nationalgrid

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

December 20, 2022

Mr. Scott Deyette
Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, BURC
625 Broadway
Albany, New York 12233-7014

RE: National Grid Former Manufactured Gas Plant Site
1 East Street, Ilion, New York
Annual Groundwater Monitoring Report

Dear Mr. Deyette:

Enclosed for your review is the Annual Groundwater Monitoring Report for the NG Ilion Former MGP Site, for 2022.

Groundwater and Environmental Service, Inc., (GES) contractor for National Grid, conducts all long-term monitoring and sampling activities at the site. Quarterly site inspections were conducted in 2022 (January, April, July, and October). The site is generally in good shape and in compliance. There were detections in several of the wells during the April and October 2022 sampling events that exceeded the regulatory criteria.

If you have any questions, then please feel free to contact me at 315.428.5652.

Very truly yours,

for SPS

Steven P. Stucker, C.P.G.
Lead Environmental Engineer
National Grid

Cc: Devin T. Shay – Groundwater and Environmental Services, Inc.

National Grid

Annual Groundwater Monitoring Report

National Grid Ilion Former MGP Site
1 East Street, Ilion, NY 13357

December 2022

Version 1

Annual Groundwater Monitoring Report

National Grid Ilion Former MGP Site
1 East Street
Ilion, NY 13357

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

Prepared by:
Groundwater & Environmental Services, Inc.
6780 Northern Boulevard, Suite 100
East Syracuse, NY 13057
TEL: 800-220-3069
www.gesonline.com

GES Project:
0603324.133570.221

Date:
December 20, 2022

Devin T. Shay, PG
Program Manager / Principal Hydrogeologist

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1 Introduction

This Annual Groundwater Monitoring Report presents results from the activities conducted at the Ilion (East Street and State Street) former non-owned manufactured gas plant (MGP) site (the Site) located in Ilion, New York (Site #6-22-019). On November 7, 2003, Niagara Mohawk Power Corporation, a predecessor to National Grid, and the New York State Department of Environmental Conservation (NYSDEC) entered into a multi-site Order on Consent (Index No. A4-0473-0000) that included this Site. A site location map is presented on Figure 1, and a site map is presented as Figure 2. All work summarized herein has been conducted in accordance with the approved Site Management Plan (SMP) for the property, dated October 22, 2018, prepared for and submitted to the New York State Department of Environmental Conservation (NYSDEC) by Arcadis.

A detailed discussion of the semi-annual monitoring activities and results is presented below.

2 Semi-Annual Groundwater Monitoring

2.1 Objectives

The objectives of the April 2022, and October 2022 groundwater monitoring activities were to:

- Obtain groundwater elevation data from monitoring wells in the vicinity of the site to evaluate groundwater flow direction, and compare the results with historical groundwater flow conditions.
- Obtain analytical data to assess potential changes in groundwater quality at the site and compare the results to the Class GA groundwater standards and guidance values presented in the NYSDEC document entitled, “Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations” (TOGS 1.1.1), reissued June 1998 and amended April 2000 and June 2004.

2.2 Groundwater Well Gauging

The April 28, 2022, and October 26, 2022 groundwater monitoring field activities were conducted by GES. Prior to collecting groundwater samples, static fluid level measurements were collected from MW-02R, MW-03, MW-06, MW-07, W-08R, and MW-13. Water levels were measured to the nearest 0.01 foot using an electronic oil-water interface probe to determine the depth from a surveyed mark on the top of the inner polyvinyl chloride (PVC) well casing to the groundwater within the well.

The fluid level measurements obtained from each monitoring well were converted to groundwater elevations using the surveyed well elevations. The calculated groundwater elevations for each monitoring well are listed in Table 1. Table 1 also includes groundwater elevation measurements obtained during previous groundwater monitoring events, and is depicted on Figures 3 and 5.

Groundwater generally flows to the north from the Site toward the Mohawk River. Groundwater elevations ranged from 385.96 feet above sea level (asl; well MW-03) to 387.31 feet asl (well MW-06). Field data from the gauging event is presented in Appendix B.

2.3 Groundwater Well Sampling and Analytical Results

Groundwater samples were collected by GES from six (6) monitoring wells on April 28, 2022, and October 26, 2022 (including MW-02R, MW-03, MW-06, MW-07, MW-08R, and MW-13). Low-flow sampling techniques were used to purge groundwater from each monitoring well prior to collecting groundwater samples. Field parameters (consisting of turbidity, temperature, pH, conductivity, oxidation reduction potential [ORP], and dissolved oxygen) were measured approximately every 5 to 10 minutes during well purging, and the depth to water was monitored throughout the pumping process to minimize drawdown within the well. Well purging activities continued at each well until the field parameters stabilized and the turbidity of the water in the wells was reduced to less than 50 nephelometric turbidity units (NTUs). Groundwater field data is presented in Appendix B.

Following purging, groundwater samples were collected. The groundwater samples were bottled and shipped to Pace Analytical for laboratory analysis for Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX; EPA Method 8260C), Semi-Volatile Polycyclic Aromatic Hydrocarbons (PAHs; EPA Method 8270D), as well as total cyanide (EPA Method 9012B). Quality assurance/quality control (QA/QC) samples, including a field duplicate, matrix spike, and duplicate matrix spike were also submitted for laboratory analysis. The laboratory analytical results for the groundwater samples were reported using NYSDEC Analytical Services Protocol (ASP) Category B data deliverable packages to facilitate data validation.

Purge water generated during the sampling activities was collected in 5-gallon buckets and transferred into 55-gallon steel drums for characterization prior to offsite treatment/disposal in accordance with applicable regulations.

Analytical results from the laboratory analysis report are summarized in Table 2 and compared to the Class GA groundwater standards and guidance values presented in TOGS 1.1.1. VOC exceedances are bolded on Table 2 and further shown on Figures 4, and 6. The Data Usability Summary Report (DUSR) is included in Appendix C.

There were BTEX and/or PAH detections in all the monitoring wells sampled in April 2022 and October 2022, with the exception of MW-03 during both events, and MW-06, MW-08R, and MW-13 during the April 2022 event. In April 2022, BTEX and acenaphthene were detected above the regulatory criteria in one or more samples. Cyanide was detected in MW-02R, MW-07, and MW-08R in April 2022. In October 2022, BTEX, acenaphthene, and naphthalene were detected above the regulatory criteria in one or more samples. Cyanide was detected in MW-02R, MW-07, and MW-08R during the October 2022 sampling event.

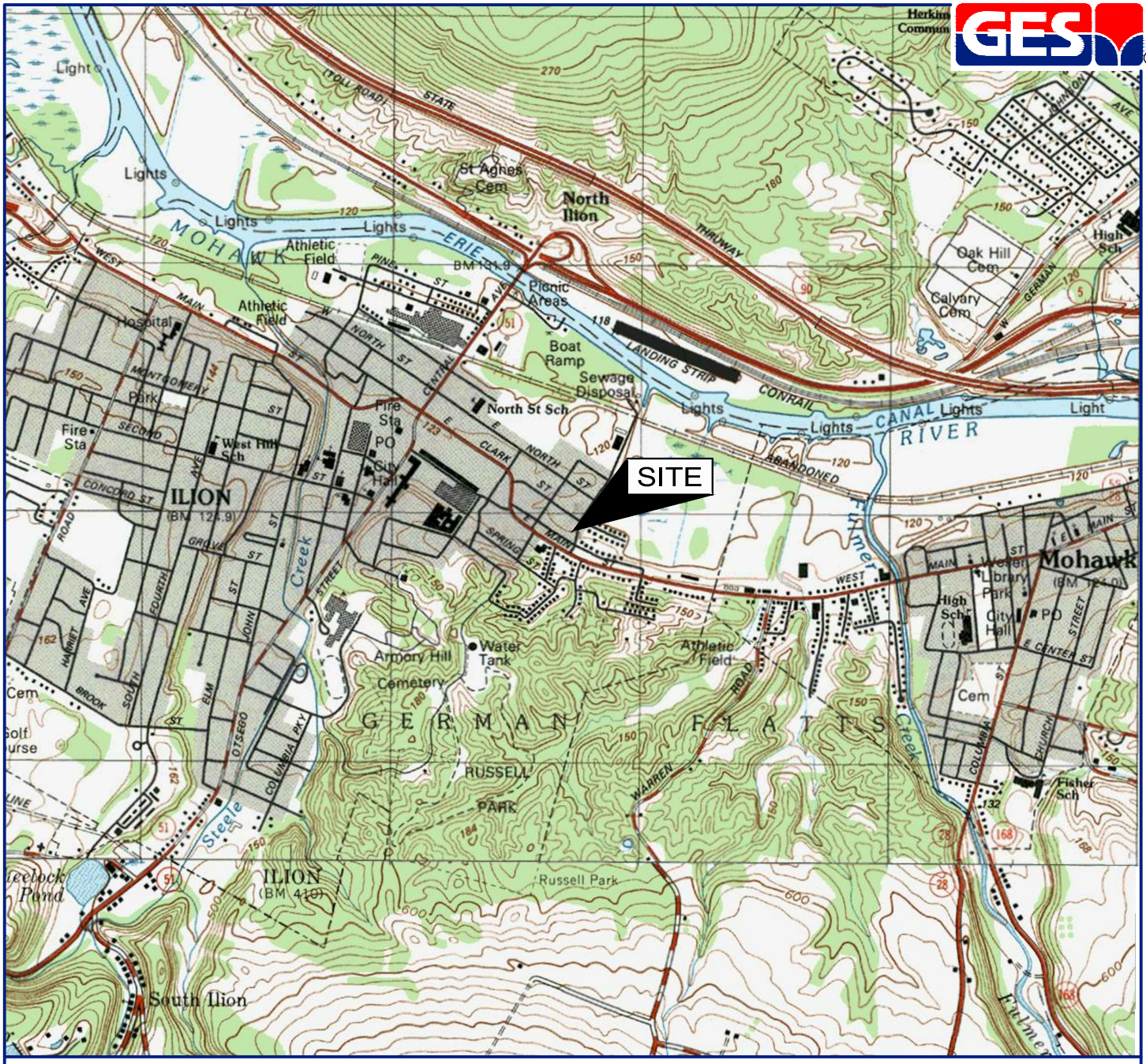
3 Quarterly Site-Wide Inspections

The quarterly site-wide inspections were completed on January 13, April 28, July 14, and October 26, 2022. The Site Inspection Forms are presented in Appendix A. In general, the Site is in compliance.

4 Recommendations

At this time, National Grid recommends continuing the semi-annual monitoring activities. The next semi-annual groundwater sampling event would be in April 2023. Semi-annual site-wide inspections are required; however, for internal security purposes, National Grid will continue to conduct quarterly site-wide inspections.

Figures



SOURCE: USGS 7.5 MINUTE SERIES
TOPOGRAPHIC QUADRANGLE 1982
ILION, NEW YORK
CONTOUR INTERVAL = 6 METERS

QUADRANGLE LOCATION

DRAFTED BY: W.G.S.	SITE LOCATION MAP
CHECKED BY:	NATIONAL GRID 1 EAST AVENUE AND STATE STREET ILION, NEW YORK
REVIEWED BY:	Groundwater & Environmental Services, Inc. 5 TECHNOLOGY PLACE, SUITE 4, EAST SYRACUSE, NY 13057
NORTH	SCALE IN FEET: 0 — 2000 / DATE: 11-28-16 / FIGURE: 1

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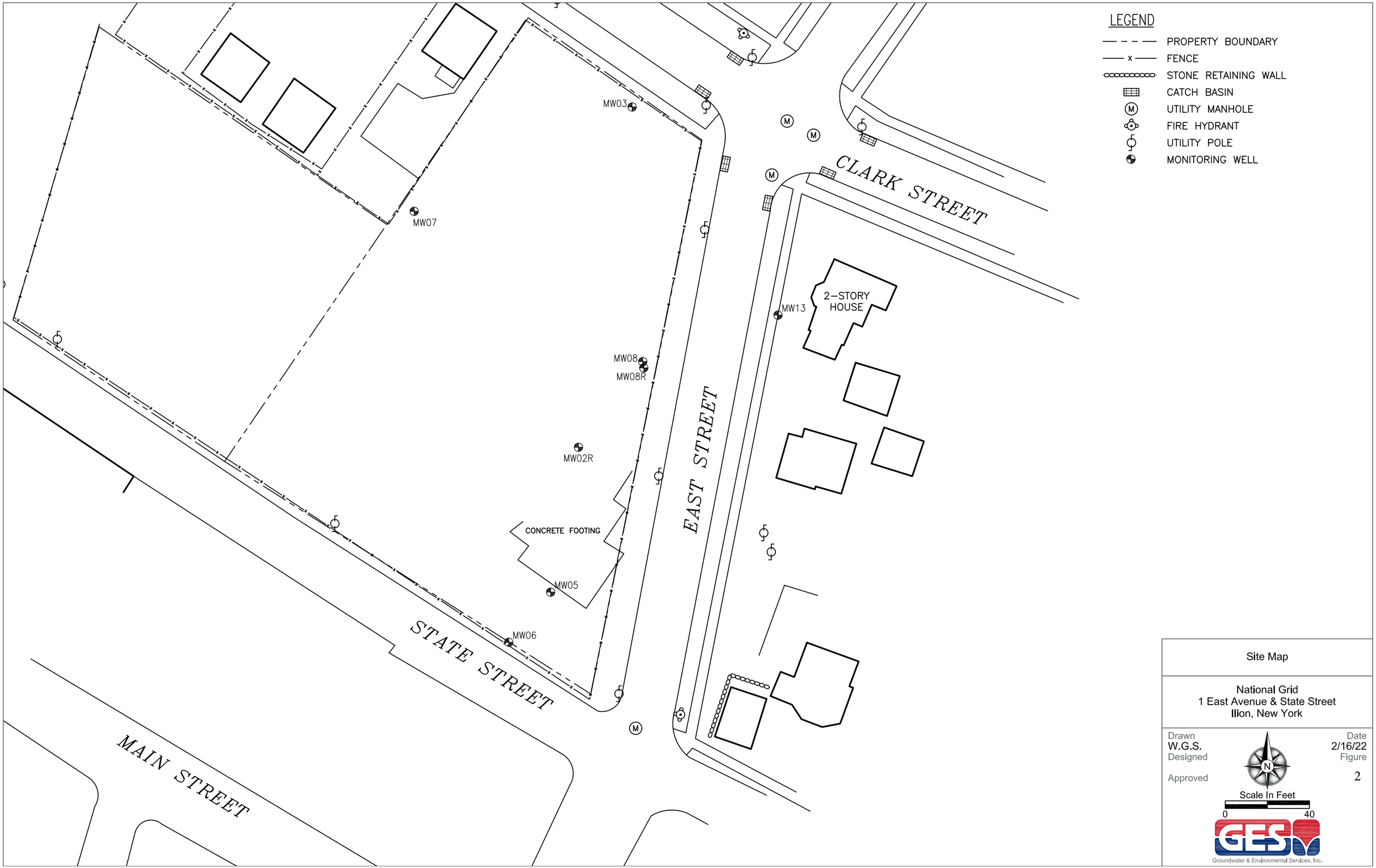

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Site Map

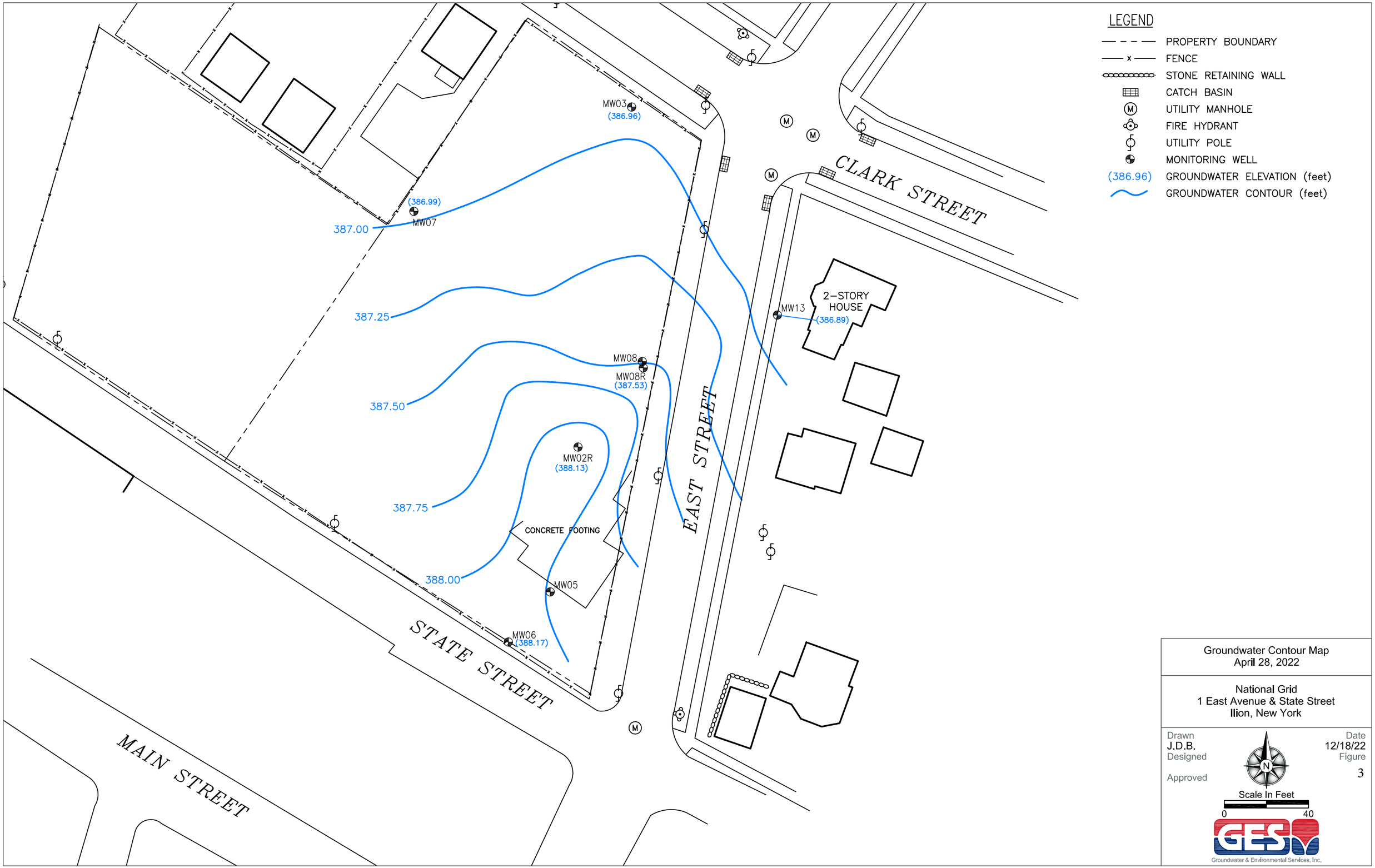
National Grid
1 East Avenue & State Street
Ilion, New York

Drawn W.G.S.
Designed
Approved

Date 2/16/22
Figure 2

Scale In Feet
0 40

Groundwater & Environmental Services, Inc.



Groundwater Contour Map
April 28, 2022

National Grid
1 East Avenue & State Street
Ilion, New York

Drawn J.D.B.
Designed
Approved

Date 12/18/22
Figure 3

Scale In Feet
0 40

Groundwater & Environmental Services, Inc.

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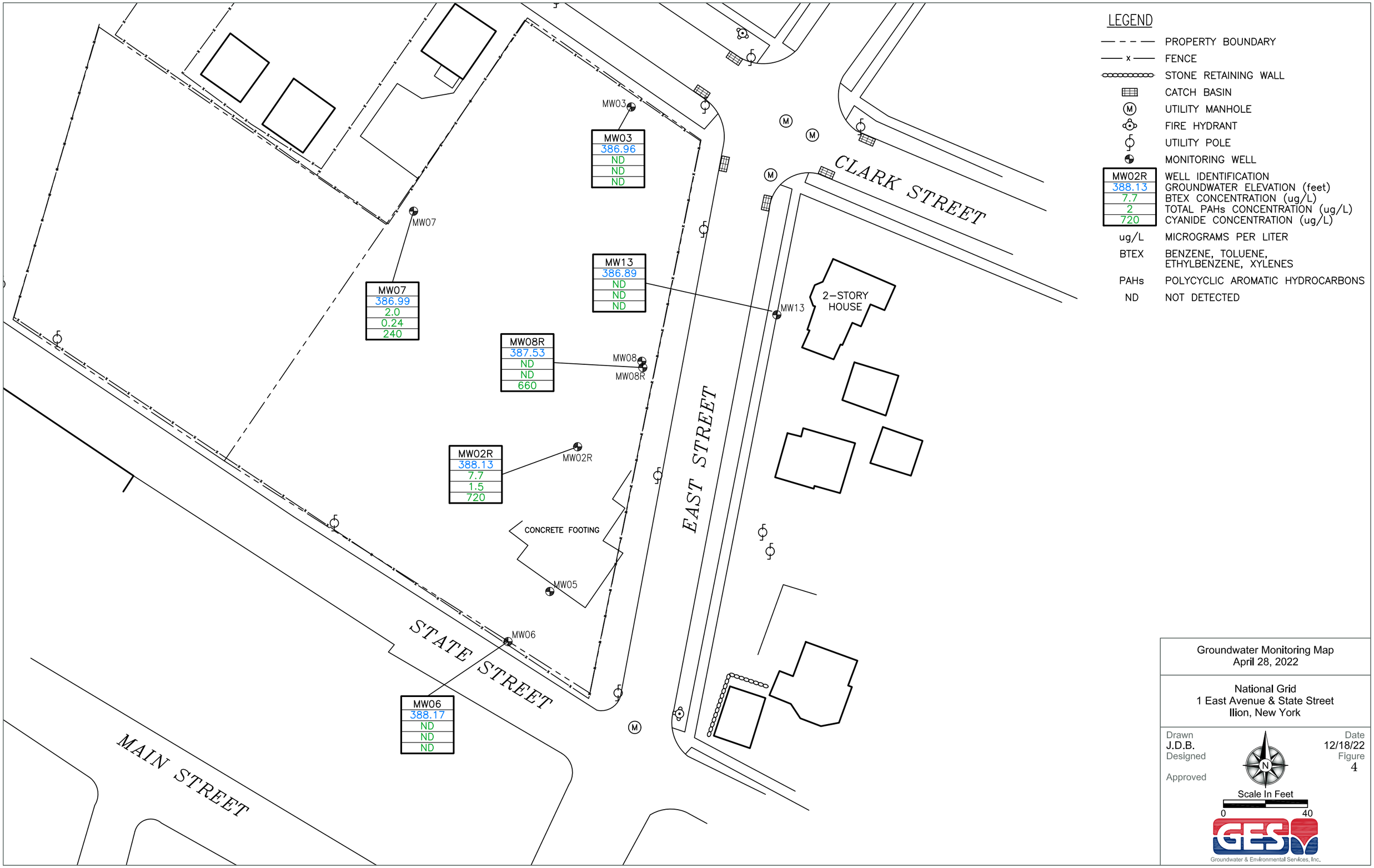

LEGEND

— — —	PROPERTY BOUNDARY
— x —	FENCE
	STONE RETAINING WALL
	CATCH BASIN
M	UTILITY MANHOLE
	FIRE HYDRANT
	UTILITY POLE
	MONITORING WELL
MW02R	WELL IDENTIFICATION
388.13	GROUNDWATER ELEVATION (feet)
7.7	BTEX CONCENTRATION (ug/L)
2	TOTAL PAHs CONCENTRATION (ug/L)
720	CYANIDE CONCENTRATION (ug/L)
ug/L	MICROGRAMS PER LITER
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
ND	NOT DETECTED

Groundwater Monitoring Map
April 28, 2022

National Grid
1 East Avenue & State Street
Ilion, New York

Drawn J.D.B.
Designed
Approved

Date 12/18/22
Figure 4

Scale In Feet
0 40

Groundwater & Environmental Services, Inc.

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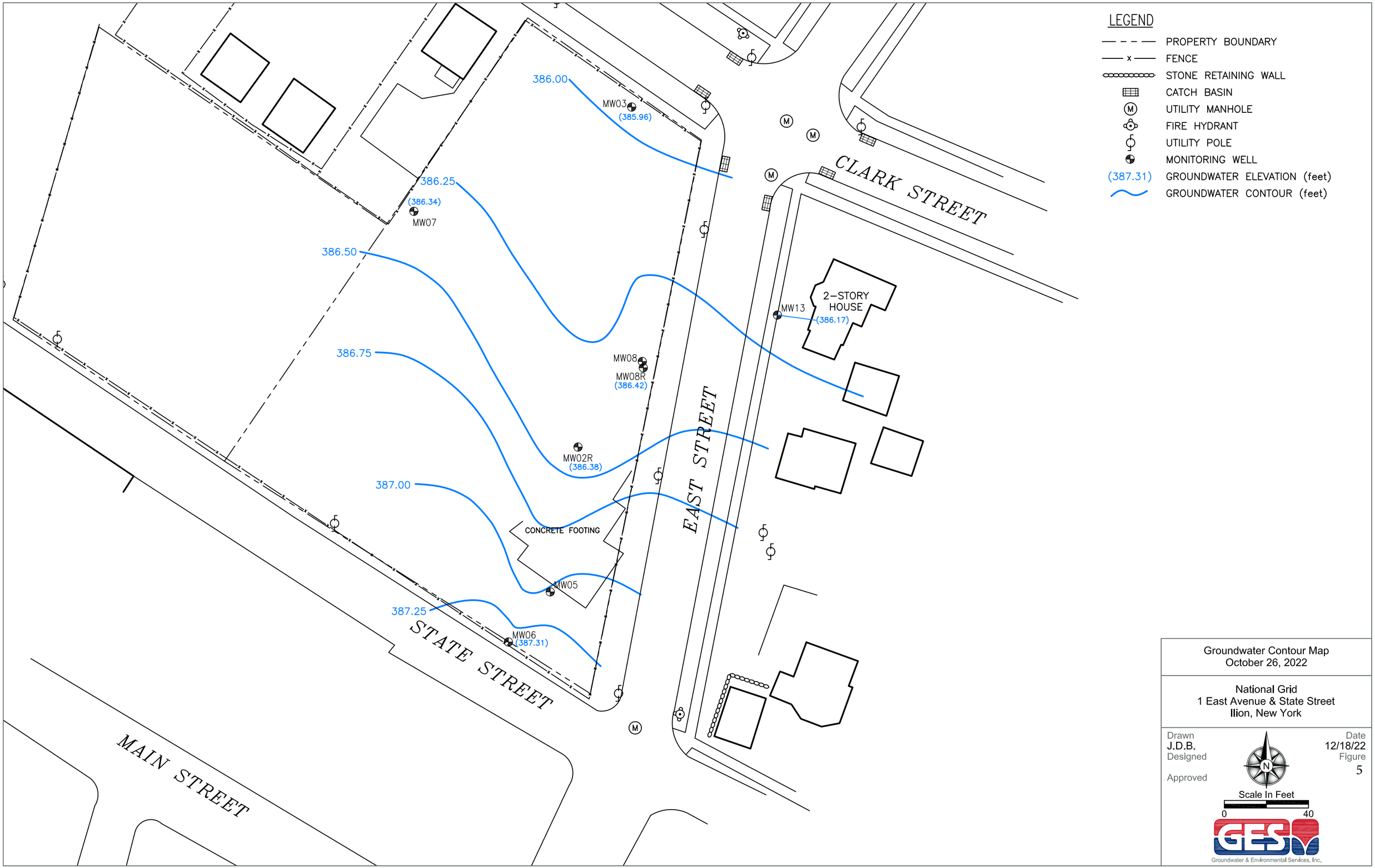

Groundwater Contour Map
October 26, 2022

National Grid
1 East Avenue & State Street
Ilion, New York

Drawn J.D.B.
Designed
Approved
Date 12/18/22
Figure 5

Scale In Feet
0 40

Groundwater & Environmental Services, Inc.

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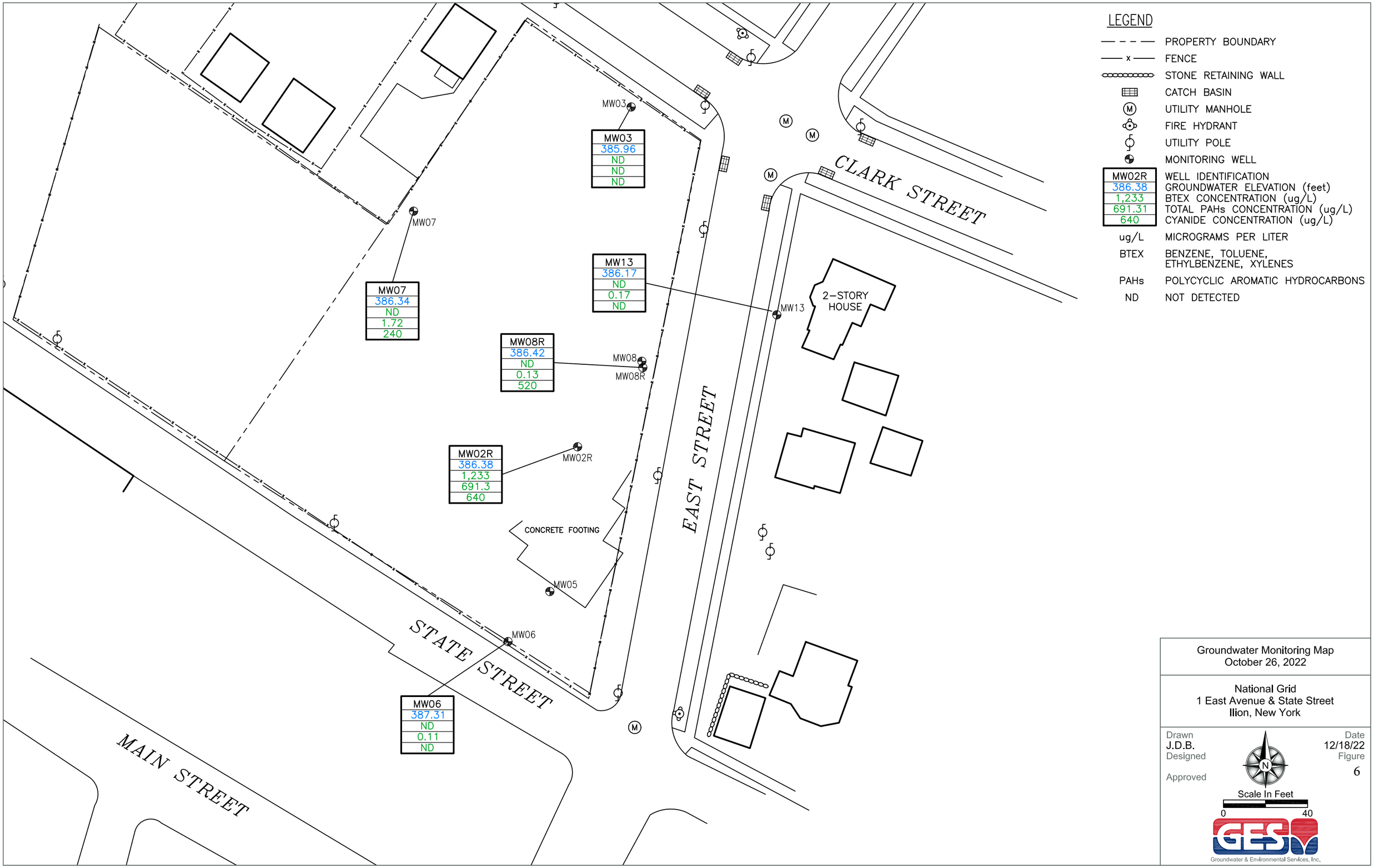

LEGEND

— — —	PROPERTY BOUNDARY
— x —	FENCE
	STONE RETAINING WALL
	CATCH BASIN
M	UTILITY MANHOLE
	FIRE HYDRANT
	UTILITY POLE
	MONITORING WELL
MW02R	WELL IDENTIFICATION
386.38	GROUNDWATER ELEVATION (feet)
1,233	BTEX CONCENTRATION (ug/L)
691.31	TOTAL PAHs CONCENTRATION (ug/L)
640	CYANIDE CONCENTRATION (ug/L)
ug/L	MICROGRAMS PER LITER
BTEX	BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
PAHs	POLYCYCLIC AROMATIC HYDROCARBONS
ND	NOT DETECTED

Groundwater Monitoring Map
October 26, 2022

National Grid
1 East Avenue & State Street
Ilion, New York

Drawn J.D.B.
Designed
Approved

Date 12/18/22
Figure 6

Scale In Feet
0 40

Groundwater & Environmental Services, Inc.

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Tables

Table 1

Groundwater Monitoring Well Gauging Data

Well ID	Well Type & Diameter	Top of Inner Casing Elevation	Depth To Well Bottom	Well Bottom Elevation	Screen Elevation	Depth To Water (10/05/17)	Groundwater Elevation (10/05/17)	Depth To Water (10/25/19)	Groundwater Elevation (1025/19)	Depth To Water (05/07/20)	Groundwater Elevation (05/07/20)	Depth To Water (10/12/20)	Groundwater Elevation (10/12/20)	Depth To Water (4/22/21)	Groundwater Elevation (4/22/21)	Depth To Water (10/21/21)	Groundwater Elevation (10/21/21)
MW-02R	Flushmount; PVC; 2-inch	398.43	18.0	380.43	8.0 - 18.0	14.15	384.28	10.83	387.60	12.12	386.31	12.82	385.61	12.75	385.68	12.52	385.91
MW-03	Flushmount; PVC; 2-inch	391.44	28.0	363.44	15.0 - 25.0	7.13	384.31	4.95	386.49	5.90	385.54	5.95	385.49	6.02	385.42	5.97	385.47
MW-06	Flushmount; PVC; 2-inch	404.21	28.0	376.21	15.0 - 25.0	19.00	385.21	16.43	387.78	16.96	387.25	17.59	386.62	17.63	386.58	17.76	386.45
MW-07	Flushmount; PVC; 2-inch	394.54	18.4	376.14	8.4 - 18.4	10.18	384.36	7.23	387.31	8.31	386.23	8.75	385.79	8.71	385.83	8.72	385.82
MW-08R	Flushmount; PVC; 2-inch	396.00	20.0	376.00	10.0 - 20.0	11.73	384.27	9.46	386.54	9.91	386.09	10.01	385.99	10.02	385.98	9.51	386.49
MW-13	Flushmount; PVC; 2-inch	392.20	24.0	368.20	14.0 - 24.0	7.95	384.25	5.52	386.68	6.43	385.77	6.54	385.66	6.55	385.65	6.69	385.51

Table 1

Groundwater Monitoring Well Gauging Data

Well ID	Depth To Water (4/28/22)	Groundwater Elevation (4/28/22)	Depth To Water (10/26/22)	Groundwater Elevation (10/26/22)
MW-02R	10.30	388.13	12.05	386.38
MW-03	4.48	386.96	5.48	385.96
MW-06	16.04	388.17	16.90	387.31
MW-07	7.55	386.99	8.20	386.34
MW-08R	8.47	387.53	9.58	386.42
MW-13	5.31	386.89	6.03	386.17

Table 2

Groundwater Analytical Data
MW-02R

CONSTITUENT	UNITS	NYSDEC AWQS Values	10/05/17	10/24/19	05/27/20	10/12/20	04/22/21	10/21/21	04/28/22	10/26/22
BTEX Compounds										
Benzene	µg/L	1	**1.3**	**186**	**551**	**632**	**708**	**819**	**1.7**	**668**
Ethylbenzene	µg/L	5	ND (<1.0)	**32.8**	**81.1**	**103**	**125**	**150**	1.2	**123**
Xylenes, Total	µg/L	5	ND (<1.0)	**48.8**	**162**	**253**	**288**	**151**	1.1	**140**
Toluene	µg/L	5	ND (<1.0)	**9.1**	**42.7**	**43.7**	**76.6**	**344**	3.7	**302**
PAHs										
Acenaphthene	µg/L	20	2.4	**24.3**	**20.4**	**38.3**	**61.6**	**57.3**	**1.2**	**66.1**
Acenaphthylene	µg/L	NC	1.5	7.5	10.3	19.4	33.7	9.9	0.31	28.1
Anthracene	µg/L	50	ND (<1.0)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	0.15	ND (<0.10)	0.11
Benzo(a)anthracene	µg/L	0.002	ND (<0.05)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Benzo(a)pyrene	µg/L	0.002	ND (<0.05)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Benzo(b)fluoranthene	µg/L	0.002	ND (<0.05)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Benzo(g,h,i)perylene	µg/L	NC	ND (<0.05)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Benzo(k)fluoranthene	µg/L	0.002	ND (<0.05)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Chrysene	µg/L	0.002	ND (<0.05)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Dibenzo(a,h)anthracene	µg/L	NC	ND (<0.05)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Fluoranthene	µg/L	50	0.0982 J	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	0.15	ND (<0.10)	ND (<0.11)
Fluorene	µg/L	50	1.08	4.0	4.4	9.0	14.1	14.0	ND (<0.10)	14.2
Indeno(1,2,3-cd)pyrene	µg/L	0.002	ND (<1.0)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
2-Methylnaphthalene	µg/L	NC	ND (<1.0)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	2.8
Naphthalene	µg/L	10	0.285	**133**	**257**	**515**	**1,140**	ND (<0.096)	ND (<0.10)	**570**
Phenanthrene	µg/L	50	0.554	0.94	2.7	6.7	10.6	0.68	ND (<0.10)	10.0
Pyrene	µg/L	50	ND (<1.0)	ND (<0.098)	ND (<0.10)	ND (<0.98)	ND (<0.98)	ND (<0.096)	ND (<0.10)	ND (<0.11)
Cyanide										
Cyanide	µg/L	200	150 J	**1,600**	**3,900**	**4,100**	**1,900**	**570**	**720**	**640**

AWQS = Ambient Water Quality Standards
BTEX = Benzene, Ethylbenzene, Toluene and Xylene
J = Estimated Concentration Value
mg/L = Milligrams per Liter
NC = No Criteria
ND (<#) = Not detected above laboratory reporting limit (indicated by #)
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PAHs = Polycyclic Aromatic Hydrocarbons
µg/L = Micrograms per Liter
Bolded = values indicated exceedance of the NYSDEC AWQS

Table 2

Groundwater Analytical Data
MW-03

CONSTITUENT	UNITS	NYSDEC AWQS Values	10/05/17	10/24/19	05/27/20	10/12/20	04/22/21	10/21/21	04/28/22	10/26/22
BTEX Compounds										
Benzene	µg/L	1	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	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylenes, Total	µg/L	5	ND (<1.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Toluene	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
PAHs										
Acenaphthene	µg/L	20	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Acenaphthylene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Anthracene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Benzo(a)anthracene	µg/L	0.002	ND (<0.05)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Benzo(a)pyrene	µg/L	0.002	ND (<0.05)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Benzo(b)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Benzo(g,h,i)perylene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Benzo(k)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Chrysene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Dibenzo(a,h)anthracene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Fluoranthene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Fluorene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Indeno(1,2,3-cd)pyrene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
2-Methylnaphthalene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Naphthalene	µg/L	10	ND (<0.10)	ND (<0.099)	0.61	0.24	0.47	ND (<0.097)	ND (<0.097)	ND (<0.11)
Phenanthrene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Pyrene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.099)	ND (<0.097)	ND (<0.097)	ND (<0.11)
Cyanide										
Cyanide	µg/L	200	10 J	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)	ND (<10)

AWQS = Ambient Water Quality Standards
BTEX = Benzene, Ethylbenzene, Toluene and Xylene
J = Estimated Concentration Value
mg/L = Milligrams per Liter
NC = No Criteria
ND (<#) = Not detected above laboratory reporting limit (indicated by #)
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PAHs = Polycyclic Aromatic Hydrocarbons
µg/L = Micrograms per Liter
Bolded = values indicated exceedance of the NYSDEC AWQS

Table 2

Groundwater Analytical Data
MW-06

CONSTITUENT	UNITS	NYSDEC AWQS Values	10/05/17	10/24/19	05/27/20	10/12/20	04/22/21	10/21/21	04/28/22	10/28/22
BTEX Compounds										
Benzene	µg/L	1	ND (<0.5)	ND (<1.0)	**4.5**	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Ethylbenzene	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylenes, Total	µg/L	5	ND (<1.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Toluene	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
PAHs										
Acenaphthene	µg/L	20	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Acenaphthylene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Anthracene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Benzo(a)anthracene	µg/L	0.002	ND (<0.05)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Benzo(a)pyrene	µg/L	0.002	ND (<0.05)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Benzo(b)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Benzo(g,h,i)perylene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Benzo(k)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Chrysene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Dibenzo(a,h)anthracene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Fluoranthene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Fluorene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Indeno(1,2,3-cd)pyrene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
2-Methylnaphthalene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Naphthalene	µg/L	10	ND (<0.10)	ND (<0.099)	1.2	0.22	ND (<0.10)	ND (<0.097)	ND (<0.098)	0.11
Phenanthrene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Pyrene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.11)	ND (<0.10)	ND (<0.097)	ND (<0.098)	ND (<0.11)
Cyanide										
Cyanide	µg/L	200	10 J	ND (<10)	ND (<10)	ND (<10)	150	ND (<10)	ND (<10)	ND (<10)

AWQS = Ambient Water Quality Standards
BTEX = Benzene, Ethylbenzene, Toluene and Xylene
J = Estimated Concentration Value
mg/L = Milligrams per Liter
NC = No Criteria
ND (<#) = Not detected above laboratory reporting limit (indicated by #)
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PAHs = Polycyclic Aromatic Hydrocarbons
µg/L = Micrograms per Liter
Bolded = values indicated exceedance of the NYSDEC AWQS

Table 2

Groundwater Analytical Data
MW-07

CONSTITUENT	UNITS	NYSDEC AWQS Values	10/05/17	10/24/19	05/27/20	10/12/20	04/22/21	10/21/21	04/28/22	10/26/22
BTEX Compounds										
Benzene	µg/L	1	**3.1**	ND (<1.0)	**2.8**	**17.2**	**1.5**	ND (<1.0)	**2.0**	ND (<1.0)
Ethylbenzene	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylenes, Total	µg/L	5	2.2	ND (<3.0)	ND (<3.0)	**7.1**	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Toluene	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
PAHs										
Acenaphthene	µg/L	20	ND (<0.10)	ND (<0.099)	0.11	0.78	0.11	0.44	0.24	0.87
Acenaphthylene	µg/L	NC	0.498	0.16	ND (<0.11)	1.7	0.18	0.25	ND (<0.10)	0.26
Anthracene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	0.17	0.24	ND (<0.098)	ND (<0.10)	ND (<0.11)
Benzo(a)anthracene	µg/L	0.002	ND (<0.05)	ND (<0.099)	ND (<0.11)	ND (<0.099)	**0.47**	ND (<0.098)	ND (<0.10)	ND (<0.11)
Benzo(a)pyrene	µg/L	0.002	ND (<0.05)	ND (<0.099)	**0.12**	ND (<0.099)	**0.46**	ND (<0.098)	ND (<0.10)	ND (<0.11)
Benzo(b)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	**0.12**	ND (<0.099)	**0.62**	ND (<0.098)	ND (<0.10)	ND (<0.11)
Benzo(g,h,i)perylene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.099)	0.22	ND (<0.098)	ND (<0.10)	ND (<0.11)
Benzo(k)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.099)	**0.59**	ND (<0.098)	ND (<0.10)	ND (<0.11)
Chrysene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.099)	**0.34**	ND (<0.098)	ND (<0.10)	ND (<0.11)
Dibenzo(a,h)anthracene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.099)	ND(<0.10)	ND (<0.098)	ND (<0.10)	ND (<0.11)
Fluoranthene	µg/L	50	ND (<0.10)	0.10	0.22	0.14	0.96	0.12	ND (<0.10)	0.20
Fluorene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	0.18	0.15	0.18	ND (<0.10)	0.21
Indeno(1,2,3-cd)pyrene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.099)	**0.21**	ND (<0.098)	ND (<0.10)	ND (<0.11)
2-Methylnaphthalene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	0.23	ND(<0.10)	ND (<0.098)	ND (<0.10)	ND (<0.11)
Naphthalene	µg/L	10	3.23	ND (<0.099)	0.47	29.7	0.33	ND (<0.098)	ND (<0.10)	ND (<0.11)
Phenanthrene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	0.17	0.80	ND (<0.098)	ND (<0.10)	ND (<0.11)
Pyrene	µg/L	50	ND (<0.10)	ND (<0.099)	0.18	ND (<0.099)	0.75	ND (<0.098)	ND (<0.10)	0.18
Cyanide										
Cyanide	µg/L	200	**290 J**	ND (<10)	**2,300**	**1,800**	**740**	200	**240**	**240**

AWQS = Ambient Water Quality Standards
BTEX = Benzene, Ethylbenzene, Toluene and Xylene
J = Estimated Concentration Value
mg/L = Milligrams per Liter
NC = No Criteria
ND (<#) = Not detected above laboratory reporting limit (indicated by #)
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PAHs = Polycyclic Aromatic Hydrocarbons
µg/L = Micrograms per Liter
Bolded = values indicated exceedance of the NYSDEC AWQS

Table 2

Groundwater Analytical Data
MW-08R

CONSTITUENT	UNITS	NYSDEC AWQS Values	10/06/17	10/24/19	05/27/20	10/12/20	04/22/21	10/21/21	04/28/22	10/26/22
BTEX Compounds										
Benzene	µg/L	1	**4.1**	**1.5**	**3.3**	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Ethylbenzene	µg/L	5	3.6	ND (<1.0)	1.8	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylenes, Total	µg/L	5	1.5	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Toluene	µg/L	5	0.38 J	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
PAHs										
Acenaphthene	µg/L	20	2.46	3.2	0.25	1.2	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Acenaphthylene	µg/L	NC	9.24	7.8	0.79	2.9	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Anthracene	µg/L	50	0.214	0.14	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Benzo(a)anthracene	µg/L	0.002	**0.167**	**0.16**	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Benzo(a)pyrene	µg/L	0.002	**0.18**	**0.15**	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Benzo(b)fluoranthene	µg/L	0.002	**0.18**	**0.18**	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Benzo(g,h,i)perylene	µg/L	NC	ND (<0.10)	ND (<0.098)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Benzo(k)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.098)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Chrysene	µg/L	0.002	**0.155**	**0.13**	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Dibenzo(a,h)anthracene	µg/L	NC	ND (<0.10)	ND (<0.098)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Fluoranthene	µg/L	50	0.514	0.55	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Fluorene	µg/L	50	4.62	4.5	ND (<0.11)	0.88	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Indeno(1,2,3-cd)pyrene	µg/L	0.002	ND (<0.10)	ND (<0.098)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
2-Methylnaphthalene	µg/L	NC	ND (<0.10)	ND (<0.098)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Naphthalene	µg/L	10	0.845	0.14	1.0	0.4	ND (<0.11)	ND (<0.099)	ND (<0.099)	0.13
Phenanthrene	µg/L	50	2.26	0.27	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Pyrene	µg/L	50	0.421	0.37	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.099)	ND (<0.099)	ND (<0.11)
Cyanide										
Cyanide	µg/L	200	**430 J**	**1,200**	**890**	**560**	170	**250**	**660**	**520**

AWQS = Ambient Water Quality Standards
BTEX = Benzene, Ethylbenzene, Toluene and Xylene
J = Estimated Concentration Value
mg/L = Milligrams per Liter
NC = No Criteria
ND (<#) = Not detected above laboratory reporting limit (indicated by #)
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PAHs = Polycyclic Aromatic Hydrocarbons
µg/L = Micrograms per Liter
Bolded = values indicated exceedance of the NYSDEC AWQS

Table 2

Groundwater Analytical Data
MW-13

CONSTITUENT	UNITS	NYSDEC AWQS Values	10/05/17	10/24/19	05/27/20	10/12/20	04/22/21	10/21/21	04/28/22	10/26/22
BTEX Compounds										
Benzene	µg/L	1	ND (<0.5)	ND (<1.0)	**1.4**	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Ethylbenzene	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
Xylenes, Total	µg/L	5	ND (<1.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)	ND (<3.0)
Toluene	µg/L	5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)
PAHs										
Acenaphthene	µg/L	20	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Acenaphthylene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Anthracene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Benzo(a)anthracene	µg/L	0.002	ND (<0.05)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Benzo(a)pyrene	µg/L	0.002	ND (<0.05)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Benzo(b)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Benzo(g,h,i)perylene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Benzo(k)fluoranthene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Chrysene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Dibenzo(a,h)anthracene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Fluoranthene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Fluorene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Indeno(1,2,3-cd)pyrene	µg/L	0.002	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
2-Methylnaphthalene	µg/L	NC	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Naphthalene	µg/L	10	ND (<0.10)	ND (<0.099)	0.63	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	0.17
Phenanthrene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Pyrene	µg/L	50	ND (<0.10)	ND (<0.099)	ND (<0.11)	ND (<0.095)	ND (<0.11)	ND (<0.097)	ND (<0.099)	ND (<0.11)
Cyanide										
Cyanide	µg/L	200	10 J	ND (<10)	ND (<10)	ND (<10)	46.0	ND (<10)	ND (<10)	ND (<10)

AWQS = Ambient Water Quality Standards
BTEX = Benzene, Ethylbenzene, Toluene and Xylene
J = Estimated Concentration Value
mg/L = Milligrams per Liter
NC = No Criteria
ND (<#) = Not detected above laboratory reporting limit (indicated by #)
NS = Not Sampled
NYSDEC = New York State Department of Environmental Conservation
PAHs = Polycyclic Aromatic Hydrocarbons
µg/L = Micrograms per Liter
Bolded = values indicated exceedance of the NYSDEC AWQS

Appendix A – Field Inspection Reports

Field Inspection Report
Former MGP Site
Ilion, New York

Date: 10/26/2022 Time: 9:00
Technician: KL Weather: Cloudy 50

Site Controls				
Fence Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Front Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Rear Man Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Padlock-NG	OPERATIONAL	NON-OPERATIONAL		COMMENTS:

General Site Conditions				
Condition of Parking area	GOOD	FAIR	POOR	COMMENTS:
Evidence of any Intrusive Activities	NONE	MINOR	SIGNIFICANT	COMMENTS:
Vegetative Growth	GOOD	FAIR	POOR	COMMENTS:
Conditions of the Site Trees	GOOD	FAIR	POOR	COMMENTS:
Agricultural or Vegetable Gardens	YES	NO		COMMENTS:
Site Been Mowed	YES	NO		COMMENTS:
Evidence of Vandalism	YES	NO		COMMENTS:
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Is the site being used in a manner inconsistant with Environmental Easement? Yes | No

Site Monitoring Wells		
Well ID.	**Location Secure**	
MW-02R	Yes	No
MW-03	Yes	No
MW-06	Yes	No
MW-07	Yes	No
MW-08R	Yes	No
MW-13	Yes	No

General Comments:

Field Inspection Report
Former MGP Site
Ilion, New York

Date: 7/14/2022 Time: 9:00
Technician: KL Weather: Sunny 74

Site Controls				
Fence Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Front Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Rear Man Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Padlock-NG	OPERATIONAL	NON-OPERATIONAL		COMMENTS:

General Site Conditions				
Condition of Parking area	GOOD	FAIR	POOR	COMMENTS:
Evidence of any Intrusive Activities	NONE	MINOR	SIGNIFICANT	COMMENTS:
Vegetative Growth	GOOD	FAIR	POOR	COMMENTS:
Conditions of the Site Trees	GOOD	FAIR	POOR	COMMENTS:
Agricultural or Vegetable Gardens	YES	NO		COMMENTS:
Site Been Mowed	YES	NO		COMMENTS:
Evidence of Vandalism	YES	NO		COMMENTS:
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Is the site being used in a manner inconsistant with Environmental Easement? Yes | No

Site Monitoring Wells		
Well ID.	**Location Secure**	
MW-02R	Yes	No
MW-03	Yes	No
MW-06	Yes	No
MW-07	Yes	No
MW-08R	Yes	No
MW-13	Yes	No

General Comments:

Field Inspection Report
Former MGP Site
Ilion, New York

Date: 4/28/2022 Time: 14:20
Technician: PL Weather: Sunny 44

Site Controls				
Fence Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Front Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Rear Man Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Padlock-NG	OPERATIONAL	NON-OPERATIONAL		COMMENTS:

General Site Conditions				
Condition of Parking area	GOOD	FAIR	POOR	COMMENTS:
Evidence of any Intrusive Activities	NONE	MINOR	SIGNIFICANT	COMMENTS:
Vegetative Growth	GOOD	FAIR	POOR	COMMENTS:
Conditions of the Site Trees	GOOD	FAIR	POOR	COMMENTS:
Agricultural or Vegetable Gardens	YES	NO		COMMENTS:
Site Been Mowed	YES	NO		COMMENTS:
Evidence of Vandalism	YES	NO		COMMENTS:
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS: cleaned up litter

Is the site being used in a manner inconsistant with Environmental Easement? Yes | No

Site Monitoring Wells		
Well ID.	**Location Secure**	
MW-02R	Yes	No
MW-03	Yes	No
MW-06	Yes	No
MW-07	Yes	No
MW-08R	Yes	No
MW-13	Yes	No

General Comments:

Field Inspection Report
Former MGP Site
Ilion, New York

Date: 1/13/2022 Time: 10:00
Technician: KL Weather: Snow 29

Site Controls				
Fence Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Front Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Rear Man Gate Condition	GOOD	FAIR	DAMAGED	COMMENTS:
Padlock-NG	OPERATIONAL	NON-OPERATIONAL		COMMENTS:

General Site Conditions				
Condition of Parking area	GOOD	FAIR	POOR	COMMENTS:
Evidence of any Intrusive Activities	NONE	MINOR	SIGNIFICANT	COMMENTS:
Vegetative Growth	GOOD	FAIR	POOR	COMMENTS:
Conditions of the Site Trees	GOOD	FAIR	POOR	COMMENTS:
Agricultural or Vegetable Gardens	YES	NO		COMMENTS:
Site Been Mowed	YES	NO		COMMENTS: winter
Evidence of Vandalism	YES	NO		COMMENTS:
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Is the site being used in a manner inconsistant with Environmental Easement? Yes | No

Site Monitoring Wells		
Well ID.	**Location Secure**	
MW-02R	Yes	No
MW-03	Yes	No
MW-06	Yes	No
MW-07	Yes	No
MW-08R	Yes	No
MW-13	Yes	No

General Comments:

Ilion – Site Conditions on January 13, 2022

Appendix B – Well Sampling Field Data

Well ID	Sample?	Well Size	DTW	DTP	DTB	Comments
MW-02R	Yes	2"	10.30	—	18.30	Field Duplicate
MW-03	Yes	2"	4.48	-	27.25	
MW-06	Yes	2"	16.04	—	28.60	MS/MSD
MW-07	Yes	2"	7.55	—	16.87	
MW-08R	Yes	2"	8.47	—	20.20	
MW-13	Yes	2"	5.31	—	23.82	

DTW *-depth to water*

DTP *-depth to product*

DTB *-depth to bottom*

National Grid
East Street, Ilion New York

Sampling Personnel: G. Ernst
Date: 4/28/22
Job Number: 0603275-133570-221
Weather: clear 40°s Breezy
Well Id. **MW-02R**
Time In: 1200 Time Out: 1255

Well Information

		TOC	Other
Depth to Water:	(feet)	10.30	
Depth to Bottom:	(feet)	18.30	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	8.00	
Volume of Water in Well:	(gal)	1.28	
Three Well Volumes:	(gal)	3.84	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:	Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	

Average Pumping Rate:	(ml/min)	200
Duration of Pumping:	(min)	30
Total Volume Removed:	(gal)	~1.5

Did well go dry? Yes [ ] No [X]
Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1210	10.43	11.31	7.46	-80	1.10	500	5.92	0.703
1215	10.66	10.45	6.87	-63	1.10	27.9	3.15	0.703
1220	10.82	10.18	6.78	-48	1.10	5.7	2.83	0.703
1225	11.06	9.92	6.74	-31	1.10	3.4	2.63	0.702
1230	11.21	9.81	6.72	-22	1.10	3.6	2.53	0.702
1235	11.40	9.73	6.71	-19	1.09	3.7	2.41	0.699
1240	11.55	9.75	6.71	-12	1.09	2.6	2.32	0.695

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's
EPA SW-846 Method 8260 VOC's BTEX
EPA SW-846 Method 9012 Total Cyanide

4 - 100 ml ambers Yes [X] No [ ]
6 - 40 ml vials Yes [X] No [ ]
2 - 250 ml plastic Yes [X] No [ ]

FD-0422

Sample ID: **MW-02R-0422** Duplicate? Yes [X] No [ ]
Sample Time: 1240 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes:

National Grid
East Street, Ilion New York

Sampling Personnel: Peter Lyon
Job Number: 0603275-133570-221
Well Id. **MW-03**

Date: 4/28/22
Weather: 45° Sunny
Time In: 1315 Time Out: 1400

Well Information

		TOC	Other
Depth to Water:	(feet)	4.49	
Depth to Bottom:	(feet)	27.25	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	22.77	
Volume of Water in Well:	(gal)	3.64	
Three Well Volumes:	(gal)	10.92	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:	Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	

Average Pumping Rate:	(ml/min)	200
Duration of Pumping:	(min)	36
Total Volume Removed:	(gal)	2

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1320	4.50	10.39	7.78	-48	1.06	35.8	0.25	.681
1325	4.50	10.64	7.68	-20	1.06	4.8	0.00	.676
1330	4.50	10.76	7.62	-6	1.06	0.2	0.00	.675
1335	4.50	10.74	2.55	8	1.06	0.0	0.00	.676
1340	4.50	10.73	7.51	16	1.06	0.0	0.00	.677
1345	4.50	10.76	7.48	22	1.06	0.3	0.00	.677
1350	4.50	10.76	7.47	28	1.06	0.0	0.00	.678

Sampling Information:

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes [X] No [ ]
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes [X] No [ ]
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes [X] No [ ]

Sample ID: **MW-03-0422** Duplicate? Yes [ ] No [X]
Sample Time: 1350 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Comments/Notes:

Laboratory: Pace Analytical Greensburg, PA

National Grid
East Street, Ilion New York

Sampling Personnel: Peter Lyon
Date: 4/28/22
Job Number: 0603275-133570-221
Weather: Sunny 40°
Well Id. **MW-06**
Time In: 1121 Time Out: 1200

Well Information

		TOC	Other
Depth to Water:	(feet)	16.09	
Depth to Bottom:	(feet)	28.60	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	12.56	
Volume of Water in Well:	(gal)	2.00	
Three Well Volumes:	(gal)	6.00	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:	Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Average Pumping Rate: (ml/min)	200			
Duration of Pumping: (min)	30			
Total Volume Removed: (gal)	2			

Did well go dry? Yes [ ] No [X]
Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1125	16.09	11.80	8.60	-40	.905	3.7	0.79	.591
1130	16.10	11.00	8.16	-57	1.04	3.2	0.21	.668
1135	16.11	10.91	7.99	-60	1.24	1.6	0.14	.796
1140	16.11	11.07	7.87	-56	1.27	0.6	0.14	.813
1145	16.11	11.39	7.85	-54	1.29	0.0	0.18	.829
1150	16.11	11.63	7.79	-51	1.30	0.0	0.22	.833
1155	16.11	12.10	7.71	-50	1.43	0.0	0.35	.918

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's
EPA SW-846 Method 8260 VOC's BTEX
EPA SW-846 Method 9012 Total Cyanide
MW-06-MS-0422 **MW-06-MSD-0422**

6 - 100 ml ambers Yes [X] No [ ]
9 - 40 ml vials Yes [X] No [ ]
3 - 250 ml plastic Yes [X] No [ ]

Sample ID: **MW-06-0422** Duplicate? Yes [ ] No [X]
Sample Time: 1155 MS/MSD? Yes [X] No [ ]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Comments/Notes:

Laboratory: Pace Analytical Greensburg, PA

National Grid
East Street, Ilion New York

Sampling Personnel: Peter Lyon
Date: 4/28/22
Job Number: 0603275-133570-221
Weather: 45° Sunny
Well Id. **MW-07**
Time In: 1226 Time Out: 1305

Well Information

		TOC	Other
Depth to Water:	(feet)	7.55	
Depth to Bottom:	(feet)	16.87	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	9.32	
Volume of Water in Well:	(gal)	1.49	
Three Well Volumes:	(gal)	4.47	

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

Purging Information

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

Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1230	8.23	13.81	7.30	-76	1.25	18.2	8.88	.810
1235	8.37	12.71	7.06	-72	1.45	10.7	7.22	.933
1240	8.42	11.58	6.96	-72	1.58	12.3	6.37	1.01
1245	8.55	12.32	6.83	-70	1.56	142	5.09	1.00
1250	8.60	10.82	7.21	-85	1.41	0.0	0.79	.909
1255	8.62	10.90	7.13	-86	1.69	381	0.07	1.08
1300	8.57	9.91	7.16	-91	1.75	110	0.60	1.12

Sampling Information:

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes [X]	No [ ]
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes [X]	No [ ]
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes [X]	No [ ]

Sample ID: **MW-07-0422** Duplicate? Yes [ ] No [X]
Sample Time: 1300 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Comments/Notes:

Laboratory: Pace Analytical Greensburg, PA

National Grid
East Street, Ilion New York

Sampling Personnel: G. ERNST
Job Number: 0603275-133570-221
Well Id. **MW-08R**

Date: 4/28/22
Weather: Clear 40's Breezy
Time In: 1255 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	8.47	
Depth to Bottom:	(feet)	20.20	
Depth to Product:	(feet)	=	
Length of Water Column:	(feet)	11.73	
Volume of Water in Well:	(gal)	1.88	
Three Well Volumes:	(gal)	5.63	

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

Purging Information

Purging Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:	Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	

Average Pumping Rate:	(ml/min)	200
Duration of Pumping:	(min)	30
Total Volume Removed:	(gal)	~1.5

Did well go dry? Yes [ ] No [X]
Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1305	8.89	12.90	7.43	77	0.552	97.2	5.37	0.352
1310	9.38	12.69	7.33	139	0.479	61.9	3.36	0.307
1315	9.86	12.49	7.31	179	0.410	20.8	2.42	0.266
1320	10.18	12.41	7.29	191	0.399	11.8	2.29	0.259
1325	10.51	12.35	7.28	199	0.389	10.9	2.11	0.253
1330	10.81	12.37	7.28	196	0.381	11.1	2.74	0.246
1335	11.02	12.40	7.25	201	0.353	11.0	2.72	0.229

Sampling Information:

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes [X]	No [ ]
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes [X]	No [ ]
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes [X]	No [ ]

Sample ID: **MW-08R-0422**
Sample Time: 1340
Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Comments/Notes:

Laboratory: Pace Analytical
Greensburg, PA

National Grid
East Street, Ilion New York

Sampling Personnel: A. ERNST
Date: 4/28/22
Job Number: 0603275-133570-221
Weather: Clear 40° s
Well Id. **MW-13**
Time In: 1100 Time Out: 1200

Well Information

		TOC	Other
Depth to Water:	(feet)	5.31	
Depth to Bottom:	(feet)	23.82	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	18.51	
Volume of Water in Well:	(gal)	2.96	
Three Well Volumes:	(gal)	8.88	

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

Purging Information

Purging Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]
Tubing/Bailer Material:	Teflon [ ]	Stainless St. [ ]	Polyethylene [X]
Sampling Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]

Average Pumping Rate:	(ml/min)	200
Duration of Pumping:	(min)	30
Total Volume Removed:	(gal)	~1.5

Did well go dry? Yes [ ] No [X]
Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1120	5.36	14.05	6.96	128	1.43	24.5	6.55	0.922
1125	5.32	12.80	6.96	111	1.45	24.0	3.50	0.929
1130	5.33	11.92	6.96	95	1.48	18.0	3.07	0.945
1135	5.33	11.45	6.95	82	1.49	11.0	2.87	0.955
1140	5.33	11.14	6.93	72	1.51	6.5	2.75	0.964
1145	5.33	10.90	6.92	64	1.52	5.4	2.63	0.970
1150	5.33	10.81	6.99	54	1.52	4.7	2.54	0.975

Sampling Information:

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes [X] No [ ]
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes [X] No [ ]
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes [X] No [ ]

Sample ID: **MW-13-0422** Duplicate? Yes [ ] No [X]
Sample Time: 1150 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Comments/Notes:

Laboratory: Pace Analytical
Greensburg, PA

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A
Required Client Information:

Company: GES - Syracuse
Address: 6780 Northern Blvd, Suite 100
East Syracuse, New York 13057
Email To: dshay@gesonline.com
Phone: 800.220.3069 x4051 Fax: None
Requested Due Date/TAT: Standard

Section B
Required Project Information:

Report To: Devin Shay (GES) dshay@gesonline.com
Report To: Tim Beaumont (GES) tbeaumont@gesonline.com
Purchase Order No.:
Project Name: National Grid - Ilion East Street, Ilion NY
Project Number: 0603275-133570-221-1106

Section C
Invoice Information:

Attention: Accounts Payable via email at ges-invoices@gesonline.com
Company Name: Groundwater & Environmental Services, Inc.
Address: 6780 Northern Blvd, Suite 100, East Syracuse, NY 13057
Pace Quote Reference:
Pace Project Manager: Rachel Christner
Pace Profile #: Semi-Annual GWS

REGULATORY AGENCY
NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

SITE LOCATION
STATE: NY

Section D Required Client Information

SAMPLE ID
One Character per box. (A-Z, 0-9 / ,-)
Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED GRAB DATE	COLLECTED GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: BTEX (8260C)	SVOCs (PAHs) (8270D)	Cyanide, Total (9012B)	Pace Project Number / Lab I.D.
1	MW-02R-0422	WT	G			4/28/22	1240		6	2			3	1				3	2	1	
2	MW-03-0422	WT	G				1350		6	2			3	1				3	2	1	
3	MW-06-0422	WT	G				1155		6	2			3	1				3	2	1	
4	MW-06-MS-0422	WT	G				1155		6	2			3	1				3	2	1	
5	MW-06-MSD-0422	WT	G				1155		6	2			3	1				3	2	1	
6	MW-07-0422	WT	G				1300		6	2			3	1				3	2	1	
7	MW-08R-0422	WT	G				1340		6	2			3	1				3	2	1	
8	MW-13-0422	WT	G				1150		6	2			3	1				3	2	1	
9	FD-0422	WT	G						6	2			3	1				3	2	1	
10	Trip Blanks	WT	G				1200		3				3					3			
11																					
12																					
13																					

Additional Comments:
SAMPLES WILL ARRIVE IN # 1 COOLERS.

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
[signature]	4/28/22	1550	[signature] PACE	4/28/22	1550

SAMPLE CONDITIONS

Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

NERegion@gesonline.com, ges@equisonline.com

SPECIFIC EDD NAME:
NGIlion-labnumber.28351.EQEDD.zip

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Greg Ernst
SIGNATURE of SAMPLER: [signature]
DATE Signed (MM / DD / YY): 04/28/22

Well ID	Sample?	Well Size	DTW	DTP	DTB	Comments
MW-02R	Yes	2"	12.05		18.30	Field Duplicate
MW-03	Yes	2"	5.18		27.25	
MW-06	Yes	2"	16.90		28.60	MS/MSD
MW-07	Yes	2"	8.20		16.87	
MW-08R	Yes	2"	9.58		20.20	
MW-13	Yes	2"	6.03		23.82	

DTW *-depth to water*

DTP *-depth to product*

DTB *-depth to bottom*

National Grid
East Street, Ilion New York

Sampling Personnel: Peter Lyon
Job Number: 0603324-133570-221
Well Id. **MW-02R**

Date: 10/26/23
Weather: cloudy
Time In: 1000 Time Out: 1040

Well Information

		TOC	Other
Depth to Water:	(feet)	12.05	
Depth to Bottom:	(feet)	18.30	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	6.25	
Volume of Water in Well:	(gal)	1	
Three Well Volumes:	(gal)	3	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Average Pumping Rate:	(ml/min)	200			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	2			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1005	12.21	19.99	6.67	-164	0.892	11.2	0.00	0.569
1010	12.38	19.82	6.62	-153	0.888	8.8	0.00	0.569
1015	12.60	18.05	6.61	-131	0.919	11.2	0.00	0.584
1020	12.76	17.76	6.58	-126	0.920	5.5	0.00	0.590
1025	12.97	17.58	6.57	-121	0.931	7.9	0.00	0.599
1030	13.10	17.34	6.58	-117	0.942	7.9	0.00	0.600
1035	13.30	17.34	6.59	-118	0.946	7.3	0.00	0.607

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's
EPA SW-846 Method 8260 VOC's BTEX
EPA SW-846 Method 9012 Total Cyanide

4 - 100 ml ambers Yes [X] No [ ]
6 - 40 ml vials Yes [X] No [ ]
2 - 250 ml plastic Yes [X] No [ ]

FD-1022

Sample ID: **MW-02R-1022** Duplicate? Yes [X] No [ ]
Sample Time: 1035 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes:

National Grid
East Street, Ilion New York

Sampling Personnel: K
Job Number: 0603324-133570-221
Well Id. **MW-03**

Date: 10/26/22
Weather: Sunny 65
Time In: 10:50 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	5.48	
Depth to Bottom:	(feet)	27.25	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	21.77	
Volume of Water in Well:	(gal)	3.48	
Three Well Volumes:	(gal)	10.44	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Average Pumping Rate:	(ml/min)	200			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	2			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] 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)
10:55	5.58	19.85	7.14	61	0.697	102	0.74	0.468
11:00	5.55	19.61	7.14	-45	0.919	31.7	0.22	0.590
11:05	5.55	18.26	7.22	-23	0.960	4.3	0.14	0.614
11:10	5.55	18.07	7.22	-8	0.961	1.8	0.13	0.616
11:15	5.55	17.70	7.23	5	0.964	2.4	0.11	0.614
11:20	5.55	17.59	7.23	17	0.968	2.1	0.08	0.620
11:25	5.55	17.26	7.23	27	0.974	2.3	0.06	0.623
~~11:30~~								
~~11:~~								

Sampling Information:

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes [X] No [ ]
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes [X] No [ ]
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes [X] No [ ]

Sample ID: **MW-03-1022** Duplicate? Yes [ ] No [X]
Sample Time: 11:25 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes:

National Grid
East Street, Ilion New York

Sampling Personnel: Peter Lyn
Job Number: 0603324-133570-221
Well Id. **MW-06**

Date: 10/26/22
Weather: Sunny 67°
Time In: 1050 Time Out: 1130

Well Information

		TOC	Other
Depth to Water:	(feet)	16.96	
Depth to Bottom:	(feet)	28.60	
Depth to Product:	(feet)	-	
Length of Water Column:	(feet)	11.64	
Volume of Water in Well:	(gal)	1.86	
Three Well Volumes:	(gal)	5.58	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Average Pumping Rate:	(ml/min)	200			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	2			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1055	12.03	18.02	6.95	-62	1.02	2.4	0.00	0.659
1100	12.03	17.17	7.02	-43	1.31	1.5	2.22	0.847
1105	12.03	17.00	7.03	-27	1.40	0.5	3.76	0.895
1110	12.03	16.84	7.02	-15	1.47	1.8	4.91	0.937
1115	12.03	16.95	7.01	-7	1.48	0.1	4.67	0.948
1120	12.03	16.70	7.00	-1	1.51	1.1	4.34	0.965
1125	12.03	16.56	6.99	2	1.52	0.0	4.52	0.969

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's
EPA SW-846 Method 8260 VOC's BTEX
EPA SW-846 Method 9012 Total Cyanide

6 - 100 ml ambers Yes [X] No [ ]
9 - 40 ml vials Yes [X] No [ ]
3 - 250 ml plastic Yes [X] No [ ]

MW-06-MS-1022 **MW-06-MSD-1022**
Sample ID: **MW-06-1022** Duplicate? Yes [ ] No [X]
Sample Time: 1125 MS/MSD? Yes [X] No [ ]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes:

National Grid
East Street, Ilion New York

Sampling Personnel: JL
Job Number: 0603324-133570-221
Well Id. **MW-07**

Date: 10/26/22
Weather: Sunny 68
Time In: 11:45 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	8.20	
Depth to Bottom:	(feet)	16.87	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	8.67	
Volume of Water in Well:	(gal)	1.38	
Three Well Volumes:	(gal)	4.14	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Average Pumping Rate:	(ml/min)	200			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	2			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] 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)
11:50	9.00	19.64	6.91	-95	1.18	128	1.30	0.748
11:55	9.77	18.80	6.63	-96	1.21	54.6	2.00	0.779
12:00	9.90	18.17	6.60	-99	1.33	53.5	2.02	0.853
12:05	9.93	17.97	6.58	-102	1.41	47.0	1.59	0.906
12:10	9.93	17.79	6.58	-106	1.46	38.8	1.40	0.932
12:15	9.93	17.63	6.58	-107	1.48	41.0	1.16	0.950
12:20	9.93	17.52	6.57	-109	1.51	39.5	0.99	0.966

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's
EPA SW-846 Method 8260 VOC's BTEX
EPA SW-846 Method 9012 Total Cyanide

2 - 100 ml ambers Yes [X] No [ ]
3 - 40 ml vials Yes [X] No [ ]
1 - 250 ml plastic Yes [X] No [ ]

Sample ID: **MW-07-1022** Duplicate? Yes [ ] No [X]
Sample Time: 12:20 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes:

National Grid
East Street, Ilion New York

Sampling Personnel: K
Job Number: 0603324-133570-221
Well Id. **MW-08R**

Date: 10/26/22
Weather: Sunn
Time In: 10:00 Time Out:

Well Information

		TOC	Other
Depth to Water:	(feet)	9.58	
Depth to Bottom:	(feet)	20.20	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	10.62	
Volume of Water in Well:	(gal)	1.69	
Three Well Volumes:	(gal)	5.09	

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

Purging Information

Purging Method:		Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]	
Tubing/Bailer Material:		Teflon [ ]	Stainless St. [ ]	Polyethylene [X]	
Sampling Method:		Bailer [ ]	Peristaltic [X]	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 [X] 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)
10:10	9.89	20.66	7.39	30	0.534	97.9	1.07	0.343
10:15	10.03	19.30	6.92	6	0.559	55.1	0.34	0.358
10:20	11.07	18.54	6.90	1	0.576	42.7	0.30	0.366
10:25	12.10	17.90	6.86	-7	0.585	38.4	0.24	0.374
10:30	12.67	17.91	6.91	-7	0.565	41.0	0.66	0.361
10:35	13.05	17.91	6.95	20	0.540	42.9	1.96	0.347
10:40	13.33	17.94	6.98	33	0.560	33.5	1.84	0.358
10:45	13.70	17.63	7.00	28	0.569	20.5	1.32	0.366

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's
EPA SW-846 Method 8260 VOC's BTEX
EPA SW-846 Method 9012 Total Cyanide

2 - 100 ml ambers Yes [X] No [ ]
3 - 40 ml vials Yes [X] No [ ]
1 - 250 ml plastic Yes [X] No [ ]

Sample ID: **MW-08R-1022** (K)
Sample Time: ~~10:45~~

Duplicate? Yes [ ] No [X]
MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes: 10:45

National Grid
East Street, Ilion New York

Sampling Personnel: Peter Lyon
Job Number: 0603324-133570-221
Well Id. **MW-13**

Date: 10/26/22
Weather: 62 Cloudy
Time In: 1146 Time Out: 1225

Well Information

		TOC	Other
Depth to Water:	(feet)	6.03	
Depth to Bottom:	(feet)	23.82	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	17.79	
Volume of Water in Well:	(gal)	2.84	
Three Well Volumes:	(gal)	8.53	

Well Type: Flushmount [X] Stick-Up [ ]
Well Locked: Yes [X] No [ ]
Measuring Point Marked: Yes [X] No [ ]
Well Material: PVC [X] SS [ ] Other: ____
Well Diameter: 1" [ ] 2" [X] Other: ____
Comments:

Purging Information

Purging Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]		
Tubing/Bailer Material:	Teflon [ ]	Stainless St. [ ]	Polyethylene [X]		
Sampling Method:	Bailer [ ]	Peristaltic [X]	Grundfos Pump [ ]		
Average Pumping Rate:	(ml/min)	200			
Duration of Pumping:	(min)	30			
Total Volume Removed:	(gal)	2			

Did well go dry? Yes [ ] No [X]

Horiba U-52 Water Quality Meter Used? Yes [X] 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)
1150	6.29	20.03	6.92	64	1.34	5.0	0.00	0.854
1155	6.30	19.45	6.88	61	1.34	3.3	0.00	0.861
1200	6.30	19.21	6.87	62	1.35	2.0	0.00	0.864
1205	6.30	19.09	6.85	64	1.35	1.2	0.00	0.863
1210	6.30	19.03	6.85	67	1.34	1.2	0.00	0.861
1215	6.30	18.99	6.84	70	1.34	1.1	0.00	0.860
1220	6.30	19.33	6.83	72	1.33	4.5	0.00	0.851

Sampling Information:

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes [X] No [ ]
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes [X] No [ ]
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes [X] No [ ]

Sample ID: **MW-13-1022** Duplicate? Yes [ ] No [X]
Sample Time: 1220 MS/MSD? Yes [ ] No [X]

Shipped: Pace Courier Pickup [X]
Drop-off Albany Service Center [ ]

Comments/Notes: T.B Blank: 1230

Laboratory: Pace Analytical Greensburg, PA

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: GES - Syracuse	Report To: Devin Shay (GES) dshay@gesonline.com	Attention: Accounts Payable via email at ges-invoices@gesonline.com
Address: 6780 Northern Blvd, Suite 100	Report To: Tim Beaumont (GES) tbeaumont@gesonline.com	Company Name: Groundwater & Environmental Services, Inc.
East Syracuse, New York 13057		Address: 6780 Northern Blvd, Suite 100, East Syracuse, NY 13057
Email To: dshay@gesonline.com	Purchase Order No.:	Pace Quote Reference:
Phone: 800.220.3069 x4051 Fax: None	Project Name: National Grid - Ilion East Street, Ilion NY	Pace Project Manager: Rachel Christner
Requested Due Date/TAT: Standard	Project Number: 0603324-133570-221-1106	Pace Profile #: Semi-Annual GWS

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER

UST RCRA OTHER_____

SITE LOCATION: GA IL NY PA SC VA OH OTHER___

Section D Required Client Information

SAMPLE ID

One Character per box. (A-Z, 0-9 / ,-) Samples IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED GRAB DATE	COLLECTED GRAB TIME	SAMPLE TEMP AT COLLECTION	#OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Requested Analysis: BTEX (8260C)	SVOCs (PAHs) (8270D)	Chem/Ha. Total (6010B)	Pace Project Number / Lab I.D.
1	MW-02R-1022	WT	G	[redacted]		10/26/12	10:35		6	2			3	1				3	2	1	
2	MW-03-1022	WT	G				11:25		6	2			3	1				3	2	1	
3	MW-06-1022	WT	G				11:25		6	2			3	1				3	2	1	
4	MW-06-MS-1022	WT	G				11:25		6	2			3	1				3	2	1	
5	MW-06-MSD-1022	WT	G				11:25		6	2			3	1				3	2	1	
6	MW-07-1022	WT	G				12:30		6	2			3	1				3	2	1	
7	MW-08R-1022	WT	G				10:45		6	2			3	1				3	2	1	
8	MW-13-1022	WT	G				12:20		6	2			3	1				3	2	1	
9	FD-1022	WT	G				12:-		6	2			3	1				3	2	1	
10	Trip Blanks	WT	G				12:30		3				3					3			
11																					
12																					
13																					

Additional Comments:

SAMPLES WILL ARRIVE IN #1 COOLERS.

NEREgion@gesonline.com, ges@equisonline.com

SPECIFIC EDD NAME:

NGIlion-labnumber.28351.EQEDD.zip

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
		13:3		10/26/12	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM / DD / YY): 10/26/12

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N
	Y/N	Y/N	Y/N

Appendix C – Data Usability Summary Report

Groundwater & Environmental Services, Inc.

708 North Main Street, Suite 201
Blacksburg, VA 24060

T. 800.662.5067

December 20, 2022

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

RE: Data Usability Summary Report for National Grid- Ilion, East Ave.: Data Package Pace Analytical Job No. 30485013

Review has been completed for the data packages generated by Pace Analytical that pertain to monitoring well samples collected during the April 2022 sampling events at the National Grid Ilion, East Avenue site. Six aqueous samples, a matrix spike/matrix spike duplicate pair, a trip blank and a field duplicate were collected from the main site. These samples were processed for volatile organic compounds benzene, toluene, ethylbenzene and xylenes (BTEX), cyanide and polynuclear aromatic hydrocarbons (PAHs).

Analytical methodologies are those of the USEPA SW846 with additional requirements of the NYSDEC ASP.

Complete NYSDEC Category B deliverables were included in the laboratory data package and all information required for validation of the data is present. This usability report is generated from review of the summary form information, and 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 and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate (MS/MSD) Correlations
- Field Duplicate Correlations
- Laboratory Control Sample (LCS)
- Preparation/Calibration Blanks
- Calibration/Low Level Standard Responses
- Instrumental Tunes
- Instrument MDLs
- Sample Quantitation and Identification
-

All of the items were determined to be acceptable for the DUSR level review. In summary, sample results are usable.

The laboratory case narratives and sample identification summary forms are attached to this text, and should be reviewed in conjunction with this report. No data was qualified pursuant to this data validation effort.

BTEX and TCL Volatiles by EPA 8260C/NYSDEC ASP

Sample holding times for groundwater samples and instrumental tune fragmentations were within acceptance ranges. Blanks, both laboratory and field generated, were free of contamination. Surrogate and internal standard recoveries were within required limits. Calibrations standards show acceptable responses within analytical protocol and validation action limits. An MS/MSD was analyzed using **MW-06-0422** as the matrix. All QC elements associated with the MS/MSD fell within project criteria. The blind field duplicate correlations between **MW-02R-0422** and the duplicate passed RPD criteria, and no qualifications were required.

Table *1*: Precision Calculations *VOCs*

Compound	MW-02R	FD	RPD
Benzene	1.7	1.8	5.7
Ethylbenzene	1.2	1.1	8.7
Toluene	1.1	1.2	8.7
Xylene (Total)	3.7	3.4	8.5

µg/L-microgram per liter RPD - relative percent difference

PAHs by EPA8270D/NYSDEC ASP

Holding times were met. Blanks, both laboratory and field generated, were free of contamination. Surrogate and internal standard recoveries were within required limits. Calibration standards, both initial and continuing, show acceptable responses within analytical method protocols and validation guidelines.

The laboratory control spike recoveries and precision indicate the methods were within laboratory control.

There was an MS/MSD analyzed using **MW-06-0422** as the matrix for the April 2022 sampling event. The matrix spike/matrix spike duplicate recoveries and relative percent differences were within laboratory-provided limits.

The blind field duplicate correlations of **MW-02R-0422** and **FD-0422** were calculated. The RPDs between **MW-02R-0422** and the duplicate are tabulated below. **MW-02R-0422** and the duplicate passed RPD criteria, and no qualifications were required.

Table 2: Precision Calculations PAHs

Compound	MW-02R	FD	RPD (maximum 30%)
Acenaphthene	1.2	1.3	8.0
Acenaphthylene	0.31	0.32	3.2

µg/L-microgram per liter RPD - relative percent difference

Cyanide by EPA 9012B /NYSDEC ASP

Holding times were met. Blanks show no contamination. Calibration standards, both initial and continuing, show acceptable responses within analytical method protocols and validation guidelines.

The within criteria recoveries and precision of the laboratory control spike indicate the method is within laboratory control. There was an MS/MSD analyzed using **MW-06-0422** as the matrix for the April 2022 sampling event. The recovery for cyanide was low for the **MW-06-0422** matrix spikes, and the compound is qualified as estimated with a possible low bias in the samples.

The blind field duplicate correlations of **MW-02R-0422** were within project criteria.

Table 3: Precision Calculations Cyanide

Compound	MW-02R	FD	RPD
Cyanide	0.72	0.74	2.7

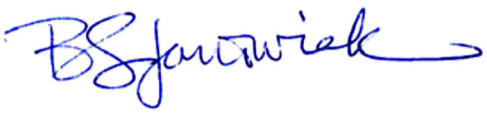
µg/L-microgram per liter RPD - relative percent difference

Data Package Completeness

Complete NYSDEC Category B deliverables were 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.

Sincerely,



Bonnie Janowiak, Ph.D.
Senior Chemist

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Greensburg, PA 15601
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SAMPLE SUMMARY

Project: National Grid - Ilion
Pace Project No.: 30485013

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30485013001	**MW-02R-0422**	Water	04/28/22 12:40	04/30/22 09:30
30485013002	**MW-03-0422**	Water	04/28/22 13:50	04/30/22 09:30
30485013003	**MW-06-0422**	Water	04/28/22 11:55	04/30/22 09:30
30485013004	**MW-06-MS-0422**	Water	04/28/22 11:55	04/30/22 09:30
30485013005	**MW-06-MSD-0422**	Water	04/28/22 11:55	04/30/22 09:30
30485013006	**MW-07-0422**	Water	04/28/22 13:00	04/30/22 09:30
30485013007	**MW-08R-0422**	Water	04/28/22 13:40	04/30/22 09:30
30485013008	**MW-13-0422**	Water	04/28/22 11:50	04/30/22 09:30
30485013009	**FD-0422**	Water	04/28/22 00:00	04/30/22 09:30
30485013010	**Trip Blank**	Water	04/28/22 12:00	04/30/22 09:30

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PROJECT NARRATIVE

Project: National Grid - Ilion
Pace Project No.: 30485013

Method: **EPA 8270D by SIM**
Description: 8270D PAH SIM Reduced Volume
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: May 16, 2022

General Information:
9 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.

Additional Comments:

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PROJECT NARRATIVE

Project: National Grid - Ilion
Pace Project No.: 30485013

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: May 16, 2022

General Information:
10 samples were analyzed for EPA 8260C/5030C by Pace Analytical Services Long Island. 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.

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.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: National Grid - Ilion
Pace Project No.: 30485013

Method: **EPA 9012B**
Description: 9012B Cyanide, Total
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: May 16, 2022

General Information:
9 samples were analyzed for EPA 9012B 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 9012B 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.

Additional Comments:

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

Groundwater & Environmental Services, Inc.

708 North Main Street, Suite 201
Blacksburg, VA 24060

T. 800.662.5067

December 20, 2022

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

RE: Data Usability Summary Report for National Grid- Ilion, East Ave.: Data Package Pace Analytical Job No. 30533623

Review has been completed for the data packages generated by Pace Analytical that pertain to monitoring well samples collected during the October 2022 sampling events at the National Grid Ilion, East Avenue site. Six aqueous samples, a matrix spike/matrix spike duplicate pair, a trip blank and a field duplicate were collected from the main site. These samples were processed for volatile organic compounds benzene, toluene, ethylbenzene and xylenes (BTEX), cyanide and polynuclear aromatic hydrocarbons (PAHs).

Analytical methodologies are those of the USEPA SW846 with additional requirements of the NYSDEC ASP.

Complete NYSDEC Category B deliverables were included in the laboratory data package and all information required for validation of the data is present. This usability report is generated from review of the summary form information, and 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 and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate (MS/MSD) Correlations
- Field Duplicate Correlations
- Laboratory Control Sample (LCS)
- Preparation/Calibration Blanks
- Calibration/Low Level Standard Responses
- Instrumental Tunes
- Instrument MDLs
- Sample Quantitation and Identification
-

All of the items were determined to be acceptable for the DUSR level review. In summary, sample results are usable.

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

Table 1 – Data Qualifications

Sample ID	Qualifier	Analyte	Reason for qualification
All samples	J-/UJ-	Naphthalene	Low LCS Recovery
MW-02R/FD	J	Cyanide	Field RPD>30%

J-/UJ-: estimated detect/estimated non-detect with a possible low bias
R: data rejected

BTEX and TCL Volatiles by EPA 8260C/NYSDEC ASP

Sample holding times for groundwater and effluent samples and instrumental tune fragmentations were within acceptance ranges. Blanks were free of contamination. Surrogate and internal standard recoveries were within required limits. Calibrations standards show acceptable responses within analytical protocol and validation action limits. An MS/MSD was analyzed using **MW-06-1022** as the matrix. All QC elements associated with the MS/MSD fell within project criteria. The blind field duplicate correlations between **MW-02R-1022** and the duplicate passed criteria, and no qualifications were required.

Table 2: Precision Calculations *VOCs*

Compound	MW-02R	FD	RPD
Benzene	668	615	0.7
Ethylbenzene	123	110	4.1
Toluene	140	120	2.0
Xylene (Total)	302	257	2.7
m&p-Xylenes	187	159	2.7
o-Xylene	115	97.6	2.5

µg/L-microgram per liter RPD - relative percent difference

PAHs by EPA8270D/NYSDEC ASP

Holding times were met. Calibration standards, both initial and continuing, show acceptable responses within analytical method protocols and validation guidelines.

The method blank associated with the 2022 data reported no detections above reporting level.

Surrogate recoveries were within criteria.

The laboratory control spike recoveries and precision indicate the methods were within laboratory control, with the exception of a low recovery for naphthalene. Data, both detect and non-detect, are considered estimated with a possible low bias.

There was an MS/MSD analyzed using **MW-06-1022** as the matrix for the October 2022 sampling event. The matrix spike/matrix spike duplicate recoveries and relative percent differences were within laboratory-provided limits.

The blind field duplicate correlations of **MW-02R-1022** and **FD-1022** were calculated. The RPDs between **MW-02R-1022** and the duplicate are tabulated below. No compound exceeded the EPA-recommended maximum 30% criteria.

Table 1: Precision Calculations PAHs

Compound	MW-02R	FD	RPD (Max 30%)
Acenaphthene	66.1	78.5	17.2
Acenaphthylene	28.1	32.9	15.7
Anthracene	0.11	0.13	16.7
Fluorene	14.2	16.0	11.9
2-MethylNaphthalene	2.8	3.1	10.2
Naphthalene	570	652	13.4
Phenanathrene	10.0	11.2	11.3

µg/L-microgram per liter RPD - relative percent difference NC: Not calculated – concentration not confirmed
ND: not detected

Cyanide by EPA 9012B /NYSDEC ASP

Holding times were met. Blanks show no contamination. Calibration standards, both initial and continuing, show acceptable responses within analytical method protocols and validation guidelines.

The within criteria recoveries and precision of the laboratory control spike indicate the method accuracy is reliable. There was an MS/MSD analyzed using **MW-06-1022** as the matrix for the October 2022 sampling event. The recovery for cyanide was within criteria for the matrix spikes.

The blind field duplicate correlations of MW-02R-1022 were outside project criteria. Cyanide data in MW-02R and the FD are qualified as estimated with an indeterminate bias.

Table *4*: Precision Calculations Cyanide

Compound	MW-02R	FD	RPD
Cyanide	0.64	1.4	74.5

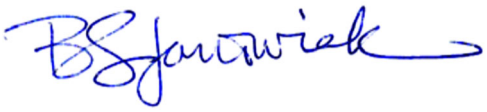
µg/L-microgram per liter RPD - relative percent difference

Data Package Completeness

Complete NYSDEC Category B deliverables were 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.

Sincerely,



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Senior Chemist

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SAMPLE SUMMARY

Project: NG Illio East Street, Illion N
Pace Project No.: 30533623

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30533623001	**MW-02R-1022**	Water	10/26/22 10:35	10/28/22 09:30
30533623002	**MW-03-1022**	Water	10/26/22 11:25	10/28/22 09:30
30533623003	**MW-06-1022**	Water	10/26/22 11:25	10/28/22 09:30
30533623004	**MW-06-MS-1022**	Water	10/26/22 11:25	10/28/22 09:30
30533623005	**MW-06-MSD-1022**	Water	10/26/22 11:25	10/28/22 09:30
30533623006	**MW-07-1022**	Water	10/26/22 12:20	10/28/22 09:30
30533623007	**MW-08R-1022**	Water	10/26/22 10:45	10/28/22 09:30
30533623008	**MW-13-1022**	Water	10/26/22 12:20	10/28/22 09:30
30533623009	**FD-1022**	Water	10/26/22 12:20	10/28/22 09:30
30533623010	**Trip Blank**	Water	10/26/22 12:30	10/28/22 09:30

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PROJECT NARRATIVE

Project: NG Illio East Street, Illion N
Pace Project No.: 30533623

Method: **EPA 8270D by SIM**
Description: 8270D PAH SIM Reduced Volume
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: November 07, 2022

General Information:
9 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.

QC Batch: 543404

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 2637625)
  - Naphthalene

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

Additional Comments:

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PROJECT NARRATIVE

Project: NG Illio East Street, Illion N
Pace Project No.: 30533623

Method: **EPA 8260C**
Description: 8260C MSV
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: November 07, 2022

General Information:
10 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.

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.

QC Batch: 544924

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

- MW-06-1022 (Lab ID: 30533623003)
  - 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:

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PROJECT NARRATIVE

Project: NG Illio East Street, Illion N
Pace Project No.: 30533623

Method: **EPA 9012B**
Description: 9012B Cyanide, Total
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: November 07, 2022

General Information:
9 samples were analyzed for EPA 9012B 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 9012B 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: 543505

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30533623001

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

- MS (Lab ID: 2637965)
  - Cyanide
- MSD (Lab ID: 2637966)
  - Cyanide

Additional Comments:

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