site inspection. Depth to groundwater measurement and sampling procedures are described in Section 2, and groundwater monitoring results are provided in Section 3. A quality assurance/quality control (QA/QC) assessment of the groundwater data is provided in Section 4. Results of the inspection of the site Engineering Control and Institutional Controls are described in Section 5. Project activities planned for the next monitoring period are outlined in Section 6.

### 1.1 BACKGROUND

The site consists of two adjoining parcels totaling approximately 0.5 acres formerly occupied by a single MGP that is bounded by the New York State Erie Barge Canal to the north, East Bank Street and a commercial property to the south, Ingersoll Street to the east, and a park and commercial property to the west (Figure 2). The western parcel (0.3 acres) is currently



owned by National Grid, which maintains an active electrical substation on the property; previous environmental investigations did not identify environmental conditions requiring remediation. The eastern parcel (0.2 acres), which is currently owned by New York State Electric and Gas Corporation (NYSEG), has been remediated to commercial use and is currently vacant and undeveloped.

Niagara Mohawk Power Corporation (doing business as National Grid) entered an Order of Consent in November 2003 with the NYSDEC to remediate soil and groundwater at the site, which have been impacted by historical MGP operations. The contaminants of concern (COCs) identified at the site, as listed in the Record of Decision (NYSDEC, 2010a) are: benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX); polycyclic aromatic hydrocarbons (PAHs) acenaphthene, benzo(a)pyrene, benzo(b)fluoranthene, benzo[k]fluoranthene, chrysene, fluorene, and indeno(1,2,3-cd) pyrene; and cyanide. In 2012, Engineering Controls were constructed at the eastern parcel including remedial excavation of the upper two feet of impacted surficial soil and construction of a soil cap system consisting of 18 inches of clean soil underlain by a demarcation layer to delineate clean soil from historical fill.

In addition to Engineering Controls, Institutional Controls including a site-wide Site Management Plan (SMP) and Environmental Easement are part of the site remedy to control exposure to remaining contamination and to maintain protection of public health and the environment. The *Monitoring and Sampling Plan* will ultimately be incorporated with the site wide SMP, which is currently under development, to conduct post-remediation monitoring to assess the performance and effectiveness of the remedy.

### 2.0 GROUNDWATER MONITORING

This section describes groundwater monitoring activities performed by Wood during the reporting period. The groundwater monitoring program including wells and their monitoring and sampling frequencies is summarized in Table 1. Figure 2 shows the locations of groundwater monitoring wells at the site. Appendix A includes the logs on which field data were recorded.

### 2.1 WATER LEVEL MEASUREMENTS

Depth to water measurements at site monitoring wells were measured on April 06, 2022, prior to sampling of the wells (Table 2). Depth to groundwater was measured with an electronic



water level sounder from a surveyed reference point marked on the top of each well casing and measurements were recorded to the nearest 0.01 foot. The depth to water of the Erie Canal, which borders the Site to the north, was also measured from a dedicated, non-surveyed point selected and recorded by field personnel during the April 2022 sampling event. The sounder was decontaminated between measurement locations by rinsing with an anionic detergent/distilled water mixture, followed by a distilled water rinse.

### 2.2 GROUNDWATER SAMPLING AND ANALYSIS

Groundwater samples were collected on April 06, 2022, in accordance with *Monitoring and Sampling Plan*. Monitoring wells were purged using low-flow sampling techniques prior to sampling using a peristaltic pump. Water quality parameters, including temperature, pH, specific conductance, oxidation-reduction potential, and dissolved oxygen were measured periodically during purging and were recorded on the sampling records. Samples were collected when parameter measurements changed less than 10 percent between three sequential measurements. Sampling records are provided in Appendix A.

Groundwater samples were collected into laboratory-provided sample containers immediately following purging. The sample containers were immediately labeled with the project number, well number, date, time, and analyses requested, stored in an ice cooled chest, and shipped to the analytical laboratory under Wood chain-of-custody procedures.

One blind field duplicate, one trip blank, and one equipment blank were collected for quality control purposes. These quality control samples were stored and delivered to the lab with the primary samples and were analyzed for the same parameters.

Eurofins TestAmerica Laboratories, Inc., of Amherst, New York, analyzed the samples for BTEX using United States Environmental Protection Agency (U.S. EPA) Method 8260C and the U.S. EPA 16-PAH list of polycyclic aromatic hydrocarbons (PAHs) using U.S. EPA Method 8270D. The samples were analyzed for total cyanide by Eurofins TestAmerica of Pittsburgh, PA, using Standard Method SM4500-CN-C/E. Both laboratories are accredited under the National Environmental Laboratory Accreditation Program.

### 2.3 Investigation Derived Waste

Groundwater purged from the monitoring wells was stored in a Department of Transportationapproved 55-gallon steel drum pending waste profiling. Following laboratory analysis and



profiling, the investigation derived waste was disposed of at an off-site, permitted facility in accordance with state and federal regulations.

### 3.0 RESULTS

This section presents the results from the groundwater monitoring activities, including groundwater elevation measurement and analytical testing.

#### 3.1 OCCURRENCE AND MOVEMENT OF GROUNDWATER

Measurements from the monitoring wells were used to evaluate the occurrence and movement of groundwater at the site.

On April 06, 2022, measured groundwater elevations in monitoring wells ranged from 501.89 (MW-9R) to 505.49 feet (MW-1). Depth to water measurements and water level elevations are summarized in Table 2. All elevations referenced are relative to the North American Vertical Datum 1988.

Figure 3 presents the potentiometric surface map for the water levels measured in the monitoring wells in April 2022. The potentiometric surface map indicates that groundwater flow generally remains toward the southeast across the site. The horizontal gradient was approximately 0.021 foot per foot (ft/ft) in April 2022.

The Erie Canal was dry beneath the measuring point during the April 2022 sampling event. The depth to water in the canal will be measured during future events at the same measuring point as previous events.

### 3.2 GROUNDWATER ANALYTICAL RESULTS

Groundwater samples were collected from six monitoring wells for BTEX, PAH, and total cyanide analysis on April 06, 2022. Groundwater evaluation criteria are the Ambient Water Quality Standards and Guidance Values (Technical & Operational Guidance Series 1.1.1, Division of Water 1998). Groundwater results are compared to the Standard Values (or Guidance Values, where Standard Values are not available) for groundwater as a drinking water source. Copies of laboratory reports are included in Appendix B. Analytical results and evaluation criteria for BTEX, PAHs, and total cyanide are presented in Table 3, Table 4, and Table 5, respectively, and on Figure 4. Compounds that were detected at concentrations exceeding their respective evaluation criteria are summarized below:



- Benzene (MW-5, MW-8R, and MW-10R)
- Ethylbenzene (MW-5 and MW-8R)
- Xylenes (MW-8R)
- Acenaphthene (MW-8R)
- Naphthalene (MW-8R)
- Toluene (MW-8R)
- Cyanide (MW-8R)

Groundwater results from April 2022 are generally lower than those from the recent sampling events. BTEX compounds in well MW-8R were observed at concentrations an order of magnitude lower than those observed in August 2021. While the concentrations in MW-8R have shown significant variability during recent monitoring events, they are within the range of historical concentrations at this well (AMEC Geomatrix, Inc., 2010).

### 4.0 DATA QUALITY REVIEW

Analytical data (Appendix B) were reviewed by the laboratory and by Wood. Consistent with the DER-10 Section 2.2 (NYSDEC, 2010b), this report meets the submittal requirements for a Category A data deliverable. The data quality review included accuracy and precision assessments for the samples collected in April 2022. Consistent with the Quality Assurance Project Plan included in the Monitoring and Sampling Plan, the data quality review was performed in accordance with the procedures specified in the U.S. EPA National Functional Guidelines for Inorganic Superfund Methods Data Review (U.S. EPA, 2020a) and the U.S. EPA National Functional Guidelines for Organic Superfund Methods Data Review (U.S. EPA, 2020b). Results of the data validation and precision assessment indicate the following:

• Analytical accuracy was evaluated by reviewing laboratory control sample/laboratory control sample duplicate (LCS/LCSD) recoveries and matrix spike/matrix spike duplicate (MS/MSD) recoveries (recoveries of spiked compounds expressed as a percentage of the true concentrations). Surrogate recoveries, holding times, and field and laboratory blank results for samples collected in April 2022 were also used to assess accuracy. No QC issues requiring data qualifiers were identified for the laboratory and field QC samples. Results for several analytes in multiple samples were qualified "J," indicating that the analyte was positively detected in the sample, but that the reported result is approximate because it was detected at a concentration below the reporting limit but above the method detection limit. Fluoranthene and Pyrene results from sample MW-5-040622 were



qualified with a "J-" to indicate a possible low bias due to surrogate recovery being outside QC limits. Non-detections for this sample were qualified as "UJ" for the following parameters, indicating that the compound was not detected but the reporting limit is considered estimated: Benzo[a]anthracene, Benzo[a]pyrene, Benzo[b]fluoranthene, Benzo[g,h,i]perylene, Benzo[k]fluoranthene, Chrysene, Dibenz(a,h)anthracene, Indeno[1,2,3-cd]pyrene.

• Data precision was evaluated by comparing analytical results from duplicate pairs and evaluating the calculated RPDs between primary and blind field duplicate samples. The blind field duplicate sample collected from MW-6 had no detections; therefore, RPD's were not able to be calculated on the April 2022 data.

Based upon the data quality review, the April 2022 results are considered valid and usable. The data are acceptable and can be used for decision-making purposes. Data completeness (the number of successful analyses relative to the number of requested analyses) was 100 percent for samples collected in April 2022.

### 5.0 SITE INSPECTION

During the semiannual groundwater sampling event, Wood field personnel performed a visual assessment of the soil cap in order to evaluate changes due to erosion, land use, construction, or other factors that may indicate a physical change in the soil cap. Observations were recorded on a "Soil Cap Inspection Form" (Appendix C).

The visual inspections did not indicate any damage to the physical integrity of the soil cap, the need for any repairs or maintenance, or changes to the land use.

### 6.0 PLANNED ACTIVITIES

The following activities are planned for the monitoring period of July to December 2022:

- The second 2022 semiannual groundwater monitoring event, which will include collection of depth to groundwater measurements and groundwater samples in accordance with the NYSDEC-approved groundwater monitoring program, will be performed.
- The second 2022 semiannual groundwater monitoring report will be submitted to the NYSDEC following the completion of groundwater monitoring and evaluation activities.

### 7.0 REFERENCES

AMEC Geomatrix, Inc., 2010. Feasibility Study Report, Albion Former Manufactured Gas Plant Site, Site No: 8-37-012, Orleans County, Albion, New York. February.



- Division of Water, 1998. Technical and Operational Guidance Series (TOGS) 1.1.1. June. Available at <a href="https://www.dec.ny.gov/docs/water-pdf/togs111.pdf">https://www.dec.ny.gov/docs/water-pdf/togs111.pdf</a>
- New York State Department of Environmental Conservation (NYSDEC), 2010a. Record of Decision. NM-Albion MGP State Superfund Project, Albion, Orleans County Site No.:837013. March.
- NYSDEC, 2010b. DER-10: Technical Guidance for Site Investigation and Remediation. May 3. Available at <a href="https://www.dec.ny.gov/docs/remediation-hudson-pdf/der10.pdf">https://www.dec.ny.gov/docs/remediation-hudson-pdf/der10.pdf</a>
- United States Environmental Protection Agency (U.S. EPA), 2020a. National Functional Guidelines for Inorganic Superfund Methods Data Review: OLEM 9240.1-66, EPA 540-R-20-006, November.
- U.S. EPA, 2020b. National Functional Guidelines for Organic Superfund Methods Data Review: OLEM 9240.0-51, EPA 540-R-20-005, November.
- Wood Environment & Infrastructure Solutions, Inc., 2018. Monitoring and Sampling Plan, National Grid Former Albion MGP Site, Albion, New York, December 21.

# wood.

**TABLES** 



### **GROUNDWATER MONITORING PROGRAM**

Former Albion MGP Site Albion, New York

Well ID	Water Level Monitoring Schedule	Water Quality Monitoring Schedule	Laboratory Analysis
MW-1 MW-5			
MW-6	6	<b>.</b>	BTEX by U.S. EPA 8260C, PAHs by U.S. EPA
MW-8R	Semiannual	Semiannual	8270D, Total Cyanide by SM4500-CN-C/E
MW-9R			. ,
MW-10R			

### **Abbreviations**

BTEX = benzene, toluene, ethylbenzene, xylenes

PAHs = polycyclic aromatic hydrocarbons

U.S. EPA = United States Environmental Protection Agency



TABLE 2

### **GROUNDWATER ELEVATIONS, APRIL 2022**

Former Albion MGP Site Albion, New York

Mall ID	Well Location	Date Measured	Measuring Point Elevation (NAVD 88)	Depth Below Measuring Point	Groundwater Elevation (NAVD 88)
Well ID	vveil Location			(feet)	
		11/19/2019	515.04	7.91	507.13
		9/22/2020	515.04	6.74	508.30
MW-1	Up-gradient	4/12/2021	515.04	9.76	505.28
		8/18/2021	515.04	6.72	508.32
		4/6/2022	515.04	9.55	505.49
		11/19/2019	513.14	7.92	505.22
		9/22/2020	513.14	7.55	505.59
MW-5	On-site	4/12/2021	513.14	9.22	503.92
		8/18/2021	513.14	7.31	505.83
		4/6/2022	513.14	9.2	503.94
		11/20/2019	510.74	5.46	505.28
		9/22/2020	510.74	6.39	504.35
MW-6	On-site	4/12/2021	510.74	5.94	504.80
		8/18/2021	510.74	5.86	504.88
		4/6/2022	510.74	6.2	504.54
		11/20/2019	515.53	11.84	503.69
		9/22/2020	515.53	11.67	503.86
MW-8R	On-site	4/12/2021	515.53	12.73	502.80
		8/18/2021	515.53	11.50	504.03
		4/6/2022	515.53	12.25	503.28
		11/20/2019	514.70	12.89	501.81
		9/22/2020	514.70	13.93	500.77
MW-9R	Down-gradient	4/12/2021	514.70	13.15	501.55
		8/18/2021	514.70	13.56	501.14
		4/6/2022	514.70	12.81	501.89
		11/19/2019	515.81	12.92	502.89
		9/22/2020	515.81	12.75	503.06
MW-10R	Down-gradient	4/12/2021	515.81	13.94	501.87
		8/18/2021	515.81	12.77	503.04
		4/6/2022	515.81	13.38	502.43



### **GROUNDWATER ELEVATIONS, APRIL 2022**

Former Albion MGP Site Albion, New York

### <u>Note</u>

 Wells were surveyed by Costich Engineering, Land Surveying & Landscape Architecture D.P.C. (Costich Engineering), a New York-licensed land surveyor in June 2018. Monitoring well MW-9R was surveyed on November 11, 2019 by Costich Engineering. Water elevations are relative to the North American Vertical Datum 1988 (NAVD 88).

### **Abbreviation**

NAVD 88 = North American Vertical Datum of 1988



TABLE 3

### GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS <sup>1,2</sup> APRIL 2022

Former Albion MGP Site Albion, New York

Results in micrograms per liter (µg/L)

					O			al	
Well ID	Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	m, p- Xylenes	o-Xylene	Xylenes, Total	Total BTEX
Well ID	MW-1-111919	11/19/2019	<1.0 <sup>3</sup>	<1.0	<1.0	<2.0	<1.0	<b>×</b> <2.0	<2.0
	MW-1-20200922	9/22/2020	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
MW-1	MW-1-041221	4/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
14144	MW-1-081821	8/18/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
	MW-1-040622	4/6/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
	MW-5-111919/DUP	11/19/2019	23 / 23	4.0 / 4.1	13 / 12	9.1 / 8.6	12 /11	21 / 20	61 / 59
	MW-5-20200922/DUP	9/22/2020	42 / 42	4.2 / 4.5	8.7 / 9.4	3.4 / 3.4	5.3 / 5.7	8.7 / 9.1	64 / 65
MW-5	MW-5-041221/DUP	4/12/2021	28 / 28	3.2 / 2.8	11 / 10	6.4 / 5.6	8.4 / 8.1	15 / 14	57 / 55
	MW-5-081821/DUP	8/18/2021	50 / 52	4.1 / 4.0	10 / 10	2.6 J / 2.4	3.3 / 3.2	5.9 / 5.6	70 / 72
	MW-5-040622	4/6/2022	14	1.0	5.2	1.2	3.3	4.5	25
	MW-6-112019	11/20/2019	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
	MW-6-20200923	9/23/2020	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
MW-6	MW-6-041221	4/12/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
	MW-6-081821	8/18/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
	MW-6-040622/DUP	4/6/2022	<1.0 / <1.0	<1.0 / <1.0	<1.0 / <1.0	<2.0 / <2.0	<1.0 / <1.0	<2.0 / <2.0	<2.0 / <2.0
	MW-8R-112019	11/20/2019	49	2.6	3.7	12	5.7	18	73
	MW-8R-20200923	9/23/2020	4,900	160	380	1,600	520	2,100	7,600
MW-8R	MW-8R-041321	4/13/2021	2,000	45 J	130	470	180	650	2,800
	MW-8R-081821	8/18/2021	4,700	210	380	1,300	510	1,800	7,100
	MW-8R-040622	4/6/2022	290	28	53	100	45	150	520
	MW-9R-112019	11/20/2019	<1.0	0.57 J	<1.0	<2.0	<1.0	<2.0	<2.0
	MW-9R-20200923	9/23/2020	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
MW-9R	MW-9R-041321	4/13/2021	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0
	MW-9R-081821	8/18/2021	<4.0	<4.0	<4.0	<8.0	<4.0	<8.0	<8.0
	MW-9R-040622	4/6/2022	<1.0	<1.0	<1.0	<2.0	<1.0	<2.0	<2.0



### GROUNDWATER ANALYTICAL RESULTS - VOLATILE ORGANIC COMPOUNDS <sup>1,2</sup> APRIL 2022

Former Albion MGP Site Albion, New York

#### Results in micrograms per liter (µg/L)

Well ID	Sample ID	Sample Date	Benzene	Toluene	Ethylbenzene	m,p-Xylenes	o-Xylene	Xylenes, Total	Total BTEX
	MW-10-111919	11/19/2019	14	<1.0	<1.0	<2.0	<1.0	<2.0	14
	MW-10R-20200922	9/22/2020	24	<1.0	<1.0	0.95 J	<1.0	0.95 J	25
MW-10R	MW-10R-041221	4/12/2021	23	<1.0	<1.0	<2.0	<1.0	<2.0	23
	MW-10R-081821	8/18/2021	20	<2.0	<2.0	<4.0	<2.0	<4.0	20
	MW-10R-040622	4/6/2022	4.1	<1.0	<1.0	<2.0	<1.0	<2.0	4.1
А	mbient Water Quality Standard	1	5	5	5	5	5		

#### **Notes**

- 1. Only detected compounds are presented. Detections are shown in **bold.** Highlighted cells indicate the concentration exceeds the respective screening criteria.
- 2. Samples analyzed for VOCs in accordance with U.S. EPA Methods 8260B or 8260C by Eurofins TestAmerica of Buffalo, New York.
- 3. "<" indicates constituent was not detected at a concentration equal to or greater than the laboratory reporting limit shown.
- 4. Division of Water 1998. Technical and Operational Guidance Series 1.1.1. June. Groundwater Standard Values for groundwater as a drinking source are shown where available; Guidance Values are shown where no Standard Value is available. Available at: https://www.dec.ny.gov/docs/water\_pdf/togs111.pdf

#### **Abbreviations**

-- = not applicable

BTEX = benzene, toluene, ethylbenzene, and xylenes

DUP = field duplicate sample

J = the analyte detected at a level less than the reporting limit and greater than or equal to the method detection limit

U.S. EPA = United States Environmental Protection Agency

VOCs = volatile organic compounds

### GROUNDWATER ANALYTICAL RESULTS - POLYCYCLIC AROMATIC HYDROCARBONS <sup>1,2</sup> APRIL 2022

Former Albion MGP Site Albion, New York

Results in micrograms per liter (µg/L)

							ке	sults in microgra	ms per liter (µg/	L)								
Well ID	Sample ID	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo [a]anthracene	Benzo (a) pyrene	Benzo(b)fluoranthene	Benzo(k)fluoranthene	Benzo [g,h,i]perylene	Chrysene	Dibenz[a,h]anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Phenanthrene	Pyrene	Naphthalene
	MW-1-111919	11/19/2019	<5.0 <sup>3</sup>	<5.0	<5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0
	MW-1-20200922	9/22/2020	24 J	20 J	5.8 J	<25	<25	<25	<25	<25	<25	<25	6.4 J	26	<25	32	4.2 J	14 J
MW-1	MW-1-041221	4/12/2021	< 5.0	< 5.0	<5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-1-081821	8/18/2021	< 5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-1-040622	4/6/2022	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-5-111919/DUP	11/19/2019	34 / 38	33 / 36	6.2 / 6.4 J	<5.0 / <25	<5.0 / <25	<5.0 / <25	<5.0 / <25	<5.0 / <25	<5.0 / <25	<5.0 / <25	5.6 / 5.4 J	45 / 46	<5.0 / <25	23 / 23 J	3.1 J / 3.5 J	24 / 25
	MW-5-20200922/DUP	9/22/2020	22 J / 22 J	19 J / 19 J	6.0 J / 6.0 J	<25 /<25	<25 /<25	<25 /<25	<25 /<25	<25 /<25	<25 /<25	<25 /<25	6.2 J / 6.2 J	24 J / 24 J	<25 /<25	29 J+ / 29 J+	4.0 J / 4.0 J	13 J / 13 J
MW-5	MW-5-041221/DUP	4/12/2021	16 J / 14 J	21 J / 17 J	3.7 J / 2.8 J	<25 /<25	<25 /<25	<25 /<25	<25 /<25	<25 /<25	<25 /<25	<25 /<25	3.9 J / 3.5 J	20 J / 17 J	<25 / <25	12 J / 6.7 J	2.2 J / 2.2 J	41 / 31
	MW-5-081821/DUP	8/18/2021	15 / 18	8.9 / 10	3.9 J / 3.9 J	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	4.8 J / 5.3	15 / 17	<5.0 / <5.0	10 / 7.7	2.7 J / 3.0 J	5.6 / 5.3
	MW-5-040622	4/6/2022	7.1	7.6	0.69	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ	<5.0 UJ	2.0 J-	7.3	<5.0 UJ	<5.0	1.1 J-	1.9
	MW-6-112019	11/20/2019	< 5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-6-20200923	9/23/2020	< 5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
MW-6	MW-6-041221	4/12/2021	< 5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-6-081821	8/18/2021	< 5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-6-040622/DUP	4/6/2022	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0	<5.0 / <5.0
	MW-8R-112019	11/20/2019	57	21 J	<25	<25	<25	<25	<25	<25	<25	<25	4.2 J	34	<25	33	2.1 J	900
	MW-8R-20200923	9/23/2020	95 J	8.1 J	7.6 J	<100	<100	<100	<100	<100	<100	<100	<100	41 J	<100	<100 U	<100	2,300
MW-8R	MW-8R-041321	4/13/2021	65 J	<500	< 500	< 500	<500	< 500	<500	<500	<500	<500	<500	< 500	<500	<500	< 500	860
	MW-8R-081821	8/18/2021	64 J	23 J	<250	<250	<250	<250	<250	<250	<250	<250	<250	42 J	<250	32 J	<250	1,900
	MW-8R-040622	4/6/2022	33	7.2	3.2	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	2.5	17	< 5.0	12	1.4	350
	MW-9R-112019	11/20/2019	6.1 J+	0.38 J+	0.65 J+	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	3.0 J+	< 5.0	2.8 J+	< 5.0	50
	MW-9R-20200923	9/23/2020	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
MW-9R	MW-9R-041321	4/13/2021	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25
	MW-9R-081821	8/18/2021	< 5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-9R-040622	4/6/2022	< 5.0	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	<5.0	< 5.0	<5.0
	MW-10-111919	11/19/2019	0.86 J	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	0.99 J
	MW-10R-20200922	9/22/2020	1.0 J+	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0 U	< 5.0	3.5 J+
MW-10R	MW-10R-041221	4/12/2021	0.73 J	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	3.4 J
	MW-10R-081821	8/18/2021	2.1 J	<5.0	<5.0	< 5.0	<5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	8.9
	MW-10R-040622	4/6/2022	0.52	< 5.0	<5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	< 5.0	<5.0	< 5.0	1.3
Ambie	nt Water Quality Standards a	and Guidance Values <sup>4</sup>	20		50	0.002	0.002	0.002	0.002		0.002		50	50	0.002	50	50	10

#### Notes

- 1. Only detected compounds are presented. Detections are shown in **bold**. Highlighted cells indicate the concentration exceeds the respective screening criteria.
- 2. Samples analyzed for PAHs in accordance with U.S. EPA Method 8270D by Eurofins TestAmerica of Buffalo, New York.
- 3. "<" indicates constituent was not detected at a concentration equal to or greater than the laboratory reporting limit shown.
- 4. Division of Water 1998. Technical and Operational Guidance Series 1.1.1. June. Groundwater Standard Values for groundwater as a drinking source are shown where available; Guidance Values are shown where no Standard Value is available. Available at https://www.dec.ny.gov/docs/water\_pdf/togs111.pdf

#### <u>Abbreviations</u>

-- = not applicable

DUP = field duplicate sample

J = the analyte detected at a concentration less than the reporting limit and greater than or equal to the method detection limit

J+ = the reported concentration may be estimated high

PAH = polycyclic aromatic hydrocarbons

UJ = The analyte was not detected but the reporting limit shown is considered estimated.

U.S. EPA = United States Environmental Protection Agency



## GROUNDWATER ANALYTICAL RESULTS - TOTAL CYANIDE 1,2 APRIL 2022

Former Albion MGP Site Albion, New York

Results in milligrams per liter (mg/L)

Well ID	Sample ID	Sample Date	Cyanide, Total	
	MW-1-111919	11/19/2019	0.098	
	MW-1-20200922	9/22/2020	0.11	
MW-1	MW-1-041221	4/12/2021	0.10	
	MW-1-081821	8/18/2021	0.10	
	MW-1-040622	4/6/2022	0.14	
	MW-5-111919/DUP	11/19/2019	0.16 / 0.16	
	MW-5-20200922/DUP	9/22/2020	0.21 / 0.22	
MW-5	MW-5-041221/DUP	4/12/2021	0.18 / 0.17	
	MW-5-081821/DUP	8/18/2021	0.21 / 0.22	
	MW-5-040622	4/6/2022	0.16	
	MW-6-112019	11/20/2019	0.041	
	MW-6-20200923	9/23/2020	0.068	
MW-6	MW-6-041221	4/12/2021	0.013	
	MW-6-081821	8/18/2021	0.051	
	MW-6-040622/DUP	4/6/2022	<0.010 <sup>3</sup> / <0.010	
	MW-8R-112019	11/20/2019	0.21	
	MW-8R-20200923	9/23/2020	0.15	
MW-8R	MW-8R-041321	4/13/2021	0.17	
	MW-8R-081821	8/18/2021	0.19	
	MW-8R-040622	4/6/2022	0.29	
	MW-9R-112019	11/20/2019	0.054	
	MW-9R-20200923	9/23/2020	0.080	
MW-9R	MW-9R-041321	4/13/2021	0.096	
	MW-9R-081821	8/18/2021	0.070	
	MW-9R-040622	4/6/2022	0.095	
	MW-10-111919	11/19/2019	0.010	
	MW-10R-20200922	9/22/2020	0.030	
MW-10R	MW-10R-041221	4/12/2021	0.024	
	MW-10R-081821	8/18/2021	0.027	
	MW-10R-040622	4/6/2022	< 0.010	
Ambi	ent Water Quality Standard	ds and Guidance Values <sup>4</sup>	0.2	



## GROUNDWATER ANALYTICAL RESULTS - TOTAL CYANIDE <sup>1,2</sup> APRIL 2022

Former Albion MGP Site Albion, New York

#### **Notes**

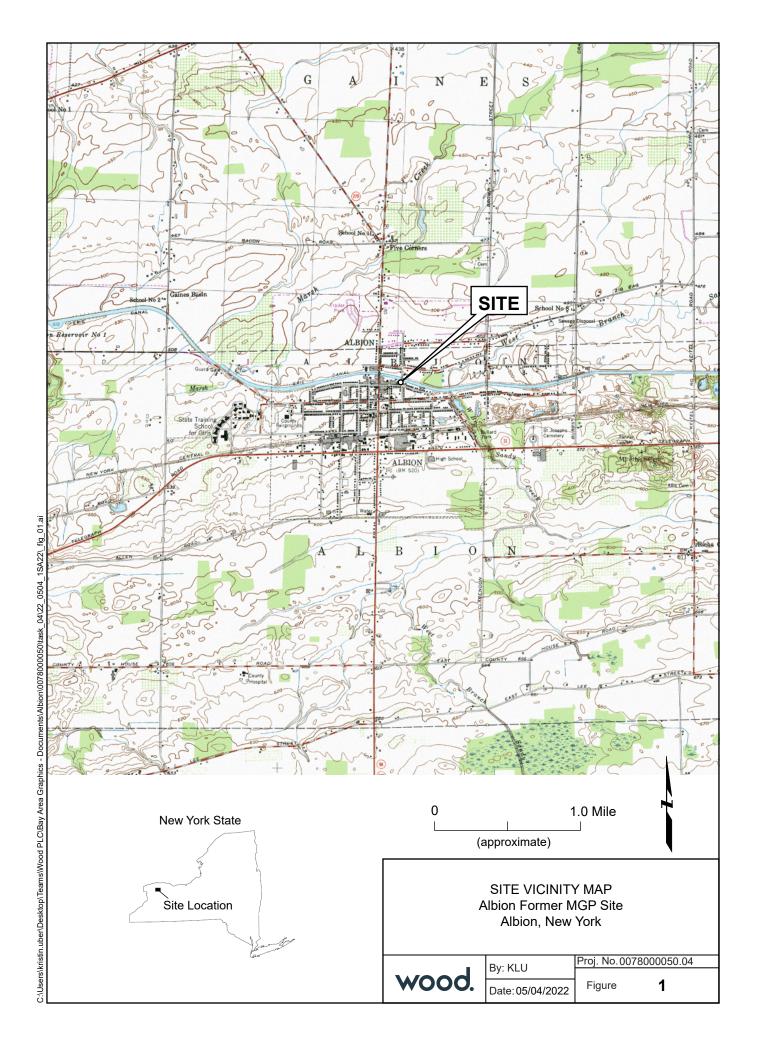
- Only detected compounds are presented. Detections are shown in **bold**.
  Highlighted cells indicate the concentration exceeds the respective screening criteria.
- 2. Samples analyzed Total Cyanide in accordance with Standard Method 4500-CN-C/E by Eurofins TestAmerica of North Canton, Ohio.
- 3. "<" indicates constituent was not detected at a concentration equal to or greater than the laboratory reporting limit shown.
- 4. Division of Water 1998. Technical and Operational Guidance Series 1.1.1. June. Groundwater Standard Value for groundwater as a drinking source is shown. Available at https://www.dec.ny.gov/docs/water\_pdf/togs111.pdf

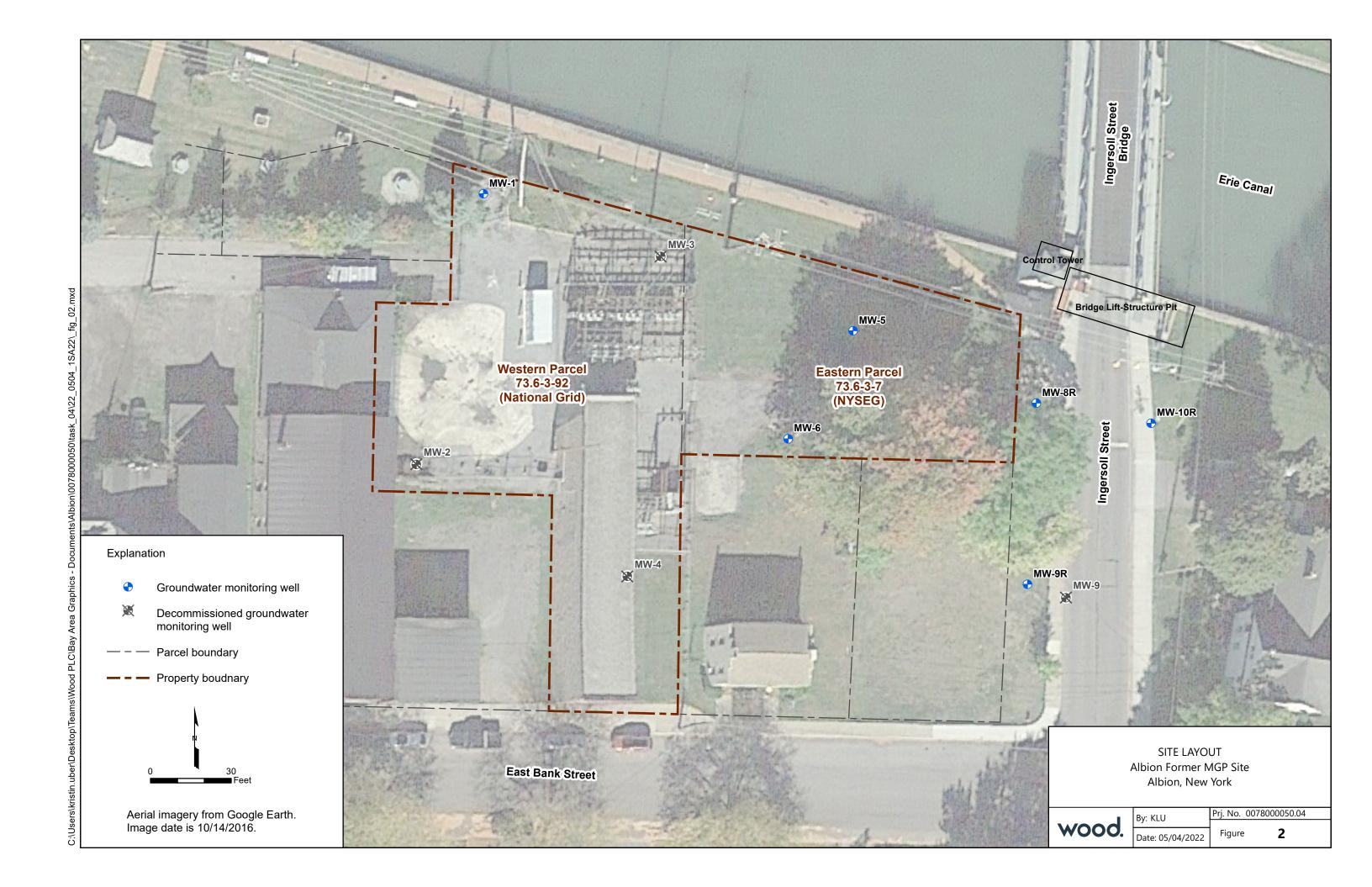
#### **Abbreviation**

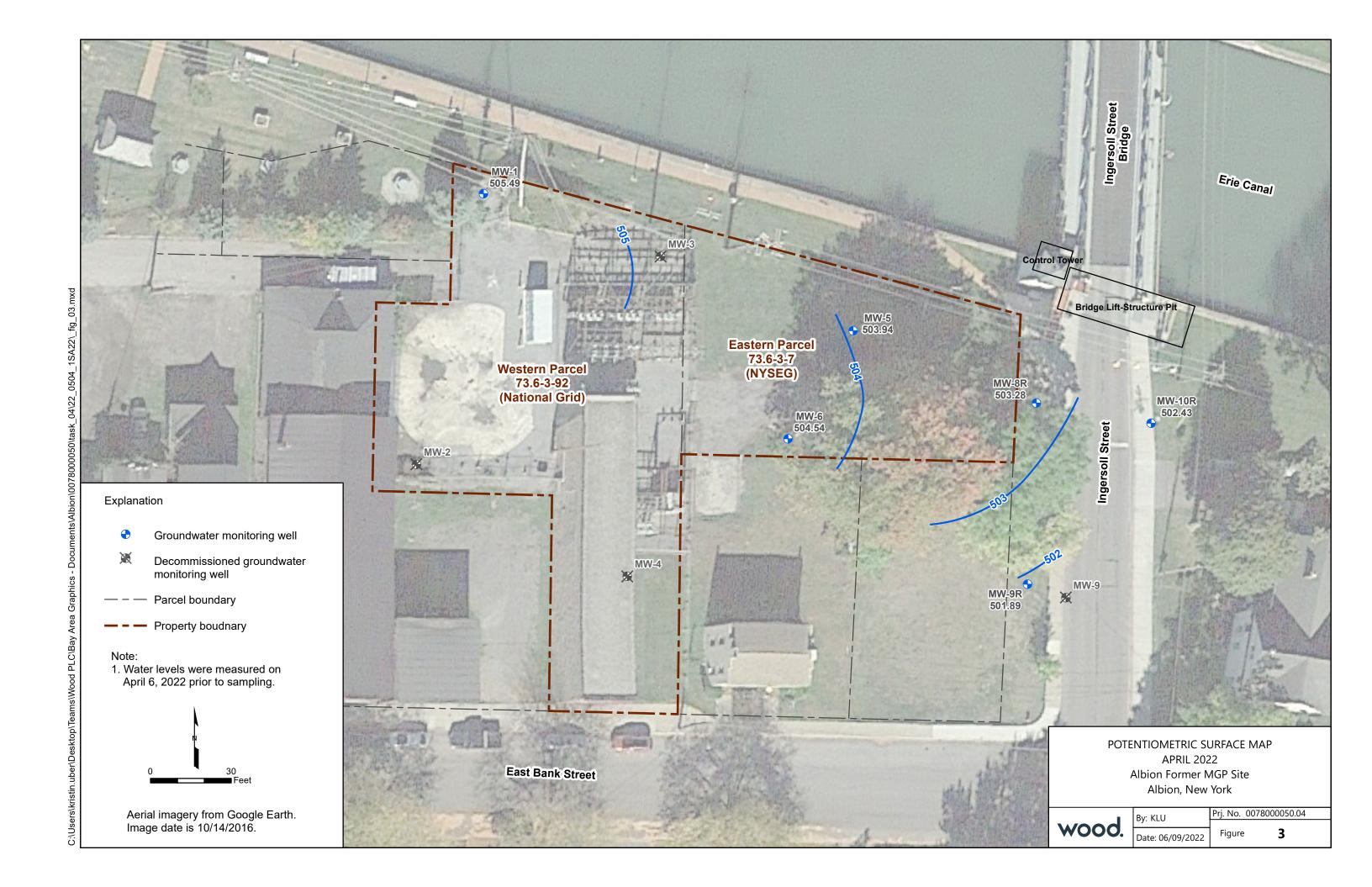
DUP = field duplicate

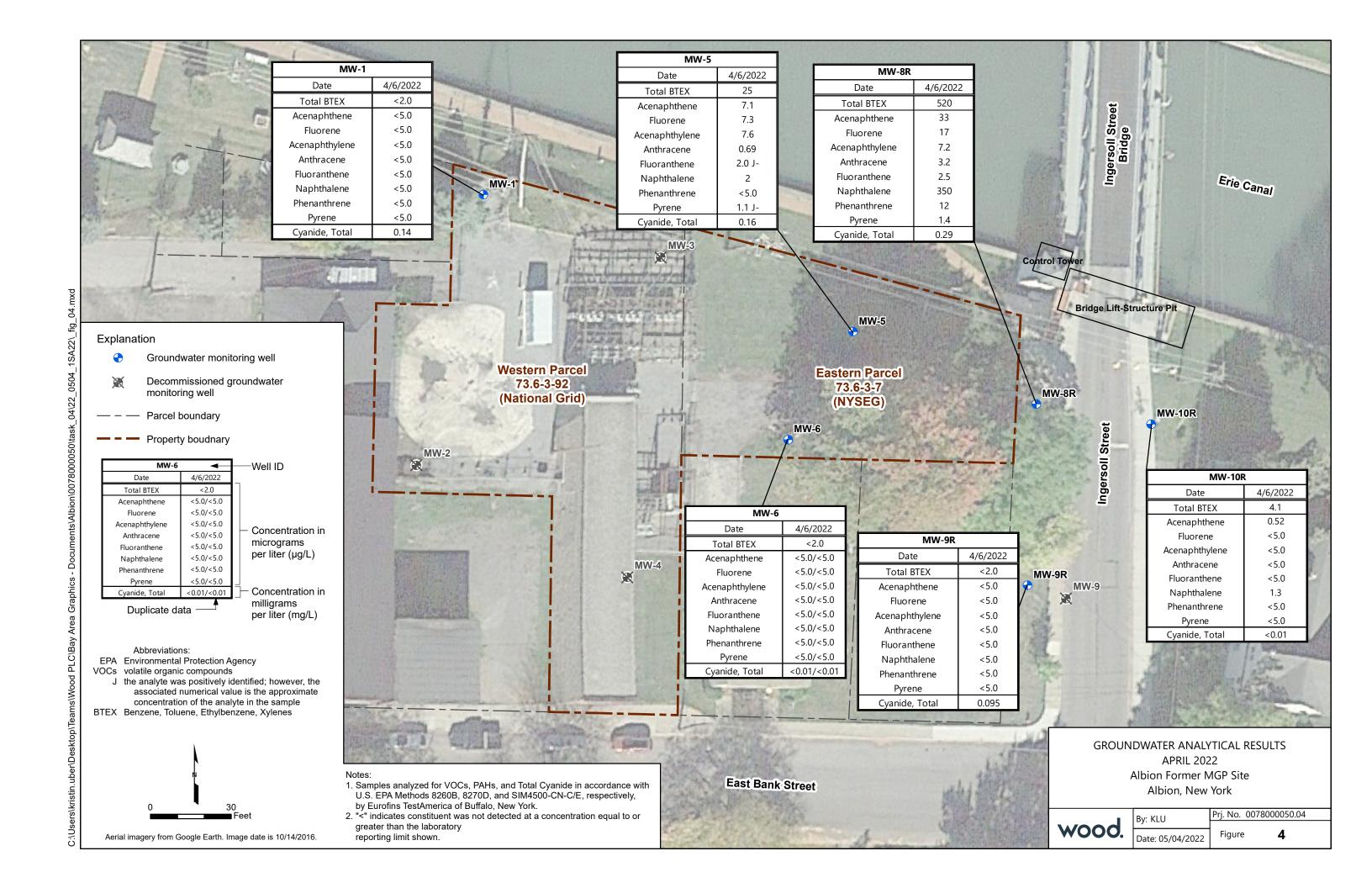
# wood.

**FIGURES** 











### **APPENDIX A**

**Groundwater Sampling Records** 

### wood

### MONITORING WELL **SAMPLE COLLECTION LOG**

**Project Name:** 

National Grid – Former MGP Site No. 837012, Albion, New York

Project/	Task	#:
00	7800	0050.03

Sampled By: A. Lyons

**Date** 

Received/Serviced

Date: 416122

**Date Calibrated** 

Well Number/ID: MW-6	Sample ID: MW-6- 040612	Duplicate ID: MW-50-040622
Mathad of Duraina	Method of Sampling:	Intake Depth:

**Field Equipment** 

Serial #/Rental ID

Low-Flow

Model

Equipment

Low-Flow

Multi-Probe	Her.in	U-	52	X80CG6	,41	415-122	4/6/22			
Turbidimeter										
		(19)12		asing Purge Vo	lume Cal	culations				
A Booth to Water / 1	3 A D	Matar		(B-A) = 9.16		Depth to Water After Sa	mpling = $6.37$ ft.			
A. Depth to water = $\underline{\psi}$										
B. Well Total Depth = 15. 29ft. E.			Volume	(C <sup>2</sup> x 0.0408 x D)	= <u>1.49</u> g	al. Actual Volume Purged (1	Actual Volume Purged (from below) = 4 400 gal/ml.			
	100 C						(If applicable, see pumping system volume calculation below)			
C. Well Diameter =	in.   F	. 3 Well	Volumes	$(3 \times E) = 4,4$	/_/_ gal.	(If applicable, see pumping	(If applicable, see pumping system			
Duran and Flour Call Valu	me V		N/A	ml		Pumping System Vo	lume Calculation			
Pump and Flow Cell Volu	ine v	p –	14/74							
Tubing Inside Diameter	D	=	N/A	in.		Volume (Vs)				
				in.		$V_S = V_P + \pi * D^2 / 4^3$	* L * 16.39 ml/in <sup>3</sup>			
Tubing Length L			N/A	111.						
Conversion from Inches <sup>3</sup>		16.39	ml							
		т.	w-1 O	lity Darameter	e (within	range for 3 consecutive re	adings if low-flow sampling)			
Purging Data			Water Quality Parameters (within range for 3 consecutive readings if low-flow sampling)							

	<b>Purging Data</b>	i	Water Quality Parameters (Within Tailige to 5 consecutive							
Time	Purge Volume	Flow Rate	Temp (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Remarks	
(24 hr)	□ gal Ø ml	□ /ml/min	Stabilization <sup>(1)</sup> :	± 3%	± 0.2 mg/L	± 0.2	± 20 mV	<10 NTU	Dru	
1425	Initial	Re	gin pug	e —	4				6.13	
1430	550	110	16.57	0.333	1.74	7.18	39	4.5	6,25	
	1160	1.0	13.07	0.705	0.08	7.48	36	3,9	6.30	
1435	1450	diameter and the second	12.04	0.704	0.00	7.22	41	3.3	6.37	
1440			11.67	0.706	0.00	7.04	43	4.3	6.37	
1445	2200		11.61		0.00	6.93	43	3.0	6.37	
1450	2750		11.70	0.709	0.00	6.89	43	3.2	6.37	
1455	3850		11.63		0.00	6.85	42	3.0	6.37	
1500		1		0		and	MW-50	-04 062		
1505	4400	•	Samples	mw-6-04	70022	Corio	1.7.0	0,002		

Sumple oderless, Cleur Remarks: TOC PID = NA

Purge pumping system volume before recording parameters on dedicated pumps only.

(1) Based on EPA low-flow sampling guidelines, ASTM D 6771-02, and research validated Best Practices (see SAP for details).

**Checked By:** Signature:

### wood

### MONITORING WELL

**Project Name:** 

National Grid - Former MGP Site No. 837012, Albion, New York

Project/Task #:
0078000050.03

Sampled By:

Date:

MONITORING WELL SAMPLE COLLECTION LOG		007800	0050.03	A	Lyans	416122	9
	Samp	e ID: MW- <b>≶</b>	040622		Duplicate ID:	N/A	
Method of Purging: Low-Flow	Metho	d of Sampling	Low-Flow		Intake Depth:	18.5' bgs	

			Field Equipmer	nt			
Equipment		Model	Serial #/Rental ID	Date Received/Serviced	Date Calibrated		
Multi-Probe Harba		a U-52	X8DCGG4L	415-122	4/6/12		
Turbidimeter	ch l	teriba					
		C	Casing Purge Volume Ca	alculations			
A. Depth to Water = $\mathcal{I}$	.21 ft.	D. Water Column	Depth to Water After Sa	mpling = 10.25 ft.			
			$(C^2 \times 0.0408 \times D) = 1.18$		Actual Volume Purged (from below) = 5,750 gal/ml.		
b. Well Total Deptil = 1	-	L. I Well Volume	(C X 0.0 100 X D) = 7		estem volume calculation below)		

C. Well Diameter =in.	F. 3 \	F. 3 Well Volumes (3 x E) = $3.5$			(If applicable, see pumping system volume calculation below)
Pump and Flow Cell Volume	Vp	=	N/A	ml	Pumping System Volume Calculation
Tubing Inside Diameter	D	=	N/A	in.	Pumping System Volume (Vs)
Tubing Length	L	=	N/A	in.	$V_S = V_P + \pi * D^2 / 4 * L * 16.39 \text{ ml/in}^3$
Conversion from Inches <sup>3</sup> to m	1 in <sup>3</sup>	_	16.39	mlV	s = ( ) + (3.1415 * ²/4) * ( ) * 16.39
Conversion from Theres to the	2				" 'S L. Sau compling)

Purging Data			ality Parameters	(within ran	ge for 3 co	onsecutive rea	idings if low-	now sampling)
Purge Volume	Flow Rate	Temp (°C)	Specific Conductance (µ8/cm)	Dissolved Oxygen (mg/L)	рН	Reduction Potential (mV)	Turbidity (NTU)	Remarks
□ gal ☐ ml	☑ ml/min	Stabilization <sup>(1)</sup> :	± 3%	± 0.2 mg/L	± 0.2	± 20 mV	<10 NTU	2160
Tnitial	Rec	in Diva						9.21
	115	1 . /. /	1.14	0.17	7.28	91	6.2	9.75
	11)		1		7.12	67	7.5	10.00
	-				7.01	55	5.3	10.05
			-,		6.95	41	3.6	10.05
					1	25	3.3	10.09
		11				10	2.5	10.15
	1		1 1			-4	1.5	10.15
	4	11133	1			-15	1.3	10.19
	Purge Volume.    gal   ml     S75	Purge Volume   Gam   Gam	Purge Volume	Purge Volume	Purge Volume	Purge Volume	Purge Volume	Purge Volume         Flow Rate graduation         Temp (°C)         Specific Conductance (µS/cm)         Dissolved Oxygen (mg/L)         pH         Oxidation Reduction Potential (mV)         Turbidity (NTU)           Initial         Beg m purge         ± 3%         ± 0.2 mg/L         ± 0.2         ± 20 mV         < 10 NTU

Remarks: TOC PID = 1//

Purge pumping system volume before recording parameters on dedicated pumps only.

(1) Based on EPA low-flow sampling guidelines, ASTM D 6771-02, and research validated Best Practices (see SAP for details).

**Checked By:** Signature:

9,	ADDIT	TONAL FI	ELD PARAM! )	CONTINUED FOR	TION LOG om frontsic	for MI( de)	CRO-PURGI	SAMPLIN	G
	Purging Data	1		Water Quality F			nge for 3 cons	ecutive readi	ngs)
Time (24 hr)	Purge Volume	Flow Rate	Temp (°C)	Specific Conductance (uS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Remarks
	- gar ta iiii	™I/min	Stabilization(1):	± 3%	± 0.2 mg/L	± 0.2	± 20 mV	<10 NTU	Drw
05	5,175	115	11.46	1.06	0.00	6.89	- 22	0.8	10.19
10	5750	115 Sampi	ed mu	1.06 AL 5-0400 5-04002	22				
		1	mw-	5-04062	22				
									(1000)
								-	
								194	
							A CONTRACTOR OF THE CONTRACTOR	1171	
	The state of the s	THE STATE OF THE S		4			10 min 10		
	9								
					PRINCIPAL PRINCI		and the state of t	A STATE OF THE STA	
	100	1				The second secon			
							The second secon		
			C .	1 1 - 1	1				
marks:			Sample c	lear, has od	W				

	WO	od			Project Name: National Grid – Former MGP Site No. 837012, Albion, New York					
	ONITOR	ING \	WEL	- 4230 (10)	Project/Task #: 0078000050.03			mpled By: 4. LyanS		ate: 1/6/2Z
Well Num		W-9R			le ID: MW-9	R- 0406	ZZ	Duplicate II	D: N/A	
Method of	f <b>Purging:</b> Lo	w-Flo	)W	Metho	od of Sampling	g: Low-F	low	Intake Dept	: <b>h:</b> 12' bg:	(changed dul to law PRW)
					Field E	quipment				
Equip	pment		Мо	del	Serial #/Rer	ntal ID		ate d/Serviced	Date	e Calibrated
Multi-Probe		Har	ba	0-52	X8DCGG	,4L	4151	22	4/61	22
Turbidimete	er	an H	or h	a						
				Ca	asing Purge Vo	lume Calc				
A. Depth to	Water = $12.8$	<u>}                                    </u>	D. V	Vater Column (	(B-A) = 4.39	_ ft.	Depth to	Water After Sa	mpling = $\sqrt{5}$	, <u>4/</u> ft
B. Well Total	Depth = <u>17</u> ,	20 ft.	E. 1	Well Volume (	C <sup>2</sup> x 0.0408 x D)	= <u>0,71  g</u> al.	Actual V	olume Purged (f	rom below) =	12,125 gal/61.
C. Well Diam	neter =2	in.	F. 3	Well Volumes	(3 x E) = Z,/	<u>4</u> gal.		able, see pumping s		
Pump and Flow Cell Volume $V_p = N/A$				= N/A	ml	Pumping System Volume Calculation				
Tubing Insi	de Diameter		D	= N/A	in.		Pu	imping System	Volume (Vs)	
Tubing Len	gth		L	= N/A	in.			$p + \pi * D^2 / 4^3$		·
Conversion	from Inches <sup>3</sup>	to ml	1 in	3 = 16.39	ml	Vs	= (	) + (3.1415 * _	²/4) ³	* ( ) * 16.39
	Purging Data			Water Qu	ality Parameter	s (within ra	inge for 3		adings if low	flow sampling)
<b>Time</b> (24 hr)	Purge Volume	Flow R	1	Temp (°C)	Specific Conductance (µS/cm)	Oxygen (mg/L)	nH	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Remarks
(21111)	□ gal ଢ़⁄ml	12/ml/r		Stabilization <sup>(1)</sup> :	1	± 0.2 mg/	L ± 0.2	± 20 mV	<10 NTU	107W
1115	Initial	74	iti	$\alpha l$						12.81
1120	625		5	9.83	2.15	9.61	5.84	239	1.7	13.15
1125	1,125	100	2	9.46	2.22	8,20	6.60		1.4	13.39
1130	1,625	100	)	9.93	2.19	7.38	6.80	197	1.5	13.50
1135	2,125	100		9.67	2.03	6.97	6.96	183	1-1	13.59
1140	2,625	100	-	9.64	1.87	6.36	7.08	173	1.0	13.70
1145	3,125	100		9.77	1.83	6.08	7,12		0.9	13.80
1150	3,625	100		9.83	1.79	5.37	7.10		0.9	13.90
1135	4,125		_	10.17	475 2.26	4.95	7.03	146	1.4	14.01
Remarks:	Remarks: TOC PID = N/A									
Purge pump	ing system volu	me befo	re rec	ording parame	ters on dedicated	pumps only.				
(1) Based on	EPA low-flow s	ampling	guidel	ines, ASTM D	5771-02, and rese	arch validate	d Best Prac	tices (see SAP fo	r details).	
Signature:	Melle	<u>v [j</u>	1	me		Checked E	By:			

Purging/Sampling Date: 4/6/22

Well Number/ID:\_\_\_MW-9R

### ADDITIONAL FIELD PARAMETER COLLECTION LOG for MICRO-PURGE SAMPLING (continued from frontside)

Purging Data			Water Quality Parameters (within range for 3 consecutive readings)						
Time (24 hr)	Purge Volume	Flow Rate	Temp (°C)	Specific Conductance ()\(\sigma\)(cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Remarks
12			Stabilization(1):	± 3%	± 0.2 mg/L	± 0.2	± 20 mV	<10 NTU	Dru
1200	4,6251	100	10.10	2.01	4.63	7.11	134	1.0	14.10
1205	5,125	100	10.04	1.88	4.37	7.15	129	1.0	14.19
1210	5,505	100	9.92	1.78	3.95	7.13	121	0.9	14,30
1215	6,125	100	9.87	1.76	3.79	7.13	119	0.8	14.40
1220	6,625	100	9.78	1.72	3.53	7.10	115	0.8	14.48
1225	7,125	100	9.77	1.70	3.24	7.08	112	0.9	14.54
1230	7,6251	100	9.80	1.70	3,09	7.10	109	1.0	14.58
1235	8,125	100	9.79	1.72	2.88	7.07	104	1.1	14.60
1240	8,625	100	9.98	1.80	2.59	7.05	106	1.4	14.69
1245	9,125	100	10.07	1.83	2.45	7.06	98	1.9	14.78
1256	9,625	100	10.11	1.85	2.30	7.06	96	2.4	14.83
1255	10,125	100	10.14	1.83	2,19	7,07	95	3.0	14,90
1300	10,625	100	10.24	1.79	2.05	7.08	94	4.5	15.00
1305	11,125	100	10.25	1.79	1.98	7.07	94	6.0	15.07
1310	11,625	100	10.28	1.81	1.90	7.07	93	80	15.11
1315	12,125	Samp	led mu	-9R-040	622				
	1								
	Tarana da Angela								
	Telephone and the second secon								

Remarks:	A Sum	ple clear	oderles

(1) Based on EPA low-flow sampling guidelines, ASTM D 6771-02, and research validated Best Practices (see SAP for details).

### wood

## MONITORING WELL SAMPLE COLLECTION LOG

**Project Name:** 

National Grid - Former MGP Site No. 837012, Albion, New York

Project/Task #:
0078000050.0

Sampled By:

Date:

Well Number/ID: N

MW-1

Sample ID:

MW-1-046622

**Duplicate ID:** 

N/A

Method of Purging:

Low-Flow

Method of Sampling:

Low-Flow

Intake Depth:

13' bgs

Field Equipment							
Equipment	Model	Serial #/Rental ID	Date Received/Serviced	Date Calibrated			
Multi-Probe	Hariba 11-52	WCR90L6V	4/5/22	416/22			

Turbidimeter un Hariba

### **Casing Purge Volume Calculations**

A. Depth to Water = $9.55$ ft.	D. Water Column (B-A) = $10.57$ ft.	Depth to Water After Sampling = $\frac{13.35}{\text{ft}}$ .
B. Well Total Depth = 20.08 ft.	E. 1 Well Volume ( $C^2 \times 0.0408 \times D$ ) = $\sqrt{23}$ gal.	Actual Volume Purged (from below) = 6250 gal/ml.
C. Well Diameter =2in.	F. 3 Well Volumes (3 x E) = gal.	(If applicable, see pumping system volume calculation below)

Pump and Flow Cell Volume	Vp	=	N/A	ml
Tubing Inside Diameter	D	=	N/A	in.
Tubing Length	L	=	N/A	in.

Pumping System Volume Calculation

Pumping System Volume (Vs)

 $V_S = V_P + \pi * D^2 / 4 * L * 16.39 \text{ ml/in}^3$ 

	<b>Purging Data</b>		Water Qua	s (within range for 3 consecutive readings if low-flow sa				flow sampling)	
Time (24 hr)	Purge Volume	Flow Rate	Temp (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Remarks
	□ gal ⊡∕ml	175 -	Stabilization <sup>(1)</sup> :	± 3%	± 0.2 mg/L	± 0.2	± 20 mV	<10 NTU	ptw.3
1120	Initial	THE	9.61	6.800	1.46	6,93	274	62.3	8,90
1125	875	125	9.58	0.80 2	0.84	6.99	286	29.0	11.44
1130	1500	1.25	9.56	0.807	0,49	6.92	288	22.7	12.66
1135	2125	100	10.15	0.821	0.46	6.91	289	16.8	11.78
1140	2625	100	10.93	0.825	0.48	6.89	285	9,5	11.59
1145	3125	125	11.50	0.827	0.46	7.19	168	8.0	11.49
1150	3750	125	11.37	0,829	6.38	7.19	767	6.1	11.44
1155	4375	125	11.18	0.829	0.35	7,23	768	4.5	11.39
1200	5'000	125	11.03	0.825	0,31	7,25	771	4.5	11.37

Remarks: TOC PID =

DTW-8.90, 11.44, Clear -ith sediment, no odor

Purge pumping system volume before recording parameters on dedicated pumps only.

(1) Based on EPA low-flow sampling guidelines, ASTM D 6771-02, and research validated Best Practices (see SAP for details).

Signature:

Checked By:

Purging/Sampling Date: 4-6-22 Well Number/ID: MW-1-040622 ADDITIONAL FIELD PARAMETER COLLECTION LOG for MICRO-PURGE SAMPLING (continued from frontside) **Purging Data** Water Quality Parameters (within range for 3 consecutive readings) Oxidation Specific **Dissolved** Reduction **Turbidity** Temp pН Purge Flow Rate Conductance Oxygen Time (°C) **Potential** (NTU) Volume □ gpm  $(\mu S/cm)$ (mg/L)Remarks (24 hr) (mV) I gal □ ml 13 ml/min Stabilization(1): ± 3% ± 0.2 mg/L ± 0.2 ± 20 mV <10 NTU DTW 11.35 1205 5625 125 10.93 0.826 6,27 4.7 7,25 273 Sampled MW-1-040622 6750 . . • Remarks:

(1) Based on EPA low-flow sampling guidelines, ASTM D 6771-02, and research validated Best Practices (see SAP for details).

### wood.

### MONITORING WELL

**Project Name:** 

National Grid - Former MGP Site No. 837012, Albion, New York

Project/Task #: 0078000050.03 Sampled By:

Date:

SAMPLE COLLECTION LOG

4-06-22

Well Number/ID:

**MW-10R** 

Sample ID: MW-10R-040622

**Duplicate ID:** N/A

Method of Purging:

Low-Flow

Method of Sampling:

Low-Flow

**Intake Depth:** 

16' bgs

**Field Equipment** 

			• •	
Equipment	Model	Serial #/Rental ID	Date Received/Serviced	Date Calibrated
Multi-Probe	Horiba U-52	WCR90LGV	415132	4/6/22
Turbidimeter	4 Horiba			

### **Casing Purge Volume Calculations**

A. Depth to Water = $13.45$ ft.	D. Water Column (B-A) = ft.	Depth to Water After Sampling = $/4$ , $4/$ ft.
B. Well Total Depth = 18.87ft.	E. 1 Well Volume (C <sup>2</sup> x 0.0408 x D) = <u>O . 8 %</u> gal.	Actual Volume Purged (from below) =
C. Well Diameter =in.	F. 3 Well Volumes (3 x E) = Z . 6 6 gal.	(If applicable, see pumping system volume calculation below)

Pump and Flow Cell Volume	Vp	=	N/A	ml
Tubing Inside Diameter	D	=	N/A	in.
Tubing Length	L	=	N/A	in.
		,		

**Pumping System Volume Calculation** 

Pumping System Volume (Vs)

 $V_S = V_P + \pi * D^2 / 4 * L * 16.39 \text{ ml/in}^3$ 

\_\_\_\_Vs = ( \_\_\_\_\_\_ ) + (3.1415 \* \_\_\_\_\_\_ ² / 4) \* ( \_\_\_\_\_ ) \* 16.39 Conversion from Inches<sup>3</sup> to ml  $| 1 \text{ in}^3 = 16.39$ 

	<b>Purging Data</b>		Water Qua	ality Parameters	rs (within range for 3 consecutive readings if low-flow sampling)				
Time (24 hr)	Purge Volume	Flow Rate	Temp (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Remarks
	□ gai □ IIII	La miyimii	Stabilization <sup>(1)</sup> :	± 3%	± 0.2 mg/L	± 0.2	± 20 mV	<10 NTU	DTL
1316	Initial	125	11.45	3,07	3,28	6.76	212	6,8	13.96
1315	625	125	11.16	3.30	3.03	6.74	264	6.5	14.00
13 20	1250	125	10.63	3.41	3.13	6.75	242	4.3	14.06
1325	1875	125	16.43	3,52	3.01	6.75	266	4.0	14.16
1330	2500	125	10.49	3,62	2.84	4.25	760	3.7	M,20
1335	3125	125	10.76	3.72	2.68	6.76	258	3.1	14.22
1340	3250	125	10.78	3.80	2.59	6.76	250	2.7	14,25
1345	3875	125	11.00	3.86	2,49	6,76	256	2,2	14.27
1350	4500	125	10,89	3,83	2.49	6,29	254	7.3	14.31

Remarks: TOC PID = 1357 - SAMPLED

Purge pumping system volume before recording parameters on dedicated pumps only.

(1) Based on EPA low-flow sampling guidelines, ASTM D 6771-02, and research validated Best Practices (see SAP for details).

Signature:

**Checked By:** 

### wood.

### MONITORING WELL SAMPLE COLLECTION LOG

**Project Name:** 

National Grid - Former MGP Site No. 837012, Albion, New York

Project/Task #: 0078000050.03
0078000050.03

Sampled By:

Date:

4-06-22
---------

Well Number/ID: MI

MW-8R

Sample ID:

MW-8R-040622

Duplicate ID:

N/A

Method of Purging:

Low-Flow

Method of Sampling:

Low-Flow

**Intake Depth:** 

16' bgs

Field Equipment							
Equipment	Model	Serial #/Rental ID	Date Received/Serviced	Date Calibrated			
Multi-Probe	Horiba V-52	WERGOLEV	415122	4/6/22			
Turbidimeter	(10 11 -)						

(Ja	Har	Lin							
Casing Purge Volume Calculations									
A. Depth to Water = $12.46$ ft.	D. Wa	ater (	Column (B	B-A) = 8/17	ft.	Depth to Water After Sampling = 13,48 ft.			
B. Well Total Depth = 20.63 ft.	E. 1 V	Well \	Volume (C	C2 x 0.0408 x D) =	<i>1,33</i> gal.	gal. Actual Volume Purged (from below) = 5075 gal/ml.			
C. Well Diameter =	F. 3 V	Well \	Volumes (	3 x E) = 4,0	o gal.	(If applicable, see pumping system volume calculation below)			
Pump and Flow Cell Volume	Vp	=	N/A	ml	%	Pumping System Volume Calculation			
Tubing Inside Diameter	D	=	N/A	in.		Pumping System Volume (V <sub>5</sub> )			
Tubing Length	L	=	N/A	in.		$V_S = V_P + \pi * D^2 / 4 * L * 16.39 \text{ ml/in}^3$			
Conversion from Inches <sup>3</sup> to ml	1 in <sup>3</sup>	=	16.39	ml	Vs =	() + (3.1415 *²/4) * () * 16.39			

	Purging Data		Water Qua	ality Parameters	(within rang	e for 3 co	onsecutive rea	adings if low-	flow sampling)
Time (24 hr)	Purge Volume	Flow Rate	Temp (°C)	Specific Conductance (µS/cm)	Dissolved Oxygen (mg/L)	рН	Oxidation Reduction Potential (mV)	Turbidity (NTU)	Remarks
	□ gal Ø ml	⊠ml/min	Stabilization(1):	± 3%	± 0.2 mg/L	± 0.2	± 20 mV	<10 NTU	
1450	Initial	125	18.64	1,51	1.89	7.06	86	2,2	12,60
1455	625	125	12.74	2,84	0.00	7.09	20	3.7	12.78
1500	1250	125	12,23	2.85	0.00	6.99	-23	3.3	17,92
1505	1875	125	12.30	2.85	6.00	6.96	-44	2.8	13.02
1510	2500	125	12.01	2.85	0.00	6.95	-69	1.4	13.14
1515	3025	115	11.78	7.84	0.00	6.94	-77	1.4	13.22
1520	3575	100	11.92	2.85	0.00	6.94	-91	0-9	13.30
1525	4075	100	11.80	7.80	6.00	6.94	-102	6.8	13,33
1530	4575	100	11.87	2,76	0.60	6.94	-111	1.0	13,42

Remarks: TOC PID = 15 35 - SAMPLED

Clear, Odor

Purge pumping system volume before recording parameters on dedicated pumps only.

(1) Based on EPA low-flow sampling guidelines, ASTM D 6771-02, and research validated Best Practices (see SAP for details).

Signature: (/ )/ ( . W

Checked By:



Sampler: _	A. Lyons / J. Hay	Date:	4/6/22
Weather:	55°F, Cloudy		

### **GROUNDWATER ELEVATIONS**

### Former Albion MGP Site Albion, New York

Well ID	Well Location	Date Measured	Time Measured	Measuring Point Elevation (NAVD 88)	Total Depth below measuring point (feet)	Depth Below Measuring Point (feet)
MW-1	Up-gradient	4/6/22	1115	515.04	20.08	9.55
MW-5	On-site	416122	1055	513.14	16.50	9,20
MW-6	On-site	4/6/22	1059	510.74	15.29	\$6.20
MW-8R	On-site	4/6/22	1105	515.53	20.63	12.25
MW-9R	Down-gradient	4/6/22	1050	514.70	17.20	12.81
MW-10R	Down-gradient	4/6/22	1052	515.81	18:87	13.38
Canal	Surface water <sup>2</sup>	4/6/22	1057		_	13.30

-

### Note

- Wells were surveyed by Costich Engineering, Land Surveying & Landscape Architecture D.P.C. (Costich Engineering), a New York-licensed land surveyor in June 2018. Monitoring well MW-9R was surveyed on November 11, 2019 by Costich Engineering. Water elevations are relative to the North American Vertical Datum 1988 (NAVD 88).
- 2. Measuring point for canal guaging outlined in field notes.

### <u>Abbreviation</u>

NAVD 88 = North American Vertical Datum of 1988



### **APPENDIX B**

Analytical Laboratory Report

## **ANALYTICAL REPORT**

Eurofins Buffalo 10 Hazelwood Drive Amherst, NY 14228-2298 Tel: (716)691-2600

Laboratory Job ID: 480-196578-1

Client Project/Site: Albion, NY Groundwater Project

Revision: 1

#### For:

eurofins

Wood E&I Solutions Inc 180 Grand Avenue Suite 1100 Oakland, California 94612

Attn: Mr. Alex Rosenthal

7

Authorized for release by: 4/26/2022 3:03:30 PM Rebecca Jones, Project Management Assistant I Rebecca.Jones@et.eurofinsus.com

Designee for

Brian Fischer, Manager of Project Management (716)504-9835

Brian.Fischer@et.eurofinsus.com

..... LINKS .....

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www.eurofinsus.com/Env

The test results in this report meet all 2003 NELAC, 2009 TNI, and 2016 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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### **Definitions/Glossary**

Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

#### **Qualifiers**

#### **GC/MS VOA**

Qualifier Qualifier Description

Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

#### **GC/MS Semi VOA**

Qualifier Qualifier Description

\*1 LCS/LCSD RPD exceeds control limits.

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.

#### **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)

TNTC Too Numerous To Count

J

4

5

6

7

8

4.0

12

14

4.6

#### **Case Narrative**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Job ID: 480-196578-1

**Laboratory: Eurofins Buffalo** 

Narrative

Job Narrative 480-196578-1

#### Revision

This report has been revised to removed the Method 8270D\_SIM 1,4-Dioxane results. The method was requested on the COC in error.

#### Receipt

The samples were received on 4/8/2022 10:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 2 coolers at receipt time were 3.6° C and 3.9° C.

#### GC/MS VOA

Method 8260C: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-8R-040622 (480-196578-4), (480-196578-F-4 MS) and (480-196578-F-4 MSD). Elevated reporting limits (RLs) are provided.

#### GC/MS Semi VOA

Method 8270D: Three surrogates are used for this analysis. The laboratory's SOP allows one of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: MW-5-040622 (480-196578-3). These results have been reported and qualified.

Method 8270D: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 480-621262 and analytical batch 480-621548 recovered outside control limits for the following analytes: Benzo[a]pyrene.

Method 8270D: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-8R-040622 (480-196578-4). 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.

#### **General Chemistry**

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

#### **Organic Prep**

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

Job ID: 480-196578-1

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10

12

10

15

Project/Site: Albion, NY Groundwater Project

Job ID: 480-196578-1

Client Sample ID: MW-1-040622 Lab Sample ID: 480-196578-1

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Cyanide, Total	0.14	0.010	0.0080 mg/L	1 SM 4500CN E	Total/NA

#### Client Sample ID: MW-6-040622 Lab Sample ID: 480-196578-2

No Detections.

#### Lab Sample ID: 480-196578-3 Client Sample ID: MW-5-040622

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	14		1.0	0.41	ug/L	1	_	8260C	Total/NA
Toluene	1.0		1.0	0.51	ug/L	1		8260C	Total/NA
Ethylbenzene	5.2		1.0	0.74	ug/L	1		8260C	Total/NA
m-Xylene & p-Xylene	1.2	J	2.0	0.66	ug/L	1		8260C	Total/NA
o-Xylene	3.3		1.0	0.76	ug/L	1		8260C	Total/NA
Xylenes, Total	4.5		2.0	0.66	ug/L	1		8260C	Total/NA
Total BTEX	25		2.0	1.0	ug/L	1		8260C	Total/NA
Acenaphthene	7.1		5.0	0.41	ug/L	1		8270D	Total/NA
Acenaphthylene	7.6		5.0	0.38	ug/L	1		8270D	Total/NA
Anthracene	0.69	J	5.0	0.28	ug/L	1		8270D	Total/NA
Fluoranthene	2.0	J	5.0	0.40	ug/L	1		8270D	Total/NA
Fluorene	7.3		5.0	0.36	ug/L	1		8270D	Total/NA
Naphthalene	1.9	J	5.0	0.76	ug/L	1		8270D	Total/NA
Pyrene	1.1	J	5.0	0.34	ug/L	1		8270D	Total/NA
Cyanide, Total	0.16		0.010	0.0080	mg/L	1		SM 4500CN E	Total/NA

## Client Sample ID: MW-8R-040622

Client Sample ID: MW-8R-				Lab Sa	am	ple ID: 4	80-196578-4		
- Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
D	200				/1		_	00000	T-4-1/NIA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D Me	ethod	Prep Type
Benzene	290		50	21	ug/L	50	82	60C	Total/NA
Toluene	28	J	50	26	ug/L	50	82	60C	Total/NA
Ethylbenzene	53		50	37	ug/L	50	82	60C	Total/NA
m-Xylene & p-Xylene	100		100	33	ug/L	50	82	60C	Total/NA
o-Xylene	45	J	50	38	ug/L	50	82	60C	Total/NA
Xylenes, Total	150		100	33	ug/L	50	82	60C	Total/NA
Total BTEX	520		100	50	ug/L	50	82	60C	Total/NA
Acenaphthene	33		5.0	0.41	ug/L	1	82	70D	Total/NA
Acenaphthylene	7.2		5.0	0.38	ug/L	1	82	70D	Total/NA
Anthracene	3.2	J	5.0	0.28	ug/L	1	82	70D	Total/NA
Fluoranthene	2.5	J	5.0	0.40	ug/L	1	82	70D	Total/NA
Fluorene	17		5.0	0.36	ug/L	1	82	70D	Total/NA
Phenanthrene	12		5.0	0.44	ug/L	1	82	70D	Total/NA
Pyrene	1.4	J	5.0	0.34	ug/L	1	82	70D	Total/NA
Naphthalene - DL	350		50	7.6	ug/L	10	82	70D	Total/NA
Cyanide, Total	0.29		0.010	0.0080	mg/L	1	SN	1 4500CN E	Total/NA

### Client Sample ID: MW-9R-040622

Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Cvanide, Total	0 095	0.010	0 0080 mg/L	1 SM 4500CN E	Total/NA

#### Client Sample ID: MW-10R-040622

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Analyte	Result Qualifier	RL	MDL Unit	Dil Fac D Method	Prep Type
Benzene	4.1	1.0	0.41 ug/L	1 8260C	Total/NA

This Detection Summary does not include radiochemical test results.

**Eurofins Buffalo** 

Lab Sample ID: 480-196578-5

Lab Sample ID: 480-196578-6

### **Detection Summary**

Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

Client Sam	ple ID:	MW-10R-	-040622	(Continued)	)
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Lab Sample ID: 480-196578-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total BTEX	4.1		2.0	1.0	ug/L	1		8260C	Total/NA
Acenaphthene	0.52	J	5.0	0.41	ug/L	1		8270D	Total/NA
Naphthalene	1.3	J	5.0	0.76	ug/L	1		8270D	Total/NA

No Detections.

Client Sample ID: EB-01-04062022 Lab Sample ID: 480-196578-8

No Detections.

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-196578-9

No Detections.

This Detection Summary does not include radiochemical test results.

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Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-1-040622

Lab Sample ID: 480-196578-1

Date Collected: 04/06/22 12:10 **Matrix: Water** Date Received: 04/08/22 10:00

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			04/10/22 00:23	1
Toluene	ND		1.0	0.51	ug/L			04/10/22 00:23	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/10/22 00:23	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			04/10/22 00:23	1
o-Xylene	ND		1.0	0.76	ug/L			04/10/22 00:23	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/10/22 00:23	1
Total BTEX	ND		2.0	1.0	ug/L			04/10/22 00:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120			-		04/10/22 00:23	1
1,2-Dichloroethane-d4 (Surr)	109		77 - 120					04/10/22 00:23	1
4-Bromofluorobenzene (Surr)	98		73 - 120					04/10/22 00:23	1
Dibromofluoromethane (Surr)	93		75 - 123					04/10/22 00:23	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		04/11/22 15:13	04/13/22 19:08	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 19:08	1
Anthracene	ND		5.0	0.28	ug/L		04/11/22 15:13	04/13/22 19:08	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 19:08	1
Benzo[a]pyrene	ND	*1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 19:08	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 19:08	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 19:08	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 19:08	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 19:08	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 19:08	1
Fluoranthene	ND		5.0	0.40	ug/L		04/11/22 15:13	04/13/22 19:08	1
Fluorene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 19:08	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 19:08	1
Naphthalene	ND		5.0	0.76	ug/L		04/11/22 15:13	04/13/22 19:08	1
Phenanthrene	ND		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 19:08	1
Pyrene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 19:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	84		48 - 120				04/11/22 15:13	04/13/22 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
2-Fluorobiphenyl	84		48 - 120	04/11/22 15:13	04/13/22 19:08	1	
Nitrobenzene-d5 (Surr)	86		46 - 120	04/11/22 15:13	04/13/22 19:08	1	
p-Terphenyl-d14 (Surr)	76		60 - 148	04/11/22 15:13	04/13/22 19:08	1	
<u> </u>							

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.14		0.010	0.0080	mg/L		04/19/22 11:30	04/20/22 13:35	1

Lab Sample ID: 480-196578-2 Client Sample ID: MW-6-040622 Date Collected: 04/06/22 15:05 **Matrix: Water** 

Date Received: 04/08/22 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	1.0	0.41	ug/L			04/10/22 00:46	1
Toluene	ND	1.0	0.51	ug/L			04/10/22 00:46	1
Ethylbenzene	ND	1.0	0.74	ug/L			04/10/22 00:46	1

**Eurofins Buffalo** 

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Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-6-040622

Date Collected: 04/06/22 15:05 Date Received: 04/08/22 10:00 Lab Sample ID: 480-196578-2

**Matrix: Water** 

Job ID: 480-196578-1

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND ND	2.0	0.66	ug/L			04/10/22 00:46	1
o-Xylene	ND	1.0	0.76	ug/L			04/10/22 00:46	1
Xylenes, Total	ND	2.0	0.66	ug/L			04/10/22 00:46	1
Total BTEX	ND	2.0	1.0	ug/L			04/10/22 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120		04/10/22 00:46	1
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		04/10/22 00:46	1
4-Bromofluorobenzene (Surr)	97		73 - 120		04/10/22 00:46	1
Dibromofluoromethane (Surr)	92		75 - 123		04/10/22 00:46	1

#### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND ND	5.0	0.41	ug/L		04/11/22 15:13	04/13/22 19:36	1
Acenaphthylene	ND	5.0	0.38	ug/L		04/11/22 15:13	04/13/22 19:36	1
Anthracene	ND	5.0	0.28	ug/L		04/11/22 15:13	04/13/22 19:36	1
Benzo[a]anthracene	ND	5.0	0.36	ug/L		04/11/22 15:13	04/13/22 19:36	1
Benzo[a]pyrene	ND *1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 19:36	1
Benzo[b]fluoranthene	ND	5.0	0.34	ug/L		04/11/22 15:13	04/13/22 19:36	1
Benzo[g,h,i]perylene	ND	5.0	0.35	ug/L		04/11/22 15:13	04/13/22 19:36	1
Benzo[k]fluoranthene	ND	5.0	0.73	ug/L		04/11/22 15:13	04/13/22 19:36	1
Chrysene	ND	5.0	0.33	ug/L		04/11/22 15:13	04/13/22 19:36	1
Dibenz(a,h)anthracene	ND	5.0	0.42	ug/L		04/11/22 15:13	04/13/22 19:36	1
Fluoranthene	ND	5.0	0.40	ug/L		04/11/22 15:13	04/13/22 19:36	1
Fluorene	ND	5.0	0.36	ug/L		04/11/22 15:13	04/13/22 19:36	1
Indeno[1,2,3-cd]pyrene	ND	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 19:36	1
Naphthalene	ND	5.0	0.76	ug/L		04/11/22 15:13	04/13/22 19:36	1
Phenanthrene	ND	5.0	0.44	ug/L		04/11/22 15:13	04/13/22 19:36	1
Pyrene	ND	5.0	0.34	ug/L		04/11/22 15:13	04/13/22 19:36	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	76	48 - 120	04/11/22 15:13	04/13/22 19:36	1
Nitrobenzene-d5 (Surr)	77	46 - 120	04/11/22 15:13	04/13/22 19:36	1
p-Terphenyl-d14 (Surr)	69	60 - 148	04/11/22 15:13	04/13/22 19:36	1

General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	
Cyanide, Total	ND		0.010	0.0080	mg/L		04/19/22 11:30	04/20/22 13:37	

Client Sample ID: MW-5-040622

Lab Sample ID: 480-196578-3 Date Collected: 04/06/22 14:10

Date Received: 04/08/22 10:00

Method: 8260C - Volatile Organic Compounds by GC/MS								
Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	14	1.0	0.41	ug/L			04/10/22 01:09	1
Toluene	1.0	1.0	0.51	ug/L			04/10/22 01:09	1
Ethylbenzene	5.2	1.0	0.74	ug/L			04/10/22 01:09	1
m-Xylene & p-Xylene	1.2 J	2.0	0.66	ug/L			04/10/22 01:09	1
o-Xylene	3.3	1.0	0.76	ug/L			04/10/22 01:09	1
Xylenes, Total	4.5	2.0	0.66	ug/L			04/10/22 01:09	1

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Dil Fac

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-5-040622

Date Collected: 04/06/22 14:10 Date Received: 04/08/22 10:00 Lab Sample ID: 480-196578-3

Analyzed

**Matrix: Water** 

Dil Fac

Job ID: 480-196578-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared
Total BTEX	25		2.0	1.0	ug/L		

Total BTEX	25	2.0	1.0 ug/L		04/10/22 01:09	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97	80 - 120			04/10/22 01:09	1
1,2-Dichloroethane-d4 (Surr)	107	77 - 120			04/10/22 01:09	1
4-Bromofluorobenzene (Surr)	95	73 - 120			04/10/22 01:09	1
Dibromofluoromethane (Surr)	90	75 - 123			04/10/22 01:09	1

Method: 8270D - Semivolatile	<b>Organic Co</b>	mpounds	(GC/MS)
Analyte	Result	Qualifier	RI

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	7.1		5.0	0.41	ug/L		04/11/22 15:13	04/13/22 20:03	1
Acenaphthylene	7.6		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 20:03	1
Anthracene	0.69	J	5.0	0.28	ug/L		04/11/22 15:13	04/13/22 20:03	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 20:03	1
Benzo[a]pyrene	ND	*1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 20:03	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 20:03	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 20:03	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 20:03	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 20:03	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 20:03	1
Fluoranthene	2.0	J	5.0	0.40	ug/L		04/11/22 15:13	04/13/22 20:03	1
Fluorene	7.3		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 20:03	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 20:03	1
Naphthalene	1.9	J	5.0	0.76	ug/L		04/11/22 15:13	04/13/22 20:03	1
Phenanthrene	ND		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 20:03	1
Pyrene	1.1	J	5.0	0.34	ug/L		04/11/22 15:13	04/13/22 20:03	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	55	48 - 120	04/11/22 15:13	04/13/22 20:03	1
Nitrobenzene-d5 (Surr)	53	46 - 120	04/11/22 15:13	04/13/22 20:03	1
p-Terphenyl-d14 (Surr)	49 S1-	60 <sub>-</sub> 148	04/11/22 15:13	04/13/22 20:03	1

<b>General</b>	Chemistry
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Contra Chomicaly										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Cyanide, Total	0.16		0.010	0.0080	mg/L		04/19/22 11:30	04/20/22 13:39	1	

Client Sample ID: MW-8R-040622

Date Collected: 04/06/22 15:25 Date Received: 04/08/22 10:00

Lab Sample ID: 480-196578-4

**Matrix: Water** 

Method: 8260C -	<b>Volatile Organ</b>	ic Compounds	by GC/MS

Method: 8260C - Volatile O	rganic Compounds	by GC/MS						
Analyte	Result Quali	fier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	290	50	21	ug/L			04/10/22 01:32	50
Toluene	28 J	50	26	ug/L			04/10/22 01:32	50
Ethylbenzene	53	50	37	ug/L			04/10/22 01:32	50
m-Xylene & p-Xylene	100	100	33	ug/L			04/10/22 01:32	50
o-Xylene	45 J	50	38	ug/L			04/10/22 01:32	50
Xylenes, Total	150	100	33	ug/L			04/10/22 01:32	50
Total BTEX	520	100	50	ug/L			04/10/22 01:32	50

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-8R-040622

Date Collected: 04/06/22 15:25 Date Received: 04/08/22 10:00 Lab Sample ID: 480-196578-4

04/11/22 15:13 04/13/22 20:31

Matrix: Water

Job ID: 480-196578-1

Surrogate	%Recovery Qualifier	Limits	Prepared Analyzed	Dil Fac
Toluene-d8 (Surr)	100	80 - 120	04/10/22 01	32 50
1,2-Dichloroethane-d4 (Surr)	106	77 - 120	04/10/22 01	32 50
4-Bromofluorobenzene (Surr)	97	73 - 120	04/10/22 01	32 50
Dibromofluoromethane (Surr)	92	75 - 123	04/10/22 01	32 50

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	33		5.0	0.41	ug/L		04/11/22 15:13	04/13/22 20:31	1
Acenaphthylene	7.2		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 20:31	1
Anthracene	3.2	J	5.0	0.28	ug/L		04/11/22 15:13	04/13/22 20:31	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 20:31	1
Benzo[a]pyrene	ND	*1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 20:31	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 20:31	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 20:31	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 20:31	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 20:31	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 20:31	1
Fluoranthene	2.5	J	5.0	0.40	ug/L		04/11/22 15:13	04/13/22 20:31	1
Fluorene	17		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 20:31	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 20:31	1
Phenanthrene	12		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 20:31	1
Pyrene	1.4	J	5.0	0.34	ug/L		04/11/22 15:13	04/13/22 20:31	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	86		48 - 120				04/11/22 15:13	04/13/22 20:31	1
Nitrobenzene-d5 (Surr)	74		46 - 120				04/11/22 15:13	04/13/22 20:31	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	350		50	7.6	ug/L		04/11/22 15:13	04/19/22 09:48	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	84		48 - 120				04/11/22 15:13	04/19/22 09:48	10
Nitrobenzene-d5 (Surr)	66		46 - 120				04/11/22 15:13	04/19/22 09:48	10
p-Terphenyl-d14 (Surr)	69		60 - 148				04/11/22 15:13	04/19/22 09:48	10
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.29		0.010	0.0080	mg/L		04/19/22 11:30	04/20/22 13:40	1

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Date Collected: 04/06/22 13:15 Date Received: 04/08/22 10:00

p-Terphenyl-d14 (Surr)

Method: 8260C - Volatile C	Organic Compounds by GC/	MS				
Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Benzene	ND ND	1.0	0.41 ug/L	<del></del> <del>_</del>	04/10/22 01:55	1
Toluene	ND	1.0	0.51 ug/L		04/10/22 01:55	1
Ethylbenzene	ND	1.0	0.74 ug/L		04/10/22 01:55	1
m-Xylene & p-Xylene	ND	2.0	0.66 ug/L		04/10/22 01:55	1
o-Xylene	ND	1.0	0.76 ug/L		04/10/22 01:55	1

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**Matrix: Water** 

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4/26/2022 (Rev. 1)

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Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-9R-040622

Date Collected: 04/06/22 13:15 Date Received: 04/08/22 10:00 Lab Sample ID: 480-196578-5

Matrix: Water

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		2.0	0.66	ug/L			04/10/22 01:55	1
Total BTEX	ND		2.0	1.0	ug/L			04/10/22 01:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120					04/10/22 01:55	1
1,2-Dichloroethane-d4 (Surr)	112		77 - 120					04/10/22 01:55	1
4-Bromofluorobenzene (Surr)	94		73 - 120					04/10/22 01:55	1
Dibromofluoromethane (Surr)	94		75 - 123					04/10/22 01:55	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		04/11/22 15:13	04/13/22 20:58	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 20:58	1
Anthracene	ND		5.0	0.28	ug/L		04/11/22 15:13	04/13/22 20:58	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 20:58	1
Benzo[a]pyrene	ND	*1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 20:58	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 20:58	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 20:58	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 20:58	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 20:58	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 20:58	1
Fluoranthene	ND		5.0	0.40	ug/L		04/11/22 15:13	04/13/22 20:58	1
Fluorene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 20:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 20:58	1
Naphthalene	ND		5.0	0.76	ug/L		04/11/22 15:13	04/13/22 20:58	1
Phenanthrene	ND		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 20:58	1
Pyrene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 20:58	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	83		48 - 120				04/11/22 15:13	04/13/22 20:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	83		48 - 120	04/11/22 15:13	04/13/22 20:58	1
Nitrobenzene-d5 (Surr)	86		46 - 120	04/11/22 15:13	04/13/22 20:58	1
p-Terphenyl-d14 (Surr)	74		60 - 148	04/11/22 15:13	04/13/22 20:58	1
_						

General Chemistry								
Analyte	Result Qu	ıalifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.095	0.010	0.0080	mg/L		04/19/22 11:30	04/20/22 14:36	1

Date Received: 04/08/22 10:00

Analyte	Result Qualifier	RL	MDL Unit	D Prepared	Analyzed	Dil Fac
Benzene	4.1	1.0	0.41 ug/L	<u> </u>	04/10/22 02:18	1
Toluene	ND	1.0	0.51 ug/L		04/10/22 02:18	1
Ethylbenzene	ND	1.0	0.74 ug/L		04/10/22 02:18	1
m-Xylene & p-Xylene	ND	2.0	0.66 ug/L		04/10/22 02:18	1
o-Xylene	ND	1.0	0.76 ug/L		04/10/22 02:18	1
Xylenes, Total	ND	2.0	0.66 ug/L		04/10/22 02:18	1
Total BTEX	4.1	2.0	1.0 ug/L		04/10/22 02:18	1

Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-10R-040622

Date Collected: 04/06/22 13:55 Date Received: 04/08/22 10:00 Lab Sample ID: 480-196578-6

04/19/22 11:30 04/20/22 14:37

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		04/10/22 02:18	1
1,2-Dichloroethane-d4 (Surr)	110		77 - 120		04/10/22 02:18	1
4-Bromofluorobenzene (Surr)	99		73 - 120		04/10/22 02:18	1
Dibromofluoromethane (Surr)	94		75 - 123		04/10/22 02:18	1

Method: 8270D - Semivola	atile Organic Co	mnounds	(GC/MS)						
Analyte	_	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	0.52	J	5.0	0.41	ug/L		04/11/22 15:13	04/13/22 21:26	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 21:26	1
Anthracene	ND		5.0	0.28	ug/L		04/11/22 15:13	04/13/22 21:26	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 21:26	1
Benzo[a]pyrene	ND	*1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 21:26	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 21:26	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 21:26	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 21:26	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 21:26	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 21:26	1
Fluoranthene	ND		5.0	0.40	ug/L		04/11/22 15:13	04/13/22 21:26	1
Fluorene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 21:26	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 21:26	1
Naphthalene	1.3	J	5.0	0.76	ug/L		04/11/22 15:13	04/13/22 21:26	1
Phenanthrene	ND		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 21:26	1
Pyrene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 21:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	81		48 - 120				04/11/22 15:13	04/13/22 21:26	1
Nitrobenzene-d5 (Surr)	77		46 - 120				04/11/22 15:13	04/13/22 21:26	1
p-Terphenyl-d14 (Surr)	60		60 - 148				04/11/22 15:13	04/13/22 21:26	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: MW-50-040622

Date Collected: 04/06/22 12:00

Lab Sample ID: 480-196578-7

Matrix: Water

0.010

0.0080 mg/L

ND

Date Received: 04/08/22 10:00

Cyanide, Total

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			04/10/22 02:41	1
Toluene	ND		1.0	0.51	ug/L			04/10/22 02:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			04/10/22 02:41	1
m-Xylene & p-Xylene	ND		2.0	0.66	ug/L			04/10/22 02:41	1
o-Xylene	ND		1.0	0.76	ug/L			04/10/22 02:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			04/10/22 02:41	1
Total BTEX	ND		2.0	1.0	ug/L			04/10/22 02:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	98		80 - 120					04/10/22 02:41	1
1,2-Dichloroethane-d4 (Surr)	107		77 - 120					04/10/22 02:41	1
4-Bromofluorobenzene (Surr)	98		73 - 120					04/10/22 02:41	1

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Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-50-040622

Date Collected: 04/06/22 12:00 Date Received: 04/08/22 10:00 Lab Sample ID: 480-196578-7

Lab Sample ID: 480-196578-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		04/11/22 15:13	04/13/22 21:53	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 21:53	1
Anthracene	ND		5.0	0.28	ug/L		04/11/22 15:13	04/13/22 21:53	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 21:53	1
Benzo[a]pyrene	ND	*1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 21:53	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 21:53	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 21:53	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 21:53	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 21:53	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 21:53	1
Fluoranthene	ND		5.0	0.40	ug/L		04/11/22 15:13	04/13/22 21:53	1
Fluorene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 21:53	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 21:53	1
Naphthalene	ND		5.0	0.76	ug/L		04/11/22 15:13	04/13/22 21:53	1
Phenanthrene	ND		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 21:53	1
Pyrene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 21:53	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	89		48 - 120				04/11/22 15:13	04/13/22 21:53	1
Nitrobenzene-d5 (Surr)	89		46 - 120				04/11/22 15:13	04/13/22 21:53	1
p-Terphenyl-d14 (Surr)	78		60 - 148				04/11/22 15:13	04/13/22 21:53	1

AnalyteResult<br/>Cyanide, TotalQualifierRL<br/>0.010MDL<br/>0.010Unit<br/>mg/LD<br/>0.080Prepared<br/>04/19/22 11:30Analyzed<br/>04/20/22 14:39Dil Fac<br/>04/20/22 14:39

Client Sample ID: EB-01-04062022 Date Collected: 04/06/22 15:30

Date Received: 04/08/22 10:00

Analyte	Result Qu	ıalifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	1.0	0.41	ug/L			04/10/22 03:04	1
Toluene	ND	1.0	0.51	ug/L			04/10/22 03:04	1
Ethylbenzene	ND	1.0	0.74	ug/L			04/10/22 03:04	1
m-Xylene & p-Xylene	ND	2.0	0.66	ug/L			04/10/22 03:04	1
o-Xylene	ND	1.0	0.76	ug/L			04/10/22 03:04	1
Xylenes, Total	ND	2.0	0.66	ug/L			04/10/22 03:04	1
Total BTEX	ND	2.0	1.0	ug/L			04/10/22 03:04	1
Surrogate	%Recovery Qu	ualifier Limits				Prepared	Analyzed	Dil Fac
Toluono de (Surr)		90 120					04/40/22 02:04	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	
Toluene-d8 (Surr)	100		80 - 120		04/10/22 03:04	1	
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		04/10/22 03:04	1	
4-Bromofluorobenzene (Surr)	100		73 - 120		04/10/22 03:04	1	
Dibromofluoromethane (Surr)	93		75 - 123		04/10/22 03:04	1	

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**Matrix: Water** 

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Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Lab Sample ID: 480-196578-8 Client Sample ID: EB-01-04062022

Date Collected: 04/06/22 15:30 Date Received: 04/08/22 10:00

**Matrix: Water** 

Job ID: 480-196578-1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		04/11/22 15:13	04/13/22 22:21	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 22:21	1
Anthracene	ND		5.0	0.28	ug/L		04/11/22 15:13	04/13/22 22:21	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 22:21	1
Benzo[a]pyrene	ND	*1	5.0	0.47	ug/L		04/11/22 15:13	04/13/22 22:21	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 22:21	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 22:21	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 22:21	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 22:21	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 22:21	1
Fluoranthene	ND		5.0	0.40	ug/L		04/11/22 15:13	04/13/22 22:21	1
Fluorene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 22:21	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 22:21	1
Naphthalene	ND		5.0	0.76	ug/L		04/11/22 15:13	04/13/22 22:21	1
Phenanthrene	ND		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 22:21	1
Pyrene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 22:21	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	79		48 - 120				04/11/22 15:13	04/13/22 22:21	1
Nitrobenzene-d5 (Surr)	77		46 - 120				04/11/22 15:13	04/13/22 22:21	1
p-Terphenyl-d14 (Surr)	102		60 - 148				04/11/22 15:13	04/13/22 22:21	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0080	ma/L		04/19/22 11:30	04/20/22 13:51	

**Client Sample ID: TRIP BLANK** 

Date Collected: 04/06/22 07:00 Date Received: 04/08/22 10:00

Lab Sample ID: 480-196578-9 **Matrix: Water** 

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND ND	1.0	0.41	ug/L			04/10/22 03:27	1
Toluene	ND	1.0	0.51	ug/L			04/10/22 03:27	1
Ethylbenzene	ND	1.0	0.74	ug/L			04/10/22 03:27	1
m-Xylene & p-Xylene	ND	2.0	0.66	ug/L			04/10/22 03:27	1
o-Xylene	ND	1.0	0.76	ug/L			04/10/22 03:27	1
Xylenes, Total	ND	2.0	0.66	ug/L			04/10/22 03:27	1
Total BTEX	ND	2.0	1.0	ug/L			04/10/22 03:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepar	red	Analyzed	Dil Fac	:
Toluene-d8 (Surr)	99		80 - 120		04	4/10/22 03:27	1	
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		04	4/10/22 03:27	1	
4-Bromofluorobenzene (Surr)	97		73 - 120		04	4/10/22 03:27	1	
Dibromofluoromethane (Surr)	94		75 - 123		04	4/10/22 03:27	1	

### **Surrogate Summary**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

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

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

				ercent Surre	•
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-196578-1	MW-1-040622	98	109	98	93
480-196578-2	MW-6-040622	98	110	97	92
480-196578-3	MW-5-040622	97	107	95	90
480-196578-4	MW-8R-040622	100	106	97	92
480-196578-4 MS	MW-8R-040622	97	112	96	92
480-196578-4 MSD	MW-8R-040622	98	104	98	90
480-196578-5	MW-9R-040622	98	112	94	94
480-196578-6	MW-10R-040622	97	110	99	94
480-196578-7	MW-50-040622	98	107	98	91
480-196578-8	EB-01-04062022	100	108	100	93
480-196578-9	TRIP BLANK	99	108	97	94
LCS 480-621089/6	Lab Control Sample	98	106	97	92
MB 480-621089/8	Method Blank	99	109	95	95

#### Surrogate Legend

TOL = Toluene-d8 (Surr)

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene (Surr)

DBFM = Dibromofluoromethane (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

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

			Pe	ercent Surrog	jate Recovery
		FBP	NBZ	TPHd14	
Lab Sample ID	Client Sample ID	(48-120)	(46-120)	(60-148)	
480-196578-1	MW-1-040622	84	86	76	
480-196578-2	MW-6-040622	76	77	69	
480-196578-3	MW-5-040622	55	53	49 S1-	
480-196578-4	MW-8R-040622	86	74	69	
480-196578-4 - DL	MW-8R-040622	84	66	69	
480-196578-5	MW-9R-040622	83	86	74	
480-196578-6	MW-10R-040622	81	77	60	
480-196578-7	MW-50-040622	89	89	78	
480-196578-8	EB-01-04062022	79	77	102	
LCS 480-621262/2-A	Lab Control Sample	92	82	112	
LCSD 480-621262/3-A	Lab Control Sample Dup	84	88	98	
MB 480-621262/1-A	Method Blank	105	96	119	

Surrogate Legend

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

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Job ID: 480-196578-1

### **Isotope Dilution Summary**

Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

Method: 8270D SIM ID - Semivolatile Organic Compounds (GC/MS SIM / Isotope Dilution)

Matrix: Water Prep Type: Total/NA

		DXE	
Lab Sample ID	Client Sample ID	(15-110)	
480-196578-1	MW-1-040622	40	
480-196578-2	MW-6-040622	39	
480-196578-3	MW-5-040622	36	
480-196578-4	MW-8R-040622	35	
480-196578-5	MW-9R-040622	40	
480-196578-6	MW-10R-040622	40	
480-196578-7	MW-50-040622	38	
480-196578-8	EB-01-04062022	36	
LCS 480-621020/2-A	Lab Control Sample	37	
LCSD 480-621020/3-A	Lab Control Sample Dup	40	
MB 480-621020/1-A	Method Blank	37	
Surrogate Legend			

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Project/Site: Albion, NY Groundwater Project

Job ID: 480-196578-1

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

Lab Sample ID: MB 480-621089/8

**Matrix: Water** 

**Analysis Batch: 621089** 

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

MB MB Analyte Result Qualifier RL **MDL** Unit Prepared Dil Fac Analyzed Benzene ND 1.0 0.41 ug/L 04/10/22 00:00 Toluene ND 1.0 0.51 ug/L 04/10/22 00:00 Ethylbenzene ND 1.0 0.74 ug/L 04/10/22 00:00 m-Xylene & p-Xylene ND 2.0 0.66 ug/L 04/10/22 00:00 ND o-Xylene 1.0 0.76 ug/L 04/10/22 00:00 Xylenes, Total ND 2.0 0.66 ug/L 04/10/22 00:00 Total BTEX ND 2.0 04/10/22 00:00 1.0 ug/L

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	99		80 - 120		04/10/22 00:00	1
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		04/10/22 00:00	1
4-Bromofluorobenzene (Surr)	95		73 - 120		04/10/22 00:00	1
Dibromofluoromethane (Surr)	95		75 - 123		04/10/22 00:00	1

Lab Sample ID: LCS 480-621089/6

**Matrix: Water** 

Analysis Batch: 621089

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

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	25.0	25.7		ug/L		103	71 - 124	
Toluene	25.0	26.1		ug/L		104	80 - 122	
Ethylbenzene	25.0	27.5		ug/L		110	77 - 123	
m-Xylene & p-Xylene	25.0	25.1		ug/L		100	76 - 122	
o-Xylene	25.0	25.0		ug/L		100	76 - 122	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	106		77 - 120
4-Bromofluorobenzene (Surr)	97		73 - 120
Dibromofluoromethane (Surr)	92		75 - 123

Lab Sample ID: 480-196578-4 MS

**Matrix: Water** 

**Analysis Batch: 621089** 

Client Sample ID: MW-8R-040622
Prep Type: Total/NA

_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	290		1250	1670		ug/L		110	71 - 124	
Toluene	28	J	1250	1390		ug/L		109	80 - 122	
Ethylbenzene	53		1250	1460		ug/L		112	77 - 123	
m-Xylene & p-Xylene	100		1250	1460		ug/L		109	76 - 122	
o-Xylene	45	J	1250	1330		ug/L		103	76 - 122	

MS	MS

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	97		80 - 120
1,2-Dichloroethane-d4 (Surr)	112		77 - 120
4-Bromofluorobenzene (Surr)	96		73 - 120
Dibromofluoromethane (Surr)	92		75 - 123

Project/Site: Albion, NY Groundwater Project

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

Lab Sample ID: 480-196578-4 MSD

**Matrix: Water** 

**Analysis Batch: 621089** 

Client Sample ID: MW-8R-040622
Prep Type: Total/NA

Job ID: 480-196578-1

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	290		1250	1580		ug/L		103	71 - 124	5	13
Toluene	28	J	1250	1390		ug/L		109	80 - 122	1	15
Ethylbenzene	53		1250	1440		ug/L		111	77 - 123	1	15
m-Xylene & p-Xylene	100		1250	1440		ug/L		108	76 - 122	1	16
o-Xylene	45	J	1250	1330		ug/L		103	76 - 122	1	16

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
Toluene-d8 (Surr)	98		80 - 120
1,2-Dichloroethane-d4 (Surr)	104		77 - 120
4-Bromofluorobenzene (Surr)	98		73 - 120
Dibromofluoromethane (Surr)	90		75 - 123

#### Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-621262/1-A

**Matrix: Water** 

Analysis Batch: 621441

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

**Prep Batch: 621262** 

	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		04/11/22 15:13	04/13/22 01:07	1
Acenaphthylene	ND		5.0	0.38	ug/L		04/11/22 15:13	04/13/22 01:07	1
Anthracene	ND		5.0	0.28	ug/L		04/11/22 15:13	04/13/22 01:07	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 01:07	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 01:07	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 01:07	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		04/11/22 15:13	04/13/22 01:07	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		04/11/22 15:13	04/13/22 01:07	1
Chrysene	ND		5.0	0.33	ug/L		04/11/22 15:13	04/13/22 01:07	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		04/11/22 15:13	04/13/22 01:07	1
Fluoranthene	ND		5.0	0.40	ug/L		04/11/22 15:13	04/13/22 01:07	1
Fluorene	ND		5.0	0.36	ug/L		04/11/22 15:13	04/13/22 01:07	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		04/11/22 15:13	04/13/22 01:07	1
Naphthalene	ND		5.0	0.76	ug/L		04/11/22 15:13	04/13/22 01:07	1
Phenanthrene	ND		5.0	0.44	ug/L		04/11/22 15:13	04/13/22 01:07	1
Pyrene	ND		5.0	0.34	ug/L		04/11/22 15:13	04/13/22 01:07	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	105		48 - 120	04/11/22 15:13	04/13/22 01:07	1
Nitrobenzene-d5 (Surr)	96		46 - 120	04/11/22 15:13	04/13/22 01:07	1
p-Terphenyl-d14 (Surr)	119		60 - 148	04/11/22 15:13	04/13/22 01:07	1

Lab Sample ID: LCS 480-621262/2-A

**Matrix: Water** 

Analysis Batch: 621441

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

Prep Batch: 621262

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Acenaphthene	32.0	29.0		ug/L		91	60 - 120	
Acenaphthylene	32.0	27.9		ug/L		87	63 - 120	

Project/Site: Albion, NY Groundwater Project

### Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-621262/2-A

**Matrix: Water** 

Analysis Batch: 621441

**Client Sample ID: Lab Control Sample** 

**Prep Type: Total/NA** Prep Batch: 621262

Job ID: 480-196578-1

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Anthracene	32.0	33.9		ug/L		106	67 - 120	
Benzo[a]anthracene	32.0	34.3		ug/L		107	70 - 121	
Benzo[a]pyrene	32.0	32.1		ug/L		100	60 - 123	
Benzo[b]fluoranthene	32.0	35.1		ug/L		110	66 - 126	
Benzo[g,h,i]perylene	32.0	34.1		ug/L		107	66 - 150	
Benzo[k]fluoranthene	32.0	35.8		ug/L		112	65 - 124	
Chrysene	32.0	33.7		ug/L		105	69 - 120	
Dibenz(a,h)anthracene	32.0	33.6		ug/L		105	65 - 135	
Fluoranthene	32.0	37.7		ug/L		118	69 - 126	
Fluorene	32.0	32.5		ug/L		102	66 - 120	
Indeno[1,2,3-cd]pyrene	32.0	34.4		ug/L		107	69 - 146	
Naphthalene	32.0	27.6		ug/L		86	57 - 120	
Phenanthrene	32.0	33.3		ug/L		104	68 - 120	
Pyrene	32.0	34.8		ug/L		109	70 - 125	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
2-Fluorobiphenyl	92	48 - 120
Nitrobenzene-d5 (Surr)	82	46 - 120
p-Terphenyl-d14 (Surr)	112	60 - 148

Lab Sample ID: LCSD 480-621262/3-A

**Matrix: Water** 

**Analysis Batch: 621441** 

**Client Sample ID: Lab Control Sample Dup** 

Prep Type: Total/NA

**Prep Batch: 621262** 

Analysis Baton. 02 1441	<b>.</b>	Spike LCSD LCSD					0/Dec DOD			
	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Acenaphthene	32.0	29.2		ug/L		91	60 - 120	1	24	
Acenaphthylene	32.0	28.1		ug/L		88	63 - 120	1	18	
Anthracene	32.0	32.3		ug/L		101	67 - 120	5	15	
Benzo[a]anthracene	32.0	31.4		ug/L		98	70 - 121	9	15	
Benzo[a]pyrene	32.0	26.8	*1	ug/L		84	60 - 123	18	15	
Benzo[b]fluoranthene	32.0	31.4		ug/L		98	66 - 126	11	15	
Benzo[g,h,i]perylene	32.0	30.3		ug/L		95	66 - 150	12	15	
Benzo[k]fluoranthene	32.0	29.9		ug/L		93	65 - 124	18	22	
Chrysene	32.0	31.3		ug/L		98	69 - 120	7	15	
Dibenz(a,h)anthracene	32.0	29.7		ug/L		93	65 - 135	12	15	
Fluoranthene	32.0	35.0		ug/L		109	69 - 126	8	15	
Fluorene	32.0	32.1		ug/L		100	66 - 120	1	15	
Indeno[1,2,3-cd]pyrene	32.0	30.2		ug/L		94	69 - 146	13	15	
Naphthalene	32.0	27.7		ug/L		87	57 - 120	0	29	
Phenanthrene	32.0	31.1		ug/L		97	68 - 120	7	15	
Pyrene	32.0	33.6		ug/L		105	70 - 125	3	19	

LCSD LCSD

Surrogate	%Recovery Qualified	r Limits
2-Fluorobiphenyl	84	48 - 120
Nitrobenzene-d5 (Surr)	88	46 - 120
p-Terphenyl-d14 (Surr)	98	60 - 148

Client: Wood E&I Solutions Inc Job ID: 480-196578-1

RL

0.010

Spike

Added

0.250

Spike

Added

0.200

Spike

Added

0.0500

Spike

Added

0.250

Spike

Added

0.200

Spike

Added

0.0500

MR MR

ND

Result Qualifier

**MDL** Unit

0.0080 mg/L

HLCS HLCS

LCS LCS

LLCS LLCS

Result Qualifier

**MDL** Unit

0.0080 mg/L

HLCS HLCS

LCS LCS

LLCS LLCS

Result Qualifier

Result Qualifier

0.253

0.212

0.0466

Result Qualifier

Result Qualifier

0.249

0.208

0.0533

RL

0.010

Result Qualifier

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Unit

mg/L

Project/Site: Albion, NY Groundwater Project

Method: SM 4500CN E - Total Cyanide

Lab Sample ID: MB 180-395901/4-A

Analysis Batch: 396121

**Matrix: Water** 

Cyanide, Total

Cyanide, Total

MB MB

Result Qualifier Analyte

ND

Lab Sample ID: HLCS 180-395901/2-A **Matrix: Water** 

**Analysis Batch: 396121** 

Analyte

Lab Sample ID: LCS 180-395901/3-A

**Matrix: Water** 

**Analysis Batch: 396121** 

Analyte

Cyanide, Total

Lab Sample ID: LLCS 180-395901/1-A

**Matrix: Water** 

**Analysis Batch: 396121** 

Analyte

Cyanide, Total

Lab Sample ID: MB 180-395902/4-A

**Matrix: Water** 

Analysis Batch: 396121

Analyte

Cyanide, Total

Lab Sample ID: HLCS 180-395902/2-A

Lab Sample ID: LCS 180-395902/3-A

**Matrix: Water** 

**Analysis Batch: 396121** 

Analyte

**Matrix: Water** 

Cyanide, Total

Analyte

**Analysis Batch: 396121** 

Cyanide, Total

Lab Sample ID: LLCS 180-395902/1-A

**Matrix: Water** 

**Analysis Batch: 396133** 

Analyte Cyanide, Total

Client Sample ID: Method Blank

**Prep Type: Total/NA** 

**Prep Batch: 395901** 

Analyzed Dil Fac Prepared 04/19/22 11:30 04/20/22 12:53

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

**Prep Batch: 395901** 

%Rec

D %Rec Limits

99

%Rec

Prepared

101

D %Rec

106

%Rec

90 - 110

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA **Prep Batch: 395901** 

%Rec Limits

90 - 110

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

**Prep Batch: 395901** 

%Rec

%Rec Limits 90 - 110 107

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

**Prep Batch: 395902** 

Dil Fac

Analyzed 04/19/22 11:30 04/20/22 13:51

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

**Prep Batch: 395902** 

%Rec

D %Rec

Limits

90 - 110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA **Prep Batch: 395902** 

%Rec

Limits

90 - 110

90 - 110

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

**Prep Batch: 395902** 

%Rec

Limits

### QC Sample Results

Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

Method: SM 4500CN E - Total Cyanide

Lab Sample ID: MB 180-395903/4-A Client Sample ID: Method Blank

**Matrix: Water** 

**Analysis Batch: 396122** 

MB MB Analyte Result Qualifier RL **MDL** Unit Analyzed Dil Fac Prepared 0.010 04/19/22 11:30 04/20/22 13:09 Cyanide, Total ND 0.0080 mg/L

Lab Sample ID: HLCS 180-395903/2-A **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA **Prep Batch: 395903 Analysis Batch: 396122** 

Spike HLCS HLCS %Rec Analyte Added Result Qualifier D %Rec Limits Unit

0.250

Lab Sample ID: LCS 180-395903/3-A **Client Sample ID: Lab Control Sample** 

0.248

mg/L

**Matrix: Water** 

Cyanide, Total

**Analysis Batch: 396122** Prep Batch: 395903 Spike LCS LCS %Rec

Analyte Added Result Qualifier Limits Unit %Rec Cyanide, Total 0.200 0.205 90 - 110 mg/L

Lab Sample ID: LLCS 180-395903/1-A **Client Sample ID: Lab Control Sample Prep Type: Total/NA** 

**Matrix: Water** 

**Analysis Batch: 396122** 

Spike LLCS LLCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits

Cyanide, Total 0.0500 0.0510 90 - 110 mg/L 102

Prep Type: Total/NA

**Prep Batch: 395903** 

Prep Type: Total/NA

**Prep Batch: 395903** 

90 - 110

## **QC Association Summary**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

#### **GC/MS VOA**

#### Analysis Batch: 621089

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196578-1	MW-1-040622	Total/NA	Water	8260C	
480-196578-2	MW-6-040622	Total/NA	Water	8260C	
480-196578-3	MW-5-040622	Total/NA	Water	8260C	
480-196578-4	MW-8R-040622	Total/NA	Water	8260C	
480-196578-5	MW-9R-040622	Total/NA	Water	8260C	
480-196578-6	MW-10R-040622	Total/NA	Water	8260C	
480-196578-7	MW-50-040622	Total/NA	Water	8260C	
480-196578-8	EB-01-04062022	Total/NA	Water	8260C	
480-196578-9	TRIP BLANK	Total/NA	Water	8260C	
MB 480-621089/8	Method Blank	Total/NA	Water	8260C	
LCS 480-621089/6	Lab Control Sample	Total/NA	Water	8260C	
480-196578-4 MS	MW-8R-040622	Total/NA	Water	8260C	
480-196578-4 MSD	MW-8R-040622	Total/NA	Water	8260C	

#### GC/MS Semi VOA

#### **Prep Batch: 621262**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196578-1	MW-1-040622	Total/NA	Water	3510C	_
480-196578-2	MW-6-040622	Total/NA	Water	3510C	
480-196578-3	MW-5-040622	Total/NA	Water	3510C	
480-196578-4 - DL	MW-8R-040622	Total/NA	Water	3510C	
480-196578-4	MW-8R-040622	Total/NA	Water	3510C	
480-196578-5	MW-9R-040622	Total/NA	Water	3510C	
480-196578-6	MW-10R-040622	Total/NA	Water	3510C	
480-196578-7	MW-50-040622	Total/NA	Water	3510C	
480-196578-8	EB-01-04062022	Total/NA	Water	3510C	
MB 480-621262/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-621262/2-A	Lab Control Sample	Total/NA	Water	3510C	
LCSD 480-621262/3-A	Lab Control Sample Dup	Total/NA	Water	3510C	

#### Analysis Batch: 621441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-621262/1-A	Method Blank	Total/NA	Water	8270D	621262
LCS 480-621262/2-A	Lab Control Sample	Total/NA	Water	8270D	621262
LCSD 480-621262/3-A	Lab Control Sample Dup	Total/NA	Water	8270D	621262

#### **Analysis Batch: 621548**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196578-1	MW-1-040622	Total/NA	Water	8270D	621262
480-196578-2	MW-6-040622	Total/NA	Water	8270D	621262
480-196578-3	MW-5-040622	Total/NA	Water	8270D	621262
480-196578-4	MW-8R-040622	Total/NA	Water	8270D	621262
480-196578-5	MW-9R-040622	Total/NA	Water	8270D	621262
480-196578-6	MW-10R-040622	Total/NA	Water	8270D	621262
480-196578-7	MW-50-040622	Total/NA	Water	8270D	621262
480-196578-8	EB-01-04062022	Total/NA	Water	8270D	621262

#### **Analysis Batch: 622154**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196578-4 - DL	MW-8R-040622	Total/NA	Water	8270D	621262

**Eurofins Buffalo** 

Job ID: 480-196578-1

## **QC Association Summary**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

**General Chemistry** 

**Prep Batch: 395901** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196578-1	MW-1-040622	Total/NA	Water	SM 4500 CN C	
480-196578-2	MW-6-040622	Total/NA	Water	SM 4500 CN C	
480-196578-3	MW-5-040622	Total/NA	Water	SM 4500 CN C	
480-196578-4	MW-8R-040622	Total/NA	Water	SM 4500 CN C	
MB 180-395901/4-A	Method Blank	Total/NA	Water	SM 4500 CN C	
HLCS 180-395901/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCS 180-395901/3-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LLCS 180-395901/1-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	

**Prep Batch: 395902** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196578-5	MW-9R-040622	Total/NA	Water	SM 4500 CN C	
480-196578-6	MW-10R-040622	Total/NA	Water	SM 4500 CN C	
480-196578-7	MW-50-040622	Total/NA	Water	SM 4500 CN C	
MB 180-395902/4-A	Method Blank	Total/NA	Water	SM 4500 CN C	
HLCS 180-395902/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCS 180-395902/3-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LLCS 180-395902/1-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	

**Prep Batch: 395903** 

Lab Sample ID 480-196578-8	Client Sample ID EB-01-04062022	Prep Type Total/NA	Matrix Water	Method SM 4500 CN C	Prep Batch
MB 180-395903/4-A	Method Blank	Total/NA	Water	SM 4500 CN C	
HLCS 180-395903/2-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LCS 180-395903/3-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	
LLCS 180-395903/1-A	Lab Control Sample	Total/NA	Water	SM 4500 CN C	

**Analysis Batch: 396121** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-196578-1	MW-1-040622	Total/NA	Water	SM 4500CN E	395901
480-196578-2	MW-6-040622	Total/NA	Water	SM 4500CN E	395901
480-196578-3	MW-5-040622	Total/NA	Water	SM 4500CN E	395901
480-196578-4	MW-8R-040622	Total/NA	Water	SM 4500CN E	395901
480-196578-5	MW-9R-040622	Total/NA	Water	SM 4500CN E	395902
480-196578-6	MW-10R-040622	Total/NA	Water	SM 4500CN E	395902
480-196578-7	MW-50-040622	Total/NA	Water	SM 4500CN E	395902
MB 180-395901/4-A	Method Blank	Total/NA	Water	SM 4500CN E	395901
MB 180-395902/4-A	Method Blank	Total/NA	Water	SM 4500CN E	395902
HLCS 180-395901/2-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395901
HLCS 180-395902/2-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395902
LCS 180-395901/3-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395901
LCS 180-395902/3-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395902
LLCS 180-395901/1-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395901

Analysis Batch: 396122

<b>Lab Sample ID</b> 480-196578-8	Client Sample ID EB-01-04062022	Prep Type Total/NA	Matrix Water	Method SM 4500CN E	Prep Batch 395903
MB 180-395903/4-A	Method Blank	Total/NA	Water	SM 4500CN E	395903
HLCS 180-395903/2-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395903
LCS 180-395903/3-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395903
LLCS 180-395903/1-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395903

Job ID: 480-196578-1

## **QC Association Summary**

Client: Wood E&I Solutions Inc Job ID: 480-196578-1

Project/Site: Albion, NY Groundwater Project

## **General Chemistry**

**Analysis Batch: 396133** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LLCS 180-395902/1-A	Lab Control Sample	Total/NA	Water	SM 4500CN E	395902

4

5

R

46

11

12

14

#### **Lab Chronicle**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-1-040622

Date Collected: 04/06/22 12:10 Date Received: 04/08/22 10:00 Lab Sample ID: 480-196578-1

**Matrix: Water** 

Job ID: 480-196578-1

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			621089	04/10/22 00:23	CRL	TAL BUF
Total/NA	Prep	3510C			621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D		1	621548	04/13/22 19:08	PJQ	TAL BUF
Total/NA	Prep	SM 4500 CN C			395901	04/19/22 11:30	CMR	TAL PIT
Total/NA	Analysis	SM 4500CN E		1	396121	04/20/22 13:35	CMR	TAL PIT

Client Sample ID: MW-6-040622

Date Collected: 04/06/22 15:05 Date Received: 04/08/22 10:00

Lab Sample ID: 480-196578-2

**Matrix: Water** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	621089	04/10/22 00:46	CRL	TAL BUF
Total/NA	Prep	3510C			621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D		1	621548	04/13/22 19:36	PJQ	TAL BUF
Total/NA	Prep	SM 4500 CN C			395901	04/19/22 11:30	CMR	TAL PIT
Total/NA	Analysis	SM 4500CN E		1	396121	04/20/22 13:37	CMR	TAL PIT

Client Sample ID: MW-5-040622

Date Collected: 04/06/22 14:10 Date Received: 04/08/22 10:00

Lab Sample ID: 480-196578-3

**Matrix: Water** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	621089	04/10/22 01:09	CRL	TAL BUF
Total/NA	Prep	3510C			621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D		1	621548	04/13/22 20:03	PJQ	TAL BUF
Total/NA	Prep	SM 4500 CN C			395901	04/19/22 11:30	CMR	TAL PIT
Total/NA	Analysis	SM 4500CN E		1	396121	04/20/22 13:39	CMR	TAL PIT

Client Sample ID: MW-8R-040622

Date Collected: 04/06/22 15:25 Date Received: 04/08/22 10:00

Lab Sample ID: 480-196578-4 **Matrix: Water** 

_	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	621089	04/10/22 01:32	CRL	TAL BUF
Total/NA	Prep	3510C			621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D		1	621548	04/13/22 20:31	PJQ	TAL BUF
Total/NA	Prep	3510C	DL		621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D	DL	10	622154	04/19/22 09:48	PJQ	TAL BUF
Total/NA	Prep	SM 4500 CN C			395901	04/19/22 11:30	CMR	TAL PIT
Total/NA	Analysis	SM 4500CN E		1	396121	04/20/22 13:40	CMR	TAL PIT

Project/Site: Albion, NY Groundwater Project

Client Sample ID: MW-9R-040622

Date Collected: 04/06/22 13:15 Date Received: 04/08/22 10:00

Lab Sample ID: 480-196578-5

**Matrix: Water** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C			621089	04/10/22 01:55	CRL	TAL BUF
Total/NA	Prep	3510C			621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D		1	621548	04/13/22 20:58	PJQ	TAL BUF
Total/NA	Prep	SM 4500 CN C			395902	04/19/22 11:30	CMR	TAL PIT
Total/NA	Analysis	SM 4500CN E		1	396121	04/20/22 14:36	CMR	TAL PIT

Lab Sample ID: 480-196578-6 Client Sample ID: MW-10R-040622

Date Collected: 04/06/22 13:55 Date Received: 04/08/22 10:00

**Matrix: Water** 

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	621089	04/10/22 02:18	CRL	TAL BUF
Total/NA	Prep	3510C			621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D		1	621548	04/13/22 21:26	PJQ	TAL BUF
Total/NA	Prep	SM 4500 CN C			395902	04/19/22 11:30	CMR	TAL PIT
Total/NA	Analysis	SM 4500CN E		1	396121	04/20/22 14:37	CMR	TAL PIT

Client Sample ID: MW-50-040622

Lab Sample ID: 480-196578-7 Date Collected: 04/06/22 12:00

**Matrix: Water** 

Date Received: 04/08/22 10:00

Batch Dilution Batch Batch Prepared Method **Prep Type** Type Run **Factor** Number or Analyzed Analyst Lab Total/NA Analysis 8260C 621089 04/10/22 02:41 CRL TAL BUF Total/NA 3510C Prep 621262 04/11/22 15:13 CMC TAL BUF Total/NA Analysis 8270D 1 621548 04/13/22 21:53 PJQ TAL BUF Total/NA Prep SM 4500 CN C 395902 04/19/22 11:30 CMR TAL PIT Total/NA Analysis SM 4500CN E 396121 04/20/22 14:39 CMR TAL PIT

Client Sample ID: EB-01-04062022

Lab Sample ID: 480-196578-8 Date Collected: 04/06/22 15:30 **Matrix: Water** 

Date Received: 04/08/22 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	621089	04/10/22 03:04	CRL	TAL BUF
Total/NA	Prep	3510C			621262	04/11/22 15:13	CMC	TAL BUF
Total/NA	Analysis	8270D		1	621548	04/13/22 22:21	PJQ	TAL BUF
Total/NA	Prep	SM 4500 CN C			395903	04/19/22 11:30	CMR	TAL PIT
Total/NA	Analysis	SM 4500CN E		1	396122	04/20/22 13:51	CMR	TAL PIT

**Client Sample ID: TRIP BLANK** 

Lab Sample ID: 480-196578-9 Date Collected: 04/06/22 07:00 **Matrix: Water** 

Date Received: 04/08/22 10:00

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	621089	04/10/22 03:27	CRL	TAL BUF

#### **Lab Chronicle**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

**Laboratory References:** 

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 480-196578-1

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## **Accreditation/Certification Summary**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

### Job ID: 480-196578-1

#### **Laboratory: Eurofins Buffalo**

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Pr	ogram	Identification Number	Expiration Date		
New York	NE	ELAP	10026	03-31-23		
The following analyte	s are included in this repo	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which		
The following analyte the agency does not o	•	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which		
• ,	•	ort, but the laboratory is r Matrix	not certified by the governing authority.  Analyte	This list may include analytes for which		

#### **Laboratory: Eurofins Pittsburgh**

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

Authority	Program	<b>Identification Number</b>	<b>Expiration Date</b>
Arkansas DEQ	State	19-033-0	06-27-22
California	State	2891	04-30-22
Connecticut	State	PH-0688	09-30-22
Florida	NELAP	E871008	06-30-22
Georgia	State	PA 02-00416	04-30-22
Illinois	NELAP	004375	06-30-22
Kansas	NELAP	E-10350	03-31-22 *
Kentucky (UST)	State	162013	04-30-22
Kentucky (WW)	State	KY98043	12-31-22
Louisiana	NELAP	04041	06-30-22
Maine	State	PA00164	03-06-24
Minnesota	NELAP	042-999-482	12-31-22
Nevada	State	PA00164	08-31-22
New Hampshire	NELAP	2030	04-04-23
New Jersey	NELAP	PA005	06-30-23
New York	NELAP	11182	04-02-22 *
North Carolina (WW/SW)	State	434	12-31-22
North Dakota	State	R-227	04-30-22
Oregon	NELAP	PA-2151	02-07-23
Pennsylvania	NELAP	02-00416	04-30-22
Rhode Island	State	LAO00362	12-31-21 *
South Carolina	State	89014	06-30-22
Texas	NELAP	T104704528	03-31-23
USDA	Federal	P-Soil-01	06-26-22
USDA	US Federal Programs	P330-16-00211	06-26-22
Utah	NELAP	PA001462019-8	05-31-22
Virginia	NELAP	10043	09-15-22
West Virginia DEP	State	142	01-31-23
Wisconsin	State	998027800	08-31-22

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 $<sup>{}^{\</sup>star}\operatorname{Accreditation/Certification\ renewal\ pending\ -\ accreditation/certification\ considered\ valid}.$ 

### **Method Summary**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
SM 4500CN E	Total Cyanide	SM	TAL PIT
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF
SM 4500 CN C	Cvanide. Distillation	SM	TAL PIT

#### **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:

TAL BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL PIT = Eurofins Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Job ID: 480-196578-1

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## **Sample Summary**

Client: Wood E&I Solutions Inc

Project/Site: Albion, NY Groundwater Project

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-196578-1	MW-1-040622	Water	04/06/22 12:10	04/08/22 10:00
480-196578-2	MW-6-040622	Water	04/06/22 15:05	04/08/22 10:00
480-196578-3	MW-5-040622	Water	04/06/22 14:10	04/08/22 10:00
480-196578-4	MW-8R-040622	Water	04/06/22 15:25	04/08/22 10:00
480-196578-5	MW-9R-040622	Water	04/06/22 13:15	04/08/22 10:00
480-196578-6	MW-10R-040622	Water	04/06/22 13:55	04/08/22 10:00
480-196578-7	MW-50-040622	Water	04/06/22 12:00	04/08/22 10:00
480-196578-8	EB-01-04062022	Water	04/06/22 15:30	04/08/22 10:00
480-196578-9	TRIP BLANK	Water	04/06/22 07:00	04/08/22 10:00

Job ID: 480-196578-1

Chain of Custody Record

Phone: 716-691-2600 Fax: 716-691-7991

Amherst, NY 14228-2298

10 Hazelwood Drive

**Eurofins Buffalo** 

**Environment Testing** 

eurofins 💸

Special Instructions/Note: Ver: 06/08/2021 M - Hexane N - None Months Company Sompany Company Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) COC No: 480-172422-33519.1 480-196578 Chain of Custody Preservation Codes MW-6 000 S-NW Page: Page 1 of 1 Job #: A HCL B - NaOH C - 72 0 -9 Archive For Total Number of co Jate/Time: Method of Shipment: Disposal By Lab State of Origin **Analysis Requested** Cooler Temperature(s) C and Other Remarks Special Instructions/QC Requirements Return To Client E-Mail: Brian.Fischer@Eurofinset.com ~ ~ N ~ 8 2 ~ 1811 MIS - GI\_SM\_MIS\_G0758 Received by ~ 8270D - PAH Semivolatiles ~ Lab PM: Fischer, Brian J (ON TO 20Y) GRINSM (TOS OF NO) Time: Field Filtered Sample (Yes or No) Preservation Code: Matrix (W=water, S=solid, O=waste/oil, Water Company Company 6525 Radiological Type (C=comp, G=grab) Sample 0 9 S ٥ S <u>ڻ</u> 0 ೨ 3 Compliance Project: A Yes A No 724-757-JCH/AJL 1015 tandero 1505 4-06-22/355 4-06-22 1200 5 - 1 72 - 90 - h 1210 4-06-22 1315 Sample 4-06-221530 200 4-06-22 1410 Date PO#: 0078000050.03.02B Unknown Due Date Requested: 4-7-22 4-06-22 22-90-6 22-90-h Sample Date Project #: 48021262 3 Date/Time: Poison B Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Mr-10R-040622 Custody Seal No. 4W-8R-040622 MW-9R-040622 4w. 6-040622 Aw-1-040622 MW-6-040622 MW-50-040622 EB-01-040622 Possible Hazard Identification Albion, NY Groundwater Project 180 Grand Avenue Suite 1100 Accounts Payable- Oakland apinvoice.us@woodplc.com Empty Kit Relinquished by: Blant Custody Seals Intact: Wood E&I Solutions Inc Client Information Sample Identification △ Yes △ No Tripo elinquished by: State, Zip: CA, 94612 Oakland

#### **Eurofins Canton**

180 S. Van Buren Avenue Barberton, OH 44203 (2) 28th

**Chain of Custody Record** 



seurofins

Environment Testing America

Ver. 06/08/2021 4/26/2022 (Rev. 1)

Phone: 330-497-9396 Fax: 330-497-0772	0 '						IWH					111			
Client Information (Sub Contract Lab)	Sampler:			Lab PM Fische		rian J	480-	196578 C	hain of (	Custody			OC No: 240-150612	2.1	
ent Contact: nipping/Receiving	Phone:			E-Mail: Brian.		her@et.euro	finsus	.com	Ne	o o ongin: w York			Page: Page 1 of 1		
ompany: urofins Environment Testing Northeast,						litations Require AP - New Yo		note):					Job #: 480-196578	3-1	
dress: 01 Alpha Drive, RIDC Park,	Due Date Requeste 5/5/2022	ed:						Analysis	Reque	sted			Preservation		
y: ttsburgh	TAT Requested (da	ays):			T								A - HCL B - NaOH C - Zn Acetate	M - He N - No e O - Asl	ne
nte, Zip: A, 15238				- 1	1								D - Nitric Acid E - NaHSO4 F - MeOH		204S 2S03
one: 2-963-7058(Tel) 412-963-2468(Fax)	PO #:				9	ш			Ш				G - Amchlor H - Ascorbic A	S - H2	
ail:	WO#.				ۆر 80 (				Ш			2	I - Ice J - DI Water K - EDTA	U - Ace V - MC W - pH	AA
ject Name: oion, NY Groundwater Project	Project #: 48021 262				ered Sample (Yes or No MS/MSD (Yes or No)							containers	L - EDA		er (specify)
e:	SSOW#:				Samp ISD ()	E/4500_CN_C		1				5	Other:		
ample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Type (w=	trix	Field Filtered Perform MS/N	4500_CN_E/450						Total Number	Spec	ial Instructi	ions/Note:
		><	Preservation C	ode:	$\propto$								M. D.	>-	
N-1-040622 (480-196578-1)	4/6/22	12:10 Eastern	W	ater		X						1			
V-6-040622 (480-196578-2)	4/6/22	15:05 Eastern	W	ater		x						1			
V-5-040622 (480-196578-3)	4/6/22	14:10 Eastern	W	ater		X						1			
V-8R-040622 (480-196578-4)	4 6/22	15:25 Eastern	W	ater		x	1					1			
V-9R-040622 (480-196578-5)	4/6/22	13:15 Eastern	W	ater		x						1			
V-10R-040622 (480-196578-6)	4/6/22	13:55 Eastern	W	ater		x						0			
V-50-040622 (480-196578-7)	4/6/22	12:00 Eastern	W	ater		x						1			
-01-04062022 (480-196578-8)	4 6/22	15:30 Eastern	W	ater		х						1			
te: Since laboratory accreditations are subject to change, Eurofins Envo cratory does not currently maintain accreditation in the State of Origin l reditation status should be brought to Eurofins Environment Testing N	listed above for analysis/tests.	matrix being an	alvzed, the samples	must be sl	hipped	d back to the Eu	rofins E	Environment	Testing No	th Central,	LLC laborat	ory or other	instructions will	be provided. A	Any changes to
ssible Hazard Identification					Sa								ed longer th		
confirmed liverable Requested: I, II, III, IV, Other (specify)	Primary Deliver	able Pank: 2			90	Return :				osal By L	ab	Arch	ive For	<u>Mo</u>	nths
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npty Kit Relinquished by:	Deta Til	Date:	10		Time:		/	1		Method o	f Shipment:			lCommi	201
houished/by:	Date/Time:	)(	)58 E			Received by:					Date/Time	1	7- 20	Compa	BENA any
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inquished by:	Date/Time:		Compa	ny		Received by:					Date/Time	<b>3.</b>		Compa	arry

Client: Wood E&I Solutions Inc Job Number: 480-196578-1

List Source: Eurofins Buffalo

Login Number: 196578 List Number: 1

Creator: Wallace, Cameron

Creator: wallace, Cameron		
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	
s 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	
f 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	
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: Wood E&I Solutions Inc Job Number: 480-196578-1

List Number: 196578

List Number: 2

List Source: Eurofins Pittsburgh

List Creation: 04/12/22 01:14 PM

Creator: Watson, Debbie

Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>N/A</td> <td></td>	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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	
s the Field Sampler's name present on COC?	N/A	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
ample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
ppropriate 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	

True

N/A

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Samples do not require splitting or compositing.

Residual Chlorine Checked.



### **APPENDIX C**

Soil Cap Inspection Form

#### **APPENDIX D**

#### **EXAMPLE SITE INSPECTION FORM**

Former MPG Site No. 837012 Albion, New York

Date: 4-06-22 Inspection By: Toshna C. Huy Others On Site:	_	Wea Tim Time	ther: <u>Overcust</u> 43° - 63° ee In: <u>1015</u> Out: <u>1615</u>
Visual Observations – Soil Cap and Monitoring	Well Ne	twork:	,
	YES	NO	Comments
Is the Soil Cap intact?			
Any signs of significant erosion?		_	
Any signs of tree roots or vegetation damaging the cap?		/	
Any signs of intrusive work (earth disturbing activities) in the capped area?		/	
Are the groundwater monitoring wells accessible and intact?	/		
If maintenance is required to resolve any of the ab Were all maintenance items resolved during this s	ite visit?	If no, w	hat items remain to be resolved?
Documentation:			
	YES	NO	Comments
Are maintenance records on-site and up-to-date?	/		Available electronically
Are monitoring records on-site and up-to-date?	/		Available electronically



	YES	NO	Comments
Is the most recent Monitoring and Sampling Plan on-site?		/	Available Electronically
Is the Site Management Plan on-site?			Main Building
If there is intrusive work being performed:  - Is there a Health and Safety Plan on-site?		/	No intrasse work
- If the surface area of construction activities is greater than 1 acre in size, is there a Stormwater Pollution Prevention Plan (SWPPP) on-site?		/	No intrusive work

If maintenance is required to resolve any of the above noted items, describe what actions taken, if any. Were all maintenance items resolved during this site visit? If no, what items remain to be resolved?				

Note: This form is provided as an example template only and should be modified and updated as needed to reflect current project conditions.