

March 30, 2023

Mr. Scott Deyette
Chief, Inspection Unit
New York State Department of Environmental Conservation
MGP Remedial Section, Division of Environmental Remediation
Bureau of Western Remedial Action, 11th Floor
625 Broadway
Albany, New York 12233-7012

**Re: Liberty Street Non-Owned Former Manufactured Gas Plant (MGP) Site
Troy, NY
Annual Groundwater Monitoring Report
NYSDEC Site # V000482**

Dear Mr. Deyette:

Attached for your information is the annual Groundwater Monitoring Report detailing the groundwater monitoring activities conducted in 2022 at the National Grid Troy (Liberty Street) Site. Site activities were conducted in accordance with the NYSDEC-approved Site Management Plan dated April 2015.

Groundwater and Environmental Services, Inc., (GES), the OM&M contractor for National Grid, conducts all long-term OM&M activities at the site. Quarterly site inspections were conducted in March, June, September, and December of 2022. Annual groundwater sampling was completed on September 15, 2022. The site is generally in good shape and in compliance.

Please contact me at 315-428-5652 if you have any questions.

Sincerely,



for SPS

Steven P. Stucker, C.P.G.
Lead Engineer
Environmental Department

National Grid

2022 Groundwater Monitoring Report



National Grid Troy Liberty Street Site
Liberty Street
Troy, NY

March 2023

Version 1





2022 Groundwater Monitoring Report

National Grid -Troy
Liberty Street
Troy, NY

Prepared for:
National Grid
300 Erie Boulevard West, C-1
Syracuse, NY 13202

Prepared by:
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East Syracuse, NY 13057
TEL: 800-220-3069
www.gesonline.com

GES Project:
0603324.121801.221

Date:
March 30, 2023

Devin T. Shay, PG
Program Manager / Principal Hydrogeologist

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Acronyms

AWQS	Ambient Water Quality Standards	OM&M	Operation, Maintenance, and Monitoring
BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes	OU	Operable Unit
DNAPL	Dense Non-Aqueous Phase Liquid	Pace	Pace Analytical Services, LLC
DUSR	Data Usability Summary Report	PAH	Polycyclic Aromatic Hydrocarbons
GES	Groundwater & Environmental Services, Inc.	POTW	Publically Owned Treatment Works
gpm	Gallons per Minute	QA/QC	Quality Assurance / Quality Control
IRM	Interim Remedial Measures	ROD	Record of Decision
LNAPL	Light Non-Aqueous Phase Liquid	SMP	Site Management Plan
MGP	Manufactured Gas Plant	USEPA	United States Environmental Protection Agency
NYSDEC	New York State Department of Environmental Conservation	WPCF	Water Pollution Control Facility

1 Introduction

1.1 Overview

Groundwater & Environmental Services, Inc. (GES) has prepared this 2022 Groundwater Monitoring Report (covering January 1, 2022 – December 31, 2022) for the Troy (Liberty Street) Site, Troy, New York. The groundwater monitoring activities described in this letter were completed as part of the annual inspection and groundwater sampling/monitoring event, in accordance to the Site Management Plan (SMP) dated April 2015.

The following activities conducted during this reporting period are summarized below:

- Quarterly site inspections.
- Annual groundwater elevation data.
- Annual groundwater sampling, analysis and data validation. Water samples are submitted to Pace Analytical Services, LLC (Pace) for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) via United States Environmental Protection Agency (EPA) Method 8260C, and polycyclic aromatic hydrocarbons (PAHs) via EPA Method 8270D.
- Any site maintenance that comes about as a result of the quarterly inspections.

1.2 Site Description

The Troy-Liberty Street former MGP Site is located in an urban residential/light commercial area in Troy's "Little Italy" neighborhood, and is approximately 1.016 acres. The Site is bordered to the east by Fifth Avenue, to the south of Washington Street, to the west by Hill Street, and to the north by Liberty Street. The Site Location is presented on **Figure 1**, and the current Site Map is presented on **Figure 2**. The Site is mainly comprised of an asphalt parking lot, with two (2) small bocce courts at the south end. The courts are constructed on top of the existing asphalt surface. It is bordered by a metal fence with brick pillars on the western side and a chain link fence on the northern side. The Site has gates which can be locked but it is common to find them unlocked.

2 Quarterly Site Inspections and Groundwater Monitoring Activities

2.1 Quarterly Site Inspections

GES conducted quarterly site inspections during this reporting period on March 3, June 23, September 15, and December 7, 2022.

In general, the Site is in good condition and in compliance. The exterior cover system is intact. No visible saw cutting, holes from burrowing animals, or evidence of any other intrusive activities were noted in 2022. The groundwater monitoring wells are secured and operable.

Attachment A includes the Quarterly Site Inspection Forms.

2.2 Groundwater Well Gauging

Groundwater level measurements are collected at the Site to accomplish the following:

- To determine the general groundwater flow direction on site.

Annual gauging field data is presented in **Table 3**. In general, site groundwater flows from east to west/northwest, consistent with past groundwater elevation data.

2.3 Groundwater Well Sampling and Analysis

Groundwater samples were collected from five (5) monitoring wells {B/MW-101(05), B/MW-102(05), B/MW-104(05), B/MW-203(06), and B/MW-404(11)}, on September 15, 2022. The wells were purged using a peristaltic pump. Field Measurements of pH, conductivity, turbidity, dissolved oxygen, temperature, total dissolved solids and oxidation-reduction potential were recorded using a Horiba U-52 water quality meter during sample collection. Samples were collected once field parameters stabilized. Field monitoring data and the chain-of-custody record are included in **Appendix B**.

Five (5) aqueous field samples, a field duplicate, and trip blank were analyzed for TCL VOCs, and TCL SVOCs. The samples were analyzed by Pace in accordance with the NYSDEC Analytical Services Protocol. Analytical results are summarized in **Table 4**. The Analytical Lab Report and Data Usability Summary Report are presented in **Appendix C**.

B/MW-102(05) had detections below standards of benzo(a)pyrene, benzo(g,h,i)perylene, fluoranthene, and pyrene, and exceedances above the AWQS of benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and indeno(1,2,3-cd)pyrene. B/MW-203(06) had exceedances of benzene, ethylbenzene, xylenes, acenaphthene, benzo(a)anthracene, chrysene, and naphthalene. Monitoring well B/MW-203(06) also had detections below the standards in toluene, acenaphthylene, anthracene, fluoranthene, fluorene, phenanthrene, and pyrene. There were no detections of TCL VOCs or TCL SVOCs observed in the groundwater samples of B/MW-101(05), B/MW-104(05), and B/MW-404(11).

2.4 Waste Disposal

Purged groundwater and decontamination fluids were containerized in a 55-gallon steel drum and were properly disposed of by Capitol Environmental on behalf of National Grid.

3 Conclusions and Recommendations

3.1 Conclusions

Based on the results of the past year's activities, the following conclusions were made:

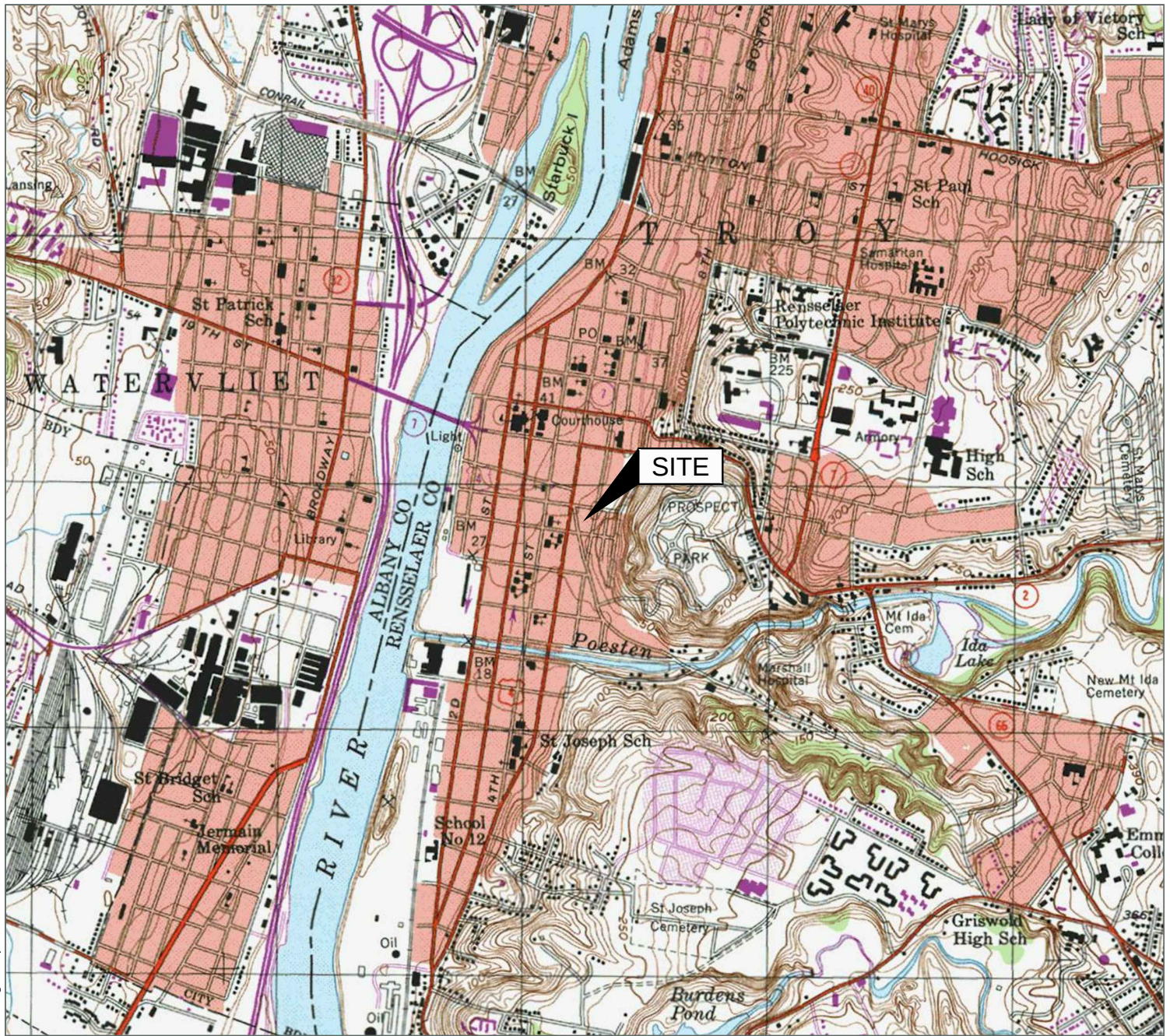
- Quarterly site inspections demonstrate that the site is in good condition and in compliance.
- Groundwater beneath the Site appears to flow in a general east to west/northwest direction.
- The groundwater samples collected in September 2022 had exceedances of benzene, ethylbenzene, xylenes, acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and naphthalene. There were no detections of TCL VOCs or TCL SVOCs observed in three of the five groundwater samples.
- Site groundwater quality has not changed significantly from 2021.

3.2 Recommendations

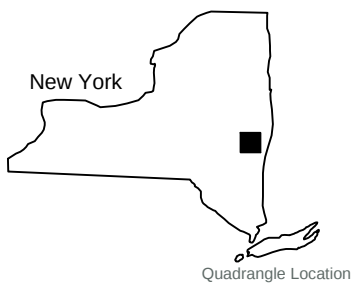
It is recommended that all groundwater monitoring activities continue, with the next report due in February 2024.



Figures



Source:
 USGS 7.5 Minute Series
 Topographic Quadrangle, 1980
 Troy South, New York
 Contour Interval = 10'



M:\Graphics\0600-Syracuse\Misc\National Grid\Troy (Liberty Street) SLM.dwg, Template SLM, WShea

Site Location Map

National Grid
 Liberty Street
 Troy, New York

Drawn
 W.G.S.
 Designed
 Approved



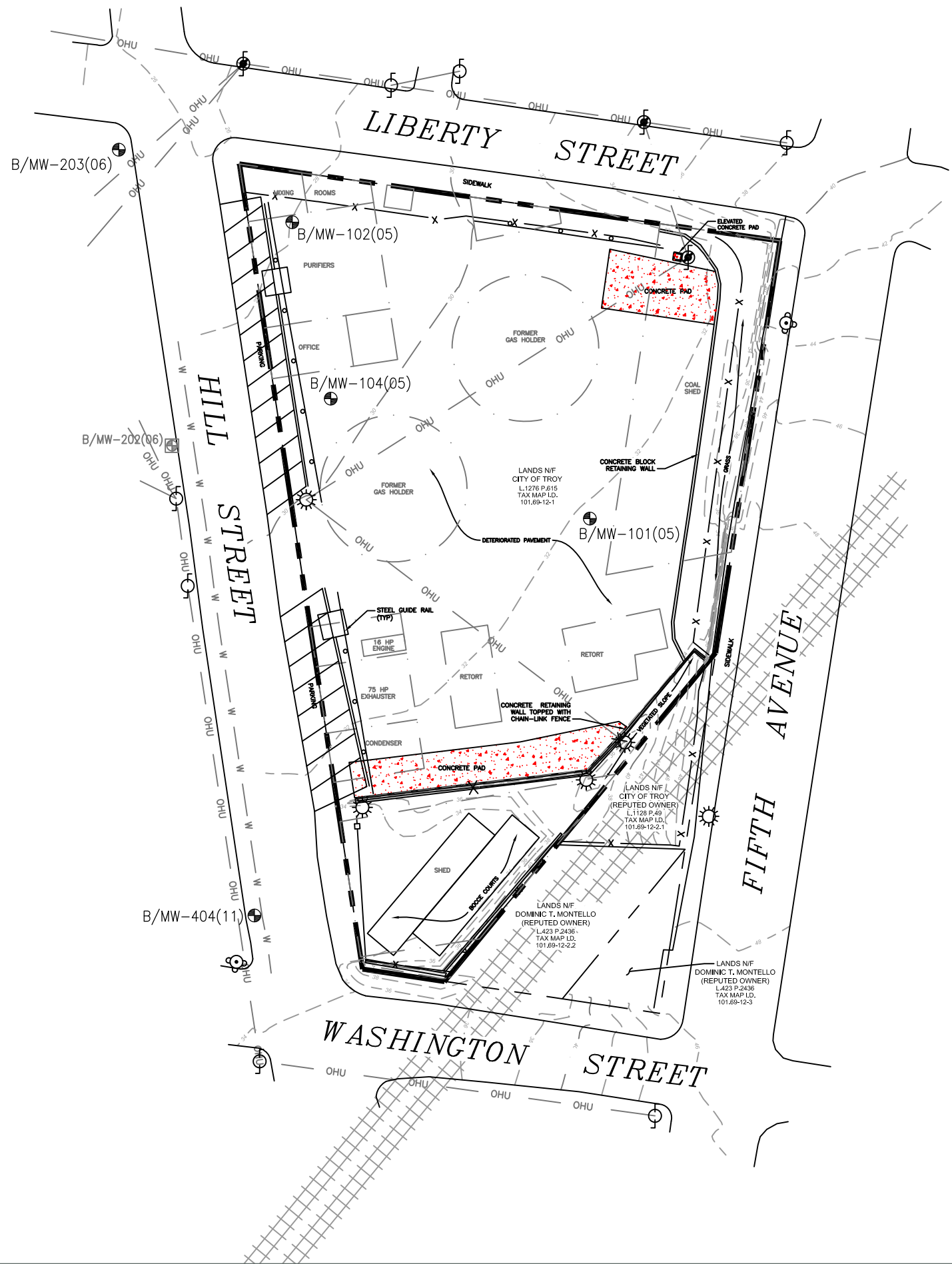
Scale In Feet



Groundwater & Environmental Services, Inc.

Date
 1-15-18
 Figure
 1

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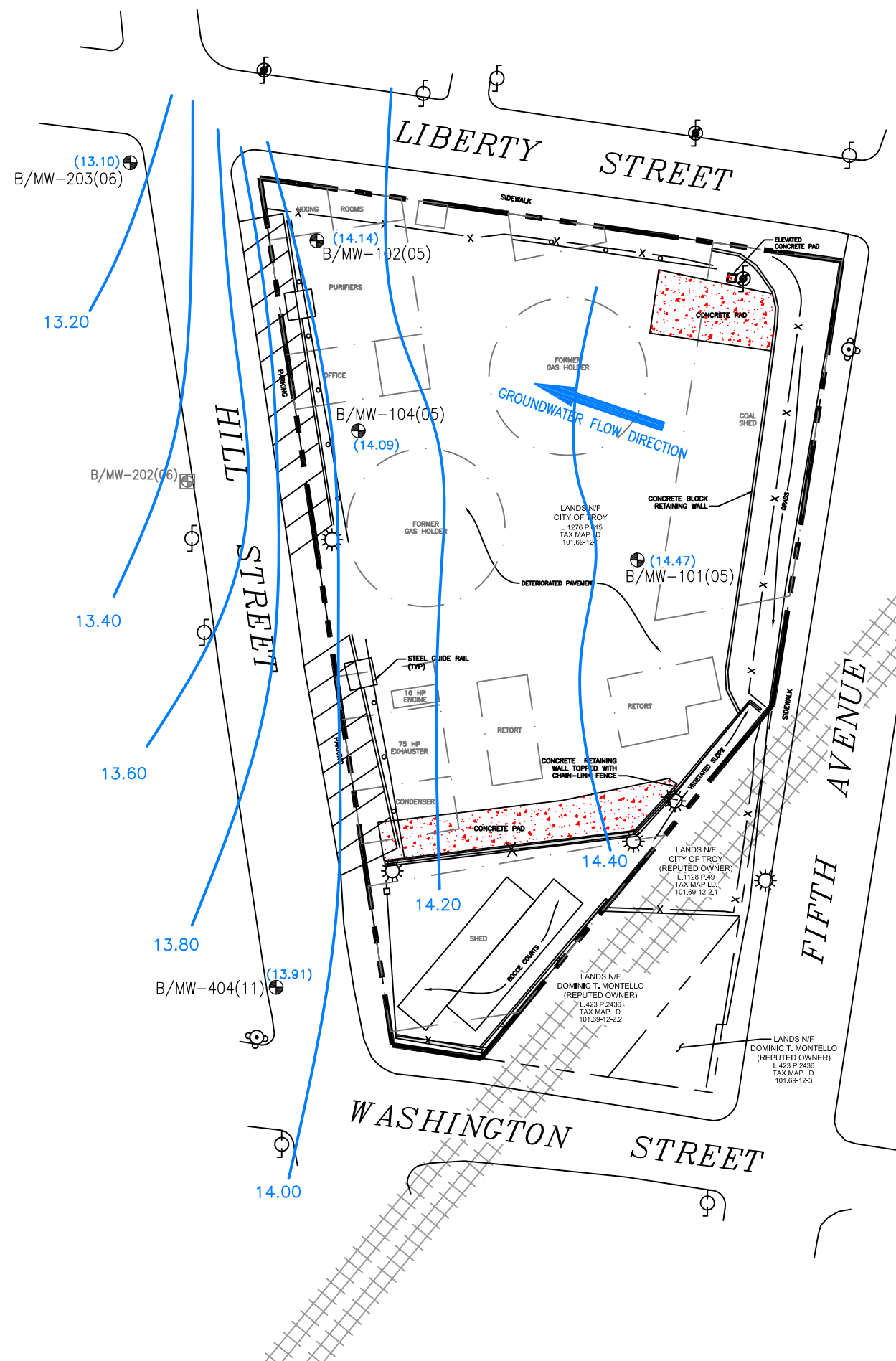


LEGEND

- PROPERTY BOUNDARY
- ☼ FIRE HYDRANT
- ☼ LIGHT POLE
- ☼ UTILITY POLE
- MONITORING WELL
- ☼ DESTROYED MONITORING WELL
- W — UNDERGROUND WATER LINE
- OHU — OVERHEAD UTILITIES

Site Map		
National Grid Liberty Street Troy, New York		
Drawn W.G.S. Designed		Date 3/9/22 Figure 2
Approved	Scale In Feet 0 50	

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LEGEND

- PROPERTY BOUNDARY
- FIRE HYDRANT
- LIGHT POLE
- UTILITY POLE
- MONITORING WELL
- DESTROYED MONITORING WELL
- (14.47) GROUNDWATER ELEVATION (feet)
- GROUNDWATER CONTOUR
DASHED WHERE INFERRED

Groundwater Contour Map
September 15, 2022

National Grid
Liberty Street
Troy, New York

Drawn
W.G.S.
Designed

Approved

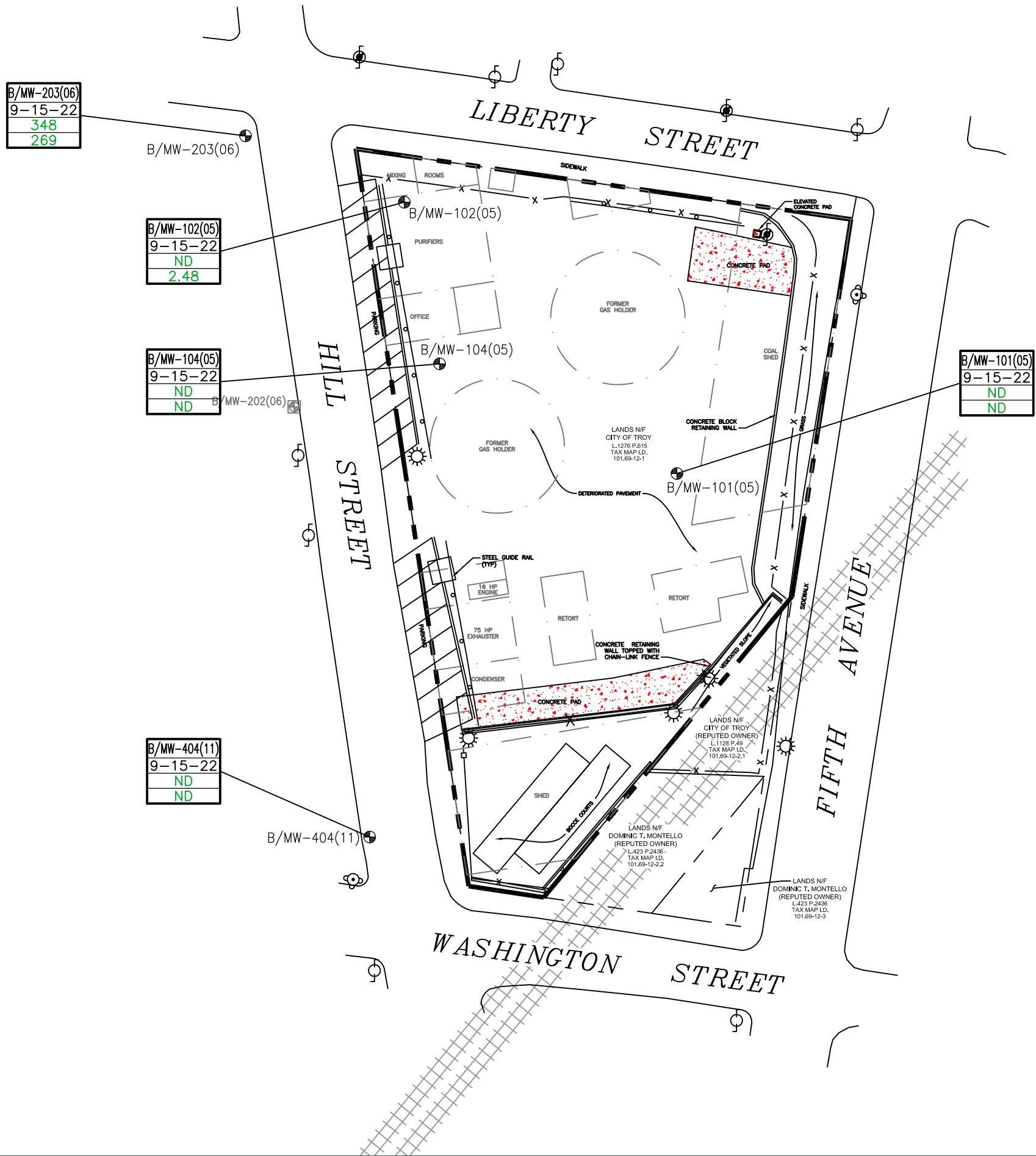
Date
1/28/23
Figure
3



Scale In Feet



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LEGEND

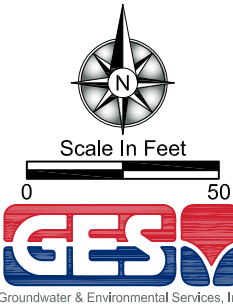
- PROPERTY BOUNDARY
 - ⊙ FIRE HYDRANT
 - ☼ LIGHT POLE
 - ⊕ UTILITY POLE
 - ⊙ MONITORING WELL
 - ⊙ DESTROYED MONITORING WELL
- | B/MW-101(05) | |
|--------------|---------------------------|
| 9-15-22 | WELL IDENTIFICATION |
| ND | SAMPLE DATE |
| ND | BTEX CONCENTRATION (ug/L) |
| ND | PAHs CONCENTRATION (ug/L) |
- ug/L MICROGRAMS PER LITER
- BTEX BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
- PAHs POLYCYCLIC AROMATIC HYDROCARBONS
- ND NOT DETECTED

Groundwater Monitoring Map
September 15, 2022

National Grid
Liberty Street
Troy, New York

Drawn
W.G.S.
Designed
Approved

Date
1/28/23
Figure
4





Tables

Table 1
Monitoring Well Construction Details

Well ID	Date Installed	Ground Surface Elevation (ft, NAVD88)	Top of PVC Casing Elevation (ft, NAVD88)	Total Boring Depth (ft, bgs)	Top of Screen (ft, bgs)	Bottom of Screen (ft, bgs)	Well Bottom (ft, bgs)	Screen Midpoint (ft, bgs)	Top of Sand Pack (ft, bgs)	Well Screen Material	Unit Screened
B/MW-101(05)	12/5/2005	32.15	31.99	30	17	27	27	23	14	2-in ID Sch 40 PVC factory slotted	f sand, silt, gravel
B/MW-102(05)	12/7/2005	28.05	27.60	17.5	7	17	17	12	5	2-in ID Sch 40 PVC factory slotted	f-m sand, silt
B/MW-103(05)	12/5/2005	33.38	33.13	30	18	28	28	23	16	2-in ID Sch 40 PVC factory slotted	f-m sand, silt, clay, gravel
B/MW-104(05)	12/6/2005	29.42	29.14	24	12	22	22	17	11	2-in ID Sch 40 PVC factory slotted	f-m sand, gravel
B/MW-201(06)	12/14/2006	35.01	34.62	25	14	24	24	19	12	2-in ID Sch 40 PVC 0.010" slot	clay, silt, sand
B/MW-202(06)	12/12/2006	28.68	28.10	20	9.5	19.5	19.5	14.5	8	2-in ID Sch 40 PVC 0.010" slot	clay, silt, sand, gravel
B/MW-203(06)	12/12/2006	26.06	25.32	20	9.5	19.5	19.5	14.5	8	2-in ID Sch 40 PVC 0.010" slot	f-c sand, silt
B/MW-301(10)	11/1/2010	31.14	30.81	35	15	25	25	20	13	2-in ID Sch 40 PVC 0.010" slot	f-c sand, silty sand, gravel, silt, clay
B/MW-302(10)	11/1/2010	33.02	32.60	35	15	25	25	20	13	2-in ID Sch 40 PVC 0.010" slot	f-c sand, gravel, silt
B/MW-303(10)	10/29/2010	33.35	32.97	45	14	24	24	19	12	2-in ID Sch 40 PVC 0.010" slot	clay, f-c sand
B/MW-324(10)	10/29/2010	33.09	32.63	45	14	24	26	19	12	2-in ID Sch 40 PVC 0.010" slot	silty f-c sand, gravel, clay
B/MW-404(11)	4/14/2011	33.33	32.95	30	14	24	24	19	12	2-in ID Sch 40 PVC 0.010" slot	f-c sand, gravel, silt
B/PZ-407(11)	4/12/2011	29.81	29.26	30	14	24	24	19	10	1-in ID Sch 40 PVC 0.010" slot	f-c sand, gravel, clay
B/PZ-408(11)	4/12/2011	31.87	31.53	30	14	24	24	19	12	1-in ID Sch 40 PVC 0.010" slot	f-c sand, gravel
B/PZ-409(11)	4/12/2011	33.33	32.79	30	15	25	25	20	13	1-in ID Sch 40 PVC 0.010" slot	silty f-c sand, gravel
B/PZ-410(11)	4/12/2011	31.65	31.17	30	14	24	24	19	12	1-in ID Sch 40 PVC 0.010" slot	f-c sand, gravel, clay
B/PZ-411(11)	4/13/2011	30.61	30.21	30	14	24	24	19	12	1-in ID Sch 40 PVC 0.010" slot	f-c sand, gravel, clay

Notes:

ft, NAVD88 - feet above North American Vertical Datum of 1988

ft, bgs - feet below ground surface

B/MW-103(05) - Well decommissioned

B/PZ-407(11) - Piezometer decommissioned

B/MW-202(06) - Well destroyed

Table 2

Final Groundwater Discharge Parameters



Well ID	Date Sampled	Temperature (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH (S.U.)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)
B/MW-101(05)	11/18/2010	15.22	1548*	14.26	6.78	137.4	3.1
B/MW-102(05)	11/19/2010	24.63	935*	0.16	6.86	176.1	6.7
B/MW-103(05)	11/19/2010	13.84	1265*	22.16	6.69	-151.0	10.6
B/MW-104(05)	11/18/2010	16.01	1052*	20.72	6.53	79.0	6.2
B/MW-201(06)	11/18/2010	14.66	1224*	19.55	6.6	130.9	0.3
B/MW-202(06)	11/18/2010	16.56	1644*	26.80	6.38	128.9	8.3
B/MW-203(06)	11/18/2010	14.55	1473*	1.86	7.06	316.4	5.8
B/MW-301(10)	11/18/2010	18.59	1876*	0.97	6.96	121.0	9.8
B/MW-302(10)	11/18/2010	15.40	1013*	0.67	7.30	357.1	2.6
B/MW-303(10)	11/18/2010	19.33	188*	1.98	7.8	310.1	4.6
B/MW-324(10)	11/19/2010	17.00	2203*	0.07	6.87	-47.2	-1.0
B/MW-101(05)	5/5/2011	12.77	1986*	6.49	6.75	157	18.8
B/MW-102(05)	5/5/2011	11.50	1884*	0.44	6.67	202.8	3.2
B/MW-103(05)	5/6/2011	14.06	1612*	6.60	6.66	-165.7	5.3
B/MW-104(05)	5/5/2011	12.93	2078*	2.03	6.55	151	2.7
B/MW-201(06)	5/5/2011	11.64	3299*	7.18	6.67	150.3	5.0
B/MW-202(06)	5/6/2011	14.03	2228*	6.99	6.45	45.7	1.3
B/MW-203(06)	5/5/2011	11.88	4767*	2.42	6.91	111.1	0.0
B/MW-301(10)	5/5/2011	13.34	2883*	12.00	6.67	-103.3	5.5
B/MW-302(10)	5/5/2011	12.53	1388*	12.03	7.02	181	0.0
B/MW-303(10)	5/5/2011	9.02	352*	27.29	8.02	80.8	0.2
B/MW-324(10)	5/6/2011	14.08	4558*	0.51	5.43	-213.5	-10.7
B/MW-404(11)	5/6/2011	9.95	522*	46.70	5.55	205.2	-5.6
B/MW-101(05)	8/19/2014	17.50	1260*	1.40	6.76	-13.8	1.4
B/MW-102(05)	8/19/2014	18.60	956*	0.01	6.45	39.9	1.0
B/MW-104(05)	8/19/2014	17.00	1597*	0.02	6.21	-4.0	0.1
B/MW-202(06)	8/19/2014	16.80	2152*	0.06	6.17	-27.2	2.6
B/MW-203(06)	8/19/2014	17.30	3135*	0.02	6.36	-33.9	8.2
B/MW-404(11)	8/19/2014	19.90	339*	2.09	6.69	41.0	0.2
B/MW-101(05)	10/7/2015	17.01	1368*	2.00	7.13	128.3	1.01
B/MW-102(05)	10/7/2015	19.34	1416*	0.26	6.80	258.3	4.10
B/MW-104(05)	10/7/2015	17.60	1589*	0.32	6.72	135.3	5.13
B/MW-202(06)	10/7/2015	17.54	2410*	0.31	6.58	137.5	4.91
B/MW-203(06)	10/7/2015	19.01	2806*	0.77	6.97	182.5	5.53
B/MW-404(11)	10/7/2015	17.18	1315*	0.35	6.50	146.5	3.15
B/MW-101(05)	11/9/2016	15.12	1907*	1.49	7.15	206.1	4.18
B/MW-104(05)	11/9/2016	16.88	1209*	0.29	6.86	203.1	4.87
B/MW-101(05)	10/12/2017	16.55	2.39	0.00	6.88	43.0	18.50
B/MW-102(05)	10/12/2017	16.10	1.50	0.00	6.71	179.0	1.80
B/MW-104(05)	10/12/2017	15.57	1.79	0.00	6.60	60.0	22.60
B/MW-202(06)	10/12/2017	14.41	2.13	1.64	5.81	64.0	5.80
B/MW-203(06)	10/12/2017	14.67	1.90	0.94	5.78	-169.0	7.40
B/MW-404(11)	10/12/2017	19.42	0.311	3.87	5.96	51.0	2.70
B/MW-101(05)	10/13/2018	15.97	1.740	0.00	6.97	153.0	6.00
B/MW-102(05)	10/13/2018	19.07	0.987	0.00	6.97	240.0	2.30
B/MW-104(05)	10/13/2018	17.17	1.350	0.01	6.73	130.0	2.00
B/MW-202(06)	10/13/2018	15.75	2.490	4.91	6.47	51.0	8.30
B/MW-203(06)	10/13/2018	15.12	2.270	0.92	6.62	-77.0	17.30
B/MW-404(11)	10/13/2018	16.65	1.500	0.29	6.20	105.0	7.00
B/MW-101(05)	10/31/2019	16.39	1.610	0.22	7.16	178.0	131.00
B/MW-102(05)	10/31/2019	19.27	0.873	0.00	7.08	-33.0	16.50
B/MW-104(05)	10/31/2019	17.97	1.150	1.34	6.95	88.0	79.60
B/MW-202(06)	10/31/2019	17.60	3.110	0.00	6.76	132.0	47.80
B/MW-203(06)	10/31/2019	18.38	1.310	0.00	6.97	-99.0	16.70
B/MW-404(11)	10/31/2019	16.97	1.650	0.00	6.59	117.0	1.40
B/MW-101(05)	9/3/2020	17.22	1.810	0.94	7.20	-79.0	74.80
B/MW-102(05)	9/3/2020	22.21	0.731	0.43	7.01	87.0	0.00
B/MW-104(05)	9/3/2020	20.22	1.230	0.53	6.95	-107.0	1.40
B/MW-203(06)	9/3/2020	15.51	1.770	4.62	5.79	-134.0	1.12
B/MW-404(11)	9/3/2020	14.27	1.81	6.23	5.91	29.0	0.0
B/MW-101(05)	9/2/2021	17.23	1.82	3.01	6.83	203	72.3
B/MW-102(05)	9/2/2021	18.99	1.58	0.00	6.36	329	0.0
B/MW-104(05)	9/2/2021	19.17	1.37	0.05	6.41	113	15.7
B/MW-203(06)	9/2/2021	19.90	1.74	1.16	6.65	-105	4.1
B/MW-404(11)	9/2/2021	17.69	1.40	0.91	6.45	166	0.4

Table 2

Final Groundwater Discharge Parameters



Well ID	Date Sampled	Temperature (°C)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	pH (S.U.)	Oxidation-Reduction Potential (mV)	Turbidity (NTU)
B/MW-101(05)	9/15/2022	18.22	2.44	2.13	7.10	173	1.6
B/MW-102(05)	9/15/2022	21.28	1.93	6.86	6.76	281	1.2
B/MW-104(05)	9/15/2022	19.09	1.47	0.00	6.73	119	0.9
B/MW-203(06)	9/15/2022	21.72	1.41	0.00	6.82	-123	0.9
B/MW-404(11)	9/15/2022	20.20	1.48	0.00	6.58	179	0.9

Notes:

°C	= degrees Celsius	NTU	= Nephelometric Turbidity Units
mS/cm	= milliSiemens per centimeter	*	= value is in $\mu\text{S/cm}$ (data collected by GEI)
mg/L	= milligrams per liter	$\mu\text{S/cm}$	= microSiemens per centimeter
S.U.	= Standard units		
mV	= milliVolts		

Table 3
Groundwater Elevations



Well ID	Northing	Easting	Ground Surface Elevation (ft, NAVD88)	Top of PVC Casing Elevation (ft, NAVD88)	Top of Screen (ft, bgs)	Bottom of Screen (ft, bgs)	Well Bottom (ft, bgs)	Screen Midpoint (ft, bgs)
B/MW-101(05)	1418713.7909	709904.0096	32.15	31.99	17	27	27	23
B/MW-102(05)	1418829.6033	709787.6836	28.05	27.60	7	17	17	12
B/MW-103(05)	1418570.6710	709822.8544	33.38	33.13	18	28	28	23
B/MW-104(05)	1418760.6340	709802.7049	29.42	29.14	12	22	22	17
B/MW-201(06)	1418475.6220	709829.4970	35.01	34.62	14	24	24	19
B/MW-202(06)	1418742.2620	709740.6720	28.68	28.10	9.5	19.5	19.5	14.5
B/MW-203(06)	1418857.9290	709719.8990	26.06	25.32	9.5	19.5	19.5	14.5
B/MW-301(10)	1418812.6260	709911.3770	31.14	30.81	15	25	25	20
B/MW-302(10)	1418625.7960	709886.5990	33.02	32.60	15	25	25	20
B/MW-303(10)	1418539.6000	709753.7880	33.35	32.97	14	24	24	19
B/MW-324(10)	1418570.3330	709807.5630	33.09	32.63	14	24	26	19
B/MW-404(11)	1418558.6354	709772.8932	33.33	32.95	14	24	24	19
B/PZ-407(11)	1418816.8233	709849.1786	29.81	29.26	14	24	24	19
B/PZ-408(11)	1418758.7155	709932.5038	31.87	31.53	14	24	24	19
B/PZ-409(11)	1418656.4867	709931.7253	33.33	32.79	15	25	25	20
B/PZ-410(11)	1418668.8797	709837.9031	31.65	31.17	14	24	24	19
B/PZ-411(11)	1418687.3890	709791.6188	30.61	30.21	14	24	24	19

Table 3
Groundwater Elevations



Well ID	Depth to Water (12/2005) (ft, bgs)	Groundwater Elevation (12/2005) (ft, NAVD88)	Depth to Water (12/2006) (ft, bgs)	Groundwater Elevation (12/2006) (ft, NAVD88)	Depth to Water (11/18/10) (ft, bgs)	Groundwater Elevation (11/18/10) (ft, NAVD88)	Depth to Water (3/1/11) (ft, bgs)	Groundwater Elevation (3/1/11) (ft, NAVD88)
B/MW-101(05)	NA	15.12	NA	14.43	17.57	14.42	NM	NM
B/MW-102(05)	NA	14.84	NA	14.15	13.65	13.95	13.43	14.17
B/MW-103(05)	NA	14.68	NA	13.95	19.25	13.88	19.06	14.07
B/MW-104(05)	NA	14.67	NA	13.95	15.21	13.93	15.00	14.14
B/MW-201(06)	--	--	NA	14.00	20.80	13.82	20.62	14.00
B/MW-202(06)	--	--	NA	14.18	14.20	13.90	NM	NM
B/MW-203(06)	--	--	NA	14.50	11.70	13.62	NM	NM
B/MW-301(10)	--	--	--	--	16.85	13.96	16.64	14.17
B/MW-302(10)	--	--	--	--	18.73	13.87	NM	NM
B/MW-303(10)	--	--	--	--	16.65	16.32	13.94	19.03
B/MW-324(10)	--	--	--	--	18.73	13.9	18.55	14.08
B/MW-404(11)	--	--	--	--	--	--	--	--
B/PZ-407(11)	--	--	--	--	--	--	--	--
B/PZ-408(11)	--	--	--	--	--	--	--	--
B/PZ-409(11)	--	--	--	--	--	--	--	--
B/PZ-410(11)	--	--	--	--	--	--	--	--
B/PZ-411(11)	--	--	--	--	--	--	--	--

Table 3
Groundwater Elevations



Well ID	Depth to Water (4/13/11) (ft, bgs)	Groundwater Elevation (4/13/11) (ft, NAVD88)	Depth to Water (5/4/11) (ft, bgs)	Groundwater Elevation (5/4/11) (ft, NAVD88)	Depth to Water (8/19/2014) (ft, bgs)	Groundwater Elevation (8/19/2014) (ft, NAVD88)	Depth to Water (10/07/2015) (ft, bgs)	Groundwater Elevation (10/07/2015) (ft, NAVD88)
B/MW-101(05)	16.00	15.99	16.06	15.93	17.24	14.75	17.82	14.17
B/MW-102(05)	12.10	15.50	12.15	15.45	13.17	14.43	13.8	13.8
B/MW-103(05)	17.62	15.51	17.66	15.47	NM	NM	NM	NM
B/MW-104(05)	13.64	15.50	13.64	15.50	14.75	14.39	15.32	13.82
B/MW-201(06)	19.15	15.47	19.2	15.42	NM	NM	NM	NM
B/MW-202(06)	12.70	15.40	NM	NM	13.76	14.34	14.31	13.79
B/MW-203(06)	10.18	15.14	10.25	15.07	11.33	13.99	11.89	13.43
B/MW-301(10)	15.30	15.51	15.35	15.46	NM	NM	NM	NM
B/MW-302(10)	17.09	15.51	17.15	15.45	NM	NM	NM	NM
B/MW-303(10)	15.85	17.12	16	16.97	NM	NM	NM	NM
B/MW-324(10)	17.17	15.46	17.21	15.42	NM	NM	NM	NM
B/MW-404(11)	17.51	15.44	17.51	15.44	18.61	14.34	19.23	13.72
B/PZ-407(11)	13.80	15.46	13.81	15.45	NM	NM	NM	NM
B/PZ-408(11)	15.98	15.55	16.01	15.52	NM	NM	NM	NM
B/PZ-409(11)	17.31	15.48	17.36	15.43	NM	NM	NM	NM
B/PZ-410(11)	15.70	15.47	15.74	15.43	NM	NM	NM	NM
B/PZ-411(11)	14.75	15.46	14.84	15.37	NM	NM	NM	NM

Table 3
Groundwater Elevations



Well ID	Depth to Water (11/09/2016) (ft, bgs)	Groundwater Elevation (11/09/2016) (ft, NAVD88)	Depth to Water (10/12/2017) (ft, bgs)	Groundwater Elevation (10/12/2017) (ft, NAVD88)	Depth to Water (10/18/2018) (ft, bgs)	Groundwater Elevation (10/18/2018) (ft, NAVD88)	Depth to Water (10/31/2019) (ft, bgs)	Groundwater Elevation (10/31/2019) (ft, NAVD88)
B/MW-101(05)	18.7	13.29	17.77	14.22	16.60	15.39	16.31	15.68
B/MW-102(05)	14.7	12.90	13.80	13.80	12.65	14.95	12.83	14.77
B/MW-103(05)	NM	NM	NM	NM	NM	NM	NM	NM
B/MW-104(05)	16.23	12.91	15.38	13.76	14.15	14.99	13.81	15.33
B/MW-201(06)	NM	NM	NM	NM	NM	NM	NM	NM
B/MW-202(06)	15.22	12.88	14.41	13.69	13.20	14.90	12.80	15.30
B/MW-203(06)	12.8	12.52	12.60	12.72	11.51	13.81	11.14	14.18
B/MW-301(10)	NM	NM	NM	NM	NM	NM	NM	NM
B/MW-302(10)	NM	NM	NM	NM	NM	NM	NM	NM
B/MW-303(10)	NM	NM	NM	NM	NM	NM	NM	NM
B/MW-324(10)	NM	NM	NM	NM	NM	NM	NM	NM
B/MW-404(11)	20.14	12.81	19.30	13.65	18.15	14.80	17.84	15.11
B/PZ-407(11)	NM	NM	NM	NM	NM	NM	NM	NM
B/PZ-408(11)	NM	NM	NM	NM	NM	NM	NM	NM
B/PZ-409(11)	NM	NM	NM	NM	NM	NM	NM	NM
B/PZ-410(11)	NM	NM	NM	NM	NM	NM	NM	NM
B/PZ-411(11)	NM	NM	NM	NM	NM	NM	NM	NM

Notes:

ft, NAVD88 = feet above North American Vertical Datum of 1988
ft, bgs = feet below ground surface
NA = Not Available
NM = Not Measured

Table 3
Groundwater Elevations



Well ID	Depth to Water (09/03/20) (ft, bgs)	Groundwater Elevation (09/03/20) (ft, NAVD88)	Depth to Water (09/02/21) (ft, bgs)	Groundwater Elevation (09/02/21) (ft, NAVD88)	Depth to Water (09/15/22) (ft, bgs)	Groundwater Elevation (09/15/22) (ft, NAVD88)
B/MW-101(05)	17.79	14.20	17.28	14.71	17.52	14.47
B/MW-102(05)	13.80	13.80	13.23	14.37	13.46	14.14
B/MW-103(05)	NM	NM	NM	NM	NM	NM
B/MW-104(05)	15.36	13.78	14.83	14.31	15.05	14.09
B/MW-201(06)	NM	NM	NM	NM	NM	NM
B/MW-202(06)	NM	NM	NM	NM	NM	NM
B/MW-203(06)	12.78	12.54	12.20	13.12	12.22	13.10
B/MW-301(10)	NM	NM	NM	NM	NM	NM
B/MW-302(10)	NM	NM	NM	NM	NM	NM
B/MW-303(10)	NM	NM	NM	NM	NM	NM
B/MW-324(10)	NM	NM	NM	NM	NM	NM
B/MW-404(11)	19.35	13.60	18.81	14.14	19.04	13.91
B/PZ-407(11)	NM	NM	NM	NM	NM	NM
B/PZ-408(11)	NM	NM	NM	NM	NM	NM
B/PZ-409(11)	NM	NM	NM	NM	NM	NM
B/PZ-410(11)	NM	NM	NM	NM	NM	NM
B/PZ-411(11)	NM	NM	NM	NM	NM	NM

Notes:

ft, NAVD88 = feet above North American Vertical Datum of 1988
ft, bgs = feet below ground surface
NA = Not Available
NM = Not Measured

Table 4
Historical Groundwater Data
B/MW-101(05)

Parameter	NYSDEC AWQS (µg/L)	12/31/05	12/31/06	11/18/10	05/05/11	08/19/14	10/07/15	11/09/16	10/12/17	10/18/18	10/31/19	09/03/20	09/02/21	09/15/22
BTEX														
Benzene	1	ND (<0.39)	ND (<0.39)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<0.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Ethylbenzene	5	ND (<0.45)	ND (<0.45)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Toluene	5	ND (<0.36)	ND (<0.36)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
m&p-Xylene	5	ND (<0.12)	ND (<1.2)	NR	NR	NR	ND (<2.5)	ND (<1.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene	5	ND (<0.46)	ND (<0.46)	NR	NR	NR	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylene (Total)	5	NR	NR	ND (<5.0)	ND (<5.0)	ND (<2.0)	ND (<2.5)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Total BTEX	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs														
Acenaphthene	20	ND (<2.7)	ND (<1.4)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Acenaphthylene	NA	ND (<2.6)	ND (<1.3)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Anthracene	50	ND (<2.8)	ND (<1.4)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Benzo(a)anthracene	0.002	ND (<2.2)	ND (<1.1)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Benzo(a)pyrene	NA	ND (<1.5)	ND (<1.2)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	0.13	ND (<0.098)
Benzo(b)fluoranthene	0.002	ND (<2.2)	ND (<0.76)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	0.17	ND (<0.098)
Benzo(g,h,i)perylene	NA	ND (<2.3)	ND (<1.1)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Benzo(k)fluoranthene	0.002	ND (<2.6)	ND (<1.9)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	0.16	ND (<0.098)
Chrysene	0.002	ND (<3.3)	ND (<1.7)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Dibenz(a,h)anthracene	NA	NR	ND (<0.87)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Fluoranthene	50	ND (<2.4)	ND (<1.2)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Fluorene	50	ND (<2.8)	ND (<1.4)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Indeno(1,2,3-cd)pyrene	0.002	ND (<1.7)	ND (<0.84)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
2-Methylnaphthalene	NA	ND (<2.2)	NR	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Naphthalene	10	ND (<2.8)	ND (<1.4)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	0.098	ND (<0.10)	ND (<0.098)
Phenanthrene	50	ND (<2.8)	ND (<1.4)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.10)	ND (<0.098)
Pyrene	50	ND (<2.9)	ND (<1.5)	ND (<4.3)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.10)	ND (<0.098)
Total PAHs	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.098	0.46	ND

NYSDEC = New York State Department of Environmental Conservation
 AWQS = Ambient Water Quality Standards
 µg/L = Micrograms per Liter
 BTEX = Benzene, Toluene, Ethylbenzene, & Xylenes
 PAH = Polycyclic Aromatic Hydrocarbons
 J = Estimated Concentration
 NA = Not Applicable
 NR = Not Recorded
 ND (<#) = Not Detected (# is laboratory reporting limit)
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Historical Groundwater Data
B/MW-102(05)

Parameter	NYSDEC AWQS (µg/L)	12/20/05	12/31/06	11/19/10	05/05/11	08/19/14	10/07/15	11/09/16	10/12/17	10/18/18	10/31/19	09/03/20	09/02/21	09/15/22
BTEX														
Benzene	1	ND (<0.39)	ND (<0.39)	ND (<5.0)	ND (<5.0)	0.086 J	ND (<0.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Ethylbenzene	5	ND (<0.45)	ND (<0.45)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Toluene	5	ND (<0.36)	ND (<0.36)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
m&p-Xylene	5	ND (<0.12)	ND (<1.2)	NR	NR	NR	ND (<2.5)	ND (<1.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene	5	0.72 J	ND (<0.46)	NR	NR	NR	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylene (Total)	5	NR	NR	ND (<5.0)	ND (<5.0)	ND (<2.0)	ND (<2.5)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Total BTEX	NA	0.72	ND	ND	ND	0.086	ND	ND	ND	ND	ND	ND	ND	ND
PAHs														
Acenaphthene	20	42	15 J	ND (<4.4)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Acenaphthylene	NA	1.8 J	9.4 J	ND (<4.4)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Anthracene	50	6.9 J	23 J	ND (<4.4)	ND (<4.0)	1.3 J	ND (<0.2)	0.03 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Benzo(a)anthracene	0.002	2.7 J	39 J	ND (<4.4)	ND (<4.0)	1.8	ND (<0.2)	0.056 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	0.19
Benzo(a)pyrene	NA	2.9 J	46 J	ND (<4.4)	ND (<4.0)	1.8 J	ND (<0.2)	0.046 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	0.29
Benzo(b)fluoranthene	0.002	3 J	40 J	ND (<4.4)	ND (<4.0)	1.9	ND (<0.2)	0.075 J	ND (<0.10)	0.16	ND (<0.099)	ND (<0.098)	ND (<0.10)	0.42
Benzo(g,h,i)perylene	NA	2.5 J	50 J	ND (<4.4)	ND (<4.0)	ND (<10)	ND (<0.2)	0.066 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	0.22
Benzo(k)fluoranthene	0.002	NR	25 J	ND (<4.4)	ND (<4.0)	0.82 J	ND (<0.2)	0.063 J	ND (<0.10)	0.14	ND (<0.099)	ND (<0.098)	ND (<0.10)	0.40
Chrysene	0.002	3 J	36 J	ND (<4.4)	ND (<4.0)	2.2 J	ND (<0.2)	0.045 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	0.15
Dibenz(a,h)anthracene	NA	NR	ND (<4.5)	ND (<4.4)	ND (<4.0)	ND (<1.0)	ND (<0.2)	0.033 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Fluoranthene	50	12	76	ND (<4.4)	ND (<4.0)	3.4 J	ND (<0.2)	0.086 J	ND (<0.10)	ND (<0.11)	0.17	ND (<0.098)	ND (<0.10)	0.30
Fluorene	50	24	ND (<7.2)	ND (<4.4)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Indeno(1,2,3-cd)pyrene	0.002	2.7 J	33 J	ND (<4.4)	ND (<4.0)	0.89 J	ND (<0.2)	0.055 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	0.19
2-Methylnaphthalene	NA	8.9 J	NR	ND (<4.4)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Naphthalene	10	ND (<1.4)	ND (<7.1)	ND (<4.4)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Phenanthrene	50	40	27 J	ND (<4.4)	ND (<4.0)	ND (<10)	ND (<0.2)	0.046 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.098)	ND (<0.10)	ND (<0.10)
Pyrene	50	10 J	190	ND (<4.4)	ND (<4.0)	3.9 J	ND (<0.2)	0.078 J	ND (<0.10)	0.15	0.19	ND (<0.098)	ND (<0.10)	0.32
Total PAHs	NA	162.4	609.4	ND	ND	18.01	ND	0.679	ND	0.45	0.36	ND	ND	2.48

NYSDEC = New York State Department of Environmental Conservation
 AWQS = Ambient Water Quality Standards
 µg/L = Micrograms per Liter
 BTEX = Benzene, Toluene, Ethylbenzene, & Xylenes
 PAH = Polycyclic Aromatic Hydrocarbons
 J = Estimated Concentration
 NA = Not Applicable
 NR = Not Recorded
 ND (<#) = Not Detected (# is laboratory reporting limit)
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Historical Groundwater Data
B/MW-104(05)

Parameter	NYSDEC AWQS (µg/L)	12/20/05	12/28/06	11/18/10	05/05/11	08/19/14	10/07/15	11/09/16	10/12/17	10/18/18	10/31/19	09/03/20	09/02/21	09/15/22
BTEX														
Benzene	1	2.7 J	1.9 J	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<0.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Ethylbenzene	5	1.3 J	ND (<0.45)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Toluene	5	ND (<0.36)	ND (<0.36)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
m&p-Xylene	5	6.2 J	ND (<1.2)	NR	NR	NR	ND (<2.5)	ND (<1.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene	5	3.2 J	ND (<0.46)	NR	NR	NR	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylene (Total)	5	NR	NR	ND (<5.0)	ND (<5.0)	ND (<2.0)	ND (<2.5)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Total BTEX	NA	13.4	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs														
Acenaphthene	20	14	22 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.098)	ND (<0.11)
Acenaphthylene	NA	3.6 J	25 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	0.17	ND (<0.11)
Anthracene	50	7.2 J	32 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	0.029 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.098)	ND (<0.11)
Benzo(a)anthracene	0.002	2.2 J	56	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	0.12	ND (<0.099)	0.39	ND (<0.11)
Benzo(a)pyrene	NA	1.6 J	10 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	0.13	ND (<0.099)	0.46	ND (<0.11)
Benzo(b)fluoranthene	0.002	1.6 J	47 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	0.15	ND (<0.099)	0.63	ND (<0.11)
Benzo(g,h,i)perylene	NA	ND (<1.1)	ND (<36)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	0.20	ND (<0.11)
Benzo(k)fluoranthene	0.002	NR	31 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	0.58	ND (<0.11)
Chrysene	0.002	2 J	50 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	0.11	ND (<0.099)	0.33	ND (<0.11)
Dibenz(a,h)anthracene	NA	NR	ND (<4.4)	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.098)	ND (<0.11)
Fluoranthene	50	9.3 J	73	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	0.046 J	ND (<0.10)	ND (<0.11)	0.19	ND (<0.099)	0.56	ND (<0.11)
Fluorene	50	17	21 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.098)	ND (<0.11)
Indeno(1,2,3-cd)pyrene	0.002	1 J	28 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	0.18	ND (<0.11)
2-Methylnaphthalene	NA	ND (<1.1)	NR	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.098)	ND (<0.11)
Naphthalene	10	ND (<1.4)	7.6 J	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.098)	ND (<0.11)
Phenanthrene	50	24	89	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	0.064 J	ND (<0.10)	ND (<0.11)	ND (<0.099)	ND (<0.099)	0.13	ND (<0.11)
Pyrene	50	6.2 J	160	ND (<4.3)	ND (<4.0)	ND (<1.0)	ND (<0.2)	0.04 J	ND (<0.10)	ND (<0.11)	0.16	ND (<0.099)	0.51	ND (<0.11)
Total PAHs	NA	89.7	651.6	ND	ND	ND	ND	0.179	ND	ND	0.86	ND	4.14	ND

NYSDEC = New York State Department of Environmental Conservation
 AWQS = Ambient Water Quality Standards
 µg/L = Micrograms per Liter
 BTEX = Benzene, Toluene, Ethylbenzene, & Xylenes
 PAH = Polycyclic Aromatic Hydrocarbons
 J = Estimated Concentration
 NA = Not Applicable
 NR = Not Recorded
 ND (<#) = Not Detected (# is laboratory reporting limit)
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Historical Groundwater Data
B/MW-203(06)

Parameter	NYSDEC AWQS (µg/L)	12/31/06	11/18/10	05/06/11	08/19/14	10/07/15	11/09/16	10/12/17	10/18/18	10/31/19	09/03/20	09/02/21	09/15/22
BTEX													
Benzene	1	ND (<0.39)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<0.5)	ND (<1.0)	8.2	ND (<1.0)	ND (<1.0)	131	92.5	98.4
Ethylbenzene	5	ND (<0.45)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	2.6	ND (<1.0)	25.0	45.0	13.0	150
Toluene	5	ND (<0.36)	ND (<5.0)	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	9.6	ND (<1.0)	3.7
m&p-Xylene	5	ND (<1.2)	NR	NR	NR	ND (<2.5)	ND (<1.0)	ND (<2.0)	ND (<2.0)	7.6	5.0	7.3	41.1
o-Xylene	5	ND (<0.46)	NR	NR	NR	ND (<2.5)	ND (<1.0)	2.0	ND (<1.0)	ND (<1.0)	19.8	13.3	54.6
Xylene (Total)	5	NR	ND (<5.0)	ND (<5.0)	ND (<2.0)	ND (<2.5)	ND (<2.0)	3.1	ND (<3.0)	7.6	24.9	20.6	95.7
Total BTEX	NA	ND	ND	ND	ND	ND	ND	13.9	ND	32.6	210.4	126.1	348
PAHs													
Acenaphthene	20	ND (<1.4)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	48.3	4.9	2.3	40.4	60.9	117
Acenaphthylene	NA	ND (<1.3)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	0.45	ND (<0.098)	ND (<0.097)	0.54	0.64	1.2
Anthracene	50	ND (<1.4)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	0.93	0.3	0.17	0.54	0.60	1.3
Benzo(a)anthracene	0.002	ND (<1.1)	ND (<4.2)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	0.26	0.19	0.10	0.25	0.16	0.31
Benzo(a)pyrene	NA	ND (<1.2)	ND (<4.2)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.098)	ND (<0.097)	ND (<0.99)	ND (<0.098)	ND (<0.10)
Benzo(b)fluoranthene	0.002	ND (<0.76)	ND (<4.2)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.098)	ND (<0.097)	ND (<0.99)	ND (<0.098)	ND (<0.10)
Benzo(g,h,i)perylene	NA	ND (<1.1)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.098)	ND (<0.097)	ND (<0.99)	ND (<0.098)	ND (<0.10)
Benzo(k)fluoranthene	0.002	ND (<1.9)	ND (<4.2)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.098)	ND (<0.097)	ND (<0.99)	ND (<0.098)	ND (<0.10)
Chrysene	0.002	ND (<1.7)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	0.16	0.13	ND (<0.097)	0.15	0.11	0.20
Dibenz(a,h)anthracene	NA	ND (<0.88)	ND (<4.2)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.098)	ND (<0.097)	ND (<0.99)	ND (<0.098)	ND (<0.10)
Fluoranthene	50	ND (<1.2)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	9.5	6.0	2.7	7.0	7.3	13.5
Fluorene	50	ND (<1.4)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	5.4	0.63	0.41	6.1	12.4	34.9
Indeno(1,2,3-cd)pyrene	0.002	ND (<0.84)	ND (<4.2)	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.098)	ND (<0.097)	ND (<0.99)	ND (<0.098)	ND (<0.10)
2-Methylnaphthalene	NA	NR	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.098)	ND (<0.097)	ND (<0.99)	ND (<0.098)	ND (<0.10)
Naphthalene	10	ND (<1.4)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	0.95	ND (<0.098)	0.28	23.2	4.9	86.3
Phenanthrene	50	ND (<1.4)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	1.7	0.31	0.29	1.3	1.4	4.5
Pyrene	50	ND (<1.5)	ND (<4.2)	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	7.0	5.1	2.3	5.5	5.6	10.2
Total PAHs	NA	ND	ND	ND	ND	ND	ND	74.7	17.6	8.6	85.0	94.0	269

NYSDEC = New York State Department of Environmental Conservation
 AWQS = Ambient Water Quality Standards
 µg/L = Micrograms per Liter
 BTEX = Benzene, Toluene, Ethylbenzene, & Xylenes
 PAH = Polycyclic Aromatic Hydrocarbons
 J = Estimated Concentration
 NA = Not Applicable
 NR = Not Recorded
 ND (<#) = Not Detected (# is laboratory reporting limit)
Bolded = values indicate exceedance of the NYSDEC AWQS

Table 4
Historical Groundwater Data
B/MW-404(11)

Parameter	NYSDEC AWQS (µg/L)	05/06/11	08/19/14	10/07/15	11/09/16	10/12/17	10/18/18	10/31/19	09/03/20	09/02/21	09/02/21
BTEX											
Benzene	1	ND (<5.0)	ND (<1.0)	ND (<0.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Ethylbenzene	5	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Toluene	5	ND (<5.0)	ND (<1.0)	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
m&p-Xylene	5	NR	NR	ND (<2.5)	ND (<1.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<2.0)
o-Xylene	5	NR	NR	ND (<2.5)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylene (Total)	5	ND (<5.0)	ND (<2.0)	ND (<2.5)	ND (<2.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Total BTEX	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PAHs											
Acenaphthene	20	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Acenaphthylene	NA	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Anthracene	50	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Benzo(a)anthracene	0.002	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Benzo(a)pyrene	NA	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Benzo(b)fluoranthene	0.002	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Benzo(g,h,i)perylene	NA	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Benzo(k)fluoranthene	0.002	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Chrysene	0.002	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Dibenz(a,h)anthracene	NA	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Fluoranthene	50	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Fluorene	50	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Indeno(1,2,3-cd)pyrene	0.002	ND (<4.0)	ND (<1.0)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
2-Methylnaphthalene	NA	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Naphthalene	10	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Phenanthrene	50	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Pyrene	50	ND (<4.0)	ND (<10)	ND (<0.2)	ND (<0.18)	ND (<0.098)	ND (<0.13)	ND (<0.098)	ND (<0.099)	ND (<0.099)	ND (<0.10)
Total PAHs	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

NYSDEC = New York State Department of Environmental Conservation
 AWQS = Ambient Water Quality Standards
 µg/L = Micrograms per Liter
 BTEX = Benzene, Toluene, Ethylbenzene, & Xylenes
 PAH = Polycyclic Aromatic Hydrocarbons
 J = Estimated Concentration
 NA = Not Applicable
 NR = Not Recorded
 ND (<#) = Not Detected (# is laboratory reporting limit)
Bolded = values indicate exceedance of the NYSDEC AWQS



Appendix A – Quarterly Inspection Forms

**Troy Liberty St
Non-Owned Former MGP Site
Site Wide Inspection**

Date: 12/7/2022
Technician: KL

Time: 10:00
Weather: Cloudy 50

Cover System			
Soil intrusion activities being performed?	YES	NO	COMMENTS:
Signs of soil intrusive activities?	YES	NO	COMMENTS:
Evidence of saw cutting?	YES	NO	COMMENTS:
Evidence of excavation or trenching?	YES	NO	COMMENTS:
Burrowing animals?	YES	NO	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
B/MW-101(05)	YES	NO
B/MW-102(05)	YES	NO
B/MW-104(05)	YES	NO
B/MW-202(06)	YES	NO
B/MW-203(06)	YES	NO
B/MW-404(11)	YES	NO

Well Destroyed by the City of Troy doing construction Fall of 2020.

General Comments/Suggested Action Items:

**Troy Liberty St
Non-Owned Former MGP Site
Site Wide Inspection**

Date: 9/15/2022
Technician: PL

Time: 9:15
Weather: Sunny 60

Cover System			
Soil intrusion activities being performed?	YES	NO	COMMENTS:
Signs of soil intrusive activities?	YES	NO	COMMENTS:
Evidence of saw cutting?	YES	NO	COMMENTS:
Evidence of excavation or trenching?	YES	NO	COMMENTS:
Burrowing animals?	YES	NO	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
B/MW-101(05)	YES	NO
B/MW-102(05)	YES	NO
B/MW-104(05)	YES	NO
B/MW-202(06)	YES	NO
B/MW-203(06)	YES	NO
B/MW-404(11)	YES	NO

Well Destroyed by the City of Troy doing construction Fall of 2020.

General Comments/Suggested Action Items:

**Troy Liberty St
Non-Owned Former MGP Site
Site Wide Inspection**

Date: 6/23/2022
Technician: KL

Time: 10:45
Weather: Cloudy 68

Cover System			
Soil intrusion activities being performed?	YES	NO	COMMENTS:
Signs of soil intrusive activities?	YES	NO	COMMENTS:
Evidence of saw cutting?	YES	NO	COMMENTS:
Evidence of excavation or trenching?	YES	NO	COMMENTS:
Burrowing animals?	YES	NO	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
B/MW-101(05)	YES	NO
B/MW-102(05)	YES	NO
B/MW-104(05)	YES	NO
B/MW-202(06)	YES	NO
B/MW-203(06)	YES	NO
B/MW-404(11)	YES	NO

Well Destroyed by the City of Troy doing construction Fall of 2020.

General Comments/Suggested Action Items:

**Troy Liberty St
Non-Owned Former MGP Site
Site Wide Inspection**

Date: 3/3/2022
Technician: KL

Time: 13:00
Weather: Cloudy 33

Cover System			
Soil intrusion activities being performed?	YES	NO	COMMENTS:
Signs of soil intrusive activities?	YES	NO	COMMENTS:
Evidence of saw cutting?	YES	NO	COMMENTS:
Evidence of excavation or trenching?	YES	NO	COMMENTS:
Burrowing animals?	YES	NO	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
B/MW-101(05)	YES	NO
B/MW-102(05)	YES	NO
B/MW-104(05)	YES	NO
B/MW-202(06)	YES	NO
B/MW-203(06)	YES	NO
B/MW-404(11)	YES	NO

Well Destroyed by the City of Troy doing construction Fall of 2020.

General Comments/Suggested Action Items:



Appendix B – Well Sampling Field Data

National Grid
Troy Liberty Street Site
Troy, New York

Annual Groundwater Sampling
9/15/2022
PL

Well ID.	Sample?	Well Size	Well Material	Stickup-Flush	DTP	DTW	DTB	Comments
B/MW-101(05)	Yes	2"	PVC	Flush	—	17.52	26.90	
B/MW-102(05)	Yes	2"	PVC	Flush	—	13.46	16.40	Field Duplicate
B/MW-104(05)	Yes	2"	PVC	Flush	—	15.05	21.15	MS/MSD
B/MW-202(06)	Yes	2"	PVC	Flush	—	—	19.55	well destroyed Fall 2020
B/MW-203(06)	Yes	2"	PVC	Flush	—	12.22	15.92	MS/MSD MS/MSD
B/MW-404(11)	Yes	2"	PVC	Flush	—	19.04	23.85	Field Duplicate

National Grid
Liberty Street, Troy New York

Sampling Personnel: Peter Lyon
Job Number: 0603324-121801-221
Well Id. **B/MW-101(05)**

Date: 9/15/22
Weather: 65° Sunny
Time In: 0925 Time Out: 1005

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>17.52</u>	
Depth to Product:	(feet)	<u>—</u>	
Depth to Bottom:	(feet)	26.90	
Length of Water Column:	(feet)	<u>9.38</u>	
Volume of Water in Well:	(gal)	<u>1.50</u>	
Three Well Volumes:	(gal)	<u>4.5</u>	

Well Type: Flushmount ☒ Stick-Up ☐
Well Locked: Yes ☒ No ☐
Measuring Point Marked: Yes ☒ No ☐
Well Material: PVC ☒ SS ☐ Other: ☐
Well Diameter: 1" ☐ 2" ☒ Other: ☐
Comments:

Purging Information

Purging Method: ☐ Bailer ☒ Peristaltic ☐ Grundfos Pump
Tubing/Bailer Material: Teflon ☐ Stainless St. ☒ Polyethylene ☒
Sampling Method: Bailer ☐ Peristaltic ☒ Grundfos Pump ☐
Average Pumping Rate: (ml/min) 200
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2 Did well go dry? Yes ☐ No ☒
Horiba U-52 Water Quality Meter Used? Yes ☒ No ☐

Conversion Factors

gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>0925</u>	<u>17.53</u>	<u>21.68</u>	<u>7.17</u>	<u>147</u>	<u>2.54</u>	<u>16.3</u>	<u>5.31</u>	<u>1.63</u>
<u>0935</u>	<u>17.53</u>	<u>20.33</u>	<u>7.15</u>	<u>154</u>	<u>2.52</u>	<u>20.8</u>	<u>2.15</u>	<u>1.61</u>
<u>0940</u>	<u>17.53</u>	<u>18.67</u>	<u>7.13</u>	<u>160</u>	<u>2.51</u>	<u>22.2</u>	<u>2.18</u>	<u>1.60</u>
<u>0945</u>	<u>17.53</u>	<u>18.55</u>	<u>7.11</u>	<u>164</u>	<u>2.52</u>	<u>16.0</u>	<u>2.11</u>	<u>1.61</u>
<u>0950</u>	<u>17.53</u>	<u>18.32</u>	<u>7.11</u>	<u>167</u>	<u>2.51</u>	<u>9.8</u>	<u>2.12</u>	<u>1.61</u>
<u>0955</u>	<u>17.53</u>	<u>18.33</u>	<u>7.10</u>	<u>171</u>	<u>2.48</u>	<u>7.7</u>	<u>2.10</u>	<u>1.59</u>
<u>1000</u>	<u>17.53</u>	<u>18.22</u>	<u>7.10</u>	<u>173</u>	<u>2.44</u>	<u>5.4</u>	<u>2.13</u>	<u>1.56</u>

Sampling Information:

Quantity	Size	Material	Preservative	Compounds analyzed	Method
3	40 mL	Glass	HCl	BTEX	EPA Method 8260B
2	100 mL	Glass	Unpreserved	PAH's	EPA Method 8270C

Sample ID: B/MW-101(05)-0922 Duplicate? Yes ☐ No ☒
Sample Time: 1000 MS/MSD? Yes ☐ No ☒

Shipped: Drop-off Albany Service Center ☐
Pace Courier ☒

Comments/Notes:

Laboratory: PACE Analytical
Greensburg, PA

Sampling Personnel: Peter Lyon

Job Number: 0603324-121801-221

Well Id. **B/MW-102(05)**

Date: 9/15/22

Weather: 65 Sunny

Time In: 1053 Time Out: 1130

Well Information

		TOC	Other
Depth to Water:	(feet)	<u>13.46</u>	
Depth to Product:	(feet)	<u>-</u>	
Depth to Bottom:	(feet)	<u>16.40</u>	
Length of Water Column:	(feet)	<u>2.94</u>	
Volume of Water in Well:	(gal)	<u>0.47</u>	
Three Well Volumes:	(gal)	<u>1.41</u>	

Well Type: Flushmount ☒ Stick-Up ☐
Well Locked: Yes ☒ No ☐
Measuring Point Marked: Yes ☒ No ☐
Well Material: PVC ☒ SS ☐ Other: ☐
Well Diameter: 1" ☐ 2" ☒ Other: ☐
Comments:

Purging Information

Purging Method: ☐ Bailer ☒ Peristaltic ☐ Grundfos Pump
Tubing/Bailer Material: ☐ Teflon ☒ Stainless St. ☐ Polyethylene
Sampling Method: ☐ Bailer ☒ Peristaltic ☐ Grundfos Pump
Average Pumping Rate: (ml/min) 200
Duration of Pumping: (min) 30
Total Volume Removed: (gal) 2 Did well go dry? Yes ☐ No ☒

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Horiba U-52 Water Quality Meter Used? Yes ☒ No ☐

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1055</u>	<u>13.79</u>	<u>20.20</u>	<u>6.72</u>	<u>157</u>	<u>2.08</u>	<u>60.1</u>	<u>4.87</u>	<u>1.33</u>
<u>1100</u>	<u>13.93</u>	<u>21.20</u>	<u>6.88</u>	<u>153</u>	<u>1.91</u>	<u>62.7</u>	<u>8.44</u>	<u>1.22</u>
<u>1105</u>	<u>14.01</u>	<u>21.33</u>	<u>6.92</u>	<u>243</u>	<u>1.88</u>	<u>52.6</u>	<u>8.38</u>	<u>1.20</u>
<u>1110</u>	<u>14.10</u>	<u>21.37</u>	<u>6.97</u>	<u>258</u>	<u>1.92</u>	<u>32.1</u>	<u>8.74</u>	<u>1.23</u>
<u>1115</u>	<u>14.18</u>	<u>21.49</u>	<u>7.03</u>	<u>258</u>	<u>1.92</u>	<u>14.5</u>	<u>8.86</u>	<u>1.23</u>
<u>1120</u>	<u>14.26</u>	<u>21.30</u>	<u>6.80</u>	<u>252</u>	<u>1.91</u>	<u>18.5</u>	<u>7.77</u>	<u>1.22</u>
<u>1125</u>	<u>14.36</u>	<u>21.28</u>	<u>6.76</u>	<u>251</u>	<u>1.93</u>	<u>4.4</u>	<u>6.86</u>	<u>1.24</u>

Sampling Information:

Quantity	Size	Material	Preservative	Compounds analyzed	Method
<u>3</u>	<u>40 mL</u>	<u>Glass</u>	<u>HCl</u>	<u>BTEX</u>	<u>EPA Method 8260B</u>
<u>2</u>	<u>100 mL</u>	<u>Glass</u>	<u>Unpreserved</u>	<u>PAH's</u>	<u>EPA Method 8270C</u>

Sample ID: B/MW-102(05)-0922 Duplicate? Yes ☒ No ☒
Sample Time: 1125 MS/MSD? Yes ☐ No ☒

Shipped: Drop-off Albany Service Center ☐
Pace Courier ☒

Comments/Notes: Field duplicate taken
Well 202 no longer exists

Laboratory: PACE Analytical
Greensburg, PA

Sampling Personnel: Rhr ysr
Job Number: 0603324-121801-221
Well Id. B/MW-104(05)

Date: 9/15/20
Weather: 65° Sunny
Time In: 1012 Time Out: 1050

Well Information			
		TOC	Other
Depth to Water:	(feet)	<u>15.05</u>	
Depth to Product:	(feet)	<u>-</u>	
Depth to Bottom:	(feet)	<u>21.15</u>	
Length of Water Column:	(feet)	<u>6.1</u>	
Volume of Water in Well:	(gal)	<u>.97</u>	
Three Well Volumes:	(gal)	<u>2.92</u>	

Well Type: Flushmount ☒ Stick-Up ☐
Well Locked: Yes ☒ No ☐
Measuring Point Marked: Yes ☒ No ☐
Well Material: PVC ☒ SS ☐ Other: ☐
Well Diameter: 1" ☐ 2" ☒ Other: ☐
Comments:

Purging Information			
Purging Method:	Bailer ☐	Peristaltic ☒	Grundfos Pump ☐
Tubing/Bailer Material:	Teflon ☐	Stainless St. ☐	Polyethylene ☒
Sampling Method:	Bailer ☐	Peristaltic ☒	Grundfos Pump ☐
Average Pumping Rate:	(ml/min)	<u>20</u>	
Duration of Pumping:	(min)	<u>30</u>	
Total Volume Removed:	(gal)	<u>2</u>	
Did well go dry?		Yes ☐ No ☒	
Horiba U-52 Water Quality Meter Used?		Yes ☒ No ☐	

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1015	15.27	19.41	6.92	129	1.66	45.8	0.27	1.06
1020	15.29	19.08	6.77	90	1.58	23.4	0.00	1.01
1025	15.28	19.11	6.76	93	1.52	13.8	0.00	0.974
1030	15.30	19.09	6.75	101	1.50	9.2	0.00	0.961
1035	15.30	19.02	6.74	108	1.49	5.5	0.00	0.952
1040	15.30	19.04	6.73	114	1.47	3.8	0.00	0.943
1045	15.30	19.09	6.73	119	1.47	4.3	0.00	0.942

Sampling Information:					
Quantity	Size	Material	Preservative	Compounds analyzed	Method
9	40 mL	Glass	HCl	BTEX	EPA Method 8260B
6	100 mL	Glass	Unpreserved	PAH's	EPA Method 8270C

B/MW-104(05)-MS-0922 and B/MW-1040(05)-MSD-0922
Sample ID: B/MW-104(05)-0922 Duplicate? Yes ☐ No ☒
Sample Time: 1045 MS/MSD? Yes ☒ No ☐
Shipped: Drop-off Albany Service Center ☐
Pace Courier ☒
Laboratory: PACE Analytical
Greensburg, PA

Comments/Notes:

PACE Analytical
Greensburg, PA

Sampling Personnel: Peter Lyon
Job Number: 0603324-121801-221
Well Id. B/MW-203(06)

Date: 9/15/22
Weather: 65° Sunny
Time In: 1237 Time Out: 1315

Well Information		
	TOC	Other
Depth to Water: (feet)	<u>12.22</u>	
Depth to Product: (feet)	<u>-</u>	
Depth to Bottom: (feet)	<u>15.92</u>	
Length of Water Column: (feet)	<u>3.7</u>	
Volume of Water in Well: (gal)	<u>0.59</u>	
Three Well Volumes: (gal)	<u>1.77</u>	

Well Type:	Flushmount ☒	Stick-Up ☐
Well Locked:	Yes ☒	No ☐
Measuring Point Marked:	Yes ☒	No ☐
Well Material:	PVC ☒ SS ☐	Other:
Well Diameter:	1" ☐ 2" ☒	Other:
Comments:		

Purging Information		
Purging Method:	Bailer ☐ Peristaltic ☒	Grundfos Pump ☐
Tubing/Bailer Material:	Teflon ☐ Stainless St. ☐	Polyethylene ☒
Sampling Method:	Bailer ☐ Peristaltic ☒	Grundfos Pump ☐
Average Pumping Rate: (ml/min)	<u>200</u>	
Duration of Pumping: (min)	<u>30</u>	
Total Volume Removed: (gal)	<u>2</u>	Did well go dry? Yes ☐ No ☒
Horiba U-52 Water Quality Meter Used? Yes ☒ No ☐		

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=133.7cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1240</u>	<u>12.62</u>	<u>22.74</u>	<u>6.90</u>	<u>-107</u>	<u>1.67</u>	<u>92.5</u>	<u>0.23</u>	<u>1.07</u>
<u>1245</u>	<u>12.77</u>	<u>21.85</u>	<u>6.85</u>	<u>-126</u>	<u>1.50</u>	<u>33.1</u>	<u>0.00</u>	<u>0.956</u>
<u>1250</u>	<u>12.79</u>	<u>21.70</u>	<u>6.83</u>	<u>-124</u>	<u>1.42</u>	<u>14.2</u>	<u>0.00</u>	<u>0.911</u>
<u>1255</u>	<u>12.80</u>	<u>21.72</u>	<u>6.82</u>	<u>-124</u>	<u>1.42</u>	<u>12.0</u>	<u>0.00</u>	<u>0.905</u>
<u>1300</u>	<u>12.80</u>	<u>21.70</u>	<u>6.82</u>	<u>-123</u>	<u>1.40</u>	<u>5.5</u>	<u>0.00</u>	<u>0.899</u>
<u>1305</u>	<u>12.79</u>	<u>21.77</u>	<u>6.82</u>	<u>-123</u>	<u>1.40</u>	<u>5.3</u>	<u>0.00</u>	<u>0.895</u>
<u>1310</u>	<u>12.79</u>	<u>21.72</u>	<u>6.82</u>	<u>-123</u>	<u>1.41</u>	<u>3.2</u>	<u>0.00</u>	<u>0.899</u>

Sampling Information:					
Quantity	Size	Material	Preservative	Compounds analyzed	Method
3	40 mL	Glass	HCl	BTEX	EPA Method 8260B
2	100 mL	Glass	Unpreserved	PAH's	EPA Method 8270C

Sample ID: B/MW-203(06)-0922 Duplicate? Yes ☐ No ☒
Sample Time: 1310 MS/MSD? Yes ☒ No ☒

Shipped: Drop-off Albany Service Center ☐
Pace Courier ☒

Comments/Notes: MS/MSD Taken

Laboratory: PACE Analytical
Greensburg, PA

Sampling Personnel: P. L. L. L.

Job Number: 0603324-121801-221

Well Id. **B/MW-404(11)**

Date: 9/15/22

Weather: 65° Sunny

Time In: 1151 Time Out: 1230

Well Information		
	TOC	Other
Depth to Water: (feet)	<u>19.04</u>	
Depth to Product: (feet)	<u>-</u>	
Depth to Bottom: (feet)	23.85	
Length of Water Column: (feet)	<u>4.81</u>	
Volume of Water in Well: (gal)	<u>0.76</u>	
Three Well Volumes: (gal)	<u>2.30</u>	

Well Type:	Flushmount ☒	Stick-Up ☐
Well Locked:	Yes ☒	No ☐
Measuring Point Marked:	Yes ☒	No ☐
Well Material:	PVC ☒ SS ☐	Other:
Well Diameter:	1" ☐ 2" ☒	Other:
Comments:		

Purging Information		
Purging Method:	Bailer ☐ Peristaltic ☒	Grundfos Pump ☐
Tubing/Bailer Material:	Teflon ☐ Stainless St. ☒	Polyethylene ☒
Sampling Method:	Bailer ☐ Peristaltic ☒	Grundfos Pump ☐
Average Pumping Rate: (ml/min)	<u>200</u>	
Duration of Pumping: (min)	<u>30</u>	
Total Volume Removed: (gal)	<u>2</u>	Did well go dry? Yes ☐ No ☒
Horiba U-52 Water Quality Meter Used? Yes ☒ No ☐		

Conversion Factors				
gal/ft. of water	1" ID	2" ID	4" ID	6" ID
	0.04	0.16	0.66	1.47
1 gallon=3.785L=3785mL=1337cu. feet				

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1155</u>	<u>19.06</u>	<u>21.68</u>	<u>6.64</u>	<u>218</u>	<u>1.49</u>	<u>3.1</u>	<u>0.00</u>	<u>0.950</u>
<u>1200</u>	<u>19.07</u>	<u>20.81</u>	<u>6.58</u>	<u>204</u>	<u>1.49</u>	<u>1.2</u>	<u>0.00</u>	<u>0.951</u>
<u>1205</u>	<u>19.06</u>	<u>20.71</u>	<u>6.57</u>	<u>194</u>	<u>1.49</u>	<u>9.0</u>	<u>0.00</u>	<u>0.950</u>
<u>1210</u>	<u>19.07</u>	<u>20.53</u>	<u>6.57</u>	<u>188</u>	<u>1.49</u>	<u>0.2</u>	<u>0.00</u>	<u>0.953</u>
<u>1215</u>	<u>19.06</u>	<u>20.42</u>	<u>6.57</u>	<u>184</u>	<u>1.49</u>	<u>0.4</u>	<u>0.00</u>	<u>0.952</u>
<u>1220</u>	<u>19.07</u>	<u>20.28</u>	<u>6.57</u>	<u>180</u>	<u>1.48</u>	<u>0.0</u>	<u>0.00</u>	<u>0.950</u>
<u>1225</u>	<u>19.07</u>	<u>20.20</u>	<u>6.58</u>	<u>179</u>	<u>1.49</u>	<u>0.0</u>	<u>0.00</u>	<u>0.949</u>

Sampling Information:					
Quantity	Size	Material	Preservative	Compounds analyzed	Method
6	40 mL	Glass	HCl	BTEX	EPA Method 8260B
4	100 mL	Glass	Unpreserved	PAH's	EPA Method 8270C

FD-0922

Sample ID: B/MW-404(11)-0922 Duplicate? Yes ☒ No ☒

Sample Time: 1225 MS/MSD? Yes ☐ No ☒

Shipped: Drop-off Albany Service Center ☐ Pace Courier ☒

Laboratory: PACE Analytical
Greensburg, PA

Comments/Notes:



Appendix C – Data Usability Summary Report and Analytical Data



Groundwater & Environmental Services, Inc.

708 North Main Street, Suite 201
Blacksburg, VA 24060

T. 800.662.5067

February 15, 2023

Devin Shay
Groundwater & Environmental Services, Syracuse
6780 Northern Blvd., Suite 100
East Syracuse, NY 13057

RE: Data Usability Summary Report for National Grid - Troy Liberty Street Site - Data Package: 30522610

Groundwater & Environmental Services, Inc. (GES) reviewed one data package (Laboratory Project No.: 30522610) from Pace Analytical Services, LLC in Greensburg PA., for the analysis of samples collected on September 15, 2022 from monitoring wells located at the National Grid: Troy Liberty Street Site. Five aqueous samples and a field duplicate were analyzed for BTEX and PAHs. Methodologies utilized are those of USEPA SW846 methods 8260C and 8270D with additional QC requirements of the NYSDEC ASP.

The data packages submitted contain full deliverables for validation, but this usability report is generated from review of the summary form information, with full validation review of sample raw data, and limited review of associated QC raw data. The reported summary forms have been reviewed for application of validation qualifiers, using guidance from the National Grid generic QAPP, USEPA Region 2 validation SOPs, the USEPA National Functional Guidelines for Data Review, and professional judgment, as affects the usability of the data. The following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate Recoveries
- Matrix Spike Recoveries/ Matrix Spike Duplicate Correlations (MS/MSD)
- Field Duplicate Correlations
- Laboratory Control Sample (LCS)
- Preparation/Calibration/Method Blanks
- Instrument MDLs
- Sample Quantitation and Identification

The items listed above which show deficiencies are discussed within the text of this narrative.

All of the other items are determined to be acceptable for the DUSR level review.

Table 1. Laboratory – Field Cross Reference

Lab Sample ID	Client Sample ID	Matrix	Collected
30522610001	B/MW-101(05)-0922	Water	09/15/22 10:00
30522610002	B/MW-102(05)-0922	Water	09/15/22 11:25
30522610003	B/MW-104(05)-0922	Water	09/15/22 10:45
30522610004	B/MW-203(06)-0922	Water	09/15/22 13:10
30522610005	B/MW-203(06)-MS-0922	Water	09/15/22 13:10
30522610006	B/MW-203(06)-MSD-0922	Water	09/15/22 13:10
30522610007	B/MW-404(11)-0922	Water	09/15/22 12:25
30522610008	Field Dup-0922	Water	09/15/22 00:00
30522610009	Trip Blank	Water	09/15/22 13:30

Table 2 – Data Qualifications

Sample ID	Qualifier	Analyte	Reason for qualification
B/MW-203(06)	J-	Acenaphthene	MS/MSD Low recoveries
		Fluoranthene	
		Fluorene	
		Naphthalene	
All Samples	J	Benzo(b)fluoranthene	Analyte does not separate sufficiently. Data is estimated
		Benzo(k)fluoranthene	

In summary, sample results are usable as reported.

The laboratory case narratives and sample identification summary forms are attached to this text, and should be reviewed in conjunction with this report.

BTEX and TCL Volatiles by EPA 8260C/NYSDEC ASP

Sample holding times are met. Surrogate and recoveries are within required limits. Surrogate and recoveries are within required limits, with the exception of high recoveries for 1,2-dichloroethane-d4 in B/MW-404(11), B/MW-104(5), the field duplicate, the blank and LCS. Laboratory control sample recoveries are within laboratory-provided criteria, so there was no high bias. The CCV for the 1,2-dichloroethane was high, indicating that the recovery for the surrogate does not necessarily reflect the efficacy of the method. There were no detections associated with the high surrogate, so no data was qualified. The MS/MSD recoveries and relative percent differences (RPD) reported within laboratory-provided criteria. The blind field duplicate correlations associated with B/MW-102(05) were not calculated, as there were no detections above RL in either sample.

PAHs by EPA8270D/NYSDEC ASP

Sample holding times are met. Surrogate and recoveries are within required limits. Laboratory control sample recoveries are within laboratory-provided criteria, so there was no high bias. There were no detections in the blank samples. The MS/MSD recoveries and relative percent differences (RPD) reported within laboratory-provided criteria when the original concentration was <4x the spiking concentrations. with the following exceptions:

- Acenaphthene, Fluoranthene, Fluorene, Naphthalene recovered low. The data may be biased low.
- Benzo(b)fluoranthene and benzo(k)fluoranthene were separated in the check standard but did not meet the resolution criteria in SW846 Method 8270D. The laboratory reported results as individual isomers, however, for these two compounds, the peak represents an isomeric pair. Detections for these analytes must be considered additive. There were no positive detections, therefore, no data is qualified.

The blind field duplicate correlations associated with B/MW-102(05) were not calculated, as there were no detections that exceeded 5 times the reporting limit. Per EPA guidance, precision can only be calculated using concentrations that are at least 5 times the reporting limit.

Data Package Completeness

The NYSDEC Category B deliverables was included in the laboratory data package, all information required for validation of the data is present.

Please do not hesitate to contact me if you have comments or questions regarding this report.



Bonnie Janowiak, Ph.D.
Principal Chemist
701 N Main, Suite 201
Blacksburg, VA 24060

SAMPLE SUMMARY

Project: National Grid - Troy Liberty S

Pace Project No.: 30522610

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30522610001	B/MW-101(05)-0922	Water	09/15/22 10:00	09/16/22 09:50
30522610002	B/MW-102(05)-0922	Water	09/15/22 11:25	09/16/22 09:50
30522610003	B/MW-104(05)-0922	Water	09/15/22 10:45	09/16/22 09:50
30522610004	B/MW-203(06)-0922	Water	09/15/22 13:10	09/16/22 09:50
30522610005	B/MW-203(06)-MS-0922	Water	09/15/22 13:10	09/16/22 09:50
30522610006	B/MW-203(06)-MSD-0922	Water	09/15/22 13:10	09/16/22 09:50
30522610007	B/MW-404(11)-0922	Water	09/15/22 12:25	09/16/22 09:50
30522610008	Field Dup-0922	Water	09/15/22 00:00	09/16/22 09:50
30522610009	Trip Blank	Water	09/15/22 13:30	09/16/22 09:50

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Troy Liberty S

Pace Project No.: 30522610

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: September 30, 2022

General Information:

8 samples were analyzed for EPA 8270D by SIM by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3510C with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 533845

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30522610004

ML: Matrix spike recovery and/or matrix spike duplicate recovery was below laboratory control limits. Result may be biased low.

- MS (Lab ID: 2589938)
 - Acenaphthene
 - Fluoranthene
 - Fluorene
 - Naphthalene
- MSD (Lab ID: 2589939)
 - Naphthalene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Troy Liberty S

Pace Project No.: 30522610

Method: EPA 8260C

Description: 8260C MSV

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: September 30, 2022

General Information:

9 samples were analyzed for EPA 8260C by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

QC Batch: 535633

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.

- B/MW-101(05)-0922 (Lab ID: 30522610001)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-102(05)-0922 (Lab ID: 30522610002)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-104(05)-0922 (Lab ID: 30522610003)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-203(06)-0922 (Lab ID: 30522610004)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-203(06)-MS-0922 (Lab ID: 30522610005)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-203(06)-MSD-0922 (Lab ID: 30522610006)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-404(11)-0922 (Lab ID: 30522610007)
 - 1,2-Dichloroethane-d4 (S)
- BLANK (Lab ID: 2599127)
 - 1,2-Dichloroethane-d4 (S)
- Field Dup-0922 (Lab ID: 30522610008)
 - 1,2-Dichloroethane-d4 (S)
- LCS (Lab ID: 2599128)
 - 1,2-Dichloroethane-d4 (S)
- MS (Lab ID: 2599129)
 - 1,2-Dichloroethane-d4 (S)
- MSD (Lab ID: 2599130)
 - 1,2-Dichloroethane-d4 (S)
- Trip Blank (Lab ID: 30522610009)
 - 1,2-Dichloroethane-d4 (S)

Internal Standards:

All internal standards were within QC limits with any exceptions noted below.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: National Grid - Troy Liberty S

Pace Project No.: 30522610

Method: EPA 8260C

Description: 8260C MSV

Client: Groundwater & Environmental Services, Inc. (Syracuse)

Date: September 30, 2022

Surrogates:

All surrogates were within QC limits with any exceptions noted below.

QC Batch: 535633

ST: Surrogate recovery was above laboratory control limits. Results may be biased high.

- B/MW-104(05)-0922 (Lab ID: 30522610003)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-203(06)-0922 (Lab ID: 30522610004)
 - 1,2-Dichloroethane-d4 (S)
- B/MW-404(11)-0922 (Lab ID: 30522610007)
 - 1,2-Dichloroethane-d4 (S)
- BLANK (Lab ID: 2599127)
 - 1,2-Dichloroethane-d4 (S)
- Field Dup-0922 (Lab ID: 30522610008)
 - 1,2-Dichloroethane-d4 (S)
- LCS (Lab ID: 2599128)
 - 1,2-Dichloroethane-d4 (S)

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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