

**From:** [Devin T Shay](#)  
**To:** [Spellman, John \(DEC\)](#)  
**Cc:** [Stucker, Steven P. \(Steven.Stucker@nationalgrid.com\)](mailto:Steven.Stucker@nationalgrid.com)  
**Subject:** National Grid - Hudson - Annual groundwater report  
**Date:** Tuesday, August 17, 2021 3:40:39 PM  
**Attachments:** [NGrid\\_Hudson\\_2021 Groundwater Monitoring Report.pdf](#)

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John –

Attached please find the annual groundwater monitoring report for the Hudson site.

Kindly respond to confirm receipt.

Thanks,  
Devin

**Devin T. Shay, PG**

Program Manager / Principal Hydrogeologist

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August 17, 2021

Mr. John Spellman, PE  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Remedial Bureau C  
625 Broadway  
Albany, NY 12233-7013

**Re: National Grid Hudson Water Street Site  
Hudson, New York  
2021 Groundwater Monitoring Report**

Dear Mr. Spellman:

Attached for your information is the 2021 Groundwater Monitoring Report detailing the annual groundwater monitoring event and OM&M activities conducted from July 1, 2020, to June 30, 2021, at the National Grid Hudson (Water Street) Site. Site activities were conducted in accordance with the NYSDEC-approved OM&M Plan (BBL/ARCADIS; January 2007) and the *Static Water Level Evaluation and Ground Water Monitoring Program Recommendation Memorandum* letter (dated August 15, 2007).

The groundwater quality has been steadily improving over the years based on the number and extent of chemical detections in the monitoring wells. Based on the annual groundwater sampling analysis report in 2021, MW-11 had detections of BTEX [totaling 2.1 µg/L]. No other detections of any compounds analyzed were noted in the remaining wells.

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

Sincerely,

for SPS

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

National Grid

# 2021 Groundwater Monitoring Report



National Grid Hudson Water Street Site  
Water Street between Ferry Street and Broad Street  
Hudson, NY 12534

August 2021

Version 1





## **2021 Groundwater Monitoring Report**

National Grid Hudson Water Street Site  
Water Street between Ferry Street & Broad Street  
Hudson, NY 12534

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

Prepared by:  
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TEL: 800-220-3069  
[www.gesonline.com](http://www.gesonline.com)

GES Project:  
0603275.125340.221

Date:  
August 17, 2021

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Devin T. Shay, PG  
Program Manager / Principal Hydrogeologist



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## Acronyms

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



# 1 Introduction

## 1.1 Overview

Groundwater & Environmental Services, Inc. (GES) has prepared this 2021 Groundwater Monitoring Report (covering July 1, 2020 – June 30, 2021) for the Hudson (Water Street) Site, Hudson, New York. This annual report includes the requirements associated with the operation, maintenance, and monitoring of the Remedial Action Plan (RAP) at Operable Unit (OU) 1 of the Hudson (Water Street) Former Manufactured Gas Plant (MGP) Site located in Hudson, New York. Please refer to the *Operation, Maintenance, and Monitoring Plan* (OM&M Plan), dated January 2007, and the CDM Smith memorandum dated July 30, 2007, for well monitoring, groundwater sampling, site inspection requirements, and associated detailed site conditions and groundwater flow pattern documentation.

Groundwater monitoring has been conducted at the Site in order to evaluate the effectiveness of remedial activities previously completed at the Site and to monitor long-term groundwater quality trends. Currently, groundwater sampling at the Former MGP Site is performed on an annual basis.

The following Operation, Maintenance, and Monitoring (OM&M) activities conducted during this reporting period are summarized below:

- Quarterly site inspections, including checks on the surface cap, riverbank protection, security fencing, steel sheeting retaining wall, and the groundwater monitoring wells.
- Annual groundwater level measurements.
- Annual dense non-aqueous phase liquid (DNAPL) monitoring and collection, if necessary.
- Annual groundwater sampling, analysis and data validation. Water samples are submitted to Pace Analytical Services, LLC (Pace) for laboratory analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) and naphthalene for comparison to New York State Department of Environmental Conservation (NYSDEC) Ambient Water Quality Standards (AWQS).
- Any site maintenance that comes about as a result of the quarterly inspections.

## 1.2 Site Description

The Hudson (Water Street) Former Manufactured Gas Plant Site located in Hudson, New York is comprised of approximately two acres of land and is owned by the City of Hudson (refer to **Figure 1 – Site Location Map** and **Figure 2 – Post Remediation Site Conditions** with current groundwater table elevations). The remedial action plan in place at the site was substantially completed in December 2006 and the OM&M Plan was finalized in January 2007 to provide a method for monitoring its effectiveness.

The objective of the post-construction groundwater monitoring task within the OM&M plan is to characterize post-remedy groundwater flow patterns and assess the quality of shallow groundwater as it leaves the site. Groundwater samples are analyzed for BTEX and naphthalene.



## 2 Quarterly Site Inspections and Groundwater Monitoring Activities

### 2.1 Quarterly Site Inspections

GES conducted quarterly site inspections during this reporting period. These quarterly inspections include checking the surface cap, riverbank protection, security fencing, steel sheeting retaining wall, and the groundwater monitoring wells.

In general, the Site is in good condition and in compliance.

**Attachment A** includes the Quarterly Site Inspection Forms.

### 2.2 Groundwater Well Gauging

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

- To determine the general groundwater flow direction on site.

Annual gauging field data is presented in **Table 2**. In general, site groundwater flows radially outward from the former gas holder area toward the Hudson River, consistent with past groundwater elevation data.

### 2.3 Annual DNAPL Monitoring and Collection

Annual DNAPL monitoring was conducted at RW-1, RW-2, and CW-01A. No DNAPL product was recovered in any of the wells. No odors were noted. Annual DNAPL monitoring and recovery tables are included as part of **Attachment B**. To date, no DNAPL has been recovered from these passive wells.

### 2.4 Groundwater Well Sampling and Analysis

Groundwater samples were collected from monitoring wells MW-03, MW-05, MW-06 and MW-11 on June 16, 2021. The wells were purged using a peristaltic pump. Field Measurements of pH, conductivity, turbidity, dissolved oxygen, temperature, total dissolved solids and oxidation-reduction potential were recorded using a Horiba U-52 water quality meter during sample collection. Samples were collected once field parameters stabilized. Field monitoring data and the chain-of-custody record are included in **Attachment B**.

Four aqueous field samples, a field duplicate, and trip blank were analyzed for BTEX (USEPA Method 8260C) and naphthalene. The samples were analyzed by Pace in accordance with the NYSDEC Analytical Services Protocol. Analytical results are summarized in **Table 1**. The Analytical Lab Report and Data Usability Summary Report are presented in **Appendix C**.

### 2.5 Site Maintenance

Site inspections during this reporting period indicated no maintenance was required on site. Photographs from quarterly site visits are included in **Attachment D**.



### 3 Conclusions and Recommendations

#### 3.1 Conclusions

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

- Quarterly site inspections demonstrate that the site is in good condition and in compliance.
- Annual static water level measurements show that the groundwater direction is radially outward from the former gas holder area.
- Annual DNAPL monitoring indicated no collectable product.
- MW-11 had a total BTEX concentration of 2.1 micrograms per liter ( $\mu\text{g/L}$ ). This is the only well with a detected concentration of any parameter analyzed. Reference **Table 1** for historical data.

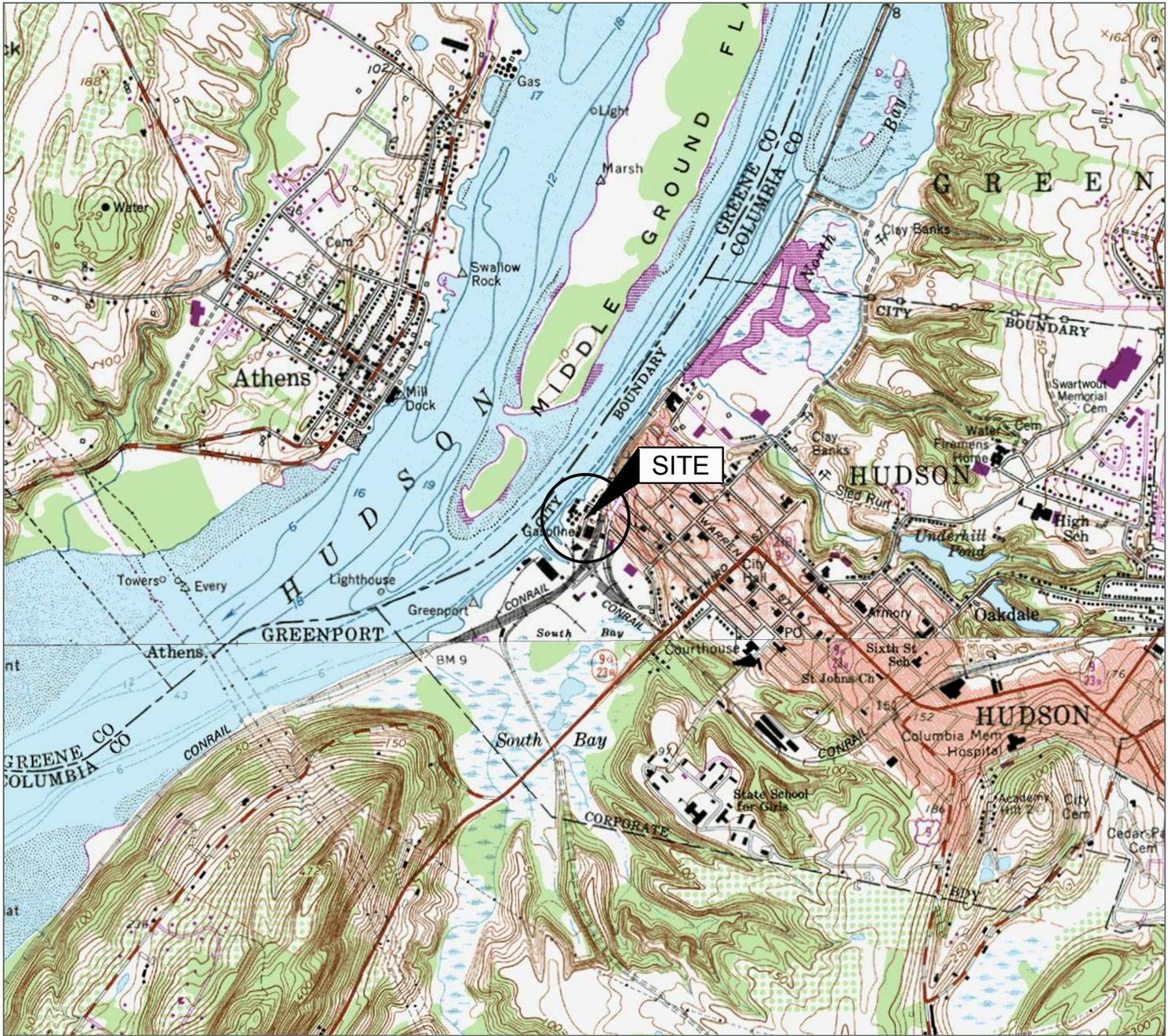
#### 3.2 Recommendations

It is recommended that all OM&M activities continue, with the next report due in July 2022.



## Figures

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



Site Location Map

National Grid  
 Water Street  
 Hudson, New York

Drawn  
 W.G.S.  
 Designed

Approved



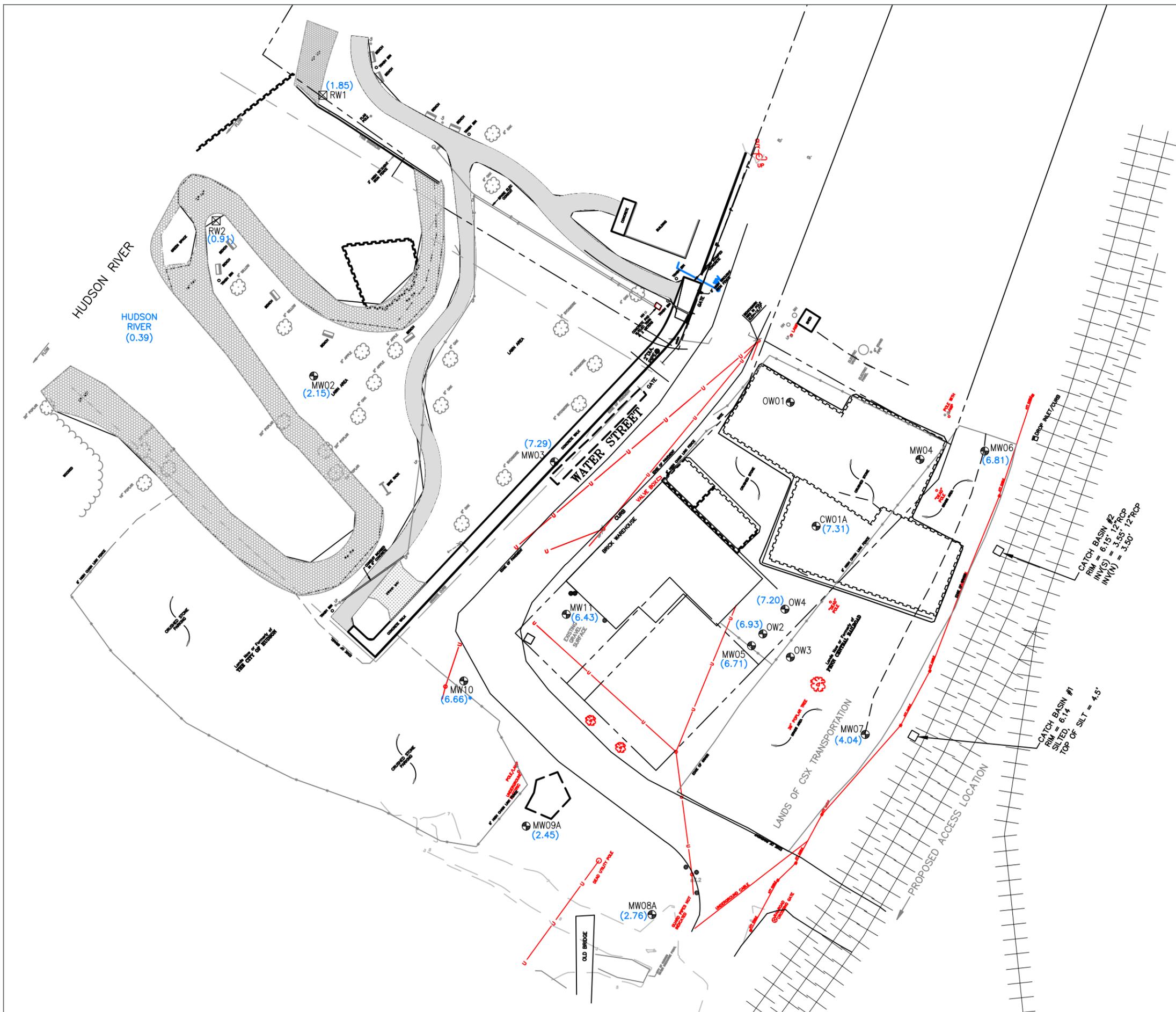
Date  
 7/6/18  
 Figure  
 1

Scale In Feet



Groundwater & Environmental Services, Inc.

M:\Graphics\0600-Syracuse\Misc\National Grid\Hudson\Hudson\_SM.dwg, B60 sm, WShea



- LEGEND**
- PROPERTY BOUNDARY
  - ⊕ MONITORING WELL
  - ⊗ RECOVERY WELL
  - (6.10) GROUNDWATER ELEVATION (ft. amsl)
  - ft. amsl FEET ABOVE MEAN SEA LEVEL
  - (1.88)\* ESTIMATED VALUE

Groundwater Elevation Map June 17, 2021	
National Grid Water Street Hudson, New York	
Drawn W.G.S. Designed	Date 6/25/21 Figure 1
Approved	
 Scale In Feet   Groundwater & Environmental Services, Inc.	



## Tables

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**Table 1**  
**Groundwater Analytical Data**  
 MW-03

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	06/01/09	06/02/10	06/07/11	06/12/12	06/11/13	06/09/14	06/02/15	06/06/16	06/22/17	06/14/18	06/13/19	06/24/20	06/17/21
Benzene	5	1	1	ND (<1.0)												
Toluene	1000	5	1	ND (<1.0)												
Ethylbenzene	700	5	1	ND (<1.0)												
Xylene (total)	10000	5	3	ND (<2.0)	ND (<3.0)											
Naphthalene	N/A	10	1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	1.1	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<2.0)				

All values reported in µg/L.

- NYSDEC = New York State Department of Environmental Conservation
- AWQS = Ambient Water Quality Standards
- ND (<#) = Not detected above laboratory reporting limits (indicated by #)
- NR = Not Reported
- Bolded** = values indicate exceedance of the NYSDEC AWQS



**Table 1**  
**Groundwater Analytical Data**  
 MW-05

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	06/01/09	06/02/10	06/07/11	06/12/12	06/11/13	06/09/14	06/02/15	06/06/16	06/22/17	06/14/18	06/13/19	06/24/20	06/17/21
Benzene	5	1	1	ND (<1.0)												
Toluene	1000	5	1	ND (<1.0)												
Ethylbenzene	700	5	1	ND (<1.0)												
Xylene (total)	10000	5	3	ND (<2.0)	ND (<3.0)											
Naphthalene	N/A	10	1	ND (<1.0)	ND (<2.0)											

All values reported in µg/L.

- NYSDEC = New York State Department of Environmental Conservation
- AWQS = Ambient Water Quality Standards
- ND (<#) = Not detected above laboratory reporting limits (indicated by #)
- NR = Not Reported
- Bolded** = values indicate exceedance of the NYSDEC AWQS



**Table 1**  
**Groundwater Analytical Data**  
 MW-06

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	06/01/09	06/02/10	06/07/11	06/12/12	06/11/13	06/09/14	06/02/15	06/06/16	06/22/17	06/14/18	06/13/19	06/24/20	06/17/21
Benzene	5	1	1	ND (<1.0)												
Toluene	1000	5	1	ND (<1.0)												
Ethylbenzene	700	5	1	ND (<1.0)												
Xylene (total)	10000	5	3	ND (<2.0)	ND (<3.0)											
Naphthalene	N/A	10	1	ND (<1.0)	ND (<2.0)											

All values reported in µg/L.

NYSDEC

= New York State Department of Environmental Conservation

AWQS

= Ambient Water Quality Standards

ND (<#)

= Not detected above laboratory reporting limits (indicated by #)

NR

= Not Reported

**Bolded**

= values indicate exceedance of the NYSDEC AWQS



**Table 1**  
**Groundwater Analytical Data**  
 MW-11

Parameter	EPA - Maximum Allowable (µg/L)	NYSDEC AWQS (µg/L)	Reporting Level (µg/L)	06/01/09	06/02/10	06/07/11	06/12/12	06/11/13	06/09/14	06/02/15	06/06/16	06/22/17	06/14/18	06/13/19	06/24/20	06/17/21
Benzene	5	1	1	4.6	<b>12</b>	3	2.9	ND (<1.0)	1.9	ND (<4.0)	<b>5.8</b>	2.6	<b>21.7</b>	4.3	<b>15.6</b>	2.1
Toluene	1000	5	1	ND (<1.0)	ND (<4.0)	ND (<4.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<1.0)					
Ethylbenzene	700	5	1	4.9	12	7	1.8	ND (<1.0)	1.1	ND (<4.0)	ND (<4.0)	ND (<1.0)	10.4	2.5	6.6	ND (<1.0)
Xylene (total)	10000	5	3	ND (<2.0)	4.6	3.3	ND (<2.0)	ND (<2.0)	ND (<2.0)	ND (<8.0)	ND (<8.0)	ND (<3.0)	4.5	ND (<3.0)	4.1	ND (<3.0)
Naphthalene	N/A	10	1	ND (<1.0)	2.6	2.5	ND (<1.0)	ND (<1.0)	ND (<1.0)	ND (<4.0)	ND (<4.0)	ND (<2.0)	3.3	ND (<2.0)	4.7	ND (<2.0)

All values reported in µg/L.

NYSDEC

= New York State Department of Environmental Conservation

AWQS

= Ambient Water Quality Standards

ND (<#)

= Not detected above laboratory reporting limits (indicated by #)

NR

= Not Reported

**Bolded**

= values indicate exceedance of the NYSDEC AWQS



**Table 2**  
**Water Level Elevations**

Well ID.	Water Level Elevation (feet amsl)									
	06/11/07	06/20/07	06/26/07	07/24/07	08/14/07	08/19/07	09/13/07	12/01/07	03/10/08	06/10/08
<b>MW-02</b>	1.73	1.95	0.95	1.79	1.96	1.77	1.72	1.23	1.32	1.77
<b>MW-03</b>	6.66	6.72	5.28	6.87	7.10	6.96	6.60	6.59	6.91	6.71
<b>MW-05</b>	6.67	6.97	5.70	6.82	7.02	6.87	6.90	7.12	6.99	6.88
<b>MW-06</b>	6.29	6.64	6.32	6.35	6.47	6.30	6.24	6.16	5.81	6.29
<b>MW-07</b>	3.84	4.09	3.86	3.54	3.56	3.39	3.65	4.76	6.09	3.84
<b>MW-08A</b>	2.89	3.46	2.51	2.62	2.74	2.52	2.61	2.88	3.52	2.80
<b>MW-09A</b>	2.92	3.15	2.84	3.11	3.25	3.25	3.13	2.85	2.86	2.95
<b>MW-10*</b>	6.99	7.08	6.52	7.57	6.49	6.31	7.17	6.59	7.94	6.42
<b>MW-11</b>	6.77	6.76	6.45	6.63	6.21	6.04	6.80	7.15	8.71	6.82
<b>OW-2</b>	6.93	7.10	5.88	6.97	7.12	6.99	7.25	7.22	7.10	7.00
<b>OW-4</b>	7.14	7.33	6.66	7.18	7.32	7.16	7.24	7.38	7.31	7.21
<b>Hudson River</b>	0.84	2.19	0.54	0.49	-0.86	1.29	-0.21	-0.74	-0.51	2.39
<b>CW-01A</b>	7.55	n/a	n/a	n/a	n/a	n/a	8.02	7.67	8.89	7.97
<b>RW-1</b>	1.49	n/a	n/a	n/a	n/a	n/a	1.05	0.17	0.99	2.27
<b>RW-2</b>	0.96	n/a	n/a	n/a	n/a	n/a	0.85	-0.54	-0.14	2.40

Notes:

- \* = Estimated elevation; well paved over during surveying but uncovered presently and can be monitored
- amsl = Above Mean Sea Level



**Table 2**  
**Water Level Elevations**

Well ID.	Water Level Elevation (feet amsl)									
	09/16/08	12/03/08	03/04/09	06/01/09	09/09/09	12/14/09	03/08/10	06/02/10	09/14/10	12/01/10
<b>MW-02</b>	1.70	1.36	0.54	1.90	1.92	1.75	1.17	1.98	1.97	1.59
<b>MW-03</b>	7.01	6.83	6.07	6.77	7.49	7.02	6.67	6.97	7.05	6.91
<b>MW-05</b>	7.48	7.39	6.47	6.65	7.63	7.40	6.92	6.81	7.37	7.18
<b>MW-06</b>	6.57	6.24	5.39	6.36	6.79	6.36	5.78	6.22	6.00	6.20
<b>MW-07</b>	4.41	4.92	4.27	4.05	4.67	4.94	5.19	3.83	3.64	4.29
<b>MW-08A</b>	2.94	2.91	2.36	2.75	2.76	2.91	3.31	2.61	1.54	1.96
<b>MW-09A</b>	3.17	2.80	2.22	2.90	3.17	3.02	2.75	2.88	3.20	2.98
<b>MW-10*</b>	6.94	6.31	5.36	5.72	6.79	7.89	5.77	5.75	6.91	5.92
<b>MW-11</b>	7.22	7.75	7.17	6.80	6.71	7.65	8.09	6.27	5.85	6.87
<b>OW-2</b>	7.62	7.45	6.57	6.78	7.82	7.47	7.02	6.90	7.00	7.25
<b>OW-4</b>	7.70	7.52	6.76	7.06	7.89	7.60	7.19	7.11	7.16	7.43
<b>Hudson River</b>	1.57	-0.87	1.79	1.03	0.61	-0.23	-0.81	1.49	2.54	3.53
<b>CW-01A</b>	8.02	8.26	7.87	7.67	7.40	8.27	8.67	6.65	7.92	n/a
<b>RW-1</b>	0.77	0.24	1.11	1.51	0.14	-0.05	0.44	1.87	2.23	3.92
<b>RW-2</b>	0.78	-0.66	1.77	1.19	0.48	-0.39	-0.80	1.61	2.54	3.46

Notes:

\* = Estimated elevation; well paved over during surveying but uncovered presently and can be monitored  
 amsl = Above Mean Sea Level



**Table 2**  
**Water Level Elevations**

Well ID.	Water Level Elevation (feet amsl)									
	03/09/11	06/07/11	09/13/11	11/15/11	03/19/12	06/12/12	09/17/12	12/03/12	03/06/13	06/11/13
<b>MW-02</b>	0.67	2.50	3.43	1.75	1.08	2.03	1.68	1.34	1.00	2.30
<b>MW-03</b>	6.05	7.27	8.44	7.69	6.65	6.97	7.35	6.70	6.65	7.15
<b>MW-05</b>	6.35	6.92	7.82	7.85	6.74	6.77	7.12	7.07	6.62	6.89
<b>MW-06</b>	5.42	6.64	7.45	6.54	5.64	6.39	6.56	6.04	5.65	6.84
<b>MW-07</b>	5.86	4.02	5.71	4.51	4.17	3.84	4.28	4.12	4.64	5.22
<b>MW-08A</b>	3.66	2.83	4.10	2.86	2.51	2.71	2.84	2.66	2.76	4.01
<b>MW-09A</b>	2.40	3.05	4.10	3.17	2.52	3.00	3.00	2.68	2.50	3.25
<b>MW-10*</b>	5.91	5.81	6.58	6.47	5.27	5.79	6.23	5.38	5.07	5.56
<b>MW-11</b>	8.75	6.57	7.84	6.87	6.84	6.50	6.69	6.65	6.87	8.89
<b>OW-2</b>	6.44	7.17	8.02	8.03	6.82	6.87	7.32	7.28	6.72	7.06
<b>OW-4</b>	6.71	7.46	8.26	7.94	7.00	7.12	7.51	7.26	6.91	7.38
<b>Hudson River</b>	0.57	0.87	3.25	-1.21	2.48	1.99	-1.39	0.00	2.89	1.69
<b>CW-01A</b>	n/a	n/a	8.60	7.49	7.61	7.45	7.62	7.07	8.15	9.25
<b>RW-1</b>	1.33	1.67	3.06	-0.39	2.09	1.50	-0.61	0.92	2.27	2.31
<b>RW-2</b>	0.78	1.06	2.38	-1.00	2.46	1.93	-1.11	0.06	2.84	1.76

Notes:

- \* = Estimated elevation; well paved over during surveying but uncovered presently and can be monitored
- amsl = Above Mean Sea Level



**Table 2**  
**Water Level Elevations**

Well ID.	Water Level Elevation (feet amsl)												
	09/16/13	12/10/13	03/09/14	06/09/14	09/08/14	12/01/14	06/02/15	06/06/16	06/22/17	06/14/18	06/13/19	06/24/20	06/17/21
<b>MW-02</b>	1.77	2.05	n/a	2.17	1.70	1.17	1.61	2.03	2.33	2.30	2.40	2.49	2.15
<b>MW-03</b>	7.05	6.57	6.24	7.04	6.95	6.90	6.67	7.77	7.44	6.17	6.72	6.89	7.29
<b>MW-05</b>	6.92	6.57	6.39	6.67	6.75	6.92	6.37	6.62	6.99	6.37	6.62	6.47	6.71
<b>MW-06</b>	6.38	6.58	5.38	6.64	6.29	6.27	6.34	6.24	7.10	6.39	6.29	6.17	6.81
<b>MW-07</b>	3.70	4.07	3.65	3.96	3.73	4.61	3.97	4.02	4.44	3.69	4.20	3.61	4.04
<b>MW-08A</b>	2.65	2.86	2.90	2.84	2.58	3.06	2.86	2.96	3.04	2.96	2.92	2.63	2.76
<b>MW-09A</b>	2.97	2.83	2.28	2.82	2.92	2.95	2.60	3.05	2.98	3.00	2.60	2.56	2.45
<b>MW-10*</b>	5.67	5.29	4.75	6.47	6.79	6.27	6.18	6.49	5.71	5.54	5.79	6.81	6.66
<b>MW-11</b>	6.11	6.99	7.47	6.52	5.74	7.70	7.10	6.75	7.09	6.02	6.63	5.85	6.43
<b>OW-2</b>	7.07	6.56	6.41	6.82	6.82	7.02	6.52	6.72	7.04	6.54	6.87	6.49	6.93
<b>OW-4</b>	7.20	6.81	6.56	7.14	7.01	7.18	6.74	6.91	7.32	6.80	7.04	8.69	7.20
<b>Hudson River</b>	1.69	0.87	n/a	1.49	1.51	2.29	1.87	0.49	1.85	-1.46	2.67	-4.46	0.39
<b>CW-01A</b>	6.89	8.09	n/a	7.27	5.99	8.54	8.15	8.23	8.02	6.62	7.17	5.77	7.31
<b>RW-1</b>	1.09	1.37	1.14	1.05	1.07	1.81	1.24	0.43	0.50	0.59	2.16	0.74	1.85
<b>RW-2</b>	1.56	0.96	0.11	1.38	1.66	2.21	1.76	0.36	0.64	-0.94	2.52	-0.64	0.91

Notes:

- \* = Estimated elevation; well paved over during surveying but uncovered presently and can be monitored.
- amsl = Above Mean Sea Level



## Appendix A – Quarterly Inspection Forms

---

**Site Inspection**  
**Hudson-Water Street**  
**Operable Unit 1**  
**Hudson, New York**

Date: 9/24/2020  
 Technician: KL

Time: 11:00  
 Weather: Sunny 65

<b>Surface Cover Areas</b>			
Excessive Settlement Observed	YES	NO	COMMENTS:
Cracks or Potholes Observed	YES	NO	
Depressions and/or Rutting Observed	YES	NO	
Exposed subbase materials Observed	YES	NO	

<b>Erosion Controls (Rip-Rap or Sod)</b>			
Exposed or damaged Geotextile layer(s) Observed	YES	NO	COMMENTS:
Excessive Settlement Observed	YES	NO	
Stressed Vegetation Observed	YES	NO	

<b>Steel Sheetpile Retaining Wall</b>			
Settlement of Wall	YES	NO	COMMENTS:
Subsidence or Cracking of Soils Behind the Wall	YES	NO	
Cracking or Separation of Wall Joints	YES	NO	

<b>Trees, Shrubs and other Planting Materials</b>			
Strong Growth Observed	YES	NO	COMMENTS:

<b>Surface Water Quality</b>					
Sheens Observed On:	Rip-Rap	NONE	MINOR	SIGNIFICANT	COMMENTS:
	Sheetpile Wall	NONE	MINOR	SIGNIFICANT	
	Other Water Surfaces	NONE	MINOR	SIGNIFICANT	

**General Comments:**

**Site Inspection**  
**Hudson-Water Street**  
**Operable Unit 1**  
**Hudson, New York**

Date: 12/16/2020  
 Technician: KL

Time: 13:00  
 Weather: Cloudy 22

<b>Surface Cover Areas</b>			
Excessive Settlement Observed	YES	NO	COMMENTS:
Cracks or Potholes Observed	YES	NO	
Depressions and/or Rutting Observed	YES	NO	
Exposed subbase materials Observed	YES	NO	

<b>Erosion Controls (Rip-Rap or Sod)</b>			
Exposed or damaged Geotextile layer(s) Observed	YES	NO	COMMENTS:
Excessive Settlement Observed	YES	NO	
Stressed Vegetation Observed	YES	NO	

<b>Steel Sheetpile Retaining Wall</b>			
Settlement of Wall	YES	NO	COMMENTS:
Subsidence or Cracking of Soils Behind the Wall	YES	NO	
Cracking or Separation of Wall Joints	YES	NO	

<b>Trees, Shrubs and other Planting Materials</b>			
Strong Growth Observed	YES	NO	COMMENTS:

<b>Surface Water Quality</b>					
Sheens Observed On:	Rip-Rap	NONE	MINOR	SIGNIFICANT	COMMENTS:
	Sheetpile Wall	NONE	MINOR	SIGNIFICANT	
	Other Water Surfaces	NONE	MINOR	SIGNIFICANT	

**General Comments:**

**Site Inspection**  
**Hudson-Water Street**  
**Operable Unit 1**  
**Hudson, New York**

Date: 3/25/2021  
 Technician: KL

Time: 11:30  
 Weather: Cloudy 57

<b>Surface Cover Areas</b>			
Excessive Settlement Observed	YES	NO	COMMENTS:
Cracks or Potholes Observed	YES	NO	
Depressions and/or Rutting Observed	YES	NO	
Exposed subbase materials Observed	YES	NO	

<b>Erosion Controls (Rip-Rap or Sod)</b>			
Exposed or damaged Geotextile layer(s) Observed	YES	NO	COMMENTS:
Excessive Settlement Observed	YES	NO	
Stressed Vegetation Observed	YES	NO	

<b>Steel Sheetpile Retaining Wall</b>			
Settlement of Wall	YES	NO	COMMENTS:
Subsidence or Cracking of Soils Behind the Wall	YES	NO	
Cracking or Separation of Wall Joints	YES	NO	

<b>Trees, Shrubs and other Planting Materials</b>			
Strong Growth Observed	YES	NO	COMMENTS:

<b>Surface Water Quality</b>					
Sheens Observed On:	Rip-Rap	NONE	MINOR	SIGNIFICANT	COMMENTS:
	Sheetpile Wall	NONE	MINOR	SIGNIFICANT	
	Other Water Surfaces	NONE	MINOR	SIGNIFICANT	

**General Comments:**

**Site Inspection**  
**Hudson-Water Street**  
**Operable Unit 1**  
**Hudson, New York**

Date: 6/17/2021  
 Technician: KL

Time: 9:30  
 Weather: Sunny 67

<b>Surface Cover Areas</b>			
Excessive Settlement Observed	YES	NO	COMMENTS:
Cracks or Potholes Observed	YES	NO	
Depressions and/or Rutting Observed	YES	NO	
Exposed subbase materials Observed	YES	NO	

<b>Erosion Controls (Rip-Rap or Sod)</b>			
Exposed or damaged Geotextile layer(s) Observed	YES	NO	COMMENTS:
Excessive Settlement Observed	YES	NO	
Stressed Vegetation Observed	YES	NO	

<b>Steel Sheetpile Retaining Wall</b>			
Settlement of Wall	YES	NO	COMMENTS:
Subsidence or Cracking of Soils Behind the Wall	YES	NO	
Cracking or Separation of Wall Joints	YES	NO	

<b>Trees, Shrubs and other Planting Materials</b>			
Strong Growth Observed	YES	NO	COMMENTS:

<b>Surface Water Quality</b>					
Sheens Observed On:	Rip-Rap	NONE	MINOR	SIGNIFICANT	COMMENTS:
	Sheetpile Wall	NONE	MINOR	SIGNIFICANT	
	Other Water Surfaces	NONE	MINOR	SIGNIFICANT	

**General Comments:**



## Appendix B – Well Sampling Field Data

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Well ID.	Sample?	Well Size	Well Material	Stickup-Flush	DTP	DTW	DTB	Sump ?	Comments
MW-02	No	2"	PVC	Flush		3.95	20.50	No	
MW-03	Yes	2"	PVC	Flush		1.68	25.50	No	
MW-05	Yes	2"	PVC	Stickup	-	5.86	28.10	No	Duplicate Sample 1105
MW-06	Yes	2"	PVC	Stickup	-	5.03	26.10	Yes	MS/MSD 1200
MW-07	No	2"	PVC	Stickup	-	4.90	24.55	Yes	
MW-08A	No	2"	PVC	Flush		3.60	25.85	No	
MW-09A	No	2"	PVC	Stickup		5.95	25.07	Yes	
MW-10	No	2"	PVC	Flush		2.03	28.70	Yes	
MW-11	Yes	2"	PVC	Flush		3.14	8.10	Yes	
OW-2	No	2"	PVC	Stickup	-	5.89	27.55	Yes	
OW-4	No	2"	PVC	Stickup	-	5.46	28.05	Yes	
Hudson River	No					9.90	N/C	No	Chiseled square adjacent to the 8th railing post on top of the sheetpile wall.
CW-01A	No	4"	Steel	Flush	-	2.36	30.90	Yes	
RW-1	No	4"	PVC	Flush		3.24	26.50	Yes	
RW-2	No	4"	PVC	Flush		4.05	22.35	Yes	

Sampling Personnel: K  
 Job Number: 0603200-125340-221  
 Well Id. **MW-03**

Date: 6/17/21  
 Weather: Sunny FD  
 Time In: 11:05 Time Out: 11:50

Well Information		TOC	Other
Depth to Water:	(feet)	<u>1.68</u>	
Depth to Product:	(feet)		
Depth to Bottom:	(feet)	25.50	
Length of Water Column:	(feet)	<u>23.82</u>	
Volume of Water in Well:	(gal)	<u>3.81</u>	
Three Well Volumes:	(gal)	<u>11.43</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: \_\_\_\_\_

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

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

Bailer  Peristaltic   
 Teflon  Stainless St.   
 Bailer  Peristaltic   
 Grundfos Pump  Polyethylene   
 Grundfos Pump

Time	DTW (feet)	Temp (°C)	pH	ORP (mV)	Conductivity (mS/cm)	Turbidity (NTU)	DO (mg/L)	TDS (g/L)
11:15	2.28	19.27	7.13	-75	1.17	28.7	0.00	0.743
11:20	4.03	17.10	6.93	-87	0.982	12.9	0.00	0.627
11:25	5.27	17.14	6.93	-91	0.962	10.2	0.00	0.616
11:30	7.62	17.51	6.87	-91	0.949	10.2	0.00	0.608
11:35	9.26	17.20	6.85	-91	0.947	11.2	0.00	0.605
11:40	10.83	17.24	6.87	-93	0.943	11.4	0.00	0.604
11:45	12.73	17.25	6.87	-93	0.942	11.5	0.00	0.604

**Sampling Information:**

USEPA SW-846 Method 8260 VOC's BTEX Including Naphthalene 3 - 40 mL vials Yes  No

Sample ID: MW-03-0621 Duplicate? Yes  No   
 Sample Time: 11:45 MS/MSD? Yes  No

Shipped: Pace Courier Pickup   
 Drop-off Albany Service Center

Laboratory: Pace Analytical Greensburg, PA

Comments/Notes: \_\_\_\_\_

Sampling Personnel: Peter Lyon  
 Job Number: 0603200-125340-221  
 Well Id: MW-05

Date: 6/17/21  
 Weather: 70 Sunny  
 Time In: 1030 Time Out: 1110

Well Information		TOC	Other
Depth to Water:	(feet)	<u>5.76</u>	
Depth to Product:	(feet)	<u>-</u>	
Depth to Bottom:	(feet)	<u>28.10</u>	
Length of Water Column:	(feet)	<u>22.34</u>	
Volume of Water in Well:	(gal)	<u>2.59</u>	
Three Well Volumes:	(gal)	<u>7.79</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) <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>1035</u>	<u>7.21</u>	<u>15.24</u>	<u>7.15</u>	<u>-129</u>	<u>.946</u>	<u>0.0</u>	<u>3.30</u>	<u>.604</u>
<u>1040</u>	<u>8.76</u>	<u>14.64</u>	<u>7.06</u>	<u>-128</u>	<u>.879</u>	<u>27.4</u>	<u>.67</u>	<u>.562</u>
<u>1045</u>	<u>9.30</u>	<u>14.60</u>	<u>7.05</u>	<u>-128</u>	<u>.872</u>	<u>30.1</u>	<u>.55</u>	<u>.558</u>
<u>1050</u>	<u>10.38</u>	<u>14.51</u>	<u>7.04</u>	<u>-128</u>	<u>.867</u>	<u>7.3</u>	<u>.40</u>	<u>.555</u>
<u>1055</u>	<u>11.49</u>	<u>14.57</u>	<u>7.03</u>	<u>-128</u>	<u>.864</u>	<u>1.7</u>	<u>.36</u>	<u>.553</u>
<u>1100</u>	<u>12.43</u>	<u>14.48</u>	<u>7.04</u>	<u>-128</u>	<u>.862</u>	<u>1.7</u>	<u>.23</u>	<u>.552</u>
<u>1105</u>	<u>13.51</u>	<u>14.49</u>	<u>7.04</u>	<u>-128</u>	<u>.861</u>	<u>2.9</u>	<u>.07</u>	<u>.551</u>

Sampling Information:

USEPA SW-846 Method 8260      VOC's BTEX      Including Naphthalene      6 - 40 mL vials      Yes  No

Sample ID: MW-05-0621      Duplicate?      Yes  No       FD-0621      Shipped:      Pace Courier Pickup   
 Sample Time: 1105      MS/MSD?      Yes  No       Drop-off Albany Service Center

Comments/Notes: \_\_\_\_\_      Laboratory:      Pace Analytical  
 Greensburg, PA

Sampling Personnel: Peter Lyon  
 Job Number: 0603200-125340-221  
 Well Id. **MW-06**

Date: 6/17/21  
 Weather: 70° Sunny  
 Time In: 1127 Time Out: 1205

Well Information		TOC	Other
Depth to Water:	(feet)	<u>5.03</u>	
Depth to Product:	(feet)	<u>-</u>	
Depth to Bottom:	(feet)	<u>26.10</u>	
Length of Water Column:	(feet)	<u>21.07</u>	
Volume of Water in Well:	(gal)	<u>3.37</u>	
Three Well Volumes:	(gal)	<u>10.11</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 checked="" 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) <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)
<u>1130</u>	<u>6.41</u>	<u>15.46</u>	<u>6.74</u>	<u>-78</u>	<u>1.18</u>	<u>3.4</u>	<u>1.06</u>	<u>.757</u>
<u>1135</u>	<u>7.98</u>	<u>14.92</u>	<u>6.63</u>	<u>-82</u>	<u>1.19</u>	<u>0.7</u>	<u>.07</u>	<u>.761</u>
<u>1140</u>	<u>9.52</u>	<u>14.77</u>	<u>6.65</u>	<u>-85</u>	<u>1.20</u>	<u>0.5</u>	<u>0.00</u>	<u>.768</u>
<u>1145</u>	<u>11.04</u>	<u>14.65</u>	<u>6.62</u>	<u>-86</u>	<u>1.20</u>	<u>0.0</u>	<u>0.00</u>	<u>.768</u>
<u>1150</u>	<u>12.84</u>	<u>14.61</u>	<u>6.61</u>	<u>-86</u>	<u>1.20</u>	<u>0.0</u>	<u>0.00</u>	<u>.769</u>
<u>1200<sup>1255</sup></u>	<u>13.64</u>	<u>14.70</u>	<u>6.61</u>	<u>-87</u>	<u>1.20</u>	<u>0.0</u>	<u>0.00</u>	<u>.767</u>
<u>1200</u>	<u>14.94</u>	<u>14.68</u>	<u>6.60</u>	<u>-87</u>	<u>1.20</u>	<u>1.0</u>	<u>0.00</u>	<u>.768</u>

Sampling Information:

USEPA SW-846 Method 8260 VOC's BTEX Including Naphthalene 9 - 40 mL vials Yes  No

**MW-06-MS-0621 MW-06-MSD-0621**

Sample ID: MW-06-0621 Duplicate? Yes  No   
 Sample Time: 1200 MS/MSD? Yes  No

Shipped: Pace Courier Pickup   
 Drop-off Albany Service Center

Comments/Notes: \_\_\_\_\_

Laboratory: Pace Analytical Greensburg, PA

National Grid  
Water Street, Hudson, New York

Sampling Personnel: K  
Job Number: 0603200-125340-221  
Well Id. **MW-11**

Date: 6/17/21  
Weather: Sunny 67  
Time In: 10:00 Time Out: 11:05

Well Information		TOC	Other
Depth to Water:	(feet)	<u>3.14</u>	
Depth to Product:	(feet)	<u>—</u>	
Depth to Bottom:	(feet)	8.10	
Length of Water Column:	(feet)	<u>4.96</u>	
Volume of Water in Well:	(gal)	<u>0.79</u>	
Three Well Volumes:	(gal)	<u>2.38</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>2.00</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)
10:30	3.17	16.31	7.29	-46	1.75	93.8	0.00	1.11
10:35	3.17	16.82	7.06	-56	1.65	14.1	0.00	1.06
10:40	3.17	16.97	7.04	-57	1.62	12.0	0.00	1.04
10:45	3.17	17.10	7.04	-59	1.61	12.5	0.00	1.03
10:50	3.17	17.17	7.04	-62	1.41	13.2	0.00	1.03
10:55	3.17	17.33	7.04	-70	1.65	9.5	0.00	1.06
11:00	3.17	17.33	7.03	-70	1.66	9.3	0.00	1.06

Sampling Information:	
USEPA SW-846 Method 8260	VOC's BTEX Including Naphthalene
3 - 40 mL vials	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Sample ID: <u>MW-11-0621</u>	Duplicate? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Sample Time: <u>11:00</u>	MS/MSD? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Shipped: Pace Courier Pickup	<input checked="" type="checkbox"/>
Drop-off Albany Service Center	<input type="checkbox"/>
Comments/Notes:	Laboratory: Pace Analytical Greensburg, PA





## Appendix C – Data Usability Summary Report and Analytical Data

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Groundwater & Environmental Services, Inc.

708 North Main Street, Suite 201  
Blacksburg, VA 24060

T. 800.662.5067

July 20, 2021

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

RE: Data Usability Summary Report for National Grid: Water Street, Hudson, NY Site Data  
Package Pace Analytical Job No. **30426848**

Groundwater & Environmental Services, Inc. (GES) reviewed one data package (Laboratory Project Number **30426848**) from Pace Analytical Services, Inc., for the analysis of groundwater samples collected on June 17, 2021 from monitoring wells located at the National Grid: Water Street, Hudson, NY Site. Four aqueous samples and a field duplicate were analyzed for select volatile organic compounds (VOCs). Methodologies utilized were USEPA SW846 methods 8260C, with additional QC requirements of the NYSDEC ASP.

The data were reported as part of a complete full deliverable type B data validation. This usability report is generated from review of the following:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times
- Surrogate and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate: (MS/MSD) Correlations
- Field Duplicate Correlations
- Laboratory Control Sample (LCS)
- Preparation/Calibration Blanks
- Calibration/Low Level Standard Responses
- Instrumental Tunes
- Instrument MDLs
- Sample Quantitation and Identification

All items are determined to be acceptable for the DUSR level review and sample results are usable as reported. No data was qualified.

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. Laboratory – Field Cross Reference**

Lab ID	Sample ID	Matrix	Date Collected	Date Received	Comments
30426848001	MW-3-0621	Water	06/17/21 11:45	06/18/21 10:30	
30426848002	MW-5-0621	Water	06/17/21 11:05	06/18/21 10:30	
30426848003	MW-6-0621	Water	06/17/21 12:00	06/18/21 10:30	MS/MSD
30426848004	MW-6-MS-0621	Water	06/17/21 12:00	06/18/21 10:30	
30426848005	MW-6-MSD-0621	Water	06/17/21 12:00	06/18/21 10:30	
30426848006	MW-11-0621	Water	06/17/21 11:00	06/18/21 10:30	
30426848007	Field Duplicate-0621	Water		06/18/21 10:30	DUP MW-5
30426848008	Trip Blank	Water	06/17/21 12:00	06/18/21 10:30	

**BTEX and TCL Volatiles by EPA 8260C/NYSDEC ASP**

Sample holding times were met and instrumental tune fragmentations were within acceptance ranges. There were no positive detections in the field blank, trip blank, or method blank.

Calibrations standards show acceptable responses within analytical protocol and validation action limits. The blind field duplicate correlations were not calculated for MW-5-0621 and the duplicate sample, as neither sample reported above detection level concentrations.

The MS/MSD recoveries and relative percent differences are within laboratory specification. No qualification was necessary.

**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.



Bonnie Janowiak, Ph.D.  
Senior Project Chemist  
708 N Main St, Suite 201  
Blacksburg, VA 24060

## VALIDATION DATA QUALIFIER DEFINITIONS

- U** The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
- J** The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
- J-** The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
- J+** The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
- UJ** The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
- NJ** The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
- R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.

# **Sample Summaries and Laboratory Case Narratives**

## SAMPLE SUMMARY

Project: National Grid-Water Street, Hu  
Pace Project No.: 30426848

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30426848001	MW-3-0621	Water	06/17/21 11:45	06/18/21 10:30
30426848002	MW-5-0621	Water	06/17/21 11:05	06/18/21 10:30
30426848003	MW-6-0621	Water	06/17/21 12:00	06/18/21 10:30
30426848004	MW-6-MS-0621	Water	06/17/21 12:00	06/18/21 10:30
30426848005	MW-6-MSD-0621	Water	06/17/21 12:00	06/18/21 10:30
30426848006	MW-11-0621	Water	06/17/21 11:00	06/18/21 10:30
30426848007	Field Duplicate-0621	Water		06/18/21 10:30
30426848008	Trip Blank	Water	06/17/21 12:00	06/18/21 10:30

## REPORT OF LABORATORY ANALYSIS

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## PROJECT NARRATIVE

Project: National Grid-Water Street, Hu

Pace Project No.: 30426848

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**Method:** EPA 8260C

**Description:** 8260C MSV

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

**Date:** June 25, 2021

**General Information:**

8 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:**

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

## REPORT OF LABORATORY ANALYSIS

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## Appendix D – Photograph Log

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Site Photo – December 2020



Site Photo – March 2021



Site Photo – June 2021