

March 13, 2023

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

**Re: *National Grid Ogdensburg Former MGP Site
NYSDEC Site No. 645053
10 King Street
Ogdensburg, New York
2022 Periodic Review Report***

Dear Mr. Deyette:

Enclosed for your review is the 2022 Periodic Review Report (PRR) for the National Grid Ogdensburg Former MGP Site. The PRR pertains to the period from February 17, 2022 through February 17, 2023 and includes a brief report and Institutional Controls/Engineering Controls (IC/EC) Certification Form.

Please feel free to contact me at 315.428.5652 if you have any questions.

Sincerely,



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

I. Introduction

A. Brief Site Summary –

The Former Ogdensburg Manufactured Gas Plant (MGP) Site (the Site) is located on an approximate 0.958 acre lot, with the address of 10 King Street in Ogdensburg, New York (refer to Figure 1 Site Location Map). The Site is owned by the St. Lawrence Gas Company. Manufactured gas was produced at the Site by a predecessor company to Niagara Mohawk Power Corporation from approximately 1854 until at least 1930 using the coal carbonization process. The majority of the buildings and above-grade structures were removed by 1949; however, several subsurface foundations and piping were left in place. In addition to the former MGP, the Site was the location of a quarry from approximately 1850 to after 1865, and was used for the storage of propane gas tanks from before 1945 until sometime before 1997.

An investigation of the Site began in 2003 with the site characterization (SC), the remedial investigation (RI), which was conducted between 2003 and 2009, and culminating in 2010 with the pre-design investigation (PDI). During these investigations, 76 soil borings were drilled, 22 monitoring wells were installed, 10 test pits were excavated, three soil vapor investigations were conducted, and more than 230 samples of environmental media were collected and analyzed. The results of the SC and RI were presented in the Remedial Investigation Report (RI Report; Arcadis 2009), and the results of the PDI were presented in the Pre-Design Investigation Summary Report (PDI Report; National Grid 2011). In March 2009, National Grid also conducted an investigation of the City of Ogdensburg's combined sewer system located downstream from the Site. The investigation was prompted by the findings of the utility evaluation conducted in October 2008 during the Phase III RI, which identified non-aqueous phase liquid (NAPL) in a sewer lateral that extended from the western portion of the Site, along the fence line, to one of the manholes in King Street. The results of the sewer investigation were presented in an April 10, 2009 memorandum to the NYSDEC (Arcadis 2009) and were summarized in the RI Report.

The site investigations identified impacted soils from MGP related activities, specifically coal tar and purifier waste. The constituents of concern (COCs) are primarily the volatile organic compounds (VOCs) benzene, toluene, ethylbenzene, and xylenes (collectively, BTEX), the general class of semi-volatile organic compounds (SVOCs) known as polycyclic aromatic hydrocarbons (PAHs), and cyanide, all of which were found at the Site and the off-Site area.

National Grid- Ogdensburg MGP Site (NYSDEC Site No. 645053)

Reporting Period – February 17, 2022 through February 17, 2023

- B. Remedial Program Effectiveness** – During the reporting period (February 17, 2022 to February 17, 2023) the long-term remedial objectives were met for the site.
- C. Remedial Program Compliance** - The major elements within the Institutional Control/Engineering Control(s) (IC/EC) Plan are in compliance.
- D. Remedial Program Recommendations** - It is recommended that no changes be made to the IC/EC Plan. It is recommended that an annual Periodic Review Report (PRR) be submitted. The next PRR submittal will cover the period February 17, 2023 to February 17, 2024.

II. Site Overview

A. Site Location and Boundaries –

The Site is located at 10 King Street in the City of Ogdensburg, County of St. Lawrence, New York (Figure 1 presents the site location map). The Site is an approximate 0.958-acre area bounded by King Street to the north, privately-owned properties to the south and west, a privately-owned property and a vacant National Grid-owned property to the east. Currently, the property is grass-covered, vacant and surrounded by a 6-foot chain link fence with barbed wire.

B. Regulatory History and Remedy Features –

The Site was remediated between May and October 2013 in accordance with the *Voluntary Cleanup Program Decision Document* (NYSDEC 2010b) and *Final (100%) Remedial Design* (Arcadis 2012). This PRR is being completed in compliance with Section 6.3 of the NYSDEC – approved Site Management Plan (SMP) for the project. A Deed of Restrictions and Covenants (DCR) was placed on the property in February 2018 by the Owner, and is included in Appendix A of the SMP.

III. Evaluate Remedy Performance, Effectiveness, and Protectiveness

- A. Evaluation of Remedy Performance** – Annual visual inspections of the cover system are conducted on the Site. The remedy performance has been effective in protecting the public.

IV. IC/EC Plan Compliance Report

A. IC/EC Requirements and Compliance

1. IC/EC Controls

The ICs/ECs:

- **Soil Cover System and Fencing:** Annual site inspection of the cover system includes identification of any damage to the cover. The fence is also inspected for any damage. National Grid conducts quarterly inspections for internal security purposes. See Attachment 1 for the Site Inspection Forms.
- **Monitoring Wells Associated with Monitored Natural Attenuation (MNA):** Semi-annual groundwater sampling of the monitoring well system will be conducted, until either water quality is consistently below NYSDEC standards, or has become asymptotic at an acceptable level over an extended period.

2. **IC/EC Goals** - Each goal is being met and/or working effectively.
3. **IC/EC Corrective Measures** – No deficiencies were noted during the site inspections.
4. **IC/EC Conclusions/Recommendations** – The EC program is in compliance and there are no recommendations for the program at this time.
5. **IC/EC Certification** – Refer to PRR Form - Attachment 2 for the certification.

V. Monitoring Plan Compliance Report – The Annual Monitoring Report was submitted to the NYSDEC on February 3, 2023. See Attachment 3 for a copy of the Annual Monitoring Report.

VI. Operation & Maintenance (O&M) Plan Compliance Report – Not Applicable

VII. Overall PRR Conclusions and Recommendations

A. Compliance with Site Management Plan (SMP)

1. **Requirements** – All IC/EC Plan requirements were met during this reporting period.
2. **Exposure Pathways** – There are no new completed exposure pathways resulting in unacceptable risk.
3. **Proposed Plans and Schedule to Meet Compliance** – No plan proposed.

B. Performance and Effectiveness of the Remedy – The remedy as described in the Site Management Plan and executed by National Grid has been effective in meeting the program goals.

C. Future PRR Submittals – The frequency of PRR Submittals should remain annual. Therefore, the next PRR reporting period will cover February 17, 2023 through February 17, 2024.

VIII. Additional Guidance – Not needed.

National Grid- Ogdensburg MGP Site (NYSDEC Site No. 645053)

Reporting Period – February 17, 2022 through February 17, 2023

REFERENCES

Arcadis, 2018. “Site Management Plan, Ogdensburg (King Street) Non-Owned Former MGP Site”, September 2018.

National Grid- Ogdensburg MGP Site (NYSDEC Site No. 645053)

Reporting Period – February 17, 2022 through February 17, 2023

Attachment 1: Site Inspection Forms

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 1/25/2023
Technician: KL

NYSDEC Site No. V00479

Time: 9:45
Weather: Cloudy 22

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS: winter

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS: winter	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:

water bubbling out of manway. Installed a new gripper plug.

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 10/20/2022
Technician: KL

NYSDEC Site No. V00479

Time: 8:30
Weather: Rain 40

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS:

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS:	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 7/20/2022
Technician: KL

NYSDEC Site No. V00479

Time: 10:30
Weather: Sunny 85

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS:

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS:	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:

Partial demolition of cheese factory building on the SW corner due to a fire near the area of MW-12R.
No well damage.

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 4/14/2022
Technician: KL

NYSDEC Site No. V00479

Time: 8:30
Weather: Cloudy 46

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS:

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS:	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:

National Grid- Ogdensburg MGP Site (NYSDEC Site No. 645053)

Reporting Period – February 17, 2022 through February 17, 2023

Attachment 2: PRR Certification Form



Enclosure 2
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Site Management Periodic Review Report Notice
Institutional and Engineering Controls Certification Form



	Site Details	Box 1		
Site No.	645053			
Site Name NM - Ogdensburg MGP				
Site Address: 10 King St.		Zip Code: 13669		
City/Town: Ogdensburg				
County: St Lawrence				
Site Acreage: 0.958				
Reporting Period: February 17, 2022 to February 17, 2023				
		YES	NO	
1.	Is the information above correct?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If NO, include handwritten above or on a separate sheet.				
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.				
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

		Box 2	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Commercial and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.			
A Corrective Measures Work Plan must be submitted along with this form to address these issues.			
Signature of Owner, Remedial Party or Designated Representative		Date	

Description of Institutional Controls

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
48.078-5-19	St. Lawrence Gas Company	Ground Water Use Restriction Landuse Restriction Site Management Plan

Deed Restriction was filed on October 10, 2006. A Site Management Plan was approved on September 26, 2018 (see Site # 645053).

48.078-5-25.1	NMPC. d/b/a National Grid	Ground Water Use Restriction Landuse Restriction Site Management Plan
----------------------	---------------------------	---

The Easement was recorded on March 22, 2018. The Site Management Plan was approved on September 26, 2018.

Description of Engineering Controls

<u>Parcel</u>	<u>Engineering Control</u>
48.078-5-19	Cover System Fencing/Access Control

The Engineering controls for the site include a site cover system and fencing to control access. The property is restricted to commercial use and groundwater use is also prohibited.

48.078-5-25.1	Cover System Fencing/Access Control
----------------------	--

The Engineering controls in place include a cover system, restriction of land use to commercial, groundwater use prohibited, and site fencing to control access.

Periodic Review Report (PRR) Certification Statements

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

(a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.

A Corrective Measures Work Plan must be submitted along with this form to address these issues.

Signature of Owner, Remedial Party or Designated Representative

Date

EC CERTIFICATIONS

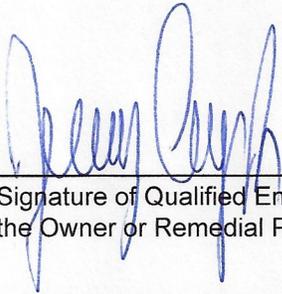
Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Gerald Cresap, PE at 6780 Northern Blvd., Suite 100, East Syracuse, NY,
print name print business address

am certifying as a Qualified Environmental Professional for the agent for National Grid
(Owner or Remedial Party)



3-9-2023

Signature of Qualified Environmental Professional for the Owner or Remedial Party, Rendering Certification Stamp (Required for PE)

Date

IC CERTIFICATIONS
SITE NO. 645053

Box 6

SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

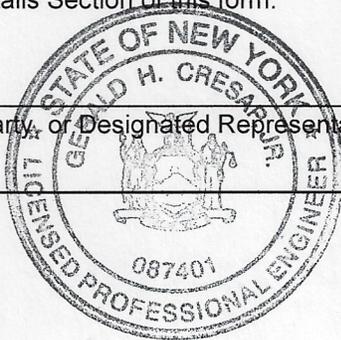
I Gerald Cresap, PE at 6780 Northern Blvd., Suite 100, East Syracuse, NY,
print name print business address

am certifying as agent for National Grid (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.


Signature of Owner, Remedial Party, or Designated Representative
Rendering Certification

3-8-2023
Date



National Grid- Ogdensburg MGP Site (NYSDEC Site No. 645053)

Reporting Period – February 17, 2022 through February 17, 2023

Attachment 3: Annual Monitoring Report

February 3, 2023

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
10 King Street, Ogdensburg, New York
Annual Groundwater Monitoring Report**

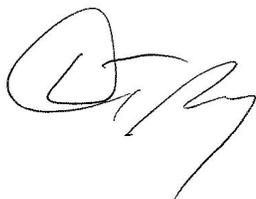
Dear Mr. Deyette:

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

Groundwater and Environmental Service, Inc., (GES) OM&M contractor for National Grid, conducts all long-term OM&M 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 of BTEX and/or PAHs in all thirteen monitoring wells sampled.

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 Ogdensburg, Former MGP Site
10 King Street, Ogdensburg, NY 13669

February 2023

Version 1





Annual Groundwater Monitoring Report

National Grid Ogdensburg, Former MGP Site
10 King Street
Ogdensburg, NY 13669

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:
0603324.136690.221

Date:
February 3, 2023

A handwritten signature in black ink, appearing to read 'D. Shay', is positioned above a horizontal line.

Devin T. Shay, PG
Program Manager / Principal Hydrogeologist



Table of Contents

1	Introduction	1
2	Semi-Annual Groundwater Monitoring	1
2.1	Objectives	1
2.2	Groundwater Well Gauging	1
2.3	Groundwater Well Sampling and Analytical Results	2
3	Quarterly Site-Wide Inspections	3
4	Recommendations	3
4.1	Recommendations	3

Figures

Figure 1 – Site Map

Figure 2 – Groundwater Contour Map, April 14, 2022

Figure 3 – Groundwater Contour Map, October 20, 2022

Figure 4 – Groundwater Analytical Map, April 14, 2022

Figure 5 – Groundwater Analytical Map, October 20, 2022

Tables

Table 1 – Groundwater Monitoring Well Gauging Data

Table 2 – Groundwater Analytical Data

Appendices

Appendix A – Field Inspection Reports

Appendix B – Well Sampling Field Data

Appendix C – Data Usability Summary Report



1 Introduction

This Annual Groundwater Monitoring Report presents results from the activities conducted at the Ogdensburg former manufactured gas plant (MGP) site (the site) located in Ogdensburg, New York (the Site). A site map is presented on Figure 1. The work summarized herein has been conducted in accordance with the approved Site Management Plan (SMP) for the site, dated September 26, 2018.

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 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 velocity, 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 New York State Department of Environmental Conservation (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 addended April 2000 and June 2004.

2.2 Groundwater Well Gauging

The April 14, 2022 and October 20, 2022 groundwater monitoring field activities were conducted by GES. Prior to collecting groundwater samples, static fluid level measurements were collected from MW-2(R), MW-5R(R), MW-8R, MW-9, MW-10R, MW-11, MW-12R, MW-14R, MW-15, MW-15RS, MW-17R, MW-19R, and MW-20R. 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. A shallow groundwater potentiometric surface contour map developed based on the groundwater elevation measurements taken on April 14, 2022 and October 20, 2022, is included on Figure 2 and Figure 3, respectfully.

Groundwater generally flows to the north from the Site toward the St. Lawrence River. Groundwater elevations ranged from 249.07 feet above sea level (asl; well MW-15) to 257.51 feet asl (well MW-5R(R)). 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 13 monitoring wells on April 14, 2022 and October 20, 2022 (including MW-2(R), MW-5R(R), MW-8R, MW-9, MW-10R, MW-11, MW-12R, MW-14R, MW-15, MW-15RS, MW-17R, MW-19R, and MW-20R). 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. Note that analytical results for well MW-15 were not reported for the October 2022 sampling event, as the laboratory lost the sample.

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 5. The Data Usability Summary Report (DUSR) is included in Appendix C.

There were BTEX and/or PAH detections in all the monitoring wells sampled during the April and October 2022 sampling event. In April 2022, BTEX, acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, indeno(1,2,3-cd)pyrene, and naphthalene were detected above the regulatory criteria in one or more samples. Cyanide was detected in monitoring wells MW-2(R), MW-5R(R), MW-8R, MW-9, MW-10R, MW-11, MW-12R, and MW-15RS during the April 2022 event. In October 2022, BTEX, acenaphthene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, and naphthalene were detected above the regulatory criteria in one or more samples. Cyanide was detected in monitoring wells MW-2(R), MW-5R(R), MW-8R, MW-9, MW-10R, MW-11, MW-12R, and MW-15RS in October 2022. As shown on Table 2, BTEX, PAHs and total cyanide detected in groundwater during the April and October 2022 sampling events are consistent with results from previous sampling events.



3 Quarterly Site-Wide Inspections

The quarterly site-wide inspections were conducted on January 20, April 14, July 20, and October 20, 2022. The Site Inspection Forms are presented in Appendix A. In general, the Site is in compliance.

4 Recommendations

4.1 Recommendations

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

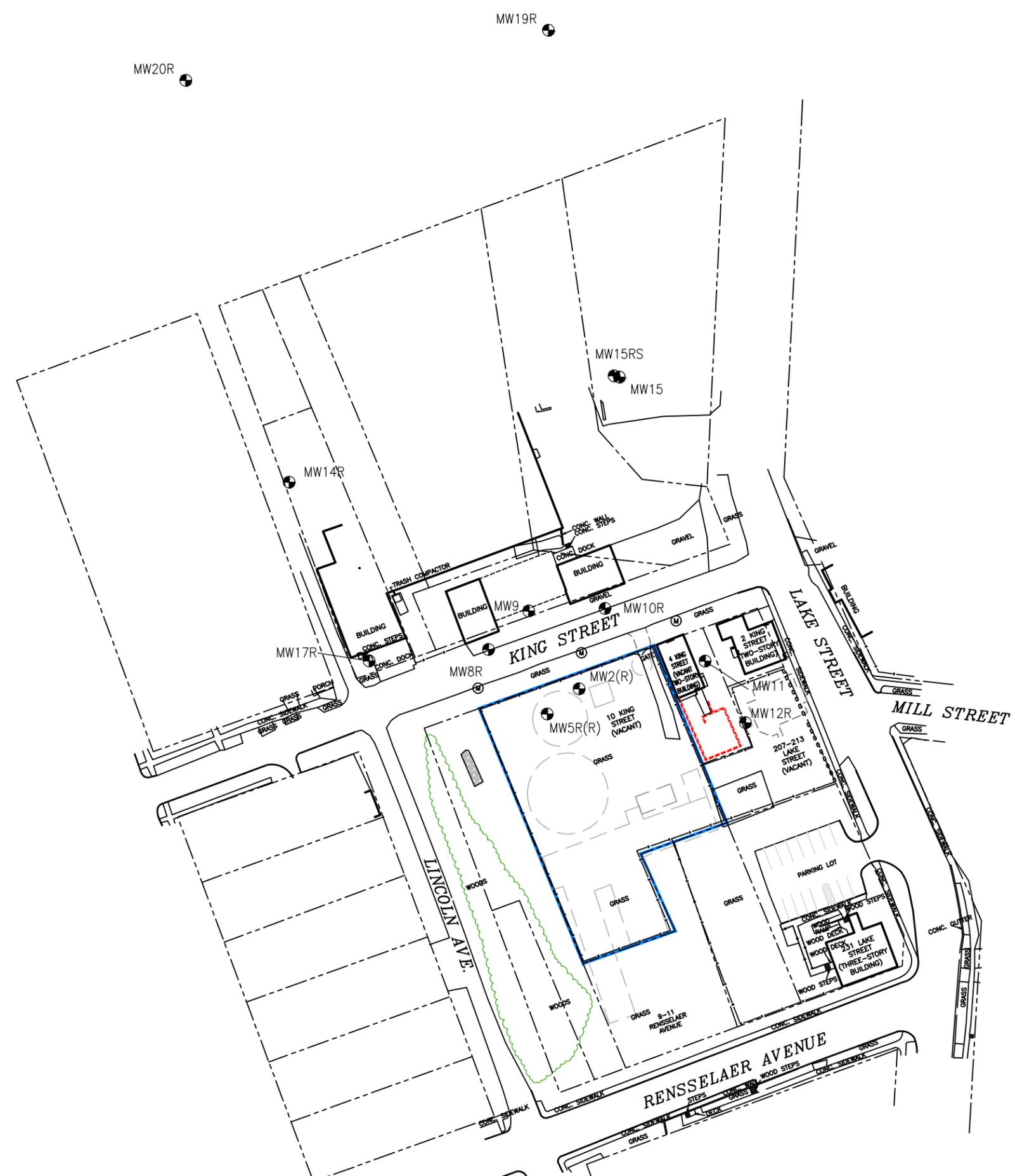


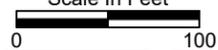
Figures

M:\Graphics\0600-Syracuse\Misc\National Grid\Ogdensburg SM.dwg, B100 SM(current), D.Hendricks

LEGEND

- PROPERTY BOUNDARY
- x - FENCE
- (M) UTILITY MANHOLE
- MONITORING WELL

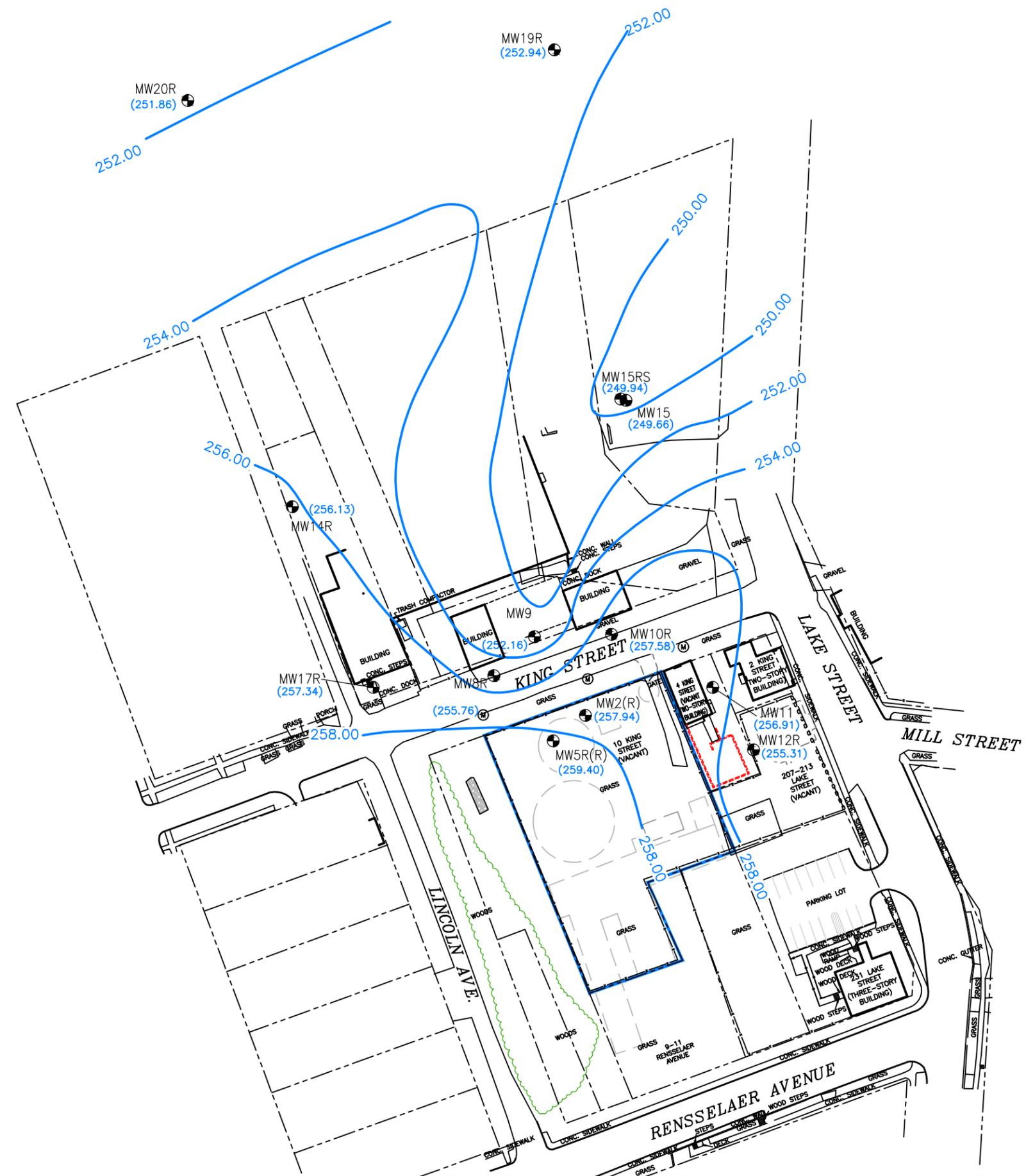


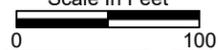
Expanded Site Map	
National Grid 10 King Street Ogdensburg, New York	
Drawn D.H.	Date 01/19/23
Designed	Figure 1
Approved	
 Scale In Feet   <small>Groundwater & Environmental Services, Inc.</small>	

M:\Graphics\0600-Syracuse\Misc\National Grid\Ogdensburg\Ogdensburg SM.dwg, B100 SM(current), D.Hendricks

LEGEND

- PROPERTY BOUNDARY
- x — FENCE
- Ⓜ UTILITY MANHOLE
- ⊕ MONITORING WELL
- (257.29) GROUNDWATER ELEVATION (feet)
- ~ GROUNDWATER CONTOUR

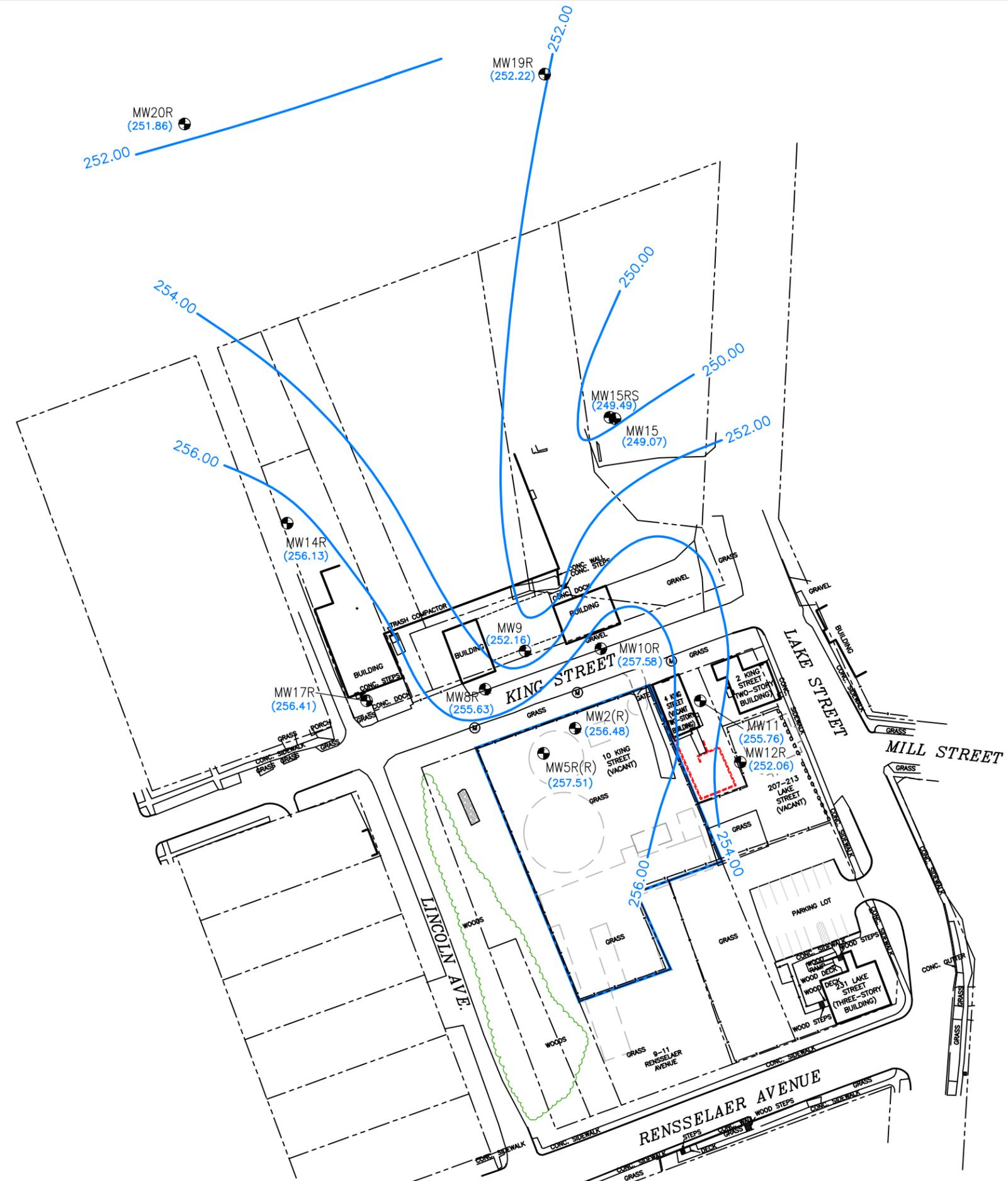


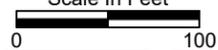
Groundwater Contour Map April 14, 2022	
National Grid 10 King Street Ogdensburg, New York	
Drawn D.H. Designed Approved	Date 01/19/23 Figure 2
 Scale In Feet   <small>Groundwater & Environmental Services, Inc.</small>	

M:\Graphics\0600-Syracuse\Misc\National Grid\Ogdensburg SM.dwg, B100 SM(current), D.Hendricks

LEGEND

- PROPERTY BOUNDARY
- x — FENCE
- Ⓜ UTILITY MANHOLE
- MONITORING WELL
- (257.29) GROUNDWATER ELEVATION (feet)
- ~ GROUNDWATER CONTOUR

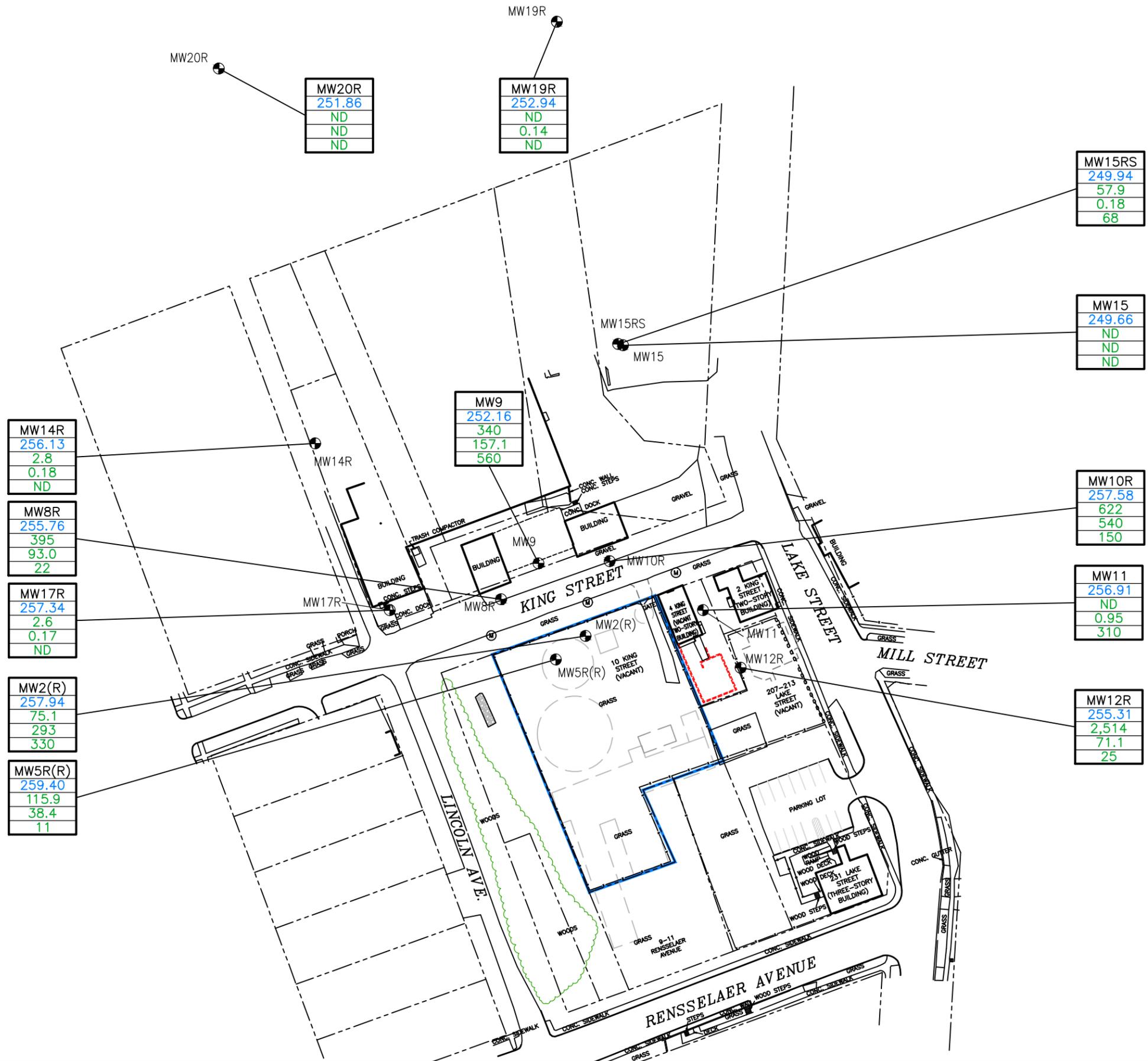


Groundwater Contour Map October 20, 2022	
National Grid 10 King Street Ogdensburg, New York	
Drawn D.H. Designed Approved	Date 01/19/23 Figure 3
 Scale In Feet 	
 Groundwater & Environmental Services, Inc.	

M:\Graphics\0600-Syracuse\Misc\National Grid\Ogdensburg SM.dwg, B100 SM(current), D.Hendricks

LEGEND

- PROPERTY BOUNDARY
 - x — FENCE
 - Ⓜ UTILITY MANHOLE
 - MONITORING WELL
- | | |
|--------|------------------------------|
| MW2(R) | WELL IDENTIFICATION |
| 255.02 | GROUNDWATER ELEVATION (feet) |
| 81.4 | BTEX CONCENTRATION (ug/L) |
| 779 | PAHs CONCENTRATION (ug/L) |
| 4,900 | CYANIDE CONCENTRATION (ug/L) |
- ug/L MICROGRAMS PER LITER
 - BTEX BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
 - PAHs POLYCYCLIC AROMATIC HYDROCARBONS
 - ND NOT DETECTED



Groundwater Contour Map
April 14, 2022

National Grid
10 King Street
Ogdensburg, New York

Drawn D.H. Designed Approved	Date 01/19/23 Figure 4
---	---------------------------------

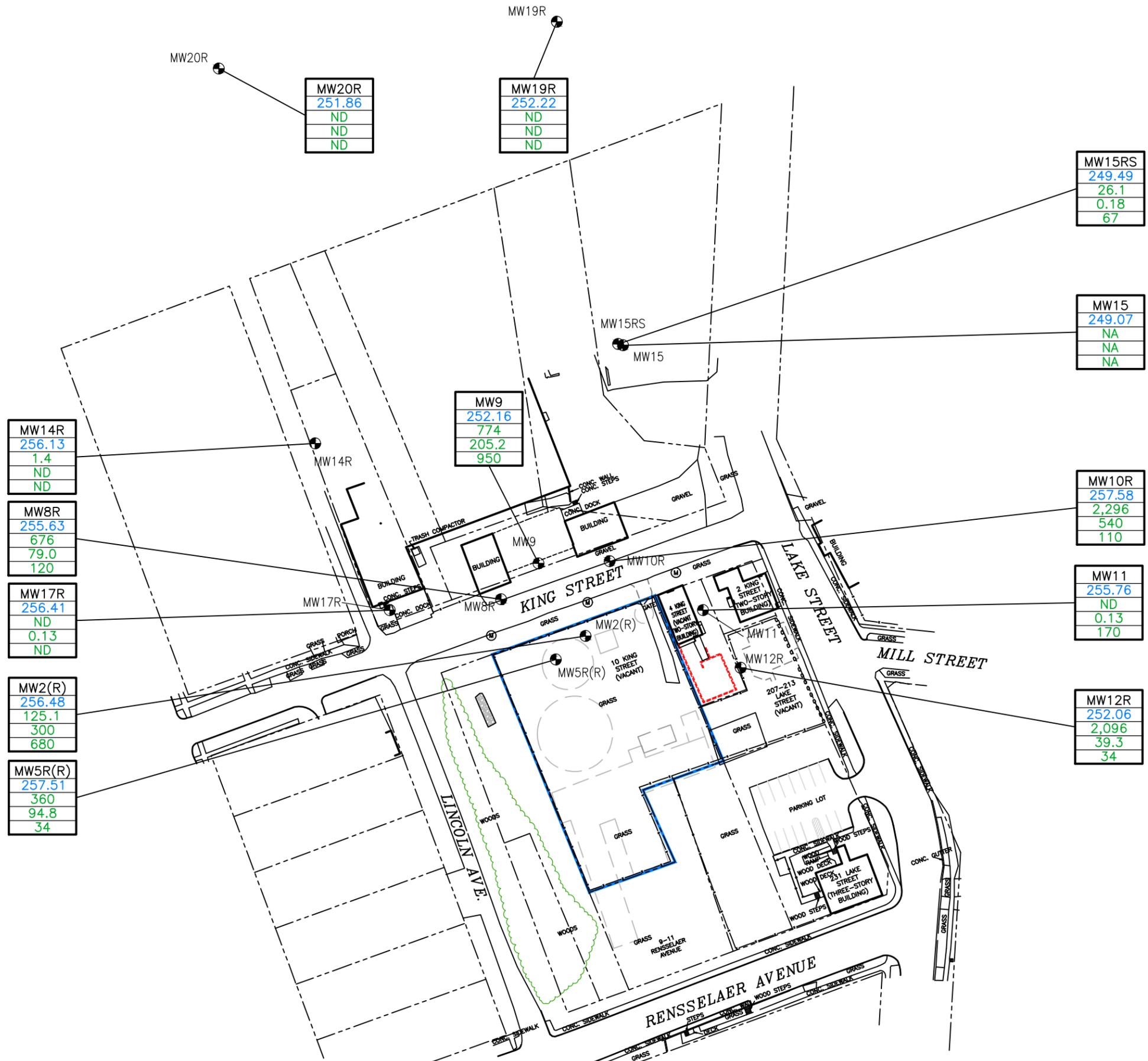
Scale In Feet

Groundwater & Environmental Services, Inc.

M:\Graphics\0600-Syracuse\Misc\National Grid\Ogdensburg SM.dwg, B100 SM(current), D.Hendricks

LEGEND

- PROPERTY BOUNDARY
 - x — FENCE
 - Ⓜ UTILITY MANHOLE
 - MONITORING WELL
- | | |
|--------|------------------------------|
| MW2(R) | WELL IDENTIFICATION |
| 255.02 | GROUNDWATER ELEVATION (feet) |
| 81.4 | BTEX CONCENTRATION (ug/L) |
| 779 | PAHs CONCENTRATION (ug/L) |
| 4,900 | CYANIDE CONCENTRATION (ug/L) |
- ug/L MICROGRAMS PER LITER
- BTEX BENZENE, TOLUENE, ETHYLBENZENE, XYLENES
- PAHs POLYCYCLIC AROMATIC HYDROCARBONS
- ND NOT DETECTED
- NA NOT ANALYZED



Groundwater Monitoring Map
October 20, 2022

National Grid
10 King Street
Ogdensburg, New York

Drawn D.H. Designed Approved	Date 01/19/23 Figure 5
---------------------------------------	---------------------------------

Scale In Feet

Groundwater & Environmental Services, Inc.



Tables

Table 1
Groundwater Monitoring Well Gauging Data

Well ID	Well Type & Diameter	Groundwater Elevation (07/14/20)	Depth To Water (10/01/20)	Groundwater Elevation (10/01/20)	Depth To Water (4/15/21)	Groundwater Elevation (4/15/21)	Depth To Water (10/20/21)	Groundwater Elevation (10/20/21)	Depth To Water (4/14/22)	Groundwater Elevation (4/14/22)	Depth To Water (10/20/22)	Groundwater Elevation (10/20/22)
MW-2(R)	Flushmount; PVC; 2-inch	254.38	3.92	255.28	2.69	256.51	4.18	255.02	1.26	257.94	2.72	256.48
MW-5R(R)	Flushmount; PVC; 2-inch	254.28	2.75	256.65	-0.04	259.44	2.11	257.29	0.00	259.40	1.89	257.51
MW-8R	Flushmount; PVC; 2-inch	253.86	2.20	255.18	2.29	255.09	2.56	254.82	1.62	255.76	1.75	255.63
MW-9	Flushmount; PVC; 2-inch	252.12	4.85	252.15	4.83	252.17	4.94	252.06	4.84	252.16	4.84	252.16
MW-10R	Flushmount; PVC; 2-inch	256.42	0.50	257.08	0.00	257.58	0.55	257.03	0.00	257.58	0.00	257.58
MW-11	Flushmount; PVC; 2-inch	255.45	3.49	255.58	2.99	256.08	3.73	255.34	2.16	256.91	3.31	255.76
MW-12R	Flushmount; PVC; 2-inch	250.47	9.34	251.45	7.22	253.57	9.19	251.60	5.48	255.31	8.73	252.06
MW-14R	Flushmount; PVC; 2-inch	253.66	0.00	256.13	0.00	256.13	0.00	256.13	0.00	256.13	0.00	256.13
MW-15	Flushmount; PVC; 2-inch	248.40	8.06	248.56	7.30	249.32	8.33	248.29	6.96	249.66	7.55	249.07
MW-15RS	Flushmount; PVC; 2-inch	250.41	8.40	249.34	7.72	250.02	8.50	249.24	7.80	249.94	8.25	249.49
MW-17R	Flushmount; PVC; 2-inch	255.81	7.16	256.13	6.84	256.45	7.29	256.00	5.95	257.34	6.88	256.41
MW-19R	Flushmount; PVC; 2-inch	249.18	4.32	251.20	3.55	251.97	4.00	251.52	2.58	252.94	3.30	252.22
MW-20R	Flushmount; PVC; 2-inch	250.48	0.00	251.86	0.50	251.36	0.20	251.66	0.00	251.86	0.00	251.86



Table 2
Groundwater Analytical Data
MW-2(R)

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/23/14	10/20/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	61	120	55.4	44.3	49.1	45.2	38.4	63.4
Ethylbenzene	5	µg/L	ND	3	1.5	1.6	2.0	1.3	ND	2.7
Toluene	5	µg/L	29	44	22.4	19.4	23.1	17.8	18.4	29.3
Total Xylenes	5	µg/L	23	36	20.7	17.8	23.1	17.1	18.3	29.7
SVOCs										
Acenaphthene	20	µg/L	1.8 J	4 J	3.5	3.0	4.9	10.7	2.6	5.0
Acenaphthylene	--	µg/L	7.7	18	16.2	12.6	20.7	44.9	10.5	19.8
Anthracene	50	µg/L	1.7 J	3 J	2.6	1.8	2.2	6.7	1.1	2.1
Benzo(a)anthracene	0.002	µg/L	3.3	ND	0.13	0.37	ND	ND	ND	ND
Benzo(a)pyrene	ND	µg/L	2.8	ND	ND	0.38	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	3.5	ND	ND	0.50	ND	ND	ND	ND
Benzo(g,h,i)perylene	--	µg/L	1.6 J	ND	ND	0.23	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	1.4 J	ND	ND	0.17	ND	ND	ND	ND
Chrysene	0.002	µg/L	2.6	ND	ND	0.29	ND	ND	ND	ND
Dibenz(a,h)anthracene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50	µg/L	6.9	ND	1.2	1.3	0.98	2.9	0.49	1.5
Fluorene	50	µg/L	2.3	7	6.2	5.2	7.7	22.1	3.7	9.1
Indeno(1,2,3-cd)pyrene	0.002	µg/L	1.4 J	ND	ND	0.23	ND	ND	ND	ND
2-Methylnaphthalene	--	µg/L	5.8	20	17.9	17.1	22.5	50.1	15.4	20.8
Naphthalene	10	µg/L	120	270	210	270	327	622	257	234
Phenanthrene	50	µg/L	4.1	6	5.0	4.1	5.5	17.7	2.0	6.6
Pyrene	50	µg/L	5.4	ND	0.74	0.92	0.61	1.7	0.30	1.0
Inorganics										
Cyanide, Total	200	µg/L	900	530	240	4,100	390	4,900	330	680

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
 MW-5R(R)

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/22/14	10/20/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	130	440	392	354	144	231	98.7	308
Ethylbenzene	5	µg/L	7.0	26	27.3	24.3	11.6	16.8	4.9	16.8
Toluene	5	µg/L	3.0	70	82.6	65.0	21.8	25.5	3.9	9.4
Total Xylenes	5	µg/L	6.4	53	78.9	58.7	24.2	33.7	8.4	26.2
SVOCs										
Acenaphthene	20	µg/L	9.8	71	44.9	38.8	26.8	28.5	12.2	20.6
Acenaphthylene	--	µg/L	6.6	40	31.9	24.6	14.1	16.6	3.5	7.9
Anthracene	50	µg/L	0.50 J	8	4.9	3.1	0.85	2.0	ND	0.36
Benzo(a)anthracene	0.002	µg/L	ND	ND	0.11	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	µg/L	ND							
Benzo(b)fluoranthene	0.002	µg/L	ND							
Benzo(g,h,i)perylene	--	µg/L	ND							
Benzo(k)fluoranthene	0.002	µg/L	ND							
Chrysene	0.002	µg/L	ND							
Dibenz(a,h)anthracene	--	µg/L	ND							
Fluoranthene	50	µg/L	ND	6	4.2	2.4	1.6	2.0	0.96	1.3
Fluorene	50	µg/L	4.7	48	28.4	23.8	18.5	21.6	9.1	12.9
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND							
2-Methylnaphthalene	--	µg/L	ND	6	10.3	7.9	3.9	4.3	0.76	0.77
Naphthalene	10	µg/L	4.1	210	248	315	86.6	110	4.7	51.9
Phenanthrene	50	µg/L	2.6	41	25.2	20.7	14.7	17.7	6.4	8.1
Pyrene	50	µg/L	ND	5	3.5	2.1	1.4	1.6	0.79	1.1
Inorganics										
Cyanide, Total	200	µg/L	10	55	55	49	17	34	11	34

Notes:

Results are presented in units of micrograms per liter (µg/L).

E = Results exceeded calibration range

D = Compound quantitated using a secondary dilution

J = Analyte was detected at a concentration less than the laboratory reporting limit

ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.

Bolded = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
 MW-8R

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/24/14	10/19/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	550	800	1,300	576	431	623	359	615
Ethylbenzene	5	µg/L	13	14	66.2	13.6	9.5	20.7	9.2	17.2
Toluene	5	µg/L	10	20	75.2	9.2	5.6	20.2	10.8	17.2
Total Xylenes	5	µg/L	19	27	132	18.0	12.5	32.6	16.1	26.2
SVOCs										
Acenaphthene	20	µg/L	5.6	10	16.2	7.6	8.2	12.6	7.5	8.5
Acenaphthylene	--	µg/L	6.7	10	23.4	5.4	3.3	12.9	4.9	7.9
Anthracene	50	µg/L	0.94 J	0.9	2.9	0.68	ND	1.5	0.44	0.61
Benzo(a)anthracene	0.002	µg/L	ND	ND	0.48	0.48	0.11	0.39	0.27	0.19
Benzo(a)pyrene	ND	µg/L	ND	ND	0.28	0.36	ND	0.22	0.16	0.12
Benzo(b)fluoranthene	0.002	µg/L	ND	ND	0.31	0.38	ND	0.33	0.24	0.18
Benzo(g,h,i)perylene	--	µg/L	ND	ND	0.10	0.13	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	ND	ND	0.10	0.18	ND	0.28	0.22	0.16
Chrysene	0.002	µg/L	0.39 J	ND	0.28	0.32	ND	0.22	0.19	0.12
Dibenz(a,h)anthracene	--	µg/L	ND							
Fluoranthene	50	µg/L	1.5 J	0.7	2.5	1.2	0.61	1.6	0.94	0.79
Fluorene	50	µg/L	4.40	7	15.6	4.5	4.6	10.1	5.1	6.1
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND	ND	0.10	0.14	ND	ND	ND	ND
2-Methylnaphthalene	--	µg/L	3.7	3	15.0	2.5	1.4	10.2	5.0	4.3
Naphthalene	10	µg/L	33	51	333	37.9	35.8	109	65.5	47.4
Phenanthrene	50	µg/L	2.7	2	9.2	1.7	1.3	4.0	1.8	2.0
Pyrene	50	µg/L	1.1 J	0.5	1.8	0.97	0.45	1.2	0.73	0.61
Inorganics										
Cyanide, Total	200	µg/L	59	320	54	58	26	17	22	120

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
MW-9

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/24/14	10/19/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	280	340	283	228	165	259	155	378
Ethylbenzene	5	µg/L	120	140	112	107	65.3	111	79.2	146
Toluene	5	µg/L	170	85	50.8	16.3	9.6	21.3	24.1	108
Total Xylenes	5	µg/L	250	180	91.7	52.1	53.0	49.5	81.6	142
SVOCs										
Acenaphthene	20	µg/L	76	48	30.2	55.5	59.9	52.8	58.3	63.8
Acenaphthylene	--	µg/L	29	17	8.6	11.0	21.6	21.9	14.9	14.0
Anthracene	50	µg/L	11	8	2.6	11.4	7.3	19.7	5.6	9.3
Benzo(a)anthracene	0.002	µg/L	ND	2	0.21	5.80	2.5	18.5	2.8	4.8
Benzo(a)pyrene	ND	µg/L	ND	1	ND	4.4	1.6	12.7	1.7	2.8
Benzo(b)fluoranthene	0.002	µg/L	ND	1	ND	4.8	2.1	18.0	2.4	4.2
Benzo(g,h,i)perylene	--	µg/L	ND	0.4 J	ND	1.5	0.46	4.5	0.56	ND
Benzo(k)fluoranthene	0.002	µg/L	ND	0.5 J	ND	1.8	2.0	15.4	2.2	3.7
Chrysene	0.002	µg/L	ND	1	0.13	4.30	1.8	11.2	2.0	3.3
Dibenz(a,h)anthracene	--	µg/L	ND	0.2 J	ND	0.46	0.21	1.6	0.22	ND
Fluoranthene	50	µg/L	6.0	8	2.2	19.2	8.7	37.4	9.0	16.5
Fluorene	50	µg/L	56	38	19.0	36.1	34.1	45.4	28.1	38.9
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND	1	ND	1.5	0.49	4.3	0.58	ND
2-Methylnaphthalene	--	µg/L	14	1	ND	ND	ND	ND	ND	ND
Naphthalene	10	µg/L	450	72	18.1	9.1	51.2	10.3	20.0	28.1
Phenanthrene	50	µg/L	51	36	9.7	25.2	9.2	43.5	2.5	4.0
Pyrene	50	µg/L	3.5	5	1.2	12.7	6.1	28.1	6.2	11.8
Inorganics										
Cyanide, Total	200	µg/L	410	1,300	1,000	1,500	320	1,100	560	950

Notes:

Results are presented in units of micrograms per liter (µg/L).

E = Results exceeded calibration range

D = Compound quantitated using a secondary dilution

J = Analyte was detected at a concentration less than the laboratory reporting limit

ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.

Bolded = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
MW-10R

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/23/14	10/19/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	1,700 J	1,400	1,360	1,540	1,040	1,790	220	1,760
Ethylbenzene	5	µg/L	25 J	100	122	124	94.3	138	101	139
Toluene	5	µg/L	3.1	94	230	201	171	197	174	222
Total Xylenes	5	µg/L	15	65	161	150	125	161	127	175
SVOCs										
Acenaphthene	20	µg/L	9.6	24	16.8	25.3	22.0	29.8	29.2	37.5
Acenaphthylene	--	µg/L	6.0	23	22.7	27.5	31.9	34.1	37.5	46.6
Anthracene	50	µg/L	ND	0.5	0.80	0.89	0.89	ND	0.78	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50	µg/L	ND	ND	0.11	0.11	ND	ND	0.096	ND
Fluorene	50	µg/L	3.9	11	8.1	11.4	9.7	13.2	10.5	16.2
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	--	µg/L	ND	1	3.6	4.8	6.4	7.4	11.0	6.4
Naphthalene	10	µg/L	20 J	140	296	486	405	653	449	431
Phenanthrene	50	µg/L	1.3 J	2	1.6	2.4	1.8	2.3	1.7	2.5
Pyrene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Inorganics										
Cyanide, Total	200	µg/L	420	190	63	62	74	61	150	110

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
MW-11

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/25/14	10/18/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs										
Acenaphthene	20	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	0.11	ND	ND	ND	0.11	ND
Benzo(a)pyrene	ND	µg/L	ND	ND	0.14	ND	ND	ND	0.11	ND
Benzo(b)fluoranthene	0.002	µg/L	ND	ND	0.13	ND	0.12	ND	0.16	ND
Benzo(g,h,i)perylene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	ND	ND	ND	ND	0.12	ND	0.15	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	--	µg/L	ND	ND	0.19	ND	ND	ND	ND	ND
Naphthalene	10	µg/L	ND	ND	0.87	0.36	0.18	ND	0.32	0.13
Phenanthrene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50	µg/L	ND	ND	ND	ND	ND	ND	0.099	ND
Inorganics										
Cyanide, Total	200	µg/L	250	310	160	270	150	200	310	170

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
 MW-12R

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/24/14	10/18/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	2,600	2,900	1,420	2,440	2,470	2,520	2,320	1,920
Ethylbenzene	5	µg/L	130	110	67.6	86.7	87.3	104	103	98.2
Toluene	5	µg/L	7.4	15	5.8	13.8	16.1	13.2	15.7	11.4
Total Xylenes	5	µg/L	49	83	27.8	58.1	70.0	72.4	75.6	66.8
SVOCs										
Acenaphthene	20	µg/L	3.4	4	104	1.2	1.4	1.8	1.5	1.5
Acenaphthylene	--	µg/L	4.8	7	1.9	1.5	2.9	3.0	3.2	3.0
Anthracene	50	µg/L	ND	ND	ND	0.098	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND							
Benzo(a)pyrene	ND	µg/L	ND							
Benzo(b)fluoranthene	0.002	µg/L	ND							
Benzo(g,h,i)perylene	--	µg/L	ND							
Benzo(k)fluoranthene	0.002	µg/L	ND							
Chrysene	0.002	µg/L	ND							
Dibenz(a,h)anthracene	--	µg/L	ND							
Fluoranthene	50	µg/L	ND							
Fluorene	50	µg/L	ND	0.3 J	0.24	0.20	0.20	ND	0.20	0.21
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND							
2-Methylnaphthalene	--	µg/L	ND							
Naphthalene	10	µg/L	31	92	6.1	19.7	52.7	39.5	66.2	34.6
Phenanthrene	50	µg/L	ND							
Pyrene	50	µg/L	ND							
Inorganics										
Cyanide, Total	200	µg/L	190	37	62	33	29	40	25	34

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
MW-14R

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/25/14	10/18/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	3.0	48	1.0	ND	1.6	1.8	2.8	1.4
Ethylbenzene	5	µg/L	ND							
Toluene	5	µg/L	ND							
Total Xylenes	5	µg/L	ND							
SVOCs										
Acenaphthene	20	µg/L	ND	ND	0.12	ND	ND	ND	ND	ND
Acenaphthylene	--	µg/L	ND							
Anthracene	50	µg/L	ND							
Benzo(a)anthracene	0.002	µg/L	ND							
Benzo(a)pyrene	ND	µg/L	ND							
Benzo(b)fluoranthene	0.002	µg/L	ND							
Benzo(g,h,i)perylene	--	µg/L	ND							
Benzo(k)fluoranthene	0.002	µg/L	ND							
Chrysene	0.002	µg/L	ND							
Dibenz(a,h)anthracene	--	µg/L	ND							
Fluoranthene	50	µg/L	ND							
Fluorene	50	µg/L	ND							
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND							
2-Methylnaphthalene	--	µg/L	ND	ND	0.14	ND	ND	0.12	ND	ND
Naphthalene	10	µg/L	ND	ND	0.96	ND	ND	0.99	0.18	ND
Phenanthrene	50	µg/L	ND							
Pyrene	50	µg/L	ND							
Inorganics										
Cyanide, Total	200	µg/L	ND							

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
 MW-15

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/24/14	10/19/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	ND	ND	ND	ND	ND	ND	ND	NA
Ethylbenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND	NA
Toluene	5	µg/L	ND	ND	ND	ND	ND	ND	ND	NA
Total Xylenes	5	µg/L	ND	ND	ND	ND	ND	ND	ND	NA
SVOCs										
Acenaphthene	20	µg/L	ND	ND	0.15	ND	ND	ND	ND	NA
Acenaphthylene	--	µg/L	ND	ND	0.18	ND	ND	ND	ND	NA
Anthracene	50	µg/L	ND	ND	0.12	ND	ND	ND	ND	NA
Benzo(a)anthracene	0.002	µg/L	ND	ND	0.28	ND	ND	ND	ND	NA
Benzo(a)pyrene	ND	µg/L	ND	0.2 J	0.27	ND	ND	ND	ND	NA
Benzo(b)fluoranthene	0.002	µg/L	ND	0.2 J	0.29	ND	ND	ND	ND	NA
Benzo(g,h,i)perylene	--	µg/L	ND	0.2 J	0.13	ND	ND	ND	ND	NA
Benzo(k)fluoranthene	0.002	µg/L	ND	ND	0.11	ND	ND	ND	ND	NA
Chrysene	0.002	µg/L	ND	ND	0.19	ND	ND	ND	ND	NA
Dibenz(a,h)anthracene	--	µg/L	ND	0.2 J	ND	ND	ND	ND	ND	NA
Fluoranthene	50	µg/L	ND	ND	0.45	ND	ND	0.11	ND	NA
Fluorene	50	µg/L	ND	0.3 J	0.13	ND	ND	ND	ND	NA
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND	ND	0.12	ND	ND	ND	ND	NA
2-Methylnaphthalene	--	µg/L	ND	ND	0.2	ND	ND	ND	ND	NA
Naphthalene	10	µg/L	ND	ND	1.0	0.27	ND	ND	ND	NA
Phenanthrene	50	µg/L	ND	0.1 J	0.28	ND	ND	ND	ND	NA
Pyrene	50	µg/L	0.35 J	0.3 J	0.4	ND	ND	ND	ND	NA
Inorganics										
Cyanide, Total	200	µg/L	ND	ND	15	ND	ND	ND	ND	NA

Notes:

Results are presented in units of micrograms per liter (µg/L).

NA = Not Available

E = Results exceeded calibration range

D = Compound quantitated using a secondary dilution

J = Analyte was detected at a concentration less than the laboratory reporting limit

ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.

Bolded = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
MW-15RS

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/22/14	10/19/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	750	170	4.8	9.7	49.6	79.0	57.9	26.1
Ethylbenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	µg/L	0.54 J	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs										
Acenaphthene	20	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	ND	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	--	µg/L	ND	ND	0.14	ND	ND	ND	ND	ND
Naphthalene	10	µg/L	ND	ND	0.85	0.52	0.14	ND	0.18	0.18
Phenanthrene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Inorganics										
Cyanide, Total	200	µg/L	160	64	67	41	51	54	68	67

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
 MW-17R

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/25/14	10/18/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	ND	ND	ND	ND	1.7	2.9	2.6	ND
Ethylbenzene	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
SVOCs										
Acenaphthene	20	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	--	µg/L	ND	ND	ND	ND	ND	0.30	ND	ND
Anthracene	50	µg/L	ND	ND	ND	ND	ND	0.13	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	0.18	ND	ND
Benzo(a)pyrene	ND	µg/L	ND	ND	ND	ND	ND	0.11	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	0.17	ND	ND
Benzo(g,h,i)perylene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	ND	ND	ND	ND	ND	0.14	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	0.11	ND	ND
Dibenz(a,h)anthracene	--	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50	µg/L	ND	ND	ND	ND	ND	0.28	ND	ND
Fluorene	50	µg/L	ND	ND	ND	ND	ND	0.21	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	--	µg/L	ND	ND	ND	ND	ND	0.35	ND	ND
Naphthalene	10	µg/L	ND	ND	0.13	0.37	0.21	1.9	0.17	0.13
Phenanthrene	50	µg/L	ND	ND	ND	ND	ND	0.44	ND	ND
Pyrene	50	µg/L	ND	ND	ND	ND	ND	0.23	ND	ND
Inorganics										
Cyanide, Total	200	µg/L	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
 MW-19R

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/25/14	10/18/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	ND							
Ethylbenzene	5	µg/L	ND							
Toluene	5	µg/L	ND							
Total Xylenes	5	µg/L	ND							
SVOCs										
Acenaphthene	20	µg/L	ND							
Acenaphthylene	--	µg/L	ND							
Anthracene	50	µg/L	ND							
Benzo(a)anthracene	0.002	µg/L	ND							
Benzo(a)pyrene	ND	µg/L	ND							
Benzo(b)fluoranthene	0.002	µg/L	ND							
Benzo(g,h,i)perylene	--	µg/L	ND							
Benzo(k)fluoranthene	0.002	µg/L	ND							
Chrysene	0.002	µg/L	ND							
Dibenz(a,h)anthracene	--	µg/L	ND							
Fluoranthene	50	µg/L	ND							
Fluorene	50	µg/L	ND							
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND							
2-Methylnaphthalene	--	µg/L	ND							
Naphthalene	10	µg/L	ND	ND	0.30	0.12	ND	ND	0.14	ND
Phenanthrene	50	µg/L	ND							
Pyrene	50	µg/L	ND							
Inorganics										
Cyanide, Total	200	µg/L	ND							

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Table 2
Groundwater Analytical Data
 MW-20R

	NYSDEC TOGS 1.1.1 Guidance Values	Units	09/25/14	10/18/17	07/14/20	10/01/20	04/15/21	10/20/21	04/14/22	10/20/22
BTEX										
Benzene	1	µg/L	ND							
Ethylbenzene	5	µg/L	ND							
Toluene	5	µg/L	ND							
Total Xylenes	5	µg/L	ND							
SVOCs										
Acenaphthene	20	µg/L	ND							
Acenaphthylene	--	µg/L	ND							
Anthracene	50	µg/L	ND							
Benzo(a)anthracene	0.002	µg/L	ND							
Benzo(a)pyrene	ND	µg/L	ND							
Benzo(b)fluoranthene	0.002	µg/L	ND							
Benzo(g,h,i)perylene	--	µg/L	ND							
Benzo(k)fluoranthene	0.002	µg/L	ND							
Chrysene	0.002	µg/L	ND							
Dibenz(a,h)anthracene	--	µg/L	ND							
Fluoranthene	50	µg/L	ND							
Fluorene	50	µg/L	ND							
Indeno(1,2,3-cd)pyrene	0.002	µg/L	ND							
2-Methylnaphthalene	--	µg/L	ND	ND	0.14	ND	ND	ND	ND	ND
Naphthalene	10	µg/L	ND	ND	0.89	0.21	ND	0.21	ND	ND
Phenanthrene	50	µg/L	ND							
Pyrene	50	µg/L	ND							
Inorganics										
Cyanide, Total	200	µg/L	ND							

Notes:

Results are presented in units of micrograms per liter (µg/L).

- E = Results exceeded calibration range
- D = Compound quantitated using a secondary dilution
- J = Analyte was detected at a concentration less than the laboratory reporting limit
- ND (<#) = Not detected above laboratory reporting limit. # represents the laboratory reporting limit.
- Bolded** = values indicate exceedance of the NYSDEC AWQS



Appendix A – Field Inspection Reports

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 10/20/2022
Technician: KL

NYSDEC Site No. V00479

Time: 8:30
Weather: Rain 40

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS:

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS:	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 7/20/2022
Technician: KL

NYSDEC Site No. V00479

Time: 10:30
Weather: Sunny 85

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS:

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS:	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:

Partial demolition of cheese factory building on the SW corner due to a fire near the area of MW-12R.
No well damage.

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 4/14/2022
Technician: KL

NYSDEC Site No. V00479

Time: 8:30
Weather: Cloudy 46

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS:

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS:	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:

**Site Management Plan Inspection Form
Ogdensburg (King Street)
Non-Owned Former MGP Site
Ogdensburg, New York**

Date: 1/20/2022
Technician: KL

NYSDEC Site No. V00479

Time: 10:30
Weather: Sunny 2

Site Wide			
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:
Are the requirements of the Site Management Plan being met?	YES	NO	COMMENTS:
Any signs/evidence of use of the Site in a manner inconsistent with the deed restriction?	YES	NO	COMMENTS:

Site Wide - SLG Responsible to Maintain			
Perimeter Fence and Gates intact?	YES	NO	COMMENTS:
Have the lawns been mowed?	YES	NO	COMMENTS: winter

Soil Cover System			
Any signs of ground-intrusive activities?	YES	NO	COMMENTS:
Any soil disturbance regardless of quantity/extent?	YES	NO	COMMENTS:
Any surface erosion?	YES	NO	COMMENTS:
Any settlement?	YES	NO	COMMENTS:
Bare or sparsely-vegetated areas?	YES	NO	COMMENTS:
Any other conditions affecting the thickness or the integrity of the soil cover system?	YES	NO	COMMENTS:

NG Owned Property on Lake Street - Not part of the SMP				
Any repairs, maintenance or corrective actions since the last inspection?	YES	NO	COMMENTS:	
Have the lawns been mowed?	YES	NO	COMMENTS:	
Condition of the sidewalks?	GOOD	FAIR	POOR	COMMENTS:
Condition of the site trees?	GOOD	FAIR	POOR	COMMENTS:
Are the boulders in place?	YES	NO	COMMENTS:	

Miscellaneous				
Evidence of Trespassing	YES	NO	COMMENTS:	
Litter	NONE	MINOR	SIGNIFICANT	COMMENTS:

Site Monitoring Wells		
Well ID.	Location Secure	
MW-2(R)	YES	NO
MW-5R(R)	YES	NO
MW-8R	YES	NO
MW-9	YES	NO
MW-10R	YES	NO
MW-11	YES	NO
MW-12R	YES	NO
MW-14R	YES	NO
MW-15	YES	NO
MW-15RS	YES	NO
MW-17R	YES	NO
MW-19R	YES	NO
MW-20R	YES	NO

General Comments:



Appendix B – Well Sampling Field Data

Well ID	Sample?	Well Size	DTW	DTP	DTB	Comments
MW-2(R)	Yes	2"	1.26		6.35	
MW-5R(R)	Yes	2"	0.00		24.30	
MW-8R	Yes	2"	1.62		20.92	MS/MSD
MW-9	Yes	2"	4.84		6.35	
MW-10R	Yes	2"	0.00		22.50	Field Duplicate
MW-11	Yes	2"	2.14		6.51	
MW-12R	Yes	2"	5.48		21.40	
MW-14R	Yes	2"	0.00		50.80	
MW-15	Yes	2"	6.96		9.04	
MW-15RS	Yes	1"	7.80		23.65	
MW-17R	Yes	2"	5.95		26.90	
MW-19R	Yes	2"	2.50		38.05	
MW-20R	Yes	2"	0.00		28.40	

DTW -depth to water

DTP -depth to product

DTB -depth to bottom

MW-10R's DTW was updated to 0.00 upon review. Initial DTW was measured above the top of casing as the water level rose above it following the removal of the j-plug due to positive pressure.

Sampling Personnel: C. ERNST
 Job Number: 0603275-136690-221
 Well Id. MW-2(R)

Date: 4/14/22
 Weather: clear 50°s
 Time In: 1140 Time Out: 1220

Well Information			TOC	Other
Depth to Water:	(feet)	<u>1.26</u>		
Depth to Bottom:	(feet)	<u>6.35</u>		
Depth to Product:	(feet)	<u>5.09</u>	<u>AP</u>	
Length of Water Column:	(feet)	<u>5.09</u>		
Volume of Water in Well:	(gal)	<u>0.81</u>		
Three Well Volumes:	(gal)	<u>2.44</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				Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	gal/ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input checked="" type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	of				
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	water	0.04	0.16	0.66	1.47
Average Pumping Rate:	(ml/min)	<u>200</u>		1 gallon=3.785L=3785mL=1337cu. feet				
Duration of Pumping:	(min)	<u>30</u>						
Total Volume Removed:	(gal)		Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
Horiba U-52 Water Quality Meter Used?		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1145</u>	<u>1.76</u>	<u>12.36</u>	<u>8.23</u>	<u>-232</u>	<u>0.782</u>	<u>73.5</u>	<u>0.38</u>	<u>0.499</u>
<u>1150</u>	<u>2.77</u>	<u>10.50</u>	<u>7.84</u>	<u>-224</u>	<u>0.657</u>	<u>51.5</u>	<u>0.41</u>	<u>0.416</u>
<u>1155</u>	<u>3.65</u>	<u>10.31</u>	<u>7.99</u>	<u>-217</u>	<u>0.574</u>	<u>27.2</u>	<u>2.51</u>	<u>0.366</u>
<u>1200</u>	<u>3.66</u>	<u>10.42</u>	<u>8.19</u>	<u>-227</u>	<u>0.564</u>	<u>17.8</u>	<u>1.96</u>	<u>0.361</u>
<u>1205</u>	<u>4.09</u>	<u>10.37</u>	<u>8.45</u>	<u>-244</u>	<u>0.579</u>	<u>20.1</u>	<u>0.12</u>	<u>0.370</u>
<u>1210</u>	<u>4.55</u>	<u>10.33</u>	<u>8.81</u>	<u>-265</u>	<u>0.542</u>	<u>14.7</u>	<u>0.00</u>	<u>0.346</u>
<u>1215</u>	<u>5.07</u>	<u>10.40</u>	<u>9.03</u>	<u>-273</u>	<u>0.497</u>	<u>7.5</u>	<u>0.06</u>	<u>0.338</u>

Sampling Information:

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

Sample ID: MW-2(R)-0422 Duplicate? Yes No
 Sample Time: 1215 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes: _____

Sampling Personnel: G. ERNST
 Job Number: 0603275-136690-221
 Well Id. MW-5R(R)

Date: 4/14/22
 Weather: clearing 50°s
 Time In: 1045 Time Out: 1140

Well Information			TOC	Other
Depth to Water:	(feet)	<u>0.00</u>	<u>Artisian</u>	
Depth to Bottom:	(feet)	<u>24.30</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>24.30</u>		
Volume of Water in Well:	(gal)	<u>3.89</u>		
Three Well Volumes:	(gal)	<u>11.66</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: _____
 Tubing/Bailer Material: _____
 Sampling Method: _____

Bailer Peristaltic
 Teflon Stainless St.
 Bailer Peristaltic

Grundfos Pump
 Polyethylene
 Grundfos Pump

Average Pumping Rate: (ml/min) 200
 Duration of Pumping: (min) 30
 Total Volume Removed: (gal) _____ 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)
1100	0.52	9.35	7.64	-281	0.724	2.1	0.00	0.460
1105	2.70	9.66	8.00	-311	0.702	2.1	0.00	0.449
1110	3.38	9.83	7.99	-316	0.701	2.0	0.00	0.449
1115	3.95	10.02	7.95	-320	0.702	1.0	0.00	0.449
1120	4.68	10.35	7.94	-323	0.705	0.7	0.00	0.451
1125	5.28	10.52	7.92	-326	0.705	0.9	0.00	0.451
1130	5.75	10.80	7.90	-328	0.702	0.6	0.00	0.449

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 No
 3 - 40 ml vials Yes No
 1 - 250 ml plastic Yes No

Sample ID: MW-5R(R)-0422 Duplicate? Yes No
 Sample Time: 1130 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes: _____

Sampling Personnel: Peter Lyon
 Job Number: 0603275-136690-221
 Well Id. MW-8R

Date: 4/14/22
 Weather: Sunny 55°
 Time In: 1050 Time Out: 1135

Well Information			TOC	Other
Depth to Water:	(feet)	<u>1.62</u>		
Depth to Bottom:	(feet)	<u>20.92</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>19.3</u>		
Volume of Water in Well:	(gal)	<u>3.08</u>		
Three Well Volumes:	(gal)	<u>9.26</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				Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	gal/ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	of				
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	water	0.04	0.16	0.66	1.47
Average Pumping Rate:	(ml/min)	<u>200</u>		1 gallon=3.785L=3785mL=1337cu. feet				
Duration of Pumping:	(min)	<u>30</u>						
Total Volume Removed:	(gal)	<u>2</u>	Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1100	2.34	9.47	7.63	-202	1.35	1.36	4.43	0.002
1105	2.74	9.76	7.57	-227	1.679	2.2	0.98	.431
1110	3.15	9.87	7.60	-247	1.659	0.6	0.67	.422
1115	3.53	9.96	7.56	-269	1.653	0.3	0.92	.418
1120	3.72	10.06	7.53	-284	1.650	0.1	1.04	.416
1125	3.88	10.16	7.49	-296	1.648	0.0	1.16	.415
1130	3.97	10.33	7.47	-302	1.645	0.0	1.27	.413

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 No
 9 - 40 ml vials Yes No
 3 - 250 ml plastic Yes No

MW-8R-MS-0422 MW-8R-MSD-0422

Sample ID: MW-8R-0422 Duplicate? Yes No
 Sample Time: 1130 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes: _____

Sampling Personnel: Peter Lyon
 Job Number: 0603275-136690-221
 Well Id. MW-9

Date: 4/14/22
 Weather: 53° Cloudy
 Time In: 1008 Time Out: 1045

Well Information			TOC	Other
Depth to Water:	(feet)	<u>4.84</u>		
Depth to Bottom:	(feet)	<u>6.35</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>1.51</u>		
Volume of Water in Well:	(gal)	<u>.24</u>		
Three Well Volumes:	(gal)	<u>0.72</u>		

Well Type: Flushmount Yes No
 Well Locked: Yes No
 Measuring Point Marked: Yes No
 Well Material: PVC SS Other: _____
 Well Diameter: 1" 2" Other: _____
 Comments: _____

Purging Information				Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	gal/ft. of water	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input checked="" type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	0.04	0.16	0.66	1.47	
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	1 gallon=3.785L=3785mL=1337cu. feet				
Average Pumping Rate:	(ml/min)	<u>200</u>	Did well go dry?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>			
Duration of Pumping:	(min)	<u>30</u>	Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>			
Total Volume Removed:	(gal)	<u>2</u>						

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1010	4.92	8.68	8.76	-179	.712	36.0	2.57	.450
1015	4.98	8.67	8.83	-181	.711	36.5	2.57	.452
1020	5.14	8.23	8.16	-184	1.01	35.4	1.57	.727
1025	5.35	8.54	7.99	-131	1.26	25.3	1.03	.705
1030	5.50	8.40	7.83	-131	1.36	17.9	3.23	.875
1035	5.65	8.92	7.69	-140	1.38	21.5	0.94	.884
1040	5.86	8.27	7.67	-152	1.43	23.1	0.93	.915

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's Yes No
 EPA SW-846 Method 8260 VOC's BTEX Yes No
 EPA SW-846 Method 9012 Total Cyanide Yes No

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

Sample ID: MW-9-0422 Duplicate? Yes No
 Sample Time: 1040 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes: _____

Sampling Personnel: Peter Lyon
 Job Number: 0603275-136690-221
 Well Id. MW-10R

Date: 4/14/22
 Weather: 55° Rain
 Time In: 0926 Time Out: 1005

Well Information			TOC	Other
Depth to Water:	(feet)	<u>0.00</u>		
Depth to Bottom:	(feet)	<u>22.50</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>22.65</u>		
Volume of Water in Well:	(gal)	<u>3.624</u>		
Three Well Volumes:	(gal)	<u>10.87</u>		

Well Type: Flushmount Yes No
 Well Locked: Yes No
 Measuring Point Marked: Yes No
 Well Material: PVC SS Other: _____
 Well Diameter: 1" 2" Other: _____
 Comments: _____

Purging Information			Conversion Factors													
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>													
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>													
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>													
Average Pumping Rate:	(ml/min)	<u>250</u>														
Duration of Pumping:	(min)	<u>30</u>														
Total Volume Removed:	(gal)	<u>2</u>	Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>													
Horiba U-52 Water Quality Meter Used? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			<table border="1"> <thead> <tr> <th>gal/ft. of water</th> <th>1" ID</th> <th>2" ID</th> <th>4" ID</th> <th>6" ID</th> </tr> </thead> <tbody> <tr> <td></td> <td>0.04</td> <td>0.16</td> <td>0.66</td> <td>1.47</td> </tr> </tbody> </table> 1 gallon=3.785L=3785mL=1337cu. feet				gal/ft. of water	1" ID	2" ID	4" ID	6" ID		0.04	0.16	0.66	1.47
gal/ft. of water	1" ID	2" ID	4" ID	6" ID												
	0.04	0.16	0.66	1.47												

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
0930	-0.15	9.98	8.45	-192	.356	0.8	22.02	.231
0935	-0.09	9.22	8.81	-223	.362	0.7	9.11	.235
0940	0.0	9.04	8.97	-232	.364	0.4	7.38	.237
0945	0.39	8.81	9.05	-234	.368	0.4	6.21	.239
0950	0.57	8.76	9.07	-236	.371	0.3	5.72	.241
0955	0.69	8.81	9.11	-238	.370	0.0	5.26	.240
1000	0.90	8.73	9.17	-241	.372	0.5	4.94	.242

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 No
 6 - 40 ml vials Yes No
 2 - 250 ml plastic Yes No

FD-0422
 Sample ID: MW-10R-0422 Duplicate? Yes No
 Sample Time: 1000 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes: _____

Sampling Personnel: G. Ernst
 Job Number: 0603275-136690-221
 Well Id. MW-11

Date: 4/14/22
 Weather: Cloudy LT Rain 50°s
 Time In: 0955 Time Out: 1045

Well Information			TOC	Other
Depth to Water:	(feet)	<u>2.16</u>		
Depth to Bottom:	(feet)	<u>6.51</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>4.35</u>		
Volume of Water in Well:	(gal)	<u>0.70</u>		
Three Well Volumes:	(gal)	<u>2.09</u>		

Well Type:	Flushmount	<input checked="" type="checkbox"/>	Stick-Up	<input type="checkbox"/>
Well Locked:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Measuring Point Marked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Well Material:	PVC	<input checked="" type="checkbox"/>	SS	<input type="checkbox"/>
Well Diameter:	1"	<input type="checkbox"/>	2"	<input checked="" type="checkbox"/>
Comments:				

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

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>1005</u>	<u>2.28</u>	<u>10.99</u>	<u>8.22</u>	<u>-221</u>	<u>1.17</u>	<u>0.0</u>	<u>1.63</u>	<u>0.754</u>
<u>1010</u>	<u>2.28</u>	<u>8.35</u>	<u>7.55</u>	<u>-220</u>	<u>1.25</u>	<u>0.0</u>	<u>0.00</u>	<u>0.798</u>
<u>1015</u>	<u>2.29</u>	<u>8.22</u>	<u>7.32</u>	<u>-222</u>	<u>1.25</u>	<u>668</u>	<u>0.00</u>	<u>0.804</u>
<u>1020</u>	<u>2.30</u>	<u>7.33</u>	<u>7.22</u>	<u>-222</u>	<u>1.32</u>	<u>42.0</u>	<u>0.00</u>	<u>0.847</u>
<u>1025</u>	<u>2.30</u>	<u>7.25</u>	<u>7.11</u>	<u>-223</u>	<u>1.34</u>	<u>38.1</u>	<u>0.00</u>	<u>0.859</u>
<u>1030</u>	<u>2.30</u>	<u>7.15</u>	<u>7.03</u>	<u>-224</u>	<u>1.36</u>	<u>37.7</u>	<u>0.00</u>	<u>0.871</u>
<u>1035</u>	<u>2.30</u>	<u>7.10</u>	<u>6.97</u>	<u>-224</u>	<u>1.37</u>	<u>38.5</u>	<u>0.00</u>	<u>0.877</u>

Sampling Information:		
EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample ID: <u>MW-11-0422</u>	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup <input checked="" type="checkbox"/>
Sample Time: <u>1040</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ship to Pace <input type="checkbox"/>
Laboratory: Pace Analytical Greensburg, PA		

Sampling Personnel: G. Ernst
 Job Number: 0603275-136690-221
 Well Id. MW-12R

Date: 4/14/22
 Weather: cloudy 40's
 Time In: 0900 Time Out: 0955

Well Information			TOC	Other
Depth to Water:	(feet)	<u>5.48</u>		
Depth to Bottom:	(feet)	<u>21.40</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>15.92</u>		
Volume of Water in Well:	(gal)	<u>2.55</u>		
Three Well Volumes:	(gal)	<u>7.64</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			Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	gal/ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	of				
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	water	0.04	0.16	0.66	1.47
Average Pumping Rate:	(ml/min)	<u>200</u>	1 gallon=3.785L=3785mL=1337cu. feet				
Duration of Pumping:	(min)	<u>30</u>					
Total Volume Removed:	(gal)		Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
0915	6.68	23.94	7.45	-262	0.548	1.7	0.00	0.348
0920	7.43	22.99	7.46	-298	0.529	1.1	0.00	0.339
0925	9.36	20.54	7.45	-321	0.550	0.8	0.00	0.359
0930	10.42	18.64	7.41	-325	0.576	0.8	0.00	0.369
0935	11.23	17.09	7.36	-328	0.599	0.8	0.00	0.384
0940	11.98	15.77	7.31	-331	0.620	1.0	0.00	0.397
0945	12.56	14.86	7.27	-332	0.634	1.0	0.00	0.406
0950	12.94	14.27	7.26	-333	0.643	1.1	0.00	0.412

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 No
 3 - 40 ml vials Yes No
 1 - 250 ml plastic Yes No

Sample ID: MW-12R-0422 Duplicate? Yes No
 Sample Time: 0950 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes: _____

Sampling Personnel: KL
 Job Number: 0603275-136690-221
 Well Id. MW-14R

Date: 4/14/22
 Weather: Cloudy
 Time In: 09:40 Time Out: 09:50

Well Information			TOC	Other
Depth to Water:	(feet)	<u>50.80</u>		
Depth to Bottom:	(feet)	<u>50.80</u>		
Depth to Product:	(feet)	<u>—</u>		
Length of Water Column:	(feet)	<u>50.80</u>		
Volume of Water in Well:	(gal)	<u>8.12</u>		
Three Well Volumes:	(gal)	<u>24.36</u>		

Well Type:	Flushmount	<input checked="" type="checkbox"/>	Stick-Up	<input type="checkbox"/>
Well Locked:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Measuring Point Marked:	Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
Well Material:	PVC	<input checked="" type="checkbox"/>	SS	<input type="checkbox"/>
Well Diameter:	1"	<input type="checkbox"/>	2"	<input checked="" type="checkbox"/>
Comments:				

Purging Method:		Bailer	<input type="checkbox"/>	Peristaltic	<input checked="" type="checkbox"/>	Grundfos Pump	<input type="checkbox"/>
Tubing/Bailer Material:		Teflon	<input type="checkbox"/>	Stainless St.	<input type="checkbox"/>	Polyethylene	<input checked="" type="checkbox"/>
Sampling Method:		Bailer	<input type="checkbox"/>	Peristaltic	<input checked="" type="checkbox"/>	Grundfos Pump	<input type="checkbox"/>
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	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
Horiba U-52 Water Quality Meter Used?	Yes		<input checked="" type="checkbox"/>	No	<input type="checkbox"/>		

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)
09:15	+6.0	14.15	7.19	-131	0.864	4.9	3.73	0.528
09:20	+6.0	14.14	7.52	-196	0.633	13.3	0.05	0.404
09:25	✓	12.77	7.42	-231	0.621	6.6	0.00	0.389
09:30	✓	11.98	7.35	-255	0.630	4.4	0.00	0.403
09:35	✓	11.68	7.33	-264	0.631	3.0	0.00	0.404
09:40	✓	11.44	7.32	-272	0.635	2.5	0.00	0.407
09:45	✓	11.33	7.28	-278	0.637	2.7	0.00	0.407

Sampling Information: WATER ABOVE WELL CASING 6"

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>

Sample ID: MW-14R-0422 Duplicate? Yes No
 Sample Time: 09:45 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes:

Sampling Personnel: K
 Job Number: 0603275-136690-221
 Well Id. MW-15

Date: 4/14/22
 Weather: S.MY 48
 Time In: 11:25 Time Out: _____

Well Information			TOC	Other
Depth to Water:	(feet)	<u>6.96</u>		
Depth to Bottom:	(feet)	<u>9.04</u>		
Depth to Product:	(feet)	<u>2</u>		
Length of Water Column:	(feet)	<u>2.08</u>		
Volume of Water in Well:	(gal)	<u>1.92</u>		
Three Well Volumes:	(gal)	<u>5.76</u>		

Well Type:	Flushmount	<input checked="" type="checkbox"/>	Stick-Up	<input type="checkbox"/>
Well Locked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Measuring Point Marked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Well Material:	PVC	<input checked="" type="checkbox"/>	SS	<input type="checkbox"/>
Well Diameter:	1"	<input type="checkbox"/>	2"	<input checked="" type="checkbox"/>
Comments:	_____			

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

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>11:30</u>	<u>7.00</u>	<u>10.24</u>	<u>7.23</u>	<u>-86</u>	<u>1.05</u>	<u>494</u>	<u>3.27</u>	<u>0.673</u>
<u>11:35</u>	<u>7.63</u>	<u>9.17</u>	<u>6.78</u>	<u>-99</u>	<u>1.12</u>	<u>57.9</u>	<u>0.00</u>	<u>0.719</u>
<u>11:40</u>	<u>7.76</u>	<u>9.25</u>	<u>6.70</u>	<u>-104</u>	<u>1.12</u>	<u>26.0</u>	<u>0.00</u>	<u>0.720</u>
<u>11:45</u>	<u>7.98</u>	<u>9.35</u>	<u>6.63</u>	<u>-108</u>	<u>1.12</u>	<u>13.2</u>	<u>0.00</u>	<u>0.720</u>
<u>11:50</u>	<u>8.25</u>	<u>9.41</u>	<u>6.59</u>	<u>-112</u>	<u>1.12</u>	<u>6.0</u>	<u>0.00</u>	<u>0.720</u>
<u>11:55</u>	<u>8.40</u>	<u>9.44</u>	<u>6.58</u>	<u>-113</u>	<u>1.12</u>	<u>3.4</u>	<u>0.00</u>	<u>0.719</u>
<u>12:00</u>	<u>8.57</u>	<u>9.48</u>	<u>6.57</u>	<u>-114</u>	<u>1.12</u>	<u>5.3</u>	<u>0.00</u>	<u>0.720</u>

Sampling Information:				
EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Sample ID: <u>MW-15-0422</u>	Duplicate?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup <input checked="" type="checkbox"/>
Sample Time: <u>12:00</u>	MS/MSD?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Ship to Pace <input type="checkbox"/>
Comments/Notes:	Laboratory: Pace Analytical Greensburg, PA			

Sampling Personnel: [Signature]
 Job Number: 0603275-136690-221
 Well Id. **MW-15RS**

Date: 4/14/22
 Weather: Sunny
 Time In: 1206 Time Out: _____

Well Information			TOC	Other
Depth to Water:	(feet)	<u>7.00</u>		
Depth to Bottom:	(feet)	23.65		
Depth to Product:	(feet)	<u>15.85</u>		
Length of Water Column:	(feet)	<u>0.1034</u>		
Volume of Water in Well:	(gal)	<u>1.90</u>		
Three Well Volumes:	(gal)			

Well Type:	Flushmount <input checked="" type="checkbox"/>	Stick-Up <input type="checkbox"/>
Well Locked:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Measuring Point Marked:	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Well Material:	PVC <input checked="" type="checkbox"/> SS <input type="checkbox"/> Other: _____	
Well Diameter:	1" <input checked="" type="checkbox"/> 2" <input type="checkbox"/> Other: _____	
Comments:	_____	

Purging Information				Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	gal/ft. of water	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	0.04	0.16	0.66	1.47	
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	1 gallon=3.785L=3785mL=1337cu. feet				
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>					
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
12:10		11.21	6.57	-116	1.13	26.0	3.25	0.772
12:15		10.83	6.64	-233	1.23	11.1	1.19	0.791
12:20		11.06	7.01	-269	1.32	3.8	0.29	0.844
12:25		11.14	7.02	-277	1.33	2.3	0.29	0.855
12:30		11.18	7.05	-289	1.35	1.5	0.00	0.871
12:35		11.28	7.10	-300	1.37	1.7	0.00	0.879
12:40	18.20	11.39	7.12	-304	1.37	1.3	0.00	0.878

Sampling Information:			
EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample ID: <u>MW-15RS-0422</u>	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup <input checked="" type="checkbox"/>	Ship to Pace <input type="checkbox"/>
Sample Time: <u>12:40</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Laboratory: Pace Analytical	Greensburg, PA
Comments/Notes: _____			

Sampling Personnel: Peter Lyon
 Job Number: 0603275-136690-221
 Well Id. MW-17R

Date: 4/14/22
 Weather: 55° sunny
 Time In: 1153 Time Out: 1235

Well Information			TOC	Other
Depth to Water:	(feet)	<u>5.95</u>		
Depth to Bottom:	(feet)	<u>26.90</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>20.95</u>		
Volume of Water in Well:	(gal)	<u>3.35</u>		
Three Well Volumes:	(gal)	<u>10.05</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			Conversion Factors			
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>			
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input checked="" type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>			
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>			
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>			
Horiba U-52 Water Quality Meter Used?			Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			

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>1200</u>	<u>7.00</u>	<u>11.83</u>	<u>7.19</u>	<u>-290</u>	<u>.697</u>	<u>0.0</u>	<u>9.46</u>	<u>.447</u>
<u>1205</u>	<u>7.45</u>	<u>11.42</u>	<u>7.19</u>	<u>-294</u>	<u>.703</u>	<u>0.0</u>	<u>6.84</u>	<u>.450</u>
<u>1210</u>	<u>7.75</u>	<u>11.57</u>	<u>7.17</u>	<u>-292</u>	<u>.701</u>	<u>0.0</u>	<u>4.86</u>	<u>.449</u>
<u>1215</u>	<u>7.99</u>	<u>11.75</u>	<u>7.15</u>	<u>-301</u>	<u>.699</u>	<u>0.0</u>	<u>1.43</u>	<u>.447</u>
<u>1220</u>	<u>8.15</u>	<u>12.02</u>	<u>7.13</u>	<u>-305</u>	<u>.696</u>	<u>0.0</u>	<u>1.38</u>	<u>.446</u>
<u>1225</u>	<u>8.21</u>	<u>12.43</u>	<u>7.12</u>	<u>-306</u>	<u>.688</u>	<u>0.0</u>	<u>1.32</u>	<u>.440</u>
<u>1230</u>	<u>8.24</u>	<u>12.93</u>	<u>7.11</u>	<u>-302</u>	<u>.677</u>	<u>0.0</u>	<u>1.28</u>	<u>.433</u>

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 No
 3 - 40 ml vials Yes No
 1 - 250 ml plastic Yes No

Sample ID: MW-17R-0422 Duplicate? Yes No
 Sample Time: 1230 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical
 Greensburg, PA

Comments/Notes: _____

Sampling Personnel:
 Job Number: 0603275-136690-221
 Well Id. MW-20R

Date: 4/14/22
 Weather: Cloudy 46
 Time In: 09:50 Time Out:

Well Information		TOC	Other
Depth to Water:	(feet)	0.00	
Depth to Bottom:	(feet)	28.40	
Depth to Product:	(feet)	—	
Length of Water Column:	(feet)	4.54	28.40
Volume of Water in Well:	(gal)	4.34	
Three Well Volumes:	(gal)	13.03	

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) 2.50
 Duration of Pumping: (min) 30
 Total Volume Removed: (gal) 7 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)
09:55	0.60	11.72	7.28	-200	0.640	5.1	5.33	0.413
10:00	1.55	10.24	7.22	-208	0.647	2.2	0.00	0.414
10:05	2.95	10.21	7.18	-205	0.647	17.1	0.00	0.414
10:10	4.00	10.20	7.15	-202	0.648	7.9	0.00	0.415
10:15	4.98	10.10	7.10	-196	0.649	3.4	0.00	0.415
10:20	5.85	10.10	7.05	-191	0.650	2.3	0.00	0.416
10:25	6.55	10.20	6.99	-187	0.650	2.3	0.00	0.416

Sampling Information:

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

Sample ID: MW-20R-0422 Duplicate? Yes No
 Sample Time: 10:25 MS/MSD? Yes No
 Shipped: Pace Courier Pickup
 Ship to Pace

Comments/Notes: Laboratory: Pace Analytical Greensburg, PA

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company: GCS - Syracuse		Reason To: Davis Shop (GES)		Attention: Accounts Payable via email at gcs@face.com	
Address: 5782 Nicholas Blvd, Suite 100		Reason To: Tom Brummitt (GES)		Company Name: Groundwater & Environmental Services, Inc.	
City: Syracuse, New York 13207		Reason To: Tom Brummitt (GES)		Address: 8-20 Northrup Blvd, East 100, East Syracuse, NY 13057	
Phone: 607.233.8855		Purchase Order No:		Face Daily Balance:	
Fax: 607.233.8851		Project Name: National Grid - Onondaga		Face Project Manager: Rachel Christie	
Requested Run Date/TAT: Standard		Project Number: 1813273 130822-221-1100		Type Profile #: Semi-Annual GWS	

FIELD SERVICE AGENCY

NPDES: DRAINAGE WATER WASTEWATER

EST: ACRA OTHER: _____

CA AL IL IN OH PA TN VA WV

ITEM #	Section D Required Client Information		DATE	TIME	OFFICE	TIME	COLLECTED		PREPARED		ANALYZED	RECEIVED	LAB USE
	SAMPLE ID	ONE CHAIN OF CUSTODY (4.2, 0.5.1)					DATE	TIME	DATE	TIME			
	MW-2R-0422		4/11/22	12:15	WT	G							
	MW-6R(B)-0422		11:30		WT	G							
	MW-8R-0422		11:30		WT	G							
	MW-8R-MS-0422		11:30		WT	G							
	MW-8R-MSD-0422		10:40		WT	G							
	MW-9-0422		10:00		WT	G							
	MW-10R-0422		10:40		WT	G							
	MW-11-0422		09:50		WT	G							
	MW-12R-0422		09:45		WT	G							
	MW-14R-0422		12:20		WT	G							
	MW-15-0422		12:40		WT	G							
	MW-15RS-0422		12:30		WT	G							
	MW-17R-0422		11:10		WT	G							
	MW-19R-0422		10:30		WT	G							
	MW-20R-0422				WT	G							
	FD-0422				WT	G							
	Trip Blanks				WT	G							

Filtered (Y/N)

Requested:

Analysis:

Field Project Number: LAB-10

Additional Comments:

SAMPLES WILL ARRIVE IN COOLERS.

Please send reports to: fcs@face.com, brummitt@face.com

SPECIFIC EPP NAME: 18151EQDD.zip

TEMPERATURE AND SIGNATURES

Temp #10: _____

Prepared on: 4/11/22

Quality Check Code: _____

Sample ID: _____

Well ID	Sample?	Well Size	DTW	DTP	DTB	Comments
MW-2(R)	Yes	2"	2.72		6.35	
MW-5R(R)	Yes	2"	1.89		24.30	
MW-8R	Yes	2"	1.75		20.92	MS/MSD
MW-9	Yes	2"	4.84		6.35	
MW-10R	Yes	2"	0.00		22.50	Field Duplicate
MW-11	Yes	2"	3.31		6.51	
MW-12R	Yes	2"	8.73		21.40	
MW-14R	Yes	2"	0.00		50.80	
MW-15	Yes	2"	7.55		9.04	
MW-15RS	Yes	1"	8.25		23.65	
MW-17R	Yes	2"	6.88		26.90	
MW-19R	Yes	2"	3.30		38.05	
MW-20R	Yes	2"	0.00		28.40	

DTW -depth to water

DTP -depth to product

DTB -depth to bottom

MW-10R's DTW was updated to 0.00 upon review. Initial DTW was measured above the top of casing as the water level rose above it following the removal of the j-plug due to positive pressure.

Sampling Personnel: G. Ernst
 Job Number: 0603324-136690-221
 Well Id. **MW-2(R)**

Date: 10/20/22
 Weather: LT Rain 40°S
 Time In: 1105 Time Out: 1200

Well Information			TOC	Other
Depth to Water:	(feet)		<u>2.72</u>	
Depth to Bottom:	(feet)		<u>6.35</u>	
Depth to Product:	(feet)		<u>NP</u>	
Length of Water Column:	(feet)		<u>3.63</u>	
Volume of Water in Well:	(gal)		<u>0.58</u>	
Three Well Volumes:	(gal)		<u>1.8</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			Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	gal/ft.			
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump	of			
Average Pumping Rate:	(ml/min)	<u>200</u>		water	0.04	0.16	0.66
Duration of Pumping:	(min)	<u>30</u>					1.47
Total Volume Removed:	(gal)	<u>2</u>	Did well go dry?	1 gallon=3.785L=3785mL=1337cu. feet			
			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>				
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>1120</u>	<u>3.34</u>	<u>13.40</u>	<u>9.07</u>	<u>-276</u>	<u>0.583</u>	<u>21.2</u>	<u>0.00</u>	<u>0.370</u>
<u>1125</u>	<u>3.59</u>	<u>13.29</u>	<u>9.33</u>	<u>-310</u>	<u>0.545</u>	<u>24.7</u>	<u>0.00</u>	<u>0.347</u>
<u>1130</u>	<u>3.78</u>	<u>13.44</u>	<u>9.66</u>	<u>-341</u>	<u>0.500</u>	<u>16.2</u>	<u>0.00</u>	<u>0.320</u>
<u>1135</u>	<u>4.28</u>	<u>13.47</u>	<u>9.83</u>	<u>-349</u>	<u>0.488</u>	<u>8.3</u>	<u>0.00</u>	<u>0.316</u>
<u>1140</u>	<u>4.92</u>	<u>13.38</u>	<u>10.42</u>	<u>-367</u>	<u>0.442</u>	<u>8.1</u>	<u>0.00</u>	<u>0.287</u>
<u>1145</u>	<u>5.03</u>	<u>13.24</u>	<u>10.95</u>	<u>-370</u>	<u>0.456</u>	<u>10.1</u>	<u>0.00</u>	<u>0.298</u>
<u>1150</u>	<u>5.23</u>	<u>12.95</u>	<u>11.80</u>	<u>-370</u>	<u>0.651</u>	<u>12.3</u>	<u>0.00</u>	<u>0.416</u>

Sampling Information:

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

Sample ID: MW-2(R)-1022 Duplicate? Yes No
 Sample Time: 1155 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Comments/Notes: _____ Laboratory: Pace Analytical Greensburg, PA

Sampling Personnel: 6 ERNST
 Job Number: 0603324-136690-221
 Well Id. MW-5R(R)

Date: 10/20/22
 Weather: cloudy 40°S
 Time In: 1200 Time Out: _____

Well Information			TOC	Other
Depth to Water:	(feet)	<u>1.89</u>		
Depth to Bottom:	(feet)	<u>24.30</u>		
Depth to Product:	(feet)	<u>NP</u>		
Length of Water Column:	(feet)	<u>22.41</u>		
Volume of Water in Well:	(gal)	<u>3.59</u>		
Three Well Volumes:	(gal)	<u>10.8</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				Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	gal/ft. of water	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	0.04	0.16	0.66	1.47	
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	1 gallon=3.785L=3785mL=133.7cu. feet				
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 <input type="checkbox"/> No <input type="checkbox"/>					
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1210	3.37	12.39	9.18	-203	6.905	8.4	0.00	0.578
1215	5.04	12.79	8.88	-257	0.894	2.6	0.00	0.572
1220	6.27	12.89	8.78	-281	0.876	5.0	0.00	0.560
1225	7.40	12.98	8.70	-299	0.841	1.8	0.00	0.538
1230	8.45	12.93	8.64	-311	0.808	0.9	0.00	0.517
1235	8.73	12.92	8.62	-315	0.793	1.3	0.00	0.507
1240	8.95	12.86	8.58	-319	0.765	0.6	0.00	0.489

Sampling Information:

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

Sample ID: MW-5R(R)-1022 Duplicate? Yes No
 Sample Time: 1245 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes: _____

Sampling Personnel: Peter Lyon
 Job Number: 0603324-136690-221
 Well Id. MW-8R

Date: 10/20/22
 Weather: 45° Rain
 Time In: 1056 Time Out: 1135

Well Information			TOC	Other
Depth to Water:	(feet)	<u>1.75</u>		
Depth to Bottom:	(feet)	<u>20.92</u>		
Depth to Product:	(feet)	<u>19.17</u>		
Length of Water Column:	(feet)	<u>19.17</u>		
Volume of Water in Well:	(gal)	<u>3.06</u>		
Three Well Volumes:	(gal)	<u>9.20</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				Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	gal/ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	of				
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	water	0.04	0.16	0.66	1.47
Average Pumping Rate:	(ml/min)	<u>200</u>		1 gallon=3.785L=3785mL=1337cu. feet				
Duration of Pumping:	(min)	<u>30</u>						
Total Volume Removed:	(gal)	<u>2</u>	Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
1100	2.15	14.97	8.43	-226	0.779	52.9	4.91	0.484
1105	3.02	14.60	7.02	-261	0.687	8.3	3.06	0.439
1110	3.93	14.64	8.15	-270	0.680	2.8	2.29	0.435
1115	4.81	14.64	8.40	-273	0.681	1.6	1.54	0.436
1120	5.11	14.63	8.41	-274	0.681	2.0	1.22	0.436
1125	5.51	14.55	8.43	-277	0.681	1.6	0.76	0.436
1130	5.72	14.48	8.49	-280	0.681	1.7	0.44	0.436

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's 6 - 100 ml ambers Yes No
 EPA SW-846 Method 8260 VOC's BTEX 9 - 40 ml vials Yes No
 EPA SW-846 Method 9012 Total Cyanide 3 - 250 ml plastic Yes No

MW-8R-MS-1022 MW-8R-MSD-1022

Sample ID: MW-8R-1022 Duplicate? Yes No
 Sample Time: 1130 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes: _____

Sampling Personnel: PKL hpr
 Job Number: 0603324-136690-221
 Well Id. MW-9

Date: 10/20/20
 Weather: 45° Rain/Cloudy
 Time In: 1012 Time Out: _____

Well Information		TOC	Other
Depth to Water:	(feet)	<u>4.81</u>	
Depth to Bottom:	(feet)	<u>6.35</u>	
Depth to Product:	(feet)	<u>-</u>	
Length of Water Column:	(feet)	<u>1.51</u>	
Volume of Water in Well:	(gal)	<u>0.24</u>	
Three Well Volumes:	(gal)	<u>0.72</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) 36
 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>1015</u>	<u>5.05</u>	<u>15.13</u>	<u>7.42</u>	<u>-72</u>	<u>1.20</u>	<u>10.4</u>	<u>6.92</u>	<u>0.777</u>
<u>1020</u>	<u>5.27</u>	<u>15.16</u>	<u>6.89</u>	<u>-104</u>	<u>1.39</u>	<u>8.4</u>	<u>7.50</u>	<u>0.896</u>
<u>1025</u>	<u>5.34</u>	<u>15.67</u>	<u>7.03</u>	<u>-126</u>	<u>1.44</u>	<u>8.1</u>	<u>8.73</u>	<u>0.923</u>
<u>1030</u>	<u>5.51</u>	<u>15.23</u>	<u>7.28</u>	<u>-152</u>	<u>1.47</u>	<u>7.6</u>	<u>8.31</u>	<u>0.938</u>
<u>1035</u>	<u>5.66</u>	<u>15.33</u>	<u>7.63</u>	<u>-179</u>	<u>1.47</u>	<u>7.4</u>	<u>7.56</u>	<u>0.943</u>
<u>1040</u>	<u>5.84</u>	<u>15.42</u>	<u>7.90</u>	<u>-208</u>	<u>1.46</u>	<u>6.4</u>	<u>7.40</u>	<u>0.937</u>
<u>1045</u>	<u>6.02</u>	<u>15.41</u>	<u>7.94</u>	<u>-225</u>	<u>1.46</u>	<u>6.2</u>	<u>7.62</u>	<u>0.935</u>

Sampling Information:

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

Sample ID: MW-9-1022 Duplicate? Yes No
 Sample Time: 1045 MS/MSD? Yes No
 Shipped: Pace Courier Pickup
 Ship to Pace

Comments/Notes: _____ Laboratory: Pace Analytical Greensburg, PA

Sampling Personnel: Pete Lynn
 Job Number: 0603324-136690-221
 Well Id. MW-10R

Date: 10/20/11
 Weather: 42° Rain
 Time In: 0928 Time Out: _____

Well Information			TOC	Other
Depth to Water:	(feet)	<u>0.00</u>		
Depth to Bottom:	(feet)	<u>22.50</u>		
Depth to Product:	(feet)	<u>-</u>		
Length of Water Column:	(feet)	<u>22.53</u>		
Volume of Water in Well:	(gal)	<u>3.60</u>		
Three Well Volumes:	(gal)	<u>10.81</u>		

Well Type:	Flushmount	<input checked="" type="checkbox"/>	Stick-Up	<input type="checkbox"/>
Well Locked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Measuring Point Marked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Well Material:	PVC	<input checked="" type="checkbox"/>	SS	<input type="checkbox"/>
Well Diameter:	1"	<input type="checkbox"/>	2"	<input checked="" type="checkbox"/>
Comments:	Other: _____			

Purging Information		Conversion Factors			
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>			
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>			
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 <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				

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>0930</u>	<u>0.40</u>	<u>15.43</u>	<u>8.81</u>	<u>-147</u>	<u>0.341</u>	<u>2.9</u>	<u>23.24</u>	<u>0.220</u>
<u>0935</u>	<u>0.65</u>	<u>15.37</u>	<u>8.76</u>	<u>-159</u>	<u>0.333</u>	<u>2.7</u>	<u>10.54</u>	<u>0.216</u>
<u>0940</u>	<u>1.13</u>	<u>15.46</u>	<u>8.25</u>	<u>-175</u>	<u>0.339</u>	<u>2.4</u>	<u>9.50</u>	<u>0.221</u>
<u>0945</u>	<u>1.42</u>	<u>15.45</u>	<u>8.72</u>	<u>-176</u>	<u>0.350</u>	<u>3.4</u>	<u>9.28</u>	<u>0.228</u>
<u>0950</u>	<u>1.65</u>	<u>15.41</u>	<u>8.57</u>	<u>-176</u>	<u>0.375</u>	<u>2.8</u>	<u>9.17</u>	<u>0.244</u>
<u>0955</u>	<u>1.89</u>	<u>15.37</u>	<u>8.64</u>	<u>-186</u>	<u>0.393</u>	<u>2.9</u>	<u>8.94</u>	<u>0.256</u>
<u>1000</u>	<u>2.09</u>	<u>15.37</u>	<u>8.72</u>	<u>-188</u>	<u>0.404</u>	<u>2.6</u>	<u>9.33</u>	<u>0.262</u>

Sampling Information:		4 - 100 ml ambers		Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
EPA SW-846 Method 8270	SVOC PAH's	6 - 40 ml vials	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
EPA SW-846 Method 8260	VOC's BTEX	2 - 250 ml plastic	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
EPA SW-846 Method 9012	Total Cyanide				
FD-1022					
Sample ID: <u>MW-10R-1022</u>	Duplicate? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Shipped: Pace Courier Pickup	<input checked="" type="checkbox"/>		
Sample Time: <u>1000</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ship to Pace	<input type="checkbox"/>		
Comments/Notes:		Laboratory: Pace Analytical	Greensburg, PA		

Sampling Personnel: _____
 Job Number: 0603324-136690-221
 Well Id. **MW-11**

Date: 10/20/22
 Weather: LT Rain 40°S
 Time In: 1015 Time Out: 1105

Well Information		
	TOC	Other
Depth to Water:	(feet) <u>3.31</u>	
Depth to Bottom:	(feet) <u>6.51</u>	
Depth to Product:	(feet) <u>NP</u>	
Length of Water Column:	(feet) <u>3.2</u>	
Volume of Water in Well:	(gal) <u>0.512</u>	
Three Well Volumes:	(gal) <u>1.53</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 <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>
Tubing/Bailer Material:	Teflon <input type="checkbox"/> Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>
Sampling Method:	Bailer <input type="checkbox"/> Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>
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 <input type="checkbox"/> No <input type="checkbox"/>
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

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)
1020	3.59	13.23	7.77	-209	1.66	268	0.00	1.07
1025	3.59	13.05	7.32	-210	1.71	80.3	0.00	1.09
1030	3.62	12.58	7.07	-213	1.68	12.8	0.00	1.08
1035	3.63	12.44	7.03	-213	1.66	8.0	0.00	1.06
1040	3.63	12.26	6.99	-212	1.66	5.4	0.00	1.06
1045	3.63	12.06	6.95	-210	1.65	3.2	0.00	1.06
1050	3.63	11.92	6.94	-209	1.64	2.0	0.00	1.05

Sampling Information:			
EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample ID: MW-11-1022	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup	<input checked="" type="checkbox"/>
Sample Time: <u>1055</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ship to Pace	<input type="checkbox"/>
Comments/Notes: _____		Laboratory: Pace Analytical Greensburg, PA	

Sampling Personnel: G. Ernst
 Job Number: 0603324-136690-221
 Well Id. **MW-12R**

Date: 10/20/22
 Weather: LT Rain 40°S
 Time In: 0920 Time Out: 1015

Well Information			TOC	Other
Depth to Water:	(feet)	<u>8.73</u>		
Depth to Bottom:	(feet)	<u>21.40</u>		
Depth to Product:	(feet)	<u>NP</u>		
Length of Water Column:	(feet)	<u>12.67</u>		
Volume of Water in Well:	(gal)	<u>2.03</u>		
Three Well Volumes:	(gal)	<u>6.1</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				Conversion Factors				
Purging Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	gal/ft.	1" ID	2" ID	4" ID	6" ID
Tubing/Bailer Material:	Teflon <input type="checkbox"/>	Stainless St. <input type="checkbox"/>	Polyethylene <input checked="" type="checkbox"/>	of				
Sampling Method:	Bailer <input type="checkbox"/>	Peristaltic <input checked="" type="checkbox"/>	Grundfos Pump <input type="checkbox"/>	water	0.04	0.16	0.66	1.47
Average Pumping Rate:	(ml/min)	<u>200</u>		1 gallon=3.785L=3785mL=1337cu. feet				
Duration of Pumping:	(min)	<u>30</u>						
Total Volume Removed:	(gal)	<u>2</u>	Did well go dry? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>					
Horiba U-52 Water Quality Meter Used?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
<u>0935</u>	<u>10.13</u>	<u>19.90</u>	<u>7.90</u>	<u>-243</u>	<u>0.549</u>	<u>0.0</u>	<u>0.19</u>	<u>0.352</u>
<u>0940</u>	<u>10.77</u>	<u>19.31</u>	<u>7.89</u>	<u>-290</u>	<u>0.553</u>	<u>0.0</u>	<u>0.00</u>	<u>0.354</u>
<u>0945</u>	<u>11.95</u>	<u>18.23</u>	<u>7.86</u>	<u>-322</u>	<u>0.565</u>	<u>0.0</u>	<u>0.00</u>	<u>0.362</u>
<u>0950</u>	<u>13.06</u>	<u>14.00</u>	<u>7.88</u>	<u>-324</u>	<u>0.629</u>	<u>0.0</u>	<u>0.00</u>	<u>0.403</u>
<u>0955</u>	<u>13.99</u>	<u>13.75</u>	<u>7.85</u>	<u>-330</u>	<u>0.635</u>	<u>0.0</u>	<u>0.00</u>	<u>0.407</u>
<u>1000</u>	<u>15.15</u>	<u>13.55</u>	<u>7.83</u>	<u>-333</u>	<u>0.641</u>	<u>11.5</u>	<u>0.00</u>	<u>0.410</u>
<u>1005</u>	<u>16.42</u>	<u>13.07</u>	<u>7.80</u>	<u>-336</u>	<u>0.647</u>	<u>13.3</u>	<u>0.00</u>	<u>0.414</u>

Sampling Information:

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

Sample ID: MW-12R-1022 Duplicate? Yes No
 Sample Time: 1010 MS/MSD? Yes No

Shipped: Pace Courier Pickup
 Ship to Pace

Comments/Notes: _____ Laboratory: Pace Analytical Greensburg, PA

Sampling Personnel: [Signature]
 Job Number: 0603324-136690-221
 Well Id. **MW-14R**

Date: 10/20/22
 Weather: RAIN 40
 Time In: 09:15 Time Out: _____

Well Information		
	TOC	Other
Depth to Water: (feet)	0.00	
Depth to Bottom: (feet)	50.80	
Depth to Product: (feet)	/	
Length of Water Column: (feet)	50.80	
Volume of Water in Well: (gal)	8-12	
Three Well Volumes: (gal)	24.30	

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

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)
09:30	0.00	12.31	7.56	-71	0.701	1.2	4.11	0.445
09:35	0.00	12.34	8.22	-66	0.690	1.1	1.94	0.441
09:40	0.00	12.36	7.44	-69	0.667	0.4	0.83	0.426
09:45	0.00	12.07	7.44	-156	0.657	1.0	0.71	0.420
09:50	0.00	11.96	7.45	-185	0.655	0.8	0.67	0.419
09:55	0.00	11.71	7.51	-236	0.655	0.6	0.63	0.419
10:00	0.00	11.63	7.53	-248	0.657	0.0	0.65	0.424

Sampling Information:			
EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample ID: <u>MW-14R-1022</u>	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup	<input checked="" type="checkbox"/>
Sample Time: <u>10:00</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ship to Pace	<input type="checkbox"/>
Comments/Notes:		Laboratory: Pace Analytical Greensburg, PA	

Sampling Personnel: KE
 Job Number: 0603324-136690-221
 Well Id. **MW-15RS**

Date: 10/20/22
 Weather: RAIN 40
 Time In: 11:25 Time Out: _____

Well Information		TOC	Other
Depth to Water:	(feet)	<u>8.25</u>	
Depth to Bottom:	(feet)	23.65	
Depth to Product:	(feet)		
Length of Water Column:	(feet)	<u>15.4</u>	
Volume of Water in Well:	(gal)	<u>0.1016</u>	
Three Well Volumes:	(gal)	<u>1.69</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>11:30</u>	<u>12.61</u>	<u>7.47</u>	<u>-106</u>	<u>1.03</u>	<u>0.0</u>	<u>2.42</u>	<u>0.697</u>	
<u>11:35</u>	<u>12.52</u>	<u>7.31</u>	<u>-257</u>	<u>1.29</u>	<u>0.0</u>	<u>1.92</u>	<u>0.829</u>	
<u>11:40</u>	<u>12.45</u>	<u>7.31</u>	<u>-284</u>	<u>1.34</u>	<u>0.0</u>	<u>1.72</u>	<u>0.892</u>	
<u>11:45</u>	<u>12.30</u>	<u>7.30</u>	<u>-294</u>	<u>1.41</u>	<u>0.0</u>	<u>1.00</u>	<u>0.905</u>	
<u>11:50</u>	<u>12.19</u>	<u>7.24</u>	<u>-301</u>	<u>1.43</u>	<u>0.0</u>	<u>0.91</u>	<u>0.919</u>	
<u>11:55</u>	<u>12.02</u>	<u>7.20</u>	<u>-310</u>	<u>1.46</u>	<u>0.0</u>	<u>0.76</u>	<u>0.934</u>	
<u>12:00</u>	<u>11.95</u>	<u>7.19</u>	<u>-314</u>	<u>1.47</u>	<u>0.0</u>	<u>0.72</u>	<u>0.940</u>	

Sampling Information: PROBE DOESNT FIT IN WELL

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

Sample ID: MW-15RS-1022 Duplicate? Yes No
 Sample Time: 12:00 MS/MSD? Yes No
 Shipped: Pace Courier Pickup
 Ship to Pace

Comments/Notes: _____ Laboratory: Pace Analytical Greensburg, PA

Sampling Personnel: Pace 402
 Job Number: 0603324-136690-221
 Well Id. MW-17R

Date: 10/20/20
 Weather: 45° overcast
 Time In: 1147 Time Out: 1225

Well Information		TOC	Other
Depth to Water:	(feet)	<u>6.87</u>	
Depth to Bottom:	(feet)	<u>26.90</u>	
Depth to Product:	(feet)	<u>-</u>	
Length of Water Column:	(feet)	<u>20.02</u>	
Volume of Water in Well:	(gal)	<u>3.20</u>	
Three Well Volumes:	(gal)	<u>9.60</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>1150</u>	<u>7.81</u>	<u>14.06</u>	<u>8.16</u>	<u>-251</u>	<u>0.823</u>	<u>6.8</u>	<u>1.02</u>	<u>0.528</u>
<u>1155</u>	<u>8.54</u>	<u>14.05</u>	<u>7.78</u>	<u>-256</u>	<u>0.840</u>	<u>1.8</u>	<u>0.36</u>	<u>0.530</u>
<u>1200</u>	<u>9.07</u>	<u>14.08</u>	<u>7.62</u>	<u>-256</u>	<u>0.841</u>	<u>1.3</u>	<u>0.00</u>	<u>0.538</u>
<u>1205</u>	<u>9.48</u>	<u>14.18</u>	<u>7.50</u>	<u>-256</u>	<u>0.841</u>	<u>1.8</u>	<u>0.00</u>	<u>0.538</u>
<u>1210</u>	<u>9.80</u>	<u>14.25</u>	<u>7.52</u>	<u>-256</u>	<u>0.837</u>	<u>0.3</u>	<u>0.00</u>	<u>0.535</u>
<u>1215</u>	<u>10.05</u>	<u>14.22</u>	<u>7.67</u>	<u>-255</u>	<u>0.828</u>	<u>1.9</u>	<u>0.00</u>	<u>0.530</u>
<u>1220</u>	<u>10.21</u>	<u>14.23</u>	<u>7.70</u>	<u>-255</u>	<u>0.829</u>	<u>2.3</u>	<u>0.00</u>	<u>0.530</u>

Sampling Information:

EPA SW-846 Method 8270 SVOC PAH's 2 - 100 ml ambers Yes No
 EPA SW-846 Method 8260 VOC's BTEX 3 - 40 ml vials Yes No
 EPA SW-846 Method 9012 Total Cyanide 1 - 250 ml plastic Yes No
 Sample ID: MW-17R-1022 Duplicate? Yes No
 Sample Time: 1220 MS/MSD? Yes No
 Shipped: Pace Courier Pickup
 Ship to Pace
 Laboratory: Pace Analytical Greensburg, PA

Comments/Notes: _____

Sampling Personnel: K
 Job Number: 0603324-136690-221
 Well Id. **MW-19R**

Date: 10/20/12
 Weather: PAR 90
 Time In: 10:45 Time Out: _____

Well Information			TOC	Other
Depth to Water:	(feet)	<u>3.30</u>		
Depth to Bottom:	(feet)	<u>38.05</u>		
Depth to Product:	(feet)	<u>—</u>		
Length of Water Column:	(feet)	<u>34.75</u>		
Volume of Water in Well:	(gal)	<u>5.56</u>		
Three Well Volumes:	(gal)	<u>16.68</u>		

Well Type:	Flushmount	<input checked="" type="checkbox"/>	Stick-Up	<input type="checkbox"/>
Well Locked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Measuring Point Marked:	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Well Material:	PVC	<input checked="" type="checkbox"/>	SS	<input type="checkbox"/>
Well Diameter:	1"	<input type="checkbox"/>	2"	<input checked="" type="checkbox"/>
Comments:	_____			

Purging Information			Conversion Factors																		
Purging Method:	Bailer	<input type="checkbox"/>	Peristaltic	<input checked="" type="checkbox"/>	Grundfos Pump	<input type="checkbox"/>															
Tubing/Bailer Material:	Teflon	<input type="checkbox"/>	Stainless St.	<input type="checkbox"/>	Polyethylene	<input checked="" type="checkbox"/>															
Sampling Method:	Bailer	<input type="checkbox"/>	Peristaltic	<input checked="" type="checkbox"/>	Grundfos Pump	<input type="checkbox"/>															
Average Pumping Rate:	(ml/min)	<u>200</u>	<table border="1"> <tr> <th>gal/ft. of water</th> <th>1" ID</th> <th>2" ID</th> <th>4" ID</th> <th>6" ID</th> </tr> <tr> <td></td> <td>0.04</td> <td>0.16</td> <td>0.66</td> <td>1.47</td> </tr> <tr> <td colspan="5">1 gallon=3.785L=3785mL=1337cu. feet</td> </tr> </table>				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				
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																					
Duration of Pumping:	(min)	<u>30</u>																			
Total Volume Removed:	(gal)	<u>2</u>																			
Horiba U-52 Water Quality Meter Used?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>	Did well go dry?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>															

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
10:50	3.95	12.33	7.49	-161	0.683	0.0	1.49	0.436
10:58	5.16	12.39	7.66	-171	0.668	0.7	1.78	0.426
11:00	7.40	12.97	7.74	-176	0.661	0.0	1.56	0.423
11:08	8.98	13.04	7.75	-176	0.661	0.0	1.46	0.427
11:10	10.74	13.11	7.71	-168	0.661	0.0	1.43	0.423
11:15	13.60	13.23	7.69	-159	0.661	0.0	1.39	0.423
11:20	15.95	13.23	7.63	-143	0.659	0.0	1.51	0.422

EPA SW-846 Method 8270	SVOC PAH's	2 - 100 ml ambers	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 8260	VOC's BTEX	3 - 40 ml vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
EPA SW-846 Method 9012	Total Cyanide	1 - 250 ml plastic	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample ID: MW-19R-1022	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Shipped: Pace Courier Pickup	<input checked="" type="checkbox"/>
Sample Time: <u>11:20</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ship to Pace	<input type="checkbox"/>
Comments/Notes: _____	Laboratory: Pace Analytical	Greensburg, PA	



Appendix C – Data Usability Summary Report



Groundwater & Environmental Services, Inc.

708 North Main Street, Suite 201
Blacksburg, VA 24060

T. 800.662.5067

February 2, 2023

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

RE: Data Usability Summary Report for National Grid - Ogdensburg: Data Packages Pace
Analytical Job No. 30481458, 30532087

Groundwater & Environmental Services, Inc. (GES) reviewed two data packages (Laboratory Project Numbers 30481458, 30532087) from Pace Analytical Services, Inc., for the analysis of groundwater samples collected on April 14, 2022 and October 20, 2022 from monitoring wells located at the at the National Grid Ogdensburg site. Collected samples included 13 aqueous samples in the spring and 12 aqueous samples in the fall event, as well as field quality samples including a trip blank and a field duplicate during each event. Sample MW-15 was not analyzed in the fall sampling event, as the sample was lost at the laboratory. The samples were processed for volatile organic compounds benzene, toluene, ethylbenzene and xylenes (BTEX), cyanide and polycyclic aromatic hydrocarbons (PAHs). The trip blanks were analyzed for volatiles with the site samples. The purpose of the trip blank is to determine if there is outside BTEX contamination caused by transporting the samples.

Analytical methodologies are those of the USEPA 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
- 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
MW-8R-1022	J+	Benzene	High MS/MSD recoveries
	R	Cyanide	MS/MSD recoveries <10%
	J	Anthracene Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Benzo(k)fluoranthene Chrysene Fluoranthene Phenanthrene Pyrene	RPD exceeds maximum
	UJ	Benzo(g,h,i)perylene Indeno(1,2,3-cd)pyrene	
MW-2R-0422	J-	Cyanide Naphthalene	Low MS/MSD recoveries
	J+	2-Methylnaphthalene Acenaphthene	High MS/MSD recoveries
MW-15RS-0422 MW-17R-0422 MW-19R-0422	J+	Naphthalene	Method Blank detections

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

R: Data unusable due to gross QC failure

J+: estimated detect with a possible high bias

J/UJ: estimated with an indeterminate bias

BTEX and TCL Volatiles by EPA 8260C/NYSDEC ASP

Sample holding times for groundwater and instrumental tune fragmentations are within acceptance ranges for both events. Surrogate and internal standard recoveries are within required limits. Calibration standards show acceptable responses within analytical protocol and validation action limits.

LCS/LCSD recoveries and relative percent differences (RPD) are within criteria for both events.

For the spring event, an MS/MSD was analyzed using **MW-8R-0422** as the matrix. Per EPA guidance, the original concentration cannot be more than 4x the spiking concentration for recovery accuracy to be calculated. Benzene recovered outside specification; however, the original concentration was ~18x that of the spiking concentration and the calculated recovery does not accurately represent the method efficacy. No qualifiers were required. The blind field duplicate correlations of **MW-10R** were within the project specification of ≤25% for both sampling events.

Table 2a: VOCs Precision Calculations

Compound	MW-10R-0422	FD-0422	RPD
Benzene	1220	1200	1.7
Ethylbenzene	101	98.7	2.3
Toluene	174	165	5.3
Xylene (Total)	127	124	2.4
m&p-Xylene	84.3	80.7	4.4
o-Xylene	43.1	43.2	0.2

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

For the fall event, an MS/MSD was analyzed using **MW-8R-1022** as the matrix. All QC elements fell within project criteria with the exception of benzene, which recovered high. The blind field duplicate correlations of **MW-10R** were within the project specification of ≤25% for both sampling events.

Table 2b: VOCs Precision Calculations

Compound	MW-10R-1022	FD-1022	RPD
Benzene	1760	1650	6.4
Ethylbenzene	139	140	0.7
Toluene	222	222	0
Xylene (Total)	175	171	2.3

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

Cyanide by EPA 9012B/NYDESC ASP

Holding times were met for both sampling events. Blanks, both laboratory and field-generated, show no contamination. 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 method is within laboratory control.

For the spring event, an MS/MSDs were analyzed using **MW-2R-0422** where the recoveries were below criteria (81%, 84%). The cyanide data for this sample is qualified as estimated with a possible low bias.

The blind field duplicate correlations of **MW-10R-0422** were within project criteria. No data was qualified.

Table 3a: Cyanide Precision Calculations

Compound	MW-10R-0422	FD-0422	RPD
Cyanide	0.15	0.14	6.9

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

For the fall event, an MS/MSD was analyzed using **MW-8R-1022** where the recoveries were below criteria (-12%, 7%). These recoveries are below the EPA-required 10% for usable data. Cyanide in the fall event for MW-8R is rejected.

The blind field duplicate correlations of **MW-10R-1022** were within project criteria. No data was qualified.

Table 3b: Cyanide Precision Calculations

Compound	MW-10R-1022	FD-0422	RPD
Cyanide	0.11	0.13	16.7

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

PAHs by EPA8270D/NYSDEC ASP

Holding times were met. Instrumental tune fragmentations are within acceptance ranges. Blanks reported no above RL concentrations with the exception of naphthalene (0.18 µg/L) in the method blank associated with the spring sampling event. Three associated samples had naphthalene detections <5x the blank concentration, rendering these naphthalene data points as possibly affected by the same laboratory source as the method blank. Data from these samples are qualified as estimated with a possible high bias, as noted in **Table 1**. All other samples had no detection of naphthalene, or reported concentrations > 5x the blank.

Surrogates were within specification for all samples. Calibration standards, both initial and continuing, show acceptable responses within analytical method protocols and validation guidelines. Samples with high concentrations were run at dilution to allow accurate quantification. Some detection limits are elevated.

The spring laboratory control spike recoveries and precision indicate the method is within laboratory control. Matrix spike and matrix spike associated with **MW-02R-0422** recoveries were within laboratory specified criteria, with the following exceptions:

- 2-Methylnaphthalene and acenaphthene both reported high.
- Naphthalene reported low recoveries

Data is qualified as estimated as noted in **Table 1**.

The blind field duplicate correlations of **MW-10R-0422** were within project specification of RPD ≤ 25%, with the exception of naphthalene. Naphthalene is qualified as estimated with an indeterminate bias.

Table 4a: PAH Precision Calculations

Compound	MW-10R-0422	FD-0422	RPD
Acenaphthene	29.2	26	11.6
Acenaphthylene	37.5	34	9.8
Anthracene	0.78	0.8	2.5
Fluorene	10.5	10.6	0.9
2-Methylnaphthalene	11.0	11.1	0.9
Naphthalene	449	647	36.1
Phenanthrene	1.7	1.8	5.7

The fall laboratory control spike recoveries and precision indicate the method is within laboratory control. Matrix spike and matrix spike recoveries associated with **MW-8R-1022** were within laboratory specified criteria, with the exception of the recovery for naphthalene, which recovered high, and acenaphthylene and phenanthrene, which recovered low. As the original naphthalene concentration >>>4x the spiking concentration, the recovery does not accurately reflect the method efficacy, and no qualifications are required.

The RPDs of the following analytes exceeded criteria in the fall MS/MSD, and the associated data in **MW-8R-1022** is qualified as estimated due to the precision issue. This qualification supersedes the possible high or low bias introduced by MS/MSD recoveries.

- Anthracene
- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Benzo(g,h,i)perylene
- Benzo(k)fluoranthene
- Chrysene
- Fluoranthene
- Indeno(1,2,3-cd)pyrene
- Phenanthrene
- Pyrene

The blind field duplicate correlations of **MW-10R-1022** were within project specification of RPD \leq 25%. No qualifications are required.

Table 4b: PAH Precision Calculations

Compound	MW-10R	FD-1022	RPD
Acenaphthene	37.5	36.8	1.9
Acenaphthylene	46.6	45.0	3.5
Fluorene	16.2	16.3	0.6
2-Methylnaphthalene	6.4	6.0	6.5
Naphthalene	431	412	4.5
Phenanthrene	2.5	2.5	0.0

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.
Principal Environmental Chemist, NRCC Certified

SAMPLE SUMMARY

Project: National Grid - Ogdensburg Kin

Pace Project No.: 30481458

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30481458001	MW-2 (R)-0422	Water	04/14/22 12:15	04/15/22 09:10
30481458002	MW-5R(R)-0422	Water	04/14/22 11:30	04/15/22 09:10
30481458003	MW-8R-0422	Water	04/14/22 11:30	04/15/22 09:10
30481458004	MW-8R-MS-0422	Water	04/14/22 11:30	04/15/22 09:10
30481458005	MW-8R-MSD-0422	Water	04/14/22 11:30	04/15/22 09:10
30481458006	MW-9-0422	Water	04/14/22 10:40	04/15/22 09:10
30481458007	MW-10R-0422	Water	04/14/22 10:00	04/15/22 09:10
30481458008	MW-11-0422	Water	04/14/22 10:40	04/15/22 09:10
30481458009	MW-12R-0422	Water	04/14/22 09:50	04/15/22 09:10
30481458010	MW-14R-0422	Water	04/14/22 09:45	04/15/22 09:10
30481458011	MW-15-0422	Water	04/14/22 12:00	04/15/22 09:10
30481458012	MW-15RS-0422	Water	04/14/22 12:40	04/15/22 09:10
30481458013	MW-17R-0422	Water	04/14/22 12:30	04/15/22 09:10
30481458014	MW-19R-0422	Water	04/14/22 11:10	04/15/22 09:10
30481458015	MW-20R-0422	Water	04/14/22 10:25	04/15/22 09:10
30481458016	FD-0422	Water	04/14/22 10:25	04/15/22 09:10
30481458017	Trip Blank	Water	04/14/22 00:00	04/15/22 09:10

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg Kin

Pace Project No.: 30481458

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

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

Date: April 26, 2022

General Information:

16 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.

QC Batch: 498907

B: Analyte was detected in the associated method blank.

- BLANK for HBN 498907 [OEXT/466 (Lab ID: 2414771)
- Naphthalene

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: 498907

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481458003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2414773)
 - 2-Methylnaphthalene
 - Acenaphthene
 - Acenaphthylene

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg Kin

Pace Project No.: 30481458

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

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

Date: April 26, 2022

QC Batch: 498907

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481458003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MSD (Lab ID: 2414774)
 - Acenaphthene
 - Acenaphthylene
 - Fluoranthene

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

- MS (Lab ID: 2414773)
 - Naphthalene
- MSD (Lab ID: 2414774)
 - Naphthalene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2414774)
 - 2-Methylnaphthalene
 - Naphthalene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg Kin

Pace Project No.: 30481458

Method: EPA 8260C

Description: 8260C MSV

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

Date: April 26, 2022

General Information:

17 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.

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: 498448

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481458003

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

- MS (Lab ID: 2412343)
 - Benzene
- MSD (Lab ID: 2412344)
 - Benzene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg Kin
Pace Project No.: 30481458

Method: EPA 9012B
Description: 9012B Cyanide, Total
Client: Groundwater & Environmental Services, Inc. (Syracuse)
Date: April 26, 2022

General Information:

16 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: 498316

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481458001,30481458011

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

- MS (Lab ID: 2411963)
 - Cyanide
- MSD (Lab ID: 2411964)
 - Cyanide

QC Batch: 499639

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30481458003

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

- MS (Lab ID: 2418631)
 - Cyanide

Additional Comments:

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

SAMPLE SUMMARY

Project: National Grid - Ogdensburg, NY

Pace Project No.: 30532087

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30532087001	MW-2(R)-1022	Water	10/20/22 11:55	10/21/22 10:20
30532087002	MW-5R(R)-1022	Water	10/20/22 12:45	10/21/22 10:20
30532087003	MW-8R-1022	Water	10/20/22 11:30	10/21/22 10:20
30532087004	MW-8R-MS-1022	Water	10/20/22 11:30	10/21/22 10:20
30532087005	MW-8R-MSD-1022	Water	10/20/22 11:30	10/21/22 10:20
30532087006	MW-9-1022	Water	10/20/22 10:45	10/21/22 10:20
30532087007	MW-10R-1022	Water	10/20/22 10:00	10/21/22 10:20
30532087008	MW-11-1022	Water	10/20/22 10:55	10/21/22 10:20
30532087009	MW-12R-1022	Water	10/20/22 10:10	10/21/22 10:20
30532087010	MW-14R-1022	Water	10/20/22 10:10	10/21/22 10:20
30532087011	missing/ please delete sample	Water	10/20/22 12:40	10/21/22 10:20
30532087012	MW-15RS-1022	Water	10/20/22 12:00	10/21/22 10:20
30532087013	MW-17R-1022	Water	10/20/22 12:20	10/21/22 10:20
30532087014	MW-19R-1022	Water	10/20/22 11:20	10/21/22 10:20
30532087015	MW-20R-1022	Water	10/20/22 10:00	10/21/22 10:20
30532087016	FD-1022	Water	10/20/22 00:00	10/21/22 10:20
30532087017	Trip Blanks	Water	10/20/22 13:00	10/21/22 10:20

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg, NY

Pace Project No.: 30532087

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

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

Date: December 27, 2022

General Information:

15 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.

QC Batch: 542089

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

- LCS (Lab ID: 2630722)
- Benzo(g,h,i)perylene

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: 542089

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: 2630722)
- Naphthalene

Matrix Spikes:

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg, NY

Pace Project No.: 30532087

Method: EPA 8270D by SIM

Description: 8270D PAH SIM Reduced Volume

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

Date: December 27, 2022

QC Batch: 542089

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30532087003

MH: Matrix spike recovery and/or matrix spike duplicate recovery was above laboratory control limits. Result may be biased high.

- MS (Lab ID: 2630723)
 - Naphthalene
- MSD (Lab ID: 2630724)
 - Naphthalene

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

- MS (Lab ID: 2630723)
 - Acenaphthylene
 - Phenanthrene

R1: RPD value was outside control limits.

- MSD (Lab ID: 2630724)
 - Anthracene
 - Benzo(a)anthracene
 - Benzo(a)pyrene
 - Benzo(b)fluoranthene
 - Benzo(g,h,i)perylene
 - Benzo(k)fluoranthene
 - Chrysene
 - Fluoranthene
 - Indeno(1,2,3-cd)pyrene
 - Phenanthrene
 - Pyrene

Additional Comments:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg, NY

Pace Project No.: 30532087

Method: EPA 8260C

Description: 8260C MSV

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

Date: December 27, 2022

General Information:

16 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.

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:

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.

PROJECT NARRATIVE

Project: National Grid - Ogdensburg, NY

Pace Project No.: 30532087

Method: EPA 9012B

Description: 9012B Cyanide, Total

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

Date: December 27, 2022

General Information:

15 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: 542007

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 30532087003,30532087015

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

- MS (Lab ID: 2631334)
 - Cyanide
- MSD (Lab ID: 2631335)
 - Cyanide

Additional Comments:

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

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
without the written consent of Pace Analytical Services, LLC.