



December 13, 2018

Mr. Salvatore F. Priore, P.E.  
New York State Department of Environmental Conservation  
Division of Environmental Remediation  
Remedial Bureau C, 11th Floor  
625 Broadway  
Albany, New York 12233-7014

Re: Report – 3rd Post Remediation Groundwater Sampling Event - September 2018  
RG&E Front Street Former MGP Site  
84 Andrews Street  
City of Rochester, Monroe County, New York  
NYSDEC Site #V00073-8

Dear Mr. Priore:

The purpose of this report is to present the results of the third post remediation groundwater sampling event completed at the Rochester Gas and Electric Corporation (RG&E) Front Street Former Manufactured Gas Plant (MGP) site (New York State Department of Environmental Conservation [NYSDEC] Site No. V00073-8), located at 84 Andrews Street in the City of Rochester, Monroe County, New York (referred to herein as the “Site”). The sampling event was completed by Neu-Velle, LLC. (NEU-VELLE) personnel in accordance with the Site Management Plan (SMP), dated May 2018, as described below.

## **SCOPE OF WORK**

### **Synoptic Water Levels**

As summarized in **Table 1**, a Site wide round of synoptic groundwater levels were gauged at the eight (8) remaining monitoring wells at the Site on September 18, 2018. 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. NAPL was not detected in any of the wells. The well gauging observations and field measurements are provided in **Table 1**.

### **Groundwater Sampling**

On September 18, 2018 through September 21, 2018 groundwater samples were collected for laboratory analysis from eight (8) groundwater monitoring wells (OW-102, MW-1, MW-1D, MW-2, MW-8S, MW-9S, MW-9D, and MW-10S). Groundwater samples were collected using the low-stress (low-flow) purging techniques outlined in the United States Environmental Protection Agency (USEPA) Ground-Water Sampling Guidelines for Superfund and Resource Conservation and Recovery Act (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 new, clean tubing were 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 ground water sample log completed at each well. The ground water sample 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 (benzene, toluene, ethylbenzene, and xylene) only, in accordance with USEPA Method 8260C,
- Semi-volatile organic compounds (SVOCs), polycyclic aromatic hydrocarbons (PAHs) only in accordance with USEPA Method 8270D,
- Total lead in accordance with USEPA Method 6010C.

In accordance with the Quality Assurance Project Plan (QAPP), provided with the SMP, appropriate chains of custody protocols were followed. Copies of the chain of custody forms are included in **Exhibit A**. Quality Assurance/Quality Control (QA/QC) samples were collected as described in the SMP and are summarized on **Table 2**.

### **Reporting of Results**

Copies of the laboratory reports are presented in **Exhibit A** and the analytical results have been summarized in **Table 2** of this report.

### **Waste Disposal**

Well purge water and decontamination water were containerized in a 55-gallon 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).

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

- BTEX, PAHs, and lead were not detected in any of the eight (8) wells that were sampled.

### Groundwater Mapping

A groundwater elevation contour map was prepared based upon the water levels gauged at the Site on September 18, 2018. The groundwater contour map is provided as **Figure 2**. The Genesee River impoundment located adjacent (to the east) of the Site creates a ponding effect that generates hydraulic head pressure on the northern portion of the Site directing shallow groundwater flow away from the river to the west/southwest.

Due to a lack of measuring points on the southern portion of the Site, shallow groundwater flow in this vicinity could not be accurately depicted. Based on the static water levels measured in groundwater monitoring wells (OW-102 and MW-8S) on the southwest portion of the Site, shallow groundwater on the southern portion of the Site may flow to the east towards the Genesee River.

A groundwater contour map associated with the two deeper bedrock monitoring wells (MW-1D and MW-9D) was not produced due to limited data. The groundwater elevations gauged at MW-1D and MW-9D suggest that the bedrock groundwater flow is to the east/northeast.

## CONCLUSIONS

This report presents the results of the third post remediation groundwater sampling event completed at the RG&E Front Street Former MGP site (NYSDEC Site No. V00073-8).

The third post remediation groundwater sampling event identified that BTEX, PAHs, and lead were not detected in any of the eight (8) wells that were sampled. A groundwater elevation contour map that was prepared based on the water levels gauged at the Site on September 18, 2018 demonstrates that the Genesee River impoundment located adjacent (to the east) of the Site creates a ponding effect that generates hydraulic head pressure on the northern portion of the Site directing shallow groundwater flow away from the river to the west/southwest. Shallow groundwater flow in the southern portion of the Site could not be accurately depicted; however, the two monitoring wells in the southwest portion of the Site may suggest shallow groundwater flows in this area to the east towards the Genesee River. A groundwater contour map associated with the two deeper bedrock monitoring wells, MW-1D and MW-9D, was not produced due to limited data. The groundwater elevations gauged at MW-1D and MW-9D suggest that the bedrock groundwater flow is to the east/northeast.

The post-remediation groundwater monitoring described in the SMP will continue (through spring of 2020) to assess whether the overall concentration in groundwater is stable, decreasing, or increasing over time.

Please feel free to contact me at any time 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

Attachments:

Attachment A – Groundwater Sample Logs

Exhibit A – Groundwater Laboratory Reports and Chain of Custody Forms

Figure 1 – Monitoring Well Locations

Figure 2 – September 2018 Shallow Groundwater Elevation Contours

Figure 3 – September 2018 Groundwater Analytical Detections

Table 1 – Monitoring Well Reference Data and Groundwater Measurements

Table 2 – Groundwater Sample Analytical Results

**Attachment A**  
**Groundwater Sampling Logs**



**NEU-VELLE, LLC**

**Low Flow Ground Water Sampling Log**

Date 9/20/2018 Personnel Kyle Miller Weather Sunny 60°F  
 Site Name RG&E - Front Street Evacuation Method Low Flow Bladder Well # MW-1  
 Site Location Rochester, NY Sampling Method Low Flow Bladder Project # 2018062

**All information:**

Depth of Well \* 12.30 ft. \* Measurements taken from Top of Well Casing 4" flush mt  
 Depth to Water \* 10.95 ft. prepump  
 Length of Water Column \_\_\_\_\_ ft.

Start Purge Time: 9:30

Elapsed Time ( )	Depth To Water (ft) BTOC	Temperature (C)	pH	Conductivity (µS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
9:35	10.97	filling		Flow - thru		cm		1/50
9:40	NM	18.5	7.19	1.04	156	4.85	14.2	
9:45	11.10	18.5	7.34	1.04	147.8	5.16	12.1	
9:50	11.19	18.5	7.41	1.03	142.8	5.47	11.7	
9:55	11.20	18.6	7.42	1.03	141.8	5.72	11.6	
10:00	11.20	18.6	7.43	1.03	141.3	6.10	12.54	
10:05	11.21	18.7	7.51	1.01	140.8	6.06	11.29	
10:10	11:22	18.7	7.48	0.99	140.4	5.79	9.79	
10:15	11:22	18.8	7.47	0.97	138.1	5.45	7.23	
10:20	11:22	18.7	7.46	0.97	137.5	5.55	7.11	

End Purge Time: 10:20 " FS - MW1 - 092018"  
 Water sample: \_\_\_\_\_  
 Time collected: 10:30 Total volume of purged water removed: ± 0.5 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

9/18 NO LNAPL, SWL 10.97 BTOC; NO DNAPL total depth 12.3'

**Analytical Parameters:**

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40ml	VQA's	2	NO	HCl	
1L	amber	1	↓	N/A	
250 ml	poly	1	↓	HNO <sub>3</sub>	

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

Date 9/19/2018 Personnel Kyle Miller Weather overcast 70°F  
 Site Name RG&E - Front Street Evacuation Method Low Flow Bladder Well # MW-1D  
 Site Location Rochester, NY Sampling Method Low Flow Bladder Project # 2018062

Well information: Lock # 2342  
 Depth of Well \* 42.67 ft. \* Measurements taken from  
 Depth to Water \* 33.19 ft. progump  Top of Well Casing 2"  
 Length of Water Column \_\_\_\_\_ ft.  Top of Protective Casing  
 (Other, Specify)

Start Purge Time: 12:00

Elapsed Time ( )	Depth To Water ( )	Temperature ( C° )	pH	Conductivity ( $\mu$ S/cm )	Oxidation Reduction Potential mV	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
12:05	Filling flow thru			cell				
12:10	33.40	18.3	7.46	0.539	129.1	4.67	7.83	4-50
12:15	33.43	18.1	7.46	0.537	127.2	5.14	9.69	
12:20	33.46	18.0	7.52	0.537	123.4	5.98	8.75	
12:25	33.47	17.8	7.61	0.537	115.0	6.23	9.34	
12:30	33.48	17.7	7.64	0.538	105.7	6.71	10.98	
12:35	33.48	17.6	7.69	0.538	95.3	6.97	6.99	
12:40	33.48	17.5	7.73	0.539	88.2	6.67	6.43	
12:45	33.48	17.5	7.60	0.539	89.0	7.93	4.95	
12:50	33.48	17.6	7.65	0.539	87.6	7.54	4.67	

End Purge Time: 12:50 "FS-MW1D-091918"

Water sample: \_\_\_\_\_  
 Time collected: 13:00 Total volume of purged water removed: 4-0.75 gal

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

9/19 NO LNAPL SWL 33.23' BTOX ; NO DNAPL

Analytical Parameters: BTEX, PAHs, Pb

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40ml	VQAs	2	NO	HCl	
1L	amber	1	✓	N/A	
250ml	poly	1	✓	HNO <sub>3</sub>	

**NEU-VELLE, LLC**

**Low Flow Ground Water Sampling Log**

Date 9/20/2018 Personnel Kyle Miller Weather overcast 75°F  
 Site Name RG&E - Front Street Evacuation Method Low Flow Bladder Well # MW-2  
 Site Location Rochester, NY Sampling Method Low Flow Bladder Project # 2018062

**Well information:**

Depth of Well \* 12.62 ft. \* Measurements taken from  
 Depth to Water \* 10.75 ft. pre-pump  Top of Well Casing 4" Flush mt.  
 Length of Water Column \_\_\_\_\_ ft.  Top of Protective Casing  
 (Other, Specify) \_\_\_\_\_

Start Purge Time: 11:20

Elapsed Time ( )	Depth To Water (ft BTL)	Temperature (C°)	pH	Conductivity (µS/cm)	Oxidation Reduction Potential	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
11:25	10.73	19.8	6.81	2.16	-70.4	1.64	7.17	1/50
11:30	10.85	19.6	6.84	2.19	-73.8	1.76	8.73	
11:35	10.90	19.5	6.87	2.19	-72.2	2.23	6.10	
11:40	10.95	19.6	6.90	2.19	-68.7	2.55	6.27	
11:45	11.00	19.6	6.93	2.19	-65.8	3.00	5.59	
11:50	11.01	19.7	6.98	2.19	-59.2	3.52	6.82	
11:55	11.01	19.6	6.92	2.19	-51.7	4.02	7.95	
12:00	11.02	19.8	6.97	2.19	-53.2	3.88	8.59	
12:05	11.02	19.9	6.99	2.19	-52.7	3.88	8.89	

End Purge Time: 12:05

" FS - MW2 - 092018 "

Water sample: \_\_\_\_\_  
 Time collected: 12:15

Total volume of purged water removed: 1/2 - 0.7 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

1/18 No LNAPL, SWL 10.69' BTL ; NO DNAPL

**Analytical Parameters:**

BTEX, PAHs, Pb

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
<u>40ml</u>	<u>VDA5</u>	<u>2</u>	<u>NO</u>	<u>HCl</u>	
<u>1L</u>	<u>amber</u>	<u>1</u>	<u>✓</u>	<u>N/A</u>	
<u>250ml</u>	<u>poly</u>	<u>1</u>	<u>✓</u>	<u>HNO3</u>	

**NEU-VELLE, LLC**

**Low Flow Ground Water Sampling Log**

Date 9/21/2018 Personnel Kyle Miller Weather sunny/windy 80°F  
 Site Name RG&E - Front Street Evacuation Method Low Flow Bladder Well # MW-85  
 Site Location Rochester, NY Sampling Method Low Flow Bladder Project # 2018062

**Well information:**

Depth of Well \* 17.05 ft. Measurements taken from Lock # 2342  
 Depth to Water \* 13.67 ft. pre-pump  
 Length of Water Column \_\_\_\_\_ ft.  
 Top of Well Casing 2"  
 Top of Protective Casing struck up  
 (Other, Specify)

Start Purge Time: 9:25

Elapsed Time ( )	Depth To Water ( Ft BTCL )	Temperature ( C )	pH	Conductivity ( $\mu\text{S/cm}$ )	Oxidation Reduction Potential <u>mv</u>	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).
9:30	13.70	Filling flow thru cell						
9:35	13.70	22.6	7.16	3.38	191.7	30.7	23.5	4-60
9:40	13.72	22.1	7.24	3.49	164.4	2.44	19.5	
9:45	13.71	22.9	7.26	3.52	130.0	2.52	20.6	4-50
9:50	13.71	23.2	7.35	3.55	82.1	2.71	14.3	
9:55	13.71	23.4	7.37	3.57	50.3	2.66	13.4	
10:00	13.71	23.6	7.30	3.58	26.9	2.93	11.5	
10:05	13.71	23.7	7.25	3.60	7.0	3.54	11.3	
10:10	13.71	23.8	7.30	3.61	-9.1	3.60	10.20	

End Purge Time: 10:10 "FS - MW85 - 092118"  
 Water sample: 10:20 Total volume of purged water removed: 4-0.75 gal  
 Time collected: \_\_\_\_\_

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

9/18 NO LNAPL 4.69' BTCL; NO DNAPL  
 SWL

Analytical Parameters: Equipment Blank "FS-EB-092118" collected @ 9:05 using Wesman purified H<sub>2</sub>O

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
<u>40ml</u>	<u>VOAS</u>	<u>2</u>   <u>2</u>	<u>NO</u>	<u>HCl</u>	
<u>1L</u>	<u>amber</u>	<u>3</u>   <u>3</u>		<u>NA</u>	
<u>200ml</u>	<u>poly</u>	<u>1</u>   <u>1</u>		<u>HNO<sub>3</sub></u>	

Sample  $\uparrow$  EB  $\uparrow$  lowflowlog

**NEU-VELLE, LLC**

**Low Flow Ground Water Sampling Log**

Date 9/18/2018 Personnel Kyle Miller Weather Sunny 75°F  
 Site Name RG&E - Front Street Evacuation Method Low Flow Bladder Well # MW-9D  
 Site Location Rochester, NY Sampling Method Low Flow Bladder Project # 2018062

**Well information:**

Depth of Well \* 44.56 ft. \* Measurements taken from Lock # 2342  
 Depth to Water \* 36.88 ft.  Top of Well Casing 2"  
 Length of Water Column \_\_\_\_\_ ft. \_\_\_\_\_ Top of Protective Casing  
 (Other, Specify) \_\_\_\_\_

Start Purge Time: 9:55

Elapsed Time ( )	Depth To Water ( Ft BTOC )	Temperature ( C° )	pH	Conductivity ( $\mu$ S/cm )	Oxidation Reduction Potential mV	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min).	
10:00									
10:05	36.82	21.5	7.03	3.67	-234.5	1.26	4.45	50	
10:10	36.82	21.5	7.07	3.69	-264.2	0.83	2.09	↑	
10:15	36.82	21.4	7.08	3.69	-285.1	0.63	1.00		
10:20	36.82	21.5	7.09	3.66	-287.5	0.84	1.02		
10:25	36.82	21.5	7.08	3.67	-292.9	0.96	0.91		
10:30	36.82	21.4	7.08	3.67	-288.5	1.02	0.91		
10:35	36.82	21.4	7.08	3.66	-264.1	0.98	0.91		↓

End Purge Time: 10:35 " FS-MW9D - 091818"  
 Water sample: \_\_\_\_\_  
 Time collected: 10:40 Total volume of purged water removed: +/- 0.5 gal

Physical appearance at start clear Physical appearance at sampling clear  
 Color \_\_\_\_\_ Color \_\_\_\_\_  
 Odor slight sulfur Odor slight sulfur  
 Sheen/Free Product No Sheen/Free Product No

9/18 No LNAPL SWL 36.88' BTOC ; NO DNAPL

**Analytical Parameters:** PAH, BTEX, Pb

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
<u>40 ml</u>	<u>VOA</u>	<u>1</u>	<u>NO</u>	<u>HCl</u>	
<u>22</u>	<u>amber</u>	<u>1</u>	<u>NO</u>	<u>N/A</u>	
<u>250 ml</u>	<u>poly</u>	<u>1</u>	<u>NO</u>	<u>HNO3</u>	

**NEU-VELLE, LLC**

**Low Flow Ground Water Sampling Log**

Date 9/18/2018 Personnel Kyle Miller Weather Sunny 75°F  
 Site Name RG&E - Front Street Evacuation Method Low Flow Bladder Well # MW-95  
 Site Location Rochester, NY Sampling Method Low Flow Bladder Project # 2018062

**Well information:**

Depth of Well \* 20.68 ft. \* Measurements taken from Lock # 2342  
 Depth to Water \* 14.05 ft.  Top of Well Casing 2"  
 Length of Water Column \_\_\_\_\_ ft. \_\_\_\_\_ Top of Protective Casing  
 (Other, Specify) \_\_\_\_\_

Start Purge Time: 11:15

Elapsed Time ( )	Depth To Water (ft. BTDC)	Temperature (C°)	pH	Conductivity (µS/cm)	Oxidation Reduction Potential (MV)	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
11:20	14.09	24.0	7.04	0.77	-91.8	3.47	16.8	50 ↓ ✓
11:25	14.10	24.1	7.06	0.76	-138.10	3.56	9.89	
11:30	14.15	24.1	7.07	0.77	-99.2	3.47	8.72	
11:35	14.18	24.0	7.06	0.76	-98.6	3.48	4.91	
11:40	14.18	24.1	7.06	0.77	-124.2	3.48	4.92	
11:45	14.16	24.1	7.07	0.76	-122.2	3.47	4.91	
11:50	14.18	24.1	7.06	0.76	-106.4	3.47	4.90	

End Purge Time: 11:50 "FS-MW95-091818"  
 Water sample: \_\_\_\_\_  
 Time collected: 12:00 Total volume of purged water removed: 1/2 - 0.5 gal

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

9/18 No LNAPL 14.05<sup>swl</sup> BTDC; NO DNAPL

Analytical Parameters: PAH, BTEX, PB

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
<u>40ml</u>	<u>VOA</u>	<u>2</u>	<u>NO</u>	<u>HCl</u>	
<u>1L</u>	<u>amber</u>	<u>1</u>	<u>NO</u>	<u>N/A</u>	
<u>250 ml</u>	<u>poly</u>	<u>1</u>	<u>NO</u>	<u>HNO3</u>	

**NEU-VELLE, LLC**

**Low Flow Ground Water Sampling Log**

Date 9/19/2018 Personnel Kyle Miller Weather overcast 65°F  
 Site Name RG&E - Front Street Evacuation Method Low Flow Bladder Well # MW-105  
 Site Location Rochester, NY Sampling Method Low Flow Bladder Project # 2018062

**Well information:**

Depth of Well \* 19.00 ft. \* Measurements taken from  Top of Well Casing 2"  
 Depth to Water \* 15.23 ft.  Top of Protective Casing  
 Length of Water Column \_\_\_\_\_ ft.  (Other, Specify)

Start Purge Time: 9:25

Elapsed Time ( )	Depth To Water (ft BTOC)	Temperature (C°)	pH	Conductivity (µmS/cm)	Oxidation Reduction Potential mv	Dissolved Oxygen (mg/l)	Turbidity (NTU)	Flow Rate (ml/min)
9:30	15.23	20.2	6.67	1.41	175.9	2.82	13.4	4-50
9:35	15.34	20.0	6.76	1.43	94.5	3.06	12.6	}
9:40	15.38	20.0	6.76	1.44	38.9	5.10	10.89	
9:45	15.40	19.9	6.90	1.45	20.1	5.31	7.57	
9:50	15.41	19.9	6.91	1.45	17.3	5.13	6.40	
9:55	15.41	19.9	6.94	1.46	10.6	5.14	5.04	
10:00	15.42	19.9	6.96	1.46	6.9	5.39	4.55	
10:05	15.42	19.9	7.01	1.44	3.7	5.44	3.37	
10:10	15.42	19.9	6.96	1.43	6.9	6.07	4.04	
10:15	15.42	19.9	7.01	1.43	6.1	5.63	2.98	

End Purge Time: 10:15

"FS - MW105 - 09 19 18"

Water sample: Time collected: 10:20 Total volume of purged water removed: 4-0.5 gal  
 \* Field Duplicate ("Duplicate 091918")

Physical appearance at start: Color clear collected here \* Odor NONE Sheen/Free Product NO  
 Physical appearance at sampling: Color \_\_\_\_\_ Odor \_\_\_\_\_ Sheen/Free Product \_\_\_\_\_

9/18 NO LNAPL SWL 15.17' BTOC ; NO DNAPL 19.0 total depth

**Analytical Parameters:**

Container Size	Container Type	# Collected	Field Filtered	Preservative	Container pH
40ml	VOA	4	NO	HCl	
1L	amber	2	↓	N/A	
250 ml	poly	2	↓	HNO3	

(partly)

NEU-VELLE, LLC

Low Flow Ground Water Sampling Log

Date 9/20/2018
Site Name RG&E - Front Street
Site Location Rochester, NY

Personnel Kyle Miller
Evacuation Method Low Flow Bladder
Sampling Method Low Flow Bladder

Weather Sunny 75°F
Well # OW-102
Project # 2018062

all information:

Depth of Well \* 34.50 ft.
Depth to Water \* 8.70 ft.
Length of Water Column ft.

\* Measurements taken from

Top of Well Casing 6" steel
Top of Protective Casing
(Other, Specify)

Start Purge Time: 14:20 - 14:50

Table with 9 columns: Elapsed 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). Includes handwritten data points from 14:25 to 15:25.

End Purge Time: 15:25

"FS - OW102 - 092018"

Water sample:
Time collected: 15:45

Total volume of purged water removed: +/- 0.75 gal

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

Physical appearance at sampling
Color 1 to yellowish-brown
Odor NONE
Sheen/Free Product NO

9/10 NO LNAPL SWL 8.80' BTOC ; NO DNAPL

Analytical Parameters: BTEX, PAHs, Pb + ms/MSD

Table with 6 columns: Container Size, Container Type, # Collected, Field Filtered, Preservative, Container pH. Includes handwritten entries for 40ml, 1L, and 250ml containers.

**Exhibit A**  
**Groundwater Laboratory Reports and Chain of Custody Forms**





**PARADIGM**  
ENVIRONMENTAL SERVICES, INC.

*Analytical Report For*

**Neu-Velle**

*For Lab Project ID*

**184364**

*Referencing*

**RGE Front St. Former MGP**

*Prepared*

**Thursday, September 27, 2018**

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

A handwritten signature in cursive script, appearing to read "J. Deutscher", is written over a horizontal line.

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

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 27, 2018*

Page 1 of 35

Page 11 of 56



Lab Project ID: 184364

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW9D-091818  
**Lab Sample ID:** 184364-01 **Date Sampled:** 9/18/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 16:48
<b>Method Reference(s):</b>	EPA 6010C EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 07:53
Acenaphthylene	< 10.0	ug/L		9/26/2018 07:53
Anthracene	< 10.0	ug/L		9/26/2018 07:53
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 07:53
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 07:53
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 07:53
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 07:53
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 07:53
Chrysene	< 10.0	ug/L		9/26/2018 07:53
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 07:53
Fluoranthene	< 10.0	ug/L		9/26/2018 07:53
Fluorene	< 10.0	ug/L		9/26/2018 07:53
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 07:53
Naphthalene	< 10.0	ug/L		9/26/2018 07:53
Phenanthrene	< 10.0	ug/L		9/26/2018 07:53
Pyrene	< 10.0	ug/L		9/26/2018 07:53

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.



**Client:** Neu-Velle

**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW9D-091818

**Lab Sample ID:** 184364-01

**Date Sampled:** 9/18/2018

**Matrix:** Groundwater

**Date Received:** 9/21/2018

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	43.0	28.7 - 98.8		9/26/2018 07:53
Nitrobenzene-d5	62.6	47.4 - 94.5		9/26/2018 07:53
Terphenyl-d14	76.1	56.7 - 107		9/26/2018 07:53

**Method Reference(s):** EPA 8270D

EPA 3510C

**Preparation Date:** 9/25/2018

**Data File:** B31964.D

**Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/26/2018 21:10
Ethylbenzene	< 2.00	ug/L		9/26/2018 21:10
m,p-Xylene	< 2.00	ug/L		9/26/2018 21:10
o-Xylene	< 2.00	ug/L		9/26/2018 21:10
Toluene	< 2.00	ug/L		9/26/2018 21:10

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	114	80.7 - 121		9/26/2018 21:10
4-Bromofluorobenzene	79.4	74.3 - 121		9/26/2018 21:10
Pentafluorobenzene	87.1	86.2 - 111		9/26/2018 21:10
Toluene-D8	87.8	86.2 - 112		9/26/2018 21:10

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

EPA 5030C

**Data File:** x54537.D



Lab Project ID: 184364

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW9S-091818  
**Lab Sample ID:** 184364-02 **Date Sampled:** 9/18/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 16:52
<b>Method Reference(s):</b>	EPA 6010C EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 08:23
Acenaphthylene	< 10.0	ug/L		9/26/2018 08:23
Anthracene	< 10.0	ug/L		9/26/2018 08:23
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 08:23
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 08:23
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 08:23
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 08:23
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 08:23
Chrysene	< 10.0	ug/L		9/26/2018 08:23
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 08:23
Fluoranthene	< 10.0	ug/L		9/26/2018 08:23
Fluorene	< 10.0	ug/L		9/26/2018 08:23
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 08:23
Naphthalene	< 10.0	ug/L		9/26/2018 08:23
Phenanthrene	< 10.0	ug/L		9/26/2018 08:23
Pyrene	< 10.0	ug/L		9/26/2018 08:23

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.



**Client:** Neu-Velle

**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW9S-091818

**Lab Sample ID:** 184364-02

**Date Sampled:** 9/18/2018

**Matrix:** Groundwater

**Date Received:** 9/21/2018

<b>Surrogate</b>	<b>Percent Recovery</b>	<b>Limits</b>	<b>Outliers</b>	<b>Date Analyzed</b>
2-Fluorobiphenyl	<b>43.1</b>	28.7 - 98.8		9/26/2018 08:23
Nitrobenzene-d5	<b>62.4</b>	47.4 - 94.5		9/26/2018 08:23
Terphenyl-d14	<b>81.1</b>	56.7 - 107		9/26/2018 08:23

**Method Reference(s):** EPA 8270D

EPA 3510C

**Preparation Date:** 9/25/2018

**Data File:** B31965.D

**Volatile Organics**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Benzene	< 1.00	ug/L		9/26/2018 17:16
Ethylbenzene	< 2.00	ug/L		9/26/2018 17:16
m,p-Xylene	< 2.00	ug/L		9/26/2018 17:16
o-Xylene	< 2.00	ug/L		9/26/2018 17:16
Toluene	< 2.00	ug/L		9/26/2018 17:16

<b>Surrogate</b>	<b>Percent Recovery</b>	<b>Limits</b>	<b>Outliers</b>	<b>Date Analyzed</b>
1,2-Dichloroethane-d4	<b>117</b>	80.7 - 121		9/26/2018 17:16
4-Bromofluorobenzene	<b>81.3</b>	74.3 - 121		9/26/2018 17:16
Pentafluorobenzene	<b>91.1</b>	86.2 - 111		9/26/2018 17:16
Toluene-D8	<b>88.3</b>	86.2 - 112		9/26/2018 17:16

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

EPA 5030C

**Data File:** x54527.D

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW1D-091918  
**Lab Sample ID:** 184364-03 **Date Sampled:** 9/19/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 16:56
<b>Method Reference(s):</b>	EPA 6010C EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 08:52
Acenaphthylene	< 10.0	ug/L		9/26/2018 08:52
Anthracene	< 10.0	ug/L		9/26/2018 08:52
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 08:52
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 08:52
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 08:52
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 08:52
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 08:52
Chrysene	< 10.0	ug/L		9/26/2018 08:52
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 08:52
Fluoranthene	< 10.0	ug/L		9/26/2018 08:52
Fluorene	< 10.0	ug/L		9/26/2018 08:52
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 08:52
Naphthalene	< 10.0	ug/L		9/26/2018 08:52
Phenanthrene	< 10.0	ug/L		9/26/2018 08:52
Pyrene	< 10.0	ug/L		9/26/2018 08:52

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.



**Client:** Neu-Velle

**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW1D-091918

**Lab Sample ID:** 184364-03

**Date Sampled:** 9/19/2018

**Matrix:** Groundwater

**Date Received:** 9/21/2018

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2-Fluorobiphenyl	<b>44.8</b>	28.7 - 98.8		9/26/2018 08:52
Nitrobenzene-d5	<b>61.1</b>	47.4 - 94.5		9/26/2018 08:52
Terphenyl-d14	<b>80.9</b>	56.7 - 107		9/26/2018 08:52

**Method Reference(s):** EPA 8270D

EPA 3510C

**Preparation Date:** 9/25/2018

**Data File:** B31966.D

**Volatile Organics**

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Benzene	< 1.00	ug/L		9/26/2018 17:40
Ethylbenzene	< 2.00	ug/L		9/26/2018 17:40
m,p-Xylene	< 2.00	ug/L		9/26/2018 17:40
o-Xylene	< 2.00	ug/L		9/26/2018 17:40
Toluene	< 2.00	ug/L		9/26/2018 17:40

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
1,2-Dichloroethane-d4	<b>111</b>	80.7 - 121		9/26/2018 17:40
4-Bromofluorobenzene	<b>77.5</b>	74.3 - 121		9/26/2018 17:40
Pentafluorobenzene	<b>89.0</b>	86.2 - 111		9/26/2018 17:40
Toluene-D8	<b>91.1</b>	86.2 - 112		9/26/2018 17:40

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

EPA 5030C

**Data File:** x54528.D



Lab Project ID: 184364

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW10S-091918  
**Lab Sample ID:** 184364-04 **Date Sampled:** 9/19/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 17:01
<b>Method Reference(s):</b>	EPA 6010C			
	EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 09:52
Acenaphthylene	< 10.0	ug/L		9/26/2018 09:52
Anthracene	< 10.0	ug/L		9/26/2018 09:52
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 09:52
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 09:52
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 09:52
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 09:52
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 09:52
Chrysene	< 10.0	ug/L		9/26/2018 09:52
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 09:52
Fluoranthene	< 10.0	ug/L		9/26/2018 09:52
Fluorene	< 10.0	ug/L		9/26/2018 09:52
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 09:52
Naphthalene	< 10.0	ug/L		9/26/2018 09:52
Phenanthrene	< 10.0	ug/L		9/26/2018 09:52
Pyrene	< 10.0	ug/L		9/26/2018 09:52

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.



**Client:** Neu-Velle

**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW10S-091918

**Lab Sample ID:** 184364-04

**Date Sampled:** 9/19/2018

**Matrix:** Groundwater

**Date Received:** 9/21/2018

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	45.1	28.7 - 98.8		9/26/2018 09:52
Nitrobenzene-d5	63.4	47.4 - 94.5		9/26/2018 09:52
Terphenyl-d14	78.6	56.7 - 107		9/26/2018 09:52

**Method Reference(s):** EPA 8270D

EPA 3510C

**Preparation Date:** 9/25/2018

**Data File:** B31968.D

**Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/26/2018 18:03
Ethylbenzene	< 2.00	ug/L		9/26/2018 18:03
m,p-Xylene	< 2.00	ug/L		9/26/2018 18:03
o-Xylene	< 2.00	ug/L		9/26/2018 18:03
Toluene	< 2.00	ug/L		9/26/2018 18:03

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	118	80.7 - 121		9/26/2018 18:03
4-Bromofluorobenzene	81.0	74.3 - 121		9/26/2018 18:03
Pentafluorobenzene	85.3	86.2 - 111	*	9/26/2018 18:03
Toluene-D8	87.2	86.2 - 112		9/26/2018 18:03

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

EPA 5030C

**Data File:** x54529.D



Lab Project ID: 184364

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** Duplicate 091918  
**Lab Sample ID:** 184364-05 **Date Sampled:** 9/19/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 17:13
<b>Method Reference(s):</b>	EPA 6010C			
	EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 10:22
Acenaphthylene	< 10.0	ug/L		9/26/2018 10:22
Anthracene	< 10.0	ug/L		9/26/2018 10:22
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 10:22
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 10:22
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 10:22
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 10:22
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 10:22
Chrysene	< 10.0	ug/L		9/26/2018 10:22
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 10:22
Fluoranthene	< 10.0	ug/L		9/26/2018 10:22
Fluorene	< 10.0	ug/L		9/26/2018 10:22
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 10:22
Naphthalene	< 10.0	ug/L		9/26/2018 10:22
Phenanthrene	< 10.0	ug/L		9/26/2018 10:22
Pyrene	< 10.0	ug/L		9/26/2018 10:22

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.



**Client:** Neu-Velle

**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** Duplicate 091918

**Lab Sample ID:** 184364-05

**Date Sampled:** 9/19/2018

**Matrix:** Groundwater

**Date Received:** 9/21/2018

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	42.4	28.7 - 98.8		9/26/2018 10:22
Nitrobenzene-d5	63.4	47.4 - 94.5		9/26/2018 10:22
Terphenyl-d14	78.9	56.7 - 107		9/26/2018 10:22

**Method Reference(s):** EPA 8270D  
EPA 3510C  
**Preparation Date:** 9/25/2018  
**Data File:** B31969.D

**Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/26/2018 18:27
Ethylbenzene	< 2.00	ug/L		9/26/2018 18:27
m,p-Xylene	< 2.00	ug/L		9/26/2018 18:27
o-Xylene	< 2.00	ug/L		9/26/2018 18:27
Toluene	< 2.00	ug/L		9/26/2018 18:27

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	120	80.7 - 121		9/26/2018 18:27
4-Bromofluorobenzene	77.5	74.3 - 121		9/26/2018 18:27
Pentafluorobenzene	89.1	86.2 - 111		9/26/2018 18:27
Toluene-D8	90.1	86.2 - 112		9/26/2018 18:27

**Method Reference(s):** EPA 8260C  
EPA 5030C  
**Data File:** x54530.D

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.

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW1-092018  
**Lab Sample ID:** 184364-06 **Date Sampled:** 9/20/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 17:18
<b>Method Reference(s):</b>	EPA 6010C			
	EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 10:52
Acenaphthylene	< 10.0	ug/L		9/26/2018 10:52
Anthracene	< 10.0	ug/L		9/26/2018 10:52
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 10:52
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 10:52
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 10:52
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 10:52
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 10:52
Chrysene	< 10.0	ug/L		9/26/2018 10:52
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 10:52
Fluoranthene	< 10.0	ug/L		9/26/2018 10:52
Fluorene	< 10.0	ug/L		9/26/2018 10:52
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 10:52
Naphthalene	< 10.0	ug/L		9/26/2018 10:52
Phenanthrene	< 10.0	ug/L		9/26/2018 10:52
Pyrene	< 10.0	ug/L		9/26/2018 10:52



**Client:** Neu-Velle

**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW1-092018

**Lab Sample ID:** 184364-06

**Date Sampled:** 9/20/2018

**Matrix:** Groundwater

**Date Received:** 9/21/2018

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
2-Fluorobiphenyl	<b>43.7</b>	28.7 - 98.8		9/26/2018 10:52
Nitrobenzene-d5	<b>65.4</b>	47.4 - 94.5		9/26/2018 10:52
Terphenyl-d14	<b>83.2</b>	56.7 - 107		9/26/2018 10:52

**Method Reference(s):** EPA 8270D  
EPA 3510C  
**Preparation Date:** 9/25/2018  
**Data File:** B31970.D

**Volatile Organics**

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Benzene	< 1.00	ug/L		9/26/2018 18:50
Ethylbenzene	< 2.00	ug/L		9/26/2018 18:50
m,p-Xylene	< 2.00	ug/L		9/26/2018 18:50
o-Xylene	< 2.00	ug/L		9/26/2018 18:50
Toluene	< 2.00	ug/L		9/26/2018 18:50

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>
1,2-Dichloroethane-d4	<b>117</b>	80.7 - 121		9/26/2018 18:50
4-Bromofluorobenzene	<b>76.3</b>	74.3 - 121		9/26/2018 18:50
Pentafluorobenzene	<b>85.9</b>	86.2 - 111	*	9/26/2018 18:50
Toluene-D8	<b>89.4</b>	86.2 - 112		9/26/2018 18:50

**Method Reference(s):** EPA 8260C  
EPA 5030C  
**Data File:** x54531.D



Lab Project ID: 184364

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW2-092018  
**Lab Sample ID:** 184364-07 **Date Sampled:** 9/20/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/26/2018 12:51
<b>Method Reference(s):</b>	EPA 6010C			
	EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180926A			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 11:22
Acenaphthylene	< 10.0	ug/L		9/26/2018 11:22
Anthracene	< 10.0	ug/L		9/26/2018 11:22
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 11:22
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 11:22
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 11:22
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 11:22
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 11:22
Chrysene	< 10.0	ug/L		9/26/2018 11:22
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 11:22
Fluoranthene	< 10.0	ug/L		9/26/2018 11:22
Fluorene	< 10.0	ug/L		9/26/2018 11:22
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 11:22
Naphthalene	< 10.0	ug/L		9/26/2018 11:22
Phenanthrene	< 10.0	ug/L		9/26/2018 11:22
Pyrene	< 10.0	ug/L		9/26/2018 11:22

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.



Lab Project ID: 184364

Client: Neu-Velle

Project Reference: RGE Front St. Former MGP

Sample Identifier: FS-MW2-092018

Lab Sample ID: 184364-07

Date Sampled: 9/20/2018

Matrix: Groundwater

Date Received: 9/21/2018

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	42.6	28.7 - 98.8		9/26/2018 11:22
Nitrobenzene-d5	61.4	47.4 - 94.5		9/26/2018 11:22
Terphenyl-d14	79.3	56.7 - 107		9/26/2018 11:22

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 9/25/2018  
Data File: B31971.D

**Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/26/2018 19:13
Ethylbenzene	< 2.00	ug/L		9/26/2018 19:13
m,p-Xylene	< 2.00	ug/L		9/26/2018 19:13
o-Xylene	< 2.00	ug/L		9/26/2018 19:13
Toluene	< 2.00	ug/L		9/26/2018 19:13

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	122	80.7 - 121	*	9/26/2018 19:13
4-Bromofluorobenzene	77.4	74.3 - 121		9/26/2018 19:13
Pentafluorobenzene	88.9	86.2 - 111		9/26/2018 19:13
Toluene-D8	89.3	86.2 - 112		9/26/2018 19:13

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x54532.D

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.

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-OW102-092018  
**Lab Sample ID:** 184364-08 **Date Sampled:** 9/20/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 17:26
<b>Method Reference(s):</b>	EPA 6010C EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 11:53
Acenaphthylene	< 10.0	ug/L		9/26/2018 11:53
Anthracene	< 10.0	ug/L		9/26/2018 11:53
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 11:53
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 11:53
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 11:53
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 11:53
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 11:53
Chrysene	< 10.0	ug/L		9/26/2018 11:53
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 11:53
Fluoranthene	< 10.0	ug/L		9/26/2018 11:53
Fluorene	< 10.0	ug/L		9/26/2018 11:53
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 11:53
Naphthalene	< 10.0	ug/L		9/26/2018 11:53
Phenanthrene	< 10.0	ug/L		9/26/2018 11:53
Pyrene	< 10.0	ug/L		9/26/2018 11:53



Lab Project ID: 184364

Client: Neu-Velle

Project Reference: RGE Front St. Former MGP

Sample Identifier: FS-OW102-092018

Lab Sample ID: 184364-08

Date Sampled: 9/20/2018

Matrix: Groundwater

Date Received: 9/21/2018

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	44.5	28.7 - 98.8		9/26/2018 11:53
Nitrobenzene-d5	62.7	47.4 - 94.5		9/26/2018 11:53
Terphenyl-d14	82.3	56.7 - 107		9/26/2018 11:53

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 9/25/2018  
Data File: B31972.D

**Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/26/2018 19:37
Ethylbenzene	< 2.00	ug/L		9/26/2018 19:37
m,p-Xylene	< 2.00	ug/L		9/26/2018 19:37
o-Xylene	< 2.00	ug/L		9/26/2018 19:37
Toluene	< 2.00	ug/L		9/26/2018 19:37

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	117	80.7 - 121		9/26/2018 19:37
4-Bromofluorobenzene	78.3	74.3 - 121		9/26/2018 19:37
Pentafluorobenzene	84.0	86.2 - 111	*	9/26/2018 19:37
Toluene-D8	88.9	86.2 - 112		9/26/2018 19:37

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x54533.D

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.



Lab Project ID: 184364

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-EB-092118  
**Lab Sample ID:** 184364-09 **Date Sampled:** 9/21/2018  
**Matrix:** Water **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 17:47
<b>Method Reference(s):</b>	EPA 6010C EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 13:23
Acenaphthylene	< 10.0	ug/L		9/26/2018 13:23
Anthracene	< 10.0	ug/L		9/26/2018 13:23
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 13:23
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 13:23
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 13:23
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 13:23
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 13:23
Chrysene	< 10.0	ug/L		9/26/2018 13:23
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 13:23
Fluoranthene	< 10.0	ug/L		9/26/2018 13:23
Fluorene	< 10.0	ug/L		9/26/2018 13:23
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 13:23
Naphthalene	< 10.0	ug/L		9/26/2018 13:23
Phenanthrene	< 10.0	ug/L		9/26/2018 13:23
Pyrene	< 10.0	ug/L		9/26/2018 13:23

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.



Lab Project ID: 184364

Client: **Neu-Velle**

Project Reference: RGE Front St. Former MGP

Sample Identifier: FS-EB-092118

Lab Sample ID: 184364-09

Date Sampled: 9/21/2018

Matrix: Water

Date Received: 9/21/2018

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	48.4	28.7 - 98.8		9/26/2018 13:23
Nitrobenzene-d5	65.6	47.4 - 94.5		9/26/2018 13:23
Terphenyl-d14	82.2	56.7 - 107		9/26/2018 13:23

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 9/25/2018  
Data File: B31975.D

**Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/26/2018 20:00
Ethylbenzene	< 2.00	ug/L		9/26/2018 20:00
m,p-Xylene	< 2.00	ug/L		9/26/2018 20:00
o-Xylene	< 2.00	ug/L		9/26/2018 20:00
Toluene	< 2.00	ug/L		9/26/2018 20:00

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	116	80.7 - 121		9/26/2018 20:00
4-Bromofluorobenzene	75.0	74.3 - 121		9/26/2018 20:00
Pentafluorobenzene	85.1	86.2 - 111	*	9/26/2018 20:00
Toluene-D8	86.8	86.2 - 112		9/26/2018 20:00

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x54534.D

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.

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** FS-MW8S-092118  
**Lab Sample ID:** 184364-10 **Date Sampled:** 9/21/2018  
**Matrix:** Groundwater **Date Received:** 9/21/2018

**Metals**

Analyte	Result	Units	Qualifier	Date Analyzed
Lead	< 0.0100	mg/L		9/25/2018 17:51
<b>Method Reference(s):</b>	EPA 6010C			
	EPA 3005A			
<b>Preparation Date:</b>	9/24/2018			
<b>Data File:</b>	180925B			

**Semi-Volatile Organics (PAHs)**

Analyte	Result	Units	Qualifier	Date Analyzed
Acenaphthene	< 10.0	ug/L		9/26/2018 13:53
Acenaphthylene	< 10.0	ug/L		9/26/2018 13:53
Anthracene	< 10.0	ug/L		9/26/2018 13:53
Benzo (a) anthracene	< 10.0	ug/L		9/26/2018 13:53
Benzo (a) pyrene	< 10.0	ug/L		9/26/2018 13:53
Benzo (b) fluoranthene	< 10.0	ug/L		9/26/2018 13:53
Benzo (g,h,i) perylene	< 10.0	ug/L		9/26/2018 13:53
Benzo (k) fluoranthene	< 10.0	ug/L		9/26/2018 13:53
Chrysene	< 10.0	ug/L		9/26/2018 13:53
Dibenz (a,h) anthracene	< 10.0	ug/L		9/26/2018 13:53
Fluoranthene	< 10.0	ug/L		9/26/2018 13:53
Fluorene	< 10.0	ug/L		9/26/2018 13:53
Indeno (1,2,3-cd) pyrene	< 10.0	ug/L		9/26/2018 13:53
Naphthalene	< 10.0	ug/L		9/26/2018 13:53
Phenanthrene	< 10.0	ug/L		9/26/2018 13:53
Pyrene	< 10.0	ug/L		9/26/2018 13:53



Lab Project ID: 184364

Client: Neu-Velle

Project Reference: RGE Front St. Former MGP

Sample Identifier: FS-MW8S-092118

Lab Sample ID: 184364-10

Date Sampled: 9/21/2018

Matrix: Groundwater

Date Received: 9/21/2018

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
2-Fluorobiphenyl	52.3	28.7 - 98.8		9/26/2018 13:53
Nitrobenzene-d5	65.7	47.4 - 94.5		9/26/2018 13:53
Terphenyl-d14	76.0	56.7 - 107		9/26/2018 13:53

Method Reference(s): EPA 8270D  
EPA 3510C  
Preparation Date: 9/25/2018  
Data File: B31976.D

**Volatile Organics**

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		9/26/2018 20:24
Ethylbenzene	< 2.00	ug/L		9/26/2018 20:24
m,p-Xylene	< 2.00	ug/L		9/26/2018 20:24
o-Xylene	< 2.00	ug/L		9/26/2018 20:24
Toluene	< 2.00	ug/L		9/26/2018 20:24

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	119	80.7 - 121		9/26/2018 20:24
4-Bromofluorobenzene	77.8	74.3 - 121		9/26/2018 20:24
Pentafluorobenzene	89.4	86.2 - 111		9/26/2018 20:24
Toluene-D8	88.4	86.2 - 112		9/26/2018 20:24

Method Reference(s): EPA 8260C  
EPA 5030C  
Data File: x54535.D

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.

**Client:** Neu-Velle
**Project Reference:** RGE Front St. Former MGP

**Sample Identifier:** Trip Blank T856

**Lab Sample ID:** 184364-11

**Date Sampled:** 9/13/2018

**Matrix:** Water

**Date Received:** 9/21/2018

**Volatile Organics**

<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Qualifier</b>	<b>Date Analyzed</b>
Benzene	< 1.00	ug/L		9/26/2018 20:47
Ethylbenzene	< 2.00	ug/L		9/26/2018 20:47
m,p-Xylene	< 2.00	ug/L		9/26/2018 20:47
o-Xylene	< 2.00	ug/L		9/26/2018 20:47
Toluene	< 2.00	ug/L		9/26/2018 20:47
<b>Surrogate</b>	<b>Percent Recovery</b>	<b>Limits</b>	<b>Outliers</b>	<b>Date Analyzed</b>
1,2-Dichloroethane-d4	<b>120</b>	80.7 - 121		9/26/2018 20:47
4-Bromofluorobenzene	<b>78.0</b>	74.3 - 121		9/26/2018 20:47
Pentafluorobenzene	<b>86.3</b>	86.2 - 111		9/26/2018 20:47
Toluene-D8	<b>87.8</b>	86.2 - 112		9/26/2018 20:47

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

EPA 5030C

**Data File:** x54536.D



**Method Blank Report**

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP  
**Lab Project ID:** 184364  
**SDG #:** 4364-01  
**Matrix:** Groundwater

**Volatile Organics**

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>	
Benzene	<1.00	ug/L		9/26/2018	12:08
Ethylbenzene	<2.00	ug/L		9/26/2018	12:08
m,p-Xylene	<2.00	ug/L		9/26/2018	12:08
o-Xylene	<2.00	ug/L		9/26/2018	12:08
Toluene	<2.00	ug/L		9/26/2018	12:08

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
1,2-Dichloroethane-d4	<b>110</b>	80.7 - 121		9/26/2018	12:08
4-Bromofluorobenzene	<b>77.4</b>	74.3 - 121		9/26/2018	12:08
Pentafluorobenzene	<b>93.4</b>	86.2 - 111		9/26/2018	12:08
Toluene-D8	<b>90.5</b>	86.2 - 112		9/26/2018	12:08

**Method Reference(s):** EPA 8260C  
 EPA 5030C  
**Data File:** x54514.D  
**QC Batch ID:** voaq180926  
**QC Number:** 1

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 27, 2018



**QC Report for Laboratory Control Sample**

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP  
**Lab Project ID:** 184364  
**SDG #:** 4634-01  
**Matrix:** Groundwater

***Volatile Organics***

<u>Analyte</u>	<u>Spike Added</u>	<u>Spike Units</u>	<u>LCS Result</u>	<u>LCS % Recovery</u>	<u>% Rec Limits</u>	<u>LCS Outliers</u>	<u>Date Analyzed</u>
Benzene	20.0	ug/L	20.8	104	72 - 130		9/26/2018
Ethylbenzene	20.0	ug/L	20.7	103	57.4 - 130		9/26/2018
Toluene	20.0	ug/L	20.4	102	57.8 - 131		9/26/2018

**Method Reference(s):** EPA 8260C  
 EPA 5030C  
**Data File:** x54513.D  
**QC Number:** 1  
**QC Batch ID:** voaq180926

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.



**QC Report for Matrix Spike and Matrix Spike Duplicate**

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**SDG #:** 4364-01  
**Lab Project ID:** 184364

**Lab Sample ID:** 184364-08  
**Sample Identifier:** FS-OW102-092018  
**Matrix:** Groundwater

**Date Sampled:** 9/20/2018  
**Date Received:** 9/21/2018  
**Date Analyzed:** 9/26/2018

***Volatile Organics***

<u>Analyte</u>	<u>Sample Result</u>	<u>MS</u>	<u>MS</u>	<u>MS %</u>	<u>MSD</u>	<u>MSD</u>	<u>MSD %</u>	<u>% Rec.</u>	<u>MS</u>	<u>MSD</u>	<u>Relative</u>	<u>RPD</u>	<u>RPD</u>	
	<u>Result</u>	<u>Units</u>	<u>Added</u>	<u>Result</u>	<u>Recovery</u>	<u>Added</u>	<u>Result</u>	<u>Recovery</u>	<u>Limits</u>	<u>Outlier</u>	<u>Outlier</u>	<u>% Diff.</u>	<u>Limit</u>	<u>Outlier</u>
Benzene	< 1.00	ug/L	50.0	57.7	115	50.0	52.6	105	72 - 130			9.24	11.2	
Ethylbenzene	< 2.00	ug/L	50.0	56.8	114	50.0	51.3	103	57.4 - 130			10.2	11.8	
Toluene	< 2.00	ug/L	50.0	54.7	109	50.0	50.5	101	57.8 - 131			8.07	11.8	

**Method Reference(s):** EPA 8260C  
EPA 5030C  
**Data File(s):** x54538.D  
x54539.D  
x54533.D  
1  
**QC Batch ID:** voaq180926

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.



***Method Blank Report***

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP  
**Lab Project ID:** 184364  
**SDG #:** 4364-01  
**Matrix:** Groundwater

---

***Metals***

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>
Lead	<0.0100	mg/L		9/25/2018 16:23

Method Reference(s): EPA 6010C  
EPA 3005A  
Preparation Date: 9/24/2018  
Data File: 180925B  
QC Batch ID: QC180924water  
QC Number: 1

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 Wednesday, September 26, 2018



**QC Report for Laboratory Control Sample and Control Sample Duplicate**

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP  
**Lab Project ID:** 184364  
**SDG #:** 4364-01  
**Matrix:** Groundwater

***Metals***

<u>Analyte</u>	<u>LCS</u> <u>Added</u>	<u>LCSD</u> <u>Added</u>	<u>Spike</u> <u>Units</u>	<u>LCS</u> <u>Result</u>	<u>LCSD</u> <u>Result</u>	<u>LCS %</u> <u>Recovery</u>	<u>LCSD %</u> <u>Recovery</u>	<u>% Rec</u> <u>Limits</u>	<u>LCS</u> <u>Outliers</u>	<u>LCSD</u> <u>Outliers</u>	<u>Relative %</u> <u>Difference</u>	<u>RPD</u> <u>Limit</u>	<u>RPD</u> <u>Outliers</u>	<u>Date</u> <u>Analyzed</u>
Lead	2.50	2.50	mg/L	2.69	2.66	108	106	85 - 115			1.13	20		9/25/2018

Method Reference(s): EPA 6010C  
 EPA 3005A  
 Preparation Date: 9/24/2018  
 Data File: 180925B  
 QC Number: 1  
 QC Batch ID: QC180924water

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.



QC Report for Sample Spike and Sample Duplicate

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**SDG #:** 4364-01  
**Lab Project ID:** 184364

**Lab Sample ID:** 184364-08  
**Sample Identifier:** FS-OW102-092018  
**Matrix:** Groundwater

**Date Sampled:** 9/20/2018  
**Date Received:** 9/21/2018

*Metals*

<u>Analyte</u>	<u>Sample Results</u>	<u>Result Units</u>	<u>Spike Added</u>	<u>Spike Result</u>	<u>Spike % Recovery</u>	<u>% Rec Limits</u>	<u>Spike Outliers</u>	<u>Duplicate Result</u>	<u>Relative % Difference</u>	<u>RPD Limit</u>	<u>RPD Outliers</u>	<u>Date Analyzed</u>
Lead	< 0.0100	mg/L	2.50	2.60	104	75 - 125		<0.0100	NC	20		9/25/2018
<b>Method Reference(s):</b>	EPA 6010C EPA 3005A											
<b>Preparation Date:</b>	9/24/2018 180925B											
<b>QC Batch ID:</b>	QC180924water											

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.

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 Wednesday, September 26, 2018



**Method Blank Report**

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP  
**Lab Project ID:** 184364  
**SDG #:** 4364-01  
**Matrix:** Groundwater

**Semi-Volatile Organics (PAHs)**

<u>Analyte</u>	<u>Result</u>	<u>Units</u>	<u>Qualifier</u>	<u>Date Analyzed</u>	
Acenaphthene	<10.0	ug/L		9/25/2018	19:35
Acenaphthylene	<10.0	ug/L		9/25/2018	19:35
Anthracene	<10.0	ug/L		9/25/2018	19:35
Benzo (a) anthracene	<10.0	ug/L		9/25/2018	19:35
Benzo (a) pyrene	<10.0	ug/L		9/25/2018	19:35
Benzo (b) fluoranthene	<10.0	ug/L		9/25/2018	19:35
Benzo (g,h,i) perylene	<10.0	ug/L		9/25/2018	19:35
Benzo (k) fluoranthene	<10.0	ug/L		9/25/2018	19:35
Chrysene	<10.0	ug/L		9/25/2018	19:35
Dibenz (a,h) anthracene	<10.0	ug/L		9/25/2018	19:35
Fluoranthene	<10.0	ug/L		9/25/2018	19:35
Fluorene	<10.0	ug/L		9/25/2018	19:35
Indeno (1,2,3-cd) pyrene	<10.0	ug/L		9/25/2018	19:35
Naphthalene	<10.0	ug/L		9/25/2018	19:35
Phenanthrene	<10.0	ug/L		9/25/2018	19:35
Pyrene	<10.0	ug/L		9/25/2018	19:35

<u>Surrogate</u>	<u>Percent Recovery</u>	<u>Limits</u>	<u>Outliers</u>	<u>Date Analyzed</u>	
2-Fluorobiphenyl	45.2	28.7 - 98.8		9/25/2018	19:35
Nitrobenzene-d5	65.8	47.4 - 94.5		9/25/2018	19:35
Terphenyl-d14	66.7	56.7 - 107		9/25/2018	19:35

**Method Reference(s):** EPA 8270D  
EPA 3510C  
**Preparation Date:** 9/25/2018  
**Data File:** B31938.D  
**QC Batch ID:** QC180925ABNW  
**QC Number:** 1

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.



**QC Report for Laboratory Control Sample**

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP  
**Lab Project ID:** 184364  
**SDG #:** 4364-01  
**Matrix:** Groundwater

***Semi-Volatile Organics (PAHs)***

<u>Analyte</u>	<u>Spike Added</u>	<u>Spike Units</u>	<u>LCS Result</u>	<u>LCS % Recovery</u>	<u>% Rec Limits</u>	<u>LCS Outliers</u>	<u>Date Analyzed</u>
Acenaphthene	50000	ug/L	37100	74.2	50.7 - 107		9/25/2018
Pyrene	50000	ug/L	36600	73.1	51.5 - 115		9/25/2018

**Method Reference(s):** EPA 8270D  
 EPA 3510C  
**Preparation Date:** 9/25/2018  
**Data File:** B31939.D  
**QC Number:** 1  
**QC Batch ID:** QC180925ABNW

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.



**QC Report for Matrix Spike and Matrix Spike Duplicate**

**Client:** Neu-Velle  
**Project Reference:** RGE Front St. Former MGP

**SDG #:** 4364-01  
**Lab Project ID:** 184364

**Lab Sample ID:** 184364-08  
**Sample Identifier:** FS-OW102-092018  
**Matrix:** Groundwater

**Date Sampled:** 9/20/2018  
**Date Received:** 9/21/2018  
**Date Analyzed:** 9/26/2018

**Semi-Volatile Organics (PAHs)**

<u>Analyte</u>	<u>Sample Result</u>	<u>MS</u>	<u>MS</u>	<u>MS %</u>	<u>MSD</u>	<u>MSD</u>	<u>MSD %</u>	<u>% Rec.</u>	<u>MS</u>	<u>MSD</u>	<u>Relative</u>	<u>RPD</u>	<u>RPD</u>	
	<u>Result</u>	<u>Units</u>	<u>Added</u>	<u>Result</u>	<u>Recovery</u>	<u>Added</u>	<u>Result</u>	<u>Recovery</u>	<u>Limits</u>	<u>Outlier</u>	<u>Outlier</u>	<u>% Diff.</u>	<u>Limit</u>	<u>Outlier</u>
Acenaphthene	< 10.0	ug/L	50.0	39.5	78.9	50.0	42.7	85.5	50.7 - 107			7.94	25.2	
Pyrene	< 10.0	ug/L	50.0	40.4	80.7	50.0	43.0	86.0	51.5 - 115			6.28	26.6	

**Method Reference(s):** EPA 8270D  
EPA 3510C  
**Preparation Date:** 9/25/2018  
**Data File(s):** B31973.D  
B31974.D  
B31972.D  
1  
**QC Batch ID:** QC180925ABNW

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.



## 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.*

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.

# 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, term 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 will 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 the 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.

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.

1062  
p. 1 of 1  
I know



# CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		LAB PROJECT ID	
CLIENT: NEU-VELLE	ADDRESS: 1667 Lake Ave. Bldg 559	CLIENT: SAME	ADDRESS: SAME	184364	
CITY: Rochester	STATE: NY	CITY:	STATE:	ZIP:	Quotation #:
PHONE: (585) 478-1666	ATTN: Kyle Miller	PHONE:	ATTN:	Email: Kmiller@neu-velle.com	

PROJECT REFERENCE  
RGE Front St.  
Former MGP

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

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX	CONTAINERS	REMARKS	PARADIGM LAB SAMPLE NUMBER
9/18/18	10:40		X	FS-MW9D-091818	WG	4	KM CPL 9/21/18 1500	01
9/18/18	12:00		X	FS-MW9S-091818	WG	4	per history of WG matrix	02
9/19/18	13:00		X	FS-MW1D-091918	WG	4	for MW, WA for ED	03
9/19/18	10:20		X	FS-MW10S-091918	WG	4	+ Trip Blank, palmi	04
9/19/18	-		X	Duplicate 091918	WG	4		05
9/20/18	10:30		X	FS-MW1-092018	WG	4		06
9/20/18	12:15		X	FS-MW2-092018	WG	4		07
9/20/18	15:45		X	FS-QW102-092018	WG	12	MS/MSD	08
9/21/18	9:05		X	FS-EB-092118	WA DW	4	Equipment Blank	09
9/21/18	10:20		X	FS-MW8S-092118	WG	4		10
9/18/18	-			Trip Blank T856				11

Turnaround Time	Report Supplements	
Availability contingent upon lab approval; additional fees may apply.		
Standard 5 day <input checked="" type="checkbox"/>	None Required <input type="checkbox"/>	None Required <input checked="" type="checkbox"/>
10 day <input type="checkbox"/>	Batch QC <input type="checkbox"/>	Basic EDD <input type="checkbox"/>
Rush 3 day <input type="checkbox"/>	Category A <input checked="" type="checkbox"/>	NYSDEC EDD <input type="checkbox"/>
Rush 2 day <input type="checkbox"/>	Category B <input type="checkbox"/>	
Rush 1 day <input type="checkbox"/>		
Other <input type="checkbox"/>	Other <input type="checkbox"/>	Other EDD <input type="checkbox"/>
please indicate date needed: _____	please indicate package needed: _____	please indicate EDD needed: _____

Sampled By: Kyle R. Miller 9/18-21/2018

Relinquished By: J. Miller 9/21/18 14:00

Received By: M. Vail 9/21/18 14:32

Received @ Lab By: \_\_\_\_\_

4°C recd 9/21/18, 14:10. Custody Seals intact, signed, dated.

By signing this form, client agrees to Paradigm Terms and Conditions (reverse). 9/21/18



### Chain of Custody Supplement

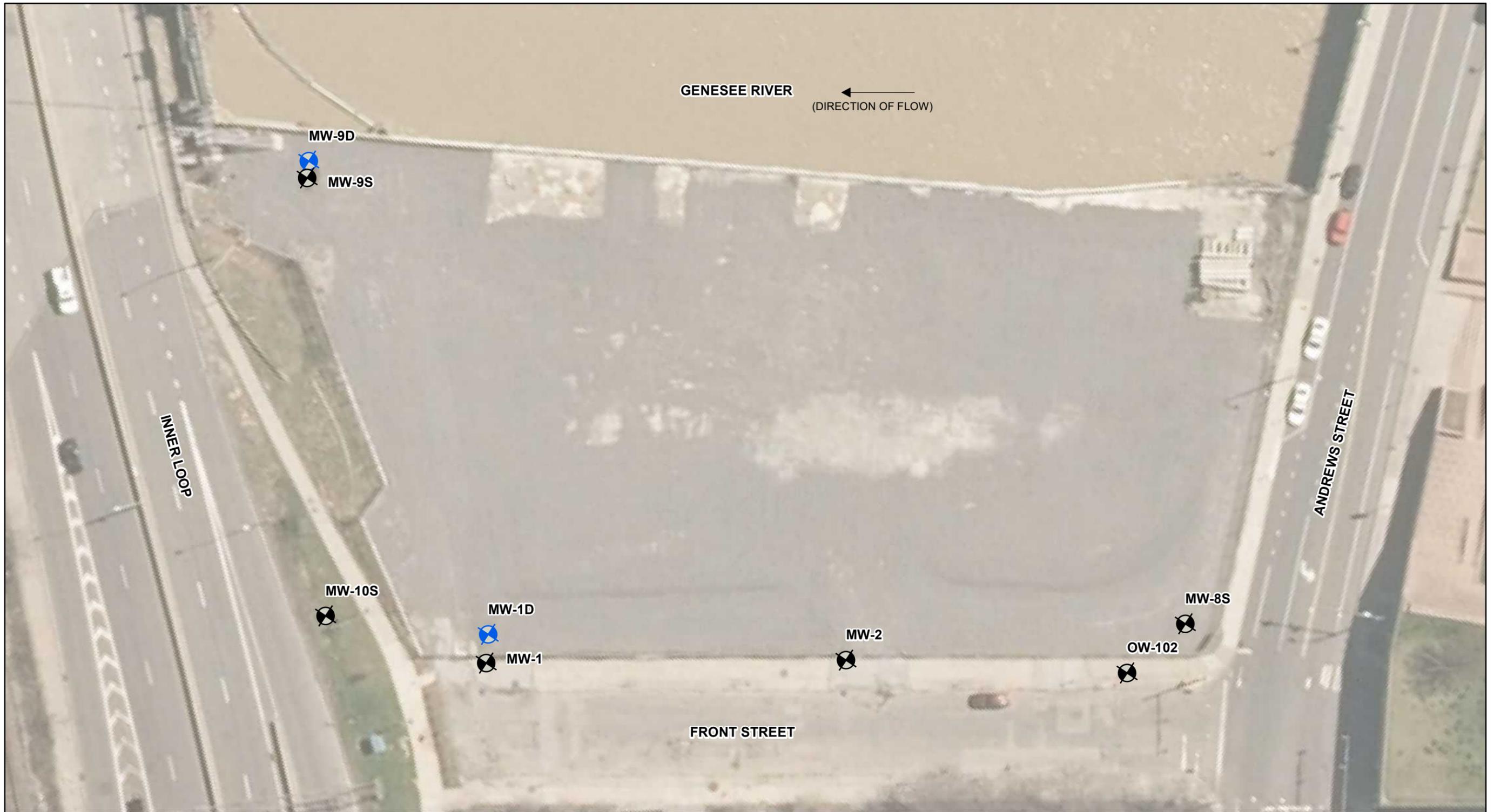
Client: Neu-velle Completed by: Molpail  
 Lab Project ID: 184364 Date: 9/21/18

**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	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		
Transferred to method-compliant container	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Headspace (<1 mL)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	_____		
Preservation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		
Chlorine Absent (<0.10 ppm per test strip)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	_____		
Holding Time	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		
Temperature	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Comments	<u>4°C cool</u>		
Sufficient Sample Quantity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments	_____		

**Figure 1**  
**Monitoring Well Location Map**



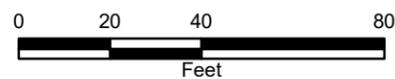


**LEGEND**

-  SHALLOW GROUNDWATER MONITORING WELL
-  DEEP GROUNDWATER MONITORING WELL

NOTE:  
1. MONITORING WELL LOCATIONS ARE APPROXIMATE.

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



**MONITORING WELL  
LOCATIONS**



**FIGURE 1**

DECEMBER 2018

**Figure 2**  
**Shallow Groundwater Contour Map**





**LEGEND**

-  SHALLOW GROUNDWATER MONITORING WELL
-  DEEP GROUNDWATER MONITORING WELL
-  GROUNDWATER FLOW DIRECTION

**NOTES:**

1. BASEMAP PROVIDED BY RG&E.
2. MONITORING WELL LOCATIONS ARE APPROXIMATE.
3. GROUNDWATER ELEVATION MEASURED SEPTEMBER 18, 2018 IN FEET ABOVE MEAN SEA LEVEL (RELATIVE TO NEW YORK STATE BARGE CANAL DATUM [BCD]).
4. DEEP MONITORING WELLS NOT USED IN CREATION OF THIS MAP.

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



SEPTEMBER 2018  
 SHALLOW GROUNDWATER  
 ELEVATION CONTOURS

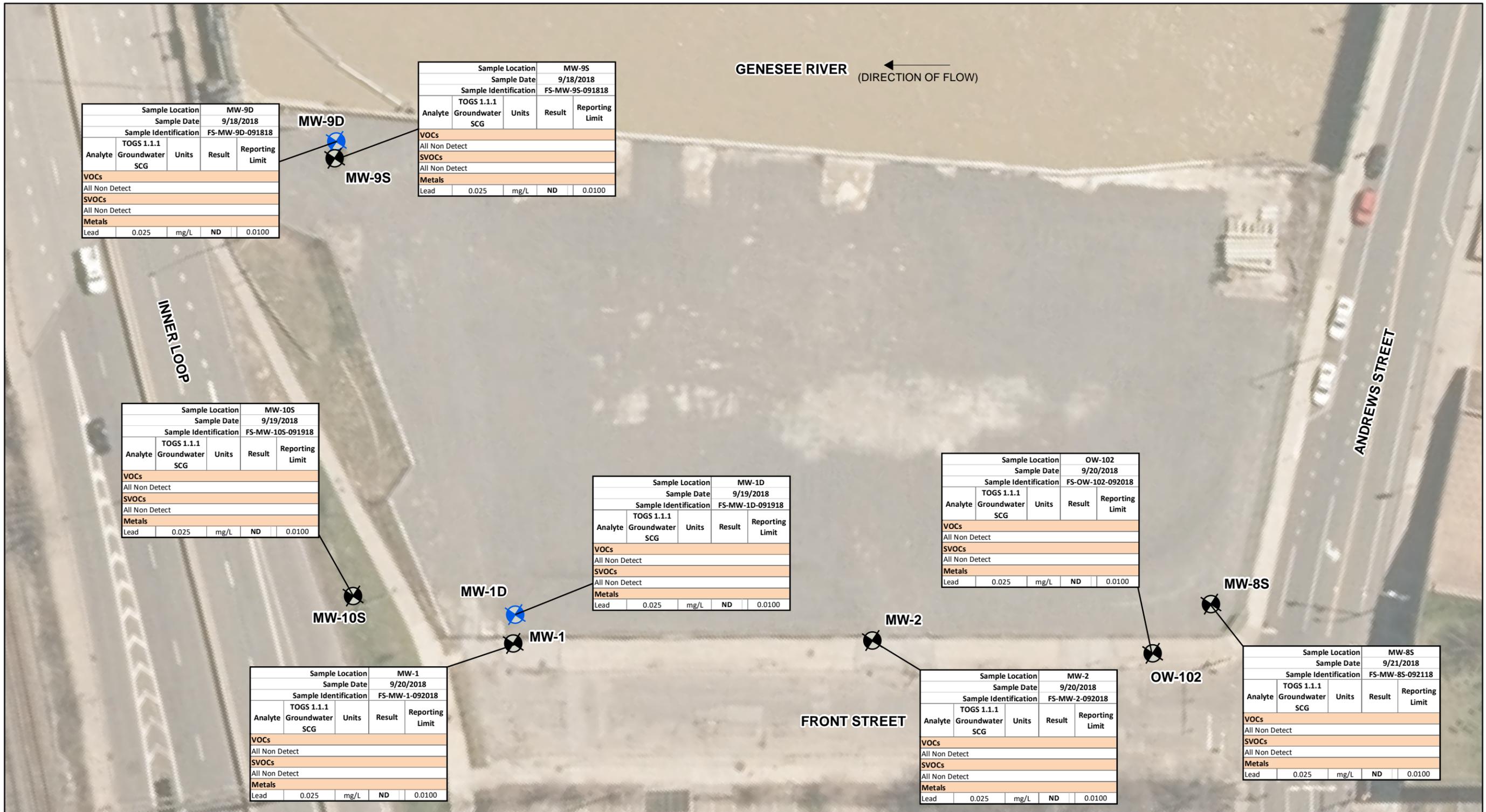


**FIGURE 2**

DECEMBER 2018

**Figure 3**  
**Groundwater Analytical Detections Map**





**LEGEND**

- SHALLOW GROUNDWATER MONITORING WELL
- DEEP GROUNDWATER MONITORING WELL

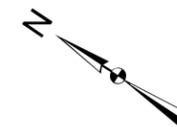
**NOTES:**

1. BASEMAP PROVIDED BY RG&E.
2. MONITORING WELL LOCATIONS ARE APPROXIMATE.
3. ND = NOT DETECTED.
4. SVOCs = SEMI-VOLATILE ORGANIC COMPOUNDS.
5. VOCs = VOLATILE ORGANIC COMPOUNDS.

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



**SEPTEMBER 2018  
GROUNDWATER ANALYTICAL  
DETECTIONS**



**FIGURE 3**

DECEMBER 2018



**Table 1**  
**Monitoring Well Reference Data and Groundwater Measurements**



**Table 1  
Groundwater Elevations**

**RG&E - Front Street Site - Rochester, New York  
Post-Remediation Groundwater Monitoring Report**

Well ID	TIC Elevation	Water Elevation ( FT AMSL)						
		11/3/2004	2/2/2005	8/23/2005	11/15/2010	10/26/2017	4/4/2018	9/18/2018
OW-102	490.11	480.25	480.59	NM	478.61	481.23	481.38	481.31
MW-1	491.03	480.13	480.28	480.16	480.03	480.44	480.44	480.06
MW-1D	496.10	475.08	474.35	467.19	463.45	462.87	462.98	462.87
MW-2	490.16	479.4	479.79	479.50	479.67	479.84	480.75	479.47
MW-3S	495.20	482.51	483.24	481.54	482.08	DMW	DMW	DMW
MW-3D	494.90	472.59	473.43	468.32	467.11	DMW	DMW	DMW
MW-4S	496.00	483.89	483.57	483.60	482.57	DMW	DMW	DMW
MW-4D	495.70	478.05	477.67	478.27	475.08	DMW	DMW	DMW
MW-5D	496.10	469.85	469.39	465.25	462.03	DMW	DMW	DMW
MW-6S	495.60	484.07	484.25	483.75	482.92	DMW	DMW	DMW
MW-6D	495.40	468.16	467.97	465.99	464.90	DMW	DMW	DMW
MW-7D	495.50	479.93	480.18	479.30	466.96	DMW	DMW	DMW
MW-8S	494.00	480.5	480.56	480.47	480.39	480.29	480.69	479.31
MW-9S	496.76	NM	NM	483.04	481.80	482.40	483.49	482.71
MW-9D	496.42	NM	NM	469.52	458.87	459.87	459.74	459.54
MW-10S	494.77	NM	NM	478.67	479.39	479.63	479.55	479.60
PZ-2	493.70	480.26	480.48	480.36	NM	NM	NM	NM
PZ-3	494.90	481.19	481.33	480.18	NM	NM	NM	NM
PZ-7	497.70	482.23	483.23	482.62	NM	NM	NM	NM
PZ-11	494.30	483.20	483.65	483.35	NM	NM	NM	NM
PZ-17	494.70	484.34	483.79	483.97	NM	NM	NM	NM
PZ-19	497.50	487.65	487.24	487.54	NM	NM	NM	NM
PZ-20	494.40	483.03	482.79	484.28	NM	NM	NM	NM
PZ-22	494.20	486.42	485.77	486.44	NM	NM	NM	NM
PZ-26	494.00	483.88	483.29	483.35	NM	NM	NM	NM
PZ-30	496.20	483.74	483.18	483.63	NM	NM	NM	NM
SG-1	493.10	483.96	484.14	NM	LNK	LNK	LNK	LNK
SG-2	493.10	483.97	484.18	NM	LNK	LNK	LNK	LNK

**Notes:**

1. Depth to water measured by NEU-VELLE on 9/18/2018 and 9/19/2018 (MW-1D).
2. ft AMSL = Feet above mean sea level (relative to New York State Barge Canal Datum [BCD]).
3. NM = Not measured.
4. DMW = Decommissioned Monitoring Well
5. LNK = Location Not Know
6. TIC = Top of Inner Casing

**Table 2**  
**Groundwater Sample Analytical Results**



**TABLE 2 (Page 1 of 2)**  
**BTEX, PAHs, AND LEAD GROUNDWATER RESULTS**  
**EXISTING MONITORING WELLS**  
**POST-REMEDATION GROUNDWATER MONITORING REPORT**  
**ROCHESTER GAS & ELECTRIC**  
**FRONT STREET FORMER MGP SITE**  
**ROCHESTER, NEW YORK**

Monitoring Well Sample ID Lab Sample ID Date Sampled	Units	NYSDEC TOGS 1.1.1 Class GA <sup>1</sup>	MW-1 FS-MW-1 1744860.01 10/28/2017	MW-1 FS-MW1-040518 181297-07 4/5/2018	MW-1 FS-MW1-092018 184364-06 9/20/2018	MW-1D FS-MW-1D 174860-07 10/31/2017	MW-1D FS-MW1D-040418 181297-03 4/4/2018	MW-1D FS-MW1D-091918 184364-03 9/19/2018	MW-2 FS-MW-2 174860-08 10/31/2017	MW-2 FS-MW2-040518 181297-05 4/5/2018	MW-2 FS-MW2-092018 184364-07 9/20/2018	MW-8S FS-MW-8S 174860-03 10/30/2017	MW-8S FS-MW9S-040618 181297-09 4/6/2018	Duplicate FS-DUPE-0418 181297-10	Equipment Blank FS-EB-040518 181297-06 4/5/2018	MW-8S FS-MW8S-092118 184364-10 9/21/2018
<b>Volatiles</b>																
Benzene	µg/L	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	µg/L	5*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	µg/L	5*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylene (total)	µg/L	5*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
m,p-Xylenes	µg/L	5*	NA	2 U	2 U	NA	2 U	2 U	NA	2 U	2 U	NA	2 U	2 U	2 U	2 U
o-Xylene	µg/L	5*	NA	2 U	2 U	NA	2 U	2 U	NA	2 U	2 U	NA	2 U	2 U	2 U	2 U
<b>Semi-Volatiles</b>																
Acenaphthene	µg/L	20**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	µg/L	NL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	µg/L	ND	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	µg/L	NL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	µg/L	NL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	µg/L	10**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
<b>Metals</b>																
Lead	mg/L	0.025	0.01 U	0.01 U	0.01 U	0.0120	0.01 U	0.01 U	0.00728	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

**Notes:**  
 NT = Not Tested  
 NA = Not Available  
 NL = Not Listed  
 MDL = Method Detection Limit  
 D - Indicates that the result is from a diluted run  
 J - Indicates an estimated value.  
 U - Indicates that the constituent was not detected at the reported detection limit.  
 Bold highlighted values - compound detected above regulatory standard or guidance value.  
<sup>1</sup>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

**TABLE 2 (Page 2 of 2)**  
**BTEX, PAHs, AND LEAD GROUNDWATER RESULTS**  
**EXISTING MONITORING WELLS**  
**POST-REMEDIAATION GROUNDWATER MONITORING REPORT**  
**ROCHESTER GAS & ELECTRIC**  
**FRONT STREET FORMER MGP SITE**  
**ROCHESTER, NEW YORK**

Monitoring Well Sample ID Lab Sample ID Date Sampled	Units	NYSDEC TOGS 1.1.1 Class GA <sup>1</sup> 10/30/2017	MW-9S FS-MW-9S 174860-04 10/30/2017	MW-9S FS-MW9S-040418 181297-01 4/4/2018	MW-9S FS-MW9S-091818 184364-02 9/18/2018	MW-9D FS-MW-9D 174860-05 10/30/2017	MW-9D FS-MW9D-040418 181297-02 4/4/2018	MW-9D FS-MW9D-091818 184364-01 9/18/2018	MW-10S FS-MW-10S 174860-02 10/28/2017	MW-10S FS-MW10S-040518 181297-08 4/5/2018	MW-10S FS-MW10S-091918 184364-04 9/19/2018	Duplicate Duplicate-091918 184364-05	Equipment Blank FS-EB-092118 184364-09 9/21/2018	OW-102 FS-OW-102 174860-09 10/31/2017	OW-102 FS-OW102-040518 181297-04 4/5/2018	OW-102 FS-OW102-092018 184364-08 9/20/2018
<b>Volatiles</b>																
Benzene	µg/L	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	µg/L	5*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Toluene	µg/L	5*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Xylene (total)	µg/L	5*	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
m,p-Xylenes	µg/L	5*	NA	2 U	2 U	NA	2 U	2 U	NA	2 U	2 U	2 U	2 U	NA	2 U	2 U
o-Xylene	µg/L	5*	NA	2 U	2 U	NA	2 U	2 U	NA	2 U	2 U	2 U	2 U	NA	2 U	2 U
<b>Semi-Volatiles</b>																
Acenaphthene	µg/L	20**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Acenaphthylene	µg/L	NL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Anthracene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)anthracene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(a)pyrene	µg/L	ND	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(b)fluoranthene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(g,h,i)perylene	µg/L	NL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzo(k)fluoranthene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Chrysene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Dibenz(a,h)anthracene	µg/L	NL	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluoranthene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Fluorene	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Indeno(1,2,3-cd)pyrene	µg/L	0.002**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	µg/L	10**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Phenanthrene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Pyrene	µg/L	50**	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
<b>Metals</b>																
Lead	mg/L	0.025	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.0104	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U	0.01 U

**Notes:**  
 NT = Not Tested  
 NA = Not Available  
 NL = Not Listed  
 MDL = Method Detection Limit  
 D - Indicates that the result is from a diluted run  
 J - Indicates an estimated value.  
 U - Indicates that the constituent was not detected at the reported detection limit.  
 Bold highlighted values - compound detected above regulatory standard or guidance value.  
<sup>1</sup>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