Mr. Tracey Garland, GIT
New York State Department of Environmental Conservation
Division of Environmental Remediation
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Date: June 6, 2025
Our Ref: 30270811
Subject: **First Quarter 2025 Groundwater Monitoring Report**
New York State Electric & Gas Corporation
Clyde Former Manufactured Gas Plant, Clyde, New York
NYSDEC Site No. 859019

Dear Mr. Garland,

On behalf of New York State Electric & Gas Corporation (NYSEG), this letter summarizes activities completed during the first quarter of 2025 (Q1) for the Clyde former manufactured gas plant (MGP) site located in the Village of Clyde, Wayne County, New York (New York State Department of Environmental Conservation [NYSDEC] Site No. 859019) (Figure 1).

Arcadis of New York, Inc. (Arcadis) conducted the Q1 monitoring event on February 24-25, 2025, in accordance with the Site Management Plan (SMP)[1] (pending NYSDEC approval). In addition, Arcadis installed two monitoring wells (MW14 and MW15), in accordance with the Monitoring Well Installation Work Plan[2], on March 10-14, 2025. During the March well installation event, Arcadis located several existing monitoring wells (MWBH1, MW11B, MW12, and MW13) that could not be located during the February monitoring event. This quarterly report summarizes activities conducted from January 1, 2025, to March 31, 2025, and includes data from the February 24-25, 2025 monitoring event and the March 10-14, 2025 well installation event.

The SMP[1] requires that groundwater samples are collected from MW4, MW12, MW14 and MW15. Please note that the Q1 monitoring event was conducted in February 2025 and MW14 and MW15 were installed in March 2025. As such, groundwater results summarized in this letter are only for groundwater collected from MW4 and MW12.

Relevant background information is presented in the following section, followed by a Q1 monitoring and operation and maintenance activity summary.

Background

The former Clyde MGP was built in 1856 and operated, primarily by the Clyde Gas and Light Company, as a coal gas plant until it was decommissioned in 1908. Above-grade structures associated with the MGP were removed

[1] GEI Consultants, Inc. 2022. *Site Management Plan*, Clyde Former Manufactured Gas Plant Site, Wayne County, Clyde, New York. October.
[2] Arcadis. 2025. Monitoring Well Installation Work Plan, Clyde Former Manufactured Gas Plant Site, 16 Sodus Street, Clyde, New York. January. 2025.

between 1907 and 1918. NYSEG purchased the parcel in 1936 and, from the late 1950s until the early 1960s, used an on-site building as a transformer house until it was demolished in the late 1960s. The current electrical substation was built in the early 1970s, during which time below-grade foundations for several of the former MGP structures were removed. Prior to remediation in 2021, the foundations for the MGP Building and the Gas Holder were still present in the subsurface. Key historical features of the MGP and surrounding area are shown on Figure 2.

The former MGP site is located along the west side of Sodus Street (approximately 16 Sodus Street) in the central business district of the Village of Clyde. The site primarily consists of two parcels that are owned by NYSEG, herein referred to as the western and eastern parcels.

The western parcel of the NYSEG property contains the Clyde Electrical Substation, which is surrounded by a perimeter fence that limits access to NYSEG employees only, and the ground surface is covered by gravel inside and around the substation. The eastern parcel of the NYSEG property is primarily maintained grass, except for the gravel access driveway along the northern side of the property that provided access to the property and substation from Sodus Street. Commercial properties, which are mainly vacant and overgrown with brush and trees, are located north of the site, and the Village of Clyde Museum and a bottle and can redemption business are located east of the site. An active railroad corridor, operated by CSX Transportation, Inc., is located south of the site, and the New York State Barge Canal is located south of the railroad corridor. The Village of Clyde owns the parcel west of the site, which is vacant and covered by weeds, brush, and small trees.

Historical site investigations and details about the remedy completed in 2021 are summarized in the SMP[1]. The primary groundwater constituents of concern at the site are benzene, toluene, ethylbenzene, and xylenes (BTEX) and naphthalene[3].

First Quarter 2025 Monitoring and Sampling

As presented in the SMP[1], groundwater remedy objectives for the Q1 monitoring period are to:

- assess site groundwater movement patterns; and
- collect and analyze site groundwater samples quarterly to document dissolved BTEX, polycyclic aromatic hydrocarbons (PAHs), total cyanide, and target analyte list metals concentrations.

To document achieving the objectives, this report presents:

- site-wide data collected during the monitoring period, including groundwater analytical data and groundwater elevation data; and
- conclusions and monitoring modification recommendations, as appropriate.

Groundwater Gauging Activities and Results

During the Q1 monitoring event, field personnel measured depth to groundwater, depth to non-aqueous phase liquid, and depth to bottom from surveyed measuring points at the following monitoring wells (shown on Figure 2):

- MWBH1, MW1D, MW1S, MW3, MW4, MW6B, MW8, MW9, MW9B, MW11, MW11B, MW12, and MW13.

[3] NYSDEC. 2024. *Record of Decision*, NYSEG-Clyde MPG, Clyde, Wayne County, Site No. 859019. February. 2014.

Gauging results, including calculated groundwater elevations and sediment thickness during this reporting period, are summarized in Table 1.

Groundwater Elevation and Flow

The shallow groundwater contour map for the Q1 gauging event is presented on Figure 3. As shown on the figure, the groundwater flow direction was generally to the south.

Non-Aqueous Phase Liquid Monitoring

Non-aqueous phase liquid was not observed in the monitoring wells gauged during the reporting period.

Well Depth Monitoring

Calculated sediment thickness in each monitoring well is summarized in Table 1. Accumulated sediment measured greater than 1 foot at the following locations: MWBH1 (2.53 feet), MW1S (3.57 feet), and MW8 (1.87 feet).

Groundwater Sampling Activities and Results

Groundwater sampling activities and associated analytical results from the Q1 monitoring event and the March well installation event are summarized below.

Groundwater Sampling Activities

Arcadis field personnel collected groundwater samples from two monitoring wells, MW4 and MW12, using low-flow groundwater purging and sampling techniques. Groundwater samples were collected from MW4 on February 25, 2025, and groundwater samples were collected from MW12 on March 14, 2025. As mentioned above, MW12 was not able to be located during the February monitoring event. Groundwater samples and appropriate quality assurance/quality control samples, to facilitate data validation, were submitted to Eurofins Laboratories, located in Amherst, New York, for the following analysis:

- BTEX using United States Environmental Protection Agency (USEPA) SW-846 Method 8260;
- PAHs using USEPA SW-846 Method 8270;
- Total cyanide using USEPA SW-846 Method 9012; and
- Target analyte list metals using USEPA SW-846 Method 6010.

Groundwater sampling logs are provided as Attachment 1.

Groundwater Quality

Arcadis reviewed and validated the laboratory analytical data and prepared Data Usability Summary Reports (DUSRs). The data review indicated that overall laboratory performance was acceptable, and the overall data quality was within the guidelines specified in the respective methods. Instances where laboratory performance was not acceptable (if any) are detailed in the DUSRs, and the data has been appropriately qualified. Laboratory reports are included as Attachment 2, and the DUSRs are included as Attachment 3.

The analytical results are presented in Table 2 and are compared to the NYSDEC's Division of Water Technical and Operational Guidance Series 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations Class GA[4] (Class GA) groundwater quality standards/guidance values.

The BTEX, PAHs, total cyanide, and metals analytical results for groundwater samples collected from monitoring wells MW-4 and MW-12 during the reporting period are summarized below.

- BTEX:
  - BTEX was not detected.
- PAHs:
  - PAH concentrations did not exceed Class GA[4] groundwater quality standards or guidance values.
  - Acenaphthene (0.54 micrograms per liter [µg/L]), fluoranthene (0.90 µg/L), fluorene (0.40 µg/L), and pyrene (1.3 µg/L) were detected in the groundwater sample collected from MW4 at concentrations less than their respective Class GA[4] groundwater quality standards or guidance values.
- Total cyanide:
  - Total cyanide was not detected.
- Metals:
  - Iron (25.3 µg/L), manganese (1.0 µg/L), and sodium (36.8 µg/L) were detected in the groundwater sample collected from MW4 at concentrations exceeding their respective Class GA**Error! Bookmark not defined.** groundwater quality standards or guidance values.
  - Iron (0.44 µg/L) and sodium (70.2 µg/L) were detected in the groundwater sample collected from MW12 at concentrations exceeding their respective Class GA**Error! Bookmark not defined.** groundwater quality standards or guidance values.

Concentrations of groundwater constituents of concern listed in the Record of Decision[3] were not detected.

Monitoring Well Installation and Well Repairs

Arcadis installed and developed two monitoring wells, MW14 and MW15, on March 10-14, 2025, in accordance with the Monitoring Well Installation Work Plan[2]. Monitoring well construction details for MW14 and MW15 are provided on the monitoring well installation logs included as Attachment 4.

Some monitoring wells had either been damaged or buried by imported gravel during remedial construction; therefore, Arcadis replaced the well surface completions at five existing monitoring wells (MWBH1, MW1D, MW11B, MW12, and MW13) and increased the riser height at three existing monitoring wells (MW-11B, MW12, and MW13).

Waste Management

Arcadis containerized and staged investigation-derived waste generated during the groundwater sampling and well installation activities in appropriately labeled, New York State Department of Transportation-approved, 55-gallon drums. The drums of investigation-derived waste were staged on pallets on site and will be subsequently transported off site for treatment/disposal by NYSEG's waste disposal vendor.

[4] NYSDEC. 1998. Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. October 22, 1993, reissued June 1998.

Mr. Tracey Garland, GIT
New York State Department of Environmental Conservation
June 6, 2025

Conclusions and Recommendations

The Q1 monitoring results represent the first groundwater sampling event since completing the remedy in 2021. Based on the Q1 monitoring results:

- The groundwater flow direction is to the south toward the New York State Barge Canal.
- Concentrations of groundwater constituents of concern listed in the Record of Decision[3] were not detected.

Based on data from this monitoring period, the following are recommended:

- Remove sediment from monitoring wells MWBH1, MW-1S, and MW-8 using a pump or weighted bailer.

Quarterly monitoring and reporting will continue to be completed as required by the SMP[1]. The next groundwater sampling event is scheduled for May 2025 and will include results from newly installed wells MW14 and MW15. Groundwater samples will continue to be analyzed for BTEX, PAHs, total cyanide, and target analyte list metals as required by the SMP[1].

Please contact John Ruspantini of NYSEG at 607.725.3801 or jjruspantini@nyseg.com with any questions or comments.

Sincerely,
Arcadis of New York, Inc.

Nicholas Beyrle
Principal Geologist

Email: nicholas.beyrle@arcadis.com
Direct Line: 585.662.4044

CC. John Ruspantini, CHMM, NYSEG
Mark Gravelding, PE, Arcadis

Enclosures:
Table 1 – Gauging Data
Table 2 – Groundwater Analytical Results
Figure 1 – Site Location Map
Figure 2 – Site Layout
Figure 3 – Shallow Groundwater Contour Map – February 24, 2025
Attachment 1 – Groundwater Sampling Logs
Attachment 2 – Groundwater Laboratory Reports
Attachment 3 – Data Usability Summary Reports
Attachment 4 – MW-14 and MW-15 Well Installation Logs

Tables

Table 1
Gauging Data
First Quarter 2025 Groundwater Monitoring Report
New York State Electric & Gas Corporation
Clyde Former Manufactured Gas Plant
Clyde, New York

Well ID	Measuring Point Elevation	Installed Depth to Bottom (feet TOC)	Screen Interval Elevation	Date	Depth to Water (feet TOC)	Groundwater Elevation	Depth to Product (feet TOC)	Depth to Bottom (feet TOC)	Accumulated Sediment Thickness (feet)
MWBH1	393.21	27.71	373.2-368.2	February 24, 2025	Could not locate				
				March 12, 2025	3.70	389.51	-	25.18	2.53
MW1D	390.64	19.84	377.6-382.6	February 24, 2025	0.95	389.69	-	19.45	0.39
				March 12, 2025	-	-	-	-	-
MW1S	390.86	9.66	387.8-382.8	February 24, 2025	0.20	390.66	-	6.09	3.57
				March 12, 2025	-	-	-	-	-
MW3	392.36	12.96	385.9-380.9	February 24, 2025	3.44	388.92	-	12.78	0.18
				March 12, 2025	-	-	-	-	-
MW4	391.25	12.95	384.8-379.3	February 24, 2025	3.76	387.49	-	14.00	-1.05
				March 12, 2025	-	-	-	-	-
MW6B	392.67	42.57	362.1-352.1	February 24, 2025	8.93	383.74	-	42.60	-0.03
				March 12, 2025	-	-	-	-	-
MW8	392.98	24.68	390.3-376.3	February 24, 2025	3.39	389.59	-	22.81	1.87
				March 12, 2025	-	-	-	-	-
MW9	394.62	17.62	389.0-379.0	February 24, 2025	5.27	389.35	-	17.59	0.03
				March 12, 2025	-	-	-	-	-
MW9B	394.58	35.68	370.9-360.9	February 24, 2025	11.33	383.25	-	35.60	0.08
				March 12, 2025	-	-	-	-	-
MW11	393.98	24.58	386.7-371.7	February 24, 2025	5.40	388.58	-	24.27	0.31
				March 12, 2025	-	-	-	-	-
MW11B	393.33	39.83	365.5-355.5	February 24, 2025	Could not locate				
				March 12, 2025	-	-	-	-	-
MW12	392.46	15.66	388.8-378.8	February 24, 2025	Could not locate				
				March 12, 2025	0.97	391.49	-	15.75	-0.09
MW13	392.79	17.69	387.1-377.1	February 24, 2025	Could not locate				
				March 12, 2025	1.62	391.17	-	17.65	0.04
MW14	393.48	13.85	390.3-380.3	March 12, 2025	-	-	-	-	-
MW15	392.95	13.81	389.2-379.2	March 12, 2025	-	-	-	-	-

Notes:
1. Elevations in feet referenced to the 1988 North American Vertical Datum.
2. MW-14 and MW-15 were installed by Arcadis on March 12, 2025. All other monitoring wells were installed by GEI.
3. Installation depths for MWBH1, MW1D, MW1S, MW3, MW4, MW6B, MW8, MW9, MW9B, MW11, MW11B, MW12, and MW13 were calculated based on well installation information provided by GEI in the Site Management Plan (GEI 2022) table titled "Monitoring Well Details and Groundwater Elevation Measurements." Note that well installation details in the aforementioned SMP table do not match the respective well installation logs in Appendix D of the SMP for MW-1D, MW-3, and MW-8.
4. "-" Indicates a measurement was not taken or was not available.

Acronyms and Abbreviations:
TOC - top of casing
GEI - GEI Consultants, Inc.

Reference:
GEI Consultants, Inc. 2022. *Site Management Plan* , Clyde Former Manufactured Gas Plant Site, Wayne County, Clyde, New York. October.

Table 2
Groundwater Analytical Results
First Quarter 2025 Groundwater Monitoring Report
New York State Electric & Gas Corporation
Clyde Former Manufactured Gas Plant
Clyde, New York

Location ID: / Date Collected:	NYSDEC TOGS 1.1.1 Standards or Guidance Values	Units	MW4 02/25/25	MW12 03/14/25
BTEX				
Benzene	1	µg/L	1.0 U	1.0 U
Ethylbenzene	5	µg/L	1.0 U	1.0 U
Toluene	5	µg/L	1.0 U	1.0 U
Xylenes (total)	5	µg/L	2.0 U	2.0 U
Total BTEX	- -	µg/L	ND	ND
PAHs				
Acenaphthene	20	µg/L	**0.54 J**	5.0 U
Acenaphthylene	- -	µg/L	5.0 U	5.0 U
Anthracene	50	µg/L	5.0 U	5.0 U
Benzo(a)anthracene	0.002	µg/L	5.0 U	5.0 U
Benzo(a)pyrene	- -	µg/L	5.0 U	5.0 U
Benzo(b)fluoranthene	0.002	µg/L	5.0 U	5.0 U
Benzo(g,h,i)perylene	- -	µg/L	5.0 U	5.0 U
Benzo(k)fluoranthene	0.002	µg/L	5.0 U	5.0 U
Chrysene	0.002	µg/L	5.0 U	5.0 U
Dibenzo(a,h)anthracene	- -	µg/L	5.0 U	5.0 U
Fluoranthene	50	µg/L	**0.90 J**	5.0 U
Fluorene	50	µg/L	**0.40 J**	5.0 U
Indeno(1,2,3-cd)pyrene	0.002	µg/L	5.0 U	5.0 U
Naphthalene	10	µg/L	5.0 U	5.0 U
Phenanthrene	50	µg/L	5.0 U	5.0 U
Pyrene	50	µg/L	**1.3 J**	5.0 U
Total PAHs	- -	µg/L	**3.14 J**	ND
Inorganics				
Aluminum	- -	mg/L	0.20 U	0.20 U
Antimony	0.003	mg/L	0.020 U	0.020 U
Arsenic	0.025	mg/L	0.015 U	0.015 U
Barium	1	mg/L	**0.24**	**0.10 J**
Beryllium	0.003	mg/L	0.0020 U	0.0020 UJ
Cadmium	0.005	mg/L	0.0020 U	0.0020 UJ
Calcium	- -	mg/L	**197**	**142**
Chromium	0.05	mg/L	0.0040 U	0.0040 U
Cobalt		mg/L	0.0040 U	0.0040 UJ
Copper	0.2	mg/L	0.010 U	**0.0017 J**
Iron	0.3	mg/L	**25.3**	**0.44 J**
Lead	0.025	mg/L	**0.0033 J**	0.010 UJ
Magnesium	35	mg/L	**30.9**	**22.3**
Manganese	0.3	mg/L	**1.0**	**0.16**
Nickel	0.1	mg/L	0.010 U	0.010 UBJ
Potassium	- -	mg/L	**6.9**	**4.7 J**
Selenium	0.01	mg/L	0.025 U	0.025 UJ
Silver	0.05	mg/L	0.0060 U	0.0060 UJ
Sodium	20	mg/L	**36.8**	**70.2**
Thallium	0.0005	mg/L	0.020 U	0.020 UJ
Vanadium	- -	mg/L	0.0050 U	0.0050 U
Zinc	2	mg/L	**0.15**	**0.22**
Cyanide				
Cyanide	0.2	mg/L	0.010 U	0.010 U

See notes on Page 2.

Table 2
Groundwater Analytical Results
First Quarter 2025 Groundwater Monitoring Report
New York State Electric & Gas Corporation
Clyde Former Manufactured Gas Plant
Clyde, New York

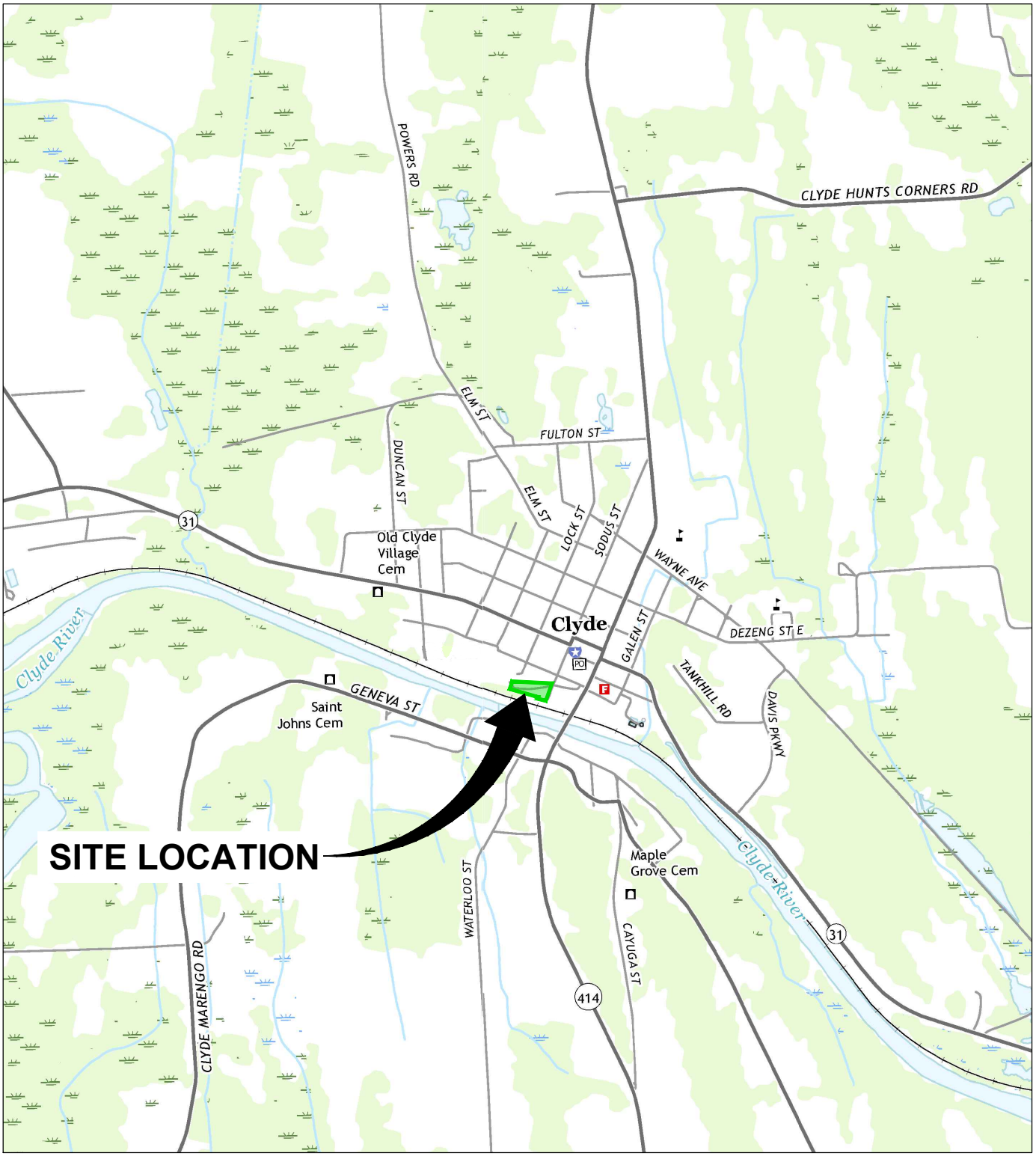
Notes:
1. Samples were submitted to Eurofins TestAmerica, Amherst, New York, for analysis using USEPA SW-846 Methods 8260B (VOCs), 8270C (SVOCs) 6010 (inorganics), and 9012 (cyanide).
2. "- -" Indicates no NYSDEC Division of Water TOGS 1.1.1 Water Quality Standard or Guidance Value (NYSDEC 1998) established.
3. Sample results detected above the MDL are presented in bold font.
4. Shading indicates that the result exceeds the NYSDEC TOGS 1.1.1 Water Quality Standard or Guidance Value (NYSDEC 1998).

Acronyms and Abbreviations:
BTEX - benzene, ethylbenzene, toluene, and xylenes
MDL - Method Detection Limit
mg/L - milligrams per liter
ND - not detected
NYSDEC - New York State Department of Environmental Conservation
PAH - polycyclic aromatic hydrocarbon
SVOC - semi-volatile organic compound
TOGS - Technical and Operational Guidance
µg/L - micrograms per liter
USEPA - United States Environmental Protection Agency
VOC - volatile organic compound

Lab Qualifiers:
J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.
U - The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
UBJ - The compound is considered non-detect at the listed value due to associated blank contamination. However, the reported limit is approximate an may or may not represent the actual limit of quantitation.
UJ - The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.

Reference:
NYSDEC 1998. Division of Water Technical and Operational Guidance Series (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. October 22, 2993; reissued June 1998.

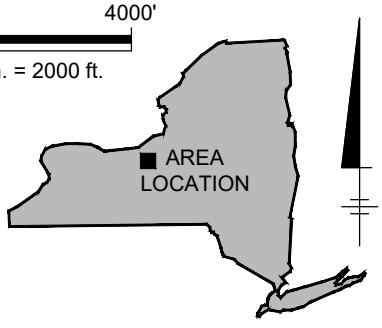
Figures



REFERENCE: BASE MAP USGS 7.5. MIN. TOPO. QUAD., LYONS & SAVANNAH, NEW YORK, 2016.

0 2000' 4000'

Approximate Scale: 1 in. = 2000 ft.



NYSEG
CLYDE FORMER MGP SITE
CLYDE, NEW YORK

SITE LOCATION MAP

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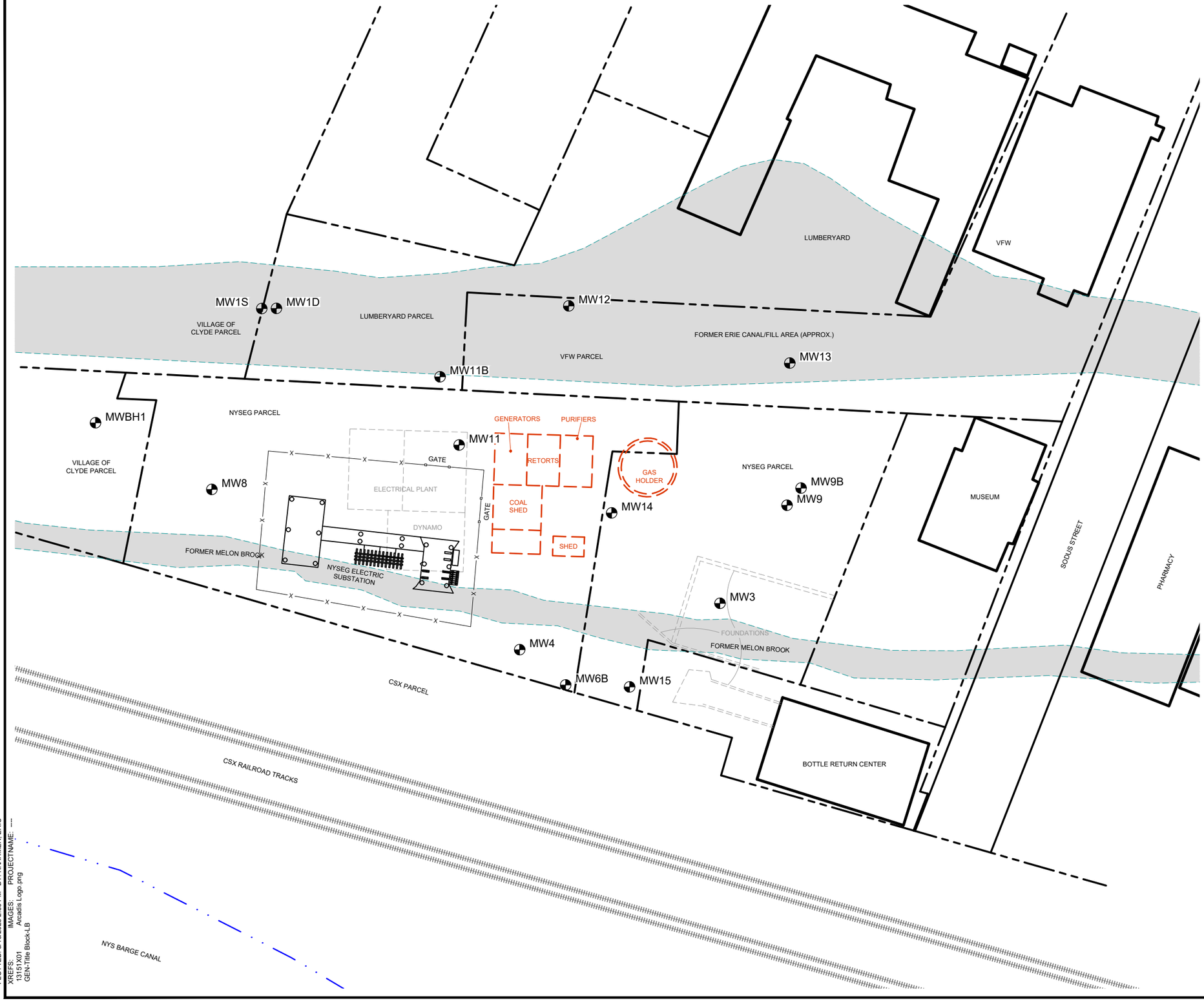
FIGURE
1



LEGEND:

- MONITORING WELL
- PROPERTY LINE
- FORMER MGP STRUCTURES
- APPROXIMATE LOCATION OF FORMER BROOK/CANAL
- FENCE LINE

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE.
2. BASE MAP REFERENCES: MAP SHOWING EXISTING CONDITIONS AT THE NYSEG CLYDE FORMER MANUFACTURED GAS PLANT - DRAWN BY THEW ASSOCIATES LAND SURVEYORS AND DATED SEPTEMBER 7, 2011, REVISED ON APRIL 23, 2012. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM (EAST ZONE, NORTH AMERICAN DATUM (NAD83). VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM (NAVD 88).
3. MONITORING WELLS MW5, MW6, MWBH6, MW7, MW10 AND MW10B HAVE BEEN DECOMMISSIONED AND ARE NOT SHOWN ON THIS FIGURE.

0 50' 100'

GRAPHIC SCALE

NYSEG
CLYDE FORMER MGP SITE
CLYDE, NEW YORK

SITE LAYOUT

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FIGURE 2

C:\Users\ekrahmer\DOCACCDocs\Arcadis ACC.US\AUS-99999999-NYSEG_FMR MGP_CLYDE_NY\Project Files\10_WIP\10T_ARC_ENV\20251\01-DWG\GEN-F02-SITE MAP.dwg LAYOUT: 2 SAVED: 5/13/2025 2:36 PM ACADVER: 24.2S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: PLTFULL.CTB
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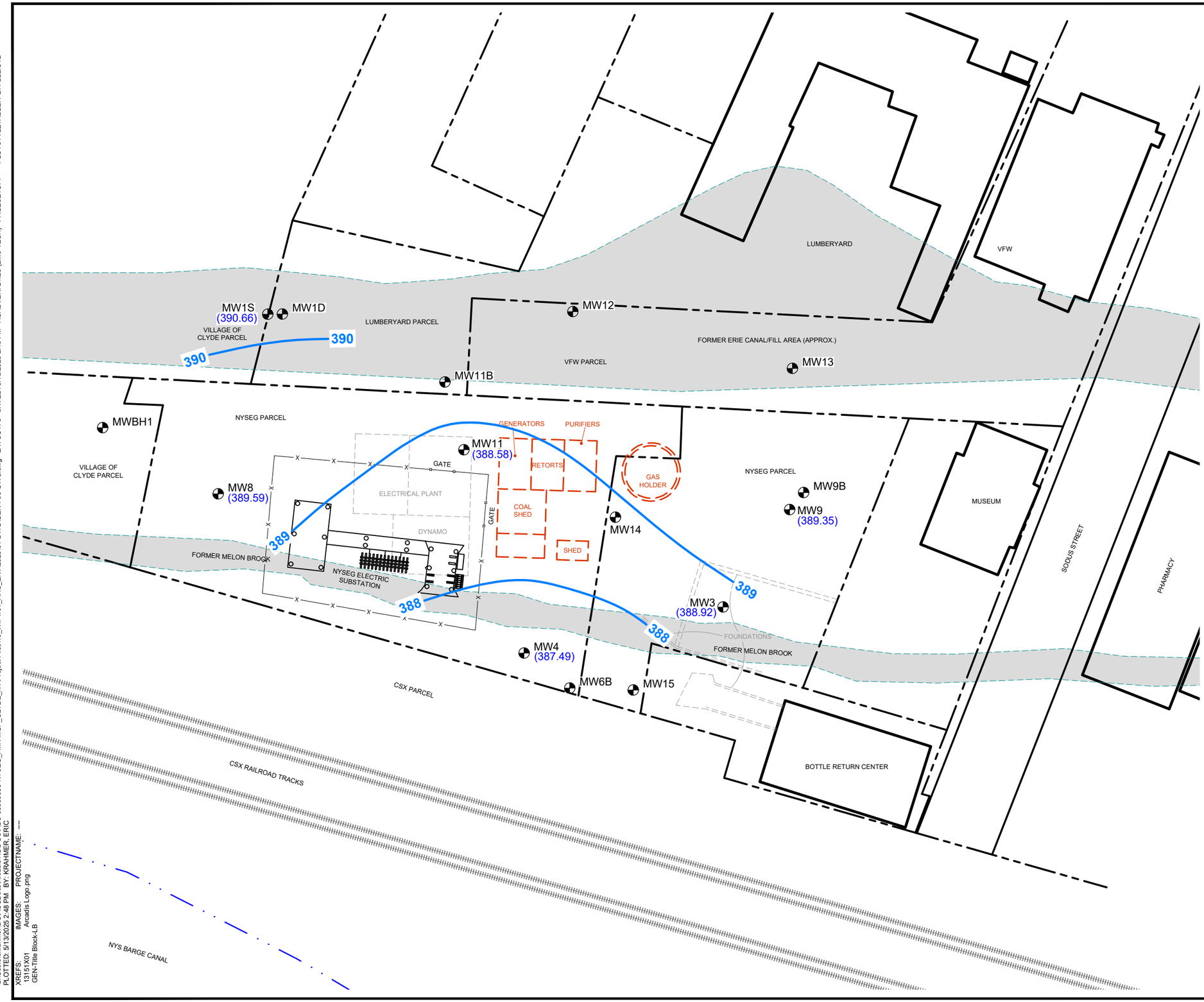

LEGEND:

- MONITORING WELL
- PROPERTY LINE
- FORMER MGP STRUCTURES
- APPROXIMATE LOCATION OF FORMER BROOK/CANAL
- FENCE LINE
- 389 — GROUNDWATER ELEVATION CONTOUR LINE
- (389.35) — GROUNDWATER ELEVATION (FEET NAVD88)

NOTES:

1. ALL LOCATIONS ARE APPROXIMATE.
2. BASE MAP REFERENCES: MAP SHOWING EXISTING CONDITIONS AT THE NYSEG CLYDE FORMER MANUFACTURED GAS PLANT - DRAWN BY THEW ASSOCIATES LAND SURVEYORS AND DATED SEPTEMBER 7, 2011, REVISED ON APRIL 23, 2012. HORIZONTAL DATUM: NEW YORK STATE PLANE COORDINATE SYSTEM (EAST ZONE, NORTH AMERICAN DATUM (NAD83). VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM (NAVD 88).
3. MONITORING WELLS MW5, MW6, MWBH6, MW7, MW10 AND MW10B HAVE BEEN DECOMMISSIONED AND ARE NOT SHOWN ON THIS FIGURE.

0 50' 100'

GRAPHIC SCALE

NYSEG
CLYDE FORMER MGP SITE
CLYDE, NEW YORK

SHALLOW GROUNDWATER CONTOUR MAP - FEBRUARY 24, 2025

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FIGURE 3

Attachment 1

Groundwater Sampling Logs

GROUNDWATER SAMPLING LOG

Site: NYSEG Clyde Former MGP — **Clyde, NY** — **Event:** February 2025 GWS

Sampling Personnel: Bailey Kudla-Williams / Kaitlyn Fleming
Well ID: MW-4
Client / Job Number: NYSEG / 30270811
Date: 2/25/2025
Weather: 37°F, Light Rain
Time In: 1040 **Time Out:** 1230

Well Information

Depth to Water:	3.76	(feet TIC)
Total Depth:	14.00	(feet TIC)
Length of Water Column:	10.24	(feet)
Volume of Water in Well:	1.6	(gal)
Screen Interval:	9-14'	(feet)
Depth to pump Intake:	~12	(feet TIC)

Well Type:	(Flushmount)	Stick-Up
Well Material:	Stainless Steel	PVC
Well Locked:	Yes	(No)
Measuring Point Marked:	Yes	(No)
Well Diameter:	(2")	4"

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	Bailer	(Peristaltic)	Grundfos	Other:

Duration of Pumping: 84 (min)
Average Pumping Rate: 200 (ml/min) Water-Quality Meter Type: YSI ProDSS
Total Volume Removed: 2.25 (gal) Did well go dry: Yes (No)

Conversion Factors				
gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469
1 gal = 3.785 L =3785 ml = 0.1337 cubic feet				

Unit Stability			
pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

	1	2	3	4	5	6	7	8	9	10	11	12	13
Parameter:	1055	1100	1105	1110	1115	1120	1125	1130	1135	1140			
Volume Purged (gal)	Pump	0.25	0.5	0.75	1.0	1.25	1.5	1.75	2.0	2.25			
Rate (mL/min)	On	200	200	200	200	200	200	200	200	S			
Depth to Water (ft.)	3.71	3.72	3.72	3.72	3.72	3.72	3.72	3.72	3.72	A			
pH	|	7.00	7.00	7.00	7.01	7.01	7.01	7.01	7.01	M			
Temp. (C)	|	9.2	9.2	9.2	9.2	9.2	9.3	9.2	9.2	P			
Conductivity (mS/cm)	|	1,209	1,210	1.211	1.213	1.213	1.214	1,215	1,215	L			
Dissolved Oxygen (mg/l)	|	1.22	0.95	0.79	0.69	0.61	0.58	0.55	0.53	E			
ORP (mV)	|	-90.8	-99.9	-106.1	-112.1	-117.0	-118.7	-120.0	-121.0	D			
Turbidity (NTU)	|	7.97	7.48	4.93	4.51	2.88	2.60	2.31	1.80	|			
Notes:	|									|		

Sampling Information

Analyses	#	Laboratory
VOCs - 8260	12	Eurofins
PAHs - 8270	8	Eurofins
Total Cn - 9012	4	Eurofins
TAL Metals - 6010	4	Eurofins
Sample ID: MW4		Sample Time: 1140
MS/MSD:	(Yes)	No
Duplicate:	(Yes)	No
Duplicate ID DUP-20250225		Dup. Time: 1150
Chain of Custody Signed By: BKW		

Problems / Observations

Initial Purge: Pump on at 1055 - clear w/ suspended particles, no odor

Final Purge: Pump off at 1219 - clear, no odor

GROUNDWATER SAMPLING LOG

Site: NYSEG Clyde Former MGP — **Clyde, NY** — **Event:** February 2025 GWS

Sampling Personnel:	Bailey Kudla-Williams / Kaitlyn Fleming	**Well ID:**	MW12
Client / Job Number:	NYSEG / 30270811	**Date:**	3/14/25
Weather:	Sunny 45°F	**Time In:**	1040 **Time Out:** 1220

Well Information

Depth to Water:	1.95	(feet TIC)
Total Depth:	16.28	(feet TIC)
Length of Water Column:	14.33	(feet)
Volume of Water in Well:	2.34	(gal)
Screen Interval:	4-14	(feet)
Depth to pump Intake:	~12	(feet TIC)

Well Type:	(Flushmount)	Stick-Up
Well Material:	Stainless Steel	(PVC)
Well Locked:	Yes	(No)
Measuring Point Marked:	(Yes)	No
Well Diameter:	(2")	4"

Purging Information

Purging Method:	Bailer	(Peristaltic)	Grundfos	Other:
Tubing/Bailer Material:	St. Steel	(Polyethylene)	Teflon	Other:
Sampling Method:	Bailer	(Peristaltic)	Grundfos	Other:

Duration of Pumping:	85	(min)			
Average Pumping Rate:	150	(ml/min)	Water-Quality Meter Type:	YSI	
Total Volume Removed:	1.8	(gal)	Did well go dry:	Yes	(No)

Conversion Factors

gal / ft. of water	1" ID	2" ID	4" ID	6" ID
	0.041	0.163	0.653	1.469

1 gal = 3.785 L =3785 ml = 0.1337 cubic feet

Unit Stability

pH	DO	Cond.	ORP
±0.1	± 10%	± 3.0%	± 10 mV

Parameter:	1	2	3	4	5	6	7	8	9	10	11	12	13
	1050	1055	1100	1105	1110	1115	1120	1125	1130	1135			
Volume Purged (gal)										S			
Rate (mL/min)	150	150	150	150	150	150	150	150	150	A			
Depth to Water (ft.)	3.21	3.23	3.27	3.27	3.21	3.21	3.21	3.21	3.21	M			
pH	7.03	7.01	7.01	7.00	7.00	7.00	7.00	7.00	7.01	P			
Temp. (C)	7.6	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.9	L			
Conductivity (mS/cm)	1.339	1.347	1.344	1.339	1.345	1.348	1.353	1.362	1.362	E			
Dissolved Oxygen (mg/l)	2.02	1.87	1.74	1.68	1.63	1.60	1.61	1.55	1.54				
ORP (mV)	126.9	125.6	123.0	119.9	116.7	114.3	111.9	109.5	106.6				
Turbidity (NTU)	13.81	16.60	21.64	19.12	28.20	37.04	7.06	7.22	6.77				
Notes:													

Sampling Information

Analyses	#	Laboratory
VOCs - 8260	12	Eurofins
PAHs - 8270	8	Eurofins
Total Cn - 9012	4	Eurofins
TAL Metals - 6010	4	Eurofins
Sample ID:	MW12	Sample Time: 1135
MS/MSD:	(Yes)	No
Duplicate:	(Yes)	No
Duplicate ID DUP-20250314		Dup. Time: 1135
Chain of Custody Signed By:	MRS	

Problems / Observations

Initial Purge:

Pump on @ 1045. Clear. No odor.

Final Purge:

Pump off @ 1210. Clear. No odor.

Attachment 2

Groundwater Laboratory Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. John J Ruspantini
New York State Electric & Gas
18 Link Drive
Binghamton, New York 13902

Generated 3/5/2025 10:42:21 AM

JOB DESCRIPTION

NYSEG - Clyde
Groundwater

JOB NUMBER

480-227535-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing Northeast, LLC Project Manager.

Authorization

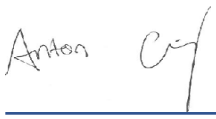

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Table of Contents

Definitions/Glossary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-227535-1 Eurofins Buffalo

Job Narrative
480-227535-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 2/26/2025 11:20 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 time was 2.6°C.

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

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

Metals
Method 6010D: The linear range check (LRC) standard recovery associated with 480-739825 is outside the acceptance criteria for the following analytes: total Silver, Beryllium, Chromium, Copper, Iron, Magnesium, Manganese, Sodium, Vanadium, and Zinc . The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

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

General Chemistry
Method 9012B_NP: The continuing calibration blank (CCB) for analytical batch 480-739740 contained Cyanide, Total above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed: MW-4 (480-227535-1), MW-4 (480-227535-1[MS]), MW-4 (480-227535-1[MSD]) and Dup-20250225 (480-227535-2).

Method 9012B_NP: The method blank for batch 480-739740 contained Cyanide, Total above the reporting limit (RL). None of the samples associated with this method blank contained the target compound; therefore, re-extraction and/or re-analysis of samples were not performed: MW-4 (480-227535-1), MW-4 (480-227535-1[MS]), MW-4 (480-227535-1[MSD]) and Dup-20250225 (480-227535-2).

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

Detection Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

Client Sample ID: MW-4 — Lab Sample ID: 480-227535-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.54	J	5.0	0.41	ug/L	1		8270D	Total/NA
Fluoranthene	0.90	J	5.0	0.40	ug/L	1		8270D	Total/NA
Fluorene	0.40	J	5.0	0.36	ug/L	1		8270D	Total/NA
Pyrene	1.3	J	5.0	0.34	ug/L	1		8270D	Total/NA
Barium	0.24		0.0020	0.00070	mg/L	1		6010D	Total/NA
Calcium	197		0.50	0.10	mg/L	1		6010D	Total/NA
Iron	25.3	^5-	0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.0033	J	0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	30.9	^5-	0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	1.0	^5-	0.0030	0.00040	mg/L	1		6010D	Total/NA
Potassium	6.9		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	36.8	^5-	1.0	0.32	mg/L	1		6010D	Total/NA
Zinc	0.15	^5-	0.010	0.0015	mg/L	1		6010D	Total/NA

Client Sample ID: Dup-20250225 — Lab Sample ID: 480-227535-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	0.51	J	5.0	0.41	ug/L	1		8270D	Total/NA
Fluoranthene	0.87	J	5.0	0.40	ug/L	1		8270D	Total/NA
Fluorene	0.38	J	5.0	0.36	ug/L	1		8270D	Total/NA
Pyrene	1.3	J	5.0	0.34	ug/L	1		8270D	Total/NA
Barium	0.24		0.0020	0.00070	mg/L	1		6010D	Total/NA
Calcium	189		0.50	0.10	mg/L	1		6010D	Total/NA
Iron	25.5	^5-	0.050	0.019	mg/L	1		6010D	Total/NA
Lead	0.0037	J	0.010	0.0030	mg/L	1		6010D	Total/NA
Magnesium	31.2	^5-	0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	1.0	^5-	0.0030	0.00040	mg/L	1		6010D	Total/NA
Potassium	6.9		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	36.7	^5-	1.0	0.32	mg/L	1		6010D	Total/NA
Zinc	0.097	^5-	0.010	0.0015	mg/L	1		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-4

Date Collected: 02/25/25 11:40
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-1

Matrix: Ground Water

Method: SW846 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			02/27/25 22:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/27/25 22:19	1
Toluene	ND		1.0	0.51	ug/L			02/27/25 22:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/27/25 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*02/27/25 22:19*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*02/27/25 22:19*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*02/27/25 22:19*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/27/25 22:19*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.54**	**J**	5.0	0.41	ug/L		02/28/25 13:52	03/03/25 16:11	1
Acenaphthylene	ND		5.0	0.38	ug/L		02/28/25 13:52	03/03/25 16:11	1
Anthracene	ND		5.0	0.28	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		02/28/25 13:52	03/03/25 16:11	1
Chrysene	ND		5.0	0.33	ug/L		02/28/25 13:52	03/03/25 16:11	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		02/28/25 13:52	03/03/25 16:11	1
Fluoranthene	**0.90**	**J**	5.0	0.40	ug/L		02/28/25 13:52	03/03/25 16:11	1
Fluorene	**0.40**	**J**	5.0	0.36	ug/L		02/28/25 13:52	03/03/25 16:11	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 16:11	1
Naphthalene	ND		5.0	0.76	ug/L		02/28/25 13:52	03/03/25 16:11	1
Phenanthrene	ND		5.0	0.44	ug/L		02/28/25 13:52	03/03/25 16:11	1
Pyrene	**1.3**	**J**	5.0	0.34	ug/L		02/28/25 13:52	03/03/25 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*86*		*53 - 126*	*02/28/25 13:52*	*03/03/25 16:11*	*1*
Nitrobenzene-d5 (Surr)	*76*		*29 - 129*	*02/28/25 13:52*	*03/03/25 16:11*	*1*
p-Terphenyl-d14 (Surr)	*81*		*33 - 132*	*02/28/25 13:52*	*03/03/25 16:11*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/27/25 09:16	02/27/25 15:04	1
Antimony	ND		0.020	0.0068	mg/L		02/27/25 09:16	02/27/25 15:04	1
Arsenic	ND		0.015	0.0056	mg/L		02/27/25 09:16	02/27/25 15:04	1
Barium	**0.24**		0.0020	0.00070	mg/L		02/27/25 09:16	02/27/25 15:04	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		02/27/25 09:16	02/27/25 15:04	1
Cadmium	ND		0.0020	0.00050	mg/L		02/27/25 09:16	02/27/25 15:04	1
Calcium	**197**		0.50	0.10	mg/L		02/27/25 09:16	03/04/25 18:17	1
Chromium	ND	^5-	0.0040	0.0010	mg/L		02/27/25 09:16	02/27/25 15:04	1
Cobalt	ND		0.0040	0.00063	mg/L		02/27/25 09:16	02/27/25 15:04	1
Copper	ND	^5+	0.010	0.0016	mg/L		02/27/25 09:16	02/27/25 15:04	1
Iron	**25.3**	**^5-**	0.050	0.019	mg/L		02/27/25 09:16	02/27/25 15:04	1
Lead	**0.0033**	**J**	0.010	0.0030	mg/L		02/27/25 09:16	02/27/25 15:04	1
Magnesium	**30.9**	**^5-**	0.20	0.043	mg/L		02/27/25 09:16	02/27/25 15:04	1

Client Sample ID: MW-4

Date Collected: 02/25/25 11:40
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-1

Matrix: Ground Water

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.0**	**^5-**	0.0030	0.00040	mg/L		02/27/25 09:16	02/27/25 15:04	1
Nickel	ND		0.010	0.0013	mg/L		02/27/25 09:16	02/27/25 15:04	1
Potassium	**6.9**		0.50	0.10	mg/L		02/27/25 09:16	02/27/25 15:04	1
Selenium	ND		0.025	0.0087	mg/L		02/27/25 09:16	02/27/25 15:04	1
Silver	ND	^5-	0.0060	0.0017	mg/L		02/27/25 09:16	02/27/25 15:04	1
Sodium	**36.8**	**^5-**	1.0	0.32	mg/L		02/27/25 09:16	02/27/25 15:04	1
Thallium	ND		0.020	0.010	mg/L		02/27/25 09:16	02/27/25 15:04	1
Vanadium	ND	^5-	0.0050	0.0015	mg/L		02/27/25 09:16	02/27/25 15:04	1
Zinc	**0.15**	**^5-**	0.010	0.0015	mg/L		02/27/25 09:16	02/27/25 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND	F1	0.010	0.0041	mg/L			02/26/25 20:36	1

Client Sample ID: Dup-20250225

Date Collected: 02/25/25 00:00
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-2

Matrix: Ground Water

Method: SW846 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			02/27/25 22:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/27/25 22:41	1
Toluene	ND		1.0	0.51	ug/L			02/27/25 22:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/27/25 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*02/27/25 22:41*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*02/27/25 22:41*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*02/27/25 22:41*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/27/25 22:41*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.51**	**J**	5.0	0.41	ug/L		02/28/25 13:52	03/03/25 17:58	1
Acenaphthylene	ND		5.0	0.38	ug/L		02/28/25 13:52	03/03/25 17:58	1
Anthracene	ND		5.0	0.28	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		02/28/25 13:52	03/03/25 17:58	1
Chrysene	ND		5.0	0.33	ug/L		02/28/25 13:52	03/03/25 17:58	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		02/28/25 13:52	03/03/25 17:58	1
Fluoranthene	**0.87**	**J**	5.0	0.40	ug/L		02/28/25 13:52	03/03/25 17:58	1
Fluorene	**0.38**	**J**	5.0	0.36	ug/L		02/28/25 13:52	03/03/25 17:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 17:58	1
Naphthalene	ND		5.0	0.76	ug/L		02/28/25 13:52	03/03/25 17:58	1
Phenanthrene	ND		5.0	0.44	ug/L		02/28/25 13:52	03/03/25 17:58	1
Pyrene	**1.3**	**J**	5.0	0.34	ug/L		02/28/25 13:52	03/03/25 17:58	1

Client Sample ID: Dup-20250225

Date Collected: 02/25/25 00:00
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-2

Matrix: Ground Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*53 - 126*	*02/28/25 13:52*	*03/03/25 17:58*	*1*
Nitrobenzene-d5 (Surr)	*75*		*29 - 129*	*02/28/25 13:52*	*03/03/25 17:58*	*1*
p-Terphenyl-d14 (Surr)	*78*		*33 - 132*	*02/28/25 13:52*	*03/03/25 17:58*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/27/25 09:16	02/27/25 15:13	1
Antimony	ND		0.020	0.0068	mg/L		02/27/25 09:16	02/27/25 15:13	1
Arsenic	ND		0.015	0.0056	mg/L		02/27/25 09:16	02/27/25 15:13	1
Barium	**0.24**		0.0020	0.00070	mg/L		02/27/25 09:16	02/27/25 15:13	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		02/27/25 09:16	02/27/25 15:13	1
Cadmium	ND		0.0020	0.00050	mg/L		02/27/25 09:16	02/27/25 15:13	1
Calcium	**189**		0.50	0.10	mg/L		02/27/25 09:16	03/04/25 18:27	1
Chromium	ND	^5-	0.0040	0.0010	mg/L		02/27/25 09:16	02/27/25 15:13	1
Cobalt	ND		0.0040	0.00063	mg/L		02/27/25 09:16	02/27/25 15:13	1
Copper	ND	^5+	0.010	0.0016	mg/L		02/27/25 09:16	02/27/25 15:13	1
Iron	**25.5**	**^5-**	0.050	0.019	mg/L		02/27/25 09:16	02/27/25 15:13	1
Lead	**0.0037**	**J**	0.010	0.0030	mg/L		02/27/25 09:16	02/27/25 15:13	1
Magnesium	**31.2**	**^5-**	0.20	0.043	mg/L		02/27/25 09:16	02/27/25 15:13	1
Manganese	**1.0**	**^5-**	0.0030	0.00040	mg/L		02/27/25 09:16	02/27/25 15:13	1
Nickel	ND		0.010	0.0013	mg/L		02/27/25 09:16	02/27/25 15:13	1
Potassium	**6.9**		0.50	0.10	mg/L		02/27/25 09:16	02/27/25 15:13	1
Selenium	ND		0.025	0.0087	mg/L		02/27/25 09:16	02/27/25 15:13	1
Silver	ND	^5-	0.0060	0.0017	mg/L		02/27/25 09:16	02/27/25 15:13	1
Sodium	**36.7**	**^5-**	1.0	0.32	mg/L		02/27/25 09:16	02/27/25 15:13	1
Thallium	ND		0.020	0.010	mg/L		02/27/25 09:16	02/27/25 15:13	1
Vanadium	ND	^5-	0.0050	0.0015	mg/L		02/27/25 09:16	02/27/25 15:13	1
Zinc	**0.097**	**^5-**	0.010	0.0015	mg/L		02/27/25 09:16	02/27/25 15:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND		0.010	0.0041	mg/L			02/26/25 20:46	1

Surrogate Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

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

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-227535-1	MW-4	105	100	101	101
480-227535-1 MS	MW-4	103	100	102	98
480-227535-1 MSD	MW-4	100	97	98	102
480-227535-2	Dup-20250225	106	102	105	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
LCS 480-739828/6	Lab Control Sample	101	101	103	97
MB 480-739828/8	Method Blank	103	102	106	98

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(53-126)	(29-129)	(33-132)
480-227535-1	MW-4	86	76	81
480-227535-1 MS	MW-4	94	87	72
480-227535-1 MSD	MW-4	88	84	68
480-227535-2	Dup-20250225	85	75	78

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(53-126)	(29-129)	(33-132)
LCS 480-739876/2-A	Lab Control Sample	83	76	93
MB 480-739876/1-A	Method Blank	74	67	86

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)

Surrogate Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

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

Lab Sample ID: MB 480-739828/8
Matrix: Water
Analysis Batch: 739828

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			02/27/25 20:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/27/25 20:03	1
Toluene	ND		1.0	0.51	ug/L			02/27/25 20:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/27/25 20:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*02/27/25 20:03*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*02/27/25 20:03*	*1*
Dibromofluoromethane (Surr)	*106*		*75 - 123*		*02/27/25 20:03*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/27/25 20:03*	*1*

Lab Sample ID: LCS 480-739828/6
Matrix: Water
Analysis Batch: 739828

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	25.0	24.5		ug/L		98	71 - 124
Ethylbenzene	25.0	23.1		ug/L		92	77 - 123
Toluene	25.0	24.2		ug/L		97	80 - 122
Xylenes, Total	50.0	46.9		ug/L		94	76 - 122

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: 480-227535-1 MS
Matrix: Ground Water
Analysis Batch: 739828

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	ND		25.0	26.8		ug/L		107	71 - 124
Ethylbenzene	ND		25.0	25.6		ug/L		103	77 - 123
Toluene	ND		25.0	26.8		ug/L		107	80 - 122
Xylenes, Total	ND		50.0	50.9		ug/L		102	76 - 122

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Dibromofluoromethane (Surr)	*102*		*75 - 123*
Toluene-d8 (Surr)	*98*		*80 - 120*

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

Lab Sample ID: 480-227535-1 MSD
Matrix: Ground Water
Analysis Batch: 739828

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		25.0	26.8		ug/L		107	71 - 124	0	13
Ethylbenzene	ND		25.0	25.8		ug/L		103	77 - 123	1	15
Toluene	ND		25.0	27.3		ug/L		109	80 - 122	2	15
Xylenes, Total	ND		50.0	51.3		ug/L		103	76 - 122	1	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*97*		*73 - 120*
Dibromofluoromethane (Surr)	*98*		*75 - 123*
Toluene-d8 (Surr)	*102*		*80 - 120*

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

Lab Sample ID: MB 480-739876/1-A
Matrix: Water
Analysis Batch: 739945

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739876

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		02/28/25 13:52	03/03/25 14:24	1
Acenaphthylene	ND		5.0	0.38	ug/L		02/28/25 13:52	03/03/25 14:24	1
Anthracene	ND		5.0	0.28	ug/L		02/28/25 13:52	03/03/25 14:24	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		02/28/25 13:52	03/03/25 14:24	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 14:24	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		02/28/25 13:52	03/03/25 14:24	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		02/28/25 13:52	03/03/25 14:24	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		02/28/25 13:52	03/03/25 14:24	1
Chrysene	ND		5.0	0.33	ug/L		02/28/25 13:52	03/03/25 14:24	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		02/28/25 13:52	03/03/25 14:24	1
Fluoranthene	ND		5.0	0.40	ug/L		02/28/25 13:52	03/03/25 14:24	1
Fluorene	ND		5.0	0.36	ug/L		02/28/25 13:52	03/03/25 14:24	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 14:24	1
Naphthalene	ND		5.0	0.76	ug/L		02/28/25 13:52	03/03/25 14:24	1
Phenanthrene	ND		5.0	0.44	ug/L		02/28/25 13:52	03/03/25 14:24	1
Pyrene	ND		5.0	0.34	ug/L		02/28/25 13:52	03/03/25 14:24	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*74*		*53 - 126*	*02/28/25 13:52*	*03/03/25 14:24*	*1*
Nitrobenzene-d5 (Surr)	*67*		*29 - 129*	*02/28/25 13:52*	*03/03/25 14:24*	*1*
p-Terphenyl-d14 (Surr)	*86*		*33 - 132*	*02/28/25 13:52*	*03/03/25 14:24*	*1*

Lab Sample ID: LCS 480-739876/2-A
Matrix: Water
Analysis Batch: 739945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 739876

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	32.0	28.2		ug/L		88	60 - 120
Acenaphthylene	32.0	29.1		ug/L		91	63 - 120
Anthracene	32.0	32.2		ug/L		100	67 - 120

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

Lab Sample ID: LCS 480-739876/2-A
Matrix: Water
Analysis Batch: 739945

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 739876

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzo[a]anthracene			32.0	32.1		ug/L		100	70 - 121		
Benzo[a]pyrene			32.0	32.7		ug/L		102	60 - 123		
Benzo[b]fluoranthene			32.0	32.0		ug/L		100	66 - 126		
Benzo[g,h,i]perylene			32.0	31.9		ug/L		100	66 - 150		
Benzo[k]fluoranthene			32.0	33.8		ug/L		106	65 - 124		
Chrysene			32.0	31.6		ug/L		99	69 - 120		
Dibenz(a,h)anthracene			32.0	31.0		ug/L		97	65 - 135		
Fluoranthene			32.0	32.2		ug/L		101	69 - 126		
Fluorene			32.0	30.1		ug/L		94	66 - 120		
Indeno[1,2,3-cd]pyrene			32.0	31.8		ug/L		99	69 - 146		
Naphthalene			32.0	23.3		ug/L		73	57 - 120		
Phenanthrene			32.0	32.6		ug/L		102	68 - 120		
Pyrene			32.0	32.9		ug/L		103	70 - 125		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*83*		*53 - 126*
Nitrobenzene-d5 (Surr)	*76*		*29 - 129*
p-Terphenyl-d14 (Surr)	*93*		*33 - 132*

Lab Sample ID: 480-227535-1 MS
Matrix: Ground Water
Analysis Batch: 739945

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 739876

Analyte		Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Acenaphthene		0.54	J	32.0	32.0		ug/L		98	48 - 120		
Acenaphthylene		ND		32.0	32.6		ug/L		102	63 - 120		
Anthracene		ND		32.0	33.4		ug/L		104	65 - 122		
Benzo[a]anthracene		ND		32.0	30.4		ug/L		95	43 - 124		
Benzo[a]pyrene		ND		32.0	29.7		ug/L		93	23 - 125		
Benzo[b]fluoranthene		ND		32.0	29.2		ug/L		91	27 - 127		
Benzo[g,h,i]perylene		ND		32.0	28.0		ug/L		87	16 - 147		
Benzo[k]fluoranthene		ND		32.0	29.9		ug/L		93	20 - 124		
Chrysene		ND		32.0	30.6		ug/L		96	44 - 122		
Dibenz(a,h)anthracene		ND		32.0	27.3		ug/L		85	16 - 139		
Fluoranthene		0.90	J	32.0	34.9		ug/L		106	63 - 129		
Fluorene		0.40	J	32.0	33.6		ug/L		104	62 - 120		
Indeno[1,2,3-cd]pyrene		ND		32.0	28.0		ug/L		88	16 - 140		
Naphthalene		ND		32.0	26.3		ug/L		82	45 - 120		
Phenanthrene		ND		32.0	37.5		ug/L		117	65 - 122		
Pyrene		1.3	J	32.0	35.5		ug/L		107	58 - 128		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*94*		*53 - 126*
Nitrobenzene-d5 (Surr)	*87*		*29 - 129*
p-Terphenyl-d14 (Surr)	*72*		*33 - 132*

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

Lab Sample ID: 480-227535-1 MSD
Matrix: Ground Water
Analysis Batch: 739945

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 739876

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	0.54	J	32.0	29.7		ug/L		91	48 - 120	7	24
Acenaphthylene	ND		32.0	30.6		ug/L		96	63 - 120	6	18
Anthracene	ND		32.0	31.5		ug/L		98	65 - 122	6	15
Benzo[a]anthracene	ND		32.0	28.5		ug/L		89	43 - 124	7	15
Benzo[a]pyrene	ND		32.0	26.8		ug/L		84	23 - 125	10	15
Benzo[b]fluoranthene	ND		32.0	26.9		ug/L		84	27 - 127	8	15
Benzo[g,h,i]perylene	ND		32.0	25.4		ug/L		79	16 - 147	10	15
Benzo[k]fluoranthene	ND		32.0	27.8		ug/L		87	20 - 124	7	22
Chrysene	ND		32.0	28.3		ug/L		89	44 - 122	8	15
Dibenz(a,h)anthracene	ND		32.0	25.0		ug/L		78	16 - 139	9	15
Fluoranthene	0.90	J	32.0	32.5		ug/L		99	63 - 129	7	15
Fluorene	0.40	J	32.0	31.2		ug/L		96	62 - 120	8	15
Indeno[1,2,3-cd]pyrene	ND		32.0	25.6		ug/L		80	16 - 140	9	15
Naphthalene	ND		32.0	25.5		ug/L		80	45 - 120	3	29
Phenanthrene	ND		32.0	35.0		ug/L		109	65 - 122	7	15
Pyrene	1.3	J	32.0	33.1		ug/L		99	58 - 128	7	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*88*		*53 - 126*
Nitrobenzene-d5 (Surr)	*84*		*29 - 129*
p-Terphenyl-d14 (Surr)	*68*		*33 - 132*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-739713/1-A
Matrix: Water
Analysis Batch: 739825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/27/25 09:16	02/27/25 15:00	1
Antimony	ND		0.020	0.0068	mg/L		02/27/25 09:16	02/27/25 15:00	1
Arsenic	ND		0.015	0.0056	mg/L		02/27/25 09:16	02/27/25 15:00	1
Barium	ND		0.0020	0.00070	mg/L		02/27/25 09:16	02/27/25 15:00	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		02/27/25 09:16	02/27/25 15:00	1
Cadmium	ND		0.0020	0.00050	mg/L		02/27/25 09:16	02/27/25 15:00	1
Calcium	ND	^5-	0.50	0.10	mg/L		02/27/25 09:16	02/27/25 15:00	1
Chromium	ND	^5-	0.0040	0.0010	mg/L		02/27/25 09:16	02/27/25 15:00	1
Cobalt	0.000951	J	0.0040	0.00063	mg/L		02/27/25 09:16	02/27/25 15:00	1
Copper	ND	^5+	0.010	0.0016	mg/L		02/27/25 09:16	02/27/25 15:00	1
Iron	ND	^5-	0.050	0.019	mg/L		02/27/25 09:16	02/27/25 15:00	1
Lead	ND		0.010	0.0030	mg/L		02/27/25 09:16	02/27/25 15:00	1
Magnesium	ND	^5-	0.20	0.043	mg/L		02/27/25 09:16	02/27/25 15:00	1
Manganese	ND	^5-	0.0030	0.00040	mg/L		02/27/25 09:16	02/27/25 15:00	1
Nickel	ND		0.010	0.0013	mg/L		02/27/25 09:16	02/27/25 15:00	1
Potassium	ND		0.50	0.10	mg/L		02/27/25 09:16	02/27/25 15:00	1
Selenium	ND		0.025	0.0087	mg/L		02/27/25 09:16	02/27/25 15:00	1
Silver	ND	^5-	0.0060	0.0017	mg/L		02/27/25 09:16	02/27/25 15:00	1
Sodium	ND	^5-	1.0	0.32	mg/L		02/27/25 09:16	02/27/25 15:00	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 480-739713/1-A
Matrix: Water
Analysis Batch: 739825

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 739713

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND		0.020	0.010	mg/L		02/27/25 09:16	02/27/25 15:00	1
Vanadium	ND	^5-	0.0050	0.0015	mg/L		02/27/25 09:16	02/27/25 15:00	1
Zinc	ND	^5-	0.010	0.0015	mg/L		02/27/25 09:16	02/27/25 15:00	1

Lab Sample ID: LCS 480-739713/2-A
Matrix: Water
Analysis Batch: 739825

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 739713

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.11	5.09		mg/L		99	80 - 120
Antimony	0.500	0.486		mg/L		97	80 - 120
Arsenic	1.01	0.961		mg/L		96	80 - 120
Barium	1.00	0.993		mg/L		99	80 - 120
Beryllium	0.496	0.516	^5-	mg/L		104	80 - 120
Cadmium	0.500	0.502		mg/L		100	80 - 120
Calcium	25.0	25.41	^5-	mg/L		102	80 - 120
Chromium	0.499	0.514	^5-	mg/L		103	80 - 120
Cobalt	0.500	0.506		mg/L		101	80 - 120
Copper	0.500	0.493	^5+	mg/L		99	80 - 120
Iron	5.12	5.46	^5-	mg/L		107	80 - 120
Lead	0.500	0.518		mg/L		104	80 - 120
Magnesium	25.0	24.65	^5-	mg/L		99	80 - 120
Manganese	0.498	0.497	^5-	mg/L		100	80 - 120
Nickel	0.501	0.522		mg/L		104	80 - 120
Potassium	25.0	25.91		mg/L		104	80 - 120
Selenium	1.00	0.987		mg/L		99	80 - 120
Silver	0.0500	0.0498	^5-	mg/L		100	80 - 120
Sodium	25.0	25.12	^5-	mg/L		101	80 - 120
Thallium	1.00	1.01		mg/L		101	80 - 120
Vanadium	0.502	0.497	^5-	mg/L		99	80 - 120
Zinc	0.500	0.531	^5-	mg/L		106	80 - 120

Lab Sample ID: 480-227535-1 MS
Matrix: Ground Water
Analysis Batch: 739825

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 739713

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		5.11	5.01		mg/L		98	75 - 125
Antimony	ND		0.500	0.498		mg/L		100	75 - 125
Arsenic	ND		1.01	0.972		mg/L		97	75 - 125
Barium	0.24		1.00	1.21		mg/L		97	75 - 125
Beryllium	ND	^5-	0.496	0.506	^5-	mg/L		102	75 - 125
Cadmium	ND		0.500	0.514		mg/L		103	75 - 125
Chromium	ND	^5-	0.499	0.510	^5-	mg/L		102	75 - 125
Cobalt	ND		0.500	0.504		mg/L		101	75 - 125
Copper	ND	^5+	0.500	0.531	^5+	mg/L		106	75 - 125
Iron	25.3	^5-	5.12	30.81	^5- 4	mg/L		108	75 - 125
Lead	0.0033	J	0.500	0.524		mg/L		104	75 - 125
Magnesium	30.9	^5-	25.0	53.87	^5-	mg/L		92	75 - 125

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-227535-1 MS
Matrix: Ground Water
Analysis Batch: 739825

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 739713

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Manganese	1.0	^5-	0.498	1.46	^5-	mg/L		91	75 - 125
Nickel	ND		0.501	0.518		mg/L		103	75 - 125
Potassium	6.9		25.0	32.84		mg/L		104	75 - 125
Selenium	ND		1.00	1.00		mg/L		100	75 - 125
Silver	ND	^5-	0.0500	0.0511	^5-	mg/L		102	75 - 125
Sodium	36.4		25.0	60.33		mg/L		96	75 - 125
Thallium	ND		1.00	1.03		mg/L		103	75 - 125
Vanadium	ND	^5-	0.502	0.499	^5-	mg/L		99	75 - 125
Zinc	0.15	^5-	0.500	0.624	^5-	mg/L		95	75 - 125

Lab Sample ID: 480-227535-1 MS
Matrix: Ground Water
Analysis Batch: 740058

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 739713

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Calcium	197		25.0	212.7	4	mg/L		62	75 - 125

Lab Sample ID: 480-227535-1 MSD
Matrix: Ground Water
Analysis Batch: 739825

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 739713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		5.11	5.23		mg/L		102	75 - 125	4	20
Antimony	ND		0.500	0.504		mg/L		101	75 - 125	1	20
Arsenic	ND		1.01	0.989		mg/L		98	75 - 125	2	20
Barium	0.24		1.00	1.25		mg/L		101	75 - 125	3	20
Beryllium	ND	^5-	0.496	0.527	^5-	mg/L		106	75 - 125	4	20
Cadmium	ND		0.500	0.522		mg/L		104	75 - 125	2	20
Chromium	ND	^5-	0.499	0.519	^5-	mg/L		104	75 - 125	2	20
Cobalt	ND		0.500	0.510		mg/L		102	75 - 125	1	20
Copper	ND	^5+	0.500	0.537	^5+	mg/L		107	75 - 125	1	20
Iron	25.3	^5-	5.12	31.13	^5- 4	mg/L		114	75 - 125	1	20
Lead	0.0033	J	0.500	0.530		mg/L		105	75 - 125	1	20
Magnesium	30.9	^5-	25.0	56.51	^5-	mg/L		102	75 - 125	5	20
Manganese	1.0	^5-	0.498	1.51	^5-	mg/L		102	75 - 125	4	20
Nickel	ND		0.501	0.523		mg/L		104	75 - 125	1	20
Potassium	6.9		25.0	33.89		mg/L		108	75 - 125	3	20
Selenium	ND		1.00	1.01		mg/L		101	75 - 125	1	20
Silver	ND	^5-	0.0500	0.0515	^5-	mg/L		103	75 - 125	1	20
Sodium	36.4		25.0	61.93		mg/L		102	75 - 125	3	20
Thallium	ND		1.00	1.04		mg/L		104	75 - 125	1	20
Vanadium	ND	^5-	0.502	0.506	^5-	mg/L		101	75 - 125	1	20
Zinc	0.15	^5-	0.500	0.625	^5-	mg/L		95	75 - 125	0	20

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-227535-1 MSD
Matrix: Ground Water
Analysis Batch: 740058

Client Sample ID: MW-4
Prep Type: Total/NA
Prep Batch: 739713

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Calcium	197		25.0	216.6	4	mg/L		78	75 - 125	2	20

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-739740/47
Matrix: Water
Analysis Batch: 739740

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.0134		0.010	0.0041	mg/L			02/26/25 20:30	1

Lab Sample ID: HLCS 480-739740/22
Matrix: Water
Analysis Batch: 739740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.400	0.407		mg/L		102	90 - 110

Lab Sample ID: LCS 480-739740/48
Matrix: Water
Analysis Batch: 739740

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	0.250	0.256		mg/L		102	90 - 110

Lab Sample ID: 480-227535-1 MS
Matrix: Ground Water
Analysis Batch: 739740

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Cyanide, Total	ND	F1	0.100	0.0700	F1	mg/L		70	90 - 110

Lab Sample ID: 480-227535-1 MSD
Matrix: Ground Water
Analysis Batch: 739740

Client Sample ID: MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	ND	F1	0.100	0.0724	F1	mg/L		72	90 - 110	3	15

QC Association Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

GC/MS VOA

Analysis Batch: 739828

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1	MW-4	Total/NA	Ground Water	8260C	
480-227535-2	Dup-20250225	Total/NA	Ground Water	8260C	
MB 480-739828/8	Method Blank	Total/NA	Water	8260C	
LCS 480-739828/6	Lab Control Sample	Total/NA	Water	8260C	
480-227535-1 MS	MW-4	Total/NA	Ground Water	8260C	
480-227535-1 MSD	MW-4	Total/NA	Ground Water	8260C	

GC/MS Semi VOA

Prep Batch: 739876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1	MW-4	Total/NA	Ground Water	3510C	
480-227535-2	Dup-20250225	Total/NA	Ground Water	3510C	
MB 480-739876/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-739876/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-227535-1 MS	MW-4	Total/NA	Ground Water	3510C	
480-227535-1 MSD	MW-4	Total/NA	Ground Water	3510C	

Analysis Batch: 739945

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1	MW-4	Total/NA	Ground Water	8270D	739876
480-227535-2	Dup-20250225	Total/NA	Ground Water	8270D	739876
MB 480-739876/1-A	Method Blank	Total/NA	Water	8270D	739876
LCS 480-739876/2-A	Lab Control Sample	Total/NA	Water	8270D	739876
480-227535-1 MS	MW-4	Total/NA	Ground Water	8270D	739876
480-227535-1 MSD	MW-4	Total/NA	Ground Water	8270D	739876

Metals

Prep Batch: 739713

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1	MW-4	Total/NA	Ground Water	3005A	
480-227535-2	Dup-20250225	Total/NA	Ground Water	3005A	
MB 480-739713/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-739713/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-227535-1 MS	MW-4	Total/NA	Ground Water	3005A	
480-227535-1 MSD	MW-4	Total/NA	Ground Water	3005A	

Analysis Batch: 739825

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1	MW-4	Total/NA	Ground Water	6010D	739713
480-227535-2	Dup-20250225	Total/NA	Ground Water	6010D	739713
MB 480-739713/1-A	Method Blank	Total/NA	Water	6010D	739713
LCS 480-739713/2-A	Lab Control Sample	Total/NA	Water	6010D	739713
480-227535-1 MS	MW-4	Total/NA	Ground Water	6010D	739713
480-227535-1 MSD	MW-4	Total/NA	Ground Water	6010D	739713

Analysis Batch: 740058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1	MW-4	Total/NA	Ground Water	6010D	739713
480-227535-2	Dup-20250225	Total/NA	Ground Water	6010D	739713
480-227535-1 MS	MW-4	Total/NA	Ground Water	6010D	739713

Metals (Continued)

Analysis Batch: 740058 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1 MSD	MW-4	Total/NA	Ground Water	6010D	739713

General Chemistry

Analysis Batch: 739740

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227535-1	MW-4	Total/NA	Ground Water	9012B	
480-227535-2	Dup-20250225	Total/NA	Ground Water	9012B	
MB 480-739740/47	Method Blank	Total/NA	Water	9012B	
HLCS 480-739740/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-739740/48	Lab Control Sample	Total/NA	Water	9012B	
480-227535-1 MS	MW-4	Total/NA	Ground Water	9012B	
480-227535-1 MSD	MW-4	Total/NA	Ground Water	9012B	

Lab Chronicle

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

Client Sample ID: MW-4

Date Collected: 02/25/25 11:40
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	739828	LCH	EET BUF	02/27/25 22:19
Total/NA	Prep	3510C			739876	LSC	EET BUF	02/28/25 13:52
Total/NA	Analysis	8270D		1	739945	AF	EET BUF	03/03/25 16:11
Total/NA	Prep	3005A			739713	ET	EET BUF	02/27/25 09:16
Total/NA	Analysis	6010D		1	739825	BMB	EET BUF	02/27/25 15:04
Total/NA	Prep	3005A			739713	ET	EET BUF	02/27/25 09:16
Total/NA	Analysis	6010D		1	740058	ESB	EET BUF	03/04/25 18:17
Total/NA	Analysis	9012B		1	739740	GW	EET BUF	02/26/25 20:36

Client Sample ID: Dup-20250225

Date Collected: 02/25/25 00:00
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-2

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	739828	LCH	EET BUF	02/27/25 22:41
Total/NA	Prep	3510C			739876	LSC	EET BUF	02/28/25 13:52
Total/NA	Analysis	8270D		1	739945	AF	EET BUF	03/03/25 17:58
Total/NA	Prep	3005A			739713	ET	EET BUF	02/27/25 09:16
Total/NA	Analysis	6010D		1	739825	BMB	EET BUF	02/27/25 15:13
Total/NA	Prep	3005A			739713	ET	EET BUF	02/27/25 09:16
Total/NA	Analysis	6010D		1	740058	ESB	EET BUF	03/04/25 18:27
Total/NA	Analysis	9012B		1	739740	GW	EET BUF	02/26/25 20:46

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: New York State Electric & Gas
Job ID: 480-227535-1
Project/Site: NYSEG - Clyde

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
6010D	Metals (ICP)	SW846	EET BUF
9012B	Cyanide, Total and/or Amenable	SW846	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-227535-1	MW-4	Ground Water	02/25/25 11:40	02/26/25 11:20
480-227535-2	Dup-20250225	Ground Water	02/25/25 00:00	02/26/25 11:20

Chain of Custody Record

eurofins Environment Testing

Phone: 716-691-2600 Fax: 716-691-7991

Client Information	Sampler: Kathryn Fleming & Bailey Kudla-Williams	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-201975-41503.1
Client Contact: Mr. John Ruspantini	Phone: 619-727-1921	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: NY	Page: Page 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 #: Purchase Order Requested			
Email: jjruspantini@nyseg.com	WO #: NYSEG-Clyde/John Ruspantini			
Project Name: NYSEG - Clyde/ Event Desc: Groundwater	Project #: 48028408			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
B - NaOH
N - None
D - HNO3
A - HCL

480-227535 Chain of Custody

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)	9012B_NP - Cyanide, Total	8270D - PAH Semivolatiles	6010D, 7470A	8260C - BTEX	Total Number	Special Instructions/Note:
			Preservation Code:				B	N	D	A		
MW-4	2/25/25	1140	G	Water	N	Y	X	X	X	X	21	
DUP - 20250225	2/25/25	—	G	Water	N	N	X	X	X	X	7	
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water							2	
TRIP BLANK		—	—	Water						X		
				Water								

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)

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	B. Kudla-Williams	2/25/2025 1730	Arcadis		2/26/25 0900	ELT
2		2/26/25 11:20	EGL		2-26-25 1120	TAB
3		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: 2.6 ICE IR# 5C

Ver: 10/10/2024

3/5/2025

Login Sample Receipt Checklist

Client: New York State Electric & Gas

Job Number: 480-227535-1

Login Number: 227535
List Number: 1
Creator: Yeager, Brian A

List Source: Eurofins 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	2.6 ICE IR# SC
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	Arcadis
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. John J Ruspantini
New York State Electric & Gas
18 Link Drive
Binghamton, New York 13902

Generated 3/20/2025 12:44:06 PM

JOB DESCRIPTION

NYSEG - Clyde
Groundwater

JOB NUMBER

480-227898-1

Eurofins Buffalo
10 Hazelwood Drive
Amherst NY 14228-2298

See page two for job notes and contact information.

Eurofins Buffalo

Job Notes

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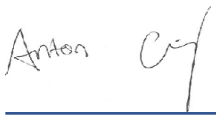

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Table of Contents

Definitions/Glossary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

Qualifiers

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Job ID: 480-227898-1 Eurofins Buffalo

Job Narrative
480-227898-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 3/15/2025 9:00 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 time was 2.6°C.

GC/MS VOA
Method 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 480-741081 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The following associated sample is impacted: MW-12 MSD (480-227898-1[MSD])

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

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

Metals
Method 6010D: The linear range check (LRC) standard recovery associated with 480-741101 is outside the acceptance criteria for the following analytes: total Silver, Beryllium, Cobalt, Copper, Lead, Selenium, and Thallium. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported.

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

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

Detection Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

Client Sample ID: MW-12 — Lab Sample ID: 480-227898-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.10		0.0020	0.00070	mg/L	1		6010D	Total/NA
Calcium	142		0.50	0.10	mg/L	1		6010D	Total/NA
Copper	0.0017	J ^5+	0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	0.44		0.050	0.019	mg/L	1		6010D	Total/NA
Magnesium	22.3		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	0.16		0.0030	0.00040	mg/L	1		6010D	Total/NA
Nickel	0.0014	J B	0.010	0.0013	mg/L	1		6010D	Total/NA
Potassium	4.7		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	70.2		1.0	0.32	mg/L	1		6010D	Total/NA
Zinc	0.22		0.010	0.0015	mg/L	1		6010D	Total/NA
Cyanide, Total	0.0091	J B F1	0.010	0.0041	mg/L	1		9012B	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 480-227898-2

No Detections.

Client Sample ID: DUP-20250314 — Lab Sample ID: 480-227898-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.10		0.0020	0.00070	mg/L	1		6010D	Total/NA
Calcium	140		0.50	0.10	mg/L	1		6010D	Total/NA
Copper	0.0020	J ^5+	0.010	0.0016	mg/L	1		6010D	Total/NA
Iron	0.46		0.050	0.019	mg/L	1		6010D	Total/NA
Magnesium	22.0		0.20	0.043	mg/L	1		6010D	Total/NA
Manganese	0.16		0.0030	0.00040	mg/L	1		6010D	Total/NA
Potassium	4.7		0.50	0.10	mg/L	1		6010D	Total/NA
Sodium	70.7		1.0	0.32	mg/L	1		6010D	Total/NA
Zinc	0.22		0.010	0.0015	mg/L	1		6010D	Total/NA
Cyanide, Total	0.0061	J B	0.010	0.0041	mg/L	1		9012B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-12

Date Collected: 03/14/25 11:35
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-1

Matrix: Ground Water

Method: SW846 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			03/19/25 01:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/19/25 01:56	1
Toluene	ND		1.0	0.51	ug/L			03/19/25 01:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/19/25 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*03/19/25 01:56*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*03/19/25 01:56*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*03/19/25 01:56*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*03/19/25 01:56*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		03/17/25 13:27	03/18/25 16:19	1
Acenaphthylene	ND		5.0	0.38	ug/L		03/17/25 13:27	03/18/25 16:19	1
Anthracene	ND		5.0	0.28	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		03/17/25 13:27	03/18/25 16:19	1
Chrysene	ND		5.0	0.33	ug/L		03/17/25 13:27	03/18/25 16:19	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		03/17/25 13:27	03/18/25 16:19	1
Fluoranthene	ND		5.0	0.40	ug/L		03/17/25 13:27	03/18/25 16:19	1
Fluorene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:19	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:19	1
Naphthalene	ND		5.0	0.76	ug/L		03/17/25 13:27	03/18/25 16:19	1
Phenanthrene	ND		5.0	0.44	ug/L		03/17/25 13:27	03/18/25 16:19	1
Pyrene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*53 - 126*	*03/17/25 13:27*	*03/18/25 16:19*	*1*
Nitrobenzene-d5 (Surr)	*66*		*29 - 129*	*03/17/25 13:27*	*03/18/25 16:19*	*1*
p-Terphenyl-d14 (Surr)	*66*		*33 - 132*	*03/17/25 13:27*	*03/18/25 16:19*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		03/18/25 08:50	03/18/25 14:25	1
Antimony	ND		0.020	0.0068	mg/L		03/18/25 08:50	03/18/25 14:25	1
Arsenic	ND		0.015	0.0056	mg/L		03/18/25 08:50	03/18/25 14:25	1
Barium	**0.10**		0.0020	0.00070	mg/L		03/18/25 08:50	03/18/25 14:25	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		03/18/25 08:50	03/18/25 14:25	1
Cadmium	ND		0.0020	0.00050	mg/L		03/18/25 08:50	03/18/25 14:25	1
Calcium	**142**		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:25	1
Chromium	ND		0.0040	0.0010	mg/L		03/18/25 08:50	03/18/25 14:25	1
Cobalt	ND	^5+	0.0040	0.00063	mg/L		03/18/25 08:50	03/18/25 14:25	1
Copper	**0.0017**	**J ^5+**	0.010	0.0016	mg/L		03/18/25 08:50	03/18/25 14:25	1
Iron	**0.44**		0.050	0.019	mg/L		03/18/25 08:50	03/18/25 14:25	1
Lead	ND	^5+	0.010	0.0030	mg/L		03/18/25 08:50	03/18/25 14:25	1
Magnesium	**22.3**		0.20	0.043	mg/L		03/18/25 08:50	03/18/25 14:25	1

Client Sample ID: MW-12

Date Collected: 03/14/25 11:35
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-1
Matrix: Ground Water

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.16**		0.0030	0.00040	mg/L		03/18/25 08:50	03/18/25 14:25	1
Nickel	**0.0014**	**J B**	0.010	0.0013	mg/L		03/18/25 08:50	03/18/25 14:25	1
Potassium	**4.7**		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:25	1
Selenium	ND	^5+	0.025	0.0087	mg/L		03/18/25 08:50	03/18/25 14:25	1
Silver	ND	^5-	0.0060	0.0017	mg/L		03/18/25 08:50	03/18/25 14:25	1
Sodium	**70.2**		1.0	0.32	mg/L		03/18/25 08:50	03/18/25 14:25	1
Thallium	ND	^5+	0.020	0.010	mg/L		03/18/25 08:50	03/18/25 14:25	1
Vanadium	ND		0.0050	0.0015	mg/L		03/18/25 08:50	03/18/25 14:25	1
Zinc	**0.22**		0.010	0.0015	mg/L		03/18/25 08:50	03/18/25 14:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.0091**	**J B F1**	0.010	0.0041	mg/L			03/18/25 19:34	1

Client Sample ID: TRIP BLANK

Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-2
Matrix: WQ

Method: SW846 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			03/19/25 02:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/19/25 02:20	1
Toluene	ND		1.0	0.51	ug/L			03/19/25 02:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/19/25 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*03/19/25 02:20*	*1*
4-Bromofluorobenzene (Surr)	*118*		*73 - 120*		*03/19/25 02:20*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*03/19/25 02:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/19/25 02:20*	*1*

Client Sample ID: DUP-20250314

Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-3
Matrix: Water

Method: SW846 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			03/19/25 02:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/19/25 02:43	1
Toluene	ND		1.0	0.51	ug/L			03/19/25 02:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/19/25 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*03/19/25 02:43*	*1*
4-Bromofluorobenzene (Surr)	*119*		*73 - 120*		*03/19/25 02:43*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*03/19/25 02:43*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/19/25 02:43*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		03/17/25 13:27	03/18/25 16:46	1

Client Sample ID: DUP-20250314
Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-3
Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		5.0	0.38	ug/L		03/17/25 13:27	03/18/25 16:46	1
Anthracene	ND		5.0	0.28	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		03/17/25 13:27	03/18/25 16:46	1
Chrysene	ND		5.0	0.33	ug/L		03/17/25 13:27	03/18/25 16:46	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		03/17/25 13:27	03/18/25 16:46	1
Fluoranthene	ND		5.0	0.40	ug/L		03/17/25 13:27	03/18/25 16:46	1
Fluorene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:46	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:46	1
Naphthalene	ND		5.0	0.76	ug/L		03/17/25 13:27	03/18/25 16:46	1
Phenanthrene	ND		5.0	0.44	ug/L		03/17/25 13:27	03/18/25 16:46	1
Pyrene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*102*		*53 - 126*	*03/17/25 13:27*	*03/18/25 16:46*	*1*
Nitrobenzene-d5 (Surr)	*87*		*29 - 129*	*03/17/25 13:27*	*03/18/25 16:46*	*1*
p-Terphenyl-d14 (Surr)	*87*		*33 - 132*	*03/17/25 13:27*	*03/18/25 16:46*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		03/18/25 08:50	03/18/25 14:36	1
Antimony	ND		0.020	0.0068	mg/L		03/18/25 08:50	03/18/25 14:36	1
Arsenic	ND		0.015	0.0056	mg/L		03/18/25 08:50	03/18/25 14:36	1
Barium	**0.10**		0.0020	0.00070	mg/L		03/18/25 08:50	03/18/25 14:36	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		03/18/25 08:50	03/18/25 14:36	1
Cadmium	ND		0.0020	0.00050	mg/L		03/18/25 08:50	03/18/25 14:36	1
Calcium	**140**		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:36	1
Chromium	ND		0.0040	0.0010	mg/L		03/18/25 08:50	03/18/25 14:36	1
Cobalt	ND	^5+	0.0040	0.00063	mg/L		03/18/25 08:50	03/18/25 14:36	1
Copper	**0.0020**	**J ^5+**	0.010	0.0016	mg/L		03/18/25 08:50	03/18/25 14:36	1
Iron	**0.46**		0.050	0.019	mg/L		03/18/25 08:50	03/18/25 14:36	1
Lead	ND	^5+	0.010	0.0030	mg/L		03/18/25 08:50	03/18/25 14:36	1
Magnesium	**22.0**		0.20	0.043	mg/L		03/18/25 08:50	03/18/25 14:36	1
Manganese	**0.16**		0.0030	0.00040	mg/L		03/18/25 08:50	03/18/25 14:36	1
Nickel	ND		0.010	0.0013	mg/L		03/18/25 08:50	03/18/25 14:36	1
Potassium	**4.7**		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:36	1
Selenium	ND	^5+	0.025	0.0087	mg/L		03/18/25 08:50	03/18/25 14:36	1
Silver	ND	^5-	0.0060	0.0017	mg/L		03/18/25 08:50	03/18/25 14:36	1
Sodium	**70.7**		1.0	0.32	mg/L		03/18/25 08:50	03/18/25 14:36	1
Thallium	ND	^5+	0.020	0.010	mg/L		03/18/25 08:50	03/18/25 14:36	1
Vanadium	ND		0.0050	0.0015	mg/L		03/18/25 08:50	03/18/25 14:36	1
Zinc	**0.22**		0.010	0.0015	mg/L		03/18/25 08:50	03/18/25 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.0061**	**J B**	0.010	0.0041	mg/L			03/18/25 19:53	1

Surrogate Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

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

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-227898-1	MW-12	94	107	97	89
480-227898-1 MS	MW-12 MS	100	113	108	101
480-227898-1 MSD	MW-12 MSD	103	115	108	103

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-227898-3	DUP-20250314	101	119	108	102
LCS 480-741081/6	Lab Control Sample	100	116	109	103
MB 480-741081/8	Method Blank	96	104	97	90

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: WQ — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(75-123)	(80-120)
480-227898-2	TRIP BLANK	103	118	110	100

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)

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

Matrix: Ground Water — **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(53-126)	(29-129)	(33-132)
480-227898-1	MW-12	76	66	66
480-227898-1 MS	MW-12 MS	101	97	83
480-227898-1 MSD	MW-12 MSD	99	94	80

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)

Surrogate Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

TPHd14 = p-Terphenyl-d14 (Surr)

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

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		FBP	NBZ	TPHd14
Lab Sample ID	Client Sample ID	(53-126)	(29-129)	(33-132)
480-227898-3	DUP-20250314	102	87	87
LCS 480-740955/2-A	Lab Control Sample	98	94	100
MB 480-740955/1-A	Method Blank	84	76	94

Surrogate Legend

FBP = 2-Fluorobiphenyl (Surr)
NBZ = Nitrobenzene-d5 (Surr)
TPHd14 = p-Terphenyl-d14 (Surr)

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

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

Lab Sample ID: MB 480-741081/8
Matrix: Water
Analysis Batch: 741081

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND		1.0	0.41	ug/L			03/19/25 01:33	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/19/25 01:33	1
Toluene	ND		1.0	0.51	ug/L			03/19/25 01:33	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/19/25 01:33	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*77 - 120*		*03/19/25 01:33*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*03/19/25 01:33*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*03/19/25 01:33*	*1*
Toluene-d8 (Surr)	*90*		*80 - 120*		*03/19/25 01:33*	*1*

Lab Sample ID: LCS 480-741081/6
Matrix: Water
Analysis Batch: 741081

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			25.0	25.3		ug/L		101	71 - 124		
Ethylbenzene			25.0	26.1		ug/L		105	77 - 123		
Toluene			25.0	24.8		ug/L		99	80 - 122		
Xylenes, Total			50.0	52.2		ug/L		104	76 - 122		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*116*		*73 - 120*
Dibromofluoromethane (Surr)	*109*		*75 - 123*
Toluene-d8 (Surr)	*103*		*80 - 120*

Lab Sample ID: 480-227898-1 MS
Matrix: Ground Water
Analysis Batch: 741081

Client Sample ID: MW-12 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	ND		25.0	28.9		ug/L		116	71 - 124		
Ethylbenzene	ND		25.0	29.9		ug/L		120	77 - 123		
Toluene	ND		25.0	28.3		ug/L		113	80 - 122		
Xylenes, Total	ND		50.0	60.3		ug/L		121	76 - 122		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*77 - 120*
4-Bromofluorobenzene (Surr)	*113*		*73 - 120*
Dibromofluoromethane (Surr)	*108*		*75 - 123*
Toluene-d8 (Surr)	*101*		*80 - 120*

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

Lab Sample ID: 480-227898-1 MSD
Matrix: Ground Water
Analysis Batch: 741081

Client Sample ID: MW-12 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	ND		25.0	29.6		ug/L		118	71 - 124	2	13
Ethylbenzene	ND		25.0	30.6		ug/L		122	77 - 123	2	15
Toluene	ND		25.0	28.6		ug/L		114	80 - 122	1	15
Xylenes, Total	ND		50.0	61.0		ug/L		122	76 - 122	1	16

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*
4-Bromofluorobenzene (Surr)	*115*		*73 - 120*
Dibromofluoromethane (Surr)	*108*		*75 - 123*
Toluene-d8 (Surr)	*103*		*80 - 120*

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

Lab Sample ID: MB 480-740955/1-A
Matrix: Water
Analysis Batch: 741010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 740955

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		03/17/25 13:27	03/18/25 14:32	1
Acenaphthylene	ND		5.0	0.38	ug/L		03/17/25 13:27	03/18/25 14:32	1
Anthracene	ND		5.0	0.28	ug/L		03/17/25 13:27	03/18/25 14:32	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 14:32	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 14:32	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 14:32	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		03/17/25 13:27	03/18/25 14:32	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		03/17/25 13:27	03/18/25 14:32	1
Chrysene	ND		5.0	0.33	ug/L		03/17/25 13:27	03/18/25 14:32	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		03/17/25 13:27	03/18/25 14:32	1
Fluoranthene	ND		5.0	0.40	ug/L		03/17/25 13:27	03/18/25 14:32	1
Fluorene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 14:32	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 14:32	1
Naphthalene	ND		5.0	0.76	ug/L		03/17/25 13:27	03/18/25 14:32	1
Phenanthrene	ND		5.0	0.44	ug/L		03/17/25 13:27	03/18/25 14:32	1
Pyrene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 14:32	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*84*		*53 - 126*	*03/17/25 13:27*	*03/18/25 14:32*	*1*
Nitrobenzene-d5 (Surr)	*76*		*29 - 129*	*03/17/25 13:27*	*03/18/25 14:32*	*1*
p-Terphenyl-d14 (Surr)	*94*		*33 - 132*	*03/17/25 13:27*	*03/18/25 14:32*	*1*

Lab Sample ID: LCS 480-740955/2-A
Matrix: Water
Analysis Batch: 741010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 740955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	32.0	31.4		ug/L		98	60 - 120
Acenaphthylene	32.0	31.9		ug/L		100	63 - 120
Anthracene	32.0	33.0		ug/L		103	67 - 120

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

Lab Sample ID: LCS 480-740955/2-A
Matrix: Water
Analysis Batch: 741010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 740955

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzo[a]anthracene	32.0	33.9		ug/L		106	70 - 121
Benzo[a]pyrene	32.0	34.5		ug/L		108	60 - 123
Benzo[b]fluoranthene	32.0	33.5		ug/L		105	66 - 126
Benzo[g,h,i]perylene	32.0	33.1		ug/L		103	66 - 150
Benzo[k]fluoranthene	32.0	36.5		ug/L		114	65 - 124
Chrysene	32.0	32.9		ug/L		103	69 - 120
Dibenz(a,h)anthracene	32.0	34.2		ug/L		107	65 - 135
Fluoranthene	32.0	33.5		ug/L		105	69 - 126
Fluorene	32.0	32.7		ug/L		102	66 - 120
Indeno[1,2,3-cd]pyrene	32.0	34.9		ug/L		109	69 - 146
Naphthalene	32.0	28.4		ug/L		89	57 - 120
Phenanthrene	32.0	32.7		ug/L		102	68 - 120
Pyrene	32.0	34.0		ug/L		106	70 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*98*		*53 - 126*
Nitrobenzene-d5 (Surr)	*94*		*29 - 129*
p-Terphenyl-d14 (Surr)	*100*		*33 - 132*

Lab Sample ID: 480-227898-1 MS
Matrix: Ground Water
Analysis Batch: 741010

Client Sample ID: MW-12 MS
Prep Type: Total/NA
Prep Batch: 740955

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acenaphthene	ND		32.0	33.9		ug/L		106	48 - 120
Acenaphthylene	ND		32.0	34.0		ug/L		106	63 - 120
Anthracene	ND		32.0	35.1		ug/L		110	65 - 122
Benzo[a]anthracene	ND		32.0	32.3		ug/L		101	43 - 124
Benzo[a]pyrene	ND		32.0	31.1		ug/L		97	23 - 125
Benzo[b]fluoranthene	ND		32.0	31.0		ug/L		97	27 - 127
Benzo[g,h,i]perylene	ND		32.0	30.0		ug/L		94	16 - 147
Benzo[k]fluoranthene	ND		32.0	32.2		ug/L		101	20 - 124
Chrysene	ND		32.0	30.8		ug/L		96	44 - 122
Dibenz(a,h)anthracene	ND		32.0	30.1		ug/L		94	16 - 139
Fluoranthene	ND		32.0	34.5		ug/L		108	63 - 129
Fluorene	ND		32.0	34.7		ug/L		109	62 - 120
Indeno[1,2,3-cd]pyrene	ND		32.0	30.9		ug/L		97	16 - 140
Naphthalene	ND		32.0	30.0		ug/L		94	45 - 120
Phenanthrene	ND		32.0	35.2		ug/L		110	65 - 122
Pyrene	ND		32.0	34.2		ug/L		107	58 - 128

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*101*		*53 - 126*
Nitrobenzene-d5 (Surr)	*97*		*29 - 129*
p-Terphenyl-d14 (Surr)	*83*		*33 - 132*

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

Lab Sample ID: 480-227898-1 MSD
Matrix: Ground Water
Analysis Batch: 741010

Client Sample ID: MW-12 MSD
Prep Type: Total/NA
Prep Batch: 740955

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Acenaphthene	ND		32.0	33.8		ug/L		106	48 - 120	0	24
Acenaphthylene	ND		32.0	32.9		ug/L		103	63 - 120	3	18
Anthracene	ND		32.0	34.4		ug/L		107	65 - 122	2	15
Benzo[a]anthracene	ND		32.0	32.1		ug/L		100	43 - 124	1	15
Benzo[a]pyrene	ND		32.0	32.0		ug/L		100	23 - 125	3	15
Benzo[b]fluoranthene	ND		32.0	31.3		ug/L		98	27 - 127	1	15
Benzo[g,h,i]perylene	ND		32.0	30.2		ug/L		94	16 - 147	1	15
Benzo[k]fluoranthene	ND		32.0	33.2		ug/L		104	20 - 124	3	22
Chrysene	ND		32.0	31.3		ug/L		98	44 - 122	2	15
Dibenz(a,h)anthracene	ND		32.0	31.1		ug/L		97	16 - 139	3	15
Fluoranthene	ND		32.0	33.9		ug/L		106	63 - 129	2	15
Fluorene	ND		32.0	34.0		ug/L		106	62 - 120	2	15
Indeno[1,2,3-cd]pyrene	ND		32.0	31.5		ug/L		98	16 - 140	2	15
Naphthalene	ND		32.0	29.3		ug/L		92	45 - 120	2	29
Phenanthrene	ND		32.0	34.1		ug/L		107	65 - 122	3	15
Pyrene	ND		32.0	34.0		ug/L		106	58 - 128	1	19

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
2-Fluorobiphenyl (Surr)	*99*		*53 - 126*
Nitrobenzene-d5 (Surr)	*94*		*29 - 129*
p-Terphenyl-d14 (Surr)	*80*		*33 - 132*

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 480-740970/1-A
Matrix: Water
Analysis Batch: 741101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 740970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		03/18/25 08:50	03/18/25 13:53	1
Antimony	ND		0.020	0.0068	mg/L		03/18/25 08:50	03/18/25 13:53	1
Arsenic	ND		0.015	0.0056	mg/L		03/18/25 08:50	03/18/25 13:53	1
Barium	ND		0.0020	0.00070	mg/L		03/18/25 08:50	03/18/25 13:53	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		03/18/25 08:50	03/18/25 13:53	1
Cadmium	ND		0.0020	0.00050	mg/L		03/18/25 08:50	03/18/25 13:53	1
Calcium	ND		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 13:53	1
Chromium	ND		0.0040	0.0010	mg/L		03/18/25 08:50	03/18/25 13:53	1
Cobalt	ND	^5+	0.0040	0.00063	mg/L		03/18/25 08:50	03/18/25 13:53	1
Copper	ND	^5+	0.010	0.0016	mg/L		03/18/25 08:50	03/18/25 13:53	1
Iron	ND		0.050	0.019	mg/L		03/18/25 08:50	03/18/25 13:53	1
Lead	ND	^5+	0.010	0.0030	mg/L		03/18/25 08:50	03/18/25 13:53	1
Magnesium	ND		0.20	0.043	mg/L		03/18/25 08:50	03/18/25 13:53	1
Manganese	ND		0.0030	0.00040	mg/L		03/18/25 08:50	03/18/25 13:53	1
Nickel	0.00328	J	0.010	0.0013	mg/L		03/18/25 08:50	03/18/25 13:53	1
Potassium	ND		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 13:53	1
Selenium	ND	^5+	0.025	0.0087	mg/L		03/18/25 08:50	03/18/25 13:53	1
Silver	ND	^5-	0.0060	0.0017	mg/L		03/18/25 08:50	03/18/25 13:53	1
Sodium	ND		1.0	0.32	mg/L		03/18/25 08:50	03/18/25 13:53	1

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: MB 480-740970/1-A
Matrix: Water
Analysis Batch: 741101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 740970

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND	^5+	0.020	0.010	mg/L		03/18/25 08:50	03/18/25 13:53	1
Vanadium	ND		0.0050	0.0015	mg/L		03/18/25 08:50	03/18/25 13:53	1
Zinc	ND		0.010	0.0015	mg/L		03/18/25 08:50	03/18/25 13:53	1

Lab Sample ID: LCS 480-740970/2-A
Matrix: Water
Analysis Batch: 741101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 740970

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	5.11	4.81		mg/L		94	80 - 120
Antimony	0.500	0.476		mg/L		95	80 - 120
Arsenic	1.00	0.953		mg/L		95	80 - 120
Barium	1.00	0.950		mg/L		95	80 - 120
Beryllium	0.496	0.504	^5-	mg/L		102	80 - 120
Cadmium	0.500	0.500		mg/L		100	80 - 120
Calcium	25.0	24.59		mg/L		98	80 - 120
Chromium	0.500	0.479		mg/L		96	80 - 120
Cobalt	0.500	0.496	^5+	mg/L		99	80 - 120
Copper	0.500	0.467	^5+	mg/L		93	80 - 120
Iron	5.12	5.05		mg/L		99	80 - 120
Lead	0.500	0.476	^5+	mg/L		95	80 - 120
Magnesium	25.0	23.81		mg/L		95	80 - 120
Manganese	0.500	0.478		mg/L		96	80 - 120
Nickel	0.500	0.478		mg/L		96	80 - 120
Potassium	25.0	24.59		mg/L		98	80 - 120
Selenium	1.00	0.962	^5+	mg/L		96	80 - 120
Silver	0.0500	0.0482	^5-	mg/L		96	80 - 120
Sodium	25.0	23.95		mg/L		96	80 - 120
Thallium	1.00	0.991	^5+	mg/L		99	80 - 120
Vanadium	0.500	0.476		mg/L		95	80 - 120
Zinc	0.500	0.526		mg/L		105	80 - 120

Lab Sample ID: 480-227898-1 MS
Matrix: Ground Water
Analysis Batch: 741101

Client Sample ID: MW-12 MS
Prep Type: Total/NA
Prep Batch: 740970

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Aluminum	ND		5.11	5.09		mg/L		100	75 - 125
Antimony	ND		0.500	0.501		mg/L		100	75 - 125
Arsenic	ND		1.00	1.01		mg/L		101	75 - 125
Barium	0.10		1.00	1.10		mg/L		100	75 - 125
Beryllium	ND	^5-	0.496	0.524	^5-	mg/L		106	75 - 125
Cadmium	ND		0.500	0.531		mg/L		106	75 - 125
Calcium	142		25.0	165.7	4	mg/L		94	75 - 125
Chromium	ND		0.500	0.496		mg/L		99	75 - 125
Cobalt	ND	^5+	0.500	0.513	^5+	mg/L		103	75 - 125
Copper	0.0017	J ^5+	0.500	0.517	^5+	mg/L		103	75 - 125
Iron	0.44		5.12	5.68		mg/L		102	75 - 125
Lead	ND	^5+	0.500	0.501	^5+	mg/L		100	75 - 125

Method: 6010D - Metals (ICP) (Continued)

Lab Sample ID: 480-227898-1 MS
Matrix: Ground Water
Analysis Batch: 741101

Client Sample ID: MW-12 MS
Prep Type: Total/NA
Prep Batch: 740970

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Magnesium	22.3		25.0	46.57		mg/L		97	75 - 125
Manganese	0.16		0.500	0.648		mg/L		98	75 - 125
Nickel	0.0014	J B	0.500	0.489		mg/L		97	75 - 125
Potassium	4.7		25.0	30.14		mg/L		102	75 - 125
Selenium	ND	^5+	1.00	1.04	^5+	mg/L		104	75 - 125
Silver	ND	^5-	0.0500	0.0522	^5-	mg/L		104	75 - 125
Sodium	70.2		25.0	96.41		mg/L		105	75 - 125
Thallium	ND	^5+	1.00	1.07	^5+	mg/L		107	75 - 125
Vanadium	ND		0.500	0.496		mg/L		99	75 - 125
Zinc	0.22		0.500	0.759		mg/L		108	75 - 125

Lab Sample ID: 480-227898-1 MSD
Matrix: Ground Water
Analysis Batch: 741101

Client Sample ID: MW-12 MSD
Prep Type: Total/NA
Prep Batch: 740970

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Aluminum	ND		5.11	4.99		mg/L		98	75 - 125	2	20
Antimony	ND		0.500	0.497		mg/L		99	75 - 125	1	20
Arsenic	ND		1.00	0.990		mg/L		99	75 - 125	2	20
Barium	0.10		1.00	1.09		mg/L		99	75 - 125	1	20
Beryllium	ND	^5-	0.496	0.514	^5-	mg/L		104	75 - 125	2	20
Cadmium	ND		0.500	0.516		mg/L		103	75 - 125	3	20
Calcium	142		25.0	162.8	4	mg/L		82	75 - 125	2	20
Chromium	ND		0.500	0.486		mg/L		97	75 - 125	2	20
Cobalt	ND	^5+	0.500	0.504	^5+	mg/L		101	75 - 125	2	20
Copper	0.0017	J ^5+	0.500	0.505	^5+	mg/L		101	75 - 125	2	20
Iron	0.44		5.12	5.56		mg/L		100	75 - 125	2	20
Lead	ND	^5+	0.500	0.496	^5+	mg/L		99	75 - 125	1	20
Magnesium	22.3		25.0	45.61		mg/L		93	75 - 125	2	20
Manganese	0.16		0.500	0.636		mg/L		96	75 - 125	2	20
Nickel	0.0014	J B	0.500	0.481		mg/L		96	75 - 125	2	20
Potassium	4.7		25.0	29.53		mg/L		99	75 - 125	2	20
Selenium	ND	^5+	1.00	1.01	^5+	mg/L		101	75 - 125	2	20
Silver	ND	^5-	0.0500	0.0505	^5-	mg/L		101	75 - 125	3	20
Sodium	70.2		25.0	94.71		mg/L		98	75 - 125	2	20
Thallium	ND	^5+	1.00	1.05	^5+	mg/L		105	75 - 125	2	20
Vanadium	ND		0.500	0.487		mg/L		97	75 - 125	2	20
Zinc	0.22		0.500	0.712		mg/L		99	75 - 125	6	20

Method: 9012B - Cyanide, Total and/or Amenable

Lab Sample ID: MB 480-741113/21
Matrix: Water
Analysis Batch: 741113

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	0.00560	J	0.010	0.0041	mg/L			03/18/25 18:53	1

Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: HLCS 480-741113/22
Matrix: Water
Analysis Batch: 741113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	HLCS Result	HLCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.400	0.400		mg/L		100	90 - 110		

Lab Sample ID: LCS 480-741113/23
Matrix: Water
Analysis Batch: 741113

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total			0.250	0.241		mg/L		96	90 - 110		

Lab Sample ID: 480-227898-1 MS
Matrix: Ground Water
Analysis Batch: 741113

Client Sample ID: MW-12 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Cyanide, Total	0.0091	J B F1	0.100	0.0984	F1	mg/L		89	90 - 110		

Lab Sample ID: 480-227898-1 MSD
Matrix: Ground Water
Analysis Batch: 741113

Client Sample ID: MW-12 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Cyanide, Total	0.0091	J B F1	0.100	0.0992		mg/L		90	90 - 110	1	15

QC Association Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

GC/MS VOA

Analysis Batch: 741081

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227898-1	MW-12	Total/NA	Ground Water	8260C	
480-227898-2	TRIP BLANK	Total/NA	WQ	8260C	
480-227898-3	DUP-20250314	Total/NA	Water	8260C	
MB 480-741081/8	Method Blank	Total/NA	Water	8260C	
LCS 480-741081/6	Lab Control Sample	Total/NA	Water	8260C	
480-227898-1 MS	MW-12 MS	Total/NA	Ground Water	8260C	
480-227898-1 MSD	MW-12 MSD	Total/NA	Ground Water	8260C	

GC/MS Semi VOA

Prep Batch: 740955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227898-1	MW-12	Total/NA	Ground Water	3510C	
480-227898-3	DUP-20250314	Total/NA	Water	3510C	
MB 480-740955/1-A	Method Blank	Total/NA	Water	3510C	
LCS 480-740955/2-A	Lab Control Sample	Total/NA	Water	3510C	
480-227898-1 MS	MW-12 MS	Total/NA	Ground Water	3510C	
480-227898-1 MSD	MW-12 MSD	Total/NA	Ground Water	3510C	

Analysis Batch: 741010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227898-1	MW-12	Total/NA	Ground Water	8270D	740955
480-227898-3	DUP-20250314	Total/NA	Water	8270D	740955
MB 480-740955/1-A	Method Blank	Total/NA	Water	8270D	740955
LCS 480-740955/2-A	Lab Control Sample	Total/NA	Water	8270D	740955
480-227898-1 MS	MW-12 MS	Total/NA	Ground Water	8270D	740955
480-227898-1 MSD	MW-12 MSD	Total/NA	Ground Water	8270D	740955

Metals

Prep Batch: 740970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227898-1	MW-12	Total/NA	Ground Water	3005A	
480-227898-3	DUP-20250314	Total/NA	Water	3005A	
MB 480-740970/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-740970/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-227898-1 MS	MW-12 MS	Total/NA	Ground Water	3005A	
480-227898-1 MSD	MW-12 MSD	Total/NA	Ground Water	3005A	

Analysis Batch: 741101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227898-1	MW-12	Total/NA	Ground Water	6010D	740970
480-227898-3	DUP-20250314	Total/NA	Water	6010D	740970
MB 480-740970/1-A	Method Blank	Total/NA	Water	6010D	740970
LCS 480-740970/2-A	Lab Control Sample	Total/NA	Water	6010D	740970
480-227898-1 MS	MW-12 MS	Total/NA	Ground Water	6010D	740970
480-227898-1 MSD	MW-12 MSD	Total/NA	Ground Water	6010D	740970

General Chemistry

Analysis Batch: 741113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-227898-1	MW-12	Total/NA	Ground Water	9012B	
480-227898-3	DUP-20250314	Total/NA	Water	9012B	
MB 480-741113/21	Method Blank	Total/NA	Water	9012B	
HLCS 480-741113/22	Lab Control Sample	Total/NA	Water	9012B	
LCS 480-741113/23	Lab Control Sample	Total/NA	Water	9012B	
480-227898-1 MS	MW-12 MS	Total/NA	Ground Water	9012B	
480-227898-1 MSD	MW-12 MSD	Total/NA	Ground Water	9012B	

Lab Chronicle

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

Client Sample ID: MW-12
Date Collected: 03/14/25 11:35
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	741081	ERS	EET BUF	03/19/25 01:56
Total/NA	Prep	3510C			740955	LSC	EET BUF	03/17/25 13:27
Total/NA	Analysis	8270D		1	741010	JMM	EET BUF	03/18/25 16:19
Total/NA	Prep	3005A			740970	EMO	EET BUF	03/18/25 08:50
Total/NA	Analysis	6010D		1	741101	BMB	EET BUF	03/18/25 14:25
Total/NA	Analysis	9012B		1	741113	GW	EET BUF	03/18/25 19:34

Client Sample ID: TRIP BLANK
Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-2
Matrix: WQ

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	741081	ERS	EET BUF	03/19/25 02:20

Client Sample ID: DUP-20250314
Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260C		1	741081	ERS	EET BUF	03/19/25 02:43
Total/NA	Prep	3510C			740955	LSC	EET BUF	03/17/25 13:27
Total/NA	Analysis	8270D		1	741010	JMM	EET BUF	03/18/25 16:46
Total/NA	Prep	3005A			740970	EMO	EET BUF	03/18/25 08:50
Total/NA	Analysis	6010D		1	741101	BMB	EET BUF	03/18/25 14:36
Total/NA	Analysis	9012B		1	741113	GW	EET BUF	03/18/25 19:53

Laboratory References:
EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: New York State Electric & Gas
Job ID: 480-227898-1
Project/Site: NYSEG - Clyde

Laboratory: Eurofins Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	03-31-25

Method Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	EET BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	EET BUF
6010D	Metals (ICP)	SW846	EET BUF
9012B	Cyanide, Total and/or Amenable	SW846	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	EET BUF
5030C	Purge and Trap	SW846	EET BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET BUF = Eurofins Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-227898-1	MW-12	Ground Water	03/14/25 11:35	03/15/25 09:00
480-227898-2	TRIP BLANK	WQ	03/14/25 00:00	03/15/25 09:00
480-227898-3	DUP-20250314	Water	03/14/25 00:00	03/15/25 09:00

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Robbie Sullivan MRS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-203695-41503.1
Client Contact: Mr. John Ruspantini	Phone: 585 590 2585	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: NY	Page: Page 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 #: Purchase Order Requested			
Email: jjruspantini@nyseg.com	WO #: NYSEG-Clyde/John Ruspantini			
Project Name: NYSEG - Clyde/ Event Desc: Groundwater	Project #: 48028408			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
B - NaOH
N - None
D - HNO3

480-227898 Chain of Custody

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)	9012B_NP - Cyanide, Total	8270D - PAH Semivolatiles	6010D, 7470A	8260C - BTEX	Total Number of cont	Special Instructions/Note:
			Preservation Code:				B	N	D	A		
[redacted] MW12	3/14/25	1135	G	Water	N	Y	X	X	X	X	21	
[redacted] DUP-20250314	3/14/25	—	G	Water	N	N	X	X	X	X	4	
TRIP BLANK	2/11/25	—	—	Water	N	N				X	2	

MRS

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)

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Robbie Sullivan	3/14/25 1700	ARCADIS		3/14/25 1700	EET
2		3/14/25 1710	EET			
3					3/15/25 900	FAT6

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		2.6 ICE IR #52

Ver: 10/10/2024

Login Sample Receipt Checklist

Client: New York State Electric & Gas

Job Number: 480-227898-1

Login Number: 227898
List Number: 1
Creator: Stopa, Erik S

List Source: Eurofins 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	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Attachment 3

Data Usability Summary Reports

NYSEG – Clyde
Groundwater

Data Usability Summary Report

Clyde, New York

Volatile Organic Compound (VOC), Semi-volatile Organic Compound (SVOC), Metals and Cyanide Analyses

SDG # 480-227535-1

Analyses Performed By:
Eurofins Buffalo
Amherst, New York

Report # 58267R
Review Level: Tier III
Project: 30270811.2

Summary

This Data Usability Summary Report (DUSR) summarizes the review of Sample Delivery Group (SDG) # 480-227535-1 for samples collected in association with the NYSEG Clyde, New York site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	Metals	CYANIDE
MW-4	480-227535-1	Water	02/25/2025		X	X	X	X
Dup-20250225	480-227535-2	Water	02/25/2025	MW-4	X	X	X	X

Notes:

VOC = Volatile Organic Compounds

SVOC = Semi-volatile Organic Compounds

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA = quality assurance

Organic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260C and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999), as appropriate and applicable Region II SOPs. USEPA NFGs and Region II SOPs were followed for qualification purposes.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
  - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
  - UB Compound is considered non-detect at the listed value due to associated blank contamination.
  - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
  - R The sample results are rejected.

The "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Volatile Organic Compounds (VOCs) Analyses

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the table below.

Method	Matrix	Holding Time	Preservation
SW-846 8260C	Water	14 days from collection to analysis (preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u. with hydrochloric acid.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits

6. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on sample MW-4. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the

field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compounds	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD
MW-4 / Dup-20250225	All compounds	U	U	AC

Note:

U Non detected
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for VOCs

VOCs: SW-846 8260C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks/Field Blanks	X				X
C. Trip blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Initial calibration %Ds		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	

VOCs: SW-846 8260C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:
%RSD = Relative standard deviation
%R = Percent recovery
RPD = Relative percent difference
%D = Percent difference

Semi-volatile Organic Compounds (SVOCs) Analyses

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the table below.

Method	Matrix	Holding Time	Preservation
SW-846 8270D	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criterion.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Caprolactam was detected in the associated equipment blank; however, the associated sample results were non detected. No other qualification of the sample results was required.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the continuing calibrations were within the specified control limits.
Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

5. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on samples where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on sample MW-4. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

7. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The LCS analysis exhibited recoveries within the control limits.

8. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compounds	Sample Result (ug/L)	Duplicate Result (ug/Kg)	RPD
MW-4/ Dup-20250225	Acenaphthene	0.54 J	0.51 J	AC
	Fluoranthene	0.90 J	0.87 J	AC
	Fluorene	0.40 J	0.38 J	AC
	Pyrene	1.3 J	1.3 J	AC

Note:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

9. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

10. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for SVOCs

SVOCs: SW-846 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks/Field blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Initial calibration %Ds		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

SVOCs: SW-846 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency USEPA Methods 6010D and 9012B. Data were reviewed in accordance with USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA 542-R-20-006, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA 540-R-04-004, October 2004), as appropriate.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
    - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
    - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
    - E The compound was quantitated above the calibration range.
    - N Spiked sample recovery is not within control limits.
    - * Duplicate analysis is not within control limits.
- Validation Qualifiers
    - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
    - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
    - UB Analyte considered non-detect at the listed value due to associated blank contamination.
    - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Metals Analyses

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D	Water	180 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were detected in the associated method blank; however, the associated sample results were non-detect. No other qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All initial and continuing calibration verification standard recoveries were within the control limit.

3.2 RL Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the reporting limit. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table (if applicable).

All RL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed on sample MW-4. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices and 35% for soil matrix is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one time the RL is applied for water matrices and two times the RL for soil matrix.

The laboratory duplicate analysis was not performed on any of the sample from this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrix is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrix.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analytes	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
MW-4 / Dup-20250225	Barium	0.24	0.24	AC
	Calcium	197	189	4.1%
	Iron	25.3	25.5	0.8%
	Lead	0.0033 J	0.0037 J	AC
	Magnesium	30.9	31.2	1.0%

Sample ID/Duplicate ID	Analytes	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
	Manganese	1.0	1.0	0.0%
	Potassium	6.9	6.9	0.0%
	Sodium	36.8	36.7	0.3%
	Zinc	0.15	0.097	AC

Note:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution analysis was not performed on the samples from this SDG.

8. System Performance and Overall Assessment

The laboratory noted: Method 6010D: The linear range check (LRC) standard recovery associated with 480-739825 is outside the acceptance criteria for the following analytes: total Silver, Beryllium, Chromium, Copper, Iron, Magnesium, Manganese, Sodium, Vanadium, and Zinc. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported. No qualification was required.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for Metals

METALS: SW-846 6010D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES)					
Tier II Validation					
Holding Times/Preservation		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X		X	
B. Method Blanks		X	X		
C. Equipment / Field Blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
ICP Serial Dilution %D	X				X
Reporting Limit Verification		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard Recovery		X		X	
ICP Interference Check		X		X	
ICP-MS Internal Standards	X				X
Transcription/calculations acceptable	Not required for Tier II plus calibration				
Raw Data	X				X
Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference
%D Percent difference

General Chemistry Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Total Cyanide by SW-846 9012B	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of greater than 12 with NaOH.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Total Cyanide was detected in the associated method blank; however, the associated sample results were non-detect. No other qualification of the sample results was required.

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All initial and continuing calibration verification standard recoveries were within the control limit.

4. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed on sample MW-4. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one time the RL is applied for water matrices and two times the RL for soil matrices.

The laboratory duplicate analysis was not performed on samples from this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
MW-4 / Dup-20250225	Cyanide (total)	U	U	AC

Note:
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for General Chemistry

General Chemistry: SW-846 9012B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
Transcription/calculations acceptable		X		X	
Raw Data		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]				Noncompliance
					VOC	SVOC	METALS	CYANIDE	
480-227535-1	02/25/2025	SW846	MW-4	Water	Yes	Yes	Yes	Yes	--
	02/25/2025	SW846	Dup-20250225	Water	Yes	Yes	Yes	Yes	--

Note:

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant, or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

VALIDATION PERFORMED BY: Amrutha M

SIGNATURE: 

DATE: March 17, 2024

PEER REVIEW: Joe Houser

DATE: March 17, 2024

Chain of Custody Corrected Sample Analysis Data Sheets

Chain of Custody Record

eurofins
Environment Testing

Phone: 716-691-2600 Fax: 716-691-7991

Client Information	Sampler: Kathryn Fleming & Bailey Kudlawilliams	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-201975-41503.1
Client Contact: Mr. John Ruspantini	Phone: 619-727-1921	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: NY	Page: Page 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 #: Purchase Order Requested			
Email: jjruspantini@nyseg.com	WO #: NYSEG-Clyde/John Ruspantini			
Project Name: NYSEG - Clyde/ Event Desc: Groundwater	Project #: 48028408			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
B - NaOH
N - None
D - HNO3
A - HCL

480-227535 Chain of Custody

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)	9012B_NP - Cyanide, Total	8270D - PAH Semivolatiles	6010D, 7470A	8260C - BTEX	Total Number of containers	Special Instructions/Note:
			Preservation Code:				B	N	D	A		
MW-4	2/25/25	1140	G	Water	N	Y	X	X	X	X	21	
DUP - 20250225	2/25/25	—	G	Water	N	N	X	X	X	X	7	
				Water								
				Water								
				Water								
				Water								
				Water								
				Water								
				Water							2	
TRIP BLANK	—	—	—	Water						X		
				Water								

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)

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	B. Kudlawilliams	2/25/2025 1730	Arcadis		2/26/25 0900	ELT
2		2/26/25 11:20	EGL		2-26-25 1120	TAB
3		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: 2.6 ICE IR# 5C

Ver: 10/10/2024

3/5/2025

Definitions/Glossary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227535-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample ID: MW-4

Date Collected: 02/25/25 11:40
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-1

Matrix: Ground Water

Method: SW846 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			02/27/25 22:19	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/27/25 22:19	1
Toluene	ND		1.0	0.51	ug/L			02/27/25 22:19	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/27/25 22:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*02/27/25 22:19*	*1*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*		*02/27/25 22:19*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*02/27/25 22:19*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*02/27/25 22:19*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.54**	**J**	5.0	0.41	ug/L		02/28/25 13:52	03/03/25 16:11	1
Acenaphthylene	ND		5.0	0.38	ug/L		02/28/25 13:52	03/03/25 16:11	1
Anthracene	ND		5.0	0.28	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		02/28/25 13:52	03/03/25 16:11	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		02/28/25 13:52	03/03/25 16:11	1
Chrysene	ND		5.0	0.33	ug/L		02/28/25 13:52	03/03/25 16:11	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		02/28/25 13:52	03/03/25 16:11	1
Fluoranthene	**0.90**	**J**	5.0	0.40	ug/L		02/28/25 13:52	03/03/25 16:11	1
Fluorene	**0.40**	**J**	5.0	0.36	ug/L		02/28/25 13:52	03/03/25 16:11	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 16:11	1
Naphthalene	ND		5.0	0.76	ug/L		02/28/25 13:52	03/03/25 16:11	1
Phenanthrene	ND		5.0	0.44	ug/L		02/28/25 13:52	03/03/25 16:11	1
Pyrene	**1.3**	**J**	5.0	0.34	ug/L		02/28/25 13:52	03/03/25 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*86*		*53 - 126*	*02/28/25 13:52*	*03/03/25 16:11*	*1*
Nitrobenzene-d5 (Surr)	*76*		*29 - 129*	*02/28/25 13:52*	*03/03/25 16:11*	*1*
p-Terphenyl-d14 (Surr)	*81*		*33 - 132*	*02/28/25 13:52*	*03/03/25 16:11*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/27/25 09:16	02/27/25 15:04	1
Antimony	ND		0.020	0.0068	mg/L		02/27/25 09:16	02/27/25 15:04	1
Arsenic	ND		0.015	0.0056	mg/L		02/27/25 09:16	02/27/25 15:04	1
Barium	**0.24**		0.0020	0.00070	mg/L		02/27/25 09:16	02/27/25 15:04	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		02/27/25 09:16	02/27/25 15:04	1
Cadmium	ND		0.0020	0.00050	mg/L		02/27/25 09:16	02/27/25 15:04	1
Calcium	**197**		0.50	0.10	mg/L		02/27/25 09:16	03/04/25 18:17	1
Chromium	ND	^5-	0.0040	0.0010	mg/L		02/27/25 09:16	02/27/25 15:04	1
Cobalt	ND		0.0040	0.00063	mg/L		02/27/25 09:16	02/27/25 15:04	1
Copper	ND	^5+	0.010	0.0016	mg/L		02/27/25 09:16	02/27/25 15:04	1
Iron	**25.3**	**^5-**	0.050	0.019	mg/L		02/27/25 09:16	02/27/25 15:04	1
Lead	**0.0033**	**J**	0.010	0.0030	mg/L		02/27/25 09:16	02/27/25 15:04	1
Magnesium	**30.9**	**^5-**	0.20	0.043	mg/L		02/27/25 09:16	02/27/25 15:04	1

Client Sample ID: MW-4

Date Collected: 02/25/25 11:40
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-1

Matrix: Ground Water

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**1.0**	**^5-**	0.0030	0.00040	mg/L		02/27/25 09:16	02/27/25 15:04	1
Nickel	ND		0.010	0.0013	mg/L		02/27/25 09:16	02/27/25 15:04	1
Potassium	**6.9**		0.50	0.10	mg/L		02/27/25 09:16	02/27/25 15:04	1
Selenium	ND		0.025	0.0087	mg/L		02/27/25 09:16	02/27/25 15:04	1
Silver	ND	^5-	0.0060	0.0017	mg/L		02/27/25 09:16	02/27/25 15:04	1
Sodium	**36.8**	**^5-**	1.0	0.32	mg/L		02/27/25 09:16	02/27/25 15:04	1
Thallium	ND		0.020	0.010	mg/L		02/27/25 09:16	02/27/25 15:04	1
Vanadium	ND	^5-	0.0050	0.0015	mg/L		02/27/25 09:16	02/27/25 15:04	1
Zinc	**0.15**	**^5-**	0.010	0.0015	mg/L		02/27/25 09:16	02/27/25 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND	F1	0.010	0.0041	mg/L			02/26/25 20:36	1

Client Sample ID: Dup-20250225

Date Collected: 02/25/25 00:00
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-2

Matrix: Ground Water

Method: SW846 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			02/27/25 22:41	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/27/25 22:41	1
Toluene	ND		1.0	0.51	ug/L			02/27/25 22:41	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/27/25 22:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*02/27/25 22:41*	*1*
4-Bromofluorobenzene (Surr)	*102*		*73 - 120*		*02/27/25 22:41*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*02/27/25 22:41*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*02/27/25 22:41*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**0.51**	**J**	5.0	0.41	ug/L		02/28/25 13:52	03/03/25 17:58	1
Acenaphthylene	ND		5.0	0.38	ug/L		02/28/25 13:52	03/03/25 17:58	1
Anthracene	ND		5.0	0.28	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		02/28/25 13:52	03/03/25 17:58	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		02/28/25 13:52	03/03/25 17:58	1
Chrysene	ND		5.0	0.33	ug/L		02/28/25 13:52	03/03/25 17:58	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		02/28/25 13:52	03/03/25 17:58	1
Fluoranthene	**0.87**	**J**	5.0	0.40	ug/L		02/28/25 13:52	03/03/25 17:58	1
Fluorene	**0.38**	**J**	5.0	0.36	ug/L		02/28/25 13:52	03/03/25 17:58	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		02/28/25 13:52	03/03/25 17:58	1
Naphthalene	ND		5.0	0.76	ug/L		02/28/25 13:52	03/03/25 17:58	1
Phenanthrene	ND		5.0	0.44	ug/L		02/28/25 13:52	03/03/25 17:58	1
Pyrene	**1.3**	**J**	5.0	0.34	ug/L		02/28/25 13:52	03/03/25 17:58	1

Client Sample ID: Dup-20250225

Date Collected: 02/25/25 00:00
Date Received: 02/26/25 11:20

Lab Sample ID: 480-227535-2

Matrix: Ground Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*85*		*53 - 126*	*02/28/25 13:52*	*03/03/25 17:58*	*1*
Nitrobenzene-d5 (Surr)	*75*		*29 - 129*	*02/28/25 13:52*	*03/03/25 17:58*	*1*
p-Terphenyl-d14 (Surr)	*78*		*33 - 132*	*02/28/25 13:52*	*03/03/25 17:58*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		02/27/25 09:16	02/27/25 15:13	1
Antimony	ND		0.020	0.0068	mg/L		02/27/25 09:16	02/27/25 15:13	1
Arsenic	ND		0.015	0.0056	mg/L		02/27/25 09:16	02/27/25 15:13	1
Barium	**0.24**		0.0020	0.00070	mg/L		02/27/25 09:16	02/27/25 15:13	1
Beryllium	ND	^5-	0.0020	0.00030	mg/L		02/27/25 09:16	02/27/25 15:13	1
Cadmium	ND		0.0020	0.00050	mg/L		02/27/25 09:16	02/27/25 15:13	1
Calcium	**189**		0.50	0.10	mg/L		02/27/25 09:16	03/04/25 18:27	1
Chromium	ND	^5-	0.0040	0.0010	mg/L		02/27/25 09:16	02/27/25 15:13	1
Cobalt	ND		0.0040	0.00063	mg/L		02/27/25 09:16	02/27/25 15:13	1
Copper	ND	^5+	0.010	0.0016	mg/L		02/27/25 09:16	02/27/25 15:13	1
Iron	**25.5**	**^5-**	0.050	0.019	mg/L		02/27/25 09:16	02/27/25 15:13	1
Lead	**0.0037**	**J**	0.010	0.0030	mg/L		02/27/25 09:16	02/27/25 15:13	1
Magnesium	**31.2**	**^5-**	0.20	0.043	mg/L		02/27/25 09:16	02/27/25 15:13	1
Manganese	**1.0**	**^5-**	0.0030	0.00040	mg/L		02/27/25 09:16	02/27/25 15:13	1
Nickel	ND		0.010	0.0013	mg/L		02/27/25 09:16	02/27/25 15:13	1
Potassium	**6.9**		0.50	0.10	mg/L		02/27/25 09:16	02/27/25 15:13	1
Selenium	ND		0.025	0.0087	mg/L		02/27/25 09:16	02/27/25 15:13	1
Silver	ND	^5-	0.0060	0.0017	mg/L		02/27/25 09:16	02/27/25 15:13	1
Sodium	**36.7**	**^5-**	1.0	0.32	mg/L		02/27/25 09:16	02/27/25 15:13	1
Thallium	ND		0.020	0.010	mg/L		02/27/25 09:16	02/27/25 15:13	1
Vanadium	ND	^5-	0.0050	0.0015	mg/L		02/27/25 09:16	02/27/25 15:13	1
Zinc	**0.097**	**^5-**	0.010	0.0015	mg/L		02/27/25 09:16	02/27/25 15:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	ND		0.010	0.0041	mg/L			02/26/25 20:46	1

NYSEG – Clyde
Groundwater

Data Usability Summary Report

Clyde, New York

Volatile Organic Compound (VOC), Semi-volatile Organic Compound (SVOC), Metals and Cyanide Analyses

SDG # 480-227898-1

Analyses Performed By:
Eurofins Buffalo
Amherst, New York

Report # 58603R
Review Level: Tier III
Project: 30270811.2

Summary

This Data Usability Summary Report (DUSR) summarizes the review of Sample Delivery Group (SDG)# 480-227898-1 for samples collected in association with the NYSEG Clyde, New York site. The review was conducted as a Tier III evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis			
					VOC	SVOC	Metals	CYANIDE
MW-12	480-227898-1	Water	03/14/2025		X	X	X	X
TRIP BLANK	480-227898-2	Water	03/14/2025		X			
DUP-20250314	480-227898-3	Water	03/14/2025	MW-12	X	X	X	X

Notes:

VOC = Volatile Organic Compounds

SVOC = Semi-volatile Organic Compounds

Analytical Data Package Documentation

The table below evaluates the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed chain-of-custody form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data package completeness and compliance		X		X	

Note:
QA = quality assurance

Organic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency (USEPA) SW-846 Method 8260C and 8270D. Data were reviewed in accordance with USEPA National Functional Guidelines for Organic Superfund Methods Data Review, EPA 540-R-20-005, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, OSWER 9240.1-05A-P, October 1999), as appropriate and applicable Region II SOPs. USEPA NFGs and Region II SOPs were followed for qualification purposes.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and had already been subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
  - U The compound was analyzed for but not detected. The associated value is the compound quantitation limit.
  - B The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspect.
- Quantitation (Q) Qualifiers
  - E The compound was quantitated above the calibration range.
  - D Concentration is based on a diluted sample analysis.
- Validation Qualifiers
  - J The compound was positively identified; however, the associated numerical value is an estimated concentration only.
  - UJ The compound was not detected above the reported sample quantitation limit. However, the reported limit is approximate and may or may not represent the actual limit of quantitation.
  - JN The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification. The associated numerical value is an estimated concentration only.
  - UB Compound is considered non-detect at the listed value due to associated blank contamination.
  - N The analysis indicates the presence of a compound for which there is presumptive evidence to make a tentative identification.
  - R The sample results are rejected.

The "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Volatile Organic Compounds (VOCs) Analyses

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the table below.

Method	Matrix	Holding Time	Preservation
SW-846 8260C	Water	14 days from collection to analysis (preserved)	Cool to <6 °C; preserved to a pH of less than 2 s.u. with hydrochloric acid.

Note:
s.u. = standard units

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. VOC analysis requires that all surrogates associated with the analysis exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits

6. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on sample MW-12. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the

field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compounds	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD
MW-12 / DUP-20250314	All compounds	U	U	AC

Notes:
U Non detected
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for VOCs

VOCs: SW-846 8260C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks/Field Blanks	X				X
C. Trip blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Initial calibration %Ds		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	

VOCs: SW-846 8260C	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
D. Transcription/calculation errors present		X		X	
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:
%RSD = Relative standard deviation
%R = Percent recovery
RPD = Relative percent difference
%D = Percent difference

Semi-volatile Organic Compounds (SVOCs) Analyses

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the table below.

Method	Matrix	Holding Time	Preservation
SW-846 8270D	Water	7 days from collection to extraction and 40 days from extraction to analysis	Cool to <6 °C

All samples were analyzed within the specified holding time criterion.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Compounds were not detected above the MDL in the associated blanks; therefore, detected sample results were not associated with blank contamination.

3. Mass Spectrometer Tuning

Mass spectrometer performance was acceptable and all analyses were performed within a 12-hour tune clock.

System performance and column resolution were acceptable.

4. Calibration

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

4.1 Initial Calibration

The method specifies percent relative standard deviation (%RSD) and relative response factor (RRF) limits for select compounds only. A technical review of the data applies limits to all compounds with no exceptions.

All target compounds associated with the initial calibration standards must exhibit a %RSD less than the control limit (20%) or a correlation coefficient greater than 0.99 and an RRF value greater than control limit (0.05).

All compounds associated with the initial calibrations were within the specified control limits.

4.2 Continuing Calibration

All target compounds associated with the continuing calibration standard must exhibit a percent difference (%D) less than the control limit (20%) and RRF value greater than control limit (0.05).

All compounds associated with the continuing calibrations were within the specified control limits.

5. Surrogates/System Monitoring Compounds

All samples to be analyzed for organic compounds are spiked with surrogate compounds prior to sample preparation to evaluate overall laboratory performance and efficiency of the analytical technique. SVOC analysis requires that two of the three SVOC surrogate compounds within each fraction exhibit recoveries within the laboratory-established acceptance limits.

All surrogate recoveries were within control limits.

6. Internal Standard Performance

Internal standard performance criteria ensure that the GC/MS sensitivity and response are stable during every sample analysis. The criteria require the internal standard compounds associated with the VOC exhibit area counts that are not greater than two times (+100%) or less than one-half (-50%) of the area counts of the associated continuing calibration standard.

All internal standard responses were within control limits.

7. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analysis

MS/MSD data are used to assess the precision and accuracy of the analytical method. The compounds used to perform the MS/MSD analysis must exhibit a percent recovery within the laboratory-established acceptance limits. The relative percent difference (RPD) between the MS/MSD recoveries must exhibit an RPD within the laboratory-established acceptance limits.

Note: The MS/MSD recovery control limits do not apply for MS/MSD performed on samples where the compound concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater.

The MS/MSD analysis performed on sample MW-12. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

8. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The compounds associated with the LCS analysis must exhibit a percent recovery within the laboratory-established acceptance limits.

The LCS analysis exhibited recoveries within the control limits.

9. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrices is applied to the RPD between the

parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Compounds	Sample Result (ug/L)	Duplicate Result (ug/Kg)	RPD
MW-12/ DUP-20250314	All compounds	U	U	AC

Notes:
U Non detected
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

10. Compound Identification

Compounds are identified on the GC/MS by using the analytes relative retention time and ion spectra.

All identified compounds met the specified criteria.

11. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for SVOCs

SVOCs: SW-846 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
Tier II Validation					
Holding times/Preservation		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks/Field blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Surrogate Spike Recoveries		X		X	
Dilution Factor		X		X	
Moisture Content	X				X
Tier III Validation					
System performance and column resolution		X		X	
Initial calibration %RSDs		X		X	
Initial calibration %Ds		X		X	
Continuing calibration RRFs		X		X	
Continuing calibration %Ds		X		X	
Instrument tune and performance check		X		X	
Ion abundance criteria for each instrument used		X		X	
Internal standard		X		X	
Compound identification and quantitation					
A. Reconstructed ion chromatograms		X		X	
B. Quantitation Reports		X		X	
C. RT of sample compounds within the established RT windows		X		X	
D. Transcription/calculation errors present		X		X	

SVOCs: SW-846 8270D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)					
E. Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:

%RSD Relative standard deviation
%R Percent recovery
RPD Relative percent difference
%D Percent difference

Inorganic Analysis Introduction

Analyses were performed according to United States Environmental Protection Agency USEPA Methods 6010D and 9012B. Data were reviewed in accordance with USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review, EPA 542-R-20-006, November 2020 (with reference to the historical USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, EPA 540-R-04-004, October 2004), as appropriate.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers
    - U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.
    - J The reported value was obtained from a reading less than the reporting limit (RL), but greater than or equal to the method detection limit (MDL).
- Quantitation (Q) Qualifiers
    - E The compound was quantitated above the calibration range.
    - N Spiked sample recovery is not within control limits.
    - * Duplicate analysis is not within control limits.
- Validation Qualifiers
    - J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.
    - UJ The analyte was not detected above the reporting limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.
    - UB Analyte considered non-detect at the listed value due to associated blank contamination.
    - R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

Metals Analyses

1. Holding Times/Preservation

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010D	Water	180 days from collection to analysis	Cool to <6 °C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample ID	Compound	Sample Result	Qualification
MW-12	Nickel (MB)	Detected sample results >RL and <BAL	"UB" at detected sample concentration

Note:
MB Method blank

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All initial and continuing calibration verification standard recoveries were within the control limit with the exception noted below.

Sample ID	ICV/CCV	Analytes	Standard Recovery
MW-12 DUP-20250314	ICV %D	Arsenic	116%
		Barium	83%
		Cadmium	85 %
		Cobalt	117%
		Iron	114%
		Nickel	116%
		Potassium	85%
		Thallium	120%
		Zinc	119%
	CCV %D	Arsenic	115%
		Barium	82%
		Cobalt	125%
		Lead	119%
		Zinc	111%

The criteria used to evaluate the ICV and CCV standard recoveries are presented in the following table. In the case of a calibration deviation, the sample results are qualified.

Analytes	Control Limit	Sample Result	Qualification
All analytes quantitated with multi-point curve	Correlation coefficient < 0.995	Non-detect	UJ
		Detect	J
All analytes (except Mercury)	75% to 89%	Non-detect	UJ
		Detect	J
	111% to 125%	Non-detect	No Action
		Detect	J
	<75%	Non-detect	R
		Detect	J
	>125%	Non-detect	No Action
		Detect	R

3.2 RL Check Standard

The RL check standard serves to verify the linearity of calibration of the analysis at the reporting limit. The RL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the RL standard analysis are presented below in the RL standards evaluation table (if applicable).

All RL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed on sample MW-12. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices and 35% for soil matrix is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one time the RL is applied for water matrices and two times the RL for soil matrix.

The laboratory duplicate analysis was not performed on any of the sample from this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices and 50% for soil matrix is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrix.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analytes	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
MW-12 / DUP-20250314	Barium	0.10	0.10	0.0%
	Calcium	142	140	1.4%
	Copper	0.0017 J	0.0020 J	AC
	Iron	0.44	0.46	4.4%
	Magnesium	22.3	22.0	1.4%

Sample ID/Duplicate ID	Analytes	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
	Manganese	0.16	0.16	0.0%
	Nickel	0.0014 J	0.010 U	AC
	Potassium	4.7	4.7	0.0%
	Sodium	70.2	70.7	0.7%
	Zinc	0.22	0.22	0.0%

Note:

AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution analysis was not performed on the samples from this SDG.

8. System Performance and Overall Assessment

The laboratory noted: Method 6010D: The linear range check (LRC) standard recovery associated with 480-741101 is outside the acceptance criteria for the following analytes: total Silver, Beryllium, Cobalt, Copper, Lead, Selenium, and Thallium. The concentration of these analyte(s) in the sample(s) are below the highest standard of the calibration curve; therefore, the data have been reported. The analytes listed above for samples MW-12 and DUP-20250314 were qualified as estimated (UJ/J).

Overall system performance was acceptable. Other than those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for Metals

METALS: SW-846 6010D	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Optical Emission Spectrometry (ICP-OES)					
Tier II Validation					
Holding Times/Preservation		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment / Field Blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
ICP Serial Dilution %D	X				X
Reporting Limit Verification		X		X	
Tier III Validation					
Initial Calibration Verification		X	X		
Continuing Calibration Verification		X	X		
CRDL Standard Recovery		X		X	
ICP Interference Check		X		X	
ICP-MS Internal Standards	X				X
Transcription/calculations acceptable	Not required for Tier II plus calibration				
Raw Data	X				X
Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference
%D Percent difference

General Chemistry Analyses

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Total Cyanide by SW-846 9012B	Water	14 days from collection to analysis	Cool to <6 °C; preserved to a pH of greater than 12 with NaOH.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All compounds associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the compounds listed in the following table. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample ID	Analyte	Sample Result	Qualification
MW-12 DUP-20250314	Cyanide, Total (MB)	Detected sample results >RL and <BAL	"UB" at detected sample concentration

Note:
MB Method blank

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All initial and continuing calibration verification standard recoveries were within the control limit.

4. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis performed on sample MW-4. The MS/MSD analysis exhibited recoveries and RPDs within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the RL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of one time the RL is applied for water matrices and two times the RL for soil matrices.

The laboratory duplicate analysis was not performed on samples from this SDG.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the overall precision of the field sampling procedures and analytical method. A control limit of 30% for water matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result (mg/L)	Duplicate Result (mg/L)	RPD
MW-12/ DUP-20250314	Cyanide (total)	U	U	AC

Note:
AC Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

Data Validation Checklist for General Chemistry

General Chemistry: SW-846 9012B	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X	X		
C. Equipment/Field Blanks	X				X
Laboratory Control Sample (LCS) %R		X		X	
Laboratory Control Sample Duplicate (LCSD) %R	X				X
LCS/LCSD Precision (RPD)	X				X
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
Transcription/calculations acceptable		X		X	
Raw Data		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

Notes:
%R Percent recovery
RPD Relative percent difference

SAMPLE COMPLIANCE REPORT

Sample Delivery Group (SDG)	Sampling Date	Protocol	Sample ID	Matrix	Compliancy[1]				Noncompliance
					VOC	SVOC	METALS	CYANIDE	
480-227898-1	03/14/2025	SW846	MW-12	Water	Yes	Yes	No	No	Metals- Blank contamination, ICV %D and CCV %D, LRC %R General Chemistry - Blank contamination
	03/14/2025	SW846	TRIP BLANK	Water	Yes	--	--	--	--
	03/14/2025	SW846	DUP-20250314	Water	Yes	Yes	No	No	Metals- ICV %D and CCV %D, LRC %R General Chemistry - Blank contamination

Note:

1 Samples which are compliant with no added validation qualifiers are listed as "yes". Samples which are non-compliant, or which have added qualifiers are listed as "no". A "no" designation does not necessarily indicate that the data have been rejected or are otherwise unusable

VALIDATION PERFORMED BY: Amrutha M

SIGNATURE: 

DATE: April 8, 2024

PEER REVIEW: Joe Houser

DATE: April 8, 2024

Chain of Custody Corrected Sample Analysis Data Sheets

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

Chain of Custody Record

eurofins | Environment Testing

Client Information	Sampler: Robbie Sullivan MRS	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-203695-41503.1
Client Contact: Mr. John Ruspantini	Phone: 585 590 2585	E-Mail: John.Schove@et.eurofinsus.com	State of Origin: NY	Page: Page 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 #: Purchase Order Requested			
Email: jjruspantini@nyseg.com	WO #: NYSEG-Clyde/John Ruspantini			
Project Name: NYSEG - Clyde/ Event Desc: Groundwater	Project #: 48028408			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:
B - NaOH
N - None
D - HNO3

480-227898 Chain of Custody

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)	9012B_NP - Cyanide, Total	8270D - PAH Semivolatiles	6010D, 7470A	8260C - BTEX	Total Number of cont	Special Instructions/Note:
			Preservation Code:				B	N	D	A		
[redacted] MW12	3/14/25	1135	G	Water	N	Y	X	X	X	X	21	
[redacted] DUP-20250314	3/14/25	—	G	Water	N	N	X	X	X	X	4	
TRIP BLANK	2/11/25	—	—	Water	N	N				X	2	

MRS

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)

Special Instructions/QC Requirements:

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

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Robbie Sullivan	3/14/25 1700	ARCADIS		3/14/25 1700	EET
2		3/14/25 1710	EET			
3					3/15/25 900	FAT6

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
		2.6 ICE IR #52

Ver: 10/10/2024

Definitions/Glossary

Client: New York State Electric & Gas
Project/Site: NYSEG - Clyde

Job ID: 480-227898-1

Qualifiers

Metals

Qualifier	Qualifier Description
^5-	Linear Range Check (LRC) is outside acceptance limits, low biased.
^5+	Linear Range Check (LRC) is outside acceptance limits, high biased.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Client Sample ID: MW-12

Date Collected: 03/14/25 11:35
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-1

Matrix: Ground Water

Method: SW846 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			03/19/25 01:56	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/19/25 01:56	1
Toluene	ND		1.0	0.51	ug/L			03/19/25 01:56	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/19/25 01:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*03/19/25 01:56*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*03/19/25 01:56*	*1*
Dibromofluoromethane (Surr)	*97*		*75 - 123*		*03/19/25 01:56*	*1*
Toluene-d8 (Surr)	*89*		*80 - 120*		*03/19/25 01:56*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		03/17/25 13:27	03/18/25 16:19	1
Acenaphthylene	ND		5.0	0.38	ug/L		03/17/25 13:27	03/18/25 16:19	1
Anthracene	ND		5.0	0.28	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		03/17/25 13:27	03/18/25 16:19	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		03/17/25 13:27	03/18/25 16:19	1
Chrysene	ND		5.0	0.33	ug/L		03/17/25 13:27	03/18/25 16:19	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		03/17/25 13:27	03/18/25 16:19	1
Fluoranthene	ND		5.0	0.40	ug/L		03/17/25 13:27	03/18/25 16:19	1
Fluorene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:19	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:19	1
Naphthalene	ND		5.0	0.76	ug/L		03/17/25 13:27	03/18/25 16:19	1
Phenanthrene	ND		5.0	0.44	ug/L		03/17/25 13:27	03/18/25 16:19	1
Pyrene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*76*		*53 - 126*	*03/17/25 13:27*	*03/18/25 16:19*	*1*
Nitrobenzene-d5 (Surr)	*66*		*29 - 129*	*03/17/25 13:27*	*03/18/25 16:19*	*1*
p-Terphenyl-d14 (Surr)	*66*		*33 - 132*	*03/17/25 13:27*	*03/18/25 16:19*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		03/18/25 08:50	03/18/25 14:25	1
Antimony	ND		0.020	0.0068	mg/L		03/18/25 08:50	03/18/25 14:25	1
Arsenic	ND	UJ	0.015	0.0056	mg/L		03/18/25 08:50	03/18/25 14:25	1
Barium	**0.10**	J	0.0020	0.00070	mg/L		03/18/25 08:50	03/18/25 14:25	1
Beryllium	ND	^5- UJ	0.0020	0.00030	mg/L		03/18/25 08:50	03/18/25 14:25	1
Cadmium	ND	UJ	0.0020	0.00050	mg/L		03/18/25 08:50	03/18/25 14:25	1
Calcium	**142**		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:25	1
Chromium	ND		0.0040	0.0010	mg/L		03/18/25 08:50	03/18/25 14:25	1
Cobalt	ND	^5+ UJ	0.0040	0.00063	mg/L		03/18/25 08:50	03/18/25 14:25	1
Copper	**0.0017**	J ^5+	0.010	0.0016	mg/L		03/18/25 08:50	03/18/25 14:25	1
Iron	**0.44**	J	0.050	0.019	mg/L		03/18/25 08:50	03/18/25 14:25	1
Lead	ND	^5+ UJ	0.010	0.0030	mg/L		03/18/25 08:50	03/18/25 14:25	1
Magnesium	**22.3**		0.20	0.043	mg/L		03/18/25 08:50	03/18/25 14:25	1

Client Sample ID: MW-12

Date Collected: 03/14/25 11:35
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-1

Matrix: Ground Water

Method: SW846 6010D - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	**0.16**		0.0030	0.00040	mg/L		03/18/25 08:50	03/18/25 14:25	1
Nickel	**0.0014**	~~J B~~ UBJ	0.010	0.0013	mg/L		03/18/25 08:50	03/18/25 14:25	1
Potassium	**4.7**	J	0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:25	1
Selenium	ND	^5+ UJ	0.025	0.0087	mg/L		03/18/25 08:50	03/18/25 14:25	1
Silver	ND	^5- UJ	0.0060	0.0017	mg/L		03/18/25 08:50	03/18/25 14:25	1
Sodium	**70.2**		1.0	0.32	mg/L		03/18/25 08:50	03/18/25 14:25	1
Thallium	ND	^5+ UJ	0.020	0.010	mg/L		03/18/25 08:50	03/18/25 14:25	1
Vanadium	ND		0.0050	0.0015	mg/L		03/18/25 08:50	03/18/25 14:25	1
Zinc	**0.22**	J	0.010	0.0015	mg/L		03/18/25 08:50	03/18/25 14:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.0091**	~~J B F1~~ UB	0.010	0.0041	mg/L			03/18/25 19:34	1

Client Sample ID: TRIP BLANK

Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-2

Matrix: WQ

Method: SW846 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			03/19/25 02:20	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/19/25 02:20	1
Toluene	ND		1.0	0.51	ug/L			03/19/25 02:20	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/19/25 02:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*03/19/25 02:20*	*1*
4-Bromofluorobenzene (Surr)	*118*		*73 - 120*		*03/19/25 02:20*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 123*		*03/19/25 02:20*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*03/19/25 02:20*	*1*

Client Sample ID: DUP-20250314

Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-3

Matrix: Water

Method: SW846 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			03/19/25 02:43	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/19/25 02:43	1
Toluene	ND		1.0	0.51	ug/L			03/19/25 02:43	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/19/25 02:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*03/19/25 02:43*	*1*
4-Bromofluorobenzene (Surr)	*119*		*73 - 120*		*03/19/25 02:43*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 123*		*03/19/25 02:43*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*03/19/25 02:43*	*1*

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		5.0	0.41	ug/L		03/17/25 13:27	03/18/25 16:46	1

Client Sample ID: DUP-20250314

Date Collected: 03/14/25 00:00
Date Received: 03/15/25 09:00

Lab Sample ID: 480-227898-3

Matrix: Water

Method: SW846 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthylene	ND		5.0	0.38	ug/L		03/17/25 13:27	03/18/25 16:46	1
Anthracene	ND		5.0	0.28	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[a]anthracene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[a]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[b]fluoranthene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[g,h,i]perylene	ND		5.0	0.35	ug/L		03/17/25 13:27	03/18/25 16:46	1
Benzo[k]fluoranthene	ND		5.0	0.73	ug/L		03/17/25 13:27	03/18/25 16:46	1
Chrysene	ND		5.0	0.33	ug/L		03/17/25 13:27	03/18/25 16:46	1
Dibenz(a,h)anthracene	ND		5.0	0.42	ug/L		03/17/25 13:27	03/18/25 16:46	1
Fluoranthene	ND		5.0	0.40	ug/L		03/17/25 13:27	03/18/25 16:46	1
Fluorene	ND		5.0	0.36	ug/L		03/17/25 13:27	03/18/25 16:46	1
Indeno[1,2,3-cd]pyrene	ND		5.0	0.47	ug/L		03/17/25 13:27	03/18/25 16:46	1
Naphthalene	ND		5.0	0.76	ug/L		03/17/25 13:27	03/18/25 16:46	1
Phenanthrene	ND		5.0	0.44	ug/L		03/17/25 13:27	03/18/25 16:46	1
Pyrene	ND		5.0	0.34	ug/L		03/17/25 13:27	03/18/25 16:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2-Fluorobiphenyl (Surr)	*102*		*53 - 126*	*03/17/25 13:27*	*03/18/25 16:46*	*1*
Nitrobenzene-d5 (Surr)	*87*		*29 - 129*	*03/17/25 13:27*	*03/18/25 16:46*	*1*
p-Terphenyl-d14 (Surr)	*87*		*33 - 132*	*03/17/25 13:27*	*03/18/25 16:46*	*1*

Method: SW846 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		03/18/25 08:50	03/18/25 14:36	1
Antimony	ND		0.020	0.0068	mg/L		03/18/25 08:50	03/18/25 14:36	1
Arsenic	ND	UJ	0.015	0.0056	mg/L		03/18/25 08:50	03/18/25 14:36	1
Barium	**0.10**	J	0.0020	0.00070	mg/L		03/18/25 08:50	03/18/25 14:36	1
Beryllium	ND	~~^5-~~ UJ	0.0020	0.00030	mg/L		03/18/25 08:50	03/18/25 14:36	1
Cadmium	ND	UJ	0.0020	0.00050	mg/L		03/18/25 08:50	03/18/25 14:36	1
Calcium	**140**		0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:36	1
Chromium	ND		0.0040	0.0010	mg/L		03/18/25 08:50	03/18/25 14:36	1
Cobalt	ND	~~^5+~~ UJ	0.0040	0.00063	mg/L		03/18/25 08:50	03/18/25 14:36	1
Copper	**0.0020**	J ~~^5+~~	0.010	0.0016	mg/L		03/18/25 08:50	03/18/25 14:36	1
Iron	**0.46**	J	0.050	0.019	mg/L		03/18/25 08:50	03/18/25 14:36	1
Lead	ND	~~^5+~~ UJ	0.010	0.0030	mg/L		03/18/25 08:50	03/18/25 14:36	1
Magnesium	**22.0**		0.20	0.043	mg/L		03/18/25 08:50	03/18/25 14:36	1
Manganese	**0.16**		0.0030	0.00040	mg/L		03/18/25 08:50	03/18/25 14:36	1
Nickel	ND	UJ	0.010	0.0013	mg/L		03/18/25 08:50	03/18/25 14:36	1
Potassium	**4.7**	J	0.50	0.10	mg/L		03/18/25 08:50	03/18/25 14:36	1
Selenium	ND	^5+ UJ	0.025	0.0087	mg/L		03/18/25 08:50	03/18/25 14:36	1
Silver	ND	~~^5-~~ UJ	0.0060	0.0017	mg/L		03/18/25 08:50	03/18/25 14:36	1
Sodium	**70.7**		1.0	0.32	mg/L		03/18/25 08:50	03/18/25 14:36	1
Thallium	ND	^5+ UJ	0.020	0.010	mg/L		03/18/25 08:50	03/18/25 14:36	1
Vanadium	ND		0.0050	0.0015	mg/L		03/18/25 08:50	03/18/25 14:36	1
Zinc	**0.22**	J	0.010	0.0015	mg/L		03/18/25 08:50	03/18/25 14:36	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total (SW846 9012B)	**0.0061**	~~J B~~ UB	0.010	0.0041	mg/L			03/18/25 19:53	1

Attachment 4

MW-14 and MW-15 Well Installation Logs

ARCADIS

Soil Boring and Construction Log

Boring No./Well ID: **SB-MW14 / MW14**

Surface Finish: Flushmount

Sheet: 1 of 1

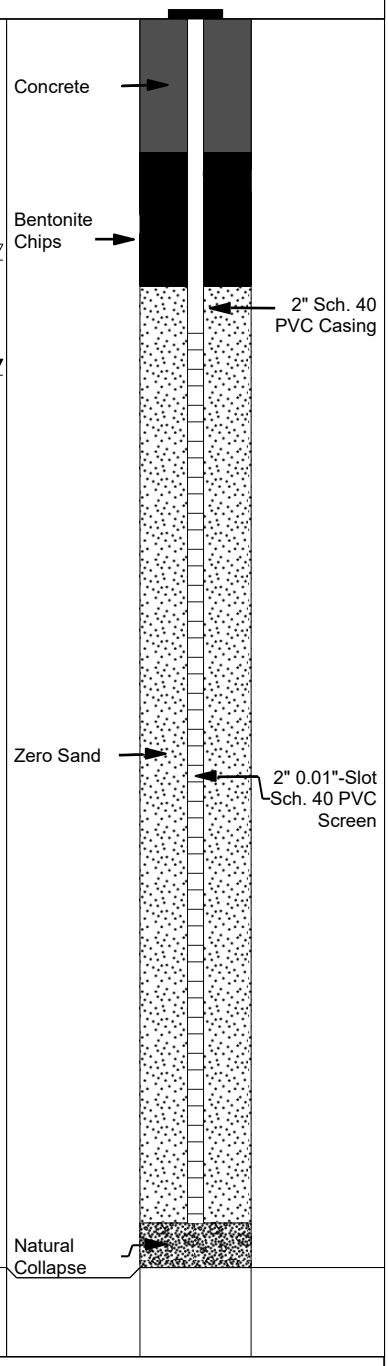
Client Name: New York State Electric & Gas
Project Number: 30251446
Project Name: Clyde Former MGP Site

Date Started: 03-10-2025
Date Completed: 03-12-2025
Total Depth: 14.0 ft bgs

Well Type: Single Screened
Logger(s): Bailey Kudla-Williams
Reviewer: NA

Depth (ft)	Rec. (ft)	PID (ppm)	Graphic	Material Description
0		0.0		(0.0-0.5 ft) NOTE: Topsoil.
1		0.0		(0.5-4.5 ft): SAND, fine to coarse, subangular to subround, little gravel, small to medium pebbles, subround, little silt; poorly sorted, moist, 10YR 5/3 - brown.
2				
3		0.0		
4		0.0		
5				(4.5-13.5 ft): SAND, fine to medium, subangular to subround, some gravel, small to large pebbles, subround to round, trace silt; soft, poorly sorted, wet, 10YR 4/3 - brown.
6	2.00			
7				
8		0.0		
9				
10	2.42			
11				
12				
13	1.33	1.1		
14				(13.5-14.0 ft): Partially Weathered Bedrock (Shale); 10G 7/1 - light greenish gray; highly weathered; soft (scratched with fingernail); very intensely fractured (few intact core segments).
				End Depth: 14.00 ft

Construction Details



Drilling Co.: Parratt-Wolff, Inc., East Syracuse, NY
Driller: Lee Penrod+Lamont Clemons
Drilling Method: Geoprobe (GP)
Sampling Method: Macrocore
Drill Rig: Geoprobe 7822DT

Interval Length: 4.0 ft
First Encountered Water (ft bgs): ▼ 4.00
Static Water Level (ft btoc): ▽ 2.71
Top of Casing Elevation: 393.48 ft amsl
Ground Surface Elevation: 393.77 ft amsl
Easting: 742769.53 ft
Northing: 1123297.11 ft
Coordinate System: NAD 1983 StatePlane New York West

Terminology
ft: feet
bgs: below ground surface
PID: photoionization detector
OVM: organic vapor meter
ppm: parts per million
NA: Not Applicable/Not Available
PVC: Polyvinyl Chloride

Remarks

Hand cleared 0-4.5 ft bgs

ARCADIS

Soil Boring and Construction Log

Boring No./Well ID: **SB-MW15 / MW15**

Surface Finish: NA

Sheet: 1 of 1

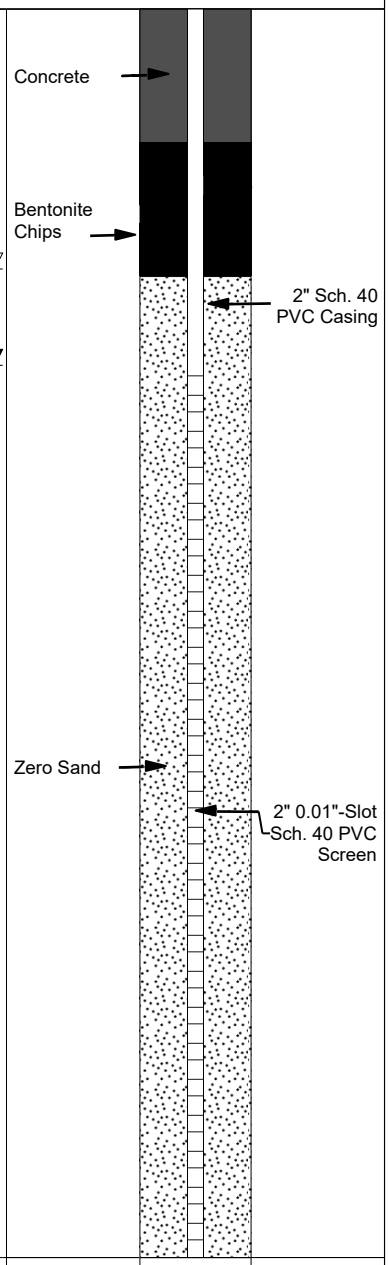
Client Name: New York State Electric & Gas
Project Number: 30251446
Project Name: Clyde Former MGP Site

Date Started: 03-10-2025
Date Completed: 03-12-2025
Total Depth: 14.0 ft bgs

Well Type: Single Screened
Logger(s): Bailey Kudla-Williams
Reviewer: NA

Depth (ft)	Rec. (ft)	PID (ppm)	Material Description
0		0.0	(0.0-1.0 ft) NOTE: Topsoil. Geotextile membrane at 1'
1			(1.0-3.0 ft): SAND, fine to coarse, subangular to subround, some gravel, small to medium pebbles, subround, little silt; poorly sorted, moist, 10YR 3/3 - dark brown.
2		0.0	
3			(3.0-4.0 ft): SAND, fine to coarse, subangular to subround, some gravel, smallpebbles to large cobbles, subround, trace silt, trace clay; poorly sorted, moist, 10YR 3/3 dark brown. NOTE: Cobbles and concrete at 3'.
4		11.6	(4.0-4.5 ft): SAND, fine to medium, subangular to subround, some silt, little gravel, small to medium pebbles, subround, little clay; soft, low plasticity, no dilatancy, poorly sorted, wet, 10YR 3/3 - dark brown. NOTE: Brick, concrete, wood at 4'.
5			(4.5-6.0 ft): SAND, fine to medium, subangular to subround, some silt, little gravel, granules to small pebbles, subangular to subround; soft, no dilatancy, poorly sorted, wet, 2.5Y 3/1 - very dark gray. NOTE: Slight petroleum-like odor, mild sheen.
6	1.58	46.2	(6.0-8.0 ft): GRAVEL, granules to small pebbles, subangular to subround, some medium to coarse sand, subangular to subround, trace silt; soft, poorly sorted, wet, 2.5Y 3/1 - very dark gray. NOTE: Slight petroleum-like odor, mild sheen, granules and pebbles consist of slag.
7			
8			(8.0-10.0 ft): SAND, medium to coarse, subangular to subround, some silt, little gravel, granules to small pebbles, subangular to subround; soft, no dilatancy, poorly sorted, wet, 2.5Y 3/1 - very dark gray. NOTE: Little slag. Clay lenses 2-3" high plasticity, light gray.
9		0.1	
10	3.50	0.2	(10.0-11.0 ft): SAND, medium to coarse, subangular to subround and SILT, little gravel, granules, subangular to subround, trace clay; soft, no dilatancy, poorly sorted, wet, 2.5Y 3/1 - very dark gray. NOTE: Trace wood chips.
11		0.2	(11.0-11.5 ft): CLAY, little silt; soft, medium plasticity, moist, 10YR 7/1 - light gray.
12		0.0	(11.5-13.0 ft): CLAY; soft, medium plasticity, moist, 10YR 7/1 - light gray. NOTE: Some oxidation orange coloring.
13	3.08	0.0	(13.0-13.9 ft): CLAY, little silt, trace very fine sand; soft, medium plasticity, moist, 10YR 7/1 - light gray.
14			(13.9-14.0 ft): Partially Weathered Bedrock (Shale); 10BG 6/1 - greenish gray; highly weathered; soft (scratched with fingernail); very intensely fractured (few intact core segments).
			End Depth: 14.00 ft

Construction Details



Drilling Co.: Parratt-Wolff, Inc., East Syracuse, NY
Driller: Lee Penrod+Lamont Clemons
Drilling Method: Geoprobe (GP)
Sampling Method: Macrocore
Drill Rig: Geoprobe 7822DT

Interval Length: 4.0 ft
First Encountered Water (ft bgs): ▼ 4.00
Static Water Level (ft btoc): ▽ 2.92
Top of Casing Elevation: 392.95 ft amsl
Ground Surface Elevation: 393.21 ft amsl

Terminology
ft: feet
bgs: below ground surface
PID: photoionization detector
OVM: organic vapor meter
ppm: parts per million
NA: Not Applicable/Not Available
PVC: Polyvinyl Chloride

Remarks
Hand cleared 0-4.5 ft bgs

Easting: 742778.96 ft
Northing: 1123207.93 ft
Coordinate System: NAD 1983 StatePlane New York West