AECOM

September 24, 2021

Mr. Douglas MacNeal
Division of Environmental Remediation
New York State Department of
Environmental Conservation
625 Broadway, 11th Floor
Albany, NY 12233

Groundwater Monitoring Event Report - 2021 Q2
Ithaca Court Street Former MGP Site - OU-2
Ithaca, New York
NYSDEC Site:7-55-008

Dear Mr. MacNeal,

On behalf of New York State Electric and Gas (NYSEG), AECOM USA, Inc. (AECOM) is pleased to present this Groundwater Monitoring Event (GME) report for the former Ithaca Court Street Manufactured Gas Plant (MGP) Operable Unit 2 (OU-2) site in Ithaca, New York (the "Site"). **Figure 1** attached shows the Site Location Plan.

This correspondence documents the findings of the GME completed over the period June 7 – 10, 2021 (2021 Q2 GME) which was undertaken in accordance with the Draft Site Management Plan (SMP; AECOM, 2019).

Results from the 2021 Q2 GME will be incorporated into the ongoing groundwater monitoring dataset in accordance with the requirements of the Draft SMP.

1. Background

The NYSEG Ithaca site is divided into two operable units (OUs). Operable Unit 1 (OU-1) consists of the former MGP parcel, surrounding sidewalks, and the location of the former tar duct structures under West Court Street from the site to North Meadow Street. Operable Unit 2 (OU-2) consists of any areas outside of the OU-1 boundary that may have been impacted by the migration of MGP residuals directly from OU-1 historical operations.

The primary constituents of concern at the Site are benzene, toluene, ethylbenzene, and xylenes (BTEX), polycyclic aromatic hydrocarbons (PAHs) and cyanide. The Site has undergone extensive remedial investigation and numerous interim remedial measures and remedial actions including excavations and historical structure removal have been completed. A history of the remedial investigations and actions completed at the Site is provided in the Draft SMP.

The Draft SMP was submitted to the New York State Department of Environmental Conservation (NYSDEC) in October 2019 and is pending approval. The Draft SMP outlines the monitoring requirements for the Site which include quarterly groundwater monitoring for 15 locations across the Site for two years (September 2020 – September 2022) to establish baseline conditions and to evaluate the potential for seasonal fluctuations in constituent concentrations. From year three through year five (October 2022 – October 2025), only wells containing MGP-related constituents at concentrations greater than the applicable water quality standards and guidance values will be sampled quarterly. The remaining wells will be sampled annually.

The 2021 Q2 GME is the third GME to be completed since submission of the Draft SMP to NYSDEC in October 2019.

2. Scope of Work

The scope of work completed for the 2021 Q2 GME included the following:

- On June 7, 2021, water level gauging was completed at the 15 groundwater wells specified for monitoring by the Draft SMP, namely; MW-C11, MW-C12, MW-C16, MW-22S, MW-23S, MW-24S, MW-25S, MW-28S, MW-31S, MW-33S, MW-40, MW-45S, MW-46S, MW-47S, and MW-48S. Groundwater monitoring well locations are presented in **Figure 2** attached.
- Water level gauging was also completed on June 7, 2021, at 26 additional locations where access was possible in order to assess water levels across the broader monitoring well network (refer **Table 1** attached).
- Each well was gauged for the presence of non-aqueous phase liquid (NAPL) using an oil-water interface probe.
- Over the period June 8 – 10, 2021, a total of 15 groundwater wells (MW-C11, MW-C12, MW-C16, MW-22S, MW-23S, MW-24S, MW-25S, MW-28S, MW-31S, MW-33S, MW-40, MW-45S, MW-46S, MW-47S, and MW-48S) were sampled in accordance with the Draft SMP. The following groundwater sampling activities were conducted:
  - Water level measurements were taken at each well prior to purging and sampling.
  - Each well was purged and sampled using low-stress (low flow) groundwater sampling methods by use of a peristaltic pump.
  - Field parameters, including pH, oxidation/reduction potential (ORP), dissolved oxygen (DO), and turbidity, were monitored and documented prior to sample collection. The following stabilization criteria were met for each parameter before sampling:
    - Temperature ±3%
    - pH ±1.0 unit
    - Dissolved Oxygen ±10%
    - Oxidation Reduction Potential ±10mV
    - Specific Conductivity ±3%
    - Drawdown <0.3'

    Groundwater purge and sampling forms are provided in **Appendix A**.
  - All wastewater generated during sampling (purge water, and decontamination fluids) was containerized in 55-gallon steel drums for off-Site disposal.
- Quality control samples were collected including one for every 20 field samples taken. Quality control samples consisted of a field duplicate, a matrix spike, a matrix spike duplicate, and an equipment blank. Based on the number of wells to be sampled (15), one set of quality control samples were required. A trip blank was sent daily with each set of VOC samples. Quality control samples were analyzed for BTEX, PAH and total cyanide.
- Groundwater samples were shipped on June 8 and 9, 2021 via courier to Eurofins Test America in Buffalo, New York for laboratory analysis. On June 10, 2021 groundwater samples were dropped off by AECOM at the Eurofins Test America service center in Albany, New York, to be shipped to Eurofins Test America in Buffalo, New York for laboratory analysis.

All activities were conducted in accordance with the Work Plan (AECOM, 2020a) that was submitted to, and approved by, the NYSDEC on September 1, 2020.

Further to the above, in response to the recommendation provided in the AECOM document titled *Subject: Groundwater Monitoring Event Report – September/October 2020 Ithaca Court Street Former MGP Site – OU-2, Ithaca, New York*, dated December 17, 2020 (AECOM, 2020b) regarding the removal of sediments and residual solids to the extent practicable in select wells, this was completed following sampling at monitoring wells MW-45S, and MW-48S. The redevelopment of these wells is in addition to the wells redeveloped after the 2021 Q1 GME.

3. Groundwater Gauging and Sampling Observations

A total of 41 groundwater wells were gauged, and 15 wells sampled. Well gauging data is provided in **Table 1** attached. A summary of observations is provided below:

- Depth to water ranged from 3.09 feet below ground surface (ft bgs) [MW-17D] to 8.32 ft bgs (MW-28S), and overall the groundwater table was lower compared to the previous gauging event completed in March 2021.
- The general direction of groundwater flow in the shallow portion of the aquifer was to the northwest, and comparable to previous sampling events. **Figure 3** attached presents the shallow aquifer inferred groundwater surface contours.
- No measurable NAPL was identified in any of the gauged wells.
- A slight sulfur-like odor was noted during gauging ay MW-20S.
- A faint organic-like odor was noted during sampling at MW-24S.
- Sheen was observed during one sample interval in the purge water at MW-47S and was not observed again.
- Visual observations included the presence of particulate in purge water at MW-22S and MW-25S. MW-22S particulate cleared through the purging, while MW-25S remained persistent during the sampling.

4. Analytical Laboratory Analyses

All groundwater samples were analyzed for:

- BTEX: EPA Method 8260C
- PAHs: EPA Method 8270D
- Total cyanide: EPA Method 9012B
- Monitored Natural Attenuation (MNA) parameters:
  - Nitrate: EPA Method 353.2
  - Ammonia: EPA Method 350.1
  - Total Iron: EPA Method 6010C
  - Ferrous Iron: EPA Method SM 3500-Fe D
  - Sulfate: EPA Method 300
  - Methane: EPA Method RSK-175
  - Alkalinity: EPA method SM 2320B

The laboratory prepared a complete NYSDEC ASP Category B data delivery package for the BTEX, PAH, total cyanide, and MNA analysis. **Appendix B** contains the full laboratory report obtained from Eurofins Test America Laboratory.

5. Discussion of Analytical Results

Samples were collected from all 15 wells as required by the Draft SMP. The groundwater sample results were validated by an AECOM chemist, and all data have been determined to be usable and no data points were rejected. A full copy of the DUSR is provided in **Appendix C**.

Results of analysis have been screened against the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 *Ambient Water Quality Standards and Guidance Values* (AWQS/GV) for water class GA. **Table 2** and **Table 3** attached provides a summary of the analytical results screened against the AWQS/GV. Also included in **Table 2** are the results of the previous analyses for reference.

Observed MGP-constituent trends are either stable or unable to be determined with the exception of ethylbenzene at MW-46S which was noted to have an increasing trend (refer **Section 6.0** for additional discussion regarding trends).

An overview of the groundwater analytical results from this GME is provided below, and **Figure 4** summarizes groundwater exceedances for BTEX, PAHs and total cyanide.

5.1 Benzene, Toluene, Ethylbenzene, Xylenes (BTEX)

A total of four out of 15 sampled wells reported concentrations of BTEX above the AWQS/GV for at least one compound, namely; MW-C12, MW-23S, MW-46S and MW-48S.

MW-C12, located on North Plain Street in the vicinity of the in-situ chemical oxidation (ISCO) remedial action area, reported benzene and ethylbenzene exceedances. The other three wells reporting BTEX compounds above the AWQS/GV are located to the west of the Site in the Washington Street area. The extent of BTEX impacts across the monitoring well network is consistent with the previous GME.

On comparison with the data obtained at the time of the previous GME, the following is noted:

- The concentration of ethylbenzene at MW-C12 decreased from 31ug/L to 10ug/L, and the reported benzene concentration was comparable to the previous GME.
- Reported BTEX concentrations at MW-23S were comparable to the previous GME.
- The reported benzene concentration remained stable at MW-46S and concentrations of toluene, ethylbenzene and xylenes increased.
- Reported benzene, ethylbenzene, and xylene concentrations at MW-48S were comparable to the previous GME.
- MW-C11, MW-C16, MW-22S, MW-24S, MW-25S, MW-28S, MW-31S, MW-33S, MW-40S, MW-45S, and MW-47S continue to report BTEX concentrations below the AWQS/GV consistent with previous monitoring events.

5.2 Polycyclic Aromatic Hydrocarbons (PAHs)

A total of five out of 15 sampled wells reported concentrations of PAHs above the AWQS/GV for at least one compound, namely; MW-C12, MW-C16, MW-23S, MW-46S and MW-48S.

Two of the wells with exceedances are located in the North Plain Street ISCO area, and the other three wells are located to the west of the Site in the Washington Street area. The extent of PAH impacts across the monitoring well network is consistent with the previous GME.

On comparison with the data obtained at the time of the previous GME, the following is noted:

- Decreases in reported acenaphthalene concentrations were observed at MW-C12, MW-23S and MW-46S.
- Decreases in reported naphthalene concentrations were observed at MW-23S and MW-46S.
- Reported concentrations of PAHs at MW-48S remained relatively stable.
- MW-C11, MW-22S, MW-24S, MW-25S, MW-28S, MW-31S, MW-33S, MW-40S, MW-45S, and MW-47S have reported PAH concentrations below the AWQS/GV consistent with previous monitoring events.

5.3 Total Cyanide

No locations reported a total cyanide concentration above the AWQS/GV at the time of the 2021 Q2 GME. Since the previous GME, the reported total cyanide concentration at MW-22S decreased to below the AWQS/GV of 0.2 mg/L.
Total cyanide was detected in the Equipment Blank at a concentration estimated to be less than the reporting limit (refer to the DUSR presented in **Appendix C**). As noted in the DUSR, the reported result for the associated sample (MW-C12) was greater than the reporting limit, but less than ten times the blank concentration, and it is noted the result is less than the AWQS/GV and is likely biased high for MW-C12.

5.4 Monitored Natural Attenuation (MNA) Parameters

Several groundwater parameters including sulfate, ammonia, nitrate, nitrite, alkalinity, iron and methane were analyzed to inform the assessment of MNA. **Table 3** presents the MNA results, and the following is noted:

- Reported concentrations of MNA parameters were variable across the Site with some locations showing high concentrations, and others were non-detect. This is consistent with the results from the previous GME.

- Consistent with the previous GME:
  - Sulphate was reported at concentrations above the AWQS/GV at MW-C11 and MW-C16.
  - Ammonia were reported above the AWQS/GV at MW-C11, MW-46S and MW-47S.
  - Iron was detected at all locations at concentrations higher than the AWQS/GV. Iron is not a constituent of concern at the Site and these concentrations are likely naturally occurring.
  - Methane was detected across the groundwater monitoring well network which may indicate the presence of biological activity at the Site.

- ORP ranged from -164.4 MeV (MW-C11) to 222.1 MeV (MW-22S) and DO ranged from 0.01 mg/L (MW-47S) to 7.7 mg/L (MW-48S).

  Decreases in DO concentrations were observed in all wells across the monitoring well network when compared to the previous GME, with the exception of MW-48S.

  Increases in ORP were observed at several wells across the monitoring well network when compared to the previous GME. It is noted that negative ORP changes were observed at MW-C11, MW-C12, MW-C16, MW-28S, MW-46S, MW-47S, and MW-48S indicating reducing conditions.

6. Mann-Kendall Analysis

Mann-Kendall trend analysis has been completed for constituents of concern, namely; benzene, ethylbenzene, toluene, xylenes, acenaphthalene, naphthalene and total cyanide at MW-C11, MW-C12, MW-C16, MW-22S, MW-23S, MW-46S and MW-48S. Data obtained from GMEs completed since June 2016 are included in the dataset.

The following is noted regarding trends of constituents of concern:

- Benzene concentrations at MW-23S and MW-48S are stable, and no trend is observed at MW-C11, MW-C12, MW-C16, MW-22S, and MW-46S.
- Ethylbenzene concentrations at MW-23S are stable, and no trend was observed at MW-C11, MW-C12, MW-C16, MW-22S, and MW-48S. An increasing trend is noted at MW-46S.
- Toluene concentrations at MW-C12, MW-23S, and MW-48S are stable, and no trend is observed at MW-C11, MW-C16, MW-22S, and MW-46S.
- Total xylenes concentrations at MW-22S, MW-23S and MW-48S are stable, and no trend was observed at MW-C11, MW-C12, MW-C16, and MW-46S.
- Acenaphthalene concentrations at MW-C11, MW-22S, and MW-23S are stable, and no trend was observed at MW-C12, MW-C16, MW-46S, and MW-48S.
- Naphthalene concentrations at MW-22S are stable, and not trend is observed at MW-C11, MW-C12, MW-C16, MW-23S, MW-46S, and MW-48S.
- Total cyanide concentrations at MW-C11 are stable, and no trend is observed at MW-C12, MW-C16, MW-22S, MW-23S, MW-46S, and MW-48S.

Mann-Kendall analysis for constituents of concern is provided in **Appendix D**.

7. Removal of Sediment and Residual Solids

Monitoring wells MW-45S and MW-48S were subject to additional pumping following sampling to remove sediment and residual solids to the extent practicable. This was undertaken in response to the recommendation provided in AECOM, 2020b to improve the hydraulic connection between the well and the surrounding geological material.

A Whale Pump was deployed in each well and each well was surged and pumped until dry. Approximately 3.5 and 2.5 gallons were removed from MW-45S and MW-48S, respectively. No odor or sheen was observed during this additional pumping. Sedimentation observed during pumping was initially high and progressively decreased until the water was observed to have very little sediment.

As a result of the additional pumping, 0.15 and 0.17 feet were gained from MW-45S and MW-48S, respectively. As MW-48S continues to have greater than 0.5 feet reduction from the original installation depth, this well will be targeted during the 2021 Q3 GME.

It is noted that this activity was undertaken following sampling as use of the Whale Pump prior to sampling would disturb the water column and potentially impact analytical results.

8. Conclusions and Recommendations

Based on the results of the 2021 Q2 GME, the following conclusions are provided:

- Consistent with the previous GME, MGP-related constituents were reported below the applicable AWQS/GV at MW-C11, MW-22S, MW-24S, MW-25S, MW-28S, MW-31S, MW-33S, MW-40, MW-45S and MW-47S.
- Select MGP-related constituents were reported above the applicable AWQS/GV at MW-C12, MW-C16, MW23-S, MW-46S and MW-48S.
- When compared with the previous GME:
  - Increases in select MGP-related constituents were reported at MW-23S (benzene, ethylbenzene, total xylenes), MW-46S (BTEX) and MW-48S (benzene and select PAHs including acenaphthene and naphthalene).
  - Decreases in select MGP-related constituents were reported at MW-C12 (benzene, ethylbenzene and select PAHs including acenaphthene), MW-22S (benzene, ethylbenzene, xylenes), and MW-48S (benzene, acenaphthene, naphthalene).
- Based on the Mann-Kendall analysis dataset, observed MGP-constituent trends are either stable or unable to be determined with the exception of ethylbenzene at MW-46S which is noted to have an increasing trend.

In accordance with the Draft SMP, additional data will be collected to further assess seasonal fluctuations and inform an appraisal of MGP-constituent concentrations and MNA trends at the Site. Groundwater sampling at the 15 specified well locations will continue to be monitored on the schedule outlined in the Draft SMP.

Should you have any questions regarding this correspondence, please contact Melissa Saunders at melissa.saunders@aecom.com.

Sincerely,

Melissa Saunders
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cc:
Project File 60615225
Tracy Blazicek, NYSEG

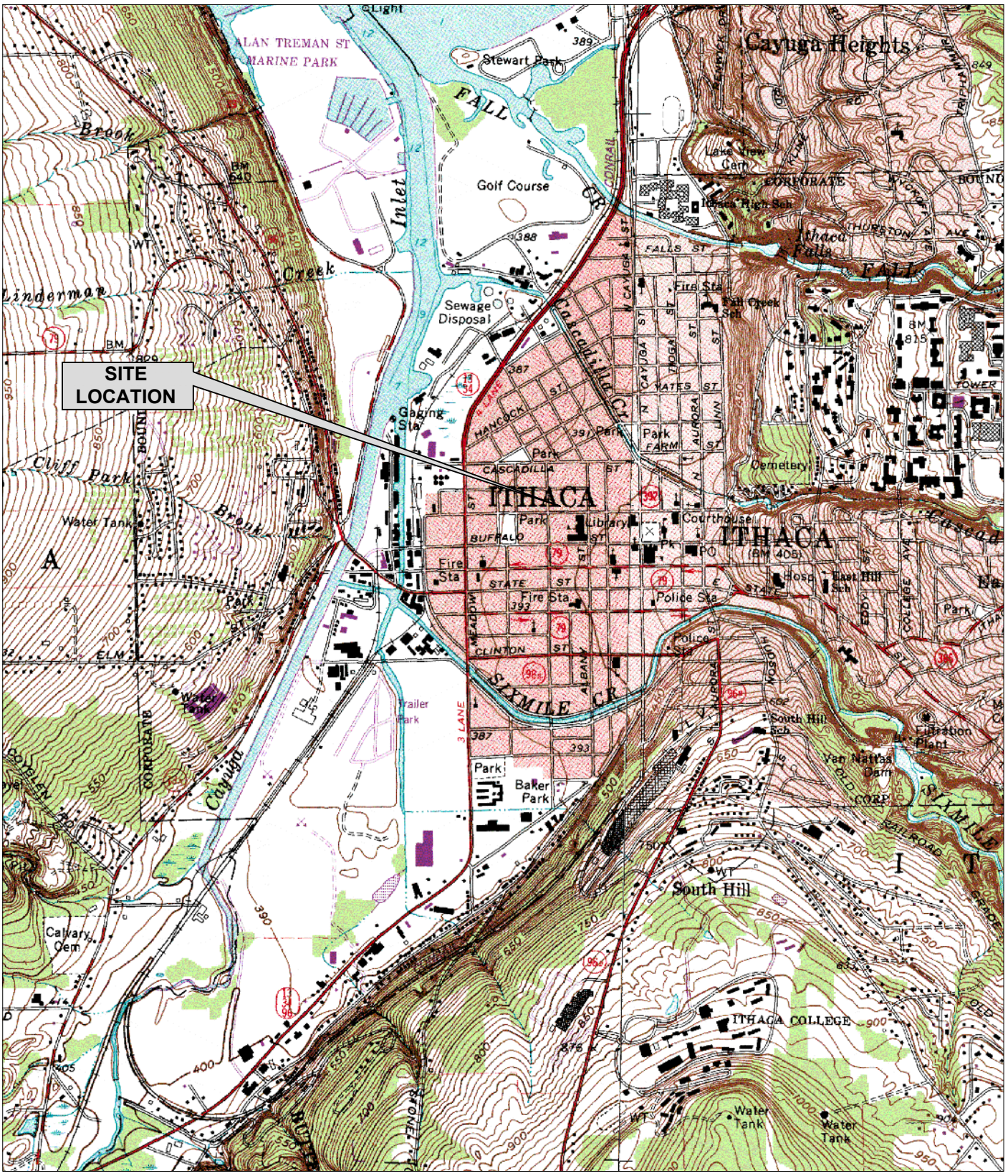
Figures
Figure 1: Site Location Plan
Figure 2: Monitoring Well Location Plan
Figure 3: Shallow Aquifer Groundwater Contour Plan – June 2021
Figure 4: Groundwater Exceedance Plan – BTEX and PAHs – June 2021

Tables
Table 1: Groundwater Gauging Table
Table 2: BTEX, PAHs and Total Cyanide
Table 3: Monitored Natural Attenuation and Field Parameters

Appendices
Appendix A: Groundwater Sampling Purge Forms
Appendix B: Analytical Laboratory Report
Appendix C: Data Usability Summary Report
Appendix D: Mann-Kendall Analysis

References
AECOM, 2019. *Site Management Plan, Ithaca Court Street Former MGP Site, Ithaca, Tompkins County, New York, NYSDEC Site #7-55-008.*
AECOM, 2020a. *Work Plan, Groundwater Monitoring Event, September 2020, Ithaca Court Street Former MGP Site-OU-2, Ithaca New York*.
AECOM, 2020b. *Subject: Groundwater Monitoring Event Report – September/October 2020 Ithaca Court Street Former MGP Site – OU-2, Ithaca, New York.*

Figures



MAP REFERENCE:
IMAGE SHOWN FROM U.S.G.S.7.5 MINUTE QUADRANGLE, ITHACA - WEST AND EAST SERIES

NEW YORK STATE ELECTRIC & GAS CORP.
FORMER COURT STREET MGP SITE - OU-2
ITHACA, NEW YORK
Project No.: 60615225 Date: SEPTEMBER 2021

SITE LOCATION PLAN

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Figure: 1

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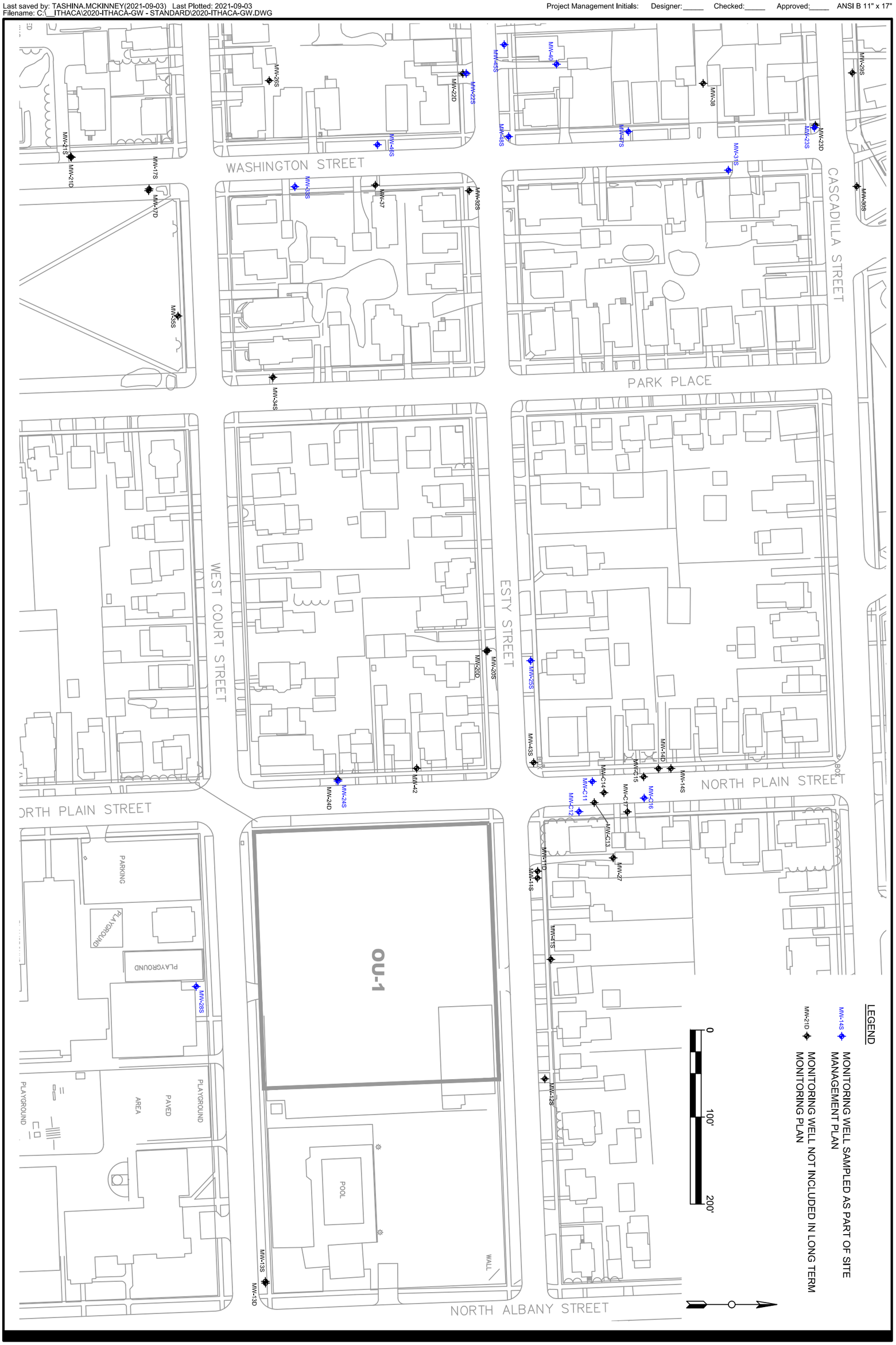

NEW YORK STATE ELECTRIC & GAS CORP.
FORMER COURT STREET MGP SITE - OU-2
ITHACA, NEW YORK
Project No.: 60615225 Date: SEPTEMBER 2021

MONITORING WELL LOCATION PLAN

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Figure: 2

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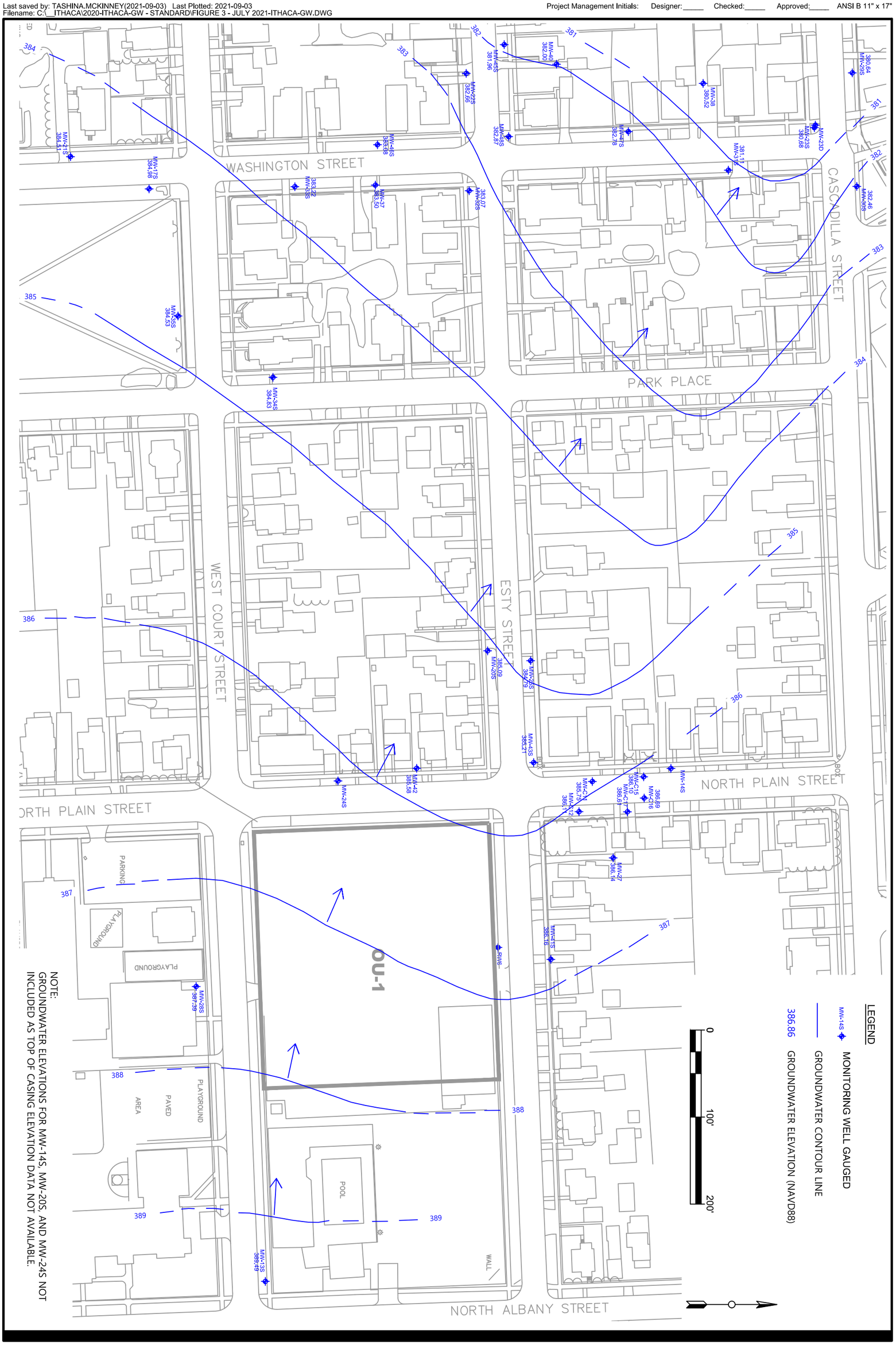

NEW YORK STATE ELECTRIC & GAS CORP.
FORMER COURT STREET MGP SITE - OU-2
ITHACA, NEW YORK
Project No.: 60615225 Date: SEPTEMBER 2021

SHALLOW AQUIFER GROUNDWATER CONTOUR PLAN - JUNE 2021

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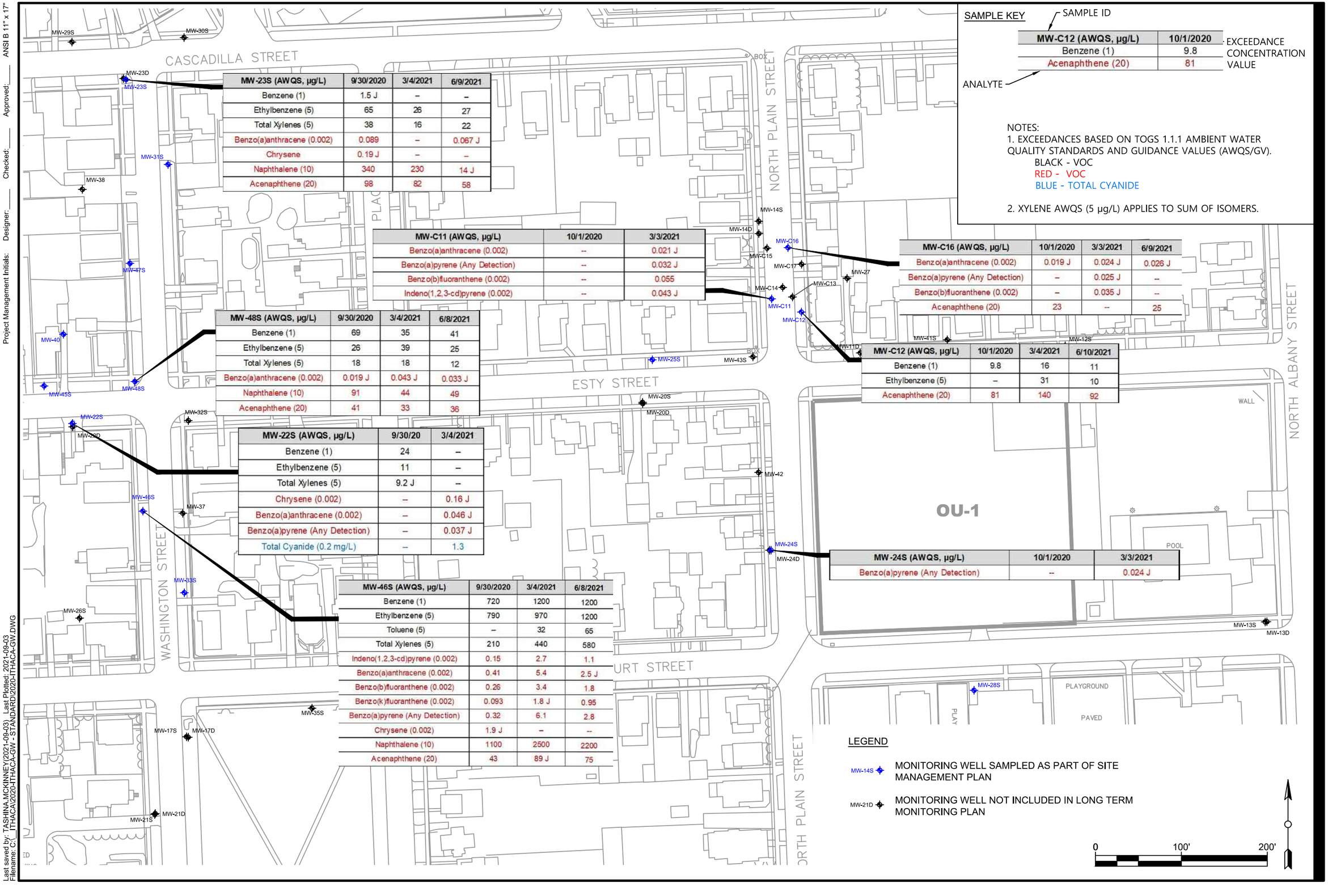
Figure: 3



SAMPLE KEY

SAMPLE ID

MW-C12 (AWQS, µg/L)	10/1/2020
Benzene (1)	9.8
Acenaphthene (20)	81

EXCEEDANCE CONCENTRATION VALUE

ANALYTE

NOTES:
1. EXCEEDANCES BASED ON TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (AWQS/GV).
BLACK - VOC
RED - VOC
BLUE - TOTAL CYANIDE

2. XYLENE AWQS (5 µg/L) APPLIES TO SUM OF ISOMERS.

MW-23S (AWQS, µg/L)	9/30/2020	3/4/2021	6/9/2021
Benzene (1)	1.5 J	–	–
Ethylbenzene (5)	65	26	27
Total Xylenes (5)	38	16	22
Benzo(a)anthracene (0.002)	0.089	–	0.067 J
Chrysene	0.19 J	–	–
Naphthalene (10)	340	230	14 J
Acenaphthene (20)	98	82	58

MW-C11 (AWQS, µg/L)	10/1/2020	3/3/2021
Benzo(a)anthracene (0.002)	--	0.021 J
Benzo(a)pyrene (Any Detection)	--	0.032 J
Benzo(b)fluoranthene (0.002)	--	0.055
Indeno(1,2,3-cd)pyrene (0.002)	--	0.043 J

MW-C16 (AWQS, µg/L)	10/1/2020	3/3/2021	6/9/2021
Benzo(a)anthracene (0.002)	0.019 J	0.024 J	0.026 J
Benzo(a)pyrene (Any Detection)	–	0.025 J	--
Benzo(b)fluoranthene (0.002)	–	0.035 J	--
Acenaphthene (20)	23	--	25

MW-48S (AWQS, µg/L)	9/30/2020	3/4/2021	6/8/2021
Benzene (1)	69	35	41
Ethylbenzene (5)	26	39	25
Total Xylenes (5)	18	18	12
Benzo(a)anthracene (0.002)	0.019 J	0.043 J	0.033 J
Naphthalene (10)	91	44	49
Acenaphthene (20)	41	33	36

MW-C12 (AWQS, µg/L)	10/1/2020	3/4/2021	6/10/2021
Benzene (1)	9.8	16	11
Ethylbenzene (5)	–	31	10
Acenaphthene (20)	81	140	92

MW-22S (AWQS, µg/L)	9/30/20	3/4/2021
Benzene (1)	24	–
Ethylbenzene (5)	11	–
Total Xylenes (5)	9.2 J	–
Chrysene (0.002)	–	0.16 J
Benzo(a)anthracene (0.002)	–	0.046 J
Benzo(a)pyrene (Any Detection)	–	0.037 J
Total Cyanide (0.2 mg/L)	–	1.3

MW-24S (AWQS, µg/L)	10/1/2020	3/3/2021
Benzo(a)pyrene (Any Detection)	--	0.024 J

MW-46S (AWQS, µg/L)	9/30/2020	3/4/2021	6/8/2021
Benzene (1)	720	1200	1200
Ethylbenzene (5)	790	970	1200
Toluene (5)	–	32	65
Total Xylenes (5)	210	440	580
Indeno(1,2,3-cd)pyrene (0.002)	0.15	2.7	1.1
Benzo(a)anthracene (0.002)	0.41	5.4	2.5 J
Benzo(b)fluoranthene (0.002)	0.26	3.4	1.8
Benzo(k)fluoranthene (0.002)	0.093	1.8 J	0.95
Benzo(a)pyrene (Any Detection)	0.32	6.1	2.8
Chrysene (0.002)	1.9 J	–	--
Naphthalene (10)	1100	2500	2200
Acenaphthene (20)	43	89 J	75

LEGEND

MW-14S — MONITORING WELL SAMPLED AS PART OF SITE MANAGEMENT PLAN

MW-21D — MONITORING WELL NOT INCLUDED IN LONG TERM MONITORING PLAN

0 100' 200'

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Figure: 4

GROUNDWATER EXCEEDANCE PLAN
BTEX, PAHs AND TOTAL CYANIDE
JUNE 2021

NEW YORK STATE ELECTRIC & GAS CORP.
FORMER COURT STREET MGP SITE - OU-2
ITHACA, NEW YORK
Project No.: 60615225 Date: SEPTEMBER 2021

Project Management Initials: Designer: Checked: Approved: ANSI B 11" x 17"

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Tables

Table 1: Groundwater Gauging Table
2021 Q2 Groundwater Monitoring Event
Ithaca Court Street Former MGP Site - OU2
Ithaca, New York

Well ID	Date Gauged	Total Depth[1] (ft bTOC)	Sump Interval (ft bTOC)	Screen Interval (ft bTOC)	Depth to Water (ft bTOC)	Depth to Water (ft bgs)	NAPL Observed (Y/N)	NAPL Thickness (ft)	Well Inspection and Sampling Notes
SMP Monitoring Plan Locations - Gauged and Sampled									
MW - C11	6/7/2021	17.21	17 - 15	15 - 10	5.39	5.66	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted.
MW - C12	6/7/2021	17.22	17 - 15	15 - 10	6.09	6.30	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted.
MW - C16	6/7/2021	15.94	16 - 14	14 - 9	4.62	4.84	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted.
MW - 22S	6/7/2021	13.61	--	14 - 4	4.08	4.49	N	NA	Well located in a flower bed and in good condition. Purge water clear with slight particulate suspension, and no odor or sheen noted.
MW - 23S	6/7/2021	13.65	--	14 - 4	6.34	6.94	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted. Well has very good recharge.
MW - 24S	6/7/2021	13.66	--	14 - 4	6.31	NC	N	NA	Well in good condition. Purge water cleared up, faint organic odor detected, no sheen detected.
MW - 25S	6/7/2021	9.71	--	10 - 3	6.43	6.65	N	NA	Purge water clear, no sheen or odors detected. Well has very poor recharge. Short spikes in tubidity were seen throughout the sampling process, possibly due to low water level.
MW - 28S	6/7/2021	19.50	--	20 - 7	7.78	8.32	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted.
MW - 31S	6/7/2021	11.53	--	12 - 4	6.81	7.12	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted.
MW - 33S	6/7/2021	9.48	--	10 - 2.5	4.33	4.60	N	NA	Well in good condition. Purge water initially tan and cleared towards end of purge, no odor or sheen noted.
MW - 40	6/7/2021	9.38	--	9 - 3	4.99	5.39	N	NA	Concrete pad loose. Purge water clear, and no odor or sheen noted.
MW - 45S	6/7/2021	14.68	15 - 14	14 - 4	4.74	5.05	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted. Approx. 3.5 gallons were purged for redevelopment at the end of the sampling event.
MW - 46S	6/7/2021	16.78	--	18 - 8	4.13	4.50	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted.
MW - 47S	6/7/2021	14.64	--	15 - 5	4.67	4.99	N	NA	Well in good condition. Purge water clear, no odor detected, sheen was noted during purging for one interval, and was not observed again.
MW - 48S	6/7/2021	13.20	15 - 14	14 - 4	3.98	4.28	N	NA	Well in good condition. Purge water clear, and no odor or sheen noted. Approx. 2.5 gallons were purged for redevelopment at the end of the sampling event.
Additional Locations - Gauged Only									
MW - C15	6/7/2021	17.79	--	16 - 11	4.98	5.21	N	NA	Good condition
MW - C17	6/7/2021	17.11	--	15 - 10	5.40	5.59	N	NA	Good condition
MW - 13S	6/7/2021	14.33	--	15 - 5	6.75	7.07	N	NA	Good condition
MW - 13D	6/7//2021	39.79	--	40 - 30	6.19	6.61	N	NA	Good condition
MW - 14S	6/7/2021	9.47	--	10 - 3	4.46	NC	N	NA	Good condition
MW - 14D	6/7/2021	33.84	--	--	4.83	NC	N	NA	Good condition
MW - 17S	6/7/2021	8.35	--	9 - 4	2.87	3.32	N	NA	PVC shifted, difficult to remove plug and measure. PVC under steel collar.
MW - 17D	6/7/2021	29.46	--	30 - 20	2.79	3.09	N	NA	PVC shifted, difficult to remove plug and measure. PVC under steel collar.
MW - 20S	6/7/2021	14.46	--	15 - 5	5.78	NC	N	NA	Good condition, slight sulfur odor noted during gauging.
MW - 20D	6/7/2021	33.36	--	34 - 24	4.87	NC	N	NA	Good condition
MW - 21S	6/7/2021	9.46	--	10 - 5	3.80	4.15	N	NA	Good condition
MW - 21D	6/7/2021	29.42	--	30 - 20	3.13	3.68	N	NA	Good condition
MW - 22D	6/7/2021	29.72	--	30 - 20	3.61	4.09	N	NA	Well located in flower bed, good condition.
MW - 23D	6/7/2021	29.33	--	30 - 20	4.96	5.35	N	NA	Good condition
MW - 24D	6/7/2021	32.68	--	--	4.58	NC	N	NA	Cover not bolted down, good condition
MW - 27	6/7/2021	8.86	--	10 - 3	5.64	6.08	N	NA	Good condition
MW - 29S	6/7/2021	12.01	--	--	6.70	7.02	N	NA	Good condition
MW - 30S	6/7/2021	9.96	--	12 - 2.5	5.55	5.78	N	NA	Good condition
MW - 32S	6/7/2021	9.47	--	10 - 4	3.94	4.35	N	NA	Good condition
MW - 34S	6/7/2021	9.52	--	--	4.48	4.90	N	NA	Good condition
MW - 35S	6/7/2021	4.28	--	8 - 3	4.27	4.82	N	NA	Good condition; Reduced well depth compared to original installation depth.
MW - 37	6/7/2021	7.80	--	8 - 3	3.59	4.18	N	NA	Good condition
MW - 38S	6/7/2021	14.18	--	8 - 3	7.64	7.96	N	NA	Good condition
MW - 41S	6/7/2021	16.82	--	9 - 3	6.68	7.00	N	NA	Good condition
MW - 42	6/7/2021	11.27	--	--	6.80	7.27	N	NA	Good condition
MW - 43S	6/7/2021	14.26	--	15 - 5	6.32	6.73	N	NA	Good condition

Notes:
1. Measured at the time of gauging
2. ft bTOC- feet below top of casing
3. ft bgs - feet below ground surface
4. NA - Not applicable

AECOM

Table 2: BTEX, PAHs and Total Cyanide
2021 Q2 Groundwater Monitoring Event
Ithaca Court Street Former MGP Site - OU2
Ithaca, New York

			BTEX µg/L				PAHs µg/L																Cyanide (mg/L)
Sample ID	**Laboratory Report Number**	**Sample Date**	Benzene	Ethylbenzene	Toluene	Xylenes, Total	Acenaphthene	Acenaphthylene	Anthracene	Chrysene	Fluoranthene	Fluorene	Naphthalene	Phenanthrene	Pyrene	Benzo(a) anthracene	Benzo(a) pyrene	Benzo(b) fluoranthene	Benzo(g,h,i) perylene	Benzo(k) fluoranthene	Dibenzo(a,h) anthracene	Indeno(1,2,3-cd)pyrene	Cyanide, Total
AWQS/GV[1]			1	5	5	5	20	NS	50	0.002	50	50	10	50	50	0.002	Any Detection	0.002	NS	0.002	NS	0.002	**0.2**
MW-C11	2149189	6/7/2016	**20.9**	**128**	**11.1**	**51**	**2.4**	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	**111**	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	**0.027 J**
	175904	10/1/2020	1 U	1 U	1 U	2 U	**3.6**	**0.53 J**	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	0.95 U	2.4 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/3/2021	4 U	4 U	4 U	8 U	**1.3 J**	6 U	10 U	10 U	10 U	10 U	20 U	4 U	10 U	0.05 U	0.05 U	**0.03 J**	0.05 U	0.05 UJ	0.05 U	0.05 U	**0.040**
DUP (MW-C11)	181652	3/3/2021	4 U	4 U	4 U	8 U	**1.4 J**	6 U	10 U	10 U	10 U	10 U	20 U	4 U	10 U	**0.021 J**	**0.032 J**	**0.055**	**0.044 J**	0.05 UJ	0.05 U	**0.043 J**	**0.033**
	185822	6/9/2021	2 U	2 U	2 U	4 U	**1.5 J**	6 U	10 U	10 U	10 U	10 U	20 U	4 U	10 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.017**
MW-C12	2149189	6/7/2016	**61.6**	**383**	1 U	**16.8**	**56.7**	1.4 U	1.4 U	1.4 U	1.4 U	**5.4**	**180 J**	**2.9**	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	**0.016**
	175904	10/1/2020	**9.8**	1 U	1 U	2 U	**81**	**1.0**	**0.096 J**	0.48 U	0.48 U	**10**	**0.19 J**	**0.90**	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.016**
	181652	3/4/2021	**16**	**31**	1 U	1.9 J	**140**	**1.4**	**0.23 J**	0.5 U	0.5 U	**18**	**0.35 J**	**2.3**	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.010**
	185894	6/10/2021	**11**	**10**	1 U	2 U	**92**	6 U	10 U	10 U	10 U	**13**	20 U	4 U	10 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.017 J+**
MW-C16	2149189	6/7/2016	1 U	1 U	1 U	3 U	**3.2**	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	**0.007 J**
	175904	10/1/2020	**0.82 J**	2 U	2 U	4 U	**23**	5.7 U	9.5 U	9.5 U	9.5 U	**3.1 J**	19 U	3.8 U	9.5 U	**0.019 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.009 J**
	181652	3/3/2021	4 U	4 U	4 U	8 U	**15**	6 U	10 U	10 U	10 U	**2.7 J**	20 U	4 U	10 U	**0.024 J**	**0.025 J**	**0.035 J**	0.05 U	0.05 UJ	0.05 U	0.05 U	**0.010**
	185822	6/9/2021	2 U	**2**	2 U	4 U	**25**	6 U	10 U	10 U	10 U	**6 J**	20 U	4 U	10 U	**0.026 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.0077 J**
MW-22S	2150102	6/9/2016	1 U	1 U	1 U	3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	**0.540**
	175829	9/30/2020	**24**	**11**	10 U	**9.2 J**	**2.4**	0.29 U	0.48 U	0.48 U	0.48 U	**0.058 J**	**0.83 J**	0.19 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.076**
DUP (MW-22S)	175829	9/30/2020	**21**	**11**	**0.51 J**	**8.6**	**3.2**	0.29 U	0.48 U	0.48 U	0.48 U	**0.095 J**	**0.82 J**	0.19 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.092**
	181652	3/4/2021	1 U	1 U	1 U	2 U	0.5 U	**0.13 J**	**0.052 J**	**0.16 J**	**0.19 J**	0.5 U	1 U	0.2 U	**0.29 J**	**0.046 J**	**0.037 J**	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	**1.3**
	185758	6/8/2021	1 U	**1**	**1**	**2**	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	**0.068 J**	0.19 U	0.48 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.06 J**
MW-23S	2150484	6/10/2016	5 U	**82.4**	5 U	**58.9**	**68.8**	1.4 U	**3.8**	1.4 U	**1.8**	**18**	1.4 U	**10.7**	**2.6**	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.005 U
	175829	9/30/2020	**1.5 J**	**65**	2 U	**38**	**98**	**1.9**	**6.5**	**0.19 J**	**3.0**	**26**	**340**	**26**	**4.4**	**0.089**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/4/2021	2 U	**26**	2 U	**16**	**82**	15 U	**3.5 J**	25 U	25 U	**17 J**	**230**	**15**	25 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	**0.005 J**
	185822	6/9/2021	**1.1 J**	**27**	**1.3 J**	**22**	**58**	15 U	**5.8 J**	25 U	25 U	**17 J**	**14 J**	**22**	25 U	**0.067 J**	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	**0.0072 J**
MW-24S	2149634	6/8/2016	1 U	1 U	1 U	3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.005 U
	175904	10/1/2020	1 U	1 U	1 U	2 U	**0.046 J**	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.19 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/3/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	**0.024 J**	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.010 U
	185822	6/9/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.0091 J**
MW-25S	2149634	6/8/2016	1 U	1 U	1 U	3 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	**0.018 J**
	175904	10/1/2020	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.19 U	0.48 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U	**0.026**
	181652	3/4/2021	0.5 U	0.3 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	**0.026**
	185822	6/9/2021	1 U	1 U	1 U	1 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.015**
MW-28S	2149634	6/8/2016	1 U	1 U	1 U	3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.005 U
	175904	10/1/2020	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.96 U	0.19 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/3/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.010 U
	185822	6/9/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.02 U	0.5 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.009 J**
MW-31S	2150484	6/10/2016	1 U	1 U	1 U	3 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	0.005 U
	175829	9/30/2020	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.19 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.006 J**
	181652	3/4/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.010 U
	185758	6/8/2021	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.190 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
DUP (MW-31S)	185758	6/8/2021	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.190 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
MW-33S	2150102	6/9/2016	1 U	1 U	1 U	3 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.005 U
	175829	9/30/2020	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	**0.10 J**	0.19 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.007 J**
	181652	3/4/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.010 U
	185758	6/8/2021	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	**0.22 J**	0.19 U	0.48 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
MW-40	2150484	6/9/2016	1 U	1 U	1 U	3 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	1.8 U	0.005 U
	175829	9/30/2020	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	**0.61 J**	0.19 U	0.48 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/4/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.010 U
	185758	6/8/2021	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.119 U	0.48 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0100 U	
MW-45S	2150484	6/9/2016	1 U	1 U	1 U	3 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U	0.005 U
	175829	9/30/2020	1 U	1 U	1 U	2 U	**0.0360 J**	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	**0.20 J**	0.19 U	**0.10 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.007 J**
	181652	3/3/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	185758	6/8/2021	1 U	1 U	1 U	2 U	0.48 U	0.29 U	0.48 U	0.48 U	0.48 U	0.48 U	0.95 U	0.19 U	0.48 U	0.05 UJ	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.0100 U
MW-46S	2150102	6/9/2016	**358**	**428**	**29.5**	**307**	**34.9**	**3.2**	**1.8**	1.5 U	1.5 U	**8.3**	**954**	**7.1**	**1.9**	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	0.005 U
	175829	9/30/2020	**720**	**790**	20 U	**210**	**43**	**2.8 J**	**2.2 J**	**1.9 J**	**2.3 J**	**9.7**	**1100**	**7.6**	**3.8 J**	**0.41**	**0.32**	**0.26**	**0.15**	**0.093**	**0.045 J**	**0.15**	0.010 U
	181652	3/4/2021	**1200**	**970**	**32**	**440**	**89 J**	**12 J**	**8.2 J**	100 U	100 U	**20 J**	**2500**	**14 J**	**22 J**	**5.4**	**6.1**	**3.4**	**2.6**	**1.8 J**	**0.95**	**2.7**	0.010 U
	185758	6/8/2021	**1200**	**1200**	**65**	**580**	**75 J**	57 U	95 U	95 U	95 U	**16 J**	**2200**	38 U	95 U	**2.5 J**	**2.8**	**1.8**	**1.1**	**0.95**	**0.34**	**1.1**	**0.012 J+**
MW-47S	2150484	6/9/2016	1 U	1 U	1 U	3 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.005 UJ
	175829	9/30/2020	1 U	1 U	1 U	2 U	**0.75 J**	1.5 U	2.5 U	2.5 U	2.5 U	2.5 U	**1.6 J**	1.0 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/4/2021	1 U	1 U	1 U	2 U	**0.91 J**	1.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5.0 U	1.00 U	2.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 UJ	0.05 U	0.05 U	0.010 U
	185758	6/8/2021	1 U	1 U	1 U	2 U	**0.84 J**	1.4 U	2.4 U	2.4 U	2.4 U	2.4 U	4.8 U	0.95 U	2.4 U	**0.016 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.010 J+**
MW-48S	2150102	6/9/2016	**174**	**275**	5 U	**31.7**	**32.7**	1.6 U	**1.6**	1.6 U	1.6 U	**7.6**	**16.4**	**6.9**	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U	0.005 U
	175829	9/30/2020	**69**	**26**	2 U	**18**	**41**	**1.5**	**1.4**	0.48 U	**0.72**	**3.9**	**91**	**4.6**	**0.90**	**0.019 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/3/2021	**35**	**39**	2 U	**18**	**33**	**1.4**	**1.4**	0.5 U	**0.61**	**4**	**44**	**5.1**	**0.76**	**0.043 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	185758	6/8/2021	**41**	**25**	1 U	**12**	**36**	**1.3 J**	**1.7 J**	4.8 U	**0.8 J**	**3.7 J**	**49**	**5.5**	**0.83 J**	**0.033 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
Equipment Blank	175904	10/1/2020	1 U	1 U	1 U	2 U	0.49 U	0.29 U	0.49 U	0.49 U	0.49 U	0.49 U	0.97 U	0.2 U	0.49 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	181652	3/3/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.010 U
	185894	6/10/2021	1 U	1 U	1 U	2 U	0.5 U	0.3 U	0.5 U	0.5 U	0.5 U	0.5 U	1 U	0.2 U	0.5 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.0055 J**
Trip Blank	181652	3/3/2021	1 U	1 U	1 U	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	185758	6/8/2021	1 U	1 U	1 U	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	185822	6/9/2021	1 U	1 U	1 U	2 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**NA**

Notes:
1. Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (AWQS/GV) for water class GA.
2. **Bold**- Analyte was detected in laboratory analysis
3. Highlight- Analyte was detected above the AWQS/GV
4. Xylene AWQS (5 µg/L) applies to the sum of isomers
5. NS - No Standard
6. U - Not detected above laboratory reporting limit.
7. J - Result is estimated, detection was below the reporting limit but above the method detection limit.
8. UJ- The analyte was analyzed for, but was not detected. The reported quantitation limit is approximated and may be inaccurate or imprecise.

AECOM

Table 3: Monitored Natural Attenuation and Field Parameters
2021 Q2 Groundwater Monitoring Event
Ithaca Court Street Former MGP Site - OU2
Ithaca, New York

			MNA Parameters									Field Parameters					
Sample ID	**Laboratory Report Number**	**Sample Date**	Sulfate (mg/L)	Ammonia (mg/L)	Nitrate + Nitrite as N (mg/L)	Nitrite as N (mg/L)	Nitrate as N (mg/L)	Alkalinity, Total (mg/L)	Ferrous Iron (mg/L)	Iron (mg/L)	Methane (µg/L)	pH (pH units)	Turbidity (NTU)	ORP (MeV)	Conductivity (mS/cm)	Dissolved Oxygen (mg/L)	
AWQS/GV[1]			250	2	10	1	10	NS	NS	0.3	NS	NS	NS	NS	NS	NS	
MW-C11	175904	10/1/2020	**121**	**0.54**	**0.024 J**	0.05 U	**0.024 J**	**404**	0.10 U	**4.7**	**98**	6.93	9.81	-87.9	2.29	0.2	
	181652	3/3/2021	**1880**	**3.4**	--	--	0.05 U	**700**	**0.17 J**	**13.6**	**460**	6.68	42.1	-109.4	7.333	0.39	
	185822	6/9/2021	**3300**	**6.9**	--	--	0.024 J	**830**	**0.08 J**	**26.8**	**380**	7.10	7.81	-164.4	7.9	0.11	
MW-C12	175904	10/1/2020	**238**	**2.5**	0.05 U	0.05 U	0.05 U	**605**	0.10 U	**2.8**	**1000**	7.11	5.00	-108.5	1.72	0.21	
	181652	3/4/2021	**214**	**1.5**	--	--	0.05 U	**538**	0.10 UJ	**2.1**	**820**	6.98	4.76	-109.4	1.116	0.39	
	185894	6/10/2021	**237**	**1.6**	--	--	**0.023 J**	**502**	0.10 UJ	**2.5**	**620**	7.30	1.06	-138.9	1.28	0.12	J+
MW-C16	175904	10/1/2020	**1320**	**0.77**	**0.055**	**0.021 J**	**0.034 J**	**563**	**0.28 J**	**25.8**	**380**	6.94	15.9	-124.3	3.57	0.4	
	181652	3/3/2021	**1470**	**0.58**	--	--	0.05 U	**615**	0.10 UJ	**25.8**	**11**	6.93	61.8	-75.2	3.914	1.4	
	185822	6/9/2021	**1650**	**1.1**	--	--	**0.041 J**	**625**	**0.27 J**	**32.9**	**20**	7.06	25	-156.6	3.63	0.35	
MW-22S	175829	9/30/2020	10 U	**3.4**	**0.025 J**	0.05 U	**0.025 J**	**343**	**0.37 J**	**7.7**	**7500**	6.77	1.40	-73.1	0.85	0.39	
	181652	3/4/2021	**58.3**	0.02 U	--	--	**18.8**	**190**	0.10 UJ	**0.73**	4.0 U	6.52	3.72	14.5	0.731	5.62	
	185758	6/8/2021	**46.7**	0.02 U	--	--	**9.2**	**209**	0.10 UJ	**0.27**	4.0 U	8.66	2.75	222.1	0.73	3.05	
MW-23S	175829	9/30/2020	**4.1 J**	**1.1**	**0.36**	0.05 U	**0.36**	**238**	**0.19 J**	**1.8**	**3100**	6.87	6.95	-63.7	0.69	1.08	
	181652	3/4/2021	**5.8 J**	**1.1**	--	--	**0.33**	**234**	0.10 UJ	**1.9**	**2900**	7.02	9.17	-53.1	0.666	0.81	
	185822	6/9/2021	**7.5 J**	**0.54**	--	--	**0.2**	**228**	0.10 UJ	**1.3**	**2500**	6.73	0.28	-29.5	0.99	0.66	
MW-24S	175904	10/1/2020	**0.87 J**	**2.7**	**0.30**	**0.021 J**	**0.28**	**301**	**0.12 J**	**29.4**	**1400**	6.91	45.9	-135.6	0.95	0.32	
	181652	3/3/2021	**39.6**	0.02 U	--	--	**1.8**	**317**	0.10 UJ	**1.8**	4.0 U	7.10	34.3	79.8	0.986	6.85	
	185822	6/9/2021	**37.5**	**0.03**	--	--	**0.13**	**352**	0.10 UJ	**0.24**	4.0 U	7.72	3.21	82.4	1.28	0.72	
MW-25S	175904	10/1/2020	**121**	**0.52**	0.05 U	**0.020 J**	0.05 U	**550**	**0.15 J**	**6.5**	**30**	6.89	5.05	-40.6	3.51	0.3	
	181652	3/4/2021	**206**	0.02 UJ	--	--	**0.12**	**616**	0.10 UJ	**1.5**	4.0 U	6.83	5.97	29.1	3.183	2.97	
	185822	6/9/2021	**171**	0.02 U	--	--	**0.055**	**566**	0.10 UJ	**48.9**	4.0 U	7.15	1.46	94.0	3.68	1.2	
MW-28S	175904	10/1/2020	10 U	**0.88**	**0.031 J**	**0.022 J**	0.050 U	**271**	**0.10 J**	**1.8**	**4000**	7.47	0.76	-134.4	0.79	0.28	
	181652	3/3/2021	**14.4**	**0.88**	--	--	**0.13**	**260**	0.10 UJ	**1.5**	**3900**	7.58	8.80	-91.8	0.692	0.37	
	185822	6/9/2021	**9.5 J**	**0.67**	--	--	**0.32**	**275**	0.10 UJ	**1.8**	**3000**	7.56	2.69	-129.7	0.97	0.13	
MW-31S	175829	9/30/2020	**10.2**	**0.096**	**0.025 J**	0.05 U	**0.025 J**	**303**	**0.086 J**	**1.5**	**580**	6.52	10.1	-11.4	0.67	0.52	
	181652	3/4/2021	**16.3**	**0.051**	--	--	**0.18**	**258**	0.10 UJ	**0.39**	**36**	6.91	21.2	18.3	0.549	0.98	
	185758	6/8/2021	**17.9**	**0.014 J**	--	--	**0.025 J**	**260**	**0.12 J**	**0.27**	**130**	6.92	0.97	9.2	0.54	0.27	
MW-33S	175829	9/30/2020	**21.2**	**3.9**	**0.049 J**	**0.022 J**	**0.027 J**	**421**	**0.64 J**	**20.9**	**190**	6.88	4.23	-108.2	0.92	0.77	
	181652	3/4/2021	**44.9**	**0.09**	--	--	**0.22**	**364**	0.10 UJ	**0.97**	**1.7 J**	7.33	57.2	55.1	0.849	7.16	
	185758	6/8/2021	**43.4**	**0.83**	--	--	**0.02 J**	**407**	0.10 UJ	**1.8**	**16**	9.38	4.74	-29.6	1.02	1.15	
MW-40	175829	9/30/2020	**3.6**	**10.1**	**0.14**	0.05 U	**0.14**	**217**	**0.13 J**	**20.4**	**950**	6.44	60.1	-70.1	0.376	0.44	
	181652	3/4/2021	**13.9**	**0.11**	--	--	**0.52**	**147**	0.10 UJ	**2.5**	**5.5**	6.39	4.99	28.6	0.314	1.12	
	185758	6/8/2021	**9.3**	**0.45**	--	--	0.05 U	**156**	0.10 UJ	**2.3**	**110**	6.70	0.91	-25.5	0.304	0.11	
MW-45S	175829	9/30/2020	10 U	**3.4**	**0.098**	0.05 U	**0.098**	**377**	**0.21 J**	**30.1**	**5800**	6.70	57.2	-81.7	1.08	0.5	
	181652	3/3/2021	**11.2**	**0.44**	NA	0.055	**0.055**	**365**	0.10 UJ	**10.4**	**24**	6.72	53.2	-20.5	0.861	1.39	
	185758	6/8/2021	**6.9 J**	**0.85**	--	--	0.05 U	**405**	0.10 UJ	**10.7**	**370**	6.98	26.3	-37.6	1.21	0.37	
MW-46S	175829	9/30/2020	**12.7**	**3.6**	**0.049 J**	0.05 U	**0.049 J**	**342**	**0.086 J**	**7.0**	**7900**	6.75	4.72	-89.9	1.06	0.32	
	181652	3/4/2021	10 U	**5**	--	--	0.05 U	**356**	**0.20 J**	**10.7**	**13000**	6.78	54.3	-89.9	0.60	0.49	
	185758	6/8/2021	10 U	**3.3**	--	--	0.05 U	**336**	0.10 UJ	**8.3**	**11000**	7.08	8.00	-155.6	0.68	0.18	
MW-47S	175829	9/30/2020	**17.8**	**7.6**	**0.14**	0.05 U	**0.14**	**305**	**0.092 J**	**40.6**	**8300**	6.47	47.8	-114.1	0.84	0.12	
	181652	3/4/2021	**7.5 J**	**4.6**	--	--	0.05 U	**292**	0.10 UJ	**14.8**	**12000**	7.07	33.2	-131.8	0.819	0.52	
	185758	6/8/2021	10 U	**8.5**	--	--	0.05 U	**303**	0.10 UJ	**15.4**	**13000**	6.79	78.2	-144.7	0.75	0.01	
MW-48S	175829	9/30/2020	40 U	**2.7**	0.05 U	0.05 U	0.05 U	**396**	0.10 U J	**6.9**	**5000**	7.08	10	-114.6	3.33	0.38	
	181652	3/3/2021	**12.1 J**	**1.4**	--	--	**0.036 J**	**376**	0.10 U J	**3.4**	**3100**	7.21	7.67	-83.3	1.678	0.84	
	185758	6/8/2021	40 U	**1.4**	--	--	**0.050 U**	**338**	0.10 UJ	**5.8**	**3000**	8.41	9.8	-135.1	3.32	7.7	

Notes:
1. Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (AWQS/GV) for water class GA.
2. **Bold**- Analyte was detected in laboratory analysis
3. Highlight- Highlight- Analyte was detected above the AWQS/GV
4. NS - No Standard
5. -- Not Analyzed
6. U- Not detected above laboratory reporting limit.
7. J - Result is estimated, detection was below the reporting limit but above the method detection limit.
8. UJ- The analyte was analyzed for, but was not detected. The reported quantitation limit is approximated and may be inaccurate or imprecise.
9. MNA - Monitored Natural Attenuation
10. ORP - Oxidation Reduction Potential

AECOM

Appendix A - Groundwater Sampling Purge Forms

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca 60615225

Monitoring Well Number: MW-C11 Date: 6/9/21

Samplers: AM + PM

Sample Number: MW-C11 060921 QA/QC Collected? —

Purging / Sampling Method: low flow peripump LDPE dedicated tubing

1. L = Well Depth:	17.21	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	5.40	feet
4. C = Column of Water in Well:	11.81	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.93	gal
6. 3(V) = Target Purge Volume	5.79	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings				✓	✓	✓
Time	24 hr	1000	1005	1010	1015	1020	1025	1030
Water Level (0.33)	feet	5.40	6.01	6.79	6.91	6.95	7.10	7.15
Volume Purged	gal	-	.15	.30	.55	.75	1.10	1.35
Flow Rate	mL/min	216	216	216	216	216	216	216
Turbidity (+/- 10%)	NTU	58.1	39.1	11.3	9.93	6.35	6.31	7.31
Dissolved Oxygen (+/- 10%)	%	5.8	2.1	1.8	1.6	1.3	1.2	1.2
Dissolved Oxygen (+/- 10%)	mg/L	.56	.20	0.18	.16	.13	.12	0.11
Eh / ORP (+/- 10)	MeV	-56.4	-128.8	-148.5	-150.9	-157.2	-161.3	-164.4
Specific Conductivity (+/- 3%)	mS/cm	.432	6.21	7.47	7.54	7.42	7.62	7.90
Conductivity (+/- 3%)	mS/cm	.356	4.98	6.09	6.15	6.06	6.22	6.47
pH (+/- 0.1)	pH unit	7.19	7.12	7.10	7.10	7.09	7.09	7.10
Temp (+/- 0.5)	C°	15.7	15.2	15.3	15.3	15.3	15.3	15.3
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	None	None	None	None	None	None	None

Comments:

Sample @ 1040

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca 60615225

Monitoring Well Number: MW-C12 Date: 6/10/21

Samplers: MG + PM

Sample Number: MW-C12 061021 QA/QC Collected? —

Purging / Sampling Method: low flow peri pump w/ dedicated LDPE tubing

1. L = Well Depth:	17.11	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	6.15	feet
4. C = Column of Water in Well:	10.96	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.79	gal
6. 3(V) = Target Purge Volume	5.37	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings				✓	✓	✓
Time	24 hr	0810	0815	0820	0825	0830	0835	0840
Water Level (0.33)	feet	6.15	7.10	7.17	7.25	7.27	7.29	7.35
Volume Purged	gal	—	.15	.75	1.00	1.50	2.00	2.50
Flow Rate	mL/min	240	240	240	240	240	240	240
Turbidity (+/- 10%)	NTU	7.81	9.63	4.81	3.96	3.84	3.44	1.06
Dissolved Oxygen (+/- 10%)	%	5.0	2.6	1.5	1.4	1.3	1.1	1.1
Dissolved Oxygen (+/- 10%)	mg/L	.50	.26	.15	.15	.13	.12	.12
Eh / ORP (+/- 10)	MeV	-86.4	-111.6	-123.1	-127.1	-131.3	-136.7	-139.9
Specific Conductivity (+/- 3%)	mS/cm[c]	2.35	1.86	1.73	1.71	1.69	1.70	1.68
Conductivity (+/- 3%)	mS/cm	1.79	1.41	1.32	1.30	1.29	1.30	1.28
pH (+/- 0.1)	pH unit	7.15	7.22	7.26	7.27	7.28	7.29	7.30
Temp (+/- 0.5)	C°	12.6	12.4	12.4	12.5	12.4	12.6	12.6
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	—	—	—	—	—	—	

Comments:

Sample @ 0900

Monitoring Well Purging / Sampling Form

Project Name and Number: Ithaca NYSEG 60615225

Monitoring Well Number: MW-C16 Date: 6/9/21

Samplers: AH + PM

Sample Number: MWC16 060921 QA/QC Collected? —

Purging / Sampling Method: low flow peripump w/ dedicated LDPE

1. L = Well Depth:	15.94	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	4.60	feet
4. C = Column of Water in Well:	11.34	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.85	gal
6. 3(V) = Target Purge Volume	5.55	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings							
Time	24 hr	0825	0830	0835	0840	0845	0850	0855	090
Water Level (0.33)	feet	4.60	4.9	9.40	9.60	9.81	9.96	10.17	10.
Volume Purged	gal	—	1.10	1.50	2.00	2.50	2.65	2.80	3.0
Flow Rate	mL/min	200	200	150	150	150	150	150	160
Turbidity (+/- 10%)	NTU	52.8	38.4	36.7	35.4	31.3	28.2	22.6	18.
Dissolved Oxygen (+/- 10%)	%	53.2	15.4	11.7	9.8	8.4	7.9	6.4	5.3
Dissolved Oxygen (+/- 10%)	mg/L	4.02	1.57	1.18	0.98	.84	.79	.65	.54
Eh / ORP (+/- 10)	MeV	-138.4	-117.1	-129.0	-135.3	-139.0	-142.4	-149.3	-154.
Specific Conductivity (+/- 3%)	mS/cm[c]	4.67	1.25	1.93	2.09	2.29	2.57	2.92	3.2
Conductivity (+/- 3%)	mS/cm	3.62	0.98	1.58	1.67	1.83	2.04	2.31	2.5
pH (+/- 0.1)	pH unit	7.03	7.03	7.05	7.04	7.04	7.04	7.04	7.0
Temp (+/- 0.5)	C°	13.5	13.9	14.4	14.4	14.2	14.1	14.1	14.1
Color	Visual	clear	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	None	None	None	None	None	None	None	None

Comments:

Sampling time @ 0930

Monitoring Well Purging / Sampling Form

Project Name and Number: Imaca NYSEG 40615225

Monitoring Well Number: MW-C16 cont. Date: 6/9/21

Samplers: AG / PM

Sample Number: MW-C16 060921 QA/QC Collected? -

Purging / Sampling Method: Same as pg1

1. L = Well Depth:	15.94	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	4.60	feet
4. C = Column of Water in Well:	11.34	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.85	gal
6. 3(V) = Target Purge Volume	5.55	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings ✓				✓		
Time	24 hr	0905	0910	0915	0920	0925		
Water Level (0.33)	feet	10.6	10.69	10.75	10.91	10.96		
Volume Purged	gal	4.75	4.85	4.95	5.00	5.10		
Flow Rate	mL/min	160	160	160	160	160		
Turbidity (+/- 10%)	NTU	15.3	12.6	23.5	24.1	25.0		
Dissolved Oxygen (+/- 10%)	%	4.3	3.8	3.6	3.5	3.5		
Dissolved Oxygen (+/- 10%)	mg/L	.42	.38	.36	.35	.35		
Eh / ORP (+/- 10)	MeV	-158.6	-163.6	-157.6	-160.5	-156.6		
Specific Conductivity (+/- 3%)	mS/cm[c]	3.91	4.98	4.54	4.87	4.67		
Conductivity (+/- 3%)	mS/cm	3.10	3.97	3.59	3.83	3.63		
pH (+/- 0.1)	pH unit	7.04	7.10	7.04	7.08	7.06		
Temp (+/- 0.5)	C°	14.0	13.9	14.0	13.7	13.8		
Color	Visual	clear	clear	clear	clear	clear		
Odor	Olfactory	—	—	—	—	—		

Comments:

Sampling @ 0930

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca. - 60615225

Monitoring Well Number: MW-225 Date: 6/8/21

Samplers: Patrick McHugh

Sample Number: MW-225 060821 QA/QC Collected? MS - MSD

Purging / Sampling Method: peri pump w/ dedicated tubing.

1. L = Well Depth:	13.61	feet
2. D = Riser Diameter (I.D.):	0.16	feet
3. W = Depth to Water:	4.01	feet
4. C = Column of Water in Well:	9.6	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.56	gal
6. 3(V) = Target Purge Volume	4.70	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings						
Time	24 hr	0955	1000	1005	1010	1015	1020	1025
Water Level (0.33)	feet	4.01	4.38	4.40	4.41	4.46	4.47	4.48
Volume Purged	gal	0	0.35	0.75	1.25	1.75	2.00	2.25
Flow Rate	mL/min	200	200	100	100	100	100	100
Turbidity (+/- 10%)	NTU	73.5	10.0	16.5	7.10	3.88	2.82	2.63
Dissolved Oxygen (+/- 10%)	%	43.4	35.0	32.9	34.4	32.1	30.8	30.4
Dissolved Oxygen (+/- 10%)	mg/L	4.53	3.70	3.44	3.58	3.34	3.21	3.13
Eh / ORP (+/- 10)	MeV	197.1	210.6	213.4	212.7	217.6	218.2	219.8
Specific Conductivity (+/- 3%)	mS/cm[c]	0.96	0.94	0.94	0.94	0.94	0.93	0.93
Conductivity (+/- 3%)	mS/cm	0.73	0.72	0.71	0.73	6.73	0.73	0.73
pH (+/- 0.1)	pH unit	11.57	10.77	9.85	9.35	8.90	8.66	8.64
Temp (+/- 0.5)	C°	12.8	12.7	13.6	13.6	13.3	13.6	13.6
Color	Visual	Clear/tan	Clear/tan	Clear	Clear	Clear	Clear	Clear
Odor	Olfactory							

Comments: pump on @

- V. fine particulate in water. - Seems to have dissipated. @ 1000
- No odor / sheen.
-

☆MS / MSD HERE

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG – Ithaca – 60615225

Monitoring Well Number: MW-225 Date: 6/8/21

Samplers: PM

Sample Number: MW-225 060821 QA/QC Collected? MS/MSD

Purging / Sampling Method: peri. w/ dedicated tubing

1. L = Well Depth:	13.61	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	4.01	feet
4. C = Column of Water in Well:	9.6	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.56	gal
6. 3(V) = Target Purge Volume	4.70	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI ✓

Parameter	Units	Readings						
Time	24 hr	1030						
Water Level (0.33)	feet	4.51						
Volume Purged	gal	2.50						
Flow Rate	mL/min	100						
Turbidity (+/- 10%)	NTU	2.73						
Dissolved Oxygen (+/- 10%)	%	29.3						
Dissolved Oxygen (+/- 10%)	mg/L	3.65						
Eh / ORP (+/- 10)	MeV	222.1						
Specific Conductivity (+/- 3%)	mS/cm^c	0.93						
Conductivity (+/- 3%)	mS/cm	0.73						
pH (+/- 0.1)	pH unit	8.66						
Temp (+/- 0.5)	C°	13.4						
Color	Visual	Clear						
Odor	Olfactory							

Comments: Sampled @ 1030

*MS/MSD HERE

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca - 60615225

Monitoring Well Number: MW-235 Date: 6/9/21

Samplers: Patrick McKye

Sample Number: MW-235 060921 QA/QC Collected? ✓

Purging / Sampling Method: Perist. pump w/ dedicated tubing.

1. L = Well Depth:	13.65	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	6.33	feet
4. C = Column of Water in Well:	7.32	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	1.19	gal
6. 3(V) = Target Purge Volume	3.58	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings						
Time	24 hr	0810	0815	0820	0825	0830	0835	0840
Water Level (0.33)	feet	6.33	6.38	6.38	6.38	6.38	6.38	6.38
Volume Purged	gal	0	0.15	0.65	1.10	1.64	2.20	2.75
Flow Rate	mL/min	200	200	200	200	200	200	200
Turbidity (+/- 10%)	NTU	27.5	19.7	2.99	0.90	0.73	0.39	0.28
Dissolved Oxygen (+/- 10%)	%	12.0	8.3	7.8	6.7	6.2	6.5	6.6
Dissolved Oxygen (+/- 10%)	mg/L	1.23	0.84	0.80	0.69	0.63	0.67	0.66
Eh / ORP (+/- 10)	MeV	-8.8	-30.8	-35.6	-31.6	-29.2	-29.9	-29.5
Specific Conductivity (+/- 3%)	mS/cm^c	1.27	1.04	1.00	0.99	0.99	0.99	0.99
Conductivity (+/- 3%)	mS/cm	1.05	0.83	0.80	0.79	0.73	0.76	0.80
pH (+/- 0.1)	pH unit	6.70	6.70	6.73	6.72	6.73	6.74	6.73
Temp (+/- 0.5)	C°	15.1	14.6	14.5	14.5	14.5	14.9	14.8
Color	Visual	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Odor	Olfactory	/	/	/	/	/	/	/

Comments: pump on @ 0810

- No odor or sheen seen
- Very good Recharge.

Sampled @ 840

Monitoring Well Purging / Sampling Form

Project Name and Number: Ithaca – NYSEG – 60615225

Monitoring Well Number: MW-24S Date: 6/9/21

Samplers: Patrick Maltese

Sample Number: MW-24S 060921 QA/QC Collected? -

Purging / Sampling Method: perist pump w/dedicated tubing

1. L = Well Depth:	13.66	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	6.67	feet
4. C = Column of Water in Well:	6.99	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	1.159	gal
6. 3(V) = Target Purge Volume	3.42	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	1135	1140	Readings 1145	1150	1155	1200	1205
Time	24 hr	~~0935~~	~~0940~~	1145	1150	1155	1200	1205
Water Level (0.33)	feet	6.67	7.33	7.58	7.71	7.84	7.96	8.08
Volume Purged	gal	0	0.15	0.40	0.60	0.75	0.90	1.10
Flow Rate	mL/min	200	200	150	150	150	125	125
Turbidity (+/- 10%)	NTU	36.6	7.99	4.79	3.34	6.22	3.98	3.28
Dissolved Oxygen (+/- 10%)	%	24.1	25.6	21.3	20.1	17.3	14.4	11.6
Dissolved Oxygen (+/- 10%)	mg/L	2.31	2.47	2.00	1.90	1.63	1.35	1.09
Eh / ORP (+/- 10)	MeV	133.4	121.9	115.2	112.8	107.7	101.5	95.2
Specific Conductivity (+/- 3%)	mS/cm[c]	1.47	1.42	1.41	1.42	1.42	1.42	1.43
Conductivity (+/- 3%)	mS/cm	1.23	1.20	1.21	1.22	1.23	1.25	1.25
pH (+/- 0.1)	pH unit	7.92	7.78	7.68	7.64	7.61	7.53	7.50
Temp (+/- 0.5)	C°	16.2	16.7	17.6	17.7	17.6	18.7	18.4
Color	Visual	Cloudy	Cloudy	Cloudy	Clear	Clear	Clear	Clear
Odor	Olfactory					Organic		

Comments: pump on @ 1135.

- faint Organic odor, No sheen.

Monitoring Well Purging / Sampling Form

Project Name and Number: Ithaca – NYSEG – 606 18225

Monitoring Well Number: MW-24S Date: 6/9/21

Samplers: PM

Sample Number: MW-24S 060921 QA/QC Collected? -

Purging / Sampling Method: Peri pump w/ dedicated tubing.

1. L = Well Depth:	13.66	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	6.67	feet
4. C = Column of Water in Well:	6.99	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.14	gal
6. 3(V) = Target Purge Volume	3.42	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	✓	✓	pH+ORP X	Readings		
Time	24 hr	1210	1215	1220	1225	1230	1235
Water Level (0.33)	feet	8.20	8.30	8.47	8.56	8.62	8.75
Volume Purged	gal	1.35	1.50	1.65	1.75	1.90	2.05
Flow Rate	mL/min	125	125.	125	100	100	100
Turbidity (+/- 10%)	NTU	4.57	4.28	3.23	5.37	4.62	5.21
Dissolved Oxygen (+/- 10%)	%	11.1	9.9	9.1	9.2	7.7	7.8
Dissolved Oxygen (+/- 10%)	mg/L	1.05	0.92	0.87	0.80	0.72	0.72
Eh / ORP (+/- 10)	MeV	89.2	85.9	79.3	76.5	73.4	82.4
Specific Conductivity (+/- 3%)	mS/cm[c]	1.43	1.42	1.43	1.42	1.43	1.45
Conductivity (+/- 3%)	mS/cm	1.25	1.25	1.24	1.24	1.26	1.28
pH (+/- 0.1)	pH unit	7.50	7.47	8.14	7.70	7.68	7.72
Temp (+/- 0.5)	C°	18.3	18.4	18.3	18.5	18.8	18.5
Color	Visual	Clear	clear	clear	clear	clear	clear
Odor	Olfactory						

Comments: Sampled @ 1235

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca - 60615225

Monitoring Well Number: MW-25S Date: 6/9/21

Samplers: Patrick McHugh

Sample Number: MW-225 060921 QA/QC Collected? ✓

Purging / Sampling Method: peri pump w/ dedicated t.l.

1. L = Well Depth:	9.71	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	6.43	feet
4. C = Column of Water in Well:	3.28	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	0.53	gal
6. 3(V) = Target Purge Volume	1.6	gal

D (inches)	D (feet)
1-inch	0.08
~~2-inch~~	~~0.17~~
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	~~2-inch~~	3-inch	4-inch	6-inch
V (gal / ft)	0.041	~~0.163~~	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

lowest setting.

Parameter	Units	Readings						
Time	24 hr	0920	0925	0930	0935	0940	0945	0950
Water Level (0.33)	feet	6.43	6.84	7.21	7.40	7.52	7.64	7.82
Volume Purged	gal	0.00	0.10	0.25	0.30	0.35	0.40	0.45
Flow Rate	mL/min	100	50	50	[illegible]	50	50	50
Turbidity (+/- 10%)	NTU	14.9	17.6	13.6	8.62	5.15	1.83	1.55
Dissolved Oxygen (+/- 10%)	%	30.2	20.0	17.9	15.8	14.0	13.0	12.6
Dissolved Oxygen (+/- 10%)	mg/L	3.03	2.06	1.82	1.60	1.41	1.31	1.28
Eh / ORP (+/- 10)	MeV	135.4	121.5	113.0	106.8	103.6	100.6	96.8
Specific Conductivity (+/- 3%)	mS/cm^c	4.58	4.62	4.68	4.69	4.68	4.69	4.69
Conductivity (+/- 3%)	mS/cm	3.71	3.61	3.69	3.70	3.70	3.72	3.71
pH (+/- 0.1)	pH unit	6.88	6.91	6.98	6.78	6.78	6.80	7.24
Temp (+/- 0.5)	C°	16.0	13.6	14.0	14.0	14.0	14.2	14.1
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	✓	✓	✓	✓	✓	✓	✓

Comments: pump on @ 0920

- No odor or sheen
- Well has known issues w/ Recharge → will have low flow rate.
- Water level dropping fast @ very low flow rate, may not stabilize before being drained.

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca - 60615225

Monitoring Well Number: MW-25S Date: 6/9/21

Samplers: PM

Sample Number: MW-25S 060921 QA/QC Collected?

Purging / Sampling Method: Peri pump w/ low flow + dedicated tubing

1. L = Well Depth:	9.71	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	6.43	feet
4. C = Column of Water in Well:	3.28	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	0.53	gal
6. 3(V) = Target Purge Volume	1.6	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	✓	✓	✓ NTU ≤ 5.0 NYS DWS	Readings			
Time	24 hr	0955	1000	1005				
Water Level (0.33)	feet	8.03	8.22	8.35				
Volume Purged	gal	0.50	0.55	0.60				
Flow Rate	mL/min	50	50	50				
Turbidity (+/- 10%)	NTU	1.61	2.02	1.46				
Dissolved Oxygen (+/- 10%)	%	12.1	12.3	11.8				
Dissolved Oxygen (+/- 10%)	mg/L	1.22	1.25	1.20				
Eh / ORP (+/- 10)	MeV	95.3	94.3	94.0				
Specific Conductivity (+/- 3%)	mS/cm^c	4.67	4.68	4.67				
Conductivity (+/- 3%)	mS/cm	3.70	3.69	3.68				
pH (+/- 0.1)	pH unit	7.03	7.09	7.15				
Temp (+/- 0.5)	C°	14.1	13.9	13.8				
Color	Visual	Clear	Clear	Clear				
Odor	Olfactory	/	/	/				

Comments: • Sampled @ 1005, worried I may not be able to get all Samples with ≥ 1.5 ft of water in the well left, started w/ Methane, Alkalinity, Sulfate, F. Iron, Metals, Nitrate, Nitrogen Ammonia, DTW @ End of that Sample set = 8.74 ft. May have enough to finish other set of BTEX, PHAs THMs, Turbidity Spikes throughout

Water level @ 9.65 @ end of Sampling

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca 60615225

Monitoring Well Number: MW-28S Date: 6/9/21

Samplers: NZ + PM

Sample Number: MW-28S 060921 QA/QC Collected? -

Purging / Sampling Method: low flow pump - dedicated HDPE

1. L = Well Depth:	19.50	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	7.67	feet
4. C = Column of Water in Well:	11.83	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.93	gal
6. 3(V) = Target Purge Volume	5.79	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings						
Time	24 hr	1135	1140	1145	1150	1155	1200	1205
Water Level (0.33)	feet	7.67	7.99	7.95	7.95	7.96	7.96	7.96
Volume Purged	gal	—	.15	.50	1.00	1.50	2.00	2.50
Flow Rate	mL/min	244	240	240	240	240	240	240
Turbidity (+/- 10%)	NTU	8.85	8.41	7.29	3.08	2.24	2.51	7.69
Dissolved Oxygen (+/- 10%)	%	13.0	3.5	2.2	1.6	1.4	1.3	1.3
Dissolved Oxygen (+/- 10%)	mg/L	1.30	.36	0.22	.16	.15	.13	.13
Eh / ORP (+/- 10)	MeV	-118.7	-136.6	-144.1	-142.4	-138.0	-135.9	-129.7
Specific Conductivity (+/- 3%)	mS/cm	0.88	0.82	0.82	0.90	0.95	0.97	0.97
Conductivity (+/- 3%)	mS/cm	0.69	0.64	0.64	0.69	0.73	0.75	0.75
pH (+/- 0.1)	pH unit	7.71	7.72	7.73	7.68	7.64	7.61	7.56
Temp (+/- 0.5)	C°	13.7	13.4	13.3	13.2	13.2	13.1	13.2
Color	Visual	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Odor	Olfactory	None	None	None	None	None	None	None

Comments:

Sample @ 1215

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca 60615225

Monitoring Well Number: MW-315 Date: 6/8/21

Samplers: AG + PM

Sample Number: MW-315 060821 QA/QC Collected? DUP

Purging / Sampling Method: low flow peripump + dedicated LDPE

1. L = Well Depth:	11.53	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	6.82	feet
4. C = Column of Water in Well:	4.71	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	0.77	gal
6. 3(V) = Target Purge Volume	2.31	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings						
Time	24 hr	1230	1235	1240	1245	1250 ✓	1255 ✓	1300 ✓
Water Level (0.33)	feet	6.82	6.84	6.84	6.85	6.85	6.85	6.85
Volume Purged	gal	–	.15	.30	.45	.60	.85	1.00
Flow Rate	mL/min	240	240	240	240	240	240	240
Turbidity (+/- 10%)	NTU	29.1	3.08	2.23	1.68	1.14	1.09	0.97
Dissolved Oxygen (+/- 10%)	%	6.6	4.9	3.7	3.3	3.0	2.4	2.7
Dissolved Oxygen (+/- 10%)	mg/L	.69	.51	0.39	0.35	.32	.25	.27
Eh / ORP (+/- 10)	MeV	-69.8	1.2	1.2	7.7	6.2	5.3	9.2
Specific Conductivity (+/- 3%)	mS/cm[c]	0.80	0.71	0.71	0.71	0.71	0.71	.71
Conductivity (+/- 3%)	mS/cm	0.60	0.54	0.54	0.54	0.54	0.54	0.54
pH (+/- 0.1)	pH unit	7.10	6.93	6.93	6.92	6.93	6.92	6.92
Temp (+/- 0.5)	C°	12.4	12.4	12.5	12.4	12.5	12.5	12.5
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	None	None	None	None	None	None	None

Comments:

Sample @ 1330

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca - 60615225

Monitoring Well Number: MW-335 Date: 06/08/21

Samplers: Patrick Meltze

Sample Number: MW-335 060821 QA/QC Collected? ✓

Purging / Sampling Method: peri pump w/ dedicated tubing Hastlas

1. L = Well Depth:	9.48	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	4.34 ~~4.37~~	feet
4. C = Column of Water in Well:	5.14	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	0.84 ~~0.674~~	gal
6. 3(V) = Target Purge Volume	2.5 ~~2.02~~	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings						
Time	24 hr	0810	0815	0820	0825	0830	0835	0840
Water Level (0.33)	feet	4.34	4.76	5.08	5.13	5.26	5.32	5.54
Volume Purged	gal	0	0.25	0.50	0.75	1.00	1.25	1.75
Flow Rate	mL/min	≈130	≈100	≈100	≈100	≈100	100	100
Turbidity (+/- 10%)	NTU	159	74.2	30.6	21.3	34.9	27.5	8.01
Dissolved Oxygen (+/- 10%)	%	20.8	16.6	13.5	12.6	12.8	12.0	11.4
Dissolved Oxygen (+/- 10%)	mg/L	2.11	1.72	1.39	1.29	1.35	1.25	1.17
Eh / ORP (+/- 10)	MeV	76.9	30.0	8.1	-3.5	0.4	10.1	-8.3
Specific Conductivity (+/- 3%)	mS/cm^c	1.32	1.31	1.31	1.30	1.36	1.35	1.33
Conductivity (+/- 3%)	mS/cm	1.04	1.03	1.03	1.04	1.05	1.06	1.05
pH (+/- 0.1)	pH unit	11.42	11.20	10.60	10.20	9.90	9.66	9.55
Temp (+/- 0.5)	C°	13.9	13.7	13.9	14.3	13.7	14.0	13.7
Color	Visual	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy
Odor	Olfactory	✓	✓	✓	✓	✓	✓	✓

Comments: Pump on @ 810
- No odor or sheen seen.
- tan & colored water.

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca - 60615225

Monitoring Well Number: MW-335 Date: 6/8/21

Samplers: PM

Sample Number: MW-335 060821 QA/QC Collected? ✓

Purging / Sampling Method: ~~Peri~~ pump w/ dedicated tubing

1. L = Well Depth:	9.42	feet
2. D = Riser Diameter (I.D.):	0.14	feet
3. W = Depth to Water:	4.34	feet
4. C = Column of Water in Well:	5.11	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	0.84	gal
6. 3(V) = Target Purge Volume	2.5	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings						
Time	24 hr	0845	0850	0855				
Water Level (0.33)	feet	5.71	5.81	6.01				
Volume Purged	gal	2.00	2.30	2.60				
Flow Rate	mL/min	125	125	125				
Turbidity (+/- 10%)	NTU	5.21	4.82	4.74				
Dissolved Oxygen (+/- 10%)	%	11.4	11.2	1.00				
Dissolved Oxygen (+/- 10%)	mg/L	1.17	1.16	1.15				
Eh / ORP (+/- 10)	MeV	-20.2	-28.0	-29.6				
Specific Conductivity (+/- 3%)	mS/cm[c]	1.33	1.32	1.32				
Conductivity (+/- 3%)	mS/cm	1.04	1.04	1.02				
pH (+/- 0.1)	pH unit	9.44	9.35	9.38				
Temp (+/- 0.5)	C°	13.8	13.6	13.3				
Color	Visual	clear	clear	clear				
Odor	Olfactory	✓	✓	✓				

Comments: Sampled @ 0855

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG Ithaca 60615225

Monitoring Well Number: MW-40 Date: 6/8/21

Samplers: MZ + PM

Sample Number: MW-40 060821 QA/QC Collected? —

Purging / Sampling Method: low flow peri pump dedicated LDPE

1. L = Well Depth:	9.38	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	5.01	feet
4. C = Column of Water in Well:	4.37	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	0.71	gal
6. 3(V) = Target Purge Volume	2.13	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings				✓	✓	✓
Time	24 hr	1050	1055	1100	1105	1110	1115	1120
Water Level (0.33)	feet	5.01	5.25	5.34	5.34	5.39	5.44	5.45
Volume Purged	gal	2165	.20	.40	.60	.80	1.00	1.20
Flow Rate	mL/min	—	216	216	216	216	216	216
Turbidity (+/- 10%)	NTU	239	85.8	10.1	4.81	8.64	0.93	0.91
Dissolved Oxygen (+/- 10%)	%	6.0	2.9	1.5	1.6	1.2	1.0	1.0
Dissolved Oxygen (+/- 10%)	mg/L	0.62	.31	0.16	0.17	0.12	.11	.11
Eh / ORP (+/- 10)	MeV	-130.4	-78.6	-40.5	-33.6	-26.7	-25.7	-25.5
Specific Conductivity (+/- 3%)	mS/cm[c]	.443	.352	.309	.309	.303	.303	.304
Conductivity (+/- 3%)	mS/cm	.327	.266	.229	.230	.225	.225	.225
pH (+/- 0.1)	pH unit	6.98	6.78	6.69	6.69	6.70	6.70	6.70
Temp (+/- 0.5)	C°	11.4	12.4	11.8	11.6	11.5	11.6	11.5
Color	Visual	murky	clear	clear	clear	clear	clear	clear
Odor	Olfactory	None	None	None	None	None	None	None

Comments:

sample @ 1140

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG Ithaca 60615225

Monitoring Well Number: MW-45S Date: 6/8/21

Samplers: AG + PM

Sample Number: MW-45S 060821 QA/QC Collected? —

Purging / Sampling Method: low flow peri pump

1. L = Well Depth:	14.68	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	4.75	feet
4. C = Column of Water in Well:	9.93	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	1.62	gal
6. 3(V) = Target Purge Volume	4.86	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings				✓	✓	✓
Time	24 hr	0930	0935	0940	0945	0950	0955	1000
Water Level (0.33)	feet	4.75	5.50	6.61	7.00	7.10	7.16	7.20
Volume Purged	gal	—	.25	.50	.75	1.00	1.25	1.50
Flow Rate	mL/min	216	216	216	216	180	180	180
Turbidity (+/- 10%)	NTU	62.7	32.2	30.1	29.6	27.4	26.8	26.3
Dissolved Oxygen (+/- 10%)	%	6.4	4.3	3.4	3.6	3.5	3.6	3.6
Dissolved Oxygen (+/- 10%)	mg/L	0.67	0.46	0.35	0.37	0.37	.37	.37
Eh / ORP (+/- 10)	MeV	-50.9	-50.9	-51.0	-50.9	-45.9	-42.0	-37.6
Specific Conductivity (+/- 3%)	mS/cm[c]	1.21	1.21	1.21	1.20	1.20	1.20	1.21
Conductivity (+/- 3%)	mS/cm	0.93	0.93	0.94	0.94	0.94	0.94	0.94
pH (+/- 0.1)	pH unit	7.00	7.00	6.99	6.99	7.00	6.99	6.98
Temp (+/- 0.5)	C°	13.1	13.2	13.5	13.6	13.6	13.6	13.4
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	None	None	None	None	None	None	None

Comments:

Sample time @ 1015

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca 60615225

Monitoring Well Number: MW-465 Date: 6/8/21

Samplers: Alexandra Holden + Pat McHugh

Sample Number: MW-465 060821 QA/QC Collected? -

Purging / Sampling Method: low flow peri pump

1. L = Well Depth:	16.78	feet
2. D = Riser Diameter (I.D.):	2"	feet
3. W = Depth to Water:	4.18	feet
4. C = Column of Water in Well:	12.60	feet
5. V = Volume of Water in Well = $C(3.14159)(0.5D)^2(7.48)$	2.06	gal
6. 3(V) = Target Purge Volume	6.18	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	Readings				✓	✓	✓
Time	24 hr	0810	0815	0820	0825	0830	0835	0840
Water Level (0.33)	feet	4.18	4.49	4.70	4.67	4.68	4.68	4.70
Volume Purged	gal	—	.15	.30	.50	.95	1.15	1.50
Flow Rate	mL/min	240	240	240	240	230	230	230
Turbidity (+/- 10%)	NTU	26.8	18.4	13.6	9.14	9.01	8.57	8.00
Dissolved Oxygen (+/- 10%)	%	6.1	2.9	2.3	2.0	1.8	1.7	1.8
Dissolved Oxygen (+/- 10%)	mg/L	0.63	0.29	0.24	.21	0.18	.18	.18
Eh / ORP (+/- 10)	MeV	-120.5	-141.5	-149.8	-152.6	-157.2	-153.5	-155.6
Specific Conductivity (+/- 3%)	mS/cm[c]	.788	0.81	0.83	0.83	0.84	0.84	0.84
Conductivity (+/- 3%)	mS/cm	0.61	0.63	0.65	0.64	0.66	0.66	0.68
pH (+/- 0.1)	pH unit	7.11	7.10	7.09	7.09	7.08	7.08	7.08
Temp (+/- 0.5)	C°	13.3	13.4	13.4	13.4	13.6	13.8	13.9
Color	Visual	clear	clear	clear	clear	clear	clear	clear
Odor	Olfactory	NONE	NONE	NONE	NONE	NONE	NONE	NO

Comments:

Sample @ 0850

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca - 60615225

Monitoring Well Number: MW-475 Date: 6/8/21

Samplers: Patrick McIlyar

Sample Number: MW-475 060821 QA/QC Collected? ✓

Purging / Sampling Method: peri. pump w/ dedicated tubing.

1. L = Well Depth:	14.64	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	5.08	feet
4. C = Column of Water in Well:	9.56	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	1.56	gal
6. 3(V) = Target Purge Volume	4.68	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Very poor Recharge

Parameter	Units	Readings						
Time	24 hr	1305	1310	1315	1320	1325	1330	1335
Water Level (0.33)	feet	5.08	6.52	8.30	8.82	9.08	9.35	9.61
Volume Purged	gal	0	0.25	0.50	0.75	1.00	1.10	1.20
Flow Rate	mL/min	150	150	100	75	50	50	50
Turbidity (+/- 10%)	NTU	31.0	56.8	40.3	54.3	72.6	76.4	78.9
Dissolved Oxygen (+/- 10%)	%	0.4	0.3	0.2	0.2	0.2	0.1	0.1
Dissolved Oxygen (+/- 10%)	mg/L	0.04	0.03	0.02	0.02	0.02	0.01	0.01
Eh / ORP (+/- 10)	MeV	-113.8	-122.5	-129.7	-133.3	-137.5	-140.5	-144.7
Specific Conductivity (+/- 3%)	mS/cm^c	0.86	0.84	0.87	0.87	0.92	0.93	0.93
Conductivity (+/- 3%)	mS/cm	0.67	0.65	0.68	0.70	0.77	0.75	0.75
pH (+/- 0.1)	pH unit	6.82	6.74	6.72	6.72	6.78	6.75	6.79
Temp (+/- 0.5)	C°	13.3	13.0	13.3	14.6	16.5	16.2	15.8
Color	Visual	Clear	Clear	Clear-ish	Clear-ish	clear-ish	Clear-ish	Clear-ish
Odor	Olfactory	✓	✓	✓	✓	✓	✓	✓

Comments: pump on @ 1305

~~No odor or sheen detected~~ PM What appears to be sheen Seen @ 1310

- Recharge very poor, Reduce flow rate even more.
- Sampled @ 1335.

Page 1 of 1

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca — 60615225

Monitoring Well Number: MW-48S Date: 6/8/21

Samplers: Patrick McHugh

Sample Number: MW-48S 060821 QA/QC Collected? -

Purging / Sampling Method: peri pump w/ dedicated tubing

1. L = Well Depth:	13.2	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	4.36	feet
4. C = Column of Water in Well:	8.84	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	1.44	gal
6. 3(V) = Target Purge Volume	4.32	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI

Parameter	Units	1135	1140	1145	Readings			
Time	24 hr	~~0135~~	~~0140~~	~~0145~~	1150	1155	1200	1205
Water Level (0.33)	feet	4.36	4.37	4.39	4.41	4.43	4.48	4.51
Volume Purged	gal	0	0.25	0.75	1.00	1.50	1.00	2.50
Flow Rate	mL/min	200	200	200	200	200	200	200
Turbidity (+/- 10%)	NTU	75.2	37.1	24.1	25.7	20.7	10.9	10.2
Dissolved Oxygen (+/- 10%)	%	13.4	13.3	10.8	8.9	8.7	8.5	8.3
Dissolved Oxygen (+/- 10%)	mg/L	2.41	1.25	1.03	0.85	0.83	0.82	0.80
Eh / ORP (+/- 10)	MeV	-156.2	-111.5	-120.5	-121.6	-126.7	-130.7	-132.6
Specific Conductivity (+/- 3%)	mS/cm^c	3.44	3.46	3.60	3.68	3.76	3.88	3.89
Conductivity (+/- 3%)	mS/cm	2.45	2.95	3.05	3.14	3.18	3.28	3.28
pH (+/- 0.1)	pH unit	9.85	9.72	9.40	8.40	8.44	8.26	8.36
Temp (+/- 0.5)	C°	17.4	17.2	17.0	17.4	17.0	16.8	16.8
Color	Visual	Clear	Clear	Clear	Clear	Clear	Clear	Clear
Odor	Olfactory	-	-	-	-	-	-	-

Comments: Pump on @ 1135
- No odor or sheen

Very Silty @ bottom, had to clean YSI Immediately.

Monitoring Well Purging / Sampling Form

Project Name and Number: NYSEG - Ithaca - [redacted] 60615225

Monitoring Well Number: MW-485 Date: 6/3/21

Samplers: PM

Sample Number: MW-485 060821 QA/QC Collected? -

Purging / Sampling Method: Peri Pump w/ dedicated tubz

1. L = Well Depth:	13.2	feet
2. D = Riser Diameter (I.D.):	0.17	feet
3. W = Depth to Water:	4.36	feet
4. C = Column of Water in Well:	8.84	feet
5. V = Volume of Water in Well = C(3.14159)(0.5D)^2(7.48)	1.44	gal
6. 3(V) = Target Purge Volume	4.32	gal

D (inches)	D (feet)
1-inch	0.08
2-inch	0.17
3-inch	0.25
4-inch	0.33
6-inch	0.50

Conversion factors to determine V given C

D (inches)	1-inch	2-inch	3-inch	4-inch	6-inch
V (gal / ft)	0.041	0.163	0.37	0.65	1.5

Water Quality Readings Collected Using NTU + YSI ✓

Parameter	Units	Readings						
Time	24 hr	1210						
Water Level (0.33)	feet	4.53						
Volume Purged	gal	3.00						
Flow Rate	mL/min	200						
Turbidity (+/- 10%)	NTU	9.8						
Dissolved Oxygen (+/- 10%)	%	8.1						
Dissolved Oxygen (+/- 10%)	mg/L	7.7						
Eh / ORP (+/- 10)	MeV	-136.1						
Specific Conductivity (+/- 3%)	mS/cm^c	3.41						
Conductivity (+/- 3%)	mS/cm	3.32						
pH (+/- 0.1)	pH unit	8.41						
Temp (+/- 0.5)	C°	17.0						
Color	Visual	Clear						
Odor	Olfactory	✓						

Comments: Sampled @ 1210

Appendix B – Analytical Laboratory Reports

Appendix C - Data Usability Summary Report

Prepared for:
NYSEG
Binghamton, NY

Prepared by:
AECOM
Pittsburgh, PA
60615225.5
June 2021

June 23, 2021

Data Usability Summary Report

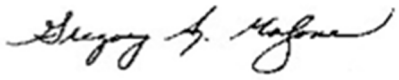
NYSEG/Ithaca Court Street Former MGP Site
Groundwater Sampling Event
Eurofins Environment Testing America Laboratory Data
June 2021
Final

Prepared for:
NYSEG
Binghamton, NY

Prepared by:
AECOM
Pittsburgh, PA
60615225.5
June 2021

Data Usability Summary Report

NYSEG/Ithaca Court Street Former MGP Site
Groundwater Sampling Event
Eurofins Environment Testing America Laboratory Data
June 2021
Final



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Contents

List of Appendices

Executive Summary

Overview

Data validation was performed by Gregory A. Malzone of AECOM-Pittsburgh on three data packages comprised of three sample delivery groups (SDGs) from Eurofins Environment Testing America (EETA-Buffalo), 10 Hazelwood Drive, Amherst, NY 14228-2298 for the analysis of groundwater samples collected on June 8-10, 2021 at the NYSEG/Ithaca Court Street former manufactured gas plant (MGP) site.

The following analytical methods were requested on the chain-of-custody (CoC) records.

- Benzene, Toluene, Ethylbenzene and Total Xylenes (BTEX) and Trihalomethanes (THMs) Bromoform, Chloroform, Chlorodibromomethane, and Dichlorobromomethane by USEPA SW-846 Method 8260C
- Polynuclear Aromatic Hydrocarbons (PAHs) by USEPA SW-846 Method 8270D Low-Level and USEPA SW-846 Method 8270E in Selected Ion Monitoring (SIM) Mode
- Methane by USEPA Method RSK-175
- Total Iron by USEPA SW-846 Method 6010C

General Chemistry

- Total Cyanide by USEPA SW-846 Method 9012B
- Sulfate by USEPA MCAWW Method 300.0
- Ammonia by USEPA MCAWW Method 350.1
- Nitrate and Nitrite by MCAWW Method 353.2 (Nitrate by Calculation)
- Total Alkalinity by Standard Method 2320B
- Ferrous Iron by Standard Method 3500 FE D

The PAH determinations using GC/MS in SIM mode were performed at the EETA-Edison, NJ facility.

The data were evaluated for conformance to method specifications and qualifiers were applied using the USEPA Region 2 SOPs and the validation criteria set forth in the *USEPA National Functional Guidelines for Organic Superfund Methods Data Review*, EPA-540-R-20-005, November 2020 and *USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review*, EPA-542-R-20-006, November 2020, as they apply to the analytical methods employed.

Field duplicate relative percent difference (RPD) review and applicable control limits were taken from the *USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Organics Analyses*, December 1996 and *USEPA Region I Laboratory Data Validation Functional Guidelines for Evaluating Inorganics Analyses*, June 1988.

The samples were processed, and the results were reported under three SDGs 480-185758-1, 480-185822-1, and 480-185894-1. Table 1 provides a sample submittal list with the field IDs cross-referenced with the ETAL-Buffalo IDs.

Table 1 - Sample Submittals – NYSEG/Ithaca Former MGP Groundwater

Field ID	Laboratory ID	QC	Matrix	Date Sampled
MW-46S 060821	480-185758-1		Groundwater	06/08/21 08:50
MW-33S 060821	480-185758-2		Groundwater	06/08/21 08:55
MW-45S 060821	480-185758-3		Groundwater	06/08/21 10:15
MW-22S 060821	480-185758-4	MS/MSD	Groundwater	06/08/21 10:30
MW-40 060821	480-185758-5		Groundwater	06/08/21 11:40
MW-48S 060821	480-185758-6		Groundwater	06/08/21 12:10
MW-31S 060821	480-185758-7		Groundwater	06/08/21 13:30
MW-47S 060821	480-185758-8		Groundwater	06/08/21 13:35
DUP 060821	480-185758-9	MW-31S 060821	Groundwater (QC)	06/08/21 00:00
TRIP BLANK 060821	480-185758-10	trip blank	Aqueous (QC)	06/08/21 00:00
MW-23S 060921	480-185822-1		Groundwater	06/09/21 08:40
MW-C16 060921	480-185822-2		Groundwater	06/09/21 09:30
MW-C11 060921	480-185822-3		Groundwater	06/09/21 10:40
MW-25S 060921	480-185822-4		Groundwater	06/09/21 10:05
MW-28S 060921	480-185822-5		Groundwater	06/09/21 12:15
MW-24S 060921	480-185822-6		Groundwater	06/09/21 12:35
TRIP BLANK 060921	480-185822-7	trip blank	Aqueous (QC)	06/09/21 00:00
MW-C12 061021	480-185894-1		Groundwater	06/10/21 09:00
EQ BLANK 061021	480-185894-2	equipment blank	Aqueous (QC)	06/10/21 09:10
TRIP BLANK 061021	480-185894-3	trip blank	Aqueous (QC)	06/10/21 00:00

Summary

Data quality for the organic analyses was evaluated by reviewing the following parameters: holding times, GC/MS tuning and performance standards, internal standards, initial and continuing calibrations, matrix spike/matrix spike duplicates (MS/MSD), surrogate recoveries, laboratory control standards (LCSs), laboratory blanks, laboratory and field duplicates, compound identification, and compound quantitation.

Inorganic data quality was evaluated by reviewing the following parameters: holding times, matrix spikes, initial calibrations, continuing calibration verification standard recoveries, contract required detection limit standard recoveries, laboratory control samples, ICP interference check sample recoveries, ICP serial dilution results, field and laboratory duplicates, laboratory blanks, and analyte quantitation.

All data have been determined to be useable for the purpose of assessing the presence/absence and quantitative concentrations of the compounds and analytes in the media tested (i.e., groundwater) with the qualifications described below. No data points were rejected. Completeness of 100% was achieved for this data set. This is within the goal of 90-100% and is acceptable.

A glossary of data qualifier definitions is included in Appendix A of this report. The data qualifier summaries are attached as Appendix B of this report.

Each noncompliance with specific data usability criteria that required data qualification is discussed below. Support documentation for data qualifications was included in Appendix C of this report.

1.0 BTEX and THMs

480-185758-1

Matrix Spike Recoveries: Sample MW-22S-060821 was designated in the field to be processed as a quality control sample, that is, as the MS/MSD. The MW-22S-060821 MS and MSD recoveries for ethylbenzene, toluene, and total xylenes were greater than the upper advisory limits. The MW-22S-060821 ethylbenzene, toluene, and total xylenes results were non-detect. No data qualification was required.

Reporting and Detection Limits: Sample MW-46S-060821 required analysis at an initial dilution to bring the target compound concentration(s) into the calibration range and/or minimalize non-target matrix interference. The initial dilution elevated the reporting limits (RLs) and method detection limits (MDLs). The surrogate recoveries were within the quality control limits. No data qualifications were required.

480-185822-1

Reporting and Detection Limits: Samples MW-23S-060921, MW-C11-060921, and MW-C16-060921 required analysis at an initial dilution to bring the target compound concentration(s) into the calibration range and/or minimalize non-target matrix interference. The initial dilution elevated the RLs and MDLs. The surrogate recoveries were within the quality control limits. No data qualifications were required.

480-185894-1

No data quality issues were noted. No data qualifications were required.

2.0 Polynuclear Aromatic Hydrocarbons

480-185758-1

Blank Contamination: Phenanthrene was detected in the low-level method blank MB 480-584784/1-A at an estimated concentration of 0.0912 J µg/L. The phenanthrene results for associated samples MW-22S-060821, MW-31S-060821, MW-33S-060821, MW-40-060821, MW-45S-060821, and DUP were estimated to be less than the RL and were qualified "U," as undetected at the RL, because of laboratory contamination. The phenanthrene results for associated samples MW-46S-060821, MW-47S-060821, and MW-48S-060821 were non-detect or greater than five times the blank concentration and did not require qualification.

Calibrations: The SIM continuing calibration verification (CCV) percent difference for benzo(a)anthracene was less than the lower method specification limit of -20% on 06/13/21 at 15:42 on instrument CBNAMS9. The positive and non-detect benzo(a)anthracene results for associated samples MW-46S-060821, MW-33S-060821, MW-45S-060821, MW-22S-060821, and MW-40-060821 were qualified "J/UJ," as estimates, because of low instrument bias.

The SIM CCV percent differences for benzo(g,h,i)perylene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were greater than the upper method specification limit of 20% on 06/13/21 at 116:23 on instrument CBNAMS13. The benzo(g,h,i)perylene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene results for associated samples MW-48S-060821, MW-31S-060821, MW-47S-060821, and DUP- 060821 were non-detect and did not require qualification.

Surrogate Recoveries: The GC/MS SIM nitrobenzene and 2-fluorobiphenyl surrogate recoveries for sample MW-33S-060821 were greater than the upper quality control limits. All PAH results for sample MW-33S-060821 were non-detect and did not require qualification.

480-185822-1

Blank Contamination: Phenanthrene was detected in the low-level method blank MB 480-585079/1-A at an estimated concentration of 0.0897 J µg/L. The phenanthrene results for associated samples MW-24S-060921, MW-28S-060921, MW-25S-060921, and MW-C16-060921 were estimated to be less than the RL and were qualified "U," as undetected at the RL, because of laboratory contamination. The phenanthrene results for associated samples MW-C11-060921 and MW-23S-060921 were non-detect or greater than five times the blank concentration and did not require qualification.

Calibrations: The SIM CCV percent difference for benzo(a)anthracene was less than the lower method specification limit of -20% on 06/13/21 at 15:42 on instrument CBNAMS9. The positive and non-detect benzo(a)anthracene results for associated samples MW-24S-060921, MW-28S-060921, MW-25S-060921, MW-C16-060921, MW-C11-060921 and MW-23S-060921 were qualified "J/UJ," as estimates, because of low instrument bias.

Reporting and Detection Limits: Low-level SVOC samples MW-23S-060921, MW-C11-060921, and MW-C16-060921 required analysis at an initial dilution to minimize foaming upon purging and/or minimize non-target matrix interference. The initial dilution elevated the RLs and MDLs. The surrogate recoveries were within the quality control limits. No data qualifications were required.

480-185894-1

Blank Contamination: Phenanthrene was detected in the low-level method blank MB 480-585079/1-A at an estimated concentration of 0.0897 J µg/L. The phenanthrene results for associated samples MW-C12-061021 and EQ BLANK-061021 were estimated to be less than the RL and were qualified "U," as undetected at the RL, because of laboratory contamination.

Reporting and Detection Limits: Low-level SVOC sample MW-C12-061021 required analysis at an initial dilution to bring the target compound concentration(s) into the calibration range and minimalize non-target matrix interference. The initial dilution elevated the RLs and MDLs. The surrogate recoveries were within the quality control limits. No data qualifications were required

3.0 Methane

480-185758-1

Dilutions: Samples MW-46S-060821, MW-45S-060821, MW-47S-060821, and MW-48S-060821 required analysis at an initial dilution to bring the methane concentration into the calibration range. The initial dilution elevated the RLs and MDLs. No data qualifications were required.

480-185822-1

Dilutions: Samples MW-23S-060921, MW-C11-060921, and MW-28S-060921 required analysis at an initial dilution to bring the methane concentration into the calibration range. The initial dilution elevated the RLs and MDLs. No data qualifications were required.

480-185894-1

Dilutions: Sample MW-C12-061221 required analysis at an initial dilution to bring the methane concentration into the calibration range. The initial dilution elevated the RLs and MDLs. No data qualifications were required.

4.0 Total Iron

All SDGs

No data quality issues were noted. No data qualifications were required.

5.0 General Chemistry

All SDGs

Holding Time: All ferrous iron samples were analyzed beyond the method holding time of 24 hours. Ferrous iron should be performed as a field test. The positive and non-detect ferrous iron results were qualified "J/UJ," as estimates, because the holding time was exceeded.

480-185758-1

Blank Contamination: Total cyanide was detected in method blanks MB 480-584830/1-A and MB 480-585039/1-A at concentrations estimated to be less than the reporting limits. The total cyanide results for associated samples MW-33S-060821, MW-40-060821, MW-45S-060821, and MW-48S-060821 were estimated to be less than the reporting limits and were qualified "U," as undetected at the reporting limit, because of laboratory contamination. The total cyanide results for associated samples MW-22S-060821, MW-46S-060821, and MW-47S-060821 were greater than or equal to the reporting limit, but less than ten times the blank concentration and were qualified "J/J+," as biased high, because of laboratory contamination. The total cyanide results for associated samples MW-31S-060821 and DUP-060821were non-detect and did not require qualification.

Several alkalinity method blanks and continuing calibration blanks had total alkalinity at concentrations estimated to be less than the reporting limits. All associated total alkalinity results were greater than the reporting limits and greater than ten times the blank levels. No data qualifications were required.

Matrix Spike Recoveries: The ammonia spikes added to MW-46S-060821 MS and MW-48S-060821 MS were less than 25% of the original sample results. Advisory limits did not apply. No data qualification was required.

The MW-22S-060821 MS/MSD total cyanide recoveries were less than 30%. The RPD between the MS and MSD recovery was greater than the maximum advisory limit. The positive total cyanide result for sample MW-22S-060821 was qualified "J," as an estimated concentration, because of matrix effects and/or sample heterogeneity, and laboratory contamination issues.

The MW-40-060821 MS total cyanide recovery was less than 30%. In addition, the associated continuing calibration standard recovery was greater than the upper quality control limit, and the associated method blank had a positive result for total cyanide. The positive result for MW-40-060821 was qualified "U," as undetected at the reporting limit, because of laboratory contamination. No further qualification was required.

480-185822-1

Blank Contamination: Ammonia was detected in the continuing calibration blank analyzed on 06/10/21 on 08:44 at a concentration estimated to be less than the reporting limit. The ammonia results for associated samples MW-23S-060921, MW-C16-060921, MW-C11-060921, and MW-25S-060921 were non-detect or greater than ten times the blank concentration. No data qualification was required.

Several alkalinity continuing calibration blanks had total alkalinity at concentrations estimated to be less than the reporting limits. All associated total alkalinity results were greater than the reporting limits and greater than ten times the blank levels. No data qualifications were required.

Matrix Spike Recoveries: The MW-C16-060921 MS total cyanide recovery was less than the lower advisory limit at 55%. The positive total cyanide result for sample MW-C16-060921 was qualified "J," as an estimated concentration, because of matrix effects and/or sample heterogeneity.

Laboratory Duplicate Precision: A duplicate analysis was performed on sample MW-23S-060921. The results were less than five times the RL, and the absolute difference between the original and duplicate result was less than the RL. Variation of this magnitude is acceptable. No data qualification was required.

480-185894-1

Blank Contamination: Total cyanide was detected in equipment blank EQ BLANK at a concentration estimated to be less than the reporting limit. The total cyanide result for associated sample MW-C12-061021 was greater than reporting limit, but less than ten times the blank concentration and was qualified “J+,” as biased high, because of ambient contamination.

The alkalinity continuing calibration blank analyzed on 06/11/21 at 08:17 had total alkalinity at a concentration estimated to be less than the reporting limit. The total alkalinity result for associated sample MW-C12-061021 was greater than the reporting limit and greater than ten times the blank level. No data qualification was required.

The ammonia method blank and 06/14/21 continuing calibration blanks had ammonia at concentrations estimated to be less than the reporting limits. The ammonia result for associated sample MW-C12-061021 was greater than the reporting limit and greater than ten times the highest associated blank level. No data qualification was required.

Matrix Spike Recoveries: The alkalinity spike added to MW-C12-061021 MS was less than 25% of the original sample result. Advisory limits did not apply. No data qualification was required.

6.0 Field Duplicate Precision

A field duplicate sample was collected at MW-31S-060821. The calculated RPDs and absolute differences are listed in Tables 2 below. Field duplicate results were evaluated using the following criteria.

Organics: The RPD must be ≤ 30% for results greater than or equal to two times the reporting detection limit. If one of the results is non-detect or less than two times the reporting limit, and the duplicate is greater than two times the reporting detection limit, the difference between the parent and field duplicate results must be less than or equal to two times the reporting limit.

Inorganics: The RPD must be ≤ 30%, for results greater than or equal to five times the reporting limit. For results less than five times the reporting limit, the difference between the parent and field duplicate results must be less than or equal to two times the reporting limit.

Action applies only to the affected analyte in the duplicate sample pair.

Field sampling/laboratory precision and sample homogeneity were acceptable; no data qualification was required.

Table 2 - Field Duplicate Precision - NYSEG/Ithaca Former MGP Groundwater

Parameter	Units	MW-31S	DUP	Abs. Diff.	RPD (%)	QUALs
All parent and field duplicate results were non-detect.						None

RPD: Relative percent difference
Abs. Diff.: Absolute difference
QUALs: Qualifications
µg/L: micrograms per liter (ppb)
mg/L: milligrams per liter (ppm)

7.0 Notes

Matrix spike and matrix spike duplicates, laboratory duplicates, and ICP serial dilutions that were performed on non-project samples were not evaluated because matrix similarity to project samples could not be assumed.

SW-846 8260C THMs were not assigned to the field duplicate, MS/MSDs, and trip blanks. Only SW-846 8260C BTEX were assigned to the to the field duplicate, MS/MSDs, and trip blanks. Samples for dissolved gases, and general chemistry (except for total cyanide) were not collected for the field duplicate.

Data Reporting: Positive results less than the RL, but greater than the MDL were qualified "J," as estimated concentrations, due to increased uncertainty near the detection limit. These "J" qualifiers were maintained in the data validation unless negated in response to blank contamination. Sample results reported between the MDL and RL are usable as estimated values with an unknown directional bias.

Sample Custody: Sample identifications, sample dates, and sample times on the chain of custody matched those found in the laboratory data package. The chain of custody was signed and dated, and proper chain of custody was followed from field to laboratory with the following exceptions.

- For SDG 480-185758-1, the chain of custody did not include a sample date and time for the trip blank and field duplicate "DUP". The laboratory logged in the field duplicate sample with the collection date indicated on the label and the sample time of "00:00" as they routinely do. The data reviewer manually edited the trip blank and field duplicate date and time to be "06/08/21" and "00:00" on the chain of custody.
- For SDG 480-185822-1, the chain of custody did not include a sample date and time for the trip blank associated with the 6/9/21 collection date. The laboratory logged in the trip blank sample with the shipment date indicated on the label and the sample time of "00:00" as they routinely do. The data reviewer manually edited the trip blank date and time to be "06/09/21" and "00:00" on the chain of custody.
- For SDG 480-185894-1, the chain of custody did not include a sample date and time for the trip blank associated with the 6/10/21 collection date. The laboratory logged in the trip blank sample with the collection date indicated on the label and the sample time of "00:00" as they routinely do. The data reviewer manually edited the trip blank date and time to be "06/10/21" and "00:00" on the chain of custody.

Appendix A

Glossary of Data Qualifier Codes

Glossary of Data Qualifier Codes

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The analyte was positively identified. The associated numerical value is the approximate concentration of the analyte in the sample.
UJ	The analyte was analyzed for but was not detected. The reported quantitation limit is approximated and may be inaccurate or imprecise.
J+	The result is an estimated quantity but may be biased high.
J-	The result is an estimated quantity but may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in the ability to meet quality control criteria. The presence or absence of the analyte cannot be verified.
N	(Organics) The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	(Organics) The analysis indicates the presence of an analyte that has been tentatively identified and the associated numerical value represents its approximate concentration.

Appendix B

Data Qualification Summaries

Sample Summary

Client: AECOM
Job ID: 480-185758-1
Project/Site: NYSEG - Former MGP Site - Ithaca, NY

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-185758-1	MW-46S 060821	Water	06/08/21 08:50	06/09/21 08:00	
480-185758-2	MW-33S 060821	Water	06/08/21 08:55	06/09/21 08:00	
480-185758-3	MW-45S 060821	Water	06/08/21 10:15	06/09/21 08:00	
480-185758-4	MW-22S 060821	Water	06/08/21 10:30	06/09/21 08:00	
480-185758-5	MW-40 060821	Water	06/08/21 11:40	06/09/21 08:00	
480-185758-6	MW-48S 060821	Water	06/08/21 12:10	06/09/21 08:00	
480-185758-7	MW-31S 060821	Water	06/08/21 13:30	06/09/21 08:00	
480-185758-8	MW-47S 060821	Water	06/08/21 13:35	06/09/21 08:00	
480-185758-9	DUP	Water	06/08/21 00:00	06/09/21 08:00	
480-185758-10	TRIP BLANK	Water	06/08/21 00:00	06/09/21 08:00	

Client Sample ID: MW-46S 060821
Lab Sample ID: 480-185758-1

Date Collected: 06/08/21 08:50
Matrix: Water

Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1200**		20	8.2	ug/L			06/10/21 00:52	20
Bromoform	ND		20	5.2	ug/L			06/10/21 00:52	20
Chlorodibromomethane	ND		20	6.4	ug/L			06/10/21 00:52	20
Chloroform	ND		20	6.8	ug/L			06/10/21 00:52	20
Dichlorobromomethane	ND		20	7.8	ug/L			06/10/21 00:52	20
Ethylbenzene	**1200**		20	15	ug/L			06/10/21 00:52	20
Toluene	**65**		20	10	ug/L			06/10/21 00:52	20
Xylenes, Total	**580**		40	13	ug/L			06/10/21 00:52	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*06/10/21 00:52*	*20*
4-Bromofluorobenzene (Surr)	*86*		*73 - 120*		*06/10/21 00:52*	*20*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*06/10/21 00:52*	*20*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/10/21 00:52*	*20*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**75**	**J**	95	6.9	ug/L		06/10/21 08:27	06/14/21 22:50	200
Acenaphthylene	ND		57	11	ug/L		06/10/21 08:27	06/14/21 22:50	200
Anthracene	ND		95	6.5	ug/L		06/10/21 08:27	06/14/21 22:50	200
Chrysene	ND		95	14	ug/L		06/10/21 08:27	06/14/21 22:50	200
Fluoranthene	ND		95	15	ug/L		06/10/21 08:27	06/14/21 22:50	200
Fluorene	**16**	**J**	95	11	ug/L		06/10/21 08:27	06/14/21 22:50	200
Naphthalene	**2200**		190	12	ug/L		06/10/21 08:27	06/14/21 22:50	200
Phenanthrene	ND		38	12	ug/L		06/10/21 08:27	06/14/21 22:50	200
Pyrene	ND		95	14	ug/L		06/10/21 08:27	06/14/21 22:50	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*S1-*	*24 - 146*	*06/10/21 08:27*	*06/14/21 22:50*	*200*
2-Fluorobiphenyl	*116*		*37 - 120*	*06/10/21 08:27*	*06/14/21 22:50*	*200*
2-Fluorophenol (Surr)	*0*	*S1-*	*10 - 120*	*06/10/21 08:27*	*06/14/21 22:50*	*200*
Nitrobenzene-d5 (Surr)	*75*		*26 - 120*	*06/10/21 08:27*	*06/14/21 22:50*	*200*
Phenol-d5 (Surr)	*29*		*11 - 120*	*06/10/21 08:27*	*06/14/21 22:50*	*200*
p-Terphenyl-d14	*118*		*64 - 127*	*06/10/21 08:27*	*06/14/21 22:50*	*200*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**2.5**	J	0.050	0.016	ug/L		06/13/21 08:28	06/14/21 02:20	1
Benzo[a]pyrene	**2.8**		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 02:20	1
Benzo[b]fluoranthene	**1.8**		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 02:20	1
Benzo[g,h,i]perylene	**1.1**		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 02:20	1
Benzo[k]fluoranthene	**0.95**		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 02:20	1
Dibenz(a,h)anthracene	**0.34**		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 02:20	1
Indeno[1,2,3-cd]pyrene	**1.1**		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*125*		*25 - 131*	*06/13/21 08:28*	*06/14/21 02:20*	*1*
Nitrobenzene-d5	*79*		*54 - 134*	*06/13/21 08:28*	*06/14/21 02:20*	*1*

Client Sample ID: MW-46S 060821
Lab Sample ID: 480-185758-1
Date Collected: 06/08/21 08:50
Matrix: Water
Date Received: 06/09/21 08:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**11000**		440	110	ug/L			06/09/21 18:22	110

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**8.3**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 00:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		10.0	1.7	mg/L			06/12/21 04:41	5
Ammonia	**3.3**		0.040	0.018	mg/L			06/10/21 08:49	2
Cyanide, Total	**0.012**	~~B~~ J+	0.010	0.0050	mg/L		06/10/21 11:24	06/10/21 17:05	1
Nitrate as N	ND		0.050	0.020	mg/L			06/09/21 17:14	1
Alkalinity, Total	**336**		5.0	0.79	mg/L			06/11/21 14:55	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-33S 060821
Lab Sample ID: 480-185758-2
Date Collected: 06/08/21 08:55
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 01:15	1
Bromoform	ND		1.0	0.26	ug/L			06/10/21 01:15	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/10/21 01:15	1
Chloroform	ND		1.0	0.34	ug/L			06/10/21 01:15	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/10/21 01:15	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/10/21 01:15	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 01:15	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/10/21 01:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*77 - 120*		*06/10/21 01:15*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*06/10/21 01:15*	*1*
Dibromofluoromethane (Surr)	*88*		*75 - 123*		*06/10/21 01:15*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/10/21 01:15*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.48	0.034	ug/L		06/10/21 08:27	06/14/21 23:18	1
Acenaphthylene	ND		0.29	0.053	ug/L		06/10/21 08:27	06/14/21 23:18	1
Anthracene	ND		0.48	0.032	ug/L		06/10/21 08:27	06/14/21 23:18	1
Chrysene	ND		0.48	0.070	ug/L		06/10/21 08:27	06/14/21 23:18	1
Fluoranthene	ND		0.48	0.076	ug/L		06/10/21 08:27	06/14/21 23:18	1
Fluorene	ND		0.48	0.055	ug/L		06/10/21 08:27	06/14/21 23:18	1
Naphthalene	**0.22**	**J**	0.95	0.061	ug/L		06/10/21 08:27	06/14/21 23:18	1
Phenanthrene	~~0.086~~ ~~J B~~ 0.19 U		0.19	0.059	ug/L		06/10/21 08:27	06/14/21 23:18	1
Pyrene	ND		0.48	0.072	ug/L		06/10/21 08:27	06/14/21 23:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*24 - 146*	*06/10/21 08:27*	*06/14/21 23:18*	*1*
2-Fluorobiphenyl	*100*		*37 - 120*	*06/10/21 08:27*	*06/14/21 23:18*	*1*

Client Sample ID: MW-33S 060821
Lab Sample ID: 480-185758-2
Date Collected: 06/08/21 08:55
Matrix: Water
Date Received: 06/09/21 08:00

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*49*		*10 - 120*	*06/10/21 08:27*	*06/14/21 23:18*	*1*
Nitrobenzene-d5 (Surr)	*87*		*26 - 120*	*06/10/21 08:27*	*06/14/21 23:18*	*1*
Phenol-d5 (Surr)	*33*		*11 - 120*	*06/10/21 08:27*	*06/14/21 23:18*	*1*
p-Terphenyl-d14	*101*		*64 - 127*	*06/10/21 08:27*	*06/14/21 23:18*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:28	06/14/21 02:41	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 02:41	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 02:41	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 02:41	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 02:41	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 02:41	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*167*	*S1+*	*25 - 131*	*06/13/21 08:28*	*06/14/21 02:41*	*1*
Nitrobenzene-d5	*148*	*S1+*	*54 - 134*	*06/13/21 08:28*	*06/14/21 02:41*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**16**		4.0	1.0	ug/L			06/09/21 16:10	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.8**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 00:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**43.4**		10.0	1.7	mg/L			06/12/21 04:59	5
Ammonia	**0.83**		0.020	0.0090	mg/L			06/10/21 08:03	1
Cyanide, Total	~~0.0070~~ ~~J B~~	0.010 U	0.010	0.0050	mg/L		06/10/21 11:24	06/10/21 17:06	1
Nitrate as N	**0.020**	**J**	0.050	0.020	mg/L			06/09/21 17:16	1
Alkalinity, Total	**407**		5.0	0.79	mg/L			06/11/21 15:02	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-45S 060821
Lab Sample ID: 480-185758-3
Date Collected: 06/08/21 10:15
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 01:37	1
Bromoform	ND		1.0	0.26	ug/L			06/10/21 01:37	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/10/21 01:37	1
Chloroform	ND		1.0	0.34	ug/L			06/10/21 01:37	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/10/21 01:37	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/10/21 01:37	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 01:37	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/10/21 01:37	1

Client Sample ID: MW-45S 060821
Date Collected: 06/08/21 10:15
Date Received: 06/09/21 08:00

Lab Sample ID: 480-185758-3
Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		77 - 120		06/10/21 01:37	1
4-Bromofluorobenzene (Surr)	84		73 - 120		06/10/21 01:37	1
Dibromofluoromethane (Surr)	88		75 - 123		06/10/21 01:37	1
Toluene-d8 (Surr)	98		80 - 120		06/10/21 01:37	1

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.48	0.034	ug/L		06/10/21 08:27	06/14/21 23:45	1
Acenaphthylene	ND		0.29	0.053	ug/L		06/10/21 08:27	06/14/21 23:45	1
Anthracene	ND		0.48	0.032	ug/L		06/10/21 08:27	06/14/21 23:45	1
Chrysene	ND		0.48	0.070	ug/L		06/10/21 08:27	06/14/21 23:45	1
Fluoranthene	ND		0.48	0.076	ug/L		06/10/21 08:27	06/14/21 23:45	1
Fluorene	ND		0.48	0.055	ug/L		06/10/21 08:27	06/14/21 23:45	1
Naphthalene	ND		0.95	0.061	ug/L		06/10/21 08:27	06/14/21 23:45	1
Phenanthrene	~~0.077 J B~~ 0.19 U		0.19	0.059	ug/L		06/10/21 08:27	06/14/21 23:45	1
Pyrene	ND		0.48	0.072	ug/L		06/10/21 08:27	06/14/21 23:45	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	109		24 - 146	06/10/21 08:27	06/14/21 23:45	1
2-Fluorobiphenyl	95		37 - 120	06/10/21 08:27	06/14/21 23:45	1
2-Fluorophenol (Surr)	48		10 - 120	06/10/21 08:27	06/14/21 23:45	1
Nitrobenzene-d5 (Surr)	86		26 - 120	06/10/21 08:27	06/14/21 23:45	1
Phenol-d5 (Surr)	32		11 - 120	06/10/21 08:27	06/14/21 23:45	1
p-Terphenyl-d14	98		64 - 127	06/10/21 08:27	06/14/21 23:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:28	06/14/21 03:02	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 03:02	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 03:02	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 03:02	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 03:02	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 03:02	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 03:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	100		25 - 131	06/13/21 08:28	06/14/21 03:02	1
Nitrobenzene-d5	95		54 - 134	06/13/21 08:28	06/14/21 03:02	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**370**		44	11	ug/L			06/09/21 18:41	11

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**10.7**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 01:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**6.9**	**J**	10.0	1.7	mg/L			06/12/21 06:46	5
Ammonia	**0.85**		0.020	0.0090	mg/L			06/10/21 08:04	1
Cyanide, Total	~~0.0083 J B~~ 0.010 U		0.010	0.0050	mg/L		06/10/21 11:24	06/10/21 17:08	1

Client Sample ID: MW-45S 060821
Lab Sample ID: 480-185758-3
Date Collected: 06/08/21 10:15
Matrix: Water
Date Received: 06/09/21 08:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.020	mg/L			06/09/21 17:17	1
Alkalinity, Total	**405**		5.0	0.79	mg/L			06/11/21 15:09	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-22S 060821
Lab Sample ID: 480-185758-4
Date Collected: 06/08/21 10:30
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 01:59	1
Bromoform	ND		1.0	0.26	ug/L			06/10/21 01:59	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/10/21 01:59	1
Chloroform	ND		1.0	0.34	ug/L			06/10/21 01:59	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/10/21 01:59	1
Ethylbenzene	ND	~~F1~~	1.0	0.74	ug/L			06/10/21 01:59	1
Toluene	ND	~~F1~~	1.0	0.51	ug/L			06/10/21 01:59	1
Xylenes, Total	ND	~~F1~~	2.0	0.66	ug/L			06/10/21 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*06/10/21 01:59*	*1*
4-Bromofluorobenzene (Surr)	*87*		*73 - 120*		*06/10/21 01:59*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*06/10/21 01:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/10/21 01:59*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.48	0.035	ug/L		06/10/21 08:27	06/14/21 22:23	1
Acenaphthylene	ND		0.29	0.054	ug/L		06/10/21 08:27	06/14/21 22:23	1
Anthracene	ND		0.48	0.033	ug/L		06/10/21 08:27	06/14/21 22:23	1
Chrysene	ND		0.48	0.071	ug/L		06/10/21 08:27	06/14/21 22:23	1
Fluoranthene	ND		0.48	0.077	ug/L		06/10/21 08:27	06/14/21 22:23	1
Fluorene	ND		0.48	0.056	ug/L		06/10/21 08:27	06/14/21 22:23	1
Naphthalene	**0.068**	**J**	0.96	0.062	ug/L		06/10/21 08:27	06/14/21 22:23	1
Phenanthrene	~~**0.071**~~ **J B**	0.19 U	0.19	0.060	ug/L		06/10/21 08:27	06/14/21 22:23	1
Pyrene	ND		0.48	0.073	ug/L		06/10/21 08:27	06/14/21 22:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*101*		*24 - 146*	*06/10/21 08:27*	*06/14/21 22:23*	*1*
2-Fluorobiphenyl	*102*		*37 - 120*	*06/10/21 08:27*	*06/14/21 22:23*	*1*
2-Fluorophenol (Surr)	*51*		*10 - 120*	*06/10/21 08:27*	*06/14/21 22:23*	*1*
Nitrobenzene-d5 (Surr)	*91*		*26 - 120*	*06/10/21 08:27*	*06/14/21 22:23*	*1*
Phenol-d5 (Surr)	*37*		*11 - 120*	*06/10/21 08:27*	*06/14/21 22:23*	*1*
p-Terphenyl-d14	*101*		*64 - 127*	*06/10/21 08:27*	*06/14/21 22:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:28	06/14/21 01:16	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 01:16	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 01:16	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 01:16	1

Client Sample ID: MW-22S 060821
Lab Sample ID: 480-185758-4
Date Collected: 06/08/21 10:30
Matrix: Water
Date Received: 06/09/21 08:00

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 01:16	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 01:16	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 01:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*106*		*25 - 131*	*06/13/21 08:28*	*06/14/21 01:16*	*1*
Nitrobenzene-d5	*90*		*54 - 134*	*06/13/21 08:28*	*06/14/21 01:16*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	1.0	ug/L			06/09/21 16:48	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.27**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 01:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**46.7**		10.0	1.7	mg/L			06/12/21 07:04	5
Ammonia	ND		0.020	0.0090	mg/L			06/10/21 08:05	1
Cyanide, Total	**0.060**	~~B F1 F2~~ J	0.010	0.0050	mg/L		06/10/21 11:24	06/10/21 16:43	1
Nitrate as N	**9.2**		0.050	0.020	mg/L			06/09/21 19:12	1
Alkalinity, Total	**209**		5.0	0.79	mg/L			06/10/21 20:27	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-40 060821
Lab Sample ID: 480-185758-5
Date Collected: 06/08/21 11:40
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 02:22	1
Bromoform	ND		1.0	0.26	ug/L			06/10/21 02:22	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/10/21 02:22	1
Chloroform	ND		1.0	0.34	ug/L			06/10/21 02:22	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/10/21 02:22	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/10/21 02:22	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 02:22	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/10/21 02:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*06/10/21 02:22*	*1*
4-Bromofluorobenzene (Surr)	*83*		*73 - 120*		*06/10/21 02:22*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*06/10/21 02:22*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/10/21 02:22*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.48	0.034	ug/L		06/10/21 08:27	06/15/21 00:12	1
Acenaphthylene	ND		0.29	0.053	ug/L		06/10/21 08:27	06/15/21 00:12	1
Anthracene	ND		0.48	0.032	ug/L		06/10/21 08:27	06/15/21 00:12	1

Client Sample ID: MW-40 060821
Lab Sample ID: 480-185758-5

Date Collected: 06/08/21 11:40
Matrix: Water

Date Received: 06/09/21 08:00

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.48	0.070	ug/L		06/10/21 08:27	06/15/21 00:12	1
Fluoranthene	ND		0.48	0.076	ug/L		06/10/21 08:27	06/15/21 00:12	1
Fluorene	ND		0.48	0.055	ug/L		06/10/21 08:27	06/15/21 00:12	1
Naphthalene	ND		0.95	0.061	ug/L		06/10/21 08:27	06/15/21 00:12	1
Phenanthrene	~~0.060 J B~~ 0.119 U		0.19	0.059	ug/L		06/10/21 08:27	06/15/21 00:12	1
Pyrene	ND		0.48	0.072	ug/L		06/10/21 08:27	06/15/21 00:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*95*		*24 - 146*	*06/10/21 08:27*	*06/15/21 00:12*	*1*
2-Fluorobiphenyl	*84*		*37 - 120*	*06/10/21 08:27*	*06/15/21 00:12*	*1*
2-Fluorophenol (Surr)	*41*		*10 - 120*	*06/10/21 08:27*	*06/15/21 00:12*	*1*
Nitrobenzene-d5 (Surr)	*76*		*26 - 120*	*06/10/21 08:27*	*06/15/21 00:12*	*1*
Phenol-d5 (Surr)	*28*		*11 - 120*	*06/10/21 08:27*	*06/15/21 00:12*	*1*
p-Terphenyl-d14	*97*		*64 - 127*	*06/10/21 08:27*	*06/15/21 00:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:28	06/14/21 03:23	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 03:23	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 03:23	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 03:23	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 03:23	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 03:23	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*25 - 131*	*06/13/21 08:28*	*06/14/21 03:23*	*1*
Nitrobenzene-d5	*94*		*54 - 134*	*06/13/21 08:28*	*06/14/21 03:23*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**110**		4.0	1.0	ug/L			06/09/21 17:07	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.3**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 01:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**9.3**		2.0	0.35	mg/L			06/12/21 07:22	1
Ammonia	**0.45**		0.020	0.0090	mg/L			06/10/21 08:06	1
Cyanide, Total	0.010 U ~~0.0073 J B F1 ^+~~		0.010	0.0050	mg/L		06/10/21 11:24	06/10/21 17:12	1
Nitrate as N	ND		0.050	0.020	mg/L			06/09/21 17:19	1
Alkalinity, Total	**156**		5.0	0.79	mg/L			06/10/21 21:39	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-48S 060821
Lab Sample ID: 480-185758-6

Date Collected: 06/08/21 12:10
Matrix: Water

Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**41**		1.0	0.41	ug/L			06/10/21 12:46	1
Bromoform	ND		1.0	0.26	ug/L			06/10/21 12:46	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/10/21 12:46	1
Chloroform	ND		1.0	0.34	ug/L			06/10/21 12:46	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/10/21 12:46	1
Ethylbenzene	**25**		1.0	0.74	ug/L			06/10/21 12:46	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 12:46	1
Xylenes, Total	**12**		2.0	0.66	ug/L			06/10/21 12:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*06/10/21 12:46*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*06/10/21 12:46*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*06/10/21 12:46*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/10/21 12:46*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**36**		4.8	0.34	ug/L		06/10/21 08:27	06/15/21 00:39	10
Acenaphthylene	**1.3**	**J**	2.9	0.53	ug/L		06/10/21 08:27	06/15/21 00:39	10
Anthracene	**1.7**	**J**	4.8	0.32	ug/L		06/10/21 08:27	06/15/21 00:39	10
Chrysene	ND		4.8	0.70	ug/L		06/10/21 08:27	06/15/21 00:39	10
Fluoranthene	**0.80**	**J**	4.8	0.76	ug/L		06/10/21 08:27	06/15/21 00:39	10
Fluorene	**3.7**	**J**	4.8	0.55	ug/L		06/10/21 08:27	06/15/21 00:39	10
Naphthalene	**49**		9.5	0.61	ug/L		06/10/21 08:27	06/15/21 00:39	10
Phenanthrene	**5.5**	**B**	1.9	0.59	ug/L		06/10/21 08:27	06/15/21 00:39	10
Pyrene	**0.83**	**J**	4.8	0.72	ug/L		06/10/21 08:27	06/15/21 00:39	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*75*		*24 - 146*	*06/10/21 08:27*	*06/15/21 00:39*	*10*
2-Fluorobiphenyl	*79*		*37 - 120*	*06/10/21 08:27*	*06/15/21 00:39*	*10*
2-Fluorophenol (Surr)	*34*		*10 - 120*	*06/10/21 08:27*	*06/15/21 00:39*	*10*
Nitrobenzene-d5 (Surr)	*70*		*26 - 120*	*06/10/21 08:27*	*06/15/21 00:39*	*10*
Phenol-d5 (Surr)	*23*		*11 - 120*	*06/10/21 08:27*	*06/15/21 00:39*	*10*
p-Terphenyl-d14	*78*		*64 - 127*	*06/10/21 08:27*	*06/15/21 00:39*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.033**	**J**	0.050	0.016	ug/L		06/13/21 08:28	06/13/21 23:58	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/13/21 23:58	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/13/21 23:58	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/13/21 23:58	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/13/21 23:58	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/13/21 23:58	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/13/21 23:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*25 - 131*	*06/13/21 08:28*	*06/13/21 23:58*	*1*
Nitrobenzene-d5	*98*		*54 - 134*	*06/13/21 08:28*	*06/13/21 23:58*	*1*

Client Sample ID: MW-48S 060821
Lab Sample ID: 480-185758-6

Date Collected: 06/08/21 12:10
Matrix: Water
Date Received: 06/09/21 08:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**3000**		44	11	ug/L			06/09/21 17:25	11

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5.8**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 01:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		40.0	7.0	mg/L			06/12/21 07:39	20
Ammonia	**1.4**		0.020	0.0090	mg/L			06/10/21 08:08	1
Cyanide, Total	~~0.0097~~ ~~J B~~	0.010 U	0.010	0.0050	mg/L		06/11/21 12:03	06/11/21 14:35	1
Nitrate as N	ND		0.050	0.020	mg/L			06/09/21 17:21	1
Alkalinity, Total	**338**		5.0	0.79	mg/L			06/10/21 20:34	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-31S 060821
Lab Sample ID: 480-185758-7

Date Collected: 06/08/21 13:30
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 03:06	1
Bromoform	ND		1.0	0.26	ug/L			06/10/21 03:06	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/10/21 03:06	1
Chloroform	ND		1.0	0.34	ug/L			06/10/21 03:06	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/10/21 03:06	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/10/21 03:06	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 03:06	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/10/21 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*06/10/21 03:06*	*1*
4-Bromofluorobenzene (Surr)	*83*		*73 - 120*		*06/10/21 03:06*	*1*
Dibromofluoromethane (Surr)	*87*		*75 - 123*		*06/10/21 03:06*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*06/10/21 03:06*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.48	0.034	ug/L		06/10/21 08:27	06/15/21 03:23	1
Acenaphthylene	ND		0.29	0.053	ug/L		06/10/21 08:27	06/15/21 03:23	1
Anthracene	ND		0.48	0.032	ug/L		06/10/21 08:27	06/15/21 03:23	1
Chrysene	ND		0.48	0.070	ug/L		06/10/21 08:27	06/15/21 03:23	1
Fluoranthene	ND		0.48	0.076	ug/L		06/10/21 08:27	06/15/21 03:23	1
Fluorene	ND		0.48	0.055	ug/L		06/10/21 08:27	06/15/21 03:23	1
Naphthalene	ND		0.95	0.061	ug/L		06/10/21 08:27	06/15/21 03:23	1
Phenanthrene	~~0.067~~ ~~J B~~	0.19 U	0.19	0.059	ug/L		06/10/21 08:27	06/15/21 03:23	1
Pyrene	ND		0.48	0.072	ug/L		06/10/21 08:27	06/15/21 03:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*91*		*24 - 146*	*06/10/21 08:27*	*06/15/21 03:23*	*1*
2-Fluorobiphenyl	*91*		*37 - 120*	*06/10/21 08:27*	*06/15/21 03:23*	*1*

Client Sample ID: MW-31S 060821
Lab Sample ID: 480-185758-7
Date Collected: 06/08/21 13:30
Matrix: Water
Date Received: 06/09/21 08:00

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorophenol (Surr)	*45*		*10 - 120*	*06/10/21 08:27*	*06/15/21 03:23*	*1*
Nitrobenzene-d5 (Surr)	*82*		*26 - 120*	*06/10/21 08:27*	*06/15/21 03:23*	*1*
Phenol-d5 (Surr)	*31*		*11 - 120*	*06/10/21 08:27*	*06/15/21 03:23*	*1*
p-Terphenyl-d14	*99*		*64 - 127*	*06/10/21 08:27*	*06/15/21 03:23*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.050	0.016	ug/L		06/13/21 08:28	06/14/21 00:19	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 00:19	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 00:19	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 00:19	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 00:19	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 00:19	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 00:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*84*		*25 - 131*	*06/13/21 08:28*	*06/14/21 00:19*	*1*
Nitrobenzene-d5	*96*		*54 - 134*	*06/13/21 08:28*	*06/14/21 00:19*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**130**		4.0	1.0	ug/L			06/09/21 17:44	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.27**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 01:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**17.9**		4.0	0.70	mg/L			06/12/21 07:57	2
Ammonia	**0.014**	**J**	0.020	0.0090	mg/L			06/10/21 08:11	1
Cyanide, Total	ND		0.010	0.0050	mg/L		06/11/21 12:03	06/11/21 14:36	1
Nitrate as N	**0.025**	**J**	0.050	0.020	mg/L			06/09/21 17:22	1
Alkalinity, Total	**260**		5.0	0.79	mg/L			06/10/21 20:40	1
Ferrous Iron	**0.12**	**~~HF~~ J**	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-47S 060821
Lab Sample ID: 480-185758-8
Date Collected: 06/08/21 13:35
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 03:28	1
Bromoform	ND		1.0	0.26	ug/L			06/10/21 03:28	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/10/21 03:28	1
Chloroform	ND		1.0	0.34	ug/L			06/10/21 03:28	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/10/21 03:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/10/21 03:28	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 03:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/10/21 03:28	1

Client Sample ID: MW-47S 060821
Date Collected: 06/08/21 13:35
Date Received: 06/09/21 08:00

Lab Sample ID: 480-185758-8
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*06/10/21 03:28*	*1*
4-Bromofluorobenzene (Surr)	*83*		*73 - 120*		*06/10/21 03:28*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*06/10/21 03:28*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/10/21 03:28*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.84**	**J**	2.4	0.17	ug/L		06/10/21 08:27	06/15/21 03:50	5
Acenaphthylene	ND		1.4	0.27	ug/L		06/10/21 08:27	06/15/21 03:50	5
Anthracene	ND		2.4	0.16	ug/L		06/10/21 08:27	06/15/21 03:50	5
Chrysene	ND		2.4	0.35	ug/L		06/10/21 08:27	06/15/21 03:50	5
Fluoranthene	ND		2.4	0.38	ug/L		06/10/21 08:27	06/15/21 03:50	5
Fluorene	ND		2.4	0.28	ug/L		06/10/21 08:27	06/15/21 03:50	5
Naphthalene	ND		4.8	0.30	ug/L		06/10/21 08:27	06/15/21 03:50	5
Phenanthrene	ND		0.95	0.30	ug/L		06/10/21 08:27	06/15/21 03:50	5
Pyrene	ND		2.4	0.36	ug/L		06/10/21 08:27	06/15/21 03:50	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*24 - 146*	*06/10/21 08:27*	*06/15/21 03:50*	*5*
2-Fluorobiphenyl	*83*		*37 - 120*	*06/10/21 08:27*	*06/15/21 03:50*	*5*
2-Fluorophenol (Surr)	*40*		*10 - 120*	*06/10/21 08:27*	*06/15/21 03:50*	*5*
Nitrobenzene-d5 (Surr)	*76*		*26 - 120*	*06/10/21 08:27*	*06/15/21 03:50*	*5*
Phenol-d5 (Surr)	*26*		*11 - 120*	*06/10/21 08:27*	*06/15/21 03:50*	*5*
p-Terphenyl-d14	*77*		*64 - 127*	*06/10/21 08:27*	*06/15/21 03:50*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.016**	**J**	0.050	0.016	ug/L		06/13/21 08:28	06/14/21 00:40	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 00:40	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 00:40	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 00:40	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 00:40	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 00:40	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 00:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*88*		*25 - 131*	*06/13/21 08:28*	*06/14/21 00:40*	*1*
Nitrobenzene-d5	*98*		*54 - 134*	*06/13/21 08:28*	*06/14/21 00:40*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**13000**		440	110	ug/L			06/09/21 19:00	110

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**15.4**		0.050	0.019	mg/L		06/10/21 10:06	06/11/21 01:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	ND		10.0	1.7	mg/L			06/12/21 08:15	5
Ammonia	**8.5**		0.10	0.045	mg/L			06/10/21 08:51	5
Cyanide, Total	**0.010**	**B J+**	0.010	0.0050	mg/L		06/11/21 12:03	06/11/21 14:40	1

Client Sample ID: MW-47S 060821
Lab Sample ID: 480-185758-8
Date Collected: 06/08/21 13:35
Matrix: Water
Date Received: 06/09/21 08:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	ND		0.050	0.020	mg/L			06/09/21 17:25	1
Alkalinity, Total	**303**		5.0	0.79	mg/L			06/10/21 20:47	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: DUP
Lab Sample ID: 480-185758-9
Date Collected: 06/08/21 00:00
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 03:50	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/10/21 03:50	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 03:50	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/10/21 03:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*77 - 120*		*06/10/21 03:50*	*1*
4-Bromofluorobenzene (Surr)	*89*		*73 - 120*		*06/10/21 03:50*	*1*
Dibromofluoromethane (Surr)	*86*		*75 - 123*		*06/10/21 03:50*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/10/21 03:50*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.48	0.034	ug/L		06/10/21 08:27	06/15/21 04:17	1
Acenaphthylene	ND		0.29	0.053	ug/L		06/10/21 08:27	06/15/21 04:17	1
Anthracene	ND		0.48	0.032	ug/L		06/10/21 08:27	06/15/21 04:17	1
Chrysene	ND		0.48	0.070	ug/L		06/10/21 08:27	06/15/21 04:17	1
Fluoranthene	ND		0.48	0.076	ug/L		06/10/21 08:27	06/15/21 04:17	1
Fluorene	ND		0.48	0.055	ug/L		06/10/21 08:27	06/15/21 04:17	1
Naphthalene	ND		0.95	0.061	ug/L		06/10/21 08:27	06/15/21 04:17	1
Phenanthrene	~~0.067~~ ~~J B~~ 0.19 U		0.19	0.059	ug/L		06/10/21 08:27	06/15/21 04:17	1
Pyrene	ND		0.48	0.072	ug/L		06/10/21 08:27	06/15/21 04:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*24 - 146*	*06/10/21 08:27*	*06/15/21 04:17*	*1*
2-Fluorobiphenyl	*97*		*37 - 120*	*06/10/21 08:27*	*06/15/21 04:17*	*1*
2-Fluorophenol (Surr)	*48*		*10 - 120*	*06/10/21 08:27*	*06/15/21 04:17*	*1*
Nitrobenzene-d5 (Surr)	*90*		*26 - 120*	*06/10/21 08:27*	*06/15/21 04:17*	*1*
Phenol-d5 (Surr)	*32*		*11 - 120*	*06/10/21 08:27*	*06/15/21 04:17*	*1*
p-Terphenyl-d14	*104*		*64 - 127*	*06/10/21 08:27*	*06/15/21 04:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.050	0.016	ug/L		06/13/21 08:28	06/14/21 01:01	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:28	06/14/21 01:01	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:28	06/14/21 01:01	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:28	06/14/21 01:01	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:28	06/14/21 01:01	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:28	06/14/21 01:01	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:28	06/14/21 01:01	1

Client Sample ID: DUP
Lab Sample ID: 480-185758-9
Date Collected: 06/08/21 00:00
Matrix: Water
Date Received: 06/09/21 08:00

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*87*		*25 - 131*	*06/13/21 08:28*	*06/14/21 01:01*	*1*
Nitrobenzene-d5	*101*		*54 - 134*	*06/13/21 08:28*	*06/14/21 01:01*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.010	0.0050	mg/L		06/11/21 12:03	06/11/21 14:42	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-185758-10
Date Collected: 06/08/21 00:00
Matrix: Water
Date Received: 06/09/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/10/21 04:12	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/10/21 04:12	1
Toluene	ND		1.0	0.51	ug/L			06/10/21 04:12	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/10/21 04:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*90*		*77 - 120*		*06/10/21 04:12*	*1*
4-Bromofluorobenzene (Surr)	*84*		*73 - 120*		*06/10/21 04:12*	*1*
Dibromofluoromethane (Surr)	*90*		*75 - 123*		*06/10/21 04:12*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/10/21 04:12*	*1*

Sample Summary

Client: AECOM
Job ID: 480-185822-1
Project/Site: NYSEG - Former MGP Site - Ithaca, NY

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-185822-1	MW-23S 060921	Water	06/09/21 08:40	06/10/21 08:00	
480-185822-2	MW-C16 060921	Water	06/09/21 09:30	06/10/21 08:00	
480-185822-3	MW-C11 060921	Water	06/09/21 10:40	06/10/21 08:00	
480-185822-4	MW-25S 060921	Water	06/09/21 10:05	06/10/21 08:00	
480-185822-5	MW-28S 060921	Water	06/09/21 12:15	06/10/21 08:00	
480-185822-6	MW-24S 060921	Water	06/09/21 12:35	06/10/21 08:00	
480-185822-7	TRIP BLANK	Water	06/09/21 00:00	06/10/21 08:00	

Client Sample ID: MW-23S 060921
Date Collected: 06/09/21 08:40
Date Received: 06/10/21 08:00

Lab Sample ID: 480-185822-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**1.1**	**J**	2.0	0.82	ug/L			06/11/21 12:21	2
Bromoform	ND		2.0	0.52	ug/L			06/11/21 12:21	2
Chlorodibromomethane	ND		2.0	0.64	ug/L			06/11/21 12:21	2
Chloroform	ND		2.0	0.68	ug/L			06/11/21 12:21	2
Dichlorobromomethane	ND		2.0	0.78	ug/L			06/11/21 12:21	2
Ethylbenzene	**27**		2.0	1.5	ug/L			06/11/21 12:21	2
Toluene	**1.3**	**J**	2.0	1.0	ug/L			06/11/21 12:21	2
Xylenes, Total	**22**		4.0	1.3	ug/L			06/11/21 12:21	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*06/11/21 12:21*	*2*
4-Bromofluorobenzene (Surr)	*112*		*73 - 120*		*06/11/21 12:21*	*2*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*06/11/21 12:21*	*2*
Toluene-d8 (Surr)	*102*		*80 - 120*		*06/11/21 12:21*	*2*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**58**		25	1.8	ug/L		06/11/21 14:34	06/14/21 16:28	50
Acenaphthylene	ND		15	2.8	ug/L		06/11/21 14:34	06/14/21 16:28	50
Anthracene	**5.8**	**J**	25	1.7	ug/L		06/11/21 14:34	06/14/21 16:28	50
Chrysene	ND		25	3.7	ug/L		06/11/21 14:34	06/14/21 16:28	50
Fluoranthene	ND		25	4.0	ug/L		06/11/21 14:34	06/14/21 16:28	50
Fluorene	**17**	**J**	25	2.9	ug/L		06/11/21 14:34	06/14/21 16:28	50
Naphthalene	**14**	**J**	50	3.2	ug/L		06/11/21 14:34	06/14/21 16:28	50
Phenanthrene	**22**	**B**	10	3.1	ug/L		06/11/21 14:34	06/14/21 16:28	50
Pyrene	ND		25	3.8	ug/L		06/11/21 14:34	06/14/21 16:28	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*118*		*24 - 146*	*06/11/21 14:34*	*06/14/21 16:28*	*50*
2-Fluorobiphenyl	*94*		*37 - 120*	*06/11/21 14:34*	*06/14/21 16:28*	*50*
2-Fluorophenol (Surr)	*39*		*10 - 120*	*06/11/21 14:34*	*06/14/21 16:28*	*50*
Nitrobenzene-d5 (Surr)	*73*		*26 - 120*	*06/11/21 14:34*	*06/14/21 16:28*	*50*
Phenol-d5 (Surr)	*29*		*11 - 120*	*06/11/21 14:34*	*06/14/21 16:28*	*50*
p-Terphenyl-d14	*102*		*64 - 127*	*06/11/21 14:34*	*06/14/21 16:28*	*50*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.067**	J	0.050	0.016	ug/L		06/13/21 08:25	06/13/21 23:09	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:25	06/13/21 23:09	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:25	06/13/21 23:09	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:25	06/13/21 23:09	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:25	06/13/21 23:09	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:25	06/13/21 23:09	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:25	06/13/21 23:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*58*		*25 - 131*	*06/13/21 08:25*	*06/13/21 23:09*	*1*
Nitrobenzene-d5	*79*		*54 - 134*	*06/13/21 08:25*	*06/13/21 23:09*	*1*

Client Sample ID: MW-23S 060921
Lab Sample ID: 480-185822-1

Date Collected: 06/09/21 08:40
Matrix: Water
Date Received: 06/10/21 08:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2500**		44	11	ug/L			06/10/21 15:20	11

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.3**		0.050	0.019	mg/L		06/15/21 16:11	06/16/21 14:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**7.5**	**J**	10.0	1.7	mg/L			06/12/21 09:45	5
Ammonia	**0.54**		0.020	0.0090	mg/L			06/11/21 08:50	1
Cyanide, Total	**0.0072**	**J**	0.010	0.0050	mg/L		06/14/21 12:20	06/14/21 15:55	1
Nitrate as N	**0.20**		0.050	0.020	mg/L			06/10/21 17:54	1
Alkalinity, Total	**228**		5.0	0.79	mg/L			06/11/21 01:00	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-C16 060921
Lab Sample ID: 480-185822-2

Date Collected: 06/09/21 09:30
Matrix: Water
Date Received: 06/10/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	0.82	ug/L			06/11/21 12:43	2
Bromoform	ND		2.0	0.52	ug/L			06/11/21 12:43	2
Chlorodibromomethane	ND		2.0	0.64	ug/L			06/11/21 12:43	2
Chloroform	ND		2.0	0.68	ug/L			06/11/21 12:43	2
Dichlorobromomethane	ND		2.0	0.78	ug/L			06/11/21 12:43	2
Ethylbenzene	**2.0**		2.0	1.5	ug/L			06/11/21 12:43	2
Toluene	ND		2.0	1.0	ug/L			06/11/21 12:43	2
Xylenes, Total	ND		4.0	1.3	ug/L			06/11/21 12:43	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*06/11/21 12:43*	*2*
4-Bromofluorobenzene (Surr)	*108*		*73 - 120*		*06/11/21 12:43*	*2*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/11/21 12:43*	*2*
Toluene-d8 (Surr)	*101*		*80 - 120*		*06/11/21 12:43*	*2*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**25**		10	0.72	ug/L		06/11/21 14:34	06/14/21 16:55	20
Acenaphthylene	ND		6.0	1.1	ug/L		06/11/21 14:34	06/14/21 16:55	20
Anthracene	ND		10	0.68	ug/L		06/11/21 14:34	06/14/21 16:55	20
Chrysene	ND		10	1.5	ug/L		06/11/21 14:34	06/14/21 16:55	20
Fluoranthene	ND		10	1.6	ug/L		06/11/21 14:34	06/14/21 16:55	20
Fluorene	**6.0**	**J**	10	1.2	ug/L		06/11/21 14:34	06/14/21 16:55	20
Naphthalene	ND		20	1.3	ug/L		06/11/21 14:34	06/14/21 16:55	20
Phenanthrene	~~1.9~~ ~~J B~~ 4.0 U		4.0	1.2	ug/L		06/11/21 14:34	06/14/21 16:55	20
Pyrene	ND		10	1.5	ug/L		06/11/21 14:34	06/14/21 16:55	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*90*		*24 - 146*	*06/11/21 14:34*	*06/14/21 16:55*	*20*
2-Fluorobiphenyl	*88*		*37 - 120*	*06/11/21 14:34*	*06/14/21 16:55*	*20*

Client Sample ID: MW-C16 060921
Lab Sample ID: 480-185822-2
Date Collected: 06/09/21 09:30
Matrix: Water
Date Received: 06/10/21 08:00

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorophenol (Surr)	44		10 - 120	06/11/21 14:34	06/14/21 16:55	20
Nitrobenzene-d5 (Surr)	74		26 - 120	06/11/21 14:34	06/14/21 16:55	20
Phenol-d5 (Surr)	28		11 - 120	06/11/21 14:34	06/14/21 16:55	20
p-Terphenyl-d14	89		64 - 127	06/11/21 14:34	06/14/21 16:55	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	**0.026**	**J**	0.050	0.016	ug/L		06/13/21 08:25	06/13/21 23:31	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:25	06/13/21 23:31	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:25	06/13/21 23:31	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:25	06/13/21 23:31	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:25	06/13/21 23:31	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:25	06/13/21 23:31	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:25	06/13/21 23:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	59		25 - 131	06/13/21 08:25	06/13/21 23:31	1
Nitrobenzene-d5	72		54 - 134	06/13/21 08:25	06/13/21 23:31	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**20**		4.0	1.0	ug/L			06/10/21 15:39	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**32.9**		0.050	0.019	mg/L		06/15/21 16:11	06/16/21 14:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**1650**		40.0	7.0	mg/L			06/12/21 10:02	20
Ammonia	**1.1**		0.020	0.0090	mg/L			06/11/21 08:51	1
Cyanide, Total	**0.0077**	**J ~~F1~~**	0.010	0.0050	mg/L		06/14/21 12:20	06/14/21 15:58	1
Nitrate as N	**0.041**	**J**	0.050	0.020	mg/L			06/10/21 16:09	1
Alkalinity, Total	**625**		5.0	0.79	mg/L			06/11/21 01:09	1
Ferrous Iron	**0.27**	**~~HF~~ J**	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-C11 060921
Lab Sample ID: 480-185822-3
Date Collected: 06/09/21 10:40
Matrix: Water
Date Received: 06/10/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		2.0	0.82	ug/L			06/11/21 13:06	2
Bromoform	ND		2.0	0.52	ug/L			06/11/21 13:06	2
Chlorodibromomethane	ND		2.0	0.64	ug/L			06/11/21 13:06	2
Chloroform	ND		2.0	0.68	ug/L			06/11/21 13:06	2
Dichlorobromomethane	ND		2.0	0.78	ug/L			06/11/21 13:06	2
Ethylbenzene	ND		2.0	1.5	ug/L			06/11/21 13:06	2
Toluene	ND		2.0	1.0	ug/L			06/11/21 13:06	2
Xylenes, Total	ND		4.0	1.3	ug/L			06/11/21 13:06	2

Client Sample ID: MW-C11 060921
Lab Sample ID: 480-185822-3

Date Collected: 06/09/21 10:40
Matrix: Water

Date Received: 06/10/21 08:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		06/11/21 13:06	2
4-Bromofluorobenzene (Surr)	108		73 - 120		06/11/21 13:06	2
Dibromofluoromethane (Surr)	109		75 - 123		06/11/21 13:06	2
Toluene-d8 (Surr)	104		80 - 120		06/11/21 13:06	2

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**1.5**	**J**	10	0.72	ug/L		06/11/21 14:34	06/14/21 17:23	20
Acenaphthylene	ND		6.0	1.1	ug/L		06/11/21 14:34	06/14/21 17:23	20
Anthracene	ND		10	0.68	ug/L		06/11/21 14:34	06/14/21 17:23	20
Chrysene	ND		10	1.5	ug/L		06/11/21 14:34	06/14/21 17:23	20
Fluoranthene	ND		10	1.6	ug/L		06/11/21 14:34	06/14/21 17:23	20
Fluorene	ND		10	1.2	ug/L		06/11/21 14:34	06/14/21 17:23	20
Naphthalene	ND		20	1.3	ug/L		06/11/21 14:34	06/14/21 17:23	20
Phenanthrene	ND		4.0	1.2	ug/L		06/11/21 14:34	06/14/21 17:23	20
Pyrene	ND		10	1.5	ug/L		06/11/21 14:34	06/14/21 17:23	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	75		24 - 146	06/11/21 14:34	06/14/21 17:23	20
2-Fluorobiphenyl	84		37 - 120	06/11/21 14:34	06/14/21 17:23	20
2-Fluorophenol (Surr)	36		10 - 120	06/11/21 14:34	06/14/21 17:23	20
Nitrobenzene-d5 (Surr)	67		26 - 120	06/11/21 14:34	06/14/21 17:23	20
Phenol-d5 (Surr)	28		11 - 120	06/11/21 14:34	06/14/21 17:23	20
p-Terphenyl-d14	83		64 - 127	06/11/21 14:34	06/14/21 17:23	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:25	06/13/21 23:52	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:25	06/13/21 23:52	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:25	06/13/21 23:52	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:25	06/13/21 23:52	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:25	06/13/21 23:52	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:25	06/13/21 23:52	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:25	06/13/21 23:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	62		25 - 131	06/13/21 08:25	06/13/21 23:52	1
Nitrobenzene-d5	82		54 - 134	06/13/21 08:25	06/13/21 23:52	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**380**		88	22	ug/L			06/10/21 14:04	22

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**26.8**		0.050	0.019	mg/L		06/15/21 16:11	06/16/21 14:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**3300**		100	17.5	mg/L			06/12/21 10:20	50
Ammonia	**6.9**		0.10	0.045	mg/L			06/11/21 08:52	5
Cyanide, Total	**0.017**		0.010	0.0050	mg/L		06/14/21 12:20	06/14/21 16:01	1

Client Sample ID: MW-C11 060921
Lab Sample ID: 480-185822-3
Date Collected: 06/09/21 10:40
Matrix: Water
Date Received: 06/10/21 08:00

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.024**	**J**	0.050	0.020	mg/L			06/10/21 16:10	1
Alkalinity, Total	**830**		5.0	0.79	mg/L			06/11/21 01:20	1
Ferrous Iron	**0.082**	**J ~~HF~~**	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-25S 060921
Lab Sample ID: 480-185822-4
Date Collected: 06/09/21 10:05
Matrix: Water
Date Received: 06/10/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/11/21 13:34	1
Bromoform	ND		1.0	0.26	ug/L			06/11/21 13:34	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/11/21 13:34	1
Chloroform	ND		1.0	0.34	ug/L			06/11/21 13:34	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/11/21 13:34	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/11/21 13:34	1
Toluene	ND		1.0	0.51	ug/L			06/11/21 13:34	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/11/21 13:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*06/11/21 13:34*	*1*
4-Bromofluorobenzene (Surr)	*98*		*73 - 120*		*06/11/21 13:34*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/11/21 13:34*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/11/21 13:34*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.036	ug/L		06/11/21 14:34	06/14/21 17:50	1
Acenaphthylene	ND		0.30	0.056	ug/L		06/11/21 14:34	06/14/21 17:50	1
Anthracene	ND		0.50	0.034	ug/L		06/11/21 14:34	06/14/21 17:50	1
Chrysene	ND		0.50	0.074	ug/L		06/11/21 14:34	06/14/21 17:50	1
Fluoranthene	ND		0.50	0.080	ug/L		06/11/21 14:34	06/14/21 17:50	1
Fluorene	ND		0.50	0.058	ug/L		06/11/21 14:34	06/14/21 17:50	1
Naphthalene	ND		1.0	0.064	ug/L		06/11/21 14:34	06/14/21 17:50	1
Phenanthrene	**~~0.099~~**	**~~J B~~** 0.20 U	0.20	0.062	ug/L		06/11/21 14:34	06/14/21 17:50	1
Pyrene	ND		0.50	0.076	ug/L		06/11/21 14:34	06/14/21 17:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*24 - 146*	*06/11/21 14:34*	*06/14/21 17:50*	*1*
2-Fluorobiphenyl	*84*		*37 - 120*	*06/11/21 14:34*	*06/14/21 17:50*	*1*
2-Fluorophenol (Surr)	*35*		*10 - 120*	*06/11/21 14:34*	*06/14/21 17:50*	*1*
Nitrobenzene-d5 (Surr)	*78*		*26 - 120*	*06/11/21 14:34*	*06/14/21 17:50*	*1*
Phenol-d5 (Surr)	*26*		*11 - 120*	*06/11/21 14:34*	*06/14/21 17:50*	*1*
p-Terphenyl-d14	*72*		*64 - 127*	*06/11/21 14:34*	*06/14/21 17:50*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:25	06/14/21 00:13	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:25	06/14/21 00:13	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:25	06/14/21 00:13	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:25	06/14/21 00:13	1

Client Sample ID: MW-25S 060921
Lab Sample ID: 480-185822-4
Date Collected: 06/09/21 10:05
Matrix: Water
Date Received: 06/10/21 08:00

Method: 8270E SIM - Semivolatile Organic Compounds (GC/MS SIM) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:25	06/14/21 00:13	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:25	06/14/21 00:13	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:25	06/14/21 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*122*		*25 - 131*	*06/13/21 08:25*	*06/14/21 00:13*	*1*
Nitrobenzene-d5	*100*		*54 - 134*	*06/13/21 08:25*	*06/14/21 00:13*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	1.0	ug/L			06/10/21 15:58	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**48.9**		0.050	0.019	mg/L		06/15/21 16:11	06/16/21 14:42	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**171**		40.0	7.0	mg/L			06/12/21 10:38	20
Ammonia	ND		0.020	0.0090	mg/L			06/11/21 08:52	1
Cyanide, Total	**0.015**		0.010	0.0050	mg/L		06/14/21 12:20	06/14/21 16:02	1
Nitrate as N	**0.055**		0.050	0.020	mg/L			06/10/21 17:55	1
Alkalinity, Total	**566**		5.0	0.79	mg/L			06/11/21 01:28	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-28S 060921
Lab Sample ID: 480-185822-5
Date Collected: 06/09/21 12:15
Matrix: Water
Date Received: 06/10/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/11/21 13:56	1
Bromoform	ND		1.0	0.26	ug/L			06/11/21 13:56	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/11/21 13:56	1
Chloroform	ND		1.0	0.34	ug/L			06/11/21 13:56	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/11/21 13:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/11/21 13:56	1
Toluene	ND		1.0	0.51	ug/L			06/11/21 13:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/11/21 13:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/11/21 13:56*	*1*
4-Bromofluorobenzene (Surr)	*99*		*73 - 120*		*06/11/21 13:56*	*1*
Dibromofluoromethane (Surr)	*107*		*75 - 123*		*06/11/21 13:56*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*06/11/21 13:56*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.036	ug/L		06/11/21 14:34	06/14/21 18:17	1
Acenaphthylene	ND		0.30	0.056	ug/L		06/11/21 14:34	06/14/21 18:17	1
Anthracene	ND		0.50	0.034	ug/L		06/11/21 14:34	06/14/21 18:17	1

Client Sample ID: MW-28S 060921
Lab Sample ID: 480-185822-5

Date Collected: 06/09/21 12:15
Matrix: Water

Date Received: 06/10/21 08:00

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chrysene	ND		0.50	0.074	ug/L		06/11/21 14:34	06/14/21 18:17	1
Fluoranthene	ND		0.50	0.080	ug/L		06/11/21 14:34	06/14/21 18:17	1
Fluorene	ND		0.50	0.058	ug/L		06/11/21 14:34	06/14/21 18:17	1
Naphthalene	ND		1.0	0.064	ug/L		06/11/21 14:34	06/14/21 18:17	1
Phenanthrene	~~0.079~~ ~~J B~~ 0.20 U		0.20	0.062	ug/L		06/11/21 14:34	06/14/21 18:17	1
Pyrene	ND		0.50	0.076	ug/L		06/11/21 14:34	06/14/21 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*94*		*24 - 146*	*06/11/21 14:34*	*06/14/21 18:17*	*1*
2-Fluorobiphenyl	*89*		*37 - 120*	*06/11/21 14:34*	*06/14/21 18:17*	*1*
2-Fluorophenol (Surr)	*47*		*10 - 120*	*06/11/21 14:34*	*06/14/21 18:17*	*1*
Nitrobenzene-d5 (Surr)	*83*		*26 - 120*	*06/11/21 14:34*	*06/14/21 18:17*	*1*
Phenol-d5 (Surr)	*34*		*11 - 120*	*06/11/21 14:34*	*06/14/21 18:17*	*1*
p-Terphenyl-d14	*107*		*64 - 127*	*06/11/21 14:34*	*06/14/21 18:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:25	06/14/21 00:34	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:25	06/14/21 00:34	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:25	06/14/21 00:34	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:25	06/14/21 00:34	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:25	06/14/21 00:34	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:25	06/14/21 00:34	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:25	06/14/21 00:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*101*		*25 - 131*	*06/13/21 08:25*	*06/14/21 00:34*	*1*
Nitrobenzene-d5	*93*		*54 - 134*	*06/13/21 08:25*	*06/14/21 00:34*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**3000**		88	22	ug/L			06/10/21 16:36	22

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1.8**		0.050	0.019	mg/L		06/15/21 16:11	06/16/21 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**9.5**	**J**	10.0	1.7	mg/L			06/12/21 10:56	5
Ammonia	**0.67**		0.020	0.0090	mg/L			06/11/21 08:55	1
Cyanide, Total	**0.0090**	**J**	0.010	0.0050	mg/L		06/14/21 12:20	06/14/21 16:07	1
Nitrate as N	**0.32**		0.050	0.020	mg/L			06/10/21 17:59	1
Alkalinity, Total	**275**		5.0	0.79	mg/L			06/11/21 01:35	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: MW-24S 060921
Date Collected: 06/09/21 12:35
Date Received: 06/10/21 08:00

Lab Sample ID: 480-185822-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/11/21 14:18	1
Bromoform	ND		1.0	0.26	ug/L			06/11/21 14:18	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/11/21 14:18	1
Chloroform	ND		1.0	0.34	ug/L			06/11/21 14:18	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/11/21 14:18	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/11/21 14:18	1
Toluene	ND		1.0	0.51	ug/L			06/11/21 14:18	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/11/21 14:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*06/11/21 14:18*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/11/21 14:18*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/11/21 14:18*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/11/21 14:18*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.036	ug/L		06/11/21 14:34	06/14/21 18:44	1
Acenaphthylene	ND		0.30	0.056	ug/L		06/11/21 14:34	06/14/21 18:44	1
Anthracene	ND		0.50	0.034	ug/L		06/11/21 14:34	06/14/21 18:44	1
Chrysene	ND		0.50	0.074	ug/L		06/11/21 14:34	06/14/21 18:44	1
Fluoranthene	ND		0.50	0.080	ug/L		06/11/21 14:34	06/14/21 18:44	1
Fluorene	ND		0.50	0.058	ug/L		06/11/21 14:34	06/14/21 18:44	1
Naphthalene	ND		1.0	0.064	ug/L		06/11/21 14:34	06/14/21 18:44	1
Phenanthrene	~~0.090~~ ~~J B~~ 0.20 U		0.20	0.062	ug/L		06/11/21 14:34	06/14/21 18:44	1
Pyrene	ND		0.50	0.076	ug/L		06/11/21 14:34	06/14/21 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*100*		*24 - 146*	*06/11/21 14:34*	*06/14/21 18:44*	*1*
2-Fluorobiphenyl	*88*		*37 - 120*	*06/11/21 14:34*	*06/14/21 18:44*	*1*
2-Fluorophenol (Surr)	*49*		*10 - 120*	*06/11/21 14:34*	*06/14/21 18:44*	*1*
Nitrobenzene-d5 (Surr)	*80*		*26 - 120*	*06/11/21 14:34*	*06/14/21 18:44*	*1*
Phenol-d5 (Surr)	*36*		*11 - 120*	*06/11/21 14:34*	*06/14/21 18:44*	*1*
p-Terphenyl-d14	*98*		*64 - 127*	*06/11/21 14:34*	*06/14/21 18:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND	UJ	0.050	0.016	ug/L		06/13/21 08:25	06/14/21 00:55	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/13/21 08:25	06/14/21 00:55	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/13/21 08:25	06/14/21 00:55	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/13/21 08:25	06/14/21 00:55	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/13/21 08:25	06/14/21 00:55	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/13/21 08:25	06/14/21 00:55	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/13/21 08:25	06/14/21 00:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*117*		*25 - 131*	*06/13/21 08:25*	*06/14/21 00:55*	*1*
Nitrobenzene-d5	*97*		*54 - 134*	*06/13/21 08:25*	*06/14/21 00:55*	*1*

Client Sample ID: MW-24S 060921
Lab Sample ID: 480-185822-6

Date Collected: 06/09/21 12:35
Matrix: Water
Date Received: 06/10/21 08:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	ND		4.0	1.0	ug/L			06/10/21 15:01	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**0.24**		0.050	0.019	mg/L		06/15/21 16:11	06/16/21 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**37.5**		10.0	1.7	mg/L			06/12/21 11:14	5
Ammonia	**0.030**		0.020	0.0090	mg/L			06/11/21 08:58	1
Cyanide, Total	**0.0091**	**J**	0.010	0.0050	mg/L		06/14/21 12:20	06/14/21 16:08	1
Nitrate as N	**0.13**		0.050	0.020	mg/L			06/10/21 18:02	1
Alkalinity, Total	**352**		5.0	0.79	mg/L			06/11/21 02:35	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-185822-7

Date Collected: 06/09/21 00:00
Matrix: Water
Date Received: 06/10/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/13/21 11:39	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/13/21 11:39	1
Toluene	ND		1.0	0.51	ug/L			06/13/21 11:39	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/13/21 11:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*06/13/21 11:39*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*06/13/21 11:39*	*1*
Dibromofluoromethane (Surr)	*98*		*75 - 123*		*06/13/21 11:39*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*06/13/21 11:39*	*1*

Sample Summary

Client: AECOM
Job ID: 480-185894-1
Project/Site: NYSEG - Former MGP Site - Ithaca, NY

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-185894-1	MW-C12 061021	Water	06/10/21 09:00	06/11/21 08:00	
480-185894-2	EQ BLANK	Water	06/10/21 09:10	06/11/21 08:00	
480-185894-3	TRIP BLANK	Water	06/10/21 00:00	06/11/21 08:00	

Client Sample ID: MW-C12 061021
Date Collected: 06/10/21 09:00
Date Received: 06/11/21 08:00

Lab Sample ID: 480-185894-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**11**		1.0	0.41	ug/L			06/11/21 20:25	1
Bromoform	ND		1.0	0.26	ug/L			06/11/21 20:25	1
Chlorodibromomethane	ND		1.0	0.32	ug/L			06/11/21 20:25	1
Chloroform	ND		1.0	0.34	ug/L			06/11/21 20:25	1
Dichlorobromomethane	ND		1.0	0.39	ug/L			06/11/21 20:25	1
Ethylbenzene	**10**		1.0	0.74	ug/L			06/11/21 20:25	1
Toluene	ND		1.0	0.51	ug/L			06/11/21 20:25	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/11/21 20:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*06/11/21 20:25*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*06/11/21 20:25*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*06/11/21 20:25*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*06/11/21 20:25*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**92**		10	0.72	ug/L		06/11/21 14:34	06/14/21 19:12	20
Acenaphthylene	ND		6.0	1.1	ug/L		06/11/21 14:34	06/14/21 19:12	20
Anthracene	ND		10	0.68	ug/L		06/11/21 14:34	06/14/21 19:12	20
Chrysene	ND		10	1.5	ug/L		06/11/21 14:34	06/14/21 19:12	20
Fluoranthene	ND		10	1.6	ug/L		06/11/21 14:34	06/14/21 19:12	20
Fluorene	**13**		10	1.2	ug/L		06/11/21 14:34	06/14/21 19:12	20
Naphthalene	ND		20	1.3	ug/L		06/11/21 14:34	06/14/21 19:12	20
Phenanthrene	~~1.4~~ ~~J B~~ 4.0 U		4.0	1.2	ug/L		06/11/21 14:34	06/14/21 19:12	20
Pyrene	ND		10	1.5	ug/L		06/11/21 14:34	06/14/21 19:12	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*100*		*24 - 146*	*06/11/21 14:34*	*06/14/21 19:12*	*20*
2-Fluorobiphenyl	*87*		*37 - 120*	*06/11/21 14:34*	*06/14/21 19:12*	*20*
2-Fluorophenol (Surr)	*44*		*10 - 120*	*06/11/21 14:34*	*06/14/21 19:12*	*20*
Nitrobenzene-d5 (Surr)	*77*		*26 - 120*	*06/11/21 14:34*	*06/14/21 19:12*	*20*
Phenol-d5 (Surr)	*34*		*11 - 120*	*06/11/21 14:34*	*06/14/21 19:12*	*20*
p-Terphenyl-d14	*90*		*64 - 127*	*06/11/21 14:34*	*06/14/21 19:12*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.050	0.016	ug/L		06/16/21 10:41	06/17/21 00:49	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/16/21 10:41	06/17/21 00:49	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/16/21 10:41	06/17/21 00:49	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/16/21 10:41	06/17/21 00:49	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/16/21 10:41	06/17/21 00:49	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/16/21 10:41	06/17/21 00:49	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/16/21 10:41	06/17/21 00:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*37*		*25 - 131*	*06/16/21 10:41*	*06/17/21 00:49*	*1*
Nitrobenzene-d5	*65*		*54 - 134*	*06/16/21 10:41*	*06/17/21 00:49*	*1*

Client Sample ID: MW-C12 061021
Lab Sample ID: 480-185894-1
Date Collected: 06/10/21 09:00
Matrix: Water
Date Received: 06/11/21 08:00

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**620**		44	11	ug/L			06/15/21 16:46	11

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2.5**		0.050	0.019	mg/L		06/16/21 16:04	06/17/21 16:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**237**		10.0	1.7	mg/L			06/16/21 22:46	5
Ammonia	**1.6**	**B**	0.020	0.0090	mg/L			06/14/21 13:25	1
Cyanide, Total	**0.017**	J+	0.010	0.0050	mg/L		06/14/21 12:26	06/14/21 16:57	1
Nitrate as N	**0.023**	**J**	0.050	0.020	mg/L			06/11/21 17:54	1
Alkalinity, Total	**502**		5.0	0.79	mg/L			06/11/21 15:56	1
Ferrous Iron	ND	~~HF~~ UJ	0.10	0.075	mg/L			06/11/21 16:10	1

Client Sample ID: EQ BLANK
Lab Sample ID: 480-185894-2
Date Collected: 06/10/21 09:10
Matrix: Water
Date Received: 06/11/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/11/21 20:48	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/11/21 20:48	1
Toluene	ND		1.0	0.51	ug/L			06/11/21 20:48	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/11/21 20:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*06/11/21 20:48*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*06/11/21 20:48*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*06/11/21 20:48*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*06/11/21 20:48*	*1*

Method: 8270D LL - Semivolatile Organic Compounds by GC/MS - Low Level

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		0.50	0.036	ug/L		06/11/21 14:34	06/14/21 19:39	1
Acenaphthylene	ND		0.30	0.056	ug/L		06/11/21 14:34	06/14/21 19:39	1
Anthracene	ND		0.50	0.034	ug/L		06/11/21 14:34	06/14/21 19:39	1
Chrysene	ND		0.50	0.074	ug/L		06/11/21 14:34	06/14/21 19:39	1
Fluoranthene	ND		0.50	0.080	ug/L		06/11/21 14:34	06/14/21 19:39	1
Fluorene	ND		0.50	0.058	ug/L		06/11/21 14:34	06/14/21 19:39	1
Naphthalene	ND		1.0	0.064	ug/L		06/11/21 14:34	06/14/21 19:39	1
Phenanthrene	~~**0.12**~~ ~~**J B**~~ 0.20 U		0.20	0.062	ug/L		06/11/21 14:34	06/14/21 19:39	1
Pyrene	ND		0.50	0.076	ug/L		06/11/21 14:34	06/14/21 19:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*92*		*24 - 146*	*06/11/21 14:34*	*06/14/21 19:39*	*1*
2-Fluorobiphenyl	*106*		*37 - 120*	*06/11/21 14:34*	*06/14/21 19:39*	*1*
2-Fluorophenol (Surr)	*55*		*10 - 120*	*06/11/21 14:34*	*06/14/21 19:39*	*1*
Nitrobenzene-d5 (Surr)	*95*		*26 - 120*	*06/11/21 14:34*	*06/14/21 19:39*	*1*
Phenol-d5 (Surr)	*40*		*11 - 120*	*06/11/21 14:34*	*06/14/21 19:39*	*1*
p-Terphenyl-d14	*115*		*64 - 127*	*06/11/21 14:34*	*06/14/21 19:39*	*1*

Client Sample ID: EQ BLANK
Lab Sample ID: 480-185894-2

Date Collected: 06/10/21 09:10
Matrix: Water
Date Received: 06/11/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]anthracene	ND		0.050	0.016	ug/L		06/16/21 10:41	06/17/21 01:10	1
Benzo[a]pyrene	ND		0.050	0.022	ug/L		06/16/21 10:41	06/17/21 01:10	1
Benzo[b]fluoranthene	ND		0.050	0.024	ug/L		06/16/21 10:41	06/17/21 01:10	1
Benzo[g,h,i]perylene	ND		0.050	0.035	ug/L		06/16/21 10:41	06/17/21 01:10	1
Benzo[k]fluoranthene	ND		0.050	0.028	ug/L		06/16/21 10:41	06/17/21 01:10	1
Dibenz(a,h)anthracene	ND		0.050	0.020	ug/L		06/16/21 10:41	06/17/21 01:10	1
Indeno[1,2,3-cd]pyrene	ND		0.050	0.036	ug/L		06/16/21 10:41	06/17/21 01:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl	*53*		*25 - 131*	*06/16/21 10:41*	*06/17/21 01:10*	*1*
Nitrobenzene-d5	*76*		*54 - 134*	*06/16/21 10:41*	*06/17/21 01:10*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	**0.0055**	**J**	0.010	0.0050	mg/L		06/14/21 12:26	06/14/21 17:01	1

Client Sample ID: TRIP BLANK
Lab Sample ID: 480-185894-3

Date Collected: 06/10/21 00:00
Matrix: Water
Date Received: 06/11/21 08:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			06/11/21 21:11	1
Ethylbenzene	ND		1.0	0.74	ug/L			06/11/21 21:11	1
Toluene	ND		1.0	0.51	ug/L			06/11/21 21:11	1
Xylenes, Total	ND		2.0	0.66	ug/L			06/11/21 21:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*06/11/21 21:11*	*1*
4-Bromofluorobenzene (Surr)	*106*		*73 - 120*		*06/11/21 21:11*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*06/11/21 21:11*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*06/11/21 21:11*	*1*

Appendix C

Support Documentation

Job Narrative
480-185758-1

Comments
No additional comments.

Receipt
The samples were received on 6/9/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 3.0º C, 3.2º C and 3.4º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-46S 060821 (480-185758-1). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D LL: The following samples were diluted due to color, appearance, and viscosity: MW-46S 060821 (480-185758-1) and MW-48S 060821 (480-185758-6). Elevated reporting limits (RL) are provided.

Method 8270D LL: The following sample was diluted due to the nature of the sample matrix: MW-46S 060821 (480-185758-1). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method 8270D LL: The following sample was diluted due to color, appearance, and viscosity: MW-47S 060821 (480-185758-8). Elevated reporting limits (RL) are provided.

Method 8270E SIM: The continuing calibration verification (CCV) associated with batch 460-783962 recovered above the upper control limit for Dibenz(a,h)anthracene, Indeno[1,2,3-cd]pyrene and Benzo[g,h,i]perylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8270E SIM: The continuing calibration verification (CCV) analyzed in batch 460-783966 was outside the method criteria for the following analyte(s): Benzo[a]anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method 8270E SIM: Surrogate recovery for the following sample was outside the upper control limit: MW-33S 060821 (480-185758-2). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC
Method 300.0: The following samples were diluted due to the abundance of non-target analytes: MW-46S 060821 (480-185758-1), MW-33S 060821 (480-185758-2), MW-45S 060821 (480-185758-3), MW-22S 060821 (480-185758-4), MW-48S 060821 (480-185758-6), MW-31S 060821 (480-185758-7) and MW-47S 060821 (480-185758-8). Elevated reporting limits (RLs) are provided.

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

GC VOA
Method RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-46S 060821 (480-185758-1), MW-45S 060821 (480-185758-3), MW-48S 060821 (480-185758-6) and MW-47S 060821 (480-185758-8). Elevated reporting limits (RLs) are provided.

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

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

General Chemistry
Methods 335.4, 9012B, SM 4500 CN G: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-584830 and analytical batch 480-584936 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method SM 3500 FE D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-46S 060821 (480-185758-1), MW-33S 060821 (480-185758-2), MW-45S 060821 (480-185758-3), MW-22S 060821 (480-185758-4), MW-40 060821 (480-185758-5), MW-48S 060821 (480-185758-6), MW-31S 060821 (480-185758-7) and MW-47S 060821 (480-185758-8).

Methods 335.4, 9012B: The continuing calibration verification (CCV) associated with batch 480-585087 recovered above the upper

control limit for <AffectedAnalytes>. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 480-585087/30).

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

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

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185758-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-584784/1-A

Matrix: Water Lab File ID: Y02822686.D

Analysis Method: 8270D LL Date Collected:

Extract. Method: 3510C Date Extracted: 06/10/2021 08:27

Sample wt/vol: 1000(mL) Date Analyzed: 06/14/2021 20:07

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 585216 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.50	0.036
208-96-8	Acenaphthylene	ND		0.30	0.056
120-12-7	Anthracene	ND		0.50	0.034
218-01-9	Chrysene	ND		0.50	0.074
206-44-0	Fluoranthene	ND		0.50	0.080
86-73-7	Fluorene	ND		0.50	0.058
91-20-3	Naphthalene	ND		1.0	0.064
85-01-8	Phenanthrene	0.0912	J	0.20	0.062
129-00-0	Pyrene	ND		0.50	0.076

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	97		24-146
321-60-8	2-Fluorobiphenyl	92		37-120
367-12-4	2-Fluorophenol (Surr)	48		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	85		26-120
4165-62-2	Phenol-d5 (Surr)	33		11-120
1718-51-0	p-Terphenyl-d14	109		64-127

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Edison Job No.: 480-185758-1

SDG No.:

Lab Sample ID: CCVIS 460-783962/2 Calibration Date: 06/13/2021 16:23

Instrument ID: CBNAMS13 Calib Start Date: 04/28/2021 12:07

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 04/28/2021 13:52

Lab File ID: C7679.D Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Lin2		0.5859		229	200	14.7	20.0
N-Nitrosodimethylamine	Ave	0.6957	0.6849		98.5	100	-1.5	20.0
Bis(2-chloroethyl)ether	Ave	1.240	1.185	0.7000	19.1	20.0	-4.4	20.0
Naphthalene	Ave	1.041	1.033	0.7000	19.8	20.0	-0.8	20.0
Acenaphthylene	Ave	1.888	1.873	0.9000	19.8	20.0	-0.8	20.0
Acenaphthene	Ave	1.211	1.166	0.9000	19.3	20.0	-3.7	20.0
Fluorene	Ave	1.418	1.309	0.9000	18.5	20.0	-7.7	20.0
4,6-Dinitro-2-methylphenol	Qua		0.0262	0.0100	82.2	200	-58.9*	20.0
Hexachlorobenzene	Ave	0.3059	0.3391	0.1000	22.2	20.0	10.8	20.0
Pentachlorophenol	Qua		0.1053	0.0500	108	100	8.2	20.0
Phenanthrene	Ave	1.178	1.152	0.7000	19.6	20.0	-2.2	20.0
Anthracene	Ave	1.001	1.007	0.7000	20.1	20.0	0.6	20.0
Fluoranthene	Ave	1.160	1.116	0.6000	19.2	20.0	-3.8	20.0
Pyrene	Ave	1.613	1.607	0.6000	19.9	20.0	-0.4	20.0
Benzo[a]anthracene	Ave	1.341	1.419	0.8000	21.2	20.0	5.8	20.0
Chrysene	Ave	1.521	1.446	0.7000	19.0	20.0	-4.9	20.0
Benzo[b]fluoranthene	Ave	1.444	1.358	0.0100	18.8	20.0	-6.0	20.0
Benzo[k]fluoranthene	Ave	1.540	1.464	0.7000	19.0	20.0	-5.0	20.0
Benzo[a]pyrene	Ave	1.140	1.149	0.7000	20.2	20.0	0.8	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.198	1.665	0.5000	27.8	20.0	39.0*	20.0
Dibenz(a,h)anthracene	Ave	1.207	1.658	0.4000	27.5	20.0	37.3*	20.0
Benzo[g,h,i]perylene	Ave	1.344	1.869	0.5000	27.8	20.0	39.0*	20.0
Nitrobenzene-d5	Ave	0.3664	0.3835		419	400	4.7	20.0
2-Fluorobiphenyl	Ave	1.765	1.865		423	400	5.6	20.0
2,4,6-Tribromophenol	Ave	0.2007	0.1829		365	400	-8.9	20.0
Terphenyl-d14	Ave	1.060	1.054		398	400	-0.6	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Edison Job No.: 480-185758-1

SDG No.:

Lab Sample ID: CCVIS 460-783966/2 Calibration Date: 06/13/2021 15:42

Instrument ID: CBNAMS9 Calib Start Date: 04/21/2021 10:00

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 04/21/2021 11:54

Lab File ID: h266301.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4283	0.4656		217	200	8.7	20.0
N-Nitrosodimethylamine	Lin2		0.4780		95.2	100	-4.8	20.0
Bis(2-chloroethyl)ether	Ave	1.068	0.9069	0.7000	17.0	20.0	-15.1	20.0
Naphthalene	Ave	1.105	1.040	0.7000	18.8	20.0	-5.8	20.0
Acenaphthylene	Ave	3.068	2.794	0.9000	18.2	20.0	-8.9	20.0
Acenaphthene	Ave	1.450	1.169	0.9000	16.1	20.0	-19.4	20.0
Fluorene	Ave	1.672	1.710	0.9000	20.5	20.0	2.3	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1356	0.0733	0.0100	108	200	-45.9*	20.0
Hexachlorobenzene	Ave	0.5779	0.5925	0.1000	20.5	20.0	2.5	20.0
Pentachlorophenol	Qua		0.1183	0.0500	50.6	100	-49.4*	20.0
Phenanthrene	Ave	1.896	0.9376	0.7000	9.89	20.0	-50.6*	20.0
Anthracene	Ave	1.358	1.169	0.7000	17.2	20.0	-13.9	20.0
Fluoranthene	Ave	1.757	1.195	0.6000	13.6	20.0	-32.0*	20.0
Pyrene	Ave	2.584	2.047	0.6000	15.8	20.0	-20.8*	20.0
Benzo[a]anthracene	Ave	1.887	1.500	0.8000	15.9	20.0	-20.5*	20.0
Chrysene	Ave	1.898	1.906	0.7000	20.1	20.0	0.4	20.0
Benzo[b]fluoranthene	Ave	1.759	1.409		16.0	20.0	-19.9	20.0
Benzo[k]fluoranthene	Ave	1.892	1.961	0.7000	20.7	20.0	3.6	20.0
Benzo[a]pyrene	Ave	1.482	1.336	0.7000	18.0	20.0	-9.9	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.596	1.682	0.5000	21.1	20.0	5.4	20.0
Dibenz(a,h)anthracene	Ave	1.644	1.779	0.4000	21.6	20.0	8.2	20.0
Benzo[g,h,i]perylene	Ave	1.721	1.621	0.5000	18.8	20.0	-5.8	20.0
Nitrobenzene-d5	Ave	0.4139	0.4202		406	400	1.5	20.0
2-Fluorobiphenyl	Ave	1.967	2.703		549	400	37.4*	20.0
2,4,6-Tribromophenol	Ave	0.5035	0.3107		247	400	-38.3*	20.0
Terphenyl-d14	Ave	0.9634	0.9086		377	400	-5.7	20.0

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Edison Job No.: 480-185758-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): Rtxi-5Sil M ID: 0.25(mm)

Client Sample ID	Lab Sample ID	NBZ #	FBP #
MW-46S 060821	480-185758-1	79	125
MW-33S 060821	480-185758-2	148 S1+	167 S1+
MW-45S 060821	480-185758-3	95	100
MW-22S 060821	480-185758-4	90	106
MW-40 060821	480-185758-5	94	101
MW-48S 060821	480-185758-6	98	84
MW-31S 060821	480-185758-7	96	84
MW-47S 060821	480-185758-8	98	88
DUP	480-185758-9	101	87
	MB 460-783925/1-A	88	95
	LCS 460-783925/2-A	75	60
	LCSD 460-783925/3-A	97	113
MW-22S 060821 MS	480-185758-4 MS	116	133 S1+
MW-22S 060821 MSD	480-185758-4 MSD	114	133 S1+

	QC LIMITS
NBZ = Nitrobenzene-d5	54-134
FBP = 2-Fluorobiphenyl	25-131

Column to be used to flag recovery values

FORM II 8270E SIM

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185758-1

SDG No.:

Analyst: JPS Batch Start Date: 06/10/2021

Reporting Units: mg/L Analytical Batch No.: 584966

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	16:30	Alkalinity, Total	104.8	100	105	90-110		Alk 100 ICV_00100
26	CCV	19:35	Alkalinity, Total	98.80	100	99	90-110		WC_ALK_CCV_00063
27	CCB	19:40	Alkalinity, Total	ND					
38	CCV	20:54	Alkalinity, Total	99.92	100	100	90-110		WC_ALK_CCV_00063
39	CCB	21:00	Alkalinity, Total	ND					
50	CCV	22:32	Alkalinity, Total	101.5	100	102	90-110		WC_ALK_CCV_00063
51	CCB	22:39	Alkalinity, Total	0.800				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185758-1

SDG No.:

Analyst: JPS Batch Start Date: 06/11/2021

Reporting Units: mg/L Analytical Batch No.: 585189

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	12:13	Alkalinity, Total	105.6	100	106	90-110		Alk 100 ICV_00100
2	CCV	12:19	Alkalinity, Total	99.68	100	100	90-110		WC_ALK_CCV_00063
3	CCB	12:25	Alkalinity, Total	ND					
14	CCV	13:43	Alkalinity, Total	102.2	100	102	90-110		WC_ALK_CCV_00063
15	CCB	13:48	Alkalinity, Total	ND					
26	CCV	15:16	Alkalinity, Total	99.52	100	100	90-110		WC_ALK_CCV_00063
27	CCB	15:21	Alkalinity, Total	ND					
50	CCV	18:10	Alkalinity, Total	103.4	100	103	90-110		WC_ALK_CCV_00063
51	CCB	18:17	Alkalinity, Total	1.12				J	
62	CCV	19:41	Alkalinity, Total	99.60	100	100	90-110		WC_ALK_CCV_00063
63	CCB	19:47	Alkalinity, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185758-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 585059 Date: 06/11/2021 23:19							
300.0	MB 480-585059/4	Sulfate	ND		mg/L	2.0	1
Batch ID: 585059 Date: 06/12/2021 06:28							
300.0	MB 480-585059/28	Sulfate	ND		mg/L	2.0	1
Batch ID: 584793 Date: 06/10/2021 07:58							
350.1	MB 480-584793/3	Ammonia	ND		mg/L	0.020	1
Batch ID: 584793 Date: 06/10/2021 08:39							
350.1	MB 480-584793/51	Ammonia	ND		mg/L	0.020	1
Batch ID: 584936 Date: 06/10/2021 16:37		Prep Batch: 584830			Date: 06/10/2021 11:24		
9012B	MB 480-584830/1-A	Cyanide, Total	0.00811	J	mg/L	0.010	1
Batch ID: 585087 Date: 06/11/2021 14:22		Prep Batch: 585039			Date: 06/11/2021 12:03		
9012B	MB 480-585039/1-A	Cyanide, Total	0.00994	J	mg/L	0.010	1
Batch ID: 584966 Date: 06/10/2021 19:45							
SM 2320B	MB 480-584966/28	Alkalinity, Total	ND		mg/L	5.0	1
Batch ID: 585189 Date: 06/11/2021 12:29							
SM 2320B	MB 480-585189/4	Alkalinity, Total	ND		mg/L	5.0	1
Batch ID: 585189 Date: 06/11/2021 18:23							
SM 2320B	MB 480-585189/52	Alkalinity, Total	ND		mg/L	5.0	1
Batch ID: 585104 Date: 06/11/2021 16:10							
SM 3500 FE D	MB 480-585104/3	Ferrous Iron	ND		mg/L	0.10	1

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185758-1

SDG No.:

Analyst: ALT Batch Start Date: 06/11/2021

Reporting Units: mg/L Analytical Batch No.: 585087

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	14:18	Cyanide, Total	0.273	0.250	109	90-110		CN CCV_01478
2	CCB	14:19	Cyanide, Total	ND					
13	CCV	14:38	Cyanide, Total	0.273	0.250	109	90-110		CN CCV_01478
14	CCB	14:39	Cyanide, Total	ND					
25	CCV	14:55	Cyanide, Total	0.276	0.250	110	90-110		CN CCV_01478
26	CCB	14:56	Cyanide, Total	ND					
30	CCV	15:02	Cyanide, Total	0.279	0.250	112	90-110		CN CCV_01478
31	CCB	15:04	Cyanide, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185758-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 585059	Date: 06/12/2021 05:16										
300.0	480-185758-2	Sulfate	43.4		mg/L						
300.0	480-185758-2 MS	Sulfate	285.3		mg/L	250	97	80-120			
Batch ID: 585059	Date: 06/12/2021 08:33										
300.0	480-185758-8	Sulfate	ND		mg/L						
300.0	480-185758-8 MS	Sulfate	245.1		mg/L	250	98	80-120			
Batch ID: 584793	Date: 06/10/2021 08:10										
350.1	480-185758-6	Ammonia	1.4		mg/L						
350.1	480-185758-6 MS	Ammonia	1.66		mg/L	0.200	130	90-110			4
Batch ID: 584793	Date: 06/10/2021 08:50										
350.1	480-185758-1	Ammonia	3.3		mg/L						
350.1	480-185758-1 MS	Ammonia	3.80		mg/L	0.400	125	90-110			4
Batch ID: 584936	Date: 06/10/2021 16:44		Prep Batch: 584830		Date: 06/10/2021 11:24						
9012B	480-185758-4	Cyanide, Total	0.060		mg/L						B F1 F2
9012B	480-185758-4 MS	Cyanide, Total	0.0814		mg/L	0.100	21	90-110			F1
Batch ID: 584936	Date: 06/10/2021 17:13		Prep Batch: 584830		Date: 06/10/2021 11:24						
9012B	480-185758-5	Cyanide, Total	0.0073	J	mg/L						B F1 ^+
9012B	480-185758-5 MS	Cyanide, Total	0.0112		mg/L	0.100	4	90-110			F1 ^+
Batch ID: 585104	Date: 06/11/2021 16:10										
SM 3500 FE D	480-185758-6	Ferrous Iron	ND		mg/L						HF
SM 3500 FE D	480-185758-6 MS	Ferrous Iron	0.992		mg/L	1.00	99	70-130			
Batch ID: 585104	Date: 06/11/2021 16:10										
SM 3500 FE D	480-185758-7	Ferrous Iron	0.12		mg/L						HF
SM 3500 FE D	480-185758-7 MS	Ferrous Iron	1.17		mg/L	1.00	105	70-130			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185758-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 585059 Date: 06/12/2021 08:51											
300.0	480-185758-8 MSD	Sulfate	246.2		mg/L	250	98	80-120	0	15	
Batch ID: 584936 Date: 06/10/2021 16:46 Prep Batch: 584830 Date: 06/10/2021 11:24											
9012B	480-185758-4 MSD	Cyanide, Total	0.0681		mg/L	0.100	8	90-110	18	15	F1 F2

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

Job Narrative
480-185822-1

Comments
No additional comments.

Receipt
The samples were received on 6/10/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperatures of the 3 coolers at receipt time were 2.7º C, 2.9º C and 3.0º C.

GC/MS VOA
Method 8260C: The following sample was diluted due to the abundance of non-target analytes: MW-23S 060921 (480-185822-1). Elevated reporting limits (RLs) are provided.

Method 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-C16 060921 (480-185822-2) and MW-C11 060921 (480-185822-3). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA
Method 8270D LL: The following samples were diluted due to color, appearance, and viscosity: MW-23S 060921 (480-185822-1), MW-C16 060921 (480-185822-2) and MW-C11 060921 (480-185822-3). Elevated reporting limits (RL) are provided.

Method 8270D LL: The following samples required a dilution due to the nature of the sample matrix: MW-23S 060921 (480-185822-1), MW-C16 060921 (480-185822-2) and MW-C11 060921 (480-185822-3). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method 8270E SIM: The continuing calibration verification (CCV) analyzed in batch 460-783966 was outside the method criteria for the following analyte(s): Benzo[a]anthracene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

HPLC/IC
Method 300.0: The following samples were diluted due to the abundance of non-target analytes: MW-23S 060921 (480-185822-1), MW-C16 060921 (480-185822-2), MW-C11 060921 (480-185822-3), MW-25S 060921 (480-185822-4), MW-28S 060921 (480-185822-5) and MW-24S 060921 (480-185822-6). Elevated reporting limits (RLs) are provided.

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

GC VOA
Method RSK-175: Due to the matrix, the initial volume(s) used for the following sample deviated from the standard procedure: MW-C11 060921 (480-185822-3). The reporting limits (RLs) have been adjusted proportionately.

Method RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-23S 060921 (480-185822-1) and MW-28S 060921 (480-185822-5). Elevated reporting limits (RLs) are provided.

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

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

General Chemistry
Method SM 3500 FE D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-23S 060921 (480-185822-1), MW-C16 060921 (480-185822-2), MW-C11 060921 (480-185822-3), MW-25S 060921 (480-185822-4), MW-28S 060921 (480-185822-5) and MW-24S 060921 (480-185822-6).

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

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

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185822-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-585079/1-A

Matrix: Water Lab File ID: Y02822675.D

Analysis Method: 8270D LL Date Collected:

Extract. Method: 3510C Date Extracted: 06/11/2021 14:34

Sample wt/vol: 1000(mL) Date Analyzed: 06/14/2021 15:06

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 585216 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.50	0.036
208-96-8	Acenaphthylene	ND		0.30	0.056
120-12-7	Anthracene	ND		0.50	0.034
218-01-9	Chrysene	ND		0.50	0.074
206-44-0	Fluoranthene	ND		0.50	0.080
86-73-7	Fluorene	ND		0.50	0.058
91-20-3	Naphthalene	ND		1.0	0.064
85-01-8	Phenanthrene	0.0897	J	0.20	0.062
129-00-0	Pyrene	ND		0.50	0.076

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	70		24-146
321-60-8	2-Fluorobiphenyl	84		37-120
367-12-4	2-Fluorophenol (Surr)	44		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	78		26-120
4165-62-2	Phenol-d5 (Surr)	32		11-120
1718-51-0	p-Terphenyl-d14	100		64-127

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Edison Job No.: 480-185822-1

SDG No.:

Lab Sample ID: CCVIS 460-783966/2 Calibration Date: 06/13/2021 15:42

Instrument ID: CBNAMS9 Calib Start Date: 04/21/2021 10:00

GC Column: Rtxi-5Sil MS ID: 0.25(mm) Calib End Date: 04/21/2021 11:54

Lab File ID: h266301.d Conc. Units: ug/L

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.4283	0.4656		217	200	8.7	20.0
N-Nitrosodimethylamine	Lin2		0.4780		95.2	100	-4.8	20.0
Bis(2-chloroethyl)ether	Ave	1.068	0.9069	0.7000	17.0	20.0	-15.1	20.0
Naphthalene	Ave	1.105	1.040	0.7000	18.8	20.0	-5.8	20.0
Acenaphthylene	Ave	3.068	2.794	0.9000	18.2	20.0	-8.9	20.0
Acenaphthene	Ave	1.450	1.169	0.9000	16.1	20.0	-19.4	20.0
Fluorene	Ave	1.672	1.710	0.9000	20.5	20.0	2.3	20.0
4,6-Dinitro-2-methylphenol	Ave	0.1356	0.0733	0.0100	108	200	-45.9*	20.0
Hexachlorobenzene	Ave	0.5779	0.5925	0.1000	20.5	20.0	2.5	20.0
Pentachlorophenol	Qua		0.1183	0.0500	50.6	100	-49.4*	20.0
Phenanthrene	Ave	1.896	0.9376	0.7000	9.89	20.0	-50.6*	20.0
Anthracene	Ave	1.358	1.169	0.7000	17.2	20.0	-13.9	20.0
Fluoranthene	Ave	1.757	1.195	0.6000	13.6	20.0	-32.0*	20.0
Pyrene	Ave	2.584	2.047	0.6000	15.8	20.0	-20.8*	20.0
Benzo[a]anthracene	Ave	1.887	1.500	0.8000	15.9	20.0	-20.5*	20.0
Chrysene	Ave	1.898	1.906	0.7000	20.1	20.0	0.4	20.0
Benzo[b]fluoranthene	Ave	1.759	1.409		16.0	20.0	-19.9	20.0
Benzo[k]fluoranthene	Ave	1.892	1.961	0.7000	20.7	20.0	3.6	20.0
Benzo[a]pyrene	Ave	1.482	1.336	0.7000	18.0	20.0	-9.9	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.596	1.682	0.5000	21.1	20.0	5.4	20.0
Dibenz(a,h)anthracene	Ave	1.644	1.779	0.4000	21.6	20.0	8.2	20.0
Benzo[g,h,i]perylene	Ave	1.721	1.621	0.5000	18.8	20.0	-5.8	20.0
Nitrobenzene-d5	Ave	0.4139	0.4202		406	400	1.5	20.0
2-Fluorobiphenyl	Ave	1.967	2.703		549	400	37.4*	20.0
2,4,6-Tribromophenol	Ave	0.5035	0.3107		247	400	-38.3*	20.0
Terphenyl-d14	Ave	0.9634	0.9086		377	400	-5.7	20.0

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185822-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 584988 Date: 06/11/2021 08:57											
350.1	480-185822-5	Ammonia	0.67		mg/L						
350.1	480-185822-5 MS	Ammonia	0.853		mg/L	0.200	90	90-110			
Batch ID: 585344 Date: 06/14/2021 16:00 Prep Batch: 585273 Date: 06/14/2021 12:20											
9012B	480-185822-2	Cyanide, Total	0.0077	J	mg/L						F1
9012B	480-185822-2 MS	Cyanide, Total	0.0625		mg/L	0.100	55	90-110			F1
Batch ID: 585104 Date: 06/11/2021 16:10											
SM 3500 FE D	480-185822-1	Ferrous Iron	ND		mg/L						HF
SM 3500 FE D	480-185822-1 MS	Ferrous Iron	1.13		mg/L	1.00	113	70-130			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185822-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 584988 Date: 06/11/2021 08:56								
350.1	MW-28S 060921	480-185822-5	Ammonia	0.67	mg/L			
350.1	MW-28S 060921	480-185822-5 DU	Ammonia	0.656	mg/L	3	20	
Batch ID: 585344 Date: 06/14/2021 15:57			Prep Batch: 585273 Date: 06/14/2021 12:20					
9012B	MW-23S 060921	480-185822-1	Cyanide, Total	0.0072	mg/L			J
9012B	MW-23S 060921	480-185822-1 DU	Cyanide, Total	0.00968	mg/L	30	15	J F5
Batch ID: 585104 Date: 06/11/2021 16:10								
SM 3500 FE D	MW-23S 060921	480-185822-1	Ferrous Iron	ND	mg/L			
SM 3500 FE D	MW-23S 060921	480-185822-1 DU	Ferrous Iron	ND	mg/L	NC	20	
Batch ID: 585104 Date: 06/11/2021 16:10								
SM 3500 FE D	MW-C16 060921	480-185822-2	Ferrous Iron	0.27	mg/L			
SM 3500 FE D	MW-C16 060921	480-185822-2 DU	Ferrous Iron	0.276	mg/L	2	20	
Batch ID: 585104 Date: 06/11/2021 16:10								
SM 3500 FE D	MW-C11 060921	480-185822-3	Ferrous Iron	0.082	mg/L			J
SM 3500 FE D	MW-C11 060921	480-185822-3 DU	Ferrous Iron	0.0939	mg/L	14	20	J
Batch ID: 585104 Date: 06/11/2021 16:10								
SM 3500 FE D	MW-25S 060921	480-185822-4	Ferrous Iron	ND	mg/L			
SM 3500 FE D	MW-25S 060921	480-185822-4 DU	Ferrous Iron	ND	mg/L	NC	20	
Batch ID: 585104 Date: 06/11/2021 16:10								
SM 3500 FE D	MW-28S 060921	480-185822-5	Ferrous Iron	ND	mg/L			
SM 3500 FE D	MW-28S 060921	480-185822-5 DU	Ferrous Iron	ND	mg/L	NC	20	
Batch ID: 585104 Date: 06/11/2021 16:10								
SM 3500 FE D	MW-24S 060921	480-185822-6	Ferrous Iron	ND	mg/L			
SM 3500 FE D	MW-24S 060921	480-185822-6 DU	Ferrous Iron	ND	mg/L	NC	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185822-1

SDG No.:

Instrument ID: LACHAT1 Method: 350.1

Start Date: 06/11/2021 08:43 End Date: 06/11/2021 09:20

Lab Sample ID	D/F	Type	Time	Analytes																			
				NH3																			
CCV 480-584988/1	1		08:43	X																			
CCB 480-584988/2	1		08:44	X																			
MB 480-584988/3	1	T	08:45	X																			
LCS 480-584988/4	1	T	08:46	X																			
ZZZZZZ			08:46																				
ZZZZZZ			08:47																				
ZZZZZZ			08:48																				
ZZZZZZ			08:49																				
480-185822-1	1	T	08:50	X																			
480-185822-2	1	T	08:51	X																			
480-185822-3	5	T	08:52	X																			
480-185822-4	1	T	08:52	X																			
CCV 480-584988/13	1		08:53	X																			
CCB 480-584988/14	1		08:54	X																			
480-185822-5	1	T	08:55	X																			
480-185822-5 DU	1	T	08:56	X																			
480-185822-5 MS	1	T	08:57	X																			
480-185822-6	1	T	08:58	X																			
ZZZZZZ			08:58																				
ZZZZZZ			08:59																				
ZZZZZZ			09:00																				
ZZZZZZ			09:01																				
ZZZZZZ			09:02																				
ZZZZZZ			09:03																				
CCV 480-584988/25	1		09:04	X																			
CCB 480-584988/26	1		09:04	X																			
ZZZZZZ			09:05																				
ZZZZZZ			09:06																				
ZZZZZZ			09:07																				
ZZZZZZ			09:08																				
ZZZZZZ			09:09																				
ZZZZZZ			09:10																				
ZZZZZZ			09:10																				
ZZZZZZ			09:11																				
ZZZZZZ			09:12																				
ZZZZZZ			09:13																				
CCV 480-584988/37			09:14																				
CCB 480-584988/38			09:15																				
ZZZZZZ			09:16																				
ZZZZZZ			09:16																				
ZZZZZZ			09:17																				
ZZZZZZ			09:18																				

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185822-1

SDG No.:

Analyst: CLT Batch Start Date: 06/11/2021

Reporting Units: mg/L Analytical Batch No.: 584988

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	08:43	Ammonia	0.966	1.00	97	90-110		NH3 CCV_01340
2	CCB	08:44	Ammonia	0.00913				J	
13	CCV	08:53	Ammonia	0.947	1.00	95	90-110		NH3 CCV_01340
14	CCB	08:54	Ammonia	ND					
25	CCV	09:04	Ammonia	0.979	1.00	98	90-110		NH3 CCV_01340
26	CCB	09:04	Ammonia	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185822-1

SDG No.:

Analyst: JPS Batch Start Date: 06/10/2021

Reporting Units: mg/L Analytical Batch No.: 584966

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	16:30	Alkalinity, Total	104.8	100	105	90-110		Alk 100 ICV_00100
50	CCV	22:32	Alkalinity, Total	101.5	100	102	90-110		WC_ALK_CCV_00063
51	CCB	22:39	Alkalinity, Total	0.800				J	
62	CCV	00:08	Alkalinity, Total	100.5	100	100	90-110		WC_ALK_CCV_00063
63	CCB	00:14	Alkalinity, Total	0.960				J	
74	CCV	01:42	Alkalinity, Total	103.0	100	103	90-110		WC_ALK_CCV_00063
75	CCB	01:48	Alkalinity, Total	ND					
83	CCV	02:42	Alkalinity, Total	103.0	100	103	90-110		WC_ALK_CCV_00063
84	CCB	02:48	Alkalinity, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

Job Narrative
480-185894-1

Comments
No additional comments.

Receipt
The samples were received on 6/11/2021 8:00 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 2.6º C.

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

GC/MS Semi VOA
Method 8270D LL: The following sample was diluted due to color, appearance, and viscosity: MW-C12 061021 (480-185894-1). Elevated reporting limits (RL) are provided.

Method 8270D LL: The following sample required a dilution due to the nature of the sample matrix: MW-C12 061021 (480-185894-1). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

HPLC/IC
Method 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-C12 061021 (480-185894-1). Elevated reporting limits (RLs) are provided.

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

GC VOA
Method RSK-175: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-C12 061021 (480-185894-1). Elevated reporting limits (RLs) are provided.

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

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

General Chemistry
Method SM 3500 FE D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following sample has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-C12 061021 (480-185894-1).

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

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

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185894-1

SDG No.:

Client Sample ID: Lab Sample ID: MB 480-585079/1-A

Matrix: Water Lab File ID: Y02822675.D

Analysis Method: 8270D LL Date Collected:

Extract. Method: 3510C Date Extracted: 06/11/2021 14:34

Sample wt/vol: 1000(mL) Date Analyzed: 06/14/2021 15:06

Con. Extract Vol.: 1(mL) Dilution Factor: 1

Injection Volume: 2(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 585216 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	ND		0.50	0.036
208-96-8	Acenaphthylene	ND		0.30	0.056
120-12-7	Anthracene	ND		0.50	0.034
218-01-9	Chrysene	ND		0.50	0.074
206-44-0	Fluoranthene	ND		0.50	0.080
86-73-7	Fluorene	ND		0.50	0.058
91-20-3	Naphthalene	ND		1.0	0.064
85-01-8	Phenanthrene	0.0897	J	0.20	0.062
129-00-0	Pyrene	ND		0.50	0.076

CAS NO.	SURROGATE	%REC	Q	LIMITS
118-79-6	2,4,6-Tribromophenol (Surr)	70		24-146
321-60-8	2-Fluorobiphenyl	84		37-120
367-12-4	2-Fluorophenol (Surr)	44		10-120
4165-60-0	Nitrobenzene-d5 (Surr)	78		26-120
4165-62-2	Phenol-d5 (Surr)	32		11-120
1718-51-0	p-Terphenyl-d14	100		64-127

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185894-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 585653	Date: 06/16/2021 22:28						
300.0	MB 480-585653/28	Sulfate	ND		mg/L	2.0	1
Batch ID: 585286	Date: 06/14/2021 13:23						
350.1	MB 480-585286/3	Ammonia	0.0130	J	mg/L	0.020	1
Batch ID: 585341	Date: 06/14/2021 16:44	Prep Batch: 585275	Date: 06/14/2021 12:26				
9012B	MB 480-585275/1-A	Cyanide, Total	ND		mg/L	0.010	1
Batch ID: 585189	Date: 06/11/2021 15:27						
SM 2320B	MB 480-585189/28	Alkalinity, Total	ND		mg/L	5.0	1
Batch ID: 585189	Date: 06/11/2021 18:23						
SM 2320B	MB 480-585189/52	Alkalinity, Total	ND		mg/L	5.0	1
Batch ID: 585104	Date: 06/11/2021 16:10						
SM 3500 FE D	MB 480-585104/27	Ferrous Iron	ND		mg/L	0.10	1

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185894-1

SDG No.:

Analyst: CLT Batch Start Date: 06/14/2021

Reporting Units: mg/L Analytical Batch No.: 585286

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	13:22	Ammonia	1.03	1.00	103	90-110		NH3 CCV_01341
2	CCB	13:23	Ammonia	0.0127				J	
13	CCV	13:32	Ammonia	1.02	1.00	102	90-110		NH3 CCV_01341
14	CCB	13:33	Ammonia	0.0122				J	
21	CCV	13:39	Ammonia	1.00	1.00	100	90-110		NH3 CCV_01341
22	CCB	13:40	Ammonia	0.0112				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185894-1

SDG No.:

Analyst: JPS Batch Start Date: 06/11/2021

Reporting Units: mg/L Analytical Batch No.: 585189

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	12:13	Alkalinity, Total	105.6	100	106	90-110		Alk 100 ICV_00100
26	CCV	15:16	Alkalinity, Total	99.52	100	100	90-110		WC_ALK_CCV_00063
27	CCB	15:21	Alkalinity, Total	ND					
38	CCV	16:41	Alkalinity, Total	100.5	100	100	90-110		WC_ALK_CCV_00063
39	CCB	16:47	Alkalinity, Total	ND					
50	CCV	18:10	Alkalinity, Total	103.4	100	103	90-110		WC_ALK_CCV_00063
51	CCB	18:17	Alkalinity, Total	1.12				J	
62	CCV	19:41	Alkalinity, Total	99.60	100	100	90-110		WC_ALK_CCV_00063
63	CCB	19:47	Alkalinity, Total	ND					

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: Eurofins TestAmerica, Buffalo Job No.: 480-185894-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 585189 Date: 06/11/2021 16:04											
SM 2320B	480-185894-1	Alkalinity, Total	502		mg/L						
SM 2320B MS	480-185894-1	Alkalinity, Total	551.5		mg/L	100	49	60-140			4
Batch ID: 585104 Date: 06/11/2021 16:10											
SM 3500 FE D	480-185894-1	Ferrous Iron	ND		mg/L						HF
SM 3500 FE D MS	480-185894-1	Ferrous Iron	1.08		mg/L	1.00	108	70-130			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

Syracuse eurofins Environment Testing America

#225

Client Information	Sampler: AG + PM	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-157433-34652.4
Client Contact: Mr. John Ruspantini	Phone: 579 97 5[illegible]51	E-Mail: John.Schove@Eurofinset.com	State of Origin: NY	Page: Page ~~4 of 5~~ 1 of 2
Company: New York State Electric & Gas	PWSID:			Job #:
Address: 18 Link Drive	Due Date Requested:			
City: Binghamton	TAT Requested (days): STANDARD TAT			
State, Zip: NY, 13902	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 4505431222			
Email: jjruspantini@nyseg.com	WO #: 60615225			
Project Name: NYSEG - Former MGP Site - Ithaca, NY	Project #: 48022675			
Site: NYSEG-ITHACA	SSOW#:			

SHORT HOLD

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

480-185758 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_SIM - SVOC SIM Analytes	8260C - BTEX + THMs	8270D_LL - Low Level PAH Semivolatiles	9012B - Cyanide, Total	300.0_28D - Sulfate	350.1 - Nitrogen, Ammonia	6010C - Metals - Iron	RSK_175 - Methane	Nitrate_Calc - Nitrate	2320B - Alkalinity	3500_FE_D - Iron, Ferrous	8260C - BTEX		Total Containers	
			Preservation Code:				N	A	N	B	N	S	D	A	N	N	N	A	A		
MW-46S	060821	0850	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	X	X	X	17	
MW-33S	060821	0855		Water			X	X	X	X	X	X	X	X	X	X	X	X	X		
MW-45S	060821	1015		Water			X	X	X	X	X	X	X	X	X	X	X	X	X		
MW-22S	060821	1030		Water		Y	X	X	X	X	X	X	X	X	X	X	X	X	X		*MS/MSD here
MW-40	060821	1140		Water		N	X	X	X	X	X	X	X	X	X	X	X	X	X		only 8270D/SVOC/PAH 9012B + 8260C
MW-48S	060821	1210		Water			X	X	X	X	X	X	X	X	X	X	X	X	X		
MW-31S	060821	1330		Water			X	X	X	X	X	X	X	X	X	X	X	X	X		
MW-47S	060821	1335		Water			X	X	X	X	X	X	X	X	X	X	X	X	X		
DUP	-	-		Water			X		X	X	[redacted]	(6)						X		8	
Trip Blank	-	-		Water														X			
MS/MSD	1050	6/8/21		Water			X	[redacted]	X	X	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	X	[redacted]	16	(AG)

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify): Category B

Special Instructions/QC Requirements:

Empty Kit Relinquished by: | Date: | Time: | Method of Shipment: Courier by LAB

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Alexandra [illegible]	6/8/21 1545	AECOM	[illegible]	6/8/21 1545	ES-SYR
2	RELINQUISHED	6.8.21, 1900	SyR	[illegible]	6-9-21 800	TAB
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 3.2 3.0 3.4 ICE

Ver: 01/16/2019

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-64367.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@Eurofinset.com	State of Origin: New York	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-185758-1
Address: 777 New Durham Road, ,	Due Date Requested: 6/22/2021			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: NYSEG - Former MGP Site - Ithaca, NY	Project #: 48022675			
Site:	SSOW#:			

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270E_SIM/3510C_LVI SVOC SIM Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-46s 060821 (480-185758-1)	6/8/21	08:50 Eastern		Water			X	1	
MW-33s 060821 (480-185758-2)	6/8/21	08:55 Eastern		Water			X	1	
MW-45s 060821 (480-185758-3)	6/8/21	10:15 Eastern		Water			X	1	
MW-22s 060821 (480-185758-4)	6/8/21	10:30 Eastern		Water			X	1	
MW-22s 060821 (480-185758-4MS)	6/8/21	10:30 Eastern	MS	Water			X	1	
MW-22s 060821 (480-185758-4MSD)	6/8/21	10:30 Eastern	MSD	Water			X	1	
MW-40 060821 (480-185758-5)	6/8/21	11:40 Eastern		Water			X	1	
MW-48s 060821 (480-185758-6)	6/8/21	12:10 Eastern		Water			X	1	
MW-31s 060821 (480-185758-7)	6/8/21	13:30 Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Andrew Arnold	6/9/21 1700	TA	Fedex	6/10/21 9:40	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.: 151313 7	Cooler Temperature(s) °C and Other Remarks: IDH 9-3.4=2.9

Ver: 11/01/2020

Page 1875 of 1878

06/18/2021

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-64367.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@Eurofinset.com	State of Origin: New York	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-185758-1
Address: 777 New Durham Road, ,	Due Date Requested: 6/22/2021			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: NYSEG - Former MGP Site - Ithaca, NY	Project #: 48022675			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270E_SIM/3510C_LVI SVOC SIM Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-47s 060821 (480-185758-8)	6/8/21	13:35 Eastern		Water			X	1	
DUP (480-185758-9)	6/8/21	Eastern		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Pgl			via Fedex	6/10/21 09:40	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 15/3/37 ID#9-3.4=2.9	Cooler Temperature(s) °C and Other Remarks:

Ver: 11/01/2020

06/18/2021

Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-185758-1

Login Number: 185758
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AEIOM
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-185758-1

Login Number: 185758
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins TestAmerica, Edison
List Creation: 06/11/21 12:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1513137
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.9°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Phone (716) 691-7991

Chain of Custody Record

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Syracuse #225

Client Information	Sampler: Patrick McHugh	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-157433-34652.4
Client Contact: Mr. John Ruspantini	Phone: 518-929-7166	E-Mail: John.Schove@Eurofinset.com	State of Origin:	Page: ~~Page 4 of 5~~ 1 of 1
Company: New York State Electric & Gas	PWSID:			Job #:
Address: 18 Link Drive	Due Date Requested:			
City: Binghamton	TAT Requested (days): Standard.			
State, Zip: NY, 13902	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 4505431222			
Email: jjruspantini@nyseg.com	WO #: 60615225			
Project Name: NYSEG - Former MGP Site - Ithaca, NY	Project #: 48022675			
Site:	SSOW#:			

SHORT HOLD

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	8270D_SIM - SVOC SIM Analytes	8260C - BTEX + THMs	8270D_LL - Low Level PAH Semivolatiles	9012B - Cyanide, Total	300.0_28D - Sulfate	350.1 - Nitrogen, Ammonia	6010C - Metals - Iron	RSK_175 - Methane	Nitrate_Calc - Nitrate	2320B - Alkalinity	3500_FE_D - Iron, Ferrous	8260C - BTEX	8260C - THM	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N	A	N	B	N	S	D	A	N	N	N	A	A		
MW-23S 060921	6/9/21	0840	G	Water	N	N	2	3	2	1	1	1	1	3	1	1	1			17	
MW-C16 060921		0930		Water																	
MW-C11 060921		1040		Water																	
MW-25S 060921		1005		Water																	
MW-28S 060921		1215		Water																	
MW-24S 060921		1235		Water																	
Trip Blank	06/09/21	00:00	-	Water	N	N												2		2	
				Water																	
				Water																	
				Water																	
				Water																	

480-185822 Chain of Custody

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples a
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Cat B.

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 6/9/21 1410	Company: AECOM	Received by:	Date/Time: 6/9/21 1410	Company: ES-SYR		
Relinquished by:	Date/Time: 6-9-21 1800	Company: ES-SYR	Received by:	Date/Time: 6-10-21 800	Company: TAB		
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:		
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 3.0 2.7 2.4 ICE				

Ver: 01/16/2019

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-64405.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@Eurofinset.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-185822-1
Address: 777 New Durham Road, ,	Due Date Requested: 6/23/2021			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: NYSEG - Former MGP Site - Ithaca, NY	Project #: 48022675			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270E_SIM/3510C_LVI SVOC SIM Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-23S 060921 (480-185822-1)	6/9/21	08:40 Eastern		Water			X	2	
MW-C16 060921 (480-185822-2)	6/9/21	09:30 Eastern		Water			X	2	
MW-C11 060921 (480-185822-3)	6/9/21	10:40 Eastern		Water			X	2	
MW-25S 060921 (480-185822-4)	6/9/21	10:05 Eastern		Water			X	2	
MW-28S 060921 (480-185822-5)	6/9/21	12:15 Eastern		Water			X	2	
MW-24S 060921 (480-185822-6)	6/9/21	12:35 Eastern		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
[illegible] 1610	6/11/21 1700	TA	Via Fedex	6/11/21 09:45	ETA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 1513147 ID-9-2.0=1.5	Cooler Temperature(s) °C and Other Remarks:

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-185822-1

Login Number: 185822
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AECOM
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-185822-1

Login Number: 185822
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins TestAmerica, Edison
List Creation: 06/11/21 12:46 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1513147
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.5°C IR9
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Eurofins TestAmerica, Buffalo Albany #224
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins | Environment Testing America

Client Information	Sampler: alexandra holden	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-161696-34652.1
Client Contact: Mr. John Ruspantini	Phone: 518 925 4957	E-Mail: John.Schove@Eurofinset.com	State of Origin:	Page: Page 1 of 5
Company: New York State Electric & Gas	PWSID:			Job #:
Address: 18 Link Drive	Due Date Requested:			
City: Binghamton	TAT Requested (days): Standard TAT			
State, Zip: NY, 13902	Compliance Project: Δ Yes Δ No			
Phone:	PO #: 4505431222			
Email: jjruspantini@nyseg.com	WO #: 60615225			
Project Name: NYSEG - Former MGP Site - Ithaca, NY	Project #: 48022675			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270D_SIM - SVOC SIM Analytes	8260C - BTEX + THMs	8270D_LL - Low Level PAH Semivolatiles	9012B - Cyanide, Total	300.0_28D - Sulfate	350.1 - Nitrogen, Ammonia	6010C - Metals - Iron	RSK_175 - Methane	Nitrate_Calc - Nitrate	2320B - Alkalinity	3500_FE_D - Iron, Ferrous	8260C - BTEX	8260C - THM	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	A	N	B	N	S	D	A	N	N	N	A	A		
MW-C12 061021	6/10/21	0900	G	Water	N	N	X	X	X	X	X	X	X	X	X	X	X	X	X	17	
EQ Blank	↓	0910	↓	Water	↓	↓	X	[redacted]	X	X								X		CD	
Trip Blank	06/10/21	00:00	↓	Water				(AA)										X		2	
				Water																	
				Water																	
				Water																	
(AA)				Water																	
				Water																	
				Water																	
				Water																	
				Water																	

480-185894 Chain of Custody

Possible Hazard Identification
☑ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if sa.
☐ Return To Client ☑ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify) Cat B

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	[signature]	6/10/21/1400	ASCOR	[signature]	6/10/21 1400	Eurofins
2	[signature]	6/10/21 1700	Eurofins	[signature]	6-11-21 800	TAB
3						

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.6 ICE

Ver: 11/01/2020

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06/18/2021

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone: 716-691-2600 Fax: 716-691-7991

Chain of Custody Record

eurofins Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-64468.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: John.Schove@Eurofinset.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 480-185894-1
Address: 777 New Durham Road, ,	Due Date Requested: 6/24/2021			
City: Edison	TAT Requested (days):			
State, Zip: NJ, 08817				
Phone: 732-549-3900(Tel) 732-549-3679(Fax)	PO #:			
Email:	WO #:			
Project Name: NYSEG - Former MGP Site - Ithaca, NY	Project #: 48022675			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8270E_SIM/3510C_LVI SVOC SIM Analytes	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-C12 061021 (480-185894-1)	6/10/21	09:00 Eastern		Water			X	2	
EQ BLANK (480-185894-2)	6/10/21	09:10 Eastern		Water			X	2	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	*Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Matthew Cinelli	6/11/21 1700	TA	Renette A. via Fedex	6/12/21 1000	ETA
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
	151357 151354	5.5°C / 5.0°C 4.5°C / 4.0°C

Ver: 11/01/2020

Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-185894-1

Login Number: 185894
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	AECOM
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: AECOM

Job Number: 480-185894-1

Login Number: 185894
List Number: 2
Creator: Armbruster, Chris

List Source: Eurofins TestAmerica, Edison
List Creation: 06/15/21 01:22 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	1513157, 1513154
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	5.0, 4.0°C
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix D - Mann Kendall Analysis

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	June 2021	Job ID:	60615225
Facility Name:	NYSEG - Ithaca Court Street	Constituent:	Acenaphthalene
Conducted By:	Pat McHugh	Concentration Units:	ug/L

Sampling Point ID:	MW-C11	MW-C12	MW-C16	MW-22S	MW-23S	MW-46S	MW-48S
Sampling Event	Sampling Date	ACENAPHTHALENE CONCENTRATION (ug/L)						
1	6/7/2016	2.4	56.7	3.2	1.7	68.8	34.9	32.7
2	10/1/2020	3.6	81.0	23.0	2.4	98.0	43.0	41.0
3	3/3/2021	1.3	140.0	15.0	3.2	82.0	89.0	33.0
4	6/9/2021	1.5	92.0	25.0	0.5	58.0	75.0	36.0
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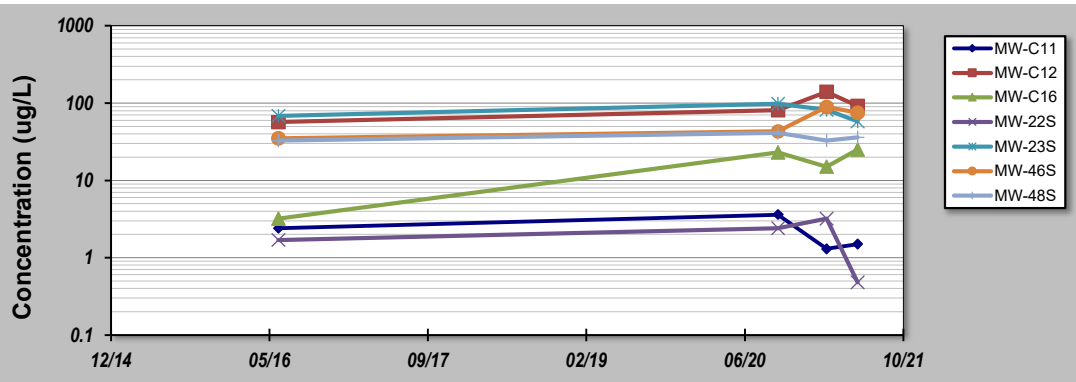
Coefficient of Variation:		0.48	0.38	0.60	0.59	0.23	0.43	0.11
Mann-Kendall Statistic (S):		-2	4	4	0	-2	4	2
Confidence Factor:		62.5%	83.3%	83.3%	37.5%	62.5%	83.3%	62.5%
Concentration Trend:		Stable	No Trend	No Trend	Stable	Stable	No Trend	No Trend



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	June 2021	Job ID:	60615225
Facility Name:	NYSEG - Ithaca Court Street	Constituent:	Benzene
Conducted By:	Pat McHugh	Concentration Units:	ug/L

Sampling Point ID:	MW-C11	MW-C12	MW-C16	MW-22S	MW-23S	MW-46S	MW-48S
Sampling Event	Sampling Date	BENZENE CONCENTRATION (ug/L)						
1	6/7/2016	20.9	61.6	1.0	1.0	5.0	358	174
2	10/1/2020	1.0	9.8	0.82	24.0	1.5	720	69.0
3	3/3/2021	4.0	16.0	4.0	1.0	2.0	1200	35.0
4	6/9/2021	2.0	11.0	2.0	1.0	1.1	1200	41.0
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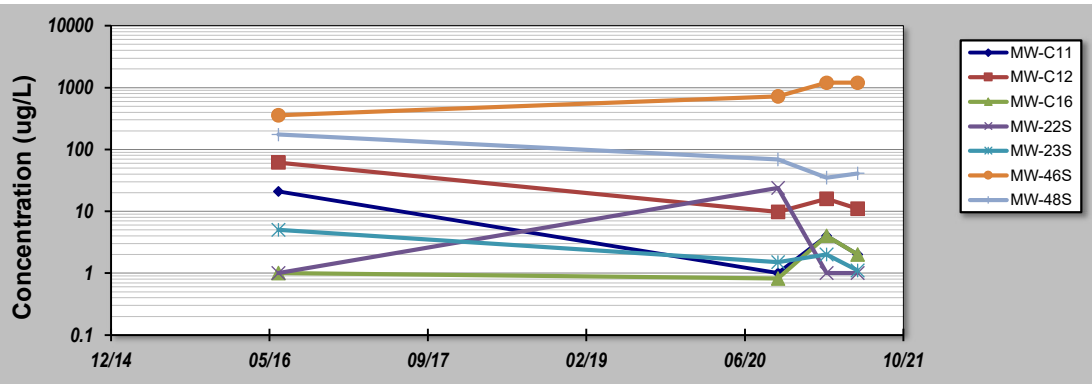
Coefficient of Variation:		1.34	1.01	0.75	1.70	0.74	0.47	0.81
Mann-Kendall Statistic (S):		-2	-2	2	-1	-4	5	-4
Confidence Factor:		62.5%	62.5%	62.5%	50.0%	83.3%	89.6%	83.3%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	Stable	No Trend	Stable



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	June 2021	Job ID:	60615225
Facility Name:	NYSEG - Ithaca Court Street	Constituent:	Ethylbenzene
Conducted By:	Pat McHugh	Concentration Units:	ug/L

Sampling Point ID:	MW-C11	MW-C12	MW-C16	MW-22S	MW-23S	MW-46S	MW-48S
Sampling Event	Sampling Date	ETHYLBENZENE CONCENTRATION (ug/L)						
1	6/7/2016	128	383	1.0	1.0	82.4	428	275
2	10/1/2020	1.0	1.0	2.0	11.0	65.0	790	26.0
3	3/3/2021	4.0	31.0	4.0	1.0	26.0	970	39.0
4	6/9/2021	2.0	10.0	2.0	1.0	27.0	1200	25.0
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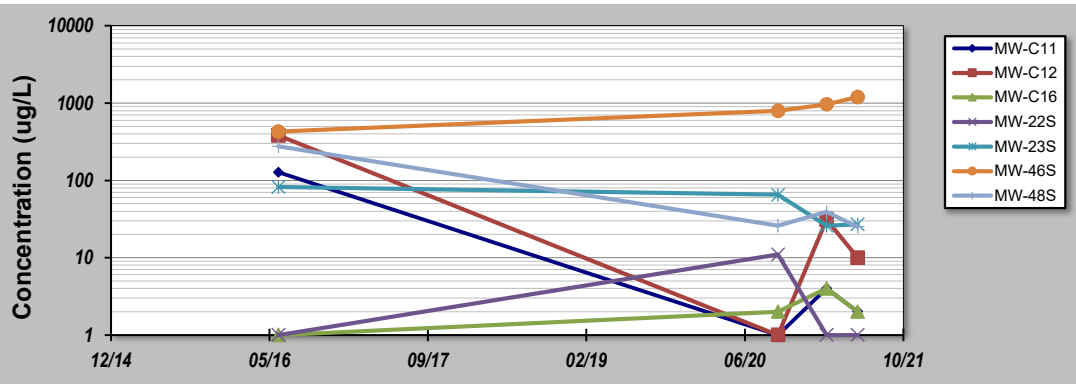
Coefficient of Variation:		1.86	1.74	0.56	1.43	0.56	0.38	1.34
Mann-Kendall Statistic (S):		-2	-2	3	-1	-4	6	-4
Confidence Factor:		62.5%	62.5%	72.9%	50.0%	83.3%	95.8%	83.3%
Concentration Trend:		No Trend	No Trend	No Trend	No Trend	Stable	Increasing	No Trend



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	June 2021	Job ID:	60615225
Facility Name:	NYSEG - Ithaca Court Street	Constituent:	Naphthalene
Conducted By:	Pat McHugh	Concentration Units:	ug/L

Sampling Point ID:	MW-C11	MW-C12	MW-C16	MW-22S	MW-23S	MW-46S	MW-48S
Sampling Event	Sampling Date	NAPHTHALENE CONCENTRATION (ug/L)						
1	6/7/2016	111	180	1.4	1.7	1.4	954.0	16.4
2	10/1/2020	4.8	0.19	19.0	0.8	340.0	1100	91.0
3	3/3/2021	20.0	0.35	20.0	1.0	230.0	2500	44.0
4	6/9/2021	20.0	20.0	20.0	0.068	14.0	2200	49.0
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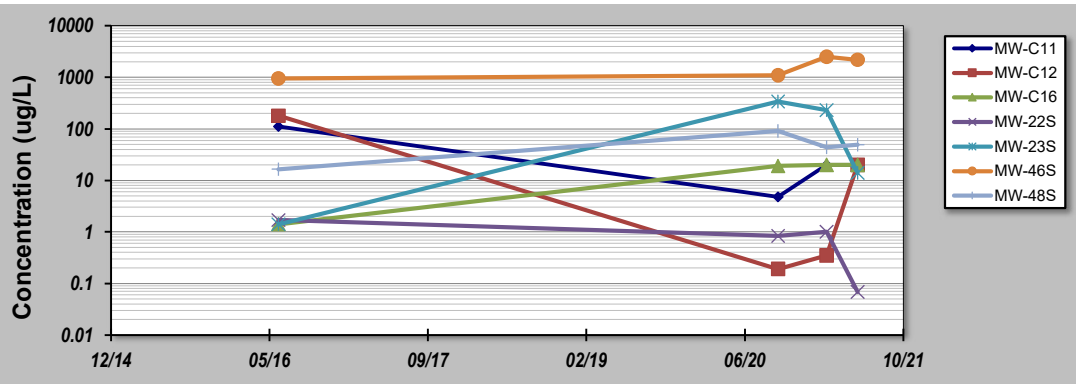
Coefficient of Variation:		1.25	1.74	0.61	0.74	1.14	0.46	0.61
Mann-Kendall Statistic (S):		-1	0	5	-4	0	4	2
Confidence Factor:		50.0%	37.5%	89.6%	83.3%	37.5%	83.3%	62.5%
Concentration Trend:		No Trend	No Trend	No Trend	Stable	No Trend	No Trend	No Trend



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
2. Confidence in Trend = Confidence (in percent) that constituent concentration is increasing (S>0) or decreasing (S<0): >95% = Increasing or Decreasing; ≥ 90% = Probably Increasing or Probably Decreasing; < 90% and S>0 = No Trend; < 90%, S≤0, and COV ≥ 1 = No Trend; < 90% and COV < 1 = Stable.
3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	June 2021	Job ID:	60615225
Facility Name:	NYSEG - Ithaca Court Street	Constituent:	Toluene
Conducted By:	Pat McHugh	Concentration Units:	ug/L

Sampling Point ID:	MW-C11	MW-C12	MW-C16	MW-22S	MW-23S	MW-46S	MW-48S
Sampling Event	Sampling Date	TOLUENE CONCENTRATION (ug/L)						
1	6/7/2016	11.1	1.0	1.0	1.0	5.0	29.5	5.0
2	10/1/2020	1.0	1.0	2.0	0.51	2.0	20.0	2.0
3	3/3/2021	4.0	1.0	4.0	1.0	2.0	32.0	2.0
4	6/9/2021	2.0	1.0	2.0	1.0	1.3	65.0	1.0
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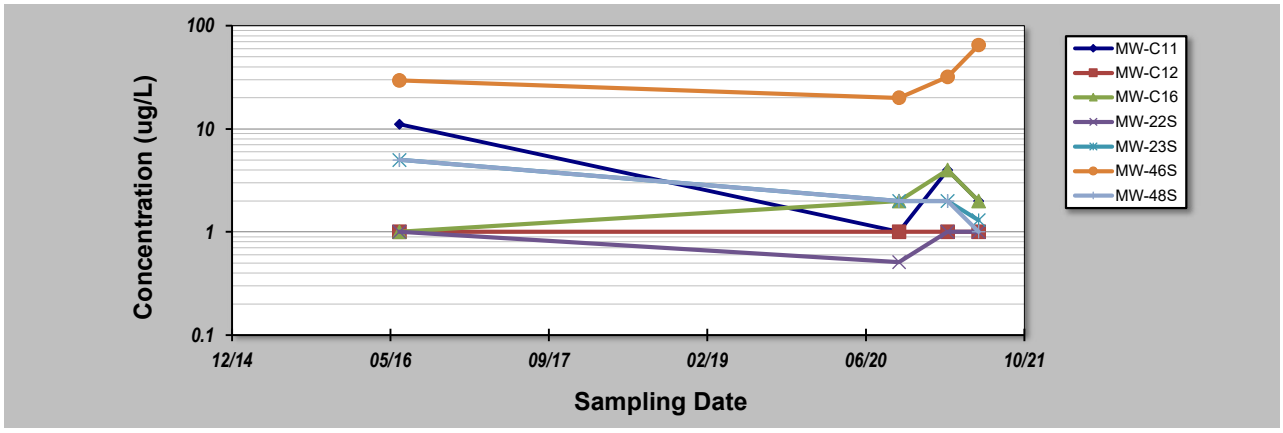
Coefficient of Variation:		1.01	0.00	0.56	0.28	0.64	0.54	0.69
Mann-Kendall Statistic (S):		-2	0	3	1	-5	4	-5
Confidence Factor:		62.5%	37.5%	72.9%	50.0%	89.6%	83.3%	89.6%
Concentration Trend:		No Trend	Stable	No Trend	No Trend	Stable	No Trend	Stable



Notes:

1. At least four independent sampling events per well are required for calculating the trend. *Methodology is valid for 4 to 40 samples.*
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3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	June 2021	Job ID:	60615225
Facility Name:	NYSEG - Ithaca Court Street	Constituent:	Xylenes, Total
Conducted By:	Pat McHugh	Concentration Units:	ug/L

Sampling Point ID:	MW-C11	MW-C12	MW-C16	MW-22S	MW-23S	MW-46S	MW-48S
Sampling Event	Sampling Date	XYLENES, TOTAL CONCENTRATION (ug/L)						
1	6/7/2016	51.0	16.8	3.0	3.0	58.9	307	31.7
2	10/1/2020	2.0	2.0	4.0	9.2	38.0	210	18.0
3	3/3/2021	8.0	1.9	8.0	2.0	16.0	440	18.0
4	6/9/2021	4.0	2.0	4.0	2.0	22.0	580	12.0
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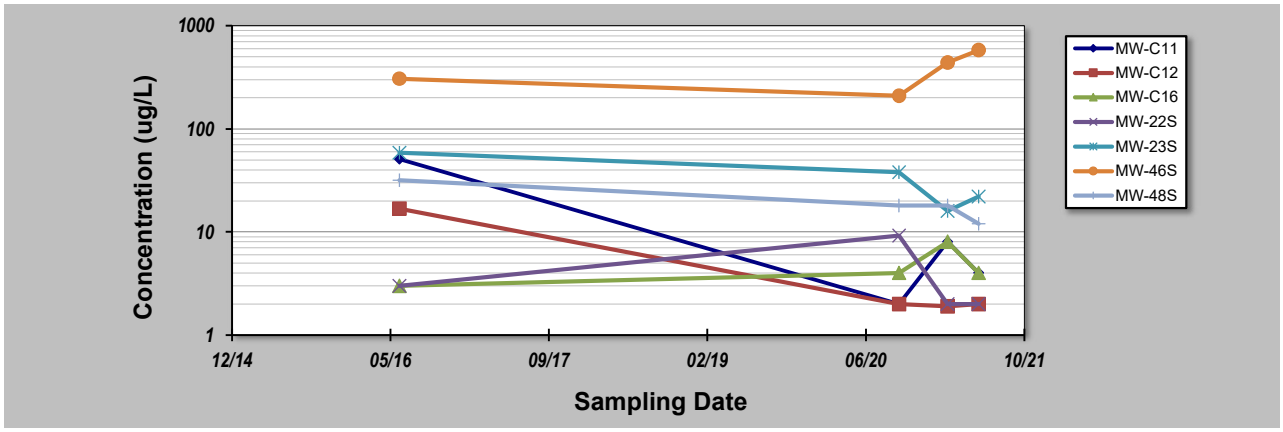
Coefficient of Variation:		1.43	1.31	0.47	0.86	0.57	0.42	0.42
Mann-Kendall Statistic (S):		-2	-3	3	-3	-4	4	-5
Confidence Factor:		62.5%	72.9%	72.9%	72.9%	83.3%	83.3%	89.6%
Concentration Trend:		No Trend	No Trend	No Trend	Stable	Stable	No Trend	Stable



Notes:

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3. Methodology based on "MAROS: A Decision Support System for Optimizing Monitoring Plans", J.J. Aziz, M. Ling, H.S. Rifai, C.J. Newell, and J.R. Gonzales, *Ground Water* , 41(3):355-367, 2003.

GSI MANN-KENDALL TOOLKIT
for Constituent Trend Analysis

Evaluation Date:	June 2021	Job ID:	60615225
Facility Name:	NYSEG - Ithaca Court Street	Constituent:	Total Cyanide
Conducted By:	Pat McHugh	Concentration Units:	mg/L

Sampling Point ID:	MW-C11	MW-C12	MW-C16	MW-22S	MW-23S	MW-46S	MW-48S
Sampling Event	Sampling Date	TOTAL CYANIDE CONCENTRATION (mg/L)						
1	6/7/2016	0.027	0.016	0.007	0.540	0.005	0.005	0.005
2	10/1/2020	0.010	0.016	0.009	0.076	0.010	0.010	0.010
3	3/3/2021	0.040	0.010	0.010	0.092	0.005	0.010	0.010
4	6/9/2021	0.017	0.017	0.0077	0.060	0.0072	0.012	0.010
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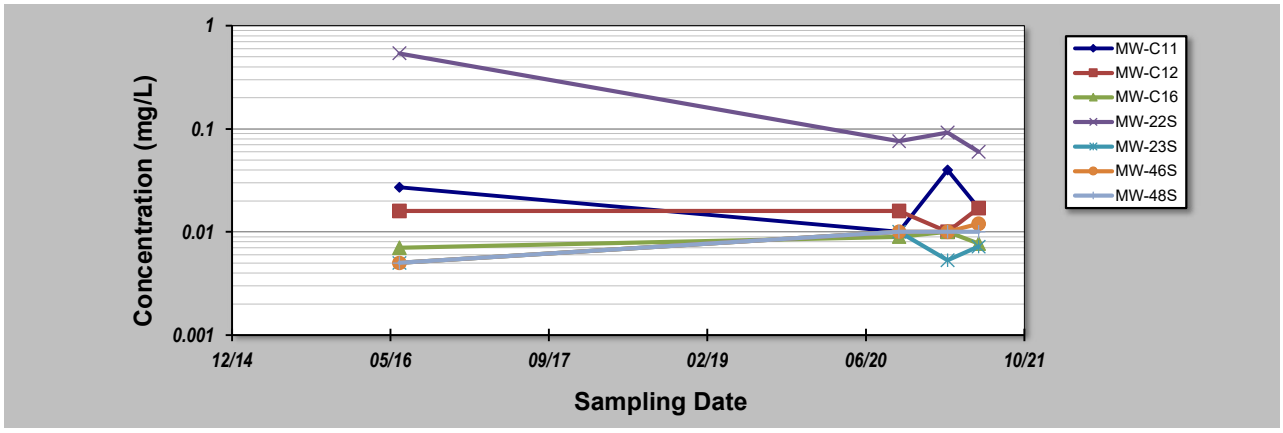
Coefficient of Variation:		0.55	0.22	0.16	1.21	0.33	0.32	0.29
Mann-Kendall Statistic (S):		0	1	2	-4	2	5	3
Confidence Factor:		37.5%	50.0%	62.5%	83.3%	62.5%	89.6%	72.9%
Concentration Trend:		Stable	No Trend	No Trend	No Trend	No Trend	No Trend	No Trend



Notes:

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