NEU-VELLE LLC

March 18, 2022

Mr. Michael Squire
New York State Department of Environmental Conservation
Division of Environmental Remediation, 11th Floor
625 Broadway
Albany, New York 12233

Re: 8th Post-Remediation Groundwater Sampling Event, October/November 2021
RG&E Park Street Former MGP Site
4 and 6 Park Street
Village of Geneseo, Livingston County, New York
New York State Department of Environmental Conservation (NYSDEC) Site #V00731

Dear Mr. Squire:

The purpose of this report is to present the results of the eighth post-remediation groundwater sampling event completed at the Rochester Gas and Electric Corporation (RG&E) Park Street Former Manufactured Gas Plant (MGP) Site (NYSDEC Site No. V00731), located at 4 and 6 Park Street in the Village of Geneseo, Livingston County, New York (referred to herein as the "Site").

This groundwater sampling event was completed by NEU-VELLE, LLC (NEU-VELLE) personnel in accordance with the Site Management Plan (SMP), dated June 2018.

SCOPE OF WORK

Synoptic Water Levels

As summarized in **Table 1**, a Site-wide round of synoptic groundwater levels was gauged at the eight groundwater monitoring wells (MW-1 through MW-8) at the Site on November 3, 2021. The locations of the monitoring wells are depicted on the Monitoring Well Locations map provided as **Figure 1**. Each well was also gauged for the presence of non-aqueous phase liquid (NAPL) using an oil/water interface probe. Except for the presence of dense non-aqueous phase liquid (DNAPL) at the bottom of MW-5, no NAPL was detected in the wells. Per the SMP, NEU-VELLE completed a quarterly NAPL Gauging and Collection Event on November 3, 2021. The findings of this quarterly event have been previously provided to NYSDEC under separate cover (i.e., the *15th Post Remediation NAPL Gauging and Collection Event, November2021* letter report, prepared by NEU-VELLE and dated December 2, 2021). Additional well gauging observations and field measurements are provided in **Table 1** of this report.

Groundwater Sampling

From October 29, 2021 to November 1, 2021 groundwater samples were collected for laboratory analysis from seven (7) groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-6, MW-7, and MW-8). A groundwater sample was not collected from MW-5 due to the presence of DNAPL in

the well. Groundwater samples were collected using the low-stress (low-flow) purging techniques outlined in the USEPA Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers dated May 2002.

Prior to initiating purging, field personnel donned new nitrile gloves and care was taken to avoid introducing contaminants into the groundwater monitoring wells. Low-flow purging was conducted using an appropriately decontaminated stainless-steel bladder pump equipped with a polyethylene bladder and polyethylene tubing. A new, clean bladder and tubing was used at each groundwater monitoring well. During purging, time, water-level measurements, temperature, dissolved oxygen (DO), oxidation reduction potential (ORP), pH, turbidity, and specific conductance (purge parameters) were measured and recorded using calibrated field monitoring equipment.

The well information, sample information, monitoring parameters and field observations were recorded on a groundwater sampling log completed at each well. The groundwater sampling logs are provided as **Attachment A**.

Collection of Laboratory Samples

New nitrile gloves were donned by field personnel prior to the collection of each laboratory sample. The laboratory sample was collected in appropriate laboratory-supplied sample containers. Samples were placed in a plastic cooler, pre-chilled with ice, and submitted under appropriate chain of custody protocols to Paradigm Environmental Services, Inc. (Paradigm) located in Rochester, New York. Samples were analyzed for:

- volatile organic compounds (VOCs), BTEX only (benzene, toluene, ethylbenzene and xylene), in accordance with USEPA Method 8260C, and
- semi volatile organic compounds (SVOCs), PAHs (polycyclic aromatic hydrocarbons) only, in accordance with USEPA Method 8270D.

In accordance with the Quality Assurance Project Plan (QAPP), provided within the SMP, appropriate chain of custody protocols were followed. Copies of the laboratory analytical reports for this sampling event, which include copies of the chain of custody forms, are included in **Exhibit A**. Please note that, due to their large file sizes, the laboratory analytical reports included in **Exhibit A** are not Analytical Services Protocols (ASP) Category B deliverables. Copies of the ASP Category B reports are available upon request.

Quality Assurance/Quality Control (QA/QC) samples consisting of a blind field duplicate sample and an equipment blank sample were collected and submitted for analysis. The blind field duplicate was collected at MW-2. A trip blank was also provided by the laboratory, maintained with the sample containers, and analyzed for BTEX in accordance with USEPA Method 8260C.

Preparation of a Data Usability Summary Report

Consistent with the requirements of the SMP, a Data Usability Summary Report (DUSR) was prepared by Environmental Data Usability of Dansville, New York. The DUSR is provided in **Exhibit A**.

RESULTS

Analytical Results

The groundwater sample analytical results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Class GA, standards, criteria, and guidance values (SCGs).

The analytical results are summarized in **Table 2** and **Figure 3** as follows:

- BTEX compounds were reported at concentrations above the corresponding TOGS 1.1.1 Class GA SCGs in two (2) of the seven (7) wells that were sampled (MW-6 and MW-8).
- Four (4) PAHs (acenaphthene, acenaphthylene, fluorene, and naphthalene) were found by the laboratory at concentrations above reporting limits in two (2) of the seven (7) wells that were sampled (MW-6 and MW-8).
    - Only naphthalene was reported at a concentration above the reporting limit in the groundwater sample collected from MW-8. Naphthalene was reported in this sample at a concentration of 0.22 micrograms per liter (μg/L) or parts per billion (ppb), which is well below the TOGS 1.1.1 Class GA SCG (10 μg/L) for this compound.
    - The following PAHs were reported above the reporting limits in the groundwater sample collected from MW-6:
        - acenaphthene was reported at a concentration of 1.7 μg/L, which is below the TOGS 1.1.1 Class GA SCG (20 μg/L) for this compound;
        - acenaphthylene was reported at a concentration of 18 μg/L, although there is no corresponding TOGS 1.1.1 Class GA SCG for acenaphthylene;
        - fluorene was reported at a concentration of 4.0 μg/L which is below the TOGS 1.1.1 Class GA SCG (50 μg/L) for this compound; and
        - naphthalene was reported at a concentration of 170 μg/L, which is above the TOGS 1.1.1 Class GA SCG (10 μg/L) for this compound.

The analytical results for QA/QC samples are summarized are as follows:

- no BTEX compounds were detected in the trip blank sample; and
- a low-level concentration (0.806 μg/L) of benzene was reported in the equipment blank sample ("GEN-EB-110121"), which was collected between the samples from MW-6 and MW-8. No other detections of BTEX or PAHs were reported in the equipment blank sample.

DUSR

Based on the outcome of the data usability evaluation, as documented in the DUSR (**see Exhibit A**), although "some results were flagged with a "J" as estimated, all results (100%) are considered usable". Therefore, the laboratory analytical data generated during this groundwater sampling event were deemed usable for their intended purpose.

Groundwater Mapping

A groundwater contour map was prepared based upon the static water levels measured at the Site on November 3, 2021. The groundwater contour map is provided as **Figure 2** and depicts an interpreted groundwater flow generally to the west, which is consistent with historic groundwater flow directions previously mapped at the Site.

CONCLUSIONS

This report presents the results of the eighth post-remediation groundwater sampling event completed at the RG&E Park Street Former MGP Site (NYSDEC Site No. V00731).

The NYSDEC Decision Document, dated August 2017, for the Site identified BTEX and three (3) PAHs [benzo(a)anthracene, benzo(a)pyrene, and indeno[1,2,3-cd]pyrene] as contaminants of potential concern (COPCs).

BTEX compounds were reported at concentrations above the corresponding TOGS 1.1.1 Class GA SCGs in two (2) of the seven (7) wells that were sampled (MW-6, and MW-8) during this sampling event.

Although the full suite of PAHs was analyzed for this sampling event, none of the PAH COPCs were detected above laboratory reporting limits. Four (4) other PAHs (acenaphthene, acenaphthylene, fluorene, and naphthalene) were reported in the sample collected from MW-6, at concentrations consistent with levels previously detected.

Reported concentrations of COPCs appear consistent with prior sampling events. Time series plots of the COPC concentrations depicting trends over time will be included in the annual Periodic Review Report for the Site.

Consistent with previous sampling events, DNAPL was encountered in MW-5. NEU-VELLE completed a quarterly NAPL Gauging and Collection Event on November 3, 2021. The findings of this quarterly event have been previously provided to NYSDEC under separate cover (i.e., the *15th Post-Remediation NAPL Gauging and Collection Event, November 2021* letter report, prepared by NEU-VELLE and dated December 2, 2021).

The ongoing post-remediation groundwater monitoring described in the SMP will continue to assess whether the overall concentrations in groundwater are stable, decreasing, or increasing. Quarterly gauging and recovery of NAPL at MW-5 will continue as conditions warrant. The frequency of gauging will only be modified with approval of the NYSDEC.

Please feel free to contact me at (585) 478-1666 with any questions you may have regarding this letter report, or contact Mr. Jeremy Wolf, RG&E's Project Manager for the project at (585) 500-8392.

Sincerely,

Kyle R. Miller, PG
NEU-VELLE, LLC

cc: Jeremy Wolf – RG&E
Chuck Reyes -SUNY Geneseo

Attachments:

Table 1 – Monitoring Well Reference Data and Groundwater Measurements

Table 2 – Groundwater Sample Analytical Results

Figure 1 - Monitoring Well Locations

Figure 2 – November 2021 Groundwater Elevation Contours

Figure 3 – October/November 2021 Groundwater Analytical Detections

Attachment A – Groundwater Sampling Logs

Exhibit A – Groundwater Laboratory Reports, Chain of Custody Forms and DUSR

Tables

NEU-VELLE LLC

Table 1 - Monitoring Well Reference Data and Groundwater Measurements

Well ID	TOC Elevation	4/23/2018				9/24/2018				5/20/2019				10/25/2019			
		Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)	Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)	Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)	Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)
		4/23/2018	Depth to DNAPL	T. Well Depth	4/23/2018	9/24/2018	Depth to DNAPL	T. Well Depth	9/24/2018	5/20/2019	Depth to DNAPL	T. Well Depth	5/20/2019	10/25/2019	Depth to DNAPL	T. Well Depth	10/25/2019
MW-1	758.41	10.11	ND	35.85	748.30	10.48	ND	35.85	747.93	7.83	ND	35.85	750.58	9.42	ND	35.85	748.99
MW-2	760.25	8.84	ND	36.76	751.41	8.90	ND	36.76	751.35	8.05	ND	36.76	752.20	8.35	ND	36.76	751.90
MW-3	761.66	9.79	ND	32.59	751.87	10.33	ND	32.59	751.33	9.30	ND	32.59	752.36	10.05	ND	32.59	751.61
MW-4	756.18	15.55	ND	39.75	740.63	15.89	ND	39.75	740.29	15.25	ND	39.75	740.93	15.51	ND	39.75	740.67
MW-5	757.82	18.52	33.23	34.90	739.30	18.02	33.3*	34.90	739.80	16.82	34.7	34.90	741.00	18.94	34.70**	34.90	738.88
MW-6	757.73	12.24	ND	37.39	745.49	12.18	ND	37.39	745.55	12.56	ND	37.39	745.17	11.70	ND	37.39	746.03
MW-7	744.07	5.63	ND	29.30	738.44	6.42	ND	29.30	737.65	5.63	ND	29.30	738.44	6.28	ND	29.30	737.79
MW-8	753.11	12.90	ND	36.88	740.21	13.37	ND	36.88	739.74	12.80	ND	36.88	740.31	13.02	ND	36.88	740.09

Well ID	TOC Elevation	4/23/2020				10/27/2020				5/6/2021				11/3/2021			
		Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)	Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)	Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)	Depth to Water ft (bgs)	Total Depth ft (bgs)		Groundwater Elevation (ft AMSL)
		4/23/2020	Depth to DNAPL	T. Well Depth	4/23/2020	10/27/2020	Depth to DNAPL	T. Well Depth	10/27/2020	5/6/2021	Depth to DNAPL	T. Well Depth	5/6/2021	11/3/2021	Depth to DNAPL	T. Well Depth	11/3/2021
MW-1	758.41	8.82	ND	35.85	749.59	9.72	ND	35.85	748.69	8.05	ND	35.85	750.36	7.73	ND	35.85	750.68
MW-2	760.25	8.58	ND	36.76	751.67	8.20	ND	36.76	752.05	8.36	ND	36.76	751.89	7.39	ND	36.76	752.86
MW-3	761.66	10.24	ND	32.59	751.42	10.29	ND	32.59	751.37	10.27	ND	32.59	751.39	9.10	ND	32.59	752.56
MW-4	756.18	15.65	ND	39.75	740.53	15.60	ND	39.75	740.58	15.87	ND	39.75	740.31	15.17	ND	39.75	741.01
MW-5	757.82	18.06	34.70	34.90	739.76	18.73	34.75***	34.90	739.09	18.02	34.75	34.90	739.80	19.28	34.7	34.90	738.54
MW-6	757.73	13.05	ND	37.39	744.68	12.75	ND	37.39	744.98	16.48	ND	37.39	741.25	14.38	ND	37.39	743.35
MW-7	744.07	6.10	ND	29.30	737.97	6.31	ND	29.30	737.76	6.16	ND	29.30	737.91	5.27	ND	29.30	738.80
MW-8	753.11	11.83	ND	36.88	741.28	13.13	ND	36.88	739.98	13.46	ND	36.88	739.65	12.65	ND	36.88	740.46

Notes:

1. ft AMSL = Feet above mean sea level, 1988 North American Vertical Datum (NAVD88).
2. bgs = below ground surface
3. ND = Not Detected

* = Depth to DNAPL measurement recorded on 9/28/2018.
** = Depth to DNAPL measurement recorded on 11/11/2019.
*** = Depth to DNAPL measurement recorded on 11/4/2020.

Table 2 - Groundwater Sample Analytical Results

Well ID			MW-1	MW-1		MW-1	MW-1		MW-1	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-2	MW-2		MW-2	MW-2	MW-2	
Sample ID		NYSDEC TOGS 1.1.1	GEN-MW1	GEN-MW1-092718	Duplicate-092718	GEN-MW1-051519	GEN-MW1 102619	Duplicate 102619	GEN-MW1-04212020	GEN-MW1-10312020	GEN-MW1-042821	GEN-MW1-103021	GEN-MW2	GEN-MW2-092918	GEN-MW2-051419	GEN-MW2 102619	GEN-MW2-04202020	GEN-DUP-04202020	GEN-MW2-10302020	GEN-MW2-042721	GEN-MW2-103021	GEN-DUP-103021
Lab Sample ID		Class GA[1]	181657-04	184501-03	184501-05	192209-04	195363-02	195363-03	201703-05	205240-03	211799-03	214958-02	181657-03	184501-07	192209-02	195363-01	201703-03	201703-02	205240-02	211799-01	214958-03	214958-04
Date Sampled	Units		4/23/2018	9/27/2018		5/15/2019	10/26/2019		4/21/2020	10/31/2020	4/28/2021	10/30/2021	4/23/2018	9/29/2018	5/14/2019	10/26/2019	4/20/2020		10/30/2020	4/27/2021	10/30/2021	
Volatiles																						
Benzene	µg/L	1	1 U	1 U	1 U	1 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1 U	1 U	1 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U
Ethylbenzene	µg/L	5*	2 U	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
Toluene	µg/L	5*	2 U	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
Xylene (total)	µg/L	5*	2 U	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	**1.39 J**	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	**1.10 J**	2.00 U
Semi-Volatiles																						
Acenaphthene	µg/L	20	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Acenaphthylene	µg/L	NS	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Anthracene	µg/L	50	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)anthracene	µg/L	0.002**	10 U	10 U	10 U	10 U	5.37 U	5.37 U	**0.02 J**	**0.02 J**	0.10 U	0.10 U	10 U	10 U	10 U	5.37 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	**0.02 J**
Benzo(a)pyrene	µg/L	ND	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(b)fluoranthene	µg/L	0.002	10 U	10 U	10 U	10 U	5.00 U	5.00 U	**0.02 J**	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	**0.03 J**
Benzo(g,h,i)perylene	µg/L	NS	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	µg/L	0.002	10 U	10 U	10 U	10 U	5.70 U	5.70 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.70 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	µg/L	NS	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chrysene	µg/L	0.002	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluoranthene	µg/L	50	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluorene	µg/L	50	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	**0.04 J**	0.10 U	0.10 U
Indeno(1,2,3-cd) pyrene	µg/L	0.002**	10 U	10 U	10 U	10 U	5.10 U	5.10 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Naphthalene	µg/L	10	10 U	10 U	10 U	10 U	6.03 U	6.03 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	6.03 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Phenanthrene	µg/L	50	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	**0.04 J**	**0.02 J**	**0.02 J**
Pyrene	µg/L	50	10 U	10 U	10 U	10 U	5.00 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U

Notes:
µg/L = micrograms per liter
NT = Not Tested
NS = No Standard
NL = Not Listed
MDL = Method Detection Limit
D - Indicates that the result is from a diluted run
J - Indicates an estimated value. Result is below the Reporting Limit (Quantitation Limit)
U - Indicates that the constituent was not detected at the reported detection limit.
Bolded value indicates that the compound was detected above laboratory minimum detection limit (includes estimated values below the reporting limit).
Bolded and highlighted value indicates that the compound was detected above its respective regulatory standard or guidance value.
[1]Class GA Drinking Water Standard or Guidance Value
ND = Non-detectable concentration by the approved analytical methods referenced in 6 NYCRR 700.3
*Principal Organic Contaminant Standard
**Class GA Guidance Value
April 2018 Duplicate sample ("GEN-FIELD DUPE") collected at MW-6.
October 2018 Duplicate sample ("Duplicate-092718") collected at MW-1.
May 2019 Duplicate sample ("Duplicate-051519") collected at MW-4.
October 2019 Duplicate sample ("Duplicate 102619") collected at MW-1.
April 2020 Duplicate sample ("GEN-DUP-04202020") collected at MW-2.
October 2020 Duplicate sample ("GEN-DUP-10282020") collected at MW-4.
April 2021 Duplicate sample ("GEN-DUP-042821") collected at MW-4.
October 2021 Duplicate sample ("GEN-DUP-103021") collected at MW-2.

Table 2 - Groundwater Sample Analytical Results

Well ID		NYSDEC	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3	MW-4	MW-4	MW-4		MW-4	MW-4	MW-4		MW-4		MW-4
Sample ID		TOGS 1.1.1	GEN-MW3	GEN-MW3-092718	GEN-MW3-051419	GEN-MW3 102919	GEN-MW3-04202020	GEN-MW3-10272020	GEN-MW3-042721	GEN-MW3-103121	GEN-MW4	GEN-MW4-092818	GEN-MW4-051519	Duplicate-051519	GEN-MW4 102919	GEN-MW4-04222020	GEN-MW4-10282020	GEN-DUP-10282020	GEN-MW4-042821	GEN-DUP-042821	GEN-MW4-102921
Lab Sample ID		Class GA[1]	181657-01	184501-02	192209-01	195363-04	201703-01	205221-01	211799-02	214958-05	181657-05	184501-06	192209-03	192209-05	195363-05	201703-07	205221-03	205221-04	211799-05	211799-04	214958-01
Date Sampled	Units		4/23/2018	9/27/2018	5/14/2019	10/29/2019	4/20/2020	10/27/2020	4/27/2021	10/31/2021	4/23/2018	9/28/2018	5/15/2019		10/29/2019	4/22/2020	10/28/2020		4/28/2021		10/29/2021
Volatiles																					
Benzene	µg/L	1	1 U	1 U	1 U	1.00 U	1.00 U	1.00 U	1.00 U	1.00 U	**0.857 J**	1 U	**0.547 J**	**1.04**	**0.841 J**	**0.828 J**	**0.852 J**	**0.949 J**	**2.56**	**2.51**	1.00 U M
Ethylbenzene	µg/L	5*	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2 U	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U M
Toluene	µg/L	5*	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2 U	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U M
Xylene (total)	µg/L	5*	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U	**2.97**	**1.97 J**	**2.02**	**2.60**	**5.86 J**	**3.18**	**5.72 J**	**6.46 J**	**19.09**	**19.57**	**2.44**
Semi-Volatiles																					
Acenaphthene	µg/L	20	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Acenaphthylene	µg/L	NS	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Anthracene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)anthracene	µg/L	0.002**	10 U	10 U	10 U	5.37 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.37 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	µg/L	ND	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(b)fluoranthene	µg/L	0.002	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(g,h,i)perylene	µg/L	NS	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	µg/L	0.002	10 U	10 U	10 U	5.70 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.70 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	µg/L	NS	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Chrysene	µg/L	0.002	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluoranthene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluorene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	**0.04 J**	**0.04 J**	0.10 U
Indeno(1,2,3-cd) pyrene	µg/L	0.002**	10 U	10 U	10 U	5.10 U	0.10 U	0.10 U UJ	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.10 U	0.10 U	0.10 UJ	0.10 UJ	0.10 U	0.10 U	0.10 U
Naphthalene	µg/L	10	10 U	10 U	10 U	6.03 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	6.03 U	**0.05 J**	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Phenanthrene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	**0.02 J**	**0.02 J**	**0.02 J**	**0.04 J**	**0.04 J**	0.10 U
Pyrene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	10 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U

Notes:
µg/L = micrograms per liter
NT = Not Tested
NS = No Standard
NL = Not Listed
MDL = Method Detection Limit
D - Indicates that the result is from a diluted run
J - Indicates an estimated value. Result is below the Reporting Limit (Quantitation Limit)
U - Indicates that the constituent was not detected at the reported detection limit.
M - Matrix spike recoveries outside QC limits. Matrix bias indicated.
Bolded value indicates that the compound was detected above laboratory minimum detection limit (includes estimated values below the reporting limit).
Bolded and highlighted value indicates that the compound was detected above its respective regulatory standard or guidance value.
[1]Class GA Drinking Water Standard or Guidance Value
ND = Non-detectable concentration by the approved analytical methods referenced in 6 NYCRR 700.3
*Principal Organic Contaminant Standard
**Class GA Guidance Value
April 2018 Duplicate sample ("GEN-FIELD DUPE") collected at MW-6.
October 2018 Duplicate sample ("Duplicate-092718") collected at MW-1.
May 2019 Duplicate sample ("Duplicate-051519") collected at MW-4.
October 2019 Duplicate sample ("Duplicate 102619") collected at MW-1.
April 2020 Duplicate sample ("GEN-DUP-04202020") collected at MW-2.
October 2020 Duplicate sample ("GEN-DUP-10282020") collected at MW-4.
April 2021 Duplicate sample ("GEN-DUP-042821") collected at MW-4.
October 2021 Duplicate sample ("GEN-DUP-103021") collected at MW-2.

Table 2 - Groundwater Sample Analytical Results

Well ID			MW-6		MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7
Sample ID		NYSDEC TOGS 1.1.1	GEN-MW6	GEN- FIELD DUPE	GEN-MW6-092918	GEN-MW6-051619	GEN-MW6-103019	GEN-MW6-04222020	GEN-MW6-10312020	GEN-MW6-050321	GEN-MW6-103121	GEN-MW7	GEN-MW7-092618	GEN-MW7-051719	GEN-MW7-103119	GEN-MW7-04222020	GEN-MW7-10302020	GEN-MW7-050321	GEN-MW7-110121
Lab Sample ID		Class GA[1]	181657-08	181657-09	184501-09	192209-06	195363-08	201703-08	205240-04	211855-02	214958-06	181657-07	184501-01	192209-09	195363-10	201703-09	205240-01	211855-03	214958-09
Date Sampled	Units		4/24/2018		9/29/2018	5/16/2019	10/30/2019	4/22/2020	10/31/2020	5/3/2021	10/31/2021	4/24/2018	9/26/2018	5/17/2019	10/31/2019	4/22/2020	10/30/2020	5/3/2021	11/1/2021
Volatiles																			
Benzene	µg/L	1	**147**	**150**	**170**	**148**	**198**	**161**	**249**	**97.4**	**178**	1 U	**0.606 J**	1 U	**0.951 J**	1.00 U	**0.729 J**	1.00 U	1.00 U
Ethylbenzene	µg/L	5*	**31.5**	**32.5**	**35.8**	**22.5**	**32.6**	**26.1**	**39.6**	**22.1**	**32.6**	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
Toluene	µg/L	5*	**51.5**	**53.1**	**62.7**	**71.8**	**84.9**	**72.4**	**79.7**	**19.4**	**33.8**	2 U	2 U	2 U	2.00 U	2.00 U	2.00 U	2.00 U	2.00 U
Xylene (total)	µg/L	5*	**107.3**	**108.9**	**116.2**	**125.6**	**114.7**	**144.0**	**126.6**	**57.6**	**86.8**	2 U	**1.65 J**	2 U	**2.0**	2.00 U	**1.00 J**	2.00 U	2.00 U
Semi-Volatiles																			
Acenaphthene	µg/L	20	20 U	20 U	20 U	20 U	25.0 U	**1.7 J**	**1.8 J**	**1.2**	**1.7**	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Acenaphthylene	µg/L	NS	**25.1**	**25.3**	**22.2**	**21.4**	**34.9**	**24**	**24**	**14**	**18**	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Anthracene	µg/L	50	20 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	**0.46 J**	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)anthracene	µg/L	0.002**	10 U	20 U	20 U	20 U	26.8 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.37 U	0.10 U	0.10 U	0.10 U	**0.02 J**
Benzo(a)pyrene	µg/L	ND	10 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(b)fluoranthene	µg/L	0.002	20 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	**0.02 J**
Benzo(g,h,i)perylene	µg/L	NS	20 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	µg/L	0.002	20 U	20 U	20 U	20 U	28.5 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.70 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	µg/L	NS	20 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Chrysene	µg/L	0.002	20 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluoranthene	µg/L	50	20 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluorene	µg/L	50	20 U	20 U	20 U	20 U	25.0 U	**3.9**	**3.8**	**2.6**	**4.0**	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd) pyrene	µg/L	0.002**	10 U	20 U	20 U	20 U	25.5 U	2.0 U	2.0 UJ	1.0 U	1.0 U	10 U	10 U	10 U	5.10 U	0.10 U	0.10 U	0.10 U	0.10 U
Naphthalene	µg/L	10	**279**	**299**	**273**	**283**	**486**	**260**	**250**	**110**	**170**	10 U	10 U	10 U	6.03 U	0.10 U	**0.07 J**	0.10 U	0.10 U
Phenanthrene	µg/L	50	20 U	20 U	20 U	20 U	25.0 U	**1.7 J**	**1.5 J**	**0.90 J**	**1.6 J**	10 U	10 U	10 U	5.00 U	**0.02 J**	**0.02 J**	**0.02 J**	**0.02 J**
Pyrene	µg/L	50	20 U	20 U	20 U	20 U	25.0 U	2.0 U	2.0 U	1.0 U	1.0 U	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U

Notes:
µg/L = micrograms per liter
NT = Not Tested
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October 2018 Duplicate sample ("Duplicate-092718") collected at MW-1.
May 2019 Duplicate sample ("Duplicate-051519") collected at MW-4.
October 2019 Duplicate sample ("Duplicate 102619") collected at MW-1.
April 2020 Duplicate sample ("GEN-DUP-04202020") collected at MW-2.
October 2020 Duplicate sample ("GEN-DUP-10282020") collected at MW-4.
April 2021 Duplicate sample ("GEN-DUP-042821") collected at MW-4.
October 2021 Duplicate sample ("GEN-DUP-103021") collected at MW-2.

Table 2 - Groundwater Sample Analytical Results

Well ID		NYSDEC	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8	MW-8
Sample ID		TOGS 1.1.1	GEN-MW8	GEN-MW8-092818	GEN-MW8-051619	GEN-MW8-102919	GEN-MW8-04212020	GEN-MW8-10282020	GEN-MW8-050321	GEN-MW8-110121
Lab Sample ID		Class GA[1]	181657-06	184501-04	192209-07	195363-07	201703-06	205221-02	211855-01	214958-08
Date Sampled	Units		4/23/2018	9/28/2018	5/16/2019	10/29/2019	4/21/2020	10/28/2020	5/3/2021	11/1/2021
Volatiles										
Benzene	µg/L	1	**8.93**	**8.08**	**6.00**	**5.50**	**2.28**	**3.59**	**2.54**	**3.37**
Ethylbenzene	µg/L	5*	**7.3**	**7.08**	**5.84**	**5.64**	**2.68**	**2.60**	**2.52**	**2.32**
Toluene	µg/L	5*	**2.76**	**5.78**	**4.99**	**5.21**	**2.24**	**3.76**	**1.49 J**	**1.44 J**
Xylene (total)	µg/L	5*	**3.85**	**11.77**	**8.26**	**9.45**	**6.28**	**8.19**	**5.88**	**6.58**
Semi-Volatiles										
Acenaphthene	µg/L	20	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Acenaphthylene	µg/L	NS	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Anthracene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)anthracene	µg/L	0.002**	10 U	10 U	10 U	5.37 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(a)pyrene	µg/L	ND	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(b)fluoranthene	µg/L	0.002	10 U	10 U	10 U	5.00 U	**0.02 J**	0.10 U	0.10 U	0.10 U
Benzo(g,h,i)perylene	µg/L	NS	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Benzo(k)fluoranthene	µg/L	0.002	10 U	10 U	10 U	5.70 U	0.10 U	0.10 U	0.10 U	0.10 U
Dibenzo(a,h)anthracene	µg/L	NS	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Chrysene	µg/L	0.002	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluoranthene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Fluorene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U
Indeno(1,2,3-cd) pyrene	µg/L	0.002**	10 U	10 U	10 U	5.10 U	0.10 U	0.10 UJ	0.10 U	0.10 U
Naphthalene	µg/L	10	10 U	10 U	10 U	6.03 U	0.10 U	0.10 U	**0.09 J**	**0.22**
Phenanthrene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	**0.04 J**
Pyrene	µg/L	50	10 U	10 U	10 U	5.00 U	0.10 U	0.10 U	0.10 U	0.10 U

Notes:
µg/L = micrograms per liter
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U - Indicates that the constituent was not detected at the reported detection limit.
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Bolded and highlighted value indicates that the compound was detected above its respective regulatory standard or guidance value.
[1]Class GA Drinking Water Standard or Guidance Value
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**Class GA Guidance Value
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October 2018 Duplicate sample ("Duplicate-092718") collected at MW-1.
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October 2019 Duplicate sample ("Duplicate 102619") collected at MW-1.
April 2020 Duplicate sample ("GEN-DUP-04202020") collected at MW-2.
October 2020 Duplicate sample ("GEN-DUP-10282020") collected at MW-4.
April 2021 Duplicate sample ("GEN-DUP-042821") collected at MW-4.
October 2021 Duplicate sample ("GEN-DUP-103021") collected at MW-2.

Figures

NEU-VELLE LLC

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LEGEND

- GROUNDWATER MONITORING WELL

NOTES:

1. MONITORING WELL LOCATIONS ARE APPROXIMATE.

ROCHESTER GAS AND
ELECTRIC CORPORATION
PARK STREET FORMER MGP SITE
GENESEO, NEW YORK

0 25 50 100
Feet

MONITORING WELL LOCATIONS

N

FIGURE 1

MARCH 2022

NEU-VELLE LLC

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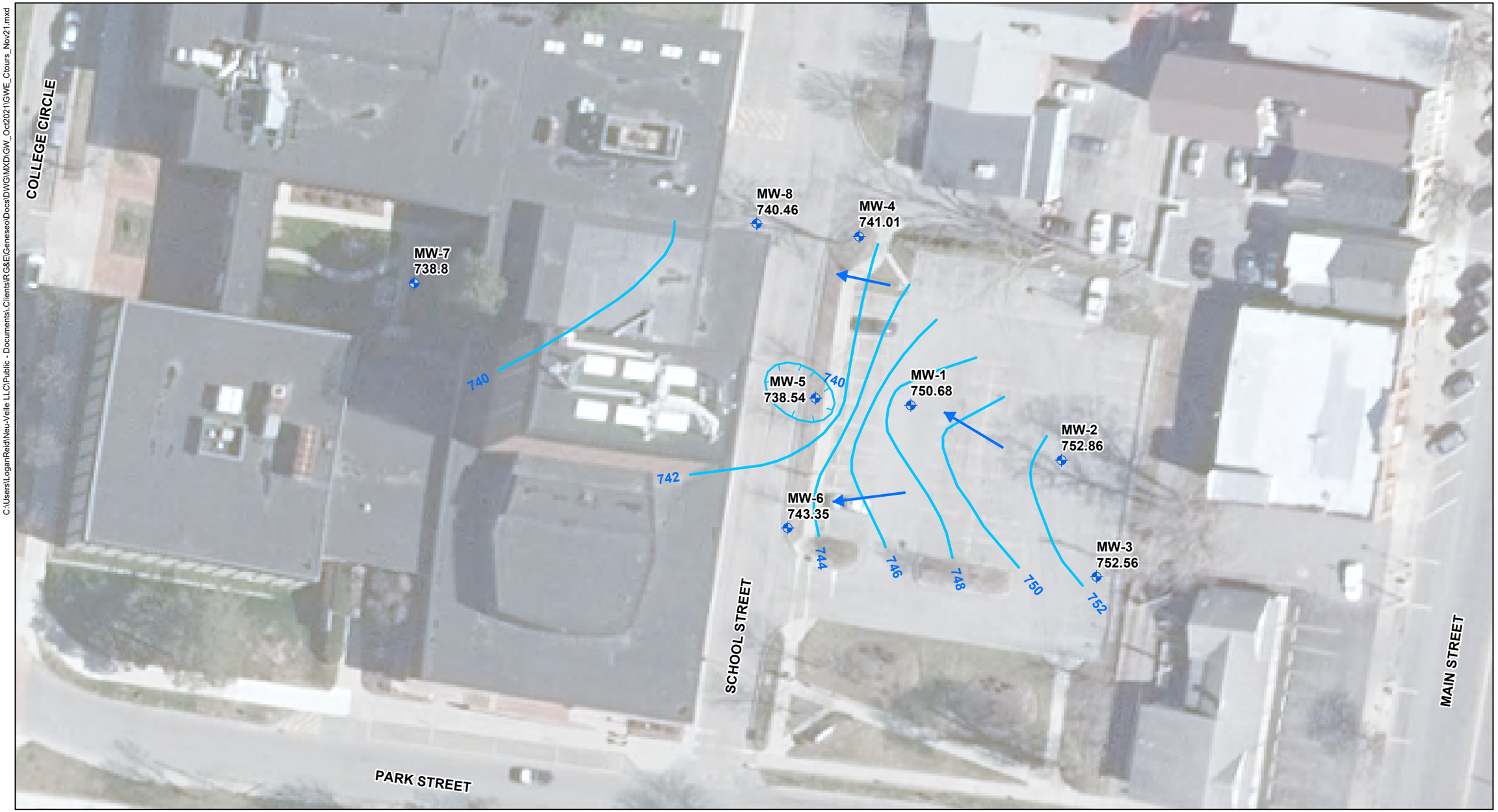

LEGEND

- GROUNDWATER MONITORING WELL
- GROUNDWATER ELEVATION CONTOURS (FT)
- GROUNDWATER FLOW DIRECTION

NOTES:

1. MONITORING WELL LOCATIONS ARE APPROXIMATE.
2. GROUNDWATER ELEVATIONS MEASURED ON NOVEMBER 3, 2021.

ROCHESTER GAS AND ELECTRIC CORPORATION
PARK STREET FORMER MGP SITE
GENESEO, NEW YORK

0 20 40 80
Feet

NOVEMBER 2021
GROUNDWATER ELEVATION CONTOURS

N

FIGURE 2

MARCH 2022

NEU-VELLE LLC

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Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-7
VOCs			
Not Detected			
SVOCs			
Benzo(a)anthracene	µg/L	0.002**	**0.02 J**
Benzo(b)fluoranthene	µg/L	0.002	**0.02 J**
Phenanthrene	µg/L	50**	**0.02 J**

Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-8
VOCs			
Benzene	µg/L	1	**3.37**
Ethylbenzene	µg/L	5*	**2.32**
Toluene	µg/L	5*	**1.44 J**
Xylene (total)	µg/L	5*	**6.58**
SVOCs			
Naphthalene	µg/L	10**	**0.22**
Phenanthrene	µg/L	50**	**0.04 J**

Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-4
VOCs			
Benzene	µg/L	1	1.00 UM
Ethylbenzene	µg/L	5*	2.00 UM
Toluene	µg/L	5*	2.00 UM
Xylene (total)	µg/L	5*	**2.44**
SVOCs			
Not Detected			

Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-1
VOCs			
Not Detected			
SVOCs			
Not Detected			

Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-2	
VOCs				Duplicate
Xylene (total)	µg/L	5*	2 U	**1.10 J**
SVOCs				
Benzo(a)anthracene	µg/L	0.002**	**0.02 J**	0.10 U
Benzo(b)fluoranthene	µg/L	0.002	**0.04 J**	0.10 U
Phenanthrene	µg/L	50**	**0.02 J**	**0.02 J**

Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-5
VOCs			
Not Sampled			
SVOCs			
Not Sampled			

Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-6
VOCs			
Benzene	µg/L	1	**178**
Ethylbenzene	µg/L	5*	**32.6**
Toluene	µg/L	5*	**33.8**
Xylene (total)	µg/L	5*	**86.8**
SVOCs			
Acenaphthene	µg/L	20	1.7
Acenaphthylene	µg/L	NS	**18**
Anthracene	µg/L	50	**0.46 J**
Fluorene	µg/L	50**	**4**
Naphthalene	µg/L	10**	**170**
Phenanthrene	µg/L	50**	**1.6 J**

Target Analyte	Units	NYSDEC TOGS 1.1.1 Class GA	MW-3
VOCs			
Not Detected			
SVOCs			
Not Detected			

COLLEGE CIRCLE
SCHOOL STREET
MAIN STREET
PARK STREET
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8

LEGEND

- GROUNDWATER MONITORING WELL

NOTES:
1. MONITORING WELL LOCATIONS ARE APPROXIMATE.
2. U = NOT DETECTED.
3. VOCS = VOLATILE ORGANIC COMPOUNDS.
4. SVOCS = SEMI-VOLATILE ORGANIC COMPOUNDS.
5. *PRINCIPAL ORGANIC CONTAMINANT STANDARD
6. J = ESTIMATED VALUE.
7. µg/L = MICROGRAMS PER LITER (OR PARTS PER BILLION).
8. BOLDED VALUE INDICATES THAT THE COMPOUND WAS DETECTED ABOVE LABORATORY REPORTING LIMIT.
9. BOLDED HIGHLIGHTED VALUES ARE DETECTED ABOVE REGULATORY STANDARD OR GUIDANCE VALUE.

ROCHESTER GAS AND ELECTRIC CORPORATION
PARK STREET FORMER MGP SITE
GENESEO, NEW YORK

0 25 50 100
Feet

OCTOBER/NOVEMBER 2021 GROUNDWATER ANALYTICAL RESULTS

N

FIGURE 3

MARCH 2022

NEU-VELLE LLC

Attachment A

Groundwater Sampling Logs

NEU-VELLE LLC

NEU-VELLE, LLC — Low Flow Ground Water Sampling Log

Date	10/29/2021	Personnel	K R Miller / ~~A Rothfuss~~	Weather	cloudy ± 55° F
Site Name	RG&E - Geneseo	Evacuation Method	Bladder Pump	Well #	MW4 raing
Site Location	Geneseo, NY	Sampling Method	Bladder Pump	Project #	2021067

Well information:

Depth of Well *	39.8	ft.	11/3/21
Depth to Water *	15.17	ft.	
Length of Water Column		ft.	

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

NO NAPL 11/3/21

Start Purge Time: 15:20

Time	Depth To Water (ft. BTOC)	Temperature (C°)	pH	Conductivity (µs/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
15:25	14.75	14.5	7.00	3.23	-73.7	8.97	19.6	± 300
15:30	15.05	14.5	7.07	3.22	-74.4	8.63	28.5	
15:35	15.21	14.5	7.10	3.20	-75.6	9.07	44.4	
15:40	15.22	14.5	7.14	3.18	-77.8	8.71	67.7	
15:45	15.25	14.5	7.19	3.16	-79.4	8.31	81.4	
15:50	15.24	14.4	7.28	3.14	-82.4	8.54	95.1	
15:55	15.25	14.3	7.45	3.11	-81.4	9.03	86.3	
16:00	15.25	14.3	7.50	3.10	-82.3	9.30	85.1	
16:05	15.26	14.4	7.47	3.11	-77.6	8.44	87.6	

End Purge Time: 16:05

Water sample:

Time collected: 16:15

Total volume of purged water removed: ± 3.5 gal

Physical appearance at start

Color: clear

Odor: slight petro.

Sheen/Free Product: NO

Physical appearance at sampling

Color: cloudy

Odor: slight petro.

Sheen/Free Product: No

"GEN-MW4-102921" + MS/MSD

Analytical Parameters:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	Glass	6	No	HCl	NM
1 L	Amber Glass	3	No	None	NM

NEU-VELLE, LLC — Low Flow Ground Water Sampling Log

Date	10 / 30 /2021	Personnel	K R Miller / ~~A Rothfuss~~	Weather	overcast, lt. rain ~50°F
Site Name	RG&E - Geneseo	Evacuation Method	Bladder Pump	Well #	MW1
Site Location	Geneseo, NY	Sampling Method	Bladder Pump	Project #	2021067

Well information:

Depth of Well * 35.85 ft.
Depth to Water * ~~7.73~~ ft. 11/3/21
Length of Water Column ft.

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

NO NAPL 11/3/21

Start Purge Time: 13:05

Time	Depth To Water (ft. BTOC)	Temperature (C°)	pH	Conductivity (µs/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
13:10	8.01	15.2	6.69	7.29	-26.0	11.61	4.98	~325
13:15	8.89	15.2	6.69	7.26	-30.0	5.03	5.45	
13:20	9.36	15.2	6.67	7.25	-31.4	2.83	3.80	
13:25	9.69	15.1	6.68	7.25	-31.5	2.46	3.06	
13:30	9.85	15.1	6.70	7.24	-32.0	2.08	4.38	
13:35	10.02	15.1	6.68	7.23	-32.3	2.05	3.90	
13:40	10.41	15.3	6.66	7.21	-34.3	1.67	2.61	
13:45	10.65	15.4	6.71	7.22	-36.7	1.37	2.87	~250
13:50	10.80	15.4	6.67	7.20	-37.9	1.30	2.43	
13:55	10.85	15.3	6.67	7.19	-40.6	1.17	2.56	

End Purge Time: 13:55

Water sample:
Time collected: 14:00

Total volume of purged water removed: ~3.5 gal

Physical appearance at start
Color: clear
Odor: swampy
Sheen/Free Product: NO

Physical appearance at sampling
Color: clear
Odor: swampy
Sheen/Free Product: NO

"GEN - MW1 - 103021"

Analytical Parameters:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	Glass	1	No	HCl	NM
1 L	Amber Glass	2	No	None	NM

NEU-VELLE, LLC — **Low Flow Ground Water Sampling Log**

Date	10 / 30 /2021	Personnel	K R Miller / A ~~Rothfuss~~	Weather	rain overcast ± 50° F
Site Name	RG&E - Geneseo	Evacuation Method	Bladder Pump	Well #	MW2
Site Location	Geneseo, NY	Sampling Method	Bladder Pump	Project #	2021067

Well information:

Depth of Well * 36.76 ft.
Depth to Water * 7.39 ft. 11/3/21
Length of Water Column ft.

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

NO NAPL 11/3/21

Start Purge Time: 14:55

Time	Depth To Water (ft. BTOC)	Temperature (C°)	pH	Conductivity (µs/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
15:00	NM	15.4	6.99	3.00	-122.1	2.32	7.82	±200
15:05	7.78	15.4	6.98	3.00	-123.3	1.10	6.64	
15:10	8.28	15.3	6.97	2.99	-122.9	1.10	7.63	
15:15	8.52	15.2	6.96	2.99	-122.4	0.97	4.57	
15:20	8.79	15.2	6.96	2.99	-121.0	0.86	6.57	
15:25	8.90	15.2	6.95	2.97	-120.2	0.76	4.42	
15:30	8.92	15.2	6.96	2.97	-120.2	0.72	4.47	
15:35	8.95	15.2	6.95	2.95	-120.3	0.62	4.84	

End Purge Time: 15:35

Water sample:
Time collected: 15:45

Total volume of purged water removed: ± 3 gal

Physical appearance at start
Color clear
Odor swampy
Sheen/Free Product NO

Physical appearance at sampling
Color clear
Odor swampy
Sheen/Free Product NO

"GEN-MW2-103021" + "GEN-DUP-103021"

Analytical Parameters:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	Glass	4	No	HCl	NM
1 L	Amber Glass	2	No	None	NM

NEU-VELLE, LLC

Low Flow Ground Water Sampling Log

Date	10/31/2021	Personnel	K R Miller / ~~A Rothfuss~~	Weather	overcast ± 50°F
Site Name	RG&E - Geneseo	Evacuation Method	Bladder Pump	Well #	MW3
Site Location	Geneseo, NY	Sampling Method	Bladder Pump	Project #	2021067

Well information:

Depth of Well * ~~32.59~~ ft. (KM)

Depth to Water * 9.10 ft. 11/3/21

Length of Water Column _____ ft.

NO NAPL 11/3/21

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

Start Purge Time: 11:45

Time	Depth To Water (ft. BTOC)	Temperature (C°)	pH	Conductivity (µs/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
11:50	8.93	14.8	7.22	3.30	-94.0	6.16	41.2	± 200
11:55	9.06	14.7	7.08	3.30	-97.7	5.03	33.8	
12:00	9.22	14.6	7.00	3.30	-99.6	6.72	34.0	
12:05	9.40	14.7	7.01	3.30	-101.0	6.44	35.0	
12:10	9.56	14.6	7.02	3.30	-101.1	3.07	30.3	
12:15	9.61	14.6	7.01	3.29	-101.1	6.09	36.9	
12:20	9.65	14.6	7.01	3.29	-101.2	5.94	35.8	
12:25	9.67	14.6	7.02	3.28	-100.9	5.15	36.9	

End Purge Time: 12:25

Water sample:

Time collected: 12:30

Total volume of purged water removed: ± 1.75 gal

Physical appearance at start

Color: clear

Odor: swampy (slight(y))

Sheen/Free Product: NO

Physical appearance at sampling

Color: clear

Odor: swampy

Sheen/Free Product: NO

"GEN - MW3 - 103121"

Analytical Parameters:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	Glass	2	No	HCl	NM
1 L	Amber Glass	1	No	None	NM

NEU-VELLE, LLC — **Low Flow Ground Water Sampling Log**

Date	10 / 31 /2021	Personnel	K R Miller ~~LA Rothfuss~~	Weather	cloudy ±50°F
Site Name	RG&E - Geneseo	Evacuation Method	Bladder Pump	Well #	MW6
Site Location	Geneseo, NY	Sampling Method	Bladder Pump	Project #	2021067

Well information:

Depth of Well * 37.39 ft.
Depth to Water * ~~14.39~~ ft. 11/3/21
Length of Water Column ft.

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

NO NAPL 11/3/21

Start Purge Time: 13:30

Time	Depth To Water (ft. BTOC)	Temperature (C°)	pH	Conductivity (µs/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
13:35	12.36	14.7	7.09	2.91	-119.1	1.23	11.6	±200
13:40	13.05	14.7	7.09	2.92	-123.3	0.49	10.15	
13:45	13.44	14.8	7.10	2.91	-127.1	0.34	17.1	
13:50	14.00	14.7	7.10	2.91	-129.2	0.27	17.4	
13:55	14.15	14.9	7.10	2.91	-130.3	0.22	17.2	±100
14:00	14.33	15.1	7.09	2.91	-131.4	0.17	17.3	
14:05	14.41	15.1	7.10	2.91	-131.9	0.16	17.5	±110
14:10	14.44	15.1	7.10	2.90	-132.6	0.14	17.7	
14:15	14.46	15.1	7.10	2.91	-133.0	0.13	17.6	

End Purge Time: 14:15

Water sample:
Time collected: 14:30

Total volume of purged water removed: ± 2 gal

Physical appearance at start
Color: clear/lt. gray
Odor: petro. odor
Sheen/Free Product: NO

Physical appearance at sampling
Color: clear/lt. gray
Odor: petro. odor
Sheen/Free Product: No

"GEN-MW6-103121"

Analytical Parameters:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	Glass	2	No	HCl	NM
1 L	Amber Glass	1	No	None	NM

NEU-VELLE, LLC — **Low Flow Ground Water Sampling Log**

Date	11/1/2021	Personnel	K R Miller / ~~A Rothfuss~~	Weather	partly cloudy ± 50° F
Site Name	RG&E - Geneseo	Evacuation Method	Bladder Pump	Well #	MW8
Site Location	Geneseo, NY	Sampling Method	Bladder Pump	Project #	2021067

Well information:

Depth of Well * ± 36.9 ft.
Depth to Water * 12.65 ft. 11/3/21
Length of Water Column ft.

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

NO NAPL 11/3/21

Start Purge Time: 14:20

Time	Depth To Water (ft. BTOC)	Temperature (C°)	pH	Conductivity (µs/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
14:25	12.95	15.8	8.06	2.89	-136.9	~~2.68~~	5.80	± 200
14:30	13.02	15.3	7.65	3.30	-155.1	3.04	5.05	
14:35	13.06	15.2	7.64	3.31	+52.16	3.06	5.02	
14:40	13.08	15.2	7.63	3.32	-150.1	3.11	4.65	
14:45	13.09	15.2	7.63	3.32	-152.1	3.69	4.30	
14:50	13.09	15.3	7.63	3.33	+53.6	3.54	4.17	

End Purge Time: 14:50

Water sample:

Time collected: 15:00

Total volume of purged water removed: ± 2 gal

Physical appearance at start
Color: clear
Odor: petro. odor
Sheen/Free Product: No

Physical appearance at sampling
Color: clear
Odor: petro odor
Sheen/Free Product: No

Equipment Blank "GEN-EB-110121" @ 12:00

Analytical Parameters: sample = "GEN-MW8-110121"

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	Glass	4	No	HCl	NM
1 L	Amber Glass	2	No	None	NM

NEU-VELLE, LLC — **Low Flow Ground Water Sampling Log**

Date	11 / 1 /2021	Personnel	K R Miller / ~~A Rothfuss~~	Weather	partly cloudy ~50 F
Site Name	RG&E - Geneseo	Evacuation Method	Bladder Pump	Well #	MW7
Site Location	Geneseo, NY	Sampling Method	Bladder Pump	Project #	2021067

Well information:

Depth of Well * ~29.3 ft.
Depth to Water * 5.27 ft. 11/3/21
Length of Water Column ft.

* Measurements taken from

X	Top of Well Casing
	Top of Protective Casing
	(Other, Specify)

NO NAPL 11/3/21

Start Purge Time: 16:00

Time	Depth To Water (ft. BTOC)	Temperature (C°)	pH	Conductivity (µs/cm)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
16:05	4.95	15.4	7.08	2.166	233.0	13.5	NM	~200
16:10	5.20	15.2	7.11	2.35	234.4	34.8	31.4	
16:15	5.25	15.3	7.12	2.34	234.2	24.6	30.2	
16:20	5.27	15.2	7.12	2.34	268.1	25.4	28.6	
16:25	5.29	15.2	7.11	2.35	268.5	26.2	23.1	
16:30	5.30	15.3	7.11	2.34	266.2	26.1	22.6	

End Purge Time: 16:30

Water sample:
Time collected: 16:30

Total volume of purged water removed: ~2 gal

Physical appearance at start
Color: clear
Odor: petro. odor
Sheen/Free Product: No

Physical appearance at sampling
Color: clear
Odor: petro. odor
Sheen/Free Product: No

"GEN - MW7 - 110121"

Analytical Parameters:

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40 ml	Glass	2	No	HCl	NM
1 L	Amber Glass	1	No	None	NM

Exhibit A

Groundwater Laboratory Reports, Chain of Custody Forms and DUSR

NEU-VELLE LLC

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Neu-Velle

For Lab Project ID

214958

Referencing

RGE Geneseo Fmr. MGP Site

Prepared

Tuesday, November 16, 2021

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below:

Portions of the enclosed report reflects analysis that has been subcontracted and are presented in their original form.

A complete ASP package will follow this report.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW4-102921		
Lab Sample ID:	214958-01	**Date Sampled:**	10/29/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L	M	11/3/2021 13:33
Ethylbenzene	< 2.00	ug/L	M	11/3/2021 13:33
m,p-Xylene	**2.44**	ug/L		11/3/2021 13:33
o-Xylene	< 2.00	ug/L		11/3/2021 13:33
Toluene	< 2.00	ug/L	M	11/3/2021 13:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**121**	77.9 - 132		11/3/2021 13:33
4-Bromofluorobenzene	**118**	62.6 - 133		11/3/2021 13:33
Pentafluorobenzene	**115**	88.9 - 114	*	11/3/2021 13:33
Toluene-D8	**107**	75.6 - 117		11/3/2021 13:33

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05208.D

Report Prepared Tuesday, November 16, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW1-103021		
Lab Sample ID:	214958-02	**Date Sampled:**	10/30/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 14:31
Ethylbenzene	< 2.00	ug/L		11/3/2021 14:31
m,p-Xylene	< 2.00	ug/L		11/3/2021 14:31
o-Xylene	< 2.00	ug/L		11/3/2021 14:31
Toluene	< 2.00	ug/L		11/3/2021 14:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**117**	77.9 - 132		11/3/2021 14:31
4-Bromofluorobenzene	**108**	62.6 - 133		11/3/2021 14:31
Pentafluorobenzene	**117**	88.9 - 114	*	11/3/2021 14:31
Toluene-D8	**108**	75.6 - 117		11/3/2021 14:31

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05211.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW2-103021		
Lab Sample ID:	214958-03	**Date Sampled:**	10/30/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 14:50
Ethylbenzene	< 2.00	ug/L		11/3/2021 14:50
m,p-Xylene	**1.10**	ug/L	J	11/3/2021 14:50
o-Xylene	< 2.00	ug/L		11/3/2021 14:50
Toluene	< 2.00	ug/L		11/3/2021 14:50

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**118**	77.9 - 132		11/3/2021 14:50
4-Bromofluorobenzene	**107**	62.6 - 133		11/3/2021 14:50
Pentafluorobenzene	**113**	88.9 - 114		11/3/2021 14:50
Toluene-D8	**107**	75.6 - 117		11/3/2021 14:50

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05212.D

Report Prepared Tuesday, November 16, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-DUP-103021		
Lab Sample ID:	214958-04	**Date Sampled:**	10/30/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 15:09
Ethylbenzene	< 2.00	ug/L		11/3/2021 15:09
m,p-Xylene	< 2.00	ug/L		11/3/2021 15:09
o-Xylene	< 2.00	ug/L		11/3/2021 15:09
Toluene	< 2.00	ug/L		11/3/2021 15:09

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**123**	77.9 - 132		11/3/2021 15:09
4-Bromofluorobenzene	**106**	62.6 - 133		11/3/2021 15:09
Pentafluorobenzene	**114**	88.9 - 114		11/3/2021 15:09
Toluene-D8	**111**	75.6 - 117		11/3/2021 15:09

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05213.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW3-103121		
Lab Sample ID:	214958-05	**Date Sampled:**	10/31/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 15:29
Ethylbenzene	< 2.00	ug/L		11/3/2021 15:29
m,p-Xylene	< 2.00	ug/L		11/3/2021 15:29
o-Xylene	< 2.00	ug/L		11/3/2021 15:29
Toluene	< 2.00	ug/L		11/3/2021 15:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**120**	77.9 - 132		11/3/2021 15:29
4-Bromofluorobenzene	**118**	62.6 - 133		11/3/2021 15:29
Pentafluorobenzene	**110**	88.9 - 114		11/3/2021 15:29
Toluene-D8	**107**	75.6 - 117		11/3/2021 15:29

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05214.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW6-103121		
Lab Sample ID:	214958-06	**Date Sampled:**	10/31/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**178**	ug/L		11/8/2021 15:52
Ethylbenzene	**32.6**	ug/L		11/8/2021 15:52
m,p-Xylene	**43.5**	ug/L		11/8/2021 15:52
o-Xylene	**43.3**	ug/L		11/8/2021 15:52
Toluene	**33.8**	ug/L		11/8/2021 15:52

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**99.0**	77.9 - 132		11/8/2021 15:52
4-Bromofluorobenzene	**86.5**	62.6 - 133		11/8/2021 15:52
Pentafluorobenzene	**99.3**	88.9 - 114		11/8/2021 15:52
Toluene-D8	**88.7**	75.6 - 117		11/8/2021 15:52

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05290.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-EB-110121		
Lab Sample ID:	214958-07	**Date Sampled:**	11/1/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**0.806**	ug/L	J	11/3/2021 16:07
Ethylbenzene	< 2.00	ug/L		11/3/2021 16:07
m,p-Xylene	< 2.00	ug/L		11/3/2021 16:07
o-Xylene	< 2.00	ug/L		11/3/2021 16:07
Toluene	< 2.00	ug/L		11/3/2021 16:07

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**117**	77.9 - 132		11/3/2021 16:07
4-Bromofluorobenzene	**117**	62.6 - 133		11/3/2021 16:07
Pentafluorobenzene	**116**	88.9 - 114	*	11/3/2021 16:07
Toluene-D8	**108**	75.6 - 117		11/3/2021 16:07

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05216.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW8-110121		
Lab Sample ID:	214958-08	**Date Sampled:**	11/1/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**3.37**	ug/L		11/3/2021 16:27
Ethylbenzene	**2.32**	ug/L		11/3/2021 16:27
m,p-Xylene	**3.52**	ug/L		11/3/2021 16:27
o-Xylene	**3.06**	ug/L		11/3/2021 16:27
Toluene	**1.44**	ug/L	J	11/3/2021 16:27

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**118**	77.9 - 132		11/3/2021 16:27
4-Bromofluorobenzene	**112**	62.6 - 133		11/3/2021 16:27
Pentafluorobenzene	**115**	88.9 - 114	*	11/3/2021 16:27
Toluene-D8	**97.0**	75.6 - 117		11/3/2021 16:27

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05217.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW7-110121		
Lab Sample ID:	214958-09	**Date Sampled:**	11/1/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 16:46
Ethylbenzene	< 2.00	ug/L		11/3/2021 16:46
m,p-Xylene	< 2.00	ug/L		11/3/2021 16:46
o-Xylene	< 2.00	ug/L		11/3/2021 16:46
Toluene	< 2.00	ug/L		11/3/2021 16:46

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**115**	77.9 - 132		11/3/2021 16:46
4-Bromofluorobenzene	**101**	62.6 - 133		11/3/2021 16:46
Pentafluorobenzene	**114**	88.9 - 114		11/3/2021 16:46
Toluene-D8	**97.7**	75.6 - 117		11/3/2021 16:46

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05218.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	Trip Blank T1075		
Lab Sample ID:	214958-10	**Date Sampled:**	10/25/2021
Matrix:	Water	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 17:05
Ethylbenzene	< 2.00	ug/L		11/3/2021 17:05
m,p-Xylene	< 2.00	ug/L		11/3/2021 17:05
o-Xylene	< 2.00	ug/L		11/3/2021 17:05
Toluene	< 2.00	ug/L		11/3/2021 17:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**127**	77.9 - 132		11/3/2021 17:05
4-Bromofluorobenzene	**111**	62.6 - 133		11/3/2021 17:05
Pentafluorobenzene	**117**	88.9 - 114	*	11/3/2021 17:05
Toluene-D8	**121**	75.6 - 117	*	11/3/2021 17:05

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05219.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"Z" = See case narrative.
"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.
"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.
"B" = Method blank contained trace levels of analyte. Refer to included method blank report.
"J" = Result estimated between the quantitation limit and half the quantitation limit.
"L" = Laboratory Control Sample recovery outside accepted QC limits.
"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.
"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.
"" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
"(1)" = Indicates data from primary column used for QC calculation.
"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.
"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

Warranty. Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

Scope and Compensation. LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

Prices. Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

Limitations of Liability. In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

Hazard Disclosure. Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

Sample Handling. Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

Legal Responsibility. LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

Assignment. LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

Force Majeure. LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

Law. This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	New-Velle LLC	CLIENT:	Same	214958
ADDRESS:	1667 Lake Ave	ADDRESS:		Quotation #:
CITY:	Rochester STATE: NY ZIP: 14615	CITY: STATE: ZIP:		
PHONE:	(585) 478-1666	PHONE:		Email: KMiller@new-velle.com
ATTN:	Kyle Miller	ATTN:		

PROJECT REFERENCE: RGE Geneseo Fmr. MGP Site

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260 BTEX	8270 PAH SIM	REMARKS	PARADIGM LAB SAMPLE NUMBER
10/29/21	16:15		X	GEN-MW4-102921	WG	9	X	X	MS/MSD	01
10/30/21	14:00		X	GEN-MW1-103021	WG	3	X	X		02
10/30/21	15:45		X	GEN-MW2-103021	WG	3	X	X		03
10/30/21	—		X	GEN-DUP-103021	WG	3	X	X	Duplicate	04
10/31/21	12:30		X	GEN-MW3-103121	WG	3	X	X		05
10/31/21	14:30		X	GEN-MW6-103121	WG	3	X	X		06
11/1/21	12:00		X	GEN-EB-110121	WA	3	X	X	Equip. Blank	07
11/1/21	15:00		X	GEN-MW8-110121	WG	3	X	X		08
11/1/21	16:30		X	GEN-MW7-110121	WG	3	X	X		09
10/25/21				Trip Blank	W	1	X		Trip Blank	10

T1075 per sample label mw 11/2/21

Turnaround Time		Report Supplements			
Availability contingent upon lab approval; additional fees may apply.					
Standard 5 day	X	None Required		None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	X
Rush 2 day		Category B	X		
Rush 1 day					
Date Needed _____ please indicate date needed:		Other please indicate package needed:		Other EDD please indicate EDD needed :	

Kyle R. Miller 10/29/21 to 11/1/21
Sampled By Date/Time

Relinquished By 11/2/21 13:30 Date/Time

Received By Emily Fauver 11/2/21 1330 Date/Time

Received @ Lab By Mail 11/2/21 1342 Date/Time

Total Cost:

P.I.F.

4°C iced 11/2/21 13:35

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

Custody Seals intact, signed, dated. GP 11/2/21

See additional page for sample conditions.

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Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Volatile Organics Method 8260	**Water (µg/L)**	**Soil (µg/kg)[2]**
Chloromethane	5	5
Bromomethane	5	5
Vinyl Chloride	5	5
Chloroethane	5	5
Methylene Chloride	3	3
Acetone	5	5
Carbon Disulfide	5	5
1,1-Dichloroethylene	5	5
1,1-Dichloroethane	5	5
1,2-Dichloroethylene (total)	5	5
Chloroform	5	5
1,2-Dichloroethane	2	2
2-Butanone	5	5
1,1,1-Trichloroethane	5	5
Carbon Tetrachloride	2	2
Bromodichloromethane	1	1
1,2-Dichloropropane	1	1
cis-1,3-Dichloropropene	5	5
Trichloroethane	5	5
Dibromochloromethane	5	5
1,1,2-Trichloroethane	3	3
Benzene	1	1
trans-1,3-Dichloropropene	5	5
Bromoform	4	4
4-Methyl-2-pentanone	5	5
2-Hexanone	5	5
Tetrachloroethene	1	1
Toluene	5	5
1,1,2,2-Tetrachloroethane	1	1
Chlorobenzene	5	5
Ethylbenzene	4	4
Styrene	5	5
2-Chloroethyl Vinyl Ether	5	5
1,2-Dichlorobenzene	5	5
1,3-Dichlorobenzene	5	5
1,4-Dichlorobenzene	5	5
Vinyl Acetate	5	5
Total Xylenes	5	5
Semivolatile Organics Method 8270	**Water (µg/L)**	**Soil (µg/kg)**
1,2,4-Trichlorobenzene	1	33
1,2-Dichlorobenzene	10	330
1,2-Diphenylhydrazine	10	330
1,3-Dichlorobenzene	10	330
1,4-Dichlorobenzene	10	330
1,4-Dioxane	10	330
2,4,5-Trichlorophenol	10	330
2,4,6-Trichlorophenol	10	330
2,4-Dichlorophenol	10	330

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Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Semivolatile Organics Method 8270 (Cont'd.)	**Water (µg/L)**	**Soil (µg/kg)**
2,4-Dimethylphenol	10	330
2,4-Dinitrophenol	40	1300
2,4-Dinitrotoluene	2	67
2,6-Dinitrotoluene	2	67
2-Chloronaphthalene	10	330
2-Chlorophenol	10	330
2-Methylnaphthalene	10	330
2-Methylphenol	10	330
2-Nitroaniline	20	670
2-Nitrophenol	10	330
3,3'-Dichlorobenzidene	20	670
3-Nitroaniline	20	670
4,6-Dinitro-2-methylphenol	40	1300
4-Bromophenyl-phenylether	10	330
4-Chloro-3-methylphenol	10	330
4-Chloroaniline	10	330
4-Chlorophenyl-phenylether	10	330
4-Methylphenol	10	330
4-Nitroaniline	20	670
4-Nitrophenol	40	1300
Acenaphthene	10	330
Acenaphthylene	10	330
Acetophenone	10	330
Aniline	10	330
Anthracene	10	330
Atrazine	10	330
Benzaldehyde	10	330
Benzidine	40	1300
Benzo(a)anthracene	1	33
Benzo(a)pyrene	1	33
Benzo(b)fluoranthene	1	33
Benzo(g,h,i)perylene	10	330
Benzo(k)fluoranthene	1	33
Benzoic Acid	10	330
Benzyl Alcohol	10	330
bis(2-chloroethoxy)methane	10	330
bis(2-chloroethyl)ether	1	33
bis(2-chloroisopropyl)ether	10	330
bis(2-ethylhexyl)phthalate	10	330
Butylbenzylphthalate	10	330
Caprolactam	10	330
Carbazole	10	330
Chrysene	10	330
Dibenzo(a,h)anthracene	1	33
Dibenzofuran	10	330
Diethylphthalate	10	330
Dimethylphthalate	10	330
Di-n-butyl phthalate	10	330
Di-n-octyl phthalate	10	330

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Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Semivolatiles Method 8270 (Cont'd.)	**Water (µg/L)**	**Soil (µg/kg)**
Diphenyl	10	330
Fluoranthene	10	330
Fluorene	10	330
Hexachlorobenzene	1	33
Hexachlorobutadiene	2	67
Hexachlorocyclopentadiene	10	330
Hexachloroethane	1	33
Indeno(1,2,3-cd)pyrene	1	33
Isophorone	10	330
N,N-Dimethylaniline	1	33
Naphthalene	10	330
Nitrobenzene	1	33
N-Nitrosodimethylamine	10	330
N-Nitroso-di-n-propylamine	1	33
N-Nitrosodiphenylamine	10	330
Pentachlorophenol	40	1300
Phenanthrene	10	330
Phenol	10	330
Pyrene	10	330
Pyridine	10	330
TAL Metals (6010/7470)	**Water (µg/L)**	**Soil (µg/kg)**
Aluminum	--	40
Antimony	--	2
Arsenic	--	1
Barium	--	40
Beryllium	--	0.4
Cadmium	--	1
Calcium	--	1000
Chromium	--	2
Cobalt	--	10
Copper	--	5
Iron	--	30
Lead	--	1
Magnesium	--	1000
Manganese	--	3
Mercury	--	0.033
Nickel	--	8
Potassium	--	1000
Selenium	--	1
Silver	--	2
Sodium	--	1000
Thallium	--	2
Vanadium	--	10
Zinc	--	6
Supplemental Parameters	**Water (µg/L)**	**Soil (mg/kg)**
Total Organic Carbon (Lloyd Kahn)	NA	100
Chloride Method 325.3	1,000	--

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Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Supplemental Parameters (Cont'd.)	**Water (µg/L)**	**Soil (mg/kg)**
Nitrate Method 353.2	100	--
Ammonia Method 350.1	100	--
Iron Method 200.7	150	--
Manganese Method 200.7	15	--
Sulfate Method 375.4	5,000	--
Sulfide Method 376.1	1,000	--
Orthophosphate Method 365.2	30	--
Alkalinity Method 310.1	5,000	--
Methane Method 3810	--	--
Reactive Sulfide	--	20
Reactive Cyanide	--	25
TCLP Benzene	--	1
Total Sulfur	--	50
Chemical Oxygen Demand	--	120

Notes:
[1] Specific quantitation limits are highly matrix dependent. The quantitation limits listed are for guidance and may not always be achievable due to matrix interference.
[2] Quantitation limits for source materials/soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for source materials/soil/sediment (calculated on a dry weight basis) will be higher.
µg/L = micrograms per liter
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram

PARADIGM

Chain of Custody Supplement

Client: Nel-Velle **Completed by:** MollyKail

Lab Project ID: 214958 **Date:** 1/12/21

Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

Condition	NELAC compliance with the sample condition requirements upon receipt: Yes	No	N/A
Container Type	☑	☐	☐
Comments			
Transferred to method-compliant container	☐	☐	☑
Headspace (<1 mL)	☑ VOA	☐	☑ ~~SVOA~~
Comments			
Preservation	☑ VOA	☐	☑ ~~SVOA~~
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☑
Comments			
Holding Time	☑	☐	☐
Comments			
Temperature	☑	☐	☐
Comments	4°C i cul		
Compliant Sample Quantity/Type	☑	☐	☐
Comments			

ANALYTICAL REPORT

Lab Number:	L2160069
Client:	Paradigm Environmental Services 179 Lake Avenue Rochester, NY 14608
ATTN:	Jane Daloia
Phone:	(585) 647-2530
Project Name:	214958
Project Number:	214958
Report Date:	11/09/21

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

Project Name: 214958
Project Number: 214958

Lab Number: L2160069
Report Date: 11/09/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2160069-01	GEN-MW4-102921 214958-01	WATER	Not Specified	10/29/21 16:15	11/02/21
L2160069-02	GEN-MW1-103021 214958-02	WATER	Not Specified	10/30/21 14:00	11/02/21
L2160069-03	GEN-MW2-103021 214958-03	WATER	Not Specified	10/30/21 15:45	11/02/21
L2160069-04	GEN-DUP-103021 214958-04	WATER	Not Specified	10/30/21 00:00	11/02/21
L2160069-05	GEN-MW3-103121 214958-05	WATER	Not Specified	10/31/21 12:30	11/02/21
L2160069-06	GEN-MW6-103121 214958-06	WATER	Not Specified	10/31/21 14:30	11/02/21
L2160069-07	GEN-EB-110121 214958-07	WATER	Not Specified	11/01/21 12:00	11/02/21
L2160069-08	GEN-MW8-110121 214958-08	WATER	Not Specified	11/01/21 15:00	11/02/21
L2160069-09	GEN-MW7-110121 214958-09	WATER	Not Specified	11/01/21 16:30	11/02/21

Project Name:	214958	**Lab Number:**	L2160069
Project Number:	214958	**Report Date:**	11/09/21

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name:	214958	**Lab Number:**	L2160069
Project Number:	214958	**Report Date:**	11/09/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 11/09/21

ORGANICS

SEMIVOLATILES

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-01
Client ID: GEN-MW4-102921 214958-01
Sample Location: Not Specified

Date Collected: 10/29/21 16:15
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/04/21 20:06
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	69		15-120
4-Terphenyl-d14	67		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-02
Client ID: GEN-MW1-103021 214958-02
Sample Location: Not Specified

Date Collected: 10/30/21 14:00
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/05/21 17:19
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	75		15-120
4-Terphenyl-d14	79		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-03
Client ID: GEN-MW2-103021 214958-03
Sample Location: Not Specified

Date Collected: 10/30/21 15:45
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/05/21 17:35
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.02	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	77		15-120
4-Terphenyl-d14	79		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-04
Client ID: GEN-DUP-103021 214958-04
Sample Location: Not Specified

Date Collected: 10/30/21 00:00
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/05/21 17:52
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.02	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	74		15-120
4-Terphenyl-d14	82		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-05
Client ID: GEN-MW3-103121 214958-05
Sample Location: Not Specified

Date Collected: 10/31/21 12:30
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/05/21 18:08
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	63		15-120
4-Terphenyl-d14	77		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-06 D
Client ID: GEN-MW6-103121 214958-06
Sample Location: Not Specified

Date Collected: 10/31/21 14:30
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/09/21 11:40
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	1.7		ug/l	1.0	0.35	10
Fluoranthene	ND		ug/l	1.0	0.38	10
Naphthalene	170		ug/l	1.0	0.43	10
Benzo(a)anthracene	ND		ug/l	1.0	0.18	10
Benzo(a)pyrene	ND		ug/l	1.0	0.39	10
Benzo(b)fluoranthene	ND		ug/l	1.0	0.16	10
Benzo(k)fluoranthene	ND		ug/l	1.0	0.42	10
Chrysene	ND		ug/l	1.0	0.38	10
Acenaphthylene	18		ug/l	1.0	0.35	10
Anthracene	0.46	J	ug/l	1.0	0.35	10
Benzo(ghi)perylene	ND		ug/l	1.0	0.42	10
Fluorene	4.0		ug/l	1.0	0.37	10
Phenanthrene	1.6		ug/l	1.0	0.15	10
Dibenzo(a,h)anthracene	ND		ug/l	1.0	0.39	10
Indeno(1,2,3-cd)pyrene	ND		ug/l	1.0	0.40	10
Pyrene	ND		ug/l	1.0	0.40	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	86		15-120
4-Terphenyl-d14	107		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-07
Client ID: GEN-EB-110121 214958-07
Sample Location: Not Specified

Date Collected: 11/01/21 12:00
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/05/21 18:41
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	84		15-120
4-Terphenyl-d14	83		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-08
Client ID: GEN-MW8-110121 214958-08
Sample Location: Not Specified

Date Collected: 11/01/21 15:00
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/05/21 18:58
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	0.22		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	69		15-120
4-Terphenyl-d14	77		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

SAMPLE RESULTS

Lab ID: L2160069-09
Client ID: GEN-MW7-110121 214958-09
Sample Location: Not Specified

Date Collected: 11/01/21 16:30
Date Received: 11/02/21
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/05/21 19:14
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.02	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	44		23-120
2-Fluorobiphenyl	50		15-120
4-Terphenyl-d14	63		41-149

Project Name: 214958 **Lab Number:** L2160069

Project Number: 214958 **Report Date:** 11/09/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/04/21 19:16
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 11/03/21 15:38

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-09 Batch: WG1566746-1					
Acenaphthene	ND		ug/l	0.10	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	29		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	67		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 214958

Project Number: 214958

Lab Number: L2160069

Report Date: 11/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 Batch: WG1566746-2 WG1566746-3								
Acenaphthene	72		69		40-140	4		40
Fluoranthene	78		69		40-140	12		40
Naphthalene	74		69		40-140	7		40
Benzo(a)anthracene	80		70		40-140	13		40
Benzo(a)pyrene	81		70		40-140	15		40
Benzo(b)fluoranthene	78		70		40-140	11		40
Benzo(k)fluoranthene	80		67		40-140	18		40
Chrysene	78		69		40-140	12		40
Acenaphthylene	84		79		40-140	6		40
Anthracene	78		71		40-140	9		40
Benzo(ghi)perylene	80		71		40-140	12		40
Fluorene	73		70		40-140	4		40
Phenanthrene	75		68		40-140	10		40
Dibenzo(a,h)anthracene	82		74		40-140	10		40
Indeno(1,2,3-cd)pyrene	80		70		40-140	13		40
Pyrene	79		70		40-140	12		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 214958

Project Number: 214958

Lab Number: L2160069

Report Date: 11/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 Batch: WG1566746-2 WG1566746-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		46		21-120
Phenol-d6	33		32		10-120
Nitrobenzene-d5	80		75		23-120
2-Fluorobiphenyl	76		72		15-120
2,4,6-Tribromophenol	118		76		10-120
4-Terphenyl-d14	64		67		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: 214958
Project Number: 214958
Lab Number: L2160069
Report Date: 11/09/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1566746-4 WG1566746-5 QC Sample: L2160069-01 Client ID: GEN-MW4-102921 214958-01												
Acenaphthene	ND	10	6.8	68		6.9	69		40-140	1		40
Fluoranthene	ND	10	6.8	68		7.2	72		40-140	6		40
Naphthalene	ND	10	6.8	68		7.1	71		40-140	4		40
Benzo(a)anthracene	ND	10	7.1	71		7.4	74		40-140	4		40
Benzo(a)pyrene	ND	10	6.9	69		7.3	73		40-140	6		40
Benzo(b)fluoranthene	ND	10	7.0	70		7.2	72		40-140	3		40
Benzo(k)fluoranthene	ND	10	6.9	69		7.2	72		40-140	4		40
Chrysene	ND	10	6.7	67		6.9	69		40-140	3		40
Acenaphthylene	ND	10	7.8	78		7.9	79		40-140	1		40
Anthracene	ND	10	6.9	69		7.1	71		40-140	3		40
Benzo(ghi)perylene	ND	10	7.1	71		7.5	75		40-140	5		40
Fluorene	ND	10	6.9	69		7.0	70		40-140	1		40
Phenanthrene	ND	10	6.7	67		6.8	68		40-140	1		40
Dibenzo(a,h)anthracene	ND	10	7.4	74		7.8	78		40-140	5		40
Indeno(1,2,3-cd)pyrene	ND	10	7.1	71		7.4	74		40-140	4		40
Pyrene	ND	10	6.7	67		7.3	73		40-140	9		40

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	74		78		10-120
2-Fluorobiphenyl	72		75		15-120
2-Fluorophenol	46		53		21-120
4-Terphenyl-d14	65		74		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: 214958

Project Number: 214958

Lab Number: L2160069

Report Date: 11/09/21

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 QC Batch ID: WG1566746-4 WG1566746-5 QC Sample: L2160069-01 Client ID: GEN-MW4-102921 214958-01												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
Nitrobenzene-d5	75		79		23-120
Phenol-d6	33		38		10-120

Project Name: 214958
Project Number: 214958

Lab Number: L2160069
Report Date: 11/09/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2160069-01A	Amber 1000ml unpreserved	A	8	8	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-01A1	Amber 1000ml unpreserved	A	9	9	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-01A2	Amber 1000ml unpreserved	A	9	9	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-02B	Amber 1000ml unpreserved	A	7	7	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-03B	Amber 1000ml unpreserved	A	8	8	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-04B	Amber 1000ml unpreserved	A	8	8	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-05B	Amber 1000ml unpreserved	A	8	8	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-06B	Amber 1000ml unpreserved	A	9	9	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-07B	Amber 1000ml unpreserved	A	9	9	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-08B	Amber 1000ml unpreserved	A	8	8	2.7	Y	Absent		NYTCL-8270-SIM(7)
L2160069-09B	Amber 1000ml unpreserved	A	9	9	2.7	Y	Absent		NYTCL-8270-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	214958	**Lab Number:**	L2160069
Project Number:	214958	**Report Date:**	11/09/21

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Project Name:	214958	**Lab Number:**	L2160069
Project Number:	214958	**Report Date:**	11/09/21

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	214958	**Lab Number:**	L2160069
Project Number:	214958	**Report Date:**	11/09/21

Data Qualifiers

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: DU Report with 'J' Qualifiers

Project Name:	214958	**Lab Number:**	L2160069
Project Number:	214958	**Report Date:**	11/09/21

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility
EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625/625.1: alpha-Terpineol
EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

L21L00109

CHAIN OF CUSTODY

11148

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:	179 Lake Avenue	ADDRESS:			
CITY:	Rochester STATE: NY ZIP: 14608	CITY:	STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE:	FAX:	PHONE:	FAX:	STD	OTHER
PROJECT NAME/SITE NAME:		ATTN:	Reporting	ATTN: Accounts Payable	☐1 ☐2 ☐3 ☒5
		COMMENTS:	Please email results to reporting@paradigmenv.com	Date Due: Standard Turn	

REQUESTED ANALYSIS

Report TF Flags

ASP Cat B Package Due 11/24

SW846 MT

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER CONTAINERS	8270 STM	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	10/29/21	1615		X	GEN-MW4-102921	GW	3	X	214958-01 ms/msd	
2	10/30/21	1400			GEN-MW1-103021		1		02	
3	10/30/21	1545			GEN-MW2-103021		1		03	
4	10/30/21	—			GEN-DUP-103021		1		04	
5	10/31/21	1230			GEN-MW3-103121		1		05	
6	10/31/21	1430			GEN-MW6-103121		1		06	
7	11/1/21	1200			GEN-EB-110121		1		07	
8	11/1/21	1500			GEN-MW5-110121		1		05	
9	11/1/21	1630		↓	GEN-MW7-110121		1	↓	09	
10										

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments:		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature:	Y ☐	N ☐
Comments:		

Client

Sampled By	Date/Time	
Myles Vail	11/2/21	1600
Relinquished By	Date/Time	
R Cunningham AAL	11/2/21	16:00
Received By	Date/Time	
Knoll Pharm	11/3/21	01:30
Received By	Date/Time	
Received @ Lab By	Date/Time	

Total Cost:

P.I.F. ☐

DATA USABILITY SUMMARY REPORT (DUSR)

RGE Geneseo
Former MGP Site

SDGs: **214958**
8 Water Samples, equipment blank and trip blank

Prepared for:

Neu Velle, LLC
1667 Lake Ave., Bldg. 59, Suite 101
Rochester, NY 14615
Attention: Kyle Miller

February 2022

EDU *Environmental Data Usability 10028 Deer Park Dr. Dansville, NY 14437 585-991-9156*

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5.0	DATA VALIDATION QUALIFIERS	3
6.0	RESULTS OF THE DATA REVIEW	4
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APPENDIX A Validated Analytical Results
APPENDIX B Laboratory QC Documentation
APPENDIX C Validator Qualifications

Tables

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Table 4-2 Quality Control Criteria for Validating Laboratory Analytical Data

Summaries of Validated Results
Table 6-1 8260-BTEX
Table 6-2 8270-SIM-PAHs

REVIEWER'S NARRATIVE
Neu-Velle SDG 214958: RGE Geneseo Former MGP Site

The data associated with this Sample Delivery Group (SDG) 214958, analyzed by Paradigm Environmental Services, Inc. Rochester, NY have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

All analytical results reported by the laboratory are considered valid and acceptable except results that have been qualified as rejected, "R". Results qualified as estimated "J", or as non-detects, "U", are considered usable for the purpose of evaluating water and/or soil quality. However, these qualifiers indicate that the accuracy and/or precision of the analytical result is questionable. A summary of all data that have been qualified and the reasons for qualification are provided in the following data usability summary report (DUSR).

Two facts should be noted by all data users. First, the "R" qualifier 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 analyte is present or not. Values qualified with an "R" should not appear on the final data tables because they cannot be relied upon, even as the last resort. Second, no analyte 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.

Reviewer's Signature: Michael K. Perry Date: 2/16/2022

Michael K. Perry
Chemist

1.0 SUMMARY

SITE:	RGE Geneseo Former MGP Site
SAMPLING DATE:	October 29 – November 01, 2021
SAMPLE TYPE:	8 water samples, equipment and trip blank
LABORATORY:	Paradigm Environmental Services, Inc. Rochester, NY
SDG No.:	214958

2.0 INTRODUCTION

This data usability summary report (DUSR) was prepared in accordance with guidance provided by the New York State Department of Environmental Conservation (NYSDEC). The DUSR is based on a review and evaluation of the laboratory analytical data package. Specifically, the NYSDEC guidance recommends review and evaluation of the following elements of the data package:

- Completeness of the data package as defined under the requirements of the NYSDEC Analytical Services Protocols (ASP) Category B or the United States Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) deliverables,
- Compliance with established analyte holding times,
- Adherence to quality control (QC) limits and specifications for blanks, instrument tuning and calibration, surrogate recoveries, spike recoveries, laboratory duplicate analyses, and other QC criteria,
- Adherence to established analytical protocols,
- Conformance of data summary sheets with raw analytical data, and
- Use of correct data qualifiers.

Data deficiencies, analytical protocol deviations, and quality control problems identified using the review criteria above and their effect on the analytical results are discussed in this report.

3.0 SAMPLE AND ANALYSIS SUMMARY

The data packages consists of analytical results for eight water samples, equipment blank, and a trip blank collected on October 29 – November 01, 2021. These samples were analyzed for volatile organic compounds (BTEX) and Semi-Volatile Organic Compounds (SVOCs).

All analyses were performed by Paradigm Environmental Services, Inc., Rochester, NY and analyzed as SDG: 214958. The SVOCs were subcontracted to Alpha Analytical in Westborough, MA and analyzed as SDG: L2160069 for PAHs by 8270-D-SIM. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA

The guidance documents appropriate for reviewing laboratory quality control (QC) data and assigning data qualifiers (flags) to analytical results were selected from those listed in Table 4-1. The QC limits established in the documents applicable to this data review were used to assess the quality of the analytical results. In some cases, however, QC limits established internally by the laboratory were taken into account to determine data quality.

The QC criteria considered for assessing the usability of the reported analytical results provided for each analyte type (i.e. VOCs, SVOCs, metals, etc.) are listed in Table 4-2. These criteria may vary with the analytical method utilized by the laboratory. These criteria comply with the guidance recommended in Section 2.0 above.

5.0 DATA VALIDATION QUALIFIERS

The letter qualifiers (flags) used to define data usability are described briefly below. These letters are assigned by the data validator to analytical results having questionable accuracy and/or precision as determined by reviewing the laboratory QC data associated with the analytical results.

TABLE 4-1

Guidance Used For Validating Laboratory Analytical Data

Analyte Group	Guidance	Date
Metals (ICP-AES)	USEPA SOP HW-3a, Rev. 1	September 2016
Metals (Hg & CN)	USEPA SOP HW-3c, Rev. 1	September 2016
Volatile Organic Compounds (by Methods 8260B & 8260C)	USEPA SOP HW-24, Rev. 4	September 2014
Semi-Volatile Organic Compounds (by Method 8270D)	USEPA SOP HW-22 Rev. 5	December 2010
Pesticides (by Method 8181B)	USEPA SOP HW-44, Rev. 1.1	December 2010
Chlorinated Herbicides (by Method 8151A)	USEPA SOP HW-17, Rev. 3.1	December 2010
Polychlorinated Biphenyls (PCBs)	USEPA SOP HW-37A, Rev. 0	June 2015
Volatile Organic Compounds (Air) (by Method TO-15)	USEPA SOP HW-31, Rev. 6	September 2016
Per- and PolyFluoroAlkyl Substances (PFAS)	* NYSDEC	January 2021
General Chemistry Parameters	per NYSDEC ASP	July 2005

* Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs, Appendix I

TABLE 4-2

QUALITY CONTROL CRITERIA USED FOR VALIDATING LABORATORY ANALYTICAL DATA

VOCs	SVOCs	Pesticides/PCBs	Metals	Gen Chemistry	PFAS
Completeness of Pkg	Completeness of Pkg	Completeness of Pkg	Completeness of Pkg	Completeness of Pkg	Completeness of Pkg
Sample Preservation	Sample Preservation	Sample Preservation	Sample Preservation	Sample Preservation	Sample Preservation
Holding Time	Holding Time	Holding Time	Holding Time	Holding Times	Holding Time
System Monitoring Compounds	Surrogate Recoveries	Surrogate Recoveries	Initial/Continuing Calibration	Calibration	Instr Performance Check
Lab Control Sample	Lab Control Sample	Matrix Spikes	CRDL Standards	Lab Control Samples	Initial Calibration
Matrix Spikes	Matrix Spikes	Blanks	Blanks	Blanks	Continuing Calibration
Blanks	Blanks	Instrument Calibration & Verification	Interference Check Sample	Spike Recoveries	Blanks
Instrument Tuning	Instrument Tuning	Comparison of duplicate GC column results	Spike Recoveries	Lab Duplicates	Surrogates
Internal Standards	Internal Standards	Analyte ID	Lab Duplicate		Lab Fortified Blank
Initial Calibration	Initial Calibration	Lab Qualifiers	Lab Control Sample		Matrix Spikes
Continuing Calibration	Continuing Calibration	Field Duplicate	ICP Serial Dilutions		Internal Standards
Lab Qualifiers	Lab Qualifiers		Lab Qualifiers		
Field Duplicate	Field Duplicate		Field Duplicate		

Method TO-15 (Air)
Completeness of Pkg
Sample Preservation
Holding Time
Canister Certification
Instrument Tuning
Initial Calibration and Instrument Performance
Daily Calibration
Blanks
Lab Control Sample
Field Duplicate

The laboratory may also use various letters and symbols to flag analytical results generated when QC limits were exceeded. The meanings of these flags may differ from those used by the independent data validator. Those used by the laboratory are provided with the analytical results.

NOTE: The assignment of data qualifiers by the data reviewer (validator) to laboratory analytical results should not necessarily be interpreted by the data user as a measure of laboratory ability or proficiency. Rather, the qualifiers are intended to provide a measure of data accuracy and precision to the data user, which, for example, may provide a level of confidence in determining whether or not standards or cleanup objectives have been met.

U The analyte was analyzed for but was not detected at or above the sample quantitation limit.

J The analyte was positively identified; the associated numerical value is the *approximate* concentration of the analyte in the sample. (The magnitude of any ± value associated with the result is not determined by data validation).

J+ The result is an estimated quantity and may be biased high.

J- The result is an estimated quantity and may be biased low.

UJ The analyte was analyzed for but not detected. The reported quantitation limit is approximate and may inaccurate or imprecise.

R The sample result is rejected (i.e., is unusable) due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.

The validated analytical results are attached to this report. Validation qualifiers (flags) are indicated in red print. Data sheets having qualified data are signed and dated by the data reviewer.

6.0 RESULTS OF THE DATA REVIEW

The results of the data review are summarized in Tables 6-1 through 6-2. The tables list the samples where QC criteria were found to exceed acceptable limits and the actions taken to qualify the associated analytical results.

7.0 TOTAL USABLE DATA

For SDG 214958, eight samples, equipment blank and a trip blank were analyzed and results were reported for 204 analytes. Even though some results were flagged with a "J" as estimated, all results (100%) are considered usable.

Table 6-1 8260 - BTEX

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
GEN-MW4 GEN-EB GEN-MW8 Trip Blank	All analytes	J detects	PFB > QC limit	Detected data are estimated
GEN-MW4	Benzene Ethyl benzene Toluene	J detects	MS/MSD > QC limit	Detected data are estimated
GEN-MW8	Benzene	J detect	Detected in equipment blank	Detected data are estimated

Table 6-2 8270-SIM-PAH

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
none		none		

ACRONYMS

BSP	Blank Spike
CCAL	Continuing Calibration
CCB	Continuing Calibration Blank
CCV	Continuing Calibration Verification
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
%D	Percent Difference
ICAL	Initial Calibration
ICB	Initial Calibration Blank
IS	Internal Standard
LCS	Laboratory Control Sample
MS/MSD	Matrix Spike/Matrix Spike Duplicate
QA	Quality Assurance
QC	Quality Control
%R	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
%RSD	Percent Relative Standard Deviation
TAL	Target Analyte List (metals)
TCL	Target Compound List (organics)

Appendix A

Validated Analytical Results

LAB PROJECT NARRATIVE: 214958
PROJECT NAME: RGE Geneseo Fmr. MGP Site
SDG: 4958-01
CLIENT: Neu-Velle

Seven groundwater samples were collected by the client between October 29 and November 1, 2021 and were received by the Paradigm laboratory on November 2, 2021. Samples were accompanied by a field duplicate, equipment blank, and trip blank. The samples were received under the conditions as noted on the chain-of-custody supplement. The samples were submitted with the Chains-of-Custody requesting the BTEX list for Volatiles and PAH by 8270SIM. All analyses, where applicable, were performed using EPA SW-846 Methods and the associated holding times.

The items noted in this case narrative address compliance with the referenced methods, NYSDOH ELAP rules, and any project specific data quality requirements. These may be different from the usability criteria referenced in any "Functional Guidelines" or other data review standards used by data validators.

GENERAL NOTES

ALL ANALYSES

The initial and continuing calibration reports are only evaluated for compounds that are on the sample summary report.

Regarding results on QC summary forms versus included raw data, due to calculations made at the instrument where many significant figures may be used, there may be slight discrepancies between the summary report result and that recorded on the raw data. This does not affect data usability.

VOLATILES

Regarding initial calibrations, it should be noted that the Quantitation Report concentrations supplied for the initial calibration reflect the calibration prior to updating. The response factors and areas are correct.

Regarding Quantitation Reports, it should be noted that the "#" symbol that appears on some of the Quantitation Reports is a software artifact and should be disregarded.

Compounds flagged with an "*" on the summary table have been calibrated using a non-average Response Factor calibration curve. The supporting curves are located after the initial calibration table.

Holding times were met for the samples.

Some of the surrogate recoveries for the samples and associated QC were not within acceptance limits (recoveries were high). Any outliers have been flagged with an "*" on the summary form and the sample reports.

Site specific QC was requested on GEN-MW4-102921 and there were outliers. These outliers have been flagged with an "*" on the summary form and an "M" on the sample reports. Matrix interference is suspected. The Laboratory Control Samples recovered within acceptance limits.

The Method Blanks were free from contamination within reportable ranges.

The instrument tunes passed all criteria and samples were within a 12-hour window.

The internal standards areas and retention times were within acceptance ranges for the samples and QC.

All data for the initial calibration was within acceptance limits for the reported analytes.

All continuing calibration data was within acceptance limits for the reported analytes.

Subcontracted Analyses

PAHs by EPA 8270D-SIM was sent to Alpha Analytical of Westborough, MA. Their reports are provided in their entirety as a separate entity after the Paradigm Environmental Services, Inc. report. Separate case narratives addressing the above parameters are included with their reports.

(signed) Steven DeVito (date) 2/10/2022
Steven DeVito – Technical Director

BATCH LOG

Lab Name: Paradigm Environmental Services
Lab Project #: 214958
Client Name: Neu-Velle
Client Project Name: RGE Geneseo Fmr. MGP Site
Client Project #: N/A
SDG No.: 4958-01

Protocol: SW846 Report Due Date: 11/17/2021 Batch Due Date: 12/2/2021

LAB SAMPLE NO.	MATRIX	CLIENT SAMPLE ID	REQUESTED ANALYSIS	DATE SAMPLED	DATE REC'D
214958-01	Groundwater	GEN-MW4-102921	VOAs, SVOAs	10/29/2021	11/2/2021
214958-02	Groundwater	GEN-MW1-103021	VOAs, SVOAs	10/30/2021	11/2/2021
214958-03	Groundwater	GEN-MW2-103021	VOAs, SVOAs	10/30/2021	11/2/2021
214958-04	Groundwater	GEN-DUP-103021	VOAs, SVOAs	10/30/2021	11/2/2021
214958-05	Groundwater	GEN-MW3-103121	VOAs, SVOAs	10/31/2021	11/2/2021
214958-06	Groundwater	GEN-MW6-103121	VOAs, SVOAs	10/31/2021	11/2/2021
214958-07	Groundwater	GEN-EB-110121	VOAs, SVOAs	11/1/2021	11/2/2021
214958-08	Groundwater	GEN-MW8-110121	VOAs, SVOAs	11/1/2021	11/2/2021
214958-09	Groundwater	GEN-MW7-110121	VOAs, SVOAs	11/1/2021	11/2/2021
214958-10	Water	Trip Blank T1075	VOAs	10/25/2021	11/2/2021

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM

CHAIN OF CUSTODY

- KRM 1086

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	New-Vette LLC	CLIENT:	Same	214958
ADDRESS:	1667 Lake Ave	ADDRESS:		Quotation #:
CITY:	Rochester STATE: NY ZIP: 14615	CITY: STATE: ZIP:		
PHONE:	(585) 478-1666	PHONE:		Email: kmiller3@new-vette.com
ATTN:	Kyle Miller	ATTN:		

PROJECT REFERENCE: RGE Geneseo Fmr. MGP Site

Matrix Codes:
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

REQUESTED ANALYSIS: 8260 BTEX; 8270 PAH; SIM

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260 BTEX	8270 PAH	SIM	REMARKS	PARADIGM LAB SAMPLE NUMBER
10/29/21	16:15		X	GEN-MW4-102921	WG	9	X	X	X	MS/MSD	01
10/30/21	14:00		X	GEN-MW1-103021	WG	3	X	X	X		02
10/30/21	15:45		X	GEN-MW2-103021	WG	3	X	X	X		03
10/30/21	—		X	GEN-DUP-103021	WG	3	X	X	X	Duplicate	04
10/31/21	12:30		X	GEN-MW3-103121	WG	3	X	X	X		05
10/31/21	14:30		X	GEN-MW6-103121	WG	3	X	X	X		06
11/1/21	12:00		X	GEN-EB-110121	WA	3	X	X	X	Equip. Blank	07
11/1/21	15:00		X	GEN-MW8-110121	WG	3	X	X	X		08
11/1/21	16:30		X	GEN-MW7-110121	WG	3	X	X	X		09
10/25/21				Trip Blank	W	1	X			Trip Blank	10

T1075 per sample label mw 11/2/21

Turnaround Time		Report Supplements		
Availability contingent upon lab approval; additional fees may apply.				
Standard 5 day	X	None Required		None Required	
10 day		Batch QC		Basic EDD	
Rush 3 day		Category A		NYSDEC EDD	X
Rush 2 day		Category B	X		
Rush 1 day					
Date Needed _____ please indicate date needed:		Other please indicate package needed:		Other EDD please indicate EDD needed :	

Kyle M. Miller 10/29/21 to 11/1/21

Sampled By

Relinquished By — Date/Time: 11/2/21 13:30

Total Cost:

Received By: Emily Fausnen — Date/Time: 11/2/21 1330

P.I.F.

Received @ Lab By: Mail — Date/Time: 11/2/21 1342

1/°C rec'd 11/2/21 13:35

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

Custody Seals intact, signed, dated. GP 11/2/21

See additional page for sample conditions.

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Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Volatile Organics Method 8260	**Water (µg/L)**	**Soil (µg/kg)[2]**
Chloromethane	5	5
Bromomethane	5	5
Vinyl Chloride	5	5
Chloroethane	5	5
Methylene Chloride	3	3
Acetone	5	5
Carbon Disulfide	5	5
1,1-Dichloroethylene	5	5
1,1-Dichloroethane	5	5
1,2-Dichloroethylene (total)	5	5
Chloroform	5	5
1,2-Dichloroethane	2	2
2-Butanone	5	5
1,1,1-Trichloroethane	5	5
Carbon Tetrachloride	2	2
Bromodichloromethane	1	1
1,2-Dichloropropane	1	1
cis-1,3-Dichloropropene	5	5
Trichloroethane	5	5
Dibromochloromethane	5	5
1,1,2-Trichloroethane	3	3
Benzene	1	1
trans-1,3-Dichloropropene	5	5
Bromoform	4	4
4-Methyl-2-pentanone	5	5
2-Hexanone	5	5
Tetrachloroethene	1	1
Toluene	5	5
1,1,2,2-Tetrachloroethane	1	1
Chlorobenzene	5	5
Ethylbenzene	4	4
Styrene	5	5
2-Chloroethyl Vinyl Ether	5	5
1,2-Dichlorobenzene	5	5
1,3-Dichlorobenzene	5	5
1,4-Dichlorobenzene	5	5
Vinyl Acetate	5	5
Total Xylenes	5	5
Semivolatile Organics Method 8270	**Water (µg/L)**	**Soil (µg/kg)**
1,2,4-Trichlorobenzene	1	33
1,2-Dichlorobenzene	10	330
1,2-Diphenylhydrazine	10	330
1,3-Dichlorobenzene	10	330
1,4-Dichlorobenzene	10	330
1,4-Dioxane	10	330
2,4,5-Trichlorophenol	10	330
2,4,6-Trichlorophenol	10	330
2,4-Dichlorophenol	10	330

Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Semivolatile Organics Method 8270 (Cont'd.)	**Water (µg/L)**	**Soil (µg/kg)**
2,4-Dimethylphenol	10	330
2,4-Dinitrophenol	40	1300
2,4-Dinitrotoluene	2	67
2,6-Dinitrotoluene	2	67
2-Chloronaphthalene	10	330
2-Chlorophenol	10	330
2-Methylnaphthalene	10	330
2-Methylphenol	10	330
2-Nitroaniline	20	670
2-Nitrophenol	10	330
3,3'-Dichlorobenzidene	20	670
3-Nitroaniline	20	670
4,6-Dinitro-2-methylphenol	40	1300
4-Bromophenyl-phenylether	10	330
4-Chloro-3-methylphenol	10	330
4-Chloroaniline	10	330
4-Chlorophenyl-phenylether	10	330
4-Methylphenol	10	330
4-Nitroaniline	20	670
4-Nitrophenol	40	1300
Acenaphthene	10	330
Acenaphthylene	10	330
Acetophenone	10	330
Aniline	10	330
Anthracene	10	330
Atrazine	10	330
Benzaldehyde	10	330
Benzidine	40	1300
Benzo(a)anthracene	1	33
Benzo(a)pyrene	1	33
Benzo(b)fluoranthene	1	33
Benzo(g,h,i)perylene	10	330
Benzo(k)fluoranthene	1	33
Benzoic Acid	10	330
Benzyl Alcohol	10	330
bis(2-chloroethoxy)methane	10	330
bis(2-chloroethyl)ether	1	33
bis(2-chloroisopropyl)ether	10	330
bis(2-ethylhexyl)phthalate	10	330
Butylbenzylphthalate	10	330
Caprolactam	10	330
Carbazole	10	330
Chrysene	10	330
Dibenzo(a,h)anthracene	1	33
Dibenzofuran	10	330
Diethylphthalate	10	330
Dimethylphthalate	10	330
Di-n-butyl phthalate	10	330
Di-n-octyl phthalate	10	330

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Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Semivolatiles Method 8270 (Cont'd.)	**Water (µg/L)**	**Soil (µg/kg)**
Diphenyl	10	330
Fluoranthene	10	330
Fluorene	10	330
Hexachlorobenzene	1	33
Hexachlorobutadiene	2	67
Hexachlorocyclopentadiene	10	330
Hexachloroethane	1	33
Indeno(1,2,3-cd)pyrene	1	33
Isophorone	10	330
N,N-Dimethylaniline	1	33
Naphthalene	10	330
Nitrobenzene	1	33
N-Nitrosodimethylamine	10	330
N-Nitroso-di-n-propylamine	1	33
N-Nitrosodiphenylamine	10	330
Pentachlorophenol	40	1300
Phenanthrene	10	330
Phenol	10	330
Pyrene	10	330
Pyridine	10	330
TAL Metals (6010/7470)	**Water (µg/L)**	**Soil (µg/kg)**
Aluminum	--	40
Antimony	--	2
Arsenic	--	1
Barium	--	40
Beryllium	--	0.4
Cadmium	--	1
Calcium	--	1000
Chromium	--	2
Cobalt	--	10
Copper	--	5
Iron	--	30
Lead	--	1
Magnesium	--	1000
Manganese	--	3
Mercury	--	0.033
Nickel	--	8
Potassium	--	1000
Selenium	--	1
Silver	--	2
Sodium	--	1000
Thallium	--	2
Vanadium	--	10
Zinc	--	6
Supplemental Parameters	**Water (µg/L)**	**Soil (mg/kg)**
Total Organic Carbon (Lloyd Kahn)	NA	100
Chloride Method 325.3	1,000	--

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Table 1
Parameter, Methods, and Quantitation Limits

Generic Quality Assurance Project Plan
Rochester Gas & Electric
Park Street Former MGP Site

Parameter	Quantitation Limit[1]	
Supplemental Parameters (Cont'd.)	**Water (µg/L)**	**Soil (mg/kg)**
Nitrate Method 353.2	100	--
Ammonia Method 350.1	100	--
Iron Method 200.7	150	--
Manganese Method 200.7	15	--
Sulfate Method 375.4	5,000	--
Sulfide Method 376.1	1,000	--
Orthophosphate Method 365.2	30	--
Alkalinity Method 310.1	5,000	--
Methane Method 3810	--	--
Reactive Sulfide	--	20
Reactive Cyanide	--	25
TCLP Benzene	--	1
Total Sulfur	--	50
Chemical Oxygen Demand	--	120

Notes:
[1] Specific quantitation limits are highly matrix dependent. The quantitation limits listed are for guidance and may not always be achievable due to matrix interference.
[2] Quantitation limits for source materials/soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for source materials/soil/sediment (calculated on a dry weight basis) will be higher.
µg/L = micrograms per liter
µg/kg = micrograms per kilogram
mg/kg = milligrams per kilogram

VOLATILE ORGANICS

SAMPLE DATA

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW4-102921		
Lab Sample ID:	214958-01	**Date Sampled:**	10/29/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result		Units	Qualifier	Date Analyzed
Benzene	< 1.00		ug/L	M	11/3/2021 13:33
Ethylbenzene	< 2.00		ug/L	M	11/3/2021 13:33
m,p-Xylene	**2.44**	J	ug/L		11/3/2021 13:33
o-Xylene	< 2.00		ug/L		11/3/2021 13:33
Toluene	< 2.00		ug/L	M	11/3/2021 13:33

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**121**	77.9 - 132		11/3/2021 13:33
4-Bromofluorobenzene	**118**	62.6 - 133		11/3/2021 13:33
Pentafluorobenzene	**115**	88.9 - 114	*	11/3/2021 13:33
Toluene-D8	**107**	75.6 - 117		11/3/2021 13:33

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05208.D

MKP 2/16/2022

Report Prepared Thursday, February 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW1-103021		
Lab Sample ID:	214958-02	**Date Sampled:**	10/30/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 14:31
Ethylbenzene	< 2.00	ug/L		11/3/2021 14:31
m,p-Xylene	< 2.00	ug/L		11/3/2021 14:31
o-Xylene	< 2.00	ug/L		11/3/2021 14:31
Toluene	< 2.00	ug/L		11/3/2021 14:31

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**117**	77.9 - 132		11/3/2021 14:31
4-Bromofluorobenzene	**108**	62.6 - 133		11/3/2021 14:31
Pentafluorobenzene	**117**	88.9 - 114	*	11/3/2021 14:31
Toluene-D8	**108**	75.6 - 117		11/3/2021 14:31

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05211.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW2-103021		
Lab Sample ID:	214958-03	**Date Sampled:**	10/30/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 14:50
Ethylbenzene	< 2.00	ug/L		11/3/2021 14:50
m,p-Xylene	**1.10**	ug/L	J	11/3/2021 14:50
o-Xylene	< 2.00	ug/L		11/3/2021 14:50
Toluene	< 2.00	ug/L		11/3/2021 14:50

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**118**	77.9 - 132		11/3/2021 14:50
4-Bromofluorobenzene	**107**	62.6 - 133		11/3/2021 14:50
Pentafluorobenzene	**113**	88.9 - 114		11/3/2021 14:50
Toluene-D8	**107**	75.6 - 117		11/3/2021 14:50

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05212.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-DUP-103021		
Lab Sample ID:	214958-04	**Date Sampled:**	10/30/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 15:09
Ethylbenzene	< 2.00	ug/L		11/3/2021 15:09
m,p-Xylene	< 2.00	ug/L		11/3/2021 15:09
o-Xylene	< 2.00	ug/L		11/3/2021 15:09
Toluene	< 2.00	ug/L		11/3/2021 15:09

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**123**	77.9 - 132		11/3/2021 15:09
4-Bromofluorobenzene	**106**	62.6 - 133		11/3/2021 15:09
Pentafluorobenzene	**114**	88.9 - 114		11/3/2021 15:09
Toluene-D8	**111**	75.6 - 117		11/3/2021 15:09

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05213.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW3-103121		
Lab Sample ID:	214958-05	**Date Sampled:**	10/31/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 15:29
Ethylbenzene	< 2.00	ug/L		11/3/2021 15:29
m,p-Xylene	< 2.00	ug/L		11/3/2021 15:29
o-Xylene	< 2.00	ug/L		11/3/2021 15:29
Toluene	< 2.00	ug/L		11/3/2021 15:29

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**120**	77.9 - 132		11/3/2021 15:29
4-Bromofluorobenzene	**118**	62.6 - 133		11/3/2021 15:29
Pentafluorobenzene	**110**	88.9 - 114		11/3/2021 15:29
Toluene-D8	**107**	75.6 - 117		11/3/2021 15:29

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05214.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW6-103121		
Lab Sample ID:	214958-06	**Date Sampled:**	10/31/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**178**	ug/L		11/8/2021 15:52
Ethylbenzene	**32.6**	ug/L		11/8/2021 15:52
m,p-Xylene	**43.5**	ug/L		11/8/2021 15:52
o-Xylene	**43.3**	ug/L		11/8/2021 15:52
Toluene	**33.8**	ug/L		11/8/2021 15:52

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**99.0**	77.9 - 132		11/8/2021 15:52
4-Bromofluorobenzene	**86.5**	62.6 - 133		11/8/2021 15:52
Pentafluorobenzene	**99.3**	88.9 - 114		11/8/2021 15:52
Toluene-D8	**88.7**	75.6 - 117		11/8/2021 15:52

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05290.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-EB-110121		
Lab Sample ID:	214958-07	**Date Sampled:**	11/1/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result		Units	Qualifier	Date Analyzed
Benzene	**0.806**	J	ug/L	J	11/3/2021 16:07
Ethylbenzene	< 2.00		ug/L		11/3/2021 16:07
m,p-Xylene	< 2.00		ug/L		11/3/2021 16:07
o-Xylene	< 2.00		ug/L		11/3/2021 16:07
Toluene	< 2.00		ug/L		11/3/2021 16:07

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**117**	77.9 - 132		11/3/2021 16:07
4-Bromofluorobenzene	**117**	62.6 - 133		11/3/2021 16:07
Pentafluorobenzene	**116**	88.9 - 114	*	11/3/2021 16:07
Toluene-D8	**108**	75.6 - 117		11/3/2021 16:07

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05216.D

MKP 2/16/2022

Report Prepared Thursday, February 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW8-110121		
Lab Sample ID:	214958-08	**Date Sampled:**	11/1/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**3.37** J	ug/L		11/3/2021 16:27
Ethylbenzene	**2.32** J	ug/L		11/3/2021 16:27
m,p-Xylene	**3.52** J	ug/L		11/3/2021 16:27
o-Xylene	**3.06** J	ug/L		11/3/2021 16:27
Toluene	**1.44** J	ug/L	J	11/3/2021 16:27

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**118**	77.9 - 132		11/3/2021 16:27
4-Bromofluorobenzene	**112**	62.6 - 133		11/3/2021 16:27
Pentafluorobenzene	**115**	88.9 - 114	*	11/3/2021 16:27
Toluene-D8	**97.0**	75.6 - 117		11/3/2021 16:27

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05217.D

MKP 2/16/2022

Report Prepared Thursday, February 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN-MW7-110121		
Lab Sample ID:	214958-09	**Date Sampled:**	11/1/2021
Matrix:	Groundwater	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 16:46
Ethylbenzene	< 2.00	ug/L		11/3/2021 16:46
m,p-Xylene	< 2.00	ug/L		11/3/2021 16:46
o-Xylene	< 2.00	ug/L		11/3/2021 16:46
Toluene	< 2.00	ug/L		11/3/2021 16:46

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**115**	77.9 - 132		11/3/2021 16:46
4-Bromofluorobenzene	**101**	62.6 - 133		11/3/2021 16:46
Pentafluorobenzene	**114**	88.9 - 114		11/3/2021 16:46
Toluene-D8	**97.7**	75.6 - 117		11/3/2021 16:46

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05218.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	Trip Blank T1075		
Lab Sample ID:	214958-10	**Date Sampled:**	10/25/2021
Matrix:	Water	**Date Received:**	11/2/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		11/3/2021 17:05
Ethylbenzene	< 2.00	ug/L		11/3/2021 17:05
m,p-Xylene	< 2.00	ug/L		11/3/2021 17:05
o-Xylene	< 2.00	ug/L		11/3/2021 17:05
Toluene	< 2.00	ug/L		11/3/2021 17:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**127**	77.9 - 132		11/3/2021 17:05
4-Bromofluorobenzene	**111**	62.6 - 133		11/3/2021 17:05
Pentafluorobenzene	**117**	88.9 - 114	*	11/3/2021 17:05
Toluene-D8	**121**	75.6 - 117	*	11/3/2021 17:05

Method Reference(s): EPA 8260C
EPA 5030C

Data File: z05219.D

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Alpha Analytical

Laboratory Code: 11148

SDG Number: L2160069

Project Name: 214958
Project Number: 214958

Lab Number: L2160069
Report Date: 11/09/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2160069-01	GEN-MW4-102921 214958-01	WATER	Not Specified	10/29/21 16:15	11/02/21
L2160069-02	GEN-MW1-103021 214958-02	WATER	Not Specified	10/30/21 14:00	11/02/21
L2160069-03	GEN-MW2-103021 214958-03	WATER	Not Specified	10/30/21 15:45	11/02/21
L2160069-04	GEN-DUP-103021 214958-04	WATER	Not Specified	10/30/21 00:00	11/02/21
L2160069-05	GEN-MW3-103121 214958-05	WATER	Not Specified	10/31/21 12:30	11/02/21
L2160069-06	GEN-MW6-103121 214958-06	WATER	Not Specified	10/31/21 14:30	11/02/21
L2160069-07	GEN-EB-110121 214958-07	WATER	Not Specified	11/01/21 12:00	11/02/21
L2160069-08	GEN-MW8-110121 214958-08	WATER	Not Specified	11/01/21 15:00	11/02/21
L2160069-09	GEN-MW7-110121 214958-09	WATER	Not Specified	11/01/21 16:30	11/02/21

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Caitlin Wallukiewicz Report Date: 11/09/21

Title: Technical Director/Representative

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

L21600169

CHAIN OF CUSTODY

11148

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:	179 Lake Avenue	ADDRESS:			
CITY:	Rochester STATE: NY ZIP: 14608	CITY:	STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE:	FAX:	PHONE:	FAX:	STD OTHER	
PROJECT NAME/SITE NAME:		ATTN:	Reporting	ATTN: Accounts Payable	☐1 ☐2 ☐3 ☐5
		COMMENTS:	Please email results to reporting@paradigmenv.com	Date Due: Standard Turn	

REQUESTED ANALYSIS

Report TFlags

ASP Cat B Package Due 11/24

SW846 MT

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	8270 STM	REMARKS	PARADIGM LAB SAMPLE NUMBER
1	10/29/21	1615		X	GEN-MW4-102921	GW	3	X	214958-01 MS/MSD	
2	10/30/21	1400			GEN-MW1-103021		1		02	
3	10/30/21	1545			GEN-MW2-103021		1		03	
4	10/30/21	—			GEN-DUP-103021		1		04	
5	10/31/21	1230			GEN-MW3-103121		1		05	
6	10/31/21	1430			GEN-MW6-103121		1		06	
7	11/1/21	1200			GEN-EB-110121		1		07	
8	11/1/21	1500			GEN-MW8-110121		1		08	
9	11/1/21	1630		↓	GEN-MW7-110121		1	↓	09	
10										

LAB USE ONLY BELOW THIS LINE

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

Receipt Parameter	NELAC Compliance	
Container Type:	Y ☐	N ☐
Comments:		
Preservation:	Y ☐	N ☐
Comments:		
Holding Time:	Y ☐	N ☐
Comments:		
Temperature:	Y ☐	N ☐
Comments:		

Client

Sampled By	Date/Time	
Myles Vail	11/2/21	1600
Relinquished By	Date/Time	
R Cunningham AAL	11/2/21	16:00
Received By	Date/Time	
Knowles Rivera	11/3/21	01:30
Received By	Date/Time	
Received @ Lab By	Date/Time	

Total Cost:

P.I.F. ☐

Semivolatiles Data
by Method 8270D-SIM

No data validation qualifiers were added

MKP 2/16/2022

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-01	**Date Collected**	: 10/29/21 16:15
Client ID	: GEN-MW4-102921 214958-01	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/04/21 20:06
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-01	**Analyst**	: ALS
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-02	**Date Collected**	: 10/30/21 14:00
Client ID	: GEN-MW1-103021 214958-02	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/05/21 17:19
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-02	**Analyst**	: JJW
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-03	**Date Collected**	: 10/30/21 15:45
Client ID	: GEN-MW2-103021 214958-03	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/05/21 17:35
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-03	**Analyst**	: JJW
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	0.02	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-04	**Date Collected**	: 10/30/21 00:00
Client ID	: GEN-DUP-103021 214958-04	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/05/21 17:52
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-04	**Analyst**	: JJW
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	0.02	0.10	0.02	J
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	0.03	0.10	0.02	J
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	0.02	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-05	**Date Collected**	: 10/31/21 12:30
Client ID	: GEN-MW3-103121 214958-05	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/05/21 18:08
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-05	**Analyst**	: JJW
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-06D	**Date Collected**	: 10/31/21 14:30
Client ID	: GEN-MW6-103121 214958-06	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/09/21 11:40
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 10
Lab File ID	: 069-06D1	**Analyst**	: RP
Sample Amount	: 1000 ml	**Instrument ID**	: SV115
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	1.7	1.0	0.35	
206-44-0	Fluoranthene	ND	1.0	0.38	U
91-20-3	Naphthalene	170	1.0	0.43	
56-55-3	Benzo(a)anthracene	ND	1.0	0.18	U
50-32-8	Benzo(a)pyrene	ND	1.0	0.39	U
205-99-2	Benzo(b)fluoranthene	ND	1.0	0.16	U
207-08-9	Benzo(k)fluoranthene	ND	1.0	0.42	U
218-01-9	Chrysene	ND	1.0	0.38	U
208-96-8	Acenaphthylene	18	1.0	0.35	
120-12-7	Anthracene	0.46	1.0	0.35	J
191-24-2	Benzo(ghi)perylene	ND	1.0	0.42	U
86-73-7	Fluorene	4.0	1.0	0.37	
85-01-8	Phenanthrene	1.6	1.0	0.15	
53-70-3	Dibenzo(a,h)anthracene	ND	1.0	0.39	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	1.0	0.40	U
129-00-0	Pyrene	ND	1.0	0.40	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-07	**Date Collected**	: 11/01/21 12:00
Client ID	: GEN-EB-110121 214958-07	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/05/21 18:41
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-07	**Analyst**	: JJW
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-08	**Date Collected**	: 11/01/21 15:00
Client ID	: GEN-MW8-110121 214958-08	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/05/21 18:58
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-08	**Analyst**	: JJW
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	0.22	0.10	0.04	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	0.04	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Paradigm Environmental Services	**Lab Number**	: L2160069
Project Name	: 214958	**Project Number**	: 214958
Lab ID	: L2160069-09	**Date Collected**	: 11/01/21 16:30
Client ID	: GEN-MW7-110121 214958-09	**Date Received**	: 11/02/21
Sample Location	:	**Date Analyzed**	: 11/05/21 19:14
Sample Matrix	: WATER	**Date Extracted**	: 11/03/21
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 1
Lab File ID	: 60069-09	**Analyst**	: JJW
Sample Amount	: 1000 ml	**Instrument ID**	: SV120
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	0.02	0.10	0.02	J
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	0.02	0.10	0.02	J
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	0.02	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U

Appendix B

Laboratory QC Documentation

VOLATILE SURROGATE RECOVERY

Lab Name: Paradigm Environmental Services
Lab Project #: 214958
Client Name: Neu-Velle
Client Project Name: RGE Geneseo Fmr. MGP Site
Client Project #: N/A
SDG No.: 4958-01
Matrix: Groundwater
QC Batch: QC211103VOAW

Instrument ID: Instrument1
GC Column 1: DB-624 ID (mm): 0.20 Detector: MSD

	LAB SAMPLE NO.	CLIENT SAMPLE ID	PFB %REC	12DCEd4 %REC	TD8 %REC	4BFB %REC	Total Out
1	Blk 1	N/A	116 *	119	118 *	111	2
2	LCS 1	N/A	111	116	126 *	109	1
3	214958-01	GEN-MW4-102921	115 *	121	107	118	1
4	214958-01MS	GEN-MW4-102921	109	114	123 *	92.6	1
5	214958-01MSD	GEN-MW4-102921	110	113	116	89.9	0
6	214958-02	GEN-MW1-103021	117 *	117	108	108	1
7	214958-03	GEN-MW2-103021	113	118	107	107	0
8	214958-04	GEN-DUP-103021	114	123	111	106	0
9	214958-05	GEN-MW3-103121	110	120	107	118	0
10	214958-07	GEN-EB-110121	116 *	117	108	117	1
11	214958-08	GEN-MW8-110121	115 *	118	97.0	112	1
12	214958-09	GEN-MW7-110121	114	115	97.7	101	0
13	214958-10	Trip Blank T1075	117 *	127	121 *	111	2
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

	QC LIMITS %
PFB = Pentafluorobenzene	(88.9 - 114)
12DCEd4 = 1,2-Dichloroethane-d4	(77.9 - 132)
TD8 = Toluene-d8	(75.6 - 117)
4BFB = 4-Bromofluorobenzene	(62.6 - 133)

* Values outside of current required QC limits
D Surrogate diluted out

FORM II VOA

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Matrix Spike and Matrix Spike Duplicate

SDG #: 4958-01

Client: **Neu-Velle**

Lab Project ID: 214958

Project Reference: RGE Geneseo Fmr. MGP Site

Lab Sample ID: 214958-01
Sample Identifier: GEN-MW4-102921
Matrix: Groundwater

Date Sampled: 10/29/2021
Date Received: 11/2/2021
Date Analyzed: 11/3/2021

Volatile Organics

Analyte	Sample Result	Result Units	MS Added	MS Result	MS % Recovery	MSD Added	MSD Result	MSD % Recovery	% Rec. Limits	MS Outlier	MSD Outlier	Relative % Diff.	RPD Limit	RPD Outlier
Benzene	< 1.00	ug/L	50.0	60.0	120	50.0	62.3	125	85.6 - 106	*	*	3.75	10.2	
Ethylbenzene	< 2.00	ug/L	50.0	53.3	107	50.0	54.8	110	80.5 - 106	*	*	2.85	15.3	
Toluene	< 2.00	ug/L	50.0	67.8	136	50.0	66.6	133	72.9 - 107	*	*	1.77	18.1	

Method Reference(s): EPA 8260C
EPA 5030C

Data File(s): z05209.D
z05210.D
z05208.D
1

QC Batch ID: QC211103VOAW

Any estimated values are displayed, and derived values calculated, based on numeric result only. See primary analytical report for data flags.

Report Prepared Wednesday, February 9, 2022

Appendix C

Validator Qualifications

KENNETH R. APPLIN
Geochemist/Data Validator

Ph.D., Geochemistry and Mineralogy, The Pennsylvania State University

M.S., Geochemistry and Mineralogy, The Pennsylvania State University

B.A., Geological Sciences, SUNY at Geneseo, NY

Dr. Applin has over 35 years of experience working with the geochemistry of natural waters. His prior experience includes working as an Assistant Professor of Geology at the University of Missouri-Columbia and as Chief Hydrogeologist and Geochemist with a leading engineering firm in Rochester, NY. In 1993, he established KR Applin and Associates, a small consulting business that focuses on the geochemistry of natural waters, especially as applied to problems involving the contamination of groundwater and surface water.

Dr. Applin is also an experienced analytical data validator and has provided data validation services since 1994 to a variety of clients performing brownfield cleanup projects, hazardous waste remediation, groundwater monitoring at solid waste facilities, and other projects requiring third-party data validation. Dr. Applin has several years of hands-on experience with the laboratory analysis of natural waters and has successfully completed the USEPA Region II certification courses for performing inorganic and organic analytical data validation.

MICHAEL K. PERRY
Chemist/Data Validator

B.S. Chemistry, Georgia State University, Atlanta, GA

A.A.S., Chemical Technology, Alfred State College, Alfred, NY

Mr. Perry has over 30 years of experience in the analytical laboratory business. During his early career, he spent several years as a laboratory analyst performing the analysis of soil, water, and air samples for inorganic and organic chemical parameters. During his last 20 years in the environmental laboratory business, he managed and directed two major analytical laboratories in Rochester, NY. His management responsibilities included oversight of the daily operations of the lab, staff training and supervision, the selection, purchase, and maintenance of analytical instruments, the introduction of new laboratory methods, analytical quality assurance and quality control, data acquisition and management, and other business-related activities.

Mr. Perry has an extensive working knowledge of the methods and procedures used for sampling and analyzing both inorganic and organic analytes in soil, water, and air. He is an accomplished laboratory chemist and is familiar with the analytical methods and procedures established under the USEPA Contract Laboratory Protocols (CLP), the NYSDEC Analytical Services Protocols (ASP), and the NYSDOH Environmental Laboratory Approval Program (ELAP).