December 7, 2021

Mr. Justin Starr
Project Manager
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7014

Re: Report – Fourth Post-Remediation Groundwater Sampling Event – September 2021
RG&E Pavilion Former MGP Site
6903 Ellicott Street Road
Town of Pavilion, Genesee County, New York 14525
NYSDEC Site No. 819024

Dear Mr. Starr:

The purpose of this report is to present the results of the fourth (4th) post-remediation groundwater sampling event completed at the Rochester Gas and Electric Corporation (RG&E) Pavilion Former Manufactured Gas Plant (MGP) site [New York State Department of Environmental Conservation (NYSDEC) Site No. 819024], located at 6903 Ellicott Street Road in the Town of Pavilion, Genesee County, New York (referred to herein as the "Site"). The groundwater sampling event was completed by NEU-VELLE, LLC (NEU-VELLE) personnel in accordance with the SMP (June 2020).

SCOPE OF WORK

Synoptic Water Levels

A Site-wide round of synoptic groundwater levels was collected from the five (5) on-site groundwater monitoring wells on September 17, 2021. The locations of these monitoring wells are depicted on the attached **Figure 1**. Each well was also gauged for the presence of Non-aqueous Phase Liquid (NAPL) using an oil/water interface probe. NAPL was not detected in any of the wells. The well gauging observations and field measurements are summarized in **Table 1**.

Groundwater Sampling

On March 22 and 23, 2021, groundwater samples were collected from the five (5) on-Site groundwater monitoring wells (MW-1, MW-2, MW-3, MW-4A, and MW-5). Groundwater samples were collected using low-flow methods.

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 new, clean tubing were used at each groundwater monitoring well. During purging, parameters [time, water table elevation, pumping (flow) rate, temperature, dissolved oxygen (DO), oxidation/reduction potential (ORP), pH, turbidity, and specific conductance] were measured using calibrated field monitoring equipment and the readings were recorded on field logs.

Eastman Business Park,1667 Lake Avenue, Building 59, 1st Floor, Rochester, New York 14615
WWW.NEU-VELLE.COM

The well information, sample information, monitoring parameters, and field observations were recorded on a ground water sample log that was completed at each sampling location. 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 groundwater sample. The laboratory samples were collected in laboratory-supplied sample containers. Samples were preserved in a plastic cooler that was pre-chilled with ice and subsequently submitted under chain of custody protocols to Paradigm Environmental Services, Inc. (Paradigm) located in Rochester, New York. The groundwater samples were analyzed for the following:

- volatile organic compounds (VOCs), benzene, toluene, ethylbenzene, and xylene (BTEX) only, by United States Environmental Protection Agency (USEPA) Method 8260; and
- semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs) only, by USEPA Method 8270; and
- total cyanide in accordance with USEPA Method 9012.

In accordance with the understood intent of the pending SMP, the following Quality Assurance/Quality Control (QA/QC) samples were collected and analyzed:

- one (1) trip blank;
- one (1) equipment blank;
- one (1) "blind duplicate sample";
- one (1) matrix spike (MS) sample; and
- one (1) matrix spike duplicate (MSD) sample.

Reporting of Results

A copy of the laboratory analytical report, including a copy of the chain of custody forms, is presented in **Attachment B.** The laboratory analytical results, including those for the "blind duplicate sample" QA/QC sample (collected from groundwater monitoring well MW-1 during this sampling event), have been summarized in **Table 2** of this report.

Waste Disposal

Purged groundwater and decontamination water were containerized in a polyethylene drum staged at the Site. This wastewater will be properly disposed at a future date, with disposal documentation to be submitted to the NYSDEC under separate cover.

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).

As summarized in **Table 2:**

- no detections of BTEX or PAHs were reported in any of the groundwater samples collected during this sampling event; and
- concentrations of total cyanide were detected in three (3) of the groundwater samples collected during this sampling event, as follows: MW-2 (0.0254 mg/L); MW-3 (0.128 mg/L); and MW-5 (0.00856 J mg/L). These reported concentrations of total cyanide in groundwater are all below the TOGS 1.1.1, Class GA SCG for total cyanide (0.2 mg/L).

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

- no detections of BTEX, PAHs, or total cyanide were reported in the equipment blank sample;
- no detections of BTEX, PAHs, or total cyanide were reported in the "blind duplicate sample" or its "parent sample" collected from groundwater monitoring well MW-1; and
- no BTEX compounds were detected in the trip blank sample.

Groundwater Mapping

A groundwater elevation contour map was prepared based upon the static water levels measured at the Site on September 17, 2021. The groundwater contour map is provided as **Figure 2**, which shows that overburden groundwater beneath the Site is interpreted to flow generally to the west, toward Oatka Creek. The findings depicted on this groundwater elevation contour map are generally consistent with previous groundwater mapping efforts associated with the Site; however, the north portion of the Site appears to have a more northerly flow direction than in recent groundwater mapping efforts.

CONCLUSIONS

This report presents the results of the fourth post-remediation groundwater sampling event completed at the RG&E Pavilion Former MGP site (NYSDEC Site No. 819024).

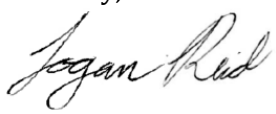
This fourth post-remediation groundwater sampling event found that BTEX and PAHs were not detected in any of the groundwater samples collected from the five (5) on-Site groundwater monitoring wells.

Concentrations of total cyanide were reported in three of the groundwater samples collected from the five (5) on-Site groundwater monitoring wells during this sampling event; however, these reported concentrations of total cyanide are below the TOGS 1.1.1, Class GA SCG for total cyanide (0.2 mg/L).

The next post-remediation groundwater monitoring event is currently scheduled for March 2022.

Please feel free to contact me at any time at (585) 478-3167 or lreid@neu-velle.com with any questions you may have regarding this report, or contact Mr. Jeremy Wolf, RG&E's Project Manager for the project at (585) 500-8392.

Sincerely,



Logan Reid
NEU-VELLE, LLC

cc: Jeremy Wolf – RG&E

Attachments:

Table 1 – Monitoring Well Reference Data and Groundwater Measurements
Table 2 – Groundwater Sample Analytical Results
Figure 1 – Monitoring Well Locations
Figure 2 – Groundwater Elevation Contours
Attachment A – Groundwater Sample Logs
Attachment B – Groundwater Laboratory Report and Chain of Custody Forms

Eastman Business Park,1667 Lake Avenue, Building 59, 1st Floor, Rochester, New York 14615
WWW.NEU-VELLE.COM

Table 1

Monitoring Well Reference Data and Groundwater Measurements

NEU-VELLE LLC

Table 1
Rochester Gas & Electric - Former MGP Site, Pavilion, NY
NYSDEC Site No. 819024
Monitoring Well Reference Data and Groundwater Measurements

Well ID	TOC Elevation (ft)	Depth to Water (ft bgs)	Groundwater Elevation (ft)	Depth to Water (ft bgs)	Groundwater Elevation (ft)	Depth to Water (ft bgs)	Groundwater Elevation (ft)	Depth to Water (ft bgs)	Groundwater Elevation (ft)
		3/25/2020		9/22/2020		3/22/2021		9/17/2021	
MW-1	938.12	5.22	932.90	6.89	931.23	5.88	932.24	6.68	931.44
MW-2	937.47	5.95	931.52	7.52	929.95	6.31	931.16	6.90	930.57
MW-3	936.01	4.41	931.60	6.68	929.33	5.18	930.83	4.81	931.20
MW-4A	937.64	5.09	932.55	7.31	930.33	5.83	931.81	5.78	931.86
MW-5	936.77	5.11	931.66	7.35	929.42	6.08	930.69	5.96	930.81

Notes:
1. Top of Casing (TOC) elevations surveyed by CT Male on December 19, 2019, FT NAVD 88.
2. Depths to water measured by NEU-VELLE on dates indicated.
3. bgs = below ground surface

Table 2

Groundwater Sample Analytical Results

NEU-VELLE LLC

Table 2 (Page 1 of 2)
Rochester Gas & Electric - Former MGP Site, Pavilion, NY
NYSDEC Site No. 819024
Groundwater Sample Analytical Results

				Sample Location	MW-1		MW-1		MW-1		MW-1		Duplicate		MW-2		MW-2		MW-2		MW-2		MW-3		MW-3		Duplicate		MW-3		MW-3	
				Sample Date	3/25/2020		9/22/2020		3/22/2021		9/16/2021				3/27/2020		9/24/2020		3/23/2021		9/17/2021		3/26/2020		9/23/2020				3/23/2021		9/17/2021	
				Sample Identification	PAV-MW1-03252020		PAV-MW1-09222020		PAV-MW1-032221		PAV-MW1-091621		PAV-DUP-091621		PAV-MW2-03272020		PAV-MW2-09242020		PAV-MW2-032321		PAV-MW2-091721		PAV-MW3-03262020		PAV-MW3-09232020		PAV-DUP-09232020		PAV-MW3-032321		PAV-MW3-091721	
Analyte	Cas No.	TOGS 1.1.1 Class GA SCG	Units	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit
BTEX																														
Benzene	71-43-2	1	µg/L	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00
Toluene	108-88-3	5	µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00
Ethylbenzene	100-41-4	5	µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00
m,p-Xylene	1330-20-7	5	µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00
o-Xylene			µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00
PAHs																														
Acenaphthene	83-32-9	20	µg/L	ND	10.0	ND	10.0	ND M	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Acenaphthylene	208-96-8	NS	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Anthracene	120-12-7	50	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Benzo(a)anthracene	56-55-3	0.002	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Benzo(a)pyrene	50-32-8	ND	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Benzo(b)fluoranthene	205-99-2	0.002	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Benzo(g,h,i)perylene	191-24-2	NS	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Benzo(k)fluoranthene	207-08-9	0.002	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Dibenzo(a,h)anthracene	53-70-3	NS	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Chrysene	218-01-9	0.002	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Fluoranthene	206-44-0	50	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Fluorene	86-73-7	50	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Indeno(1,2,3-cd) pyrene	193-39-5	0.002	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Naphthalene	91-20-3	10	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Phenanthrene	85-01-8	50	µg/L	ND	10.0	ND	10.0	ND	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Pyrene	129-00-0	50	µg/L	ND M, D	10.0	ND M	10.0	ND M	10.2	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.0
Cyanide																														
Cyanide, Total	NA	0.2	mg/L	NT		**0.0137**		**0.00920** JM		ND	0.0100	ND	0.0100	NT		**0.0234**		**0.0298**		**0.0254**		NT		**0.238**		**0.230**		**0.120**		**0.128**	

Notes:

1. µg/L = micrograms per liter
2. mg/L = milligrams per liter
3. NT = not tested, NS = No standard, and ND = non-detect
4. Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) Ambient Water Quality Standards and Groundwater Effluent Limitations, June 1998.
5. M is a laboratory data qualifier indicating "Matrix spike recoveries outside QC limits. Matrix bias indicated."
6. D is a laboratory data qualifier indicating "Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit."
7. **Bold Sample result** = compound was detected.
8. **Gray shading indicates the sample result is above the TOGS 1.1.1 Standards, Criteria and Guidance Value.**
9. J is a laboratory data qualifier indicating "Result estimated between the quantitation limit and half the quantitation limit."
10. M is a laboratory data qualifier indicating "Matrix spike recoveries outside QC limits. Matrix bias indicated."

NEU-VELLE

Table 2 (Page 2 of 2)
Rochester Gas & Electric - Former MGP Site, Pavilion, NY
NYSDEC Site No. 819024
Groundwater Sample Analytical Results

Sample Location				MW-4A		MW-4A		MW-4A		MW-4A		MW-5		Duplicate		MW-5		MW-5		Duplicate		MW-5		EB		EB	
Sample Date				3/27/2020		9/24/2020		3/23/2021		9/20/2021		3/26/2020		3/26/2020		9/23/2020		3/22/2021		3/22/2021		9/16/2021		3/23/2021		9/20/2021	
Sample Identification				PAV-MW4A-03272020		PAV-MW4-0924A2020		PAV-MW4A-032321		PAV-MW4A-092021		PAV-MW5-03262020		PAV-DUP-03262020		PAV-MW5-09232020		PAV-MW5-032221		PAV-DUP-032221		PAV-MW5-091621		PAV-EB-032321		PAV-EB-092021	
Analyte	Cas No.	TOGS 1.1.1 Class GA SCG	Units	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit	Result	Reporting Limit
BTEX																											
Benzene	71-43-2	1	µg/L	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND	1.00	ND M	1.00	ND	1.00	ND	1.00
Toluene	108-88-3	5	µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND M	2.00	ND	2.00	ND	2.00
Ethylbenzene	100-41-4	5	µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00
m,p-Xylene	1330-20-7	5	µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00
o-Xylene			µg/L	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00	ND	2.00
PAHs																											
Acenaphthene	83-32-9	20	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Acenaphthylene	208-96-8	NS	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Anthracene	120-12-7	50	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Benzo(a)anthracene	56-55-3	0.002	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Benzo(a)pyrene	50-32-8	ND	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Benzo(b)fluoranthene	205-99-2	0.002	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Benzo(g,h,i)perylene	191-24-2	NS	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Benzo(k)fluoranthene	207-08-9	0.002	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Dibenzo(a,h)anthracene	53-70-3	NS	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Chrysene	218-01-9	0.002	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Fluoranthene	206-44-0	50	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Fluorene	86-73-7	50	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Indeno(1,2,3-cd) pyrene	193-39-5	0.002	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Naphthalene	91-20-3	10	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Phenanthrene	85-01-8	50	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Pyrene	129-00-0	50	µg/L	ND	10.0	ND	10.0	ND	10.0	ND	10.0	ND	10.1	ND	10.1	ND	10.0	ND	10.4	ND	10.4	ND	10.0	ND	10.1	ND	10.0
Cyanide																											
Cyanide, Total	NA	0.2	mg/L	NT		ND	0.0100	**0.00860** J		ND	0.0100	NT		NT		**0.0103**		**0.00620** J		**0.00580** J		**0.00856** J		**NT**		ND	0.0100

Notes:

1. µg/L = micrograms per liter
2. mg/L = milligrams per liter
3. NT = not tested, NS = No standard, and ND = non-detect
4. Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1) Ambient Water Quality Standards and Groundwater Effluent Limitations, June 1998.
5. M is a laboratory data qualifier indicating "Matrix spike recoveries outside QC limits. Matrix bias indicated."
6. D is a laboratory data qualifier indicating "Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit."
7. **Bold Sample result** = compound was detected.
8. **Gray shading indicates the sample result is above the TOGS 1.1.1 Standards, Criteria and Guidance Value.**
9. J is a laboratory data qualifier indicating "Result estimated between the quantitation limit and half the quantitation limit."
10. M is a laboratory data qualifier indicating "Matrix spike recoveries outside QC limits. Matrix bias indicated."

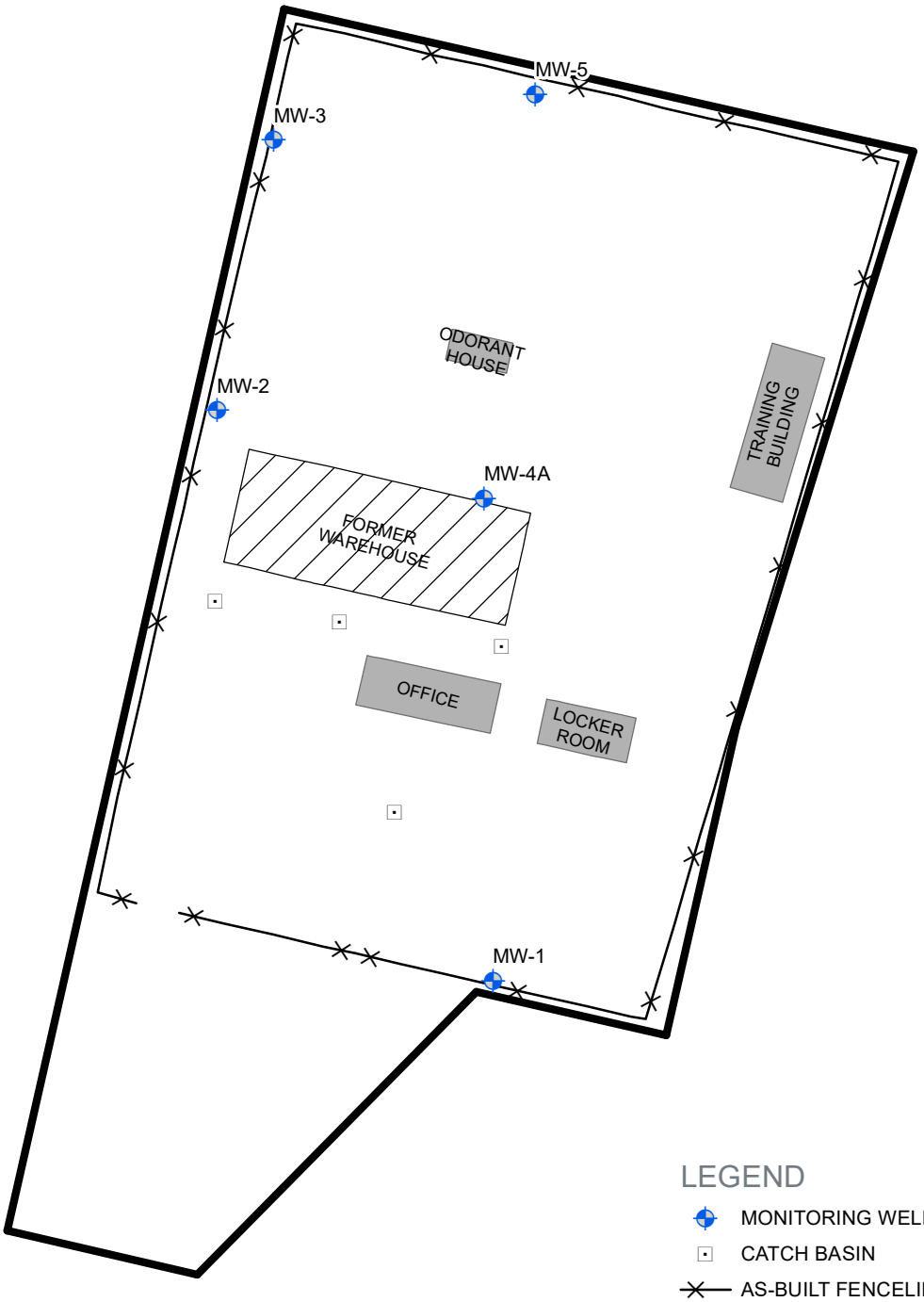
NEU-VELLE

Figure 1

Monitoring Well Locations

NEU-VELLE LLC

FIGURE 1



LEGEND

- MONITORING WELL
- CATCH BASIN
- AS-BUILT FENCELINE
- APPROXIMATE RG&E PROPERTY BOUNDARY - ENVIRONMENTAL EASEMENT LIMITS
- EXISTING BUILDING
- DEMOLISHED BUILDING

NOTE:
1) MONITORING WELL LOCATIONS WERE SURVEYED BY CT MALE ON DECEMBER 19, 2019.

ROCHESTER GAS AND ELECTRIC CORPORATION
PAVILION FORMER MGP SITE
6903 ELICOTT STREET ROAD
PAVILION, NEW YORK

MONITORING WELL LOCATIONS

N

0 40 80 160
Feet

DECEMBER 2021

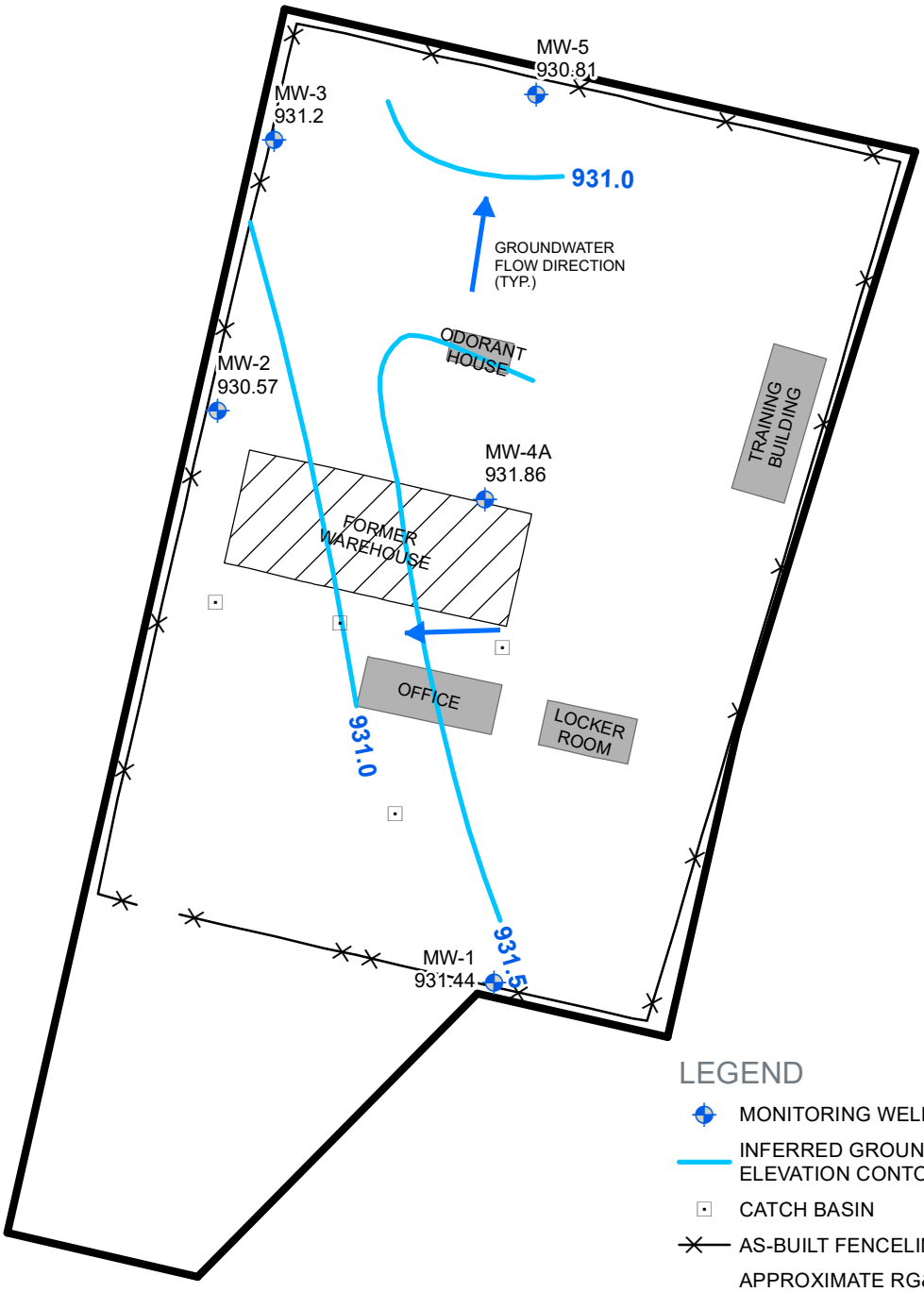
NEU-VELLE LLC

Figure 2

Groundwater Elevation Contours

NEU-VELLE LLC

FIGURE 2



LEGEND

- MONITORING WELL
- INFERRED GROUNDWATER ELEVATION CONTOUR
- CATCH BASIN
- AS-BUILT FENCELINE
- APPROXIMATE RG&E PROPERTY BOUNDARY - ENVIRONMENTAL EASEMENT LIMITS
- EXISTING BUILDING
- DEMOLISHED BUILDING
- INFERRED GROUNDWATER FLOW DIRECTION

NOTE:
1) GROUNDWATER ELEVATIONS WERE MEASURED ON SEPTEMBER 17, 2021.
2) ELEVATIONS ARE REPORTED IN FEET, NAVD 88.

ROCHESTER GAS AND ELECTRIC CORPORATION
PAVILION FORMER MGP SITE
6903 ELICOTT STREET ROAD
PAVILION, NEW YORK

N

GROUNDWATER ELEVATION CONTOURS SEPTEMBER 2021

0 40 80 160
Feet

DECEMBER 2021

NEU-VELLE LLC

Attachment A

Groundwater Sampling Logs

NEU-VELLE LLC

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

Date	9/ 16 /2021	Personnel	K R Miller	Weather	sunny ± 70° F
Site Name	RG&E - Pavilion Fmr. MGP	Evacuation Method	Bladder Pump 1.75-in. dia.	Well #	MW 5
Site Location	Pavilion, NY	Sampling Method	Bladder Pump 1.75-in. dia.	Project #	2021038

Well information:

Depth of Well * ± 18.9 ft.
Depth to Water * 5.69 ft. 9/16
Length of Water Column ft.
5.96' 9/17

* Measurements taken from

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

NO NAPL 9/16/21

Start Purge Time: 12:00

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).
12:05	6.25	19.0	7.46	2.90	56.5	9.01	16.2	± 300
12:10	6.24	19.1	7.50	2.91	43.4	9.03	12.3	
12:15	6.22	19.2	7.58	2.94	26.9	8.99	10.94	
12:20	6.21	19.1	7.59	2.97	20.1	8.36	8.57	
12:25	6.24	19.2	7.60	2.99	19.7	8.93	5.74	

End Purge Time: 12:25

Water sample:

Time collected: 12:30

Total volume of purged water removed: ± 2.5 gal

Physical appearance at start		Physical appearance at sampling	
Color	clear	Color	clear
Odor	NONE	Odor	NONE
Sheen/Free Product	NO	Sheen/Free Product	NO

PAV-MW5-091621" + MS/MSD

Analytical Parameters:

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

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

Date	9/16/2021	Personnel	K R Miller	Weather	Sunny ± 75°F
Site Name	RG&E - Pavilion Fmr. MGP	Evacuation Method	Bladder Pump 1.75-in. dia.	Well #	MW1
Site Location	Pavilion, NY	Sampling Method	Bladder Pump 1.75-in. dia.	Project #	2021038

Well information:

Depth of Well * ±19.35 ft.
Depth to Water * 6.71 ft. 9/16
Length of Water Column ft.
SWL 6.68' 9/17

* Measurements taken from

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

NO NAPL 9/16/21

Start Purge Time: 13:55

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).
14:00	8.51	18.3	7.63	0.86	115.1	7.63	9.39	± 300
14:05	10.25	18.2	7.10	0.86	125.0	4.69	11.3	"
14:10	10.65	18.0	7.12	0.92	127.7	4.68	13.9	± 200
14:15	10.96	17.9	7.10	0.95	127.1	4.70	14.7	
14:20	11.14	17.1	7.06	1.07	123.1	4.88	13.5	
14:25	11.15	16.8	7.18	1.14	122.2	5.01	12.2	
14:30	11.17	16.9	7.16	1.27	119.9	5.20	9.87	
14:35	11.18	16.8	7.21	1.27	120.1	5.22	9.73	

End Purge Time: 14:35

Water sample:
Time collected: 14:45

Total volume of purged water removed: ± 2.5 gal

Physical appearance at start
Color: clear
Odor: NONE
Sheen/Free Product: NO

Physical appearance at sampling
Color: clear
Odor: NONE
Sheen/Free Product: NO

"PAV-MW1-091621" + "PAV-DUP-091621"

Analytical Parameters:

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

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

Date	9/17/2021	Personnel	K R Miller	Weather	Mostly sunny ± 70° F
Site Name	RG&E - Pavilion Fmr. MGP	Evacuation Method	Bladder Pump 1.75-in. dia.	Well #	MW-3
Site Location	Pavilion, NY	Sampling Method	Bladder Pump 1.75-in. dia.	Project #	2021038

Well information:

Depth of Well *	14.6	ft.	
Depth to Water *	4.81	ft.	9/17
Length of Water Column		ft.	

* Measurements taken from

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

No NAPL 9/17/21

Start Purge Time: 11:20

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).
11:25	4.98	19.1	6.90	1.18	260.5	7.03	2.24	± 275
11:30	5.05	19.1	6.78	1.42	249.0	2.00	1.89	
11:35	4.99	19.2	6.89	1.81	222.2	0.54	1.45	
11:40	5.00	19.2	6.93	2.01	207.1	0.47	1.23	
11:45	5.02	19.2	6.99	2.19	183.4	0.24	0.59	
11:50	5.02	19.3	7.01	2.30	171.2	0.25	0.50	
11:55	5.03	19.1	7.07	2.38	159.8	0.18	0.22	

End Purge Time: 11:55

Water sample:

Time collected: 12:00

Total volume of purged water removed: ± 2.5 gal

Physical appearance at start		Physical appearance at sampling	
Color	Clear	Color	Clear
Odor	NONE	Odor	NONE
Sheen/Free Product	NO	Sheen/Free Product	NO

"PAV-MW3-091721"

Analytical Parameters:

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

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

Date	9/17/2021	Personnel	K R Miller	Weather	Sunny ± 75°F
Site Name	RG&E - Pavilion Fmr. MGP	Evacuation Method	Bladder Pump 1.75-in. dia.	Well #	MW2
Site Location	Pavilion, NY	Sampling Method	Bladder Pump 1.75-in. dia.	Project #	2021038

Well information:

Depth of Well * 16.16 ft.
Depth to Water * 6.90 ft. 9/17
Length of Water Column ft.

* Measurements taken from

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

NO NAPL 9/17/21

Start Purge Time: 13:50

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).
13:55	7.55	19.1	7.36	1.37	-76.8	8.43	49.0	± 250
14:00	8.25	18.7	7.26	1.39	-81.2	5.18	37.5	
14:05	8.68	18.3	7.28	1.40	-82.2	3.41	32.8	
14:10	8.85	18.1	7.31	1.43	-83.0	0.91	21.4	
14:15	8.85	17.9	7.30	1.44	-82.9	0.90	18.2	
14:20	8.85	17.6	7.38	1.45	-82.6	0.87	14.2	

End Purge Time: 14:20

Water sample:
Time collected: 14:30

Total volume of purged water removed: ± 2.5 gal

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

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

"PAV-MW2-091721"

Analytical Parameters:

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

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

Date	9/ 20 /2021	Personnel	K R Miller	Weather	Sunny ± 70° F
Site Name	RG&E - Pavilion Fmr. MGP	Evacuation Method	Bladder Pump 1.75-in. dia.	Well #	MW4A
Site Location	Pavilion, NY	Sampling Method	Bladder Pump 1.75-in. dia.	Project #	2021038

Well information:

Depth of Well * ±16.55' ft.
Depth to Water * 5.78 ft. 9/17/21
6.36 9/20/21
Length of Water Column ft.

* Measurements taken from

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

NO NAPL 9/20/21

Start Purge Time: 13:00

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).
13:05	6.71	19.9	7.28	5.52	5.3	5.12	15.5	±150
13:10	6.73	20.1	7.32	5.62	-29.4	2.52	16.6	
13:15	6.75	20.3	7.34	5.59	-37.5	1.18	23.0	
13:20	6.77	20.3	7.33	5.55	-36.8	0.97	10.29	
13:25	6.79	20.4	7.32	5.51	-36.2	0.77	12.37	
13:30	6.79	20.4	7.33	5.54	-42.0	0.69	6.56	
13:35	6.79	20.4	7.33	5.57	-49.2	0.50	3.79	

End Purge Time: 13:35

Water sample:
Time collected: 13:45

Total volume of purged water removed: ± 1.5 gal

Physical appearance at start		Physical appearance at sampling	
Color	clear	Color	clear
Odor	NONE	Odor	NONE
Sheen/Free Product	NO	Sheen/Free Product	NO

Equip- Blank "PAV-EB-092021" collected @ 12:45

Analytical Parameters: Sample "PAV-MW4A-092021"

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

Attachment B

Groundwater Laboratory Report and Chain of Custody Forms

NEU-VELLE LLC

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report For

Neu-Velle

For Lab Project ID

214234

Referencing

Pavilion Former MGP Site

Prepared

Monday, October 4, 2021

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

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: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW5-091621		
Lab Sample ID:	214234-01	**Date Sampled:**	9/16/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/23/2021 16:40
Acenaphthylene	< 10.0	ug/L		9/23/2021 16:40
Anthracene	< 10.0	ug/L		9/23/2021 16:40
Benzo (a) anthracene	< 10.0	ug/L		9/23/2021 16:40
Benzo (a) pyrene	< 10.0	ug/L		9/23/2021 16:40
Benzo (b) fluoranthene	< 10.0	ug/L		9/23/2021 16:40
Benzo (g,h,i) perylene	< 10.0	ug/L		9/23/2021 16:40
Benzo (k) fluoranthene	< 10.0	ug/L		9/23/2021 16:40
Chrysene	< 10.0	ug/L		9/23/2021 16:40
Dibenz (a,h) anthracene	< 10.0	ug/L		9/23/2021 16:40
Fluoranthene	< 10.0	ug/L		9/23/2021 16:40
Fluorene	< 10.0	ug/L		9/23/2021 16:40
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/23/2021 16:40
Naphthalene	< 10.0	ug/L		9/23/2021 16:40
Phenanthrene	< 10.0	ug/L		9/23/2021 16:40
Pyrene	< 10.0	ug/L		9/23/2021 16:40

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**30.6**	30.9 - 98.1	*	9/23/2021 16:40
Nitrobenzene-d5	**50.9**	49.6 - 104		9/23/2021 16:40
Terphenyl-d14	**53.4**	56.5 - 118	*	9/23/2021 16:40

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57022.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L	M	9/29/2021 15:00
Ethylbenzene	< 2.00	ug/L		9/29/2021 15:00

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW5-091621		
Lab Sample ID:	214234-01	**Date Sampled:**	9/16/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

m,p-Xylene	< 2.00	ug/L			9/29/2021 15:00
o-Xylene	< 2.00	ug/L			9/29/2021 15:00
Toluene	< 2.00	ug/L		M	9/29/2021 15:00

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**102**	83 - 120		9/29/2021 15:00
4-Bromofluorobenzene	**84.8**	65.5 - 118		9/29/2021 15:00
Pentafluorobenzene	**118**	91.2 - 109	*	9/29/2021 15:00
Toluene-D8	**98.3**	79.7 - 112		9/29/2021 15:00

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

Data File: z04366.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.00856**	mg/L	J	10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-DUP-091621		
Lab Sample ID:	214234-02	**Date Sampled:**	9/16/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/23/2021 18:07
Acenaphthylene	< 10.0	ug/L		9/23/2021 18:07
Anthracene	< 10.0	ug/L		9/23/2021 18:07
Benzo (a) anthracene	< 10.0	ug/L		9/23/2021 18:07
Benzo (a) pyrene	< 10.0	ug/L		9/23/2021 18:07
Benzo (b) fluoranthene	< 10.0	ug/L		9/23/2021 18:07
Benzo (g,h,i) perylene	< 10.0	ug/L		9/23/2021 18:07
Benzo (k) fluoranthene	< 10.0	ug/L		9/23/2021 18:07
Chrysene	< 10.0	ug/L		9/23/2021 18:07
Dibenz (a,h) anthracene	< 10.0	ug/L		9/23/2021 18:07
Fluoranthene	< 10.0	ug/L		9/23/2021 18:07
Fluorene	< 10.0	ug/L		9/23/2021 18:07
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/23/2021 18:07
Naphthalene	< 10.0	ug/L		9/23/2021 18:07
Phenanthrene	< 10.0	ug/L		9/23/2021 18:07
Pyrene	< 10.0	ug/L		9/23/2021 18:07

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**43.7**	30.9 - 98.1		9/23/2021 18:07
Nitrobenzene-d5	**60.6**	49.6 - 104		9/23/2021 18:07
Terphenyl-d14	**67.6**	56.5 - 118		9/23/2021 18:07

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57025.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/29/2021 14:39
Ethylbenzene	< 2.00	ug/L		9/29/2021 14:39

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-DUP-091621		
Lab Sample ID:	214234-02	**Date Sampled:**	9/16/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

m,p-Xylene	< 2.00	ug/L			9/29/2021 14:39
o-Xylene	< 2.00	ug/L			9/29/2021 14:39
Toluene	< 2.00	ug/L			9/29/2021 14:39

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**105**	83 - 120		9/29/2021 14:39
4-Bromofluorobenzene	**97.2**	65.5 - 118		9/29/2021 14:39
Pentafluorobenzene	**126**	91.2 - 109	*	9/29/2021 14:39
Toluene-D8	**108**	79.7 - 112		9/29/2021 14:39

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

Data File: z04365.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW1-091621		
Lab Sample ID:	214234-03	**Date Sampled:**	9/16/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/23/2021 18:36
Acenaphthylene	< 10.0	ug/L		9/23/2021 18:36
Anthracene	< 10.0	ug/L		9/23/2021 18:36
Benzo (a) anthracene	< 10.0	ug/L		9/23/2021 18:36
Benzo (a) pyrene	< 10.0	ug/L		9/23/2021 18:36
Benzo (b) fluoranthene	< 10.0	ug/L		9/23/2021 18:36
Benzo (g,h,i) perylene	< 10.0	ug/L		9/23/2021 18:36
Benzo (k) fluoranthene	< 10.0	ug/L		9/23/2021 18:36
Chrysene	< 10.0	ug/L		9/23/2021 18:36
Dibenz (a,h) anthracene	< 10.0	ug/L		9/23/2021 18:36
Fluoranthene	< 10.0	ug/L		9/23/2021 18:36
Fluorene	< 10.0	ug/L		9/23/2021 18:36
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/23/2021 18:36
Naphthalene	< 10.0	ug/L		9/23/2021 18:36
Phenanthrene	< 10.0	ug/L		9/23/2021 18:36
Pyrene	< 10.0	ug/L		9/23/2021 18:36

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**35.5**	30.9 - 98.1		9/23/2021 18:36
Nitrobenzene-d5	**54.4**	49.6 - 104		9/23/2021 18:36
Terphenyl-d14	**41.9**	56.5 - 118	*	9/23/2021 18:36

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57026.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/29/2021 14:18
Ethylbenzene	< 2.00	ug/L		9/29/2021 14:18

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW1-091621		
Lab Sample ID:	214234-03	**Date Sampled:**	9/16/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

m,p-Xylene	< 2.00	ug/L			9/29/2021 14:18
o-Xylene	< 2.00	ug/L			9/29/2021 14:18
Toluene	< 2.00	ug/L			9/29/2021 14:18

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**106**	83 - 120		9/29/2021 14:18
4-Bromofluorobenzene	**104**	65.5 - 118		9/29/2021 14:18
Pentafluorobenzene	**123**	91.2 - 109	*	9/29/2021 14:18
Toluene-D8	**106**	79.7 - 112		9/29/2021 14:18

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

Data File: z04364.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW3-091721		
Lab Sample ID:	214234-04	**Date Sampled:**	9/17/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/23/2021 19:05
Acenaphthylene	< 10.0	ug/L		9/23/2021 19:05
Anthracene	< 10.0	ug/L		9/23/2021 19:05
Benzo (a) anthracene	< 10.0	ug/L		9/23/2021 19:05
Benzo (a) pyrene	< 10.0	ug/L		9/23/2021 19:05
Benzo (b) fluoranthene	< 10.0	ug/L		9/23/2021 19:05
Benzo (g,h,i) perylene	< 10.0	ug/L		9/23/2021 19:05
Benzo (k) fluoranthene	< 10.0	ug/L		9/23/2021 19:05
Chrysene	< 10.0	ug/L		9/23/2021 19:05
Dibenz (a,h) anthracene	< 10.0	ug/L		9/23/2021 19:05
Fluoranthene	< 10.0	ug/L		9/23/2021 19:05
Fluorene	< 10.0	ug/L		9/23/2021 19:05
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/23/2021 19:05
Naphthalene	< 10.0	ug/L		9/23/2021 19:05
Phenanthrene	< 10.0	ug/L		9/23/2021 19:05
Pyrene	< 10.0	ug/L		9/23/2021 19:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**42.7**	30.9 - 98.1		9/23/2021 19:05
Nitrobenzene-d5	**65.3**	49.6 - 104		9/23/2021 19:05
Terphenyl-d14	**63.6**	56.5 - 118		9/23/2021 19:05

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57027.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/29/2021 13:57
Ethylbenzene	< 2.00	ug/L		9/29/2021 13:57

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW3-091721		
Lab Sample ID:	214234-04	**Date Sampled:**	9/17/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

m,p-Xylene	< 2.00	ug/L			9/29/2021 13:57
o-Xylene	< 2.00	ug/L			9/29/2021 13:57
Toluene	< 2.00	ug/L			9/29/2021 13:57

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**105**	83 - 120		9/29/2021 13:57
4-Bromofluorobenzene	**96.1**	65.5 - 118		9/29/2021 13:57
Pentafluorobenzene	**116**	91.2 - 109	*	9/29/2021 13:57
Toluene-D8	**102**	79.7 - 112		9/29/2021 13:57

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

Data File: z04363.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.128**	mg/L		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW2-091721		
Lab Sample ID:	214234-05	**Date Sampled:**	9/17/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/23/2021 19:34
Acenaphthylene	< 10.0	ug/L		9/23/2021 19:34
Anthracene	< 10.0	ug/L		9/23/2021 19:34
Benzo (a) anthracene	< 10.0	ug/L		9/23/2021 19:34
Benzo (a) pyrene	< 10.0	ug/L		9/23/2021 19:34
Benzo (b) fluoranthene	< 10.0	ug/L		9/23/2021 19:34
Benzo (g,h,i) perylene	< 10.0	ug/L		9/23/2021 19:34
Benzo (k) fluoranthene	< 10.0	ug/L		9/23/2021 19:34
Chrysene	< 10.0	ug/L		9/23/2021 19:34
Dibenz (a,h) anthracene	< 10.0	ug/L		9/23/2021 19:34
Fluoranthene	< 10.0	ug/L		9/23/2021 19:34
Fluorene	< 10.0	ug/L		9/23/2021 19:34
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/23/2021 19:34
Naphthalene	< 10.0	ug/L		9/23/2021 19:34
Phenanthrene	< 10.0	ug/L		9/23/2021 19:34
Pyrene	< 10.0	ug/L		9/23/2021 19:34

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**53.6**	30.9 - 98.1		9/23/2021 19:34
Nitrobenzene-d5	**69.8**	49.6 - 104		9/23/2021 19:34
Terphenyl-d14	**80.7**	56.5 - 118		9/23/2021 19:34

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57028.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/29/2021 13:37
Ethylbenzene	< 2.00	ug/L		9/29/2021 13:37

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW2-091721		
Lab Sample ID:	214234-05	**Date Sampled:**	9/17/2021
Matrix:	Groundwater	**Date Received:**	9/20/2021

m,p-Xylene	< 2.00	ug/L			9/29/2021 13:37
o-Xylene	< 2.00	ug/L			9/29/2021 13:37
Toluene	< 2.00	ug/L			9/29/2021 13:37

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**107**	83 - 120		9/29/2021 13:37
4-Bromofluorobenzene	**105**	65.5 - 118		9/29/2021 13:37
Pentafluorobenzene	**122**	91.2 - 109	*	9/29/2021 13:37
Toluene-D8	**107**	79.7 - 112		9/29/2021 13:37

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

Data File: z04362.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	**0.0254**	mg/L		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-EB-092021		
Lab Sample ID:	214234-06	**Date Sampled:**	9/20/2021
Matrix:	Water	**Date Received:**	9/20/2021

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/23/2021 20:03
Acenaphthylene	< 10.0	ug/L		9/23/2021 20:03
Anthracene	< 10.0	ug/L		9/23/2021 20:03
Benzo (a) anthracene	< 10.0	ug/L		9/23/2021 20:03
Benzo (a) pyrene	< 10.0	ug/L		9/23/2021 20:03
Benzo (b) fluoranthene	< 10.0	ug/L		9/23/2021 20:03
Benzo (g,h,i) perylene	< 10.0	ug/L		9/23/2021 20:03
Benzo (k) fluoranthene	< 10.0	ug/L		9/23/2021 20:03
Chrysene	< 10.0	ug/L		9/23/2021 20:03
Dibenz (a,h) anthracene	< 10.0	ug/L		9/23/2021 20:03
Fluoranthene	< 10.0	ug/L		9/23/2021 20:03
Fluorene	< 10.0	ug/L		9/23/2021 20:03
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/23/2021 20:03
Naphthalene	< 10.0	ug/L		9/23/2021 20:03
Phenanthrene	< 10.0	ug/L		9/23/2021 20:03
Pyrene	< 10.0	ug/L		9/23/2021 20:03

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**45.5**	30.9 - 98.1		9/23/2021 20:03
Nitrobenzene-d5	**65.3**	49.6 - 104		9/23/2021 20:03
Terphenyl-d14	**61.6**	56.5 - 118		9/23/2021 20:03

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57029.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/29/2021 13:16
Ethylbenzene	< 2.00	ug/L		9/29/2021 13:16

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-EB-092021		
Lab Sample ID:	214234-06	**Date Sampled:**	9/20/2021
Matrix:	Water	**Date Received:**	9/20/2021

m,p-Xylene	< 2.00	ug/L			9/29/2021 13:16
o-Xylene	< 2.00	ug/L			9/29/2021 13:16
Toluene	< 2.00	ug/L			9/29/2021 13:16

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**108**	83 - 120		9/29/2021 13:16
4-Bromofluorobenzene	**105**	65.5 - 118		9/29/2021 13:16
Pentafluorobenzene	**124**	91.2 - 109	*	9/29/2021 13:16
Toluene-D8	**113**	79.7 - 112	*	9/29/2021 13:16

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

Data File: z04361.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW4A-092021		
Lab Sample ID:	214234-07	**Date Sampled:**	9/20/2021
Matrix:	Water	**Date Received:**	9/20/2021

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/23/2021 20:32
Acenaphthylene	< 10.0	ug/L		9/23/2021 20:32
Anthracene	< 10.0	ug/L		9/23/2021 20:32
Benzo (a) anthracene	< 10.0	ug/L		9/23/2021 20:32
Benzo (a) pyrene	< 10.0	ug/L		9/23/2021 20:32
Benzo (b) fluoranthene	< 10.0	ug/L		9/23/2021 20:32
Benzo (g,h,i) perylene	< 10.0	ug/L		9/23/2021 20:32
Benzo (k) fluoranthene	< 10.0	ug/L		9/23/2021 20:32
Chrysene	< 10.0	ug/L		9/23/2021 20:32
Dibenz (a,h) anthracene	< 10.0	ug/L		9/23/2021 20:32
Fluoranthene	< 10.0	ug/L		9/23/2021 20:32
Fluorene	< 10.0	ug/L		9/23/2021 20:32
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/23/2021 20:32
Naphthalene	< 10.0	ug/L		9/23/2021 20:32
Phenanthrene	< 10.0	ug/L		9/23/2021 20:32
Pyrene	< 10.0	ug/L		9/23/2021 20:32

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	**44.6**	30.9 - 98.1		9/23/2021 20:32
Nitrobenzene-d5	**66.4**	49.6 - 104		9/23/2021 20:32
Terphenyl-d14	**76.2**	56.5 - 118		9/23/2021 20:32

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57030.D

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/29/2021 12:55
Ethylbenzene	< 2.00	ug/L		9/29/2021 12:55

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	PAV-MW4A-092021		
Lab Sample ID:	214234-07	**Date Sampled:**	9/20/2021
Matrix:	Water	**Date Received:**	9/20/2021

m,p-Xylene	< 2.00	ug/L			9/29/2021 12:55
o-Xylene	< 2.00	ug/L			9/29/2021 12:55
Toluene	< 2.00	ug/L			9/29/2021 12:55

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**108**	83 - 120		9/29/2021 12:55
4-Bromofluorobenzene	**98.2**	65.5 - 118		9/29/2021 12:55
Pentafluorobenzene	**123**	91.2 - 109	*	9/29/2021 12:55
Toluene-D8	**107**	79.7 - 112		9/29/2021 12:55

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

Data File: z04360.D

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	< 0.0100	mg/L		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214234

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Sample Identifier:	Trip Blank T1065		
Lab Sample ID:	214234-08	**Date Sampled:**	9/13/2021
Matrix:	Water	**Date Received:**	9/20/2021

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/29/2021 12:35
Ethylbenzene	< 2.00	ug/L		9/29/2021 12:35
m,p-Xylene	< 2.00	ug/L		9/29/2021 12:35
o-Xylene	< 2.00	ug/L		9/29/2021 12:35
Toluene	< 2.00	ug/L		9/29/2021 12:35

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**106**	83 - 120		9/29/2021 12:35
4-Bromofluorobenzene	**102**	65.5 - 118		9/29/2021 12:35
Pentafluorobenzene	**118**	91.2 - 109	*	9/29/2021 12:35
Toluene-D8	**106**	79.7 - 112		9/29/2021 12:35

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

Data File: z04359.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Method Blank Report

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Lab Project ID: 214234

SDG #: 4234-01

Matrix: Groundwater

Total Cyanide

Analyte	Result	Units	Qualifier	Date Analyzed
Cyanide, Total	<0.0100	mg/L		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

QC Batch ID: QC211001WTCN

QC Number: Blk 1

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Laboratory Control Sample

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Lab Project ID: 214234

SDG #: 4234-01

Matrix: Groundwater

Total Cyanide

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Cyanide, Total	0.100	mg/L	0.0980	98.0	85 - 115		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

QC Number: 1

QC Batch ID: QC211001WTCN

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Sample Spike and Sample Duplicate

SDG #: 4234-01

Client: **Neu-Velle**

Lab Project ID: 214234

Project Reference: Pavilion Former MGP Site

Lab Sample ID: 214234-01

Sample Identifier: PAV-MW5-091621

Matrix: Groundwater

Date Sampled: 9/16/2021

Date Received: 9/20/2021

Total Cyanide

Analyte	Sample Results	Result Units	Spike Added	Spike Result	Spike % Recovery	% Rec Limits	Spike Outliers	Duplicate Result	Relative % Difference	RPD Limit	RPD Outliers	Date Analyzed
Cyanide, Total	**0.00856**	mg/L	0.100	0.102	93.6	80 - 120		0.00770	NC	20		10/1/2021

Method Reference(s): SM 4500 CN E - 2011
SM 4500 CN C - 2011

Preparation Date: 10/1/2021

QC Batch ID: QC211001WTCN

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.

Report Prepared Monday, October 4, 2021

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Lab Project ID: 214234

SDG #: 4234-01

Matrix: Groundwater

Semi-Volatile Organics (PAHs)

Analyte	Result	Units	Qualifier	Date Analyzed	
Acenaphthene	<10.0	ug/L		9/23/2021	13:16
Acenaphthylene	<10.0	ug/L		9/23/2021	13:16
Anthracene	<10.0	ug/L		9/23/2021	13:16
Benzo (a) anthracene	<10.0	ug/L		9/23/2021	13:16
Benzo (a) pyrene	<10.0	ug/L		9/23/2021	13:16
Benzo (b) fluoranthene	<10.0	ug/L		9/23/2021	13:16
Benzo (g,h,i) perylene	<10.0	ug/L		9/23/2021	13:16
Benzo (k) fluoranthene	<10.0	ug/L		9/23/2021	13:16
Chrysene	<10.0	ug/L		9/23/2021	13:16
Dibenz (a,h) anthracene	<10.0	ug/L		9/23/2021	13:16
Fluoranthene	<10.0	ug/L		9/23/2021	13:16
Fluorene	<10.0	ug/L		9/23/2021	13:16
Indeno (1,2,3-cd) pyrene	<10.0	ug/L		9/23/2021	13:16
Naphthalene	<10.0	ug/L		9/23/2021	13:16
Phenanthrene	<10.0	ug/L		9/23/2021	13:16
Pyrene	<10.0	ug/L		9/23/2021	13:16

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
2-Fluorobiphenyl	**40.2**	30.9 - 98.1		9/23/2021	13:16
Nitrobenzene-d5	**59.7**	49.6 - 104		9/23/2021	13:16
Terphenyl-d14	**65.7**	56.5 - 118		9/23/2021	13:16

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File: B57015.D
QC Batch ID: QC210922610W
QC Number: 1

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Lab Project ID: 214234

SDG #: 4234-01

Matrix: Groundwater

Semi-Volatile Organics (PAHs)

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Acenaphthene	50.0	ug/L	34.0	68.0	51.6 - 101		9/23/2021
Pyrene	50.0	ug/L	38.4	76.8	60 - 120		9/23/2021

Method Reference(s): EPA 8270D
EPA 3510C

Preparation Date: 9/22/2021

Data File: B57016.D

QC Number: 1

QC Batch ID: QC210922610W

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Matrix Spike and Matrix Spike Duplicate

SDG #: 4234-01

Client: Neu-Velle

Lab Project ID: 214234

Project Reference: Pavilion Former MGP Site

Lab Sample ID: 214234-01
Sample Identifier: PAV-MW5-091621
Matrix: Groundwater

Date Sampled: 9/16/2021
Date Received: 9/20/2021
Date Analyzed: 9/23/2021

Semi-Volatile Organics (PAHs)

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
Acenaphthene	< 10.0	ug/L	50.0	32.1	64.2	50.0	33.1	66.3	51.6 - 101			3.13	43.4	
Pyrene	< 10.0	ug/L	50.0	35.0	70.0	50.0	36.6	73.1	60 - 120			4.37	47.2	

Method Reference(s): EPA 8270D
EPA 3510C
Preparation Date: 9/22/2021
Data File(s): B57023.D
B57024.D
B57022.D
1
QC Batch ID: QC210922610W

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

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Friday, September 24, 2021

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Method Blank Report

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Lab Project ID: 214234

SDG #: 4234-01

Matrix: Groundwater

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed	
Benzene	<1.00	ug/L		9/29/2021	12:14
Ethylbenzene	<2.00	ug/L		9/29/2021	12:14
m,p-Xylene	<2.00	ug/L		9/29/2021	12:14
o-Xylene	<2.00	ug/L		9/29/2021	12:14
Toluene	<2.00	ug/L		9/29/2021	12:14

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed	
1,2-Dichloroethane-d4	**106**	83 - 120		9/29/2021	12:14
4-Bromofluorobenzene	**108**	65.5 - 118		9/29/2021	12:14
Pentafluorobenzene	**107**	91.2 - 109		9/29/2021	12:14
Toluene-D8	**98.9**	79.7 - 112		9/29/2021	12:14

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

Data File: z04358.D

QC Batch ID: voaq210929

QC Number: Blk 1

PARADIGM
ENVIRONMENTAL SERVICES, INC

QC Report for Laboratory Control Sample

Client: **Neu-Velle**

Project Reference: Pavilion Former MGP Site

Lab Project ID: 214234

SDG #: 4234-01

Matrix: Groundwater

Volatile Organics

Analyte	Spike Added	Spike Units	LCS Result	LCS % Recovery	% Rec Limits	LCS Outliers	Date Analyzed
Benzene	20.0	ug/L	20.9	104	87.6 - 106		9/29/2021
Ethylbenzene	20.0	ug/L	19.0	94.9	81.5 - 105		9/29/2021
Toluene	20.0	ug/L	20.7	103	78.6 - 106		9/29/2021

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

Data File: z04369.D

QC Number: LCS 1

QC Batch ID: voaq210929

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, September 30, 2021

PARADIGM
ENVIRONMENTAL SERVICES, INC.

QC Report for Matrix Spike and Matrix Spike Duplicate

SDG #: 4234-01
Client: Neu-Velle
Lab Project ID: 214234
Project Reference: Pavilion Former MGP Site

Lab Sample ID: 214234-01
Sample Identifier: PAV-MW5-091621
Matrix: Groundwater

Date Sampled: 9/16/2021
Date Received: 9/20/2021
Date Analyzed: 9/29/2021

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	57.0	114	50.0	56.2	112	87.6 - 106	*	*	1.50	10	
Ethylbenzene	< 2.00	ug/L	50.0	49.1	98.2	50.0	50.6	101	81.5 - 105			2.94	12.5	
Toluene	< 2.00	ug/L	50.0	55.7	111	50.0	53.1	106	78.6 - 106	*	*	4.83	12.6	

Method Reference(s): EPA 8260C
EPA 5030C
Data File(s): z04367.D
z04368.D
z04366.D
1
QC Batch ID: voaq210929

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

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

Report Prepared Thursday, September 30, 2021

Analytical Report Appendix

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

Each page of this document is part of a multipage report. This document may not be reproduced except in its entirety, without the prior consent of Paradigm Environmental Services, Inc.

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

Page 1 of 2

1 of 3

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	Nen-Velle LLC	CLIENT:	Same	LAB PROJECT ID: 214234
ADDRESS:	1667 Lake Ave.	ADDRESS:		
CITY: STATE: ZIP:	Rochester, NY 14615	CITY: STATE: ZIP:		Quotation #:
PHONE:	(585) 478-1666	PHONE:		Email: kmiller@nen-velle.com lreid@nen-velle.com
ATTN:	Kyle Miller / Logan Reid	ATTN:		

PROJECT REFERENCE: Pavilion Former 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	BTEX 8260	PAHs 8270	Cyanide	REMARKS	PARADIGM LAB SAMPLE NUMBER
9/16/21	12:30		X	PAV-MW5-091621	WG	12	X	X	X	MS/MSD	01
9/16/21	—		X	PAV-DUP-091621	WG	4	X	X	X	Duplicate	02
9/16/21	14:45		X	PAV-MW1-091621	WG	4	X	X	X		03
9/17/21	12:00		X	PAV-MW3-091721	WG	4	X	X	X		04
9/17/21	14:30		X	PAV-MW2-091721	WG	4	X	X	X		05
9/20/21	12:45		X	PAV-EB-092021	WA	4	X	X	X	Equip. Blank	06
9/20/21	13:45		X	PAV-MW4A-092021	WA	4	X	X	X		07
9/13/21				T1065 Trip Blank		1	X				08

6°C iced 9/20/21 1617

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

Kyle R. Miller 9/20/2021 16,17,4
Sampled By / Date/Time

Mollyvail N/A custody seals Client delivered

[signature] 9/20/21 16:15
Relinquished By / Date/Time

[signature] 9/20/21 16:15
Received By / Date/Time

Total Cost:

P.I.F.

Molly Vail 9/20/21 1622
Received @ Lab By / Date/Time

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

See additional page for sample conditions.

Table 2 Parameters, Laboratory Limits, and Regulatory Limits for Groundwater Sampling				
Target Analyte	Units	Laboratory Water QLs	Laboratory Water MDLs	NYSDEC TOGS 1.1.1 Class GA Standards and Guidance Values (µg/L)
VOCs (BTEX only)				
Benzene	µg/L	0.7	0.225	1
Ethylbenzene	µg/L	2.0	0.390	5
m-Xylene and p-Xylene	µg/L	2.0	0.921	5
o-Xylene (1,2-xylene)	µg/L	2.0	0.561	5
Toluene	µg/L	2.0	0.507	5
SVOCs (PAHs only)				
2-Methylnaphthalene	µg/L	10	TBD	NC
Acenaphthene	µg/L	10.0	1.91	20
Acenaphthylene	µg/L	10.0	1.96	NC
Anthracene	µg/L	10.0	1.68	50
Benz(a)anthracene	µg/L	10.0	1.73	0.002
Benzo(a)pyrene	µg/L	10.0	1.56	ND
Benzo(b)fluoranthene	µg/L	10.0	1.57	0.002
Benzo(g,h,i)perylene	µg/L	10.0	1.05	NC
Benzo(k)fluoranthene	µg/L	10.0	1.75	0.002
Chrysene	µg/L	10.0	1.54	0.002
Dibenz(a,h)anthracene	µg/L	10.0	1.39	NC
Fluoranthene	µg/L	10.0	1.59	50
Fluorene	µg/L	10.0	1.92	50
Indeno(1,2,3-cd)pyrene	µg/L	10.0	2.40	0.002
Naphthalene	µg/L	10.0	1.80	10
Phenanthrene	µg/L	10.0	1.71	50
Pyrene	µg/L	10.0	1.67	50

Notes:

1. QLs indicates quantitation limits.
2. MDLs indicate method detection limits.
3. µg/L indicates microgram per liter.
4. mg/L indicates milligram per liter.
5. MDLs and QLs provided by Paradigm, current as of April 2019.
6. NA indicates not applicable.
7. VOCs indicates volatile organic compounds (via United States Environmental Protection Agency [USEPA] Method 8260).
8. SVOCs indicates semi-volatile organic compounds via USEPA Method 8270.
9. TBD indicates MDL and QL are to be determined.

PARADIGM

Chain of Custody Supplement

Client: Neu-velle **Completed by:** MolPaid

Lab Project ID: 214234 **Date:** 9/20/21

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	☐	☐
Comments			
Preservation	☑	☐	☐
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☑
Comments			
Holding Time	☑	☐	☐
Comments			
Temperature	☑	☐	☐
Comments	6°C iced		
Compliant Sample Quantity/Type	☑	☐	☐
Comments			