Site Management Periodic Review
Report and IC/EC Certification (2022)
Geneseo -Park Street MGP Site (V00731)
Geneseo, New York
December 2022

Exhibit A

Laboratory Reports for Groundwater Sampling Events

(Presented as separate file)

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Neu-Velle

For Lab Project ID

214958

Referencing

RGE Geneseo Fmr. MGP Site

Prepared

Tuesday, November 16, 2021

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

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

A complete ASP package will follow this report.

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

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

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.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05208.D

Report Prepared Tuesday, November 16, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05211.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05212.D

Report Prepared Tuesday, November 16, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05213.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05214.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05290.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05216.D

Report Prepared Tuesday, November 16, 2021

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05217.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05218.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05219.D

Analytical Report Appendix

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

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

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

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

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

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

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

GENERAL TERMS AND CONDITIONS
LABORATORY SERVICES

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

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

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

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

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

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

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

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

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

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

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

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

PARADIGM

CHAIN OF CUSTODY

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

PROJECT REFERENCE: RGE Geneseo Fmr. MGP Site

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

REQUESTED ANALYSIS

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

T1075 per sample label mw 11/2/21

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

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

Relinquished By: [signature] Date/Time: 11/2/21 13:30

Received By: Emily Fauver 11/2/21 1330

Received @ Lab By: [signature] 11/2/21 1342

Total Cost:

P.I.F.

4°C iced 11/2/21 13:35

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

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

See additional page for sample conditions.

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11/2/21
COC
-KRM

Table 1
Parameter, Methods, and Quantitation Limits

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

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

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COC
-KRM

Table 1
Parameter, Methods, and Quantitation Limits

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

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

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Table 1
Parameter, Methods, and Quantitation Limits

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

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

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Table 1
Parameter, Methods, and Quantitation Limits

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

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

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

PARADIGM

Chain of Custody Supplement

Client:	Neu-Velle	**Completed by:**	[signature]
Lab Project ID:	214958	**Date:**	1/2/21

Sample Condition Requirements

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

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

ANALYTICAL REPORT

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

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

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

Project Name: 214958
Project Number: 214958

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

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

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

Case Narrative

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

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

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

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

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

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

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

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Caitlin Walukevich

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

ORGANICS

SEMIVOLATILES

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

SAMPLE RESULTS

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

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

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

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

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

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

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

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

Method Blank Analysis
Batch Quality Control

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

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

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

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

Lab Control Sample Analysis
Batch Quality Control

Project Name: 214958
Project Number: 214958

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

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

Lab Control Sample Analysis

Batch Quality Control

Project Name: 214958

Project Number: 214958

Lab Number: L2160069

Report Date: 11/09/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-09 Batch: WG1566746-2 WG1566746-3

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

Matrix Spike Analysis

Batch Quality Control

Project Name: 214958
Project Number: 214958

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

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

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

Matrix Spike Analysis

Batch Quality Control

Project Name: 214958

Project Number: 214958

Lab Number: L2160069

Report Date: 11/09/21

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

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

Project Name: 214958
Project Number: 214958

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

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

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

*Values in parentheses indicate holding time in days

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GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

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Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

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Data Qualifiers

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: DU Report with 'J' Qualifiers

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

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

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

L21L00109

CHAIN OF CUSTODY

11148

PARADIGM ENVIRONMENTAL SERVICES, INC.

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

PROJECT NAME/SITE NAME:

REQUESTED ANALYSIS

Report TFlags

ASP Cat B Package Due 11/24

SW846 MT

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

LAB USE ONLY BELOW THIS LINE

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

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

Client

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

Total Cost:

P.I.F. ☐

DATA USABILITY SUMMARY REPORT (DUSR)

RGE Geneseo
Former MGP Site

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

Prepared for:

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

February 2022

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

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

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

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

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

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

Michael K. Perry
Chemist

1.0 SUMMARY

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

2.0 INTRODUCTION

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

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

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

3.0 SAMPLE AND ANALYSIS SUMMARY

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

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

4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA

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

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

5.0 DATA VALIDATION QUALIFIERS

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

TABLE 4-1

Guidance Used For Validating Laboratory Analytical Data

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

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

TABLE 4-2

QUALITY CONTROL CRITERIA USED FOR VALIDATING LABORATORY ANALYTICAL DATA

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

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

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

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

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

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

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

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

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

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

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

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

6.0 RESULTS OF THE DATA REVIEW

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

7.0 TOTAL USABLE DATA

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

Table 6-1 8260 - BTEX

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

Table 6-2 8270-SIM-PAH

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
none		none		

ACRONYMS

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

Appendix A

Validated Analytical Results

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

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

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

GENERAL NOTES

ALL ANALYSES

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

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

VOLATILES

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

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

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

Holding times were met for the samples.

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

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

The Method Blanks were free from contamination within reportable ranges.

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

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

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

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

Subcontracted Analyses

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

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

BATCH LOG

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

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

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

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

CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	New-Vette LLC	CLIENT:	Same	214958
ADDRESS:	1667 Lake Ave	ADDRESS:		Quotation #:
CITY:	Rochester STATE: NY ZIP: 14615	CITY: STATE: ZIP:		
PHONE:	(585) 478-1666	PHONE:		Email: KMiller2@new-vette.com
ATTN:	Kyle Miller	ATTN:		

PROJECT REFERENCE: RGE Geneseo Fmr. MGP Site

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

REQUESTED ANALYSIS: 8260 BTEX; 8270 PAH; SIM

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

T1075 per sample label mw 11/2/21

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

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

Sampled By

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

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

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

Total Cost:

P.I.F.

1/°C cred 11/2/21 13:35

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

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

See additional page for sample conditions.

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5
11/2/21
COC
-14CM

Table 1
Parameter, Methods, and Quantitation Limits

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

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

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COC
-KRM

Table 1
Parameter, Methods, and Quantitation Limits

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

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

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-KLM

Table 1
Parameter, Methods, and Quantitation Limits

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

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

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Table 1
Parameter, Methods, and Quantitation Limits

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

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

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

VOLATILE ORGANICS

SAMPLE DATA

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05208.D

MKP 2/16/2022

Report Prepared Thursday, February 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05211.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05212.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05213.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05214.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05290.D

Report Prepared Thursday, February 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05216.D

MKP 2/16/2022

Report Prepared Thursday, February 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05217.D

MKP 2/16/2022

Report Prepared Thursday, February 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05218.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 214958

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

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

Volatile Organics

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

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

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

Data File: z05219.D

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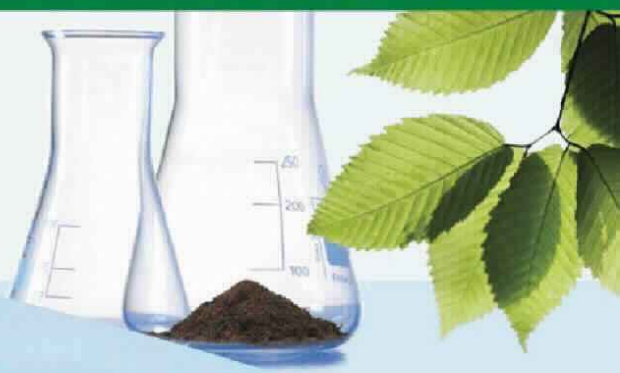

Alpha Analytical

Laboratory Code: 11148

SDG Number: L2160069

Project Name: 214958
Project Number: 214958

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

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

Case Narrative (continued)

Report Submission

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

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

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

Title: Technical Director/Representative

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

L21600169

CHAIN OF CUSTODY

11148

PARADIGM ENVIRONMENTAL SERVICES, INC.

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

REQUESTED ANALYSIS

Report TFlags

ASP Cat B Package Due 11/24

SW846 MT

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

LAB USE ONLY BELOW THIS LINE

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

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

Client

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

Total Cost:

P.I.F. ☐

Semivolatiles Data
by Method 8270D-SIM

No data validation qualifiers were added

MKP 2/16/2022

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Appendix B

Laboratory QC Documentation

VOLATILE SURROGATE RECOVERY

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

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

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

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

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

FORM II VOA

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Matrix Spike and Matrix Spike Duplicate

SDG #: 4958-01

Client: **Neu-Velle**

Lab Project ID: 214958

Project Reference: RGE Geneseo Fmr. MGP Site

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

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

Volatile Organics

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

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

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

QC Batch ID: QC211103VOAW

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

Report Prepared Wednesday, February 9, 2022

Appendix C

Validator Qualifications

KENNETH R. APPLIN
Geochemist/Data Validator

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

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

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

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

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

MICHAEL K. PERRY
Chemist/Data Validator

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

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

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

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

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

Analytical Report For

Neu-Velle

For Lab Project ID

222457

Referencing

RGE Geneseo Fmr. MGP Site

Prepared

Friday, June 10, 2022

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

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

Emily Faumen

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.

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW3 - 052322		
Lab Sample ID:	222457-01	**Date Sampled:**	5/23/2022 14:00
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 13:30
Ethylbenzene	< 2.00	ug/L		6/2/2022 13:30
m,p-Xylene	< 2.00	ug/L		6/2/2022 13:30
o-Xylene	< 2.00	ug/L		6/2/2022 13:30
Toluene	< 2.00	ug/L		6/2/2022 13:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**83.7**	81.1 - 136		6/2/2022 13:30
4-Bromofluorobenzene	**87.0**	75.8 - 132		6/2/2022 13:30
Pentafluorobenzene	**121**	82 - 132		6/2/2022 13:30
Toluene-D8	**115**	64.6 - 137		6/2/2022 13:30

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

Data File: z09594.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - EB - 052322		
Lab Sample ID:	222457-02	**Date Sampled:**	5/23/2022 12:45
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 13:49
Ethylbenzene	< 2.00	ug/L		6/2/2022 13:49
m,p-Xylene	< 2.00	ug/L		6/2/2022 13:49
o-Xylene	< 2.00	ug/L		6/2/2022 13:49
Toluene	< 2.00	ug/L		6/2/2022 13:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**74.1**	81.1 - 136	*	6/2/2022 13:49
4-Bromofluorobenzene	**76.6**	75.8 - 132		6/2/2022 13:49
Pentafluorobenzene	**126**	82 - 132		6/2/2022 13:49
Toluene-D8	**106**	64.6 - 137		6/2/2022 13:49

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

Data File: z09595.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - DUP - 052322		
Lab Sample ID:	222457-03	**Date Sampled:**	5/23/2022
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 14:09
Ethylbenzene	< 2.00	ug/L		6/2/2022 14:09
m,p-Xylene	< 2.00	ug/L		6/2/2022 14:09
o-Xylene	< 2.00	ug/L		6/2/2022 14:09
Toluene	< 2.00	ug/L		6/2/2022 14:09

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**72.5**	81.1 - 136	*	6/2/2022 14:09
4-Bromofluorobenzene	**74.3**	75.8 - 132	*	6/2/2022 14:09
Pentafluorobenzene	**129**	82 - 132		6/2/2022 14:09
Toluene-D8	**109**	64.6 - 137		6/2/2022 14:09

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

Data File: z09596.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW2 - 052322		
Lab Sample ID:	222457-04	**Date Sampled:**	5/23/2022 15:30
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 14:28
Ethylbenzene	< 2.00	ug/L	M	6/2/2022 14:28
m,p-Xylene	< 2.00	ug/L		6/2/2022 14:28
o-Xylene	< 2.00	ug/L		6/2/2022 14:28
Toluene	< 2.00	ug/L		6/2/2022 14:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**70.5**	81.1 - 136	*	6/2/2022 14:28
4-Bromofluorobenzene	**68.1**	75.8 - 132	*	6/2/2022 14:28
Pentafluorobenzene	**126**	82 - 132		6/2/2022 14:28
Toluene-D8	**100**	64.6 - 137		6/2/2022 14:28

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

Data File: z09597.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW1 - 052422		
Lab Sample ID:	222457-05	**Date Sampled:**	5/24/2022 14:45
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 15:45
Ethylbenzene	< 2.00	ug/L		6/2/2022 15:45
m,p-Xylene	< 2.00	ug/L		6/2/2022 15:45
o-Xylene	< 2.00	ug/L		6/2/2022 15:45
Toluene	< 2.00	ug/L		6/2/2022 15:45

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**72.8**	81.1 - 136	*	6/2/2022 15:45
4-Bromofluorobenzene	**72.2**	75.8 - 132	*	6/2/2022 15:45
Pentafluorobenzene	**125**	82 - 132		6/2/2022 15:45
Toluene-D8	**106**	64.6 - 137		6/2/2022 15:45

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

Data File: z09601.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW4 - 052422		
Lab Sample ID:	222457-06	**Date Sampled:**	5/24/2022 16:30
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**0.503**	ug/L	J	6/2/2022 16:05
Ethylbenzene	< 2.00	ug/L		6/2/2022 16:05
m,p-Xylene	**2.98**	ug/L		6/2/2022 16:05
o-Xylene	< 2.00	ug/L		6/2/2022 16:05
Toluene	< 2.00	ug/L		6/2/2022 16:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**68.6**	81.1 - 136	*	6/2/2022 16:05
4-Bromofluorobenzene	**68.9**	75.8 - 132	*	6/2/2022 16:05
Pentafluorobenzene	**122**	82 - 132		6/2/2022 16:05
Toluene-D8	**98.6**	64.6 - 137		6/2/2022 16:05

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

Data File: z09602.D

Report Prepared Friday, June 10, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW6 - 052522		
Lab Sample ID:	222457-07	**Date Sampled:** 5/25/2022	14:45
Matrix:	Groundwater	**Date Received** 5/26/2022	

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**164**	ug/L		6/2/2022 15:26
Ethylbenzene	**46.7**	ug/L		6/2/2022 15:26
m,p-Xylene	**55.7**	ug/L		6/2/2022 15:26
o-Xylene	**48.5**	ug/L		6/2/2022 15:26
Toluene	**49.8**	ug/L		6/2/2022 15:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**79.8**	81.1 - 136	*	6/2/2022 15:26
4-Bromofluorobenzene	**88.8**	75.8 - 132		6/2/2022 15:26
Pentafluorobenzene	**122**	82 - 132		6/2/2022 15:26
Toluene-D8	**108**	64.6 - 137		6/2/2022 15:26

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

Data File: z09600.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW8 - 052522		
Lab Sample ID:	222457-08	**Date Sampled:**	5/25/2022 16:30
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**1.88**	ug/L		6/2/2022 16:24
Ethylbenzene	**3.08**	ug/L		6/2/2022 16:24
m,p-Xylene	**5.86**	ug/L		6/2/2022 16:24
o-Xylene	**3.12**	ug/L		6/2/2022 16:24
Toluene	**2.00**	ug/L	J	6/2/2022 16:24

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**75.4**	81.1 - 136	*	6/2/2022 16:24
4-Bromofluorobenzene	**79.3**	75.8 - 132		6/2/2022 16:24
Pentafluorobenzene	**121**	82 - 132		6/2/2022 16:24
Toluene-D8	**106**	64.6 - 137		6/2/2022 16:24

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

Data File: z09603.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW7 - 052622		
Lab Sample ID:	222457-09	**Date Sampled:**	5/26/2022 13:00
Matrix:	Groundwater	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 16:43
Ethylbenzene	< 2.00	ug/L		6/2/2022 16:43
m,p-Xylene	< 2.00	ug/L		6/2/2022 16:43
o-Xylene	< 2.00	ug/L		6/2/2022 16:43
Toluene	< 2.00	ug/L		6/2/2022 16:43

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**81.6**	81.1 - 136		6/2/2022 16:43
4-Bromofluorobenzene	**78.8**	75.8 - 132		6/2/2022 16:43
Pentafluorobenzene	**113**	82 - 132		6/2/2022 16:43
Toluene-D8	**103**	64.6 - 137		6/2/2022 16:43

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

Data File: z09604.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	Trip Blank		
Lab Sample ID:	222457-10	**Date Sampled:**	5/26/2022
Matrix:	Water	**Date Received**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 12:07
Ethylbenzene	< 2.00	ug/L		6/2/2022 12:07
m,p-Xylene	< 2.00	ug/L		6/2/2022 12:07
o-Xylene	< 2.00	ug/L		6/2/2022 12:07
Toluene	< 2.00	ug/L		6/2/2022 12:07

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**75.8**	81.1 - 136	*	6/2/2022 12:07
4-Bromofluorobenzene	**78.7**	75.8 - 132		6/2/2022 12:07
Pentafluorobenzene	**121**	82 - 132		6/2/2022 12:07
Toluene-D8	**107**	64.6 - 137		6/2/2022 12:07

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

Data File: z09590.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

Analytical Report Appendix

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

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

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

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

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

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

"<" = Analyzed for but not detected at or above the quantitation limit.
"E" = Result has been estimated, calibration limit exceeded.
"H" = Denotes a parameter analyzed outside of holding time.
"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, 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 wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

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

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

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

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

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

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

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

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

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

PARADIGM

CHAIN OF CUSTODY

REPORT TO:		INVOICE TO:		
CLIENT:	New-Velle LLC	CLIENT:	Same	LAB PROJECT ID 222457
ADDRESS:	1667 Lake Ave	ADDRESS:		
CITY: Rochester	STATE: NY ZIP: 14615	CITY:	STATE: ZIP:	Quotation #:
PHONE:	(585) 478-1666	PHONE:		Email: /reid@new-kmiller@3velle.com
ATTN:	Kyle Miller	ATTN:		

PROJECT REFERENCE: RGE Genesee Fmr. MGP Site

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

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260 BTEX	8270 SIM PAHs	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/23/22	14:00		X	GEN-MW3-052322	WG	3	X	X		01
5/23/22	12:45		X	GEN-EB-052322	WA	3	X	X	Equipment Blank	02
5/23/22	—		X	GEN-DUP-052322	WG	3	X	X	Duplicate	03
5/23/22	15:30		X	GEN-MW2-052322	WG	9	X	X	MS/MSD	04
5/24/22	14:45		X	GEN-MW1-052422	WG	3	X	X		05
5/24/22	16:30		X	GEN-MW4-052422	WG	3	X	X		06
5/25/22	14:45		X	GEN-MW6-052522	WG	3	X	X		07
5/25/22	10:30		X	GEN-MW8-052522	WG	3	X	X		08
5/26/22	13:00		X	GEN-MW7-052622	WG	3	X	X		09
5/26/22				Trip Blank	W	1	X		Trip Blank	10

per procedure qw 5/26/22   per visual ew 5/26/22

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

Kyle Miller 5/23-26/22
Sampled By / Date/Time

[signature] 5/26/22 14:30
Relinquished By / Date/Time

[signature] 5/26/22 14:30
Received By / Date/Time

[signature] 5/26/22 14:59
Received @ Lab By / Date/Time

10°C iced 5/26/22

Total Cost: 1447

P.I.F. ☐

Custody Seals intact, signed, dated. CP 5/26/22

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

See additional page for sample conditions.

5/26/22 COC -KRM

Table 1
Parameter, Methods, and Quantitation Limits

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

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

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5/26/22
COC
- KM

Table 1
Parameter, Methods, and Quantitation Limits

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

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

Table 1
Parameter, Methods, and Quantitation Limits

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

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

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COC

Table 1
Parameter, Methods, and Quantitation Limits

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

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

Notes:

[1] Specific quantitation limits are highly matrix dependent. The quantitation limits listed are for guidance and may not always be achievable due to matrix interference.

[2] Quantitation limits for source materials/soil/sediment are based on wet weight. The quantitation limits calculated by the laboratory for source materials/soil/sediment (calculated on a dry weight basis) will be higher.

µg/L = micrograms per liter

µg/kg = micrograms per kilogram

mg/kg = milligrams per kilogram

PARADIGM

Chain of Custody Supplement

Client: NLV-Ville **Completed by:** Emilee Hyde

Lab Project ID: 222457 **Date:** 5/26/22

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	☒ VOA	☐	☒
Comments			
Chlorine Absent (<0.10 ppm per test strip)	☐	☐	☒
Comments			
Holding Time	☒	☐	☐
Comments			
Temperature	☒ 0°C	☒	☐
Comments	10°C iced		
Compliant Sample Quantity/Type	☒	☐	☐
Comments			

ANALYTICAL REPORT

Lab Number:	L2228058
Client:	Paradigm Environmental Services 179 Lake Avenue Rochester, NY 14608
ATTN:	Jane Daloia
Phone:	(585) 647-2530
Project Name:	222457
Project Number:	222457
Report Date:	06/09/22

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

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

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2228058-01	GEN MW3-052322 222457-01	WATER	Not Specified	05/23/22 14:00	05/26/22
L2228058-02	GEN-EB-052322 222457-02	WATER	Not Specified	05/23/22 12:45	05/26/22
L2228058-03	GEN-DUP-052322 222457-03	WATER	Not Specified	05/23/22 00:00	05/26/22
L2228058-04	GEN-MW2-052322 222457-04	WATER	Not Specified	05/23/22 15:30	05/26/22
L2228058-05	GEN-MW1-052422 222457-05	WATER	Not Specified	05/24/22 14:45	05/26/22
L2228058-06	GEN-MW4-052422 222457-06	WATER	Not Specified	05/24/22 16:30	05/26/22
L2228058-07	GEN-MW6-052522 222457-07	WATER	Not Specified	05/25/22 14:45	05/26/22
L2228058-08	GEN-MW8-052522 222457-08	WATER	Not Specified	05/25/22 16:30	05/26/22
L2228058-09	GEN-MW7-052622 222457-09	WATER	Not Specified	05/26/22 13:00	05/26/22

Project Name:	222457	**Lab Number:**	L2228058
Project Number:	222457	**Report Date:**	06/09/22

Case Narrative

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

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

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

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

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

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

Project Name: 222457 **Lab Number:** L2228058
Project Number: 222457 **Report Date:** 06/09/22

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 06/09/22

ORGANICS

SEMIVOLATILES

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-01
Client ID: GEN MW3-052322 222457-01
Sample Location: Not Specified

Date Collected: 05/23/22 14:00
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 16:19
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 03:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	78		15-120
4-Terphenyl-d14	70		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-02
Client ID: GEN-EB-052322 222457-02
Sample Location: Not Specified

Date Collected: 05/23/22 12:45
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 16:35
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 03:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	114		23-120
2-Fluorobiphenyl	87		15-120
4-Terphenyl-d14	93		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-03
Client ID: GEN-DUP-052322 222457-03
Sample Location: Not Specified

Date Collected: 05/23/22 00:00
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 16:52
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 03:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	70		15-120
4-Terphenyl-d14	66		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-04
Client ID: GEN-MW2-052322 222457-04
Sample Location: Not Specified

Date Collected: 05/23/22 15:30
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 17:08
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 03:43

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	71		15-120
4-Terphenyl-d14	66		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-05
Client ID: GEN-MW1-052422 222457-05
Sample Location: Not Specified

Date Collected: 05/24/22 14:45
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 18:46
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 08:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	69		15-120
4-Terphenyl-d14	72		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-06
Client ID: GEN-MW4-052422 222457-06
Sample Location: Not Specified

Date Collected: 05/24/22 16:30
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 19:02
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 08:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.03	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	110		23-120
2-Fluorobiphenyl	88		15-120
4-Terphenyl-d14	90		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-07
Client ID: GEN-MW6-052522 222457-07
Sample Location: Not Specified

Date Collected: 05/25/22 14:45
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/31/22 20:01
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/29/22 11:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	2.9		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.05	J	ug/l	0.10	0.04	1
Naphthalene	200	E	ug/l	0.10	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	29	E	ug/l	0.10	0.04	1
Anthracene	0.42		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	5.5		ug/l	0.10	0.04	1
Phenanthrene	1.9		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	0.10	J	ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	110		23-120
2-Fluorobiphenyl	80		15-120
4-Terphenyl-d14	70		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-07 D
Client ID: GEN-MW6-052522 222457-07
Sample Location: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 06/09/22 16:56
Analyst: RP

Date Collected: 05/25/22 14:45
Date Received: 05/26/22
Field Prep: Not Specified

Extraction Method: EPA 3510C
Extraction Date: 05/29/22 11:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Naphthalene	180		ug/l	1.0	0.43	10
Acenaphthylene	21		ug/l	1.0	0.35	10

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-08
Client ID: GEN-MW8-052522 222457-08
Sample Location: Not Specified

Date Collected: 05/25/22 16:30
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/31/22 20:17
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/29/22 11:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.10	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	62		15-120
4-Terphenyl-d14	62		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

SAMPLE RESULTS

Lab ID: L2228058-09
Client ID: GEN-MW7-052622 222457-09
Sample Location: Not Specified

Date Collected: 05/26/22 13:00
Date Received: 05/26/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 05/31/22 20:34
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/29/22 11:36

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.11	0.04	1
2-Chloronaphthalene	ND		ug/l	0.22	0.04	1
Fluoranthene	ND		ug/l	0.11	0.04	1
Naphthalene	ND		ug/l	0.11	0.05	1
Benzo(a)anthracene	ND		ug/l	0.11	0.02	1
Benzo(a)pyrene	ND		ug/l	0.11	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.11	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.11	0.05	1
Chrysene	ND		ug/l	0.11	0.04	1
Acenaphthylene	ND		ug/l	0.11	0.04	1
Anthracene	ND		ug/l	0.11	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.11	0.05	1
Fluorene	ND		ug/l	0.11	0.04	1
Phenanthrene	0.03	J	ug/l	0.11	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.11	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.11	0.04	1
Pyrene	ND		ug/l	0.11	0.04	1
2-Methylnaphthalene	ND		ug/l	0.11	0.05	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	116		23-120
2-Fluorobiphenyl	77		15-120
4-Terphenyl-d14	71		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 16:03
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 03:43

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-04 Batch: WG1643559-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04
2-Methylnaphthalene	ND		ug/l	0.10	0.05

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	71		15-120
4-Terphenyl-d14	87		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/29/22 18:30
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/27/22 08:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 05-06 Batch: WG1643644-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04
2-Methylnaphthalene	ND		ug/l	0.10	0.05

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	65		15-120
4-Terphenyl-d14	72		41-149

Project Name: 222457 **Lab Number:** L2228058

Project Number: 222457 **Report Date:** 06/09/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 05/31/22 19:45
Analyst: RP

Extraction Method: EPA 3510C
Extraction Date: 05/29/22 11:36

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 07-09 Batch: WG1644257-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04
2-Methylnaphthalene	ND		ug/l	0.10	0.05

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	108		23-120
2-Fluorobiphenyl	73		15-120
4-Terphenyl-d14	77		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 222457

Project Number: 222457

Lab Number: L2228058

Report Date: 06/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1643559-2 WG1643559-3								
Acenaphthene	72		83		40-140	14		40
2-Chloronaphthalene	76		86		40-140	12		40
Fluoranthene	84		94		40-140	11		40
Naphthalene	70		82		40-140	16		40
Benzo(a)anthracene	85		96		40-140	12		40
Benzo(a)pyrene	100		112		40-140	11		40
Benzo(b)fluoranthene	89		94		40-140	5		40
Benzo(k)fluoranthene	89		104		40-140	16		40
Chrysene	75		86		40-140	14		40
Acenaphthylene	91		103		40-140	12		40
Anthracene	82		93		40-140	13		40
Benzo(ghi)perylene	81		90		40-140	11		40
Fluorene	80		91		40-140	13		40
Phenanthrene	74		83		40-140	11		40
Dibenzo(a,h)anthracene	87		97		40-140	11		40
Indeno(1,2,3-cd)pyrene	82		92		40-140	11		40
Pyrene	82		92		40-140	11		40
2-Methylnaphthalene	75		86		40-140	14		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 Batch: WG1643559-2 WG1643559-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	105		**124**	Q	23-120
2-Fluorobiphenyl	74		85		15-120
4-Terphenyl-d14	79		88		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05-06 Batch: WG1643644-2 WG1643644-3								
Acenaphthene	84		64		40-140	27		40
2-Chloronaphthalene	82		64		40-140	25		40
Fluoranthene	93		72		40-140	25		40
Naphthalene	82		64		40-140	25		40
Benzo(a)anthracene	87		66		40-140	27		40
Benzo(a)pyrene	109		84		40-140	26		40
Benzo(b)fluoranthene	92		70		40-140	27		40
Benzo(k)fluoranthene	94		73		40-140	25		40
Chrysene	87		68		40-140	25		40
Acenaphthylene	96		74		40-140	26		40
Anthracene	90		69		40-140	26		40
Benzo(ghi)perylene	98		73		40-140	29		40
Fluorene	88		67		40-140	27		40
Phenanthrene	81		62		40-140	27		40
Dibenzo(a,h)anthracene	103		78		40-140	28		40
Indeno(1,2,3-cd)pyrene	96		74		40-140	26		40
Pyrene	93		72		40-140	25		40
2-Methylnaphthalene	85		66		40-140	25		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 05-06 Batch: WG1643644-2 WG1643644-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	114		90		23-120
2-Fluorobiphenyl	83		65		15-120
4-Terphenyl-d14	89		71		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 222457

Project Number: 222457

Lab Number: L2228058

Report Date: 06/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 07-09 Batch: WG1644257-2 WG1644257-3								
Acenaphthene	92		75		40-140	20		40
2-Chloronaphthalene	96		78		40-140	21		40
Fluoranthene	103		86		40-140	18		40
Naphthalene	94		76		40-140	21		40
Benzo(a)anthracene	110		93		40-140	17		40
Benzo(a)pyrene	123		101		40-140	20		40
Benzo(b)fluoranthene	111		90		40-140	21		40
Benzo(k)fluoranthene	98		82		40-140	18		40
Chrysene	93		78		40-140	18		40
Acenaphthylene	109		89		40-140	20		40
Anthracene	101		83		40-140	20		40
Benzo(ghi)perylene	113		95		40-140	17		40
Fluorene	99		81		40-140	20		40
Phenanthrene	94		76		40-140	21		40
Dibenzo(a,h)anthracene	121		100		40-140	19		40
Indeno(1,2,3-cd)pyrene	133		110		40-140	19		40
Pyrene	99		83		40-140	18		40
2-Methylnaphthalene	98		79		40-140	21		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 07-09 Batch: WG1644257-2 WG1644257-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Nitrobenzene-d5	**142**	Q	111		23-120
2-Fluorobiphenyl	94		75		15-120
4-Terphenyl-d14	96		78		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1643559-4 WG1643559-5 QC Sample: L2228058-04 Client ID: GEN-MW2-052322 222457-04												
Acenaphthene	ND	10	6.4	64		7.8	78		40-140	20		40
2-Chloronaphthalene	ND	10	6.3	63		7.7	77		40-140	20		40
Fluoranthene	ND	10	7.8	78		9.3	93		40-140	18		40
Naphthalene	ND	10	6.2	62		7.5	75		40-140	19		40
Benzo(a)anthracene	ND	10	7.0	70		8.5	85		40-140	19		40
Benzo(a)pyrene	ND	10	4.4	44		5.0	50		40-140	13		40
Benzo(b)fluoranthene	ND	10	4.2	42		5.0	50		40-140	17		40
Benzo(k)fluoranthene	ND	10	3.8	**38**	Q	4.2	42		40-140	10		40
Chrysene	ND	10	5.3	53		6.2	62		40-140	16		40
Acenaphthylene	ND	10	6.9	69		8.4	84		40-140	20		40
Anthracene	ND	10	6.7	67		8.1	81		40-140	19		40
Benzo(ghi)perylene	ND	10	1.2	**12**	Q	1.4	**14**	Q	40-140	15		40
Fluorene	ND	10	6.8	68		8.2	82		40-140	19		40
Phenanthrene	ND	10	6.1	61		7.5	75		40-140	21		40
Dibenzo(a,h)anthracene	ND	10	1.4	**14**	Q	1.6	**16**	Q	40-140	13		40
Indeno(1,2,3-cd)pyrene	ND	10	1.4	**14**	Q	1.7	**17**	Q	40-140	19		40
Pyrene	ND	10	8.1	81		9.5	95		40-140	16		40
2-Methylnaphthalene	ND	10	6.2	62		7.5	75		40-140	19		40

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2-Fluorobiphenyl	60		73		15-120
4-Terphenyl-d14	58		64		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: 222457 ***Lab Number:*** L2228058

Project Number: 222457 ***Report Date:*** 06/09/22

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG1643559-4 WG1643559-5 QC Sample: L2228058-04 Client ID: GEN-MW2-052322 222457-04												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
Nitrobenzene-d5	68		84		23-120

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2228058-01A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-02A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-03A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-04A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-04A1	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-04A2	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-05A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-06A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-07A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-08A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)
L2228058-09A	Amber 1000ml unpreserved	A	7	7	3.8	Y	Absent		NYTCL-PAHSIM(7)

*Values in parentheses indicate holding time in days

Project Name:	222457	**Lab Number:**	L2228058
Project Number:	222457	**Report Date:**	06/09/22

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	222457	**Lab Number:**	L2228058
Project Number:	222457	**Report Date:**	06/09/22

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

Data Qualifiers

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

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

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

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	222457	**Lab Number:**	L2228058
Project Number:	222457	**Report Date:**	06/09/22

Data Qualifiers

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

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

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

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	222457	**Lab Number:**	L2228058
Project Number:	222457	**Report Date:**	06/09/22

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

PARADIGM ENVIRONMENTAL SERVICES, INC.

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

1 of 3

11148

CHAIN OF COUSTODY L2228058

REPORT TO:		INVOICE TO:			
COMPANY:	Paradigm Environmental	COMPANY:	Same	LAB PROJECT #:	CLIENT PROJECT #:
ADDRESS:	179 Lake Avenue	ADDRESS:			
CITY:	Rochester STATE: NY ZIP: 14608	CITY:	STATE: ZIP:	TURNAROUND TIME: (WORKING DAYS)	
PHONE:	FAX:	PHONE:	FAX:	☐ 1 ☐ 2 ☐ 3 ☐ 5 (STD)	OTHER: 10 Day
ATTN:	Reporting	ATTN:	Accounts Payable		
COMMENTS:	Please email results to reporting@paradigmenv.com			Date Due: 6/10/22 for data	

PROJECT NAME/SITE NAME:

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	8270 PAH			REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/23/22	14:00		X	GEN-MW3-052322	WG	1	X			NYS ASP Cat B Report Pkg and NYSDEC EDD	222457-01
2	5/23/22	12:45		X	GEN-EB-052322	WG	1	X				02
3	5/23/22			X	GEN-DUP-052322	WG	1	X				03
4	5/23/22	15:30		X	GEN-MW2-052322	WG	1	X			SIM for PAH DLs as needed	04
5	5/24/22	14:45		X	GEN-MW1-052422	WG	1	X				05
6	5/24/22	16:30		X	GEN-MW4-052422	WG	1	X			Run MS/MSD on sample GEN-MW2-052322	06
7	5/25/22	14:45		X	GEN-MW6-052522	WG	1	X				07
8	5/25/22	16:30		X	GEN-MW8-052522	WG	1	X				08
9	5/26/22	13:00		X	GEN-MW7-052622	WG	1	X				09
10												

LAB USE ONLY BELOW THIS LINE

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

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

Client

	Signature	Date/Time
Sampled By	[signature]	5/26/22 1600
Relinquished By	R Cunningham AAL	5/26/22 16:00
Received By	[signature]	5/27/22 0030
Received By		
Received @ Lab By		

Total Cost:

P.I.F.

DATA USABILITY SUMMARY REPORT (DUSR)

RGE Geneseo
Former MGP Site

SDGs: **222457**
8 Water Samples, equipment blank and trip blank

Prepared for:

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

September 2022

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

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4.0	GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA	2
5.0	DATA VALIDATION QUALIFIERS	3
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APPENDIX A Validated Analytical Results
APPENDIX B Laboratory QC Documentation
APPENDIX C Validator Qualifications

Tables

Table 4-1 Data Validation Guidance Documents
Table 4-2 Quality Control Criteria for Validating Laboratory Analytical Data

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

REVIEWER'S NARRATIVE
Neu-Velle SDG 222457: RGE Geneseo Former MGP Site

The data associated with this Sample Delivery Group (SDG) 222457, analyzed by Paradigm Environmental Services, Inc. Rochester, NY have been reviewed in accordance with assessment criteria provided by the New York State Department of Environmental Conservation following the review procedures provided in the USEPA Functional Guidelines for evaluating organic and inorganic data.

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

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

Reviewer's Signature: Michael K. Perry Date: 9/8/2022

Michael K. Perry
Chemist

1.0 SUMMARY

SITE:	RGE Geneseo Former MGP Site
SAMPLING DATE:	May 23 – May 26, 2022
SAMPLE TYPE:	8 water samples, equipment and trip blank
LABORATORY:	Paradigm Environmental Services, Inc. Rochester, NY
SDG No.:	222457

2.0 INTRODUCTION

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

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

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

3.0 SAMPLE AND ANALYSIS SUMMARY

The data packages consists of analytical results for eight water samples, equipment blank, and a trip blank collected on May 23 – May 26, 2022. These samples were analyzed for volatile organic compounds (BTEX) and Semi-Volatile Organic Compounds (SVOCs).

All analyses were performed by Paradigm Environmental Services, Inc., Rochester, NY and analyzed as SDG: 222457. The SVOCs were subcontracted to Alpha Analytical in Westborough, MA and analyzed as SDG: L2228058 for PAHs by 8270-D-SIM. The analytical results were provided in NYSDEC ASP Category B format, which includes all raw analytical data and laboratory QC data.

4.0 GUIDANCE DOCUMENTS AND DATA REVIEW CRITERIA

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

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

5.0 DATA VALIDATION QUALIFIERS

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

TABLE 4-1

Guidance Used For Validating Laboratory Analytical Data

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

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

TABLE 4-2

QUALITY CONTROL CRITERIA USED FOR VALIDATING LABORATORY ANALYTICAL DATA

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

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

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

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

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

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

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

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

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

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

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

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

6.0 RESULTS OF THE DATA REVIEW

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

7.0 TOTAL USABLE DATA

For SDG 222457, eight samples, equipment blank and a trip blank were analyzed and results were reported for 222 analytes. Even though some results were flagged with a "J" as estimated, all results (100%) are considered usable.

Table 6-1 8260 - BTEX

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
GEN-EB-5/23/22 GEN-MW6-5/25/22 GEN-MW8-5/25/22 Trip Blank	All analytes	J detects UJ non-detects	Surr rec for 1,2-DCEd4 < QC limit	Data are estimated
GEN-DUP-5/23/22 GEN-MW2-5/23/22 GEN-MW1-5/24/22 GEN-MW4-5/25/22	All analytes	J detects UJ non-detects	Surr rec for 1,2-DCEd4 and Td8 < QC limit	Data are estimated
GEN-MW2-5/23/22	Ethyl benzene	J detects	MS/MSD > QC limit	Detected data are estimated

Table 6-2 8270-SIM-PAH

SAMPLES AFFECTED	ANALYTES	ACTION	QC VIOLATION	COMMENTS
GEN-MW6-5/25/22 GEN-MW8-5/25/22	Benzo(a)anthracene	CRQL-U	Detected in method blank	Detected data changed to non-detect
GEN-MW2-5/23/22	Benzo(k)fluoranthene Benzo(g,h,i)perylene Dibenzo(a,h)anthracene Indene(1,2,3-cd)pyrene	J detects UJ non-detects	MS/MSD < QC limit	Data are estimated
GEN-MW3-5/23/22 GEN-EB-5/23/22 GEN-DUP-5/23/22 GEN-MW2-5/23/22 GEN-MW1-5/24/22 GEN-MW4-5/25/22	Benzo(a)pyrene	J detects UJ non-detects	CCV < QC limit	Data are estimated

SDG 222457

GEN-MW6-5/25/22 GEN-MW8-5/25/22 GEN-MW7-5/26/22	Benzo(a)pyrene Indene(1,2,3-cd)pyrene	J detects UJ non-detects	CCV < QC limit	Data are estimated

ACRONYMS

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

Appendix A

Validated Analytical Results

LAB PROJECT NARRATIVE: 222457
PROJECT NAME: RGE Geneseo Fmr. MGP Site
SDG: 2457-01
CLIENT: Neu-Velle

Seven groundwater samples were collected by the client on May 23, 2022 and were received by the Paradigm laboratory on May 26, 2022. Samples were accompanied by a field duplicate, equipment blank, and trip blank. The samples were received under the conditions as noted on the chain-of-custody supplement. The samples were submitted with the Chains-of-Custody requesting the BTEX list for Volatiles and PAH by 8270SIM. All analyses, where applicable, were performed using EPA SW-846 Methods and the associated holding times.

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

GENERAL NOTES

ALL ANALYSES

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

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

VOLATILES

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

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

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

Holding times were met for the samples.

Many of the samples had outliers for 1,2-Dichloroethane-d4 and 4-Bromofluorobenzene. All outliers have been flagged with an "*" on the summary form and the sample report.

Site specific QC was requested and analyzed on GEN-MW2-052322 and ethylbenzene recovered high in the matrix spike. This outlier has been flagged with an "*" on the summary page and an "M" on the sample report. Matrix interference is suspected. The Laboratory Control Sample recovered within acceptance limits.

The Method Blank was free from contamination within reportable ranges.

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

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

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

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

Subcontracted Analyses

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

(signed) Steven DeVito (date) 8/31/2022

Steven DeVito – Technical Director

BATCH LOG

Lab Name: Paradigm Environmental Services
Lab Project #: 222457
Client Name: Neu-Velle
Client Project Name: RGE Geneseo Fmr. MGP Site
Client Project #: N/A
SDG No.: 2457-01

Protocol: SW846 Report Due Date: 6/10/2022 Batch Due Date: 6/25/2022

LAB SAMPLE NO.	MATRIX	CLIENT SAMPLE ID	REQUESTED ANALYSIS	DATE SAMPLED	DATE REC'D
222457-01	Groundwater	GEN - MW3 - 052322	VOAs, SVOAs	5/23/2022	5/26/2022
222457-02	Groundwater	GEN - EB - 052322	VOAs, SVOAs	5/23/2022	5/26/2022
222457-03	Groundwater	GEN - DUP - 052322	VOAs, SVOAs	5/23/2022	5/26/2022
222457-04	Groundwater	GEN - MW2 - 052322	VOAs, SVOAs	5/23/2022	5/26/2022
222457-05	Groundwater	GEN - MW1 - 052422	VOAs, SVOAs	5/24/2022	5/26/2022
222457-06	Groundwater	GEN - MW4 - 052422	VOAs, SVOAs	5/24/2022	5/26/2022
222457-07	Groundwater	GEN - MW6 - 052522	VOAs, SVOAs	5/25/2022	5/26/2022
222457-08	Groundwater	GEN - MW8 - 052522	VOAs, SVOAs	5/25/2022	5/26/2022
222457-09	Groundwater	GEN - MW7 - 052622	VOAs, SVOAs	5/26/2022	5/26/2022
222457-10	Water	Trip Blank	VOAs	5/26/2022	5/26/2022

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

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CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, INC.

REPORT TO:		INVOICE TO:		LAB PROJECT ID
CLIENT:	New-Velle LLC	CLIENT:	Same	222457
ADDRESS:	1667 Lake Ave	ADDRESS:		
CITY:	Rochester STATE: NY ZIP 14615	CITY: STATE: ZIP:		Quotation #:
PHONE:	(585) 478-1666	PHONE:		Email: kmiller3@new-velle.com
ATTN:	Kyle Miller	ATTN:		

PROJECT REFERENCE: RGE Geneseo Fmr. MGP Site

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

REQUESTED ANALYSIS

DATE COLLECTED	TIME COLLECTED	COMPOSITE	GRAB	SAMPLE IDENTIFIER	MATRIX CODES	NUMBER OF CONTAINERS	8260 BTEX	8270 SIM PAHs	REMARKS	PARADIGM LAB SAMPLE NUMBER
5/23/22	14:00		X	GEN-MW3-052322	WG	3	X	X		01
5/23/22	12:45		X	GEN-EB-052322	WA	3	X	X	Equipment Blank	02
5/23/22	—		X	GEN-DUP-052322	WG	3	X	X	Duplicate	03
5/23/22	15:30		X	GEN-MW2-052322	WG	9	X	X	MS/MSD	04
5/24/22	14:45		X	GEN-MW1-052422	WG	3	X	X		05
5/24/22	16:30		X	GEN-MW4-052422	WG	3	X	X		06
5/25/22	14:45		X	GEN-MW6-052522	WG	3	X	X		07
5/25/22	16:30		X	GEN-MW8-052522	WG	3	X	X		08
5/26/22	13:00		X	GEN-MW7-052622	WG	3	X	X		09
5/26/22 per procedure gw 5/26/22				Trip Blank	W	1	X		Trip Blank	10

per visual SD 5/26/22

10°C iced 5/26/22

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

Kyle Miller 5/23-26/22
Sampled By Date/Time

Relinquished By Date/Time 5/26/22 14:30

Received By Date/Time 5/26/22 1430

Emily Hyde Received @ Lab By Date/Time 5/26/22 14:59

Total Cost: 1447

P.I.F.

Custody Seals intact, signed, dated. CP 5/26/22

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

See additional page for sample conditions.

VOLATILE ORGANICS

SAMPLE DATA

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW3 - 052322		
Lab Sample ID:	222457-01	**Date Sampled:**	5/23/2022
Matrix:	Groundwater	**Date Received:**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 13:30
Ethylbenzene	< 2.00	ug/L		6/2/2022 13:30
m,p-Xylene	< 2.00	ug/L		6/2/2022 13:30
o-Xylene	< 2.00	ug/L		6/2/2022 13:30
Toluene	< 2.00	ug/L		6/2/2022 13:30

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**83.7**	81.1 - 136		6/2/2022 13:30
4-Bromofluorobenzene	**87.0**	75.8 - 132		6/2/2022 13:30
Pentafluorobenzene	**121**	82 - 132		6/2/2022 13:30
Toluene-D8	**115**	64.6 - 137		6/2/2022 13:30

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

Data File: z09594.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: Neu-Velle

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier: GEN - EB - 052322
Lab Sample ID: 222457-02 **Date Sampled:** 5/23/2022
Matrix: Groundwater **Date Received:** 5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L	UJ	6/2/2022 13:49
Ethylbenzene	< 2.00	ug/L		6/2/2022 13:49
m,p-Xylene	< 2.00	ug/L		6/2/2022 13:49
o-Xylene	< 2.00	ug/L		6/2/2022 13:49
Toluene	< 2.00	ug/L		6/2/2022 13:49

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**74.1**	81.1 - 136	*	6/2/2022 13:49
4-Bromofluorobenzene	**76.6**	75.8 - 132		6/2/2022 13:49
Pentafluorobenzene	**126**	82 - 132		6/2/2022 13:49
Toluene-D8	**106**	64.6 - 137		6/2/2022 13:49

Method Reference(s): EPA 8260C
EPA 5030C
Data File: z09595.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: Neu-Velle

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier: GEN - DUP - 052322
Lab Sample ID: 222457-03 **Date Sampled:** 5/23/2022
Matrix: Groundwater **Date Received:** 5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L	UJ	6/2/2022 14:09
Ethylbenzene	< 2.00	ug/L		6/2/2022 14:09
m,p-Xylene	< 2.00	ug/L		6/2/2022 14:09
o-Xylene	< 2.00	ug/L		6/2/2022 14:09
Toluene	< 2.00	ug/L		6/2/2022 14:09

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**72.5**	81.1 - 136	*	6/2/2022 14:09
4-Bromofluorobenzene	**74.3**	75.8 - 132	*	6/2/2022 14:09
Pentafluorobenzene	**129**	82 - 132		6/2/2022 14:09
Toluene-D8	**109**	64.6 - 137		6/2/2022 14:09

Method Reference(s): EPA 8260C
EPA 5030C
Data File: z09596.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier: GEN - MW2 - 052322
Lab Sample ID: 222457-04 **Date Sampled:** 5/23/2022
Matrix: Groundwater **Date Received:** 5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L	UJ	6/2/2022 14:28
Ethylbenzene	< 2.00	ug/L	M	6/2/2022 14:28
m,p-Xylene	< 2.00	ug/L		6/2/2022 14:28
o-Xylene	< 2.00	ug/L		6/2/2022 14:28
Toluene	< 2.00	ug/L		6/2/2022 14:28

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**70.5**	81.1 - 136	*	6/2/2022 14:28
4-Bromofluorobenzene	**68.1**	75.8 - 132	*	6/2/2022 14:28
Pentafluorobenzene	**126**	82 - 132		6/2/2022 14:28
Toluene-D8	**100**	64.6 - 137		6/2/2022 14:28

Method Reference(s): EPA 8260C
EPA 5030C
Data File: z09597.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: Neu-Velle

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier: GEN - MW1 - 052422
Lab Sample ID: 222457-05
Matrix: Groundwater
Date Sampled: 5/24/2022
Date Received: 5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L	UJ	6/2/2022 15:45
Ethylbenzene	< 2.00	ug/L		6/2/2022 15:45
m,p-Xylene	< 2.00	ug/L		6/2/2022 15:45
o-Xylene	< 2.00	ug/L		6/2/2022 15:45
Toluene	< 2.00	ug/L		6/2/2022 15:45

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**72.8**	81.1 - 136	*	6/2/2022 15:45
4-Bromofluorobenzene	**72.2**	75.8 - 132	*	6/2/2022 15:45
Pentafluorobenzene	**125**	82 - 132		6/2/2022 15:45
Toluene-D8	**106**	64.6 - 137		6/2/2022 15:45

Method Reference(s): EPA 8260C
EPA 5030C
Data File: z09601.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: Neu-Velle

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier: GEN - MW4 - 052422
Lab Sample ID: 222457-06
Matrix: Groundwater
Date Sampled: 5/24/2022
Date Received: 5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier		Date Analyzed
Benzene	**0.503**	ug/L	J	J	6/2/2022 16:05
Ethylbenzene	< 2.00	ug/L	UJ		6/2/2022 16:05
m,p-Xylene	**2.98**	ug/L	J		6/2/2022 16:05
o-Xylene	< 2.00	ug/L	UJ		6/2/2022 16:05
Toluene	< 2.00	ug/L	UJ		6/2/2022 16:05

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**68.6**	81.1 - 136	*	6/2/2022 16:05
4-Bromofluorobenzene	**68.9**	75.8 - 132	*	6/2/2022 16:05
Pentafluorobenzene	**122**	82 - 132		6/2/2022 16:05
Toluene-D8	**98.6**	64.6 - 137		6/2/2022 16:05

Method Reference(s): EPA 8260C
EPA 5030C
Data File: z09602.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: Neu-Velle

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier: GEN - MW6 - 052522
Lab Sample ID: 222457-07
Matrix: Groundwater
Date Sampled: 5/25/2022
Date Received: 5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	**164**	ug/L	J	6/2/2022 15:26
Ethylbenzene	**46.7**	ug/L		6/2/2022 15:26
m,p-Xylene	**55.7**	ug/L		6/2/2022 15:26
o-Xylene	**48.5**	ug/L		6/2/2022 15:26
Toluene	**49.8**	ug/L		6/2/2022 15:26

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**79.8**	81.1 - 136	*	6/2/2022 15:26
4-Bromofluorobenzene	**88.8**	75.8 - 132		6/2/2022 15:26
Pentafluorobenzene	**122**	82 - 132		6/2/2022 15:26
Toluene-D8	**108**	64.6 - 137		6/2/2022 15:26

Method Reference(s): EPA 8260C
EPA 5030C
Data File: z09600.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW8 - 052522		
Lab Sample ID:	222457-08	**Date Sampled:**	5/25/2022
Matrix:	Groundwater	**Date Received:**	5/26/2022

Volatile Organics

Analyte	Result	Units		Qualifier	Date Analyzed
Benzene	**1.88**	ug/L	J		6/2/2022 16:24
Ethylbenzene	**3.08**	ug/L			6/2/2022 16:24
m,p-Xylene	**5.86**	ug/L			6/2/2022 16:24
o-Xylene	**3.12**	ug/L			6/2/2022 16:24
Toluene	**2.00**	ug/L		J	6/2/2022 16:24

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**75.4**	81.1 - 136	*	6/2/2022 16:24
4-Bromofluorobenzene	**79.3**	75.8 - 132		6/2/2022 16:24
Pentafluorobenzene	**121**	82 - 132		6/2/2022 16:24
Toluene-D8	**106**	64.6 - 137		6/2/2022 16:24

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

Data File: z09603.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: **Neu-Velle**

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier:	GEN - MW7 - 052622		
Lab Sample ID:	222457-09	**Date Sampled:**	5/26/2022
Matrix:	Groundwater	**Date Received:**	5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L		6/2/2022 16:43
Ethylbenzene	< 2.00	ug/L		6/2/2022 16:43
m,p-Xylene	< 2.00	ug/L		6/2/2022 16:43
o-Xylene	< 2.00	ug/L		6/2/2022 16:43
Toluene	< 2.00	ug/L		6/2/2022 16:43

Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**81.6**	81.1 - 136		6/2/2022 16:43
4-Bromofluorobenzene	**78.8**	75.8 - 132		6/2/2022 16:43
Pentafluorobenzene	**113**	82 - 132		6/2/2022 16:43
Toluene-D8	**103**	64.6 - 137		6/2/2022 16:43

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

Data File: z09604.D

Report Prepared Friday, September 2, 2022

PARADIGM ENVIRONMENTAL SERVICES, INC.

Lab Project ID: 222457

Client: Neu-Velle

Project Reference: RGE Geneseo Fmr. MGP Site

Sample Identifier: Trip Blank
Lab Sample ID: 222457-10
Matrix: Water
Date Sampled: 5/26/2022
Date Received: 5/26/2022

Volatile Organics

Analyte	Result	Units	Qualifier	Date Analyzed
Benzene	< 1.00	ug/L	UJ	6/2/2022 12:07
Ethylbenzene	< 2.00	ug/L		6/2/2022 12:07
m,p-Xylene	< 2.00	ug/L		6/2/2022 12:07
o-Xylene	< 2.00	ug/L		6/2/2022 12:07
Toluene	< 2.00	ug/L		6/2/2022 12:07

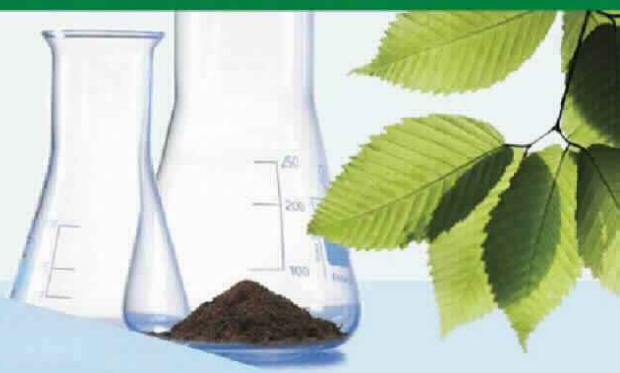
Surrogate	Percent Recovery	Limits	Outliers	Date Analyzed
1,2-Dichloroethane-d4	**75.8**	81.1 - 136	*	6/2/2022 12:07
4-Bromofluorobenzene	**78.7**	75.8 - 132		6/2/2022 12:07
Pentafluorobenzene	**121**	82 - 132		6/2/2022 12:07
Toluene-D8	**107**	64.6 - 137		6/2/2022 12:07

Method Reference(s): EPA 8260C
EPA 5030C
Data File: z09590.D

MKP 9/8/2022

Report Prepared Friday, September 2, 2022

www.alphalab.com



Alpha Analytical

Laboratory Code: 11148

SDG Number: L2228058

Project Name: 222457
Project Number: 222457

Lab Number: L2228058
Report Date: 06/09/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2228058-01	GEN MW3-052322 222457-01	WATER	Not Specified	05/23/22 14:00	05/26/22
L2228058-02	GEN-EB-052322 222457-02	WATER	Not Specified	05/23/22 12:45	05/26/22
L2228058-03	GEN-DUP-052322 222457-03	WATER	Not Specified	05/23/22 00:00	05/26/22
L2228058-04	GEN-MW2-052322 222457-04	WATER	Not Specified	05/23/22 15:30	05/26/22
L2228058-05	GEN-MW1-052422 222457-05	WATER	Not Specified	05/24/22 14:45	05/26/22
L2228058-06	GEN-MW4-052422 222457-06	WATER	Not Specified	05/24/22 16:30	05/26/22
L2228058-07	GEN-MW6-052522 222457-07	WATER	Not Specified	05/25/22 14:45	05/26/22
L2228058-08	GEN-MW8-052522 222457-08	WATER	Not Specified	05/25/22 16:30	05/26/22
L2228058-09	GEN-MW7-052622 222457-09	WATER	Not Specified	05/26/22 13:00	05/26/22

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Caitlin Walukevich Report Date: 06/09/22

Title: Technical Director/Representative

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

1 of 3

PARADIGM ENVIRONMENTAL SERVICES, INC.

CHAIN OF CUSTODY L2228058

11148

REPORT TO:		INVOICE TO:	
COMPANY:	Paradigm Environmental	COMPANY:	Same
ADDRESS:	179 Lake Avenue	ADDRESS:	
CITY:	Rochester STATE: NY ZIP: 14608	CITY:	STATE: ZIP:
PHONE:	FAX:	PHONE:	FAX:
ATTN:	Reporting	ATTN:	Accounts Payable
COMMENTS:	Please email results to reporting@paradigmenv.com		

PROJECT NAME/SITE NAME:

LAB PROJECT #: CLIENT PROJECT #:

TURNAROUND TIME: (WORKING DAYS) ☐1 ☐2 ☐3 STD ☐5 OTHER: 10 Day

Date Due: 6/10/22 for data

REQUESTED ANALYSIS

	DATE	TIME	COMPOSITE	GRAB	SAMPLE LOCATION/FIELD ID	MATRIX	NUMBER OF CONTAINERS	8270 PAH			REMARKS	PARADIGM LAB SAMPLE NUMBER
1	5/23/22	14:00		X	GEN-MW3-052322	WG	1	X			NYS ASP Cat B Report Pkg and NYSDEC EDD	222457-01
2	5/23/22	12:45		X	GEN-EB-052322	WG	1	X				02
3	5/23/22			X	GEN-DUP-052322	WG	1	X				03
4	5/23/22	15:30		X	GEN-MW2-052322	WG	1	X			SIM for PAH DLs as needed	04
5	5/24/22	14:45		X	GEN-MW1-052422	WG	1	X				05
6	5/24/22	16:30		X	GEN-MW4-052422	WG	1	X				06
7	5/25/22	14:45		X	GEN-MW6-052522	WG	1	X			Run MS/MSD on sample GEN-MW2-052322	07
8	5/25/22	16:30		X	GEN-MW8-052522	WG	1	X				08
9	5/26/22	13:00		X	GEN-MW7-052622	WG	1	X				09
10												

LAB USE ONLY BELOW THIS LINE

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

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

Client

	Signature	Date/Time
Sampled By	[signature]	5/26/22 1600
Relinquished By	R Cunningham AAL	5/26/22 16:00
Received By	[signature]	5/27/22 0030
Received By		
Received @ Lab By		

Total Cost:

P.I.F.

Semivolatiles Data
by Method 8270D-SIM

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-01	Date Collected	: 05/23/22 14:00
Client ID	: GEN MW3-052322 222457-01	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/29/22 16:19
Sample Matrix	: WATER	Date Extracted	: 05/27/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-01	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.04	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U UJ
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.05	U

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-02	Date Collected	: 05/23/22 12:45
Client ID	: GEN-EB-052322 222457-02	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/29/22 16:35
Sample Matrix	: WATER	Date Extracted	: 05/27/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-02	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter	ug/L Results	RL	MDL	Qualifier	
83-32-9	Acenaphthene	ND	0.10	0.04	U	
91-58-7	2-Chloronaphthalene	ND	0.20	0.04	U	
206-44-0	Fluoranthene	ND	0.10	0.04	U	
91-20-3	Naphthalene	ND	0.10	0.04	U	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U	
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U	UJ
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U	
218-01-9	Chrysene	ND	0.10	0.04	U	
208-96-8	Acenaphthylene	ND	0.10	0.04	U	
120-12-7	Anthracene	ND	0.10	0.04	U	
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U	
86-73-7	Fluorene	ND	0.10	0.04	U	
85-01-8	Phenanthrene	ND	0.10	0.02	U	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U	
129-00-0	Pyrene	ND	0.10	0.04	U	
91-57-6	2-Methylnaphthalene	ND	0.10	0.05	U	

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-03	Date Collected	: 05/23/22 00:00
Client ID	: GEN-DUP-052322 222457-03	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/29/22 16:52
Sample Matrix	: WATER	Date Extracted	: 05/27/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-03	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.04	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U UJ
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.05	U

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-04	Date Collected	: 05/23/22 15:30
Client ID	: GEN-MW2-052322 222457-04	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/29/22 17:08
Sample Matrix	: WATER	Date Extracted	: 05/27/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-04	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.04	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U UJ
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U UJ
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U UJ
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U UJ
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U UJ
129-00-0	Pyrene	ND	0.10	0.04	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.05	U

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-05	Date Collected	: 05/24/22 14:45
Client ID	: GEN-MW1-052422 222457-05	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/29/22 18:46
Sample Matrix	: WATER	Date Extracted	: 05/27/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-05	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.04	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U UJ
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.05	U

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-06	Date Collected	: 05/24/22 16:30
Client ID	: GEN-MW4-052422 222457-06	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/29/22 19:02
Sample Matrix	: WATER	Date Extracted	: 05/27/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-06	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.04	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U UJ
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	0.03	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.05	U

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-07	Date Collected	: 05/25/22 14:45
Client ID	: GEN-MW6-052522 222457-07	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/31/22 20:01
Sample Matrix	: WATER	Date Extracted	: 05/29/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-07	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

			ug/L			
CAS NO.	Parameter		Results	RL	MDL	Qualifier
83-32-9	Acenaphthene		2.9	0.10	0.04	
91-58-7	2-Chloronaphthalene		ND	0.20	0.04	U
206-44-0	Fluoranthene		0.05	0.10	0.04	J
91-20-3	Naphthalene		200	0.10	0.04	E
56-55-3	Benzo(a)anthracene	0.05 UJ	~~0.02~~	0.10	0.02	J
50-32-8	Benzo(a)pyrene		ND	0.10	0.04	U UJ
205-99-2	Benzo(b)fluoranthene		ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene		ND	0.10	0.04	U
218-01-9	Chrysene		ND	0.10	0.04	U
208-96-8	Acenaphthylene		29	0.10	0.04	E
120-12-7	Anthracene		0.42	0.10	0.04	
191-24-2	Benzo(ghi)perylene		ND	0.10	0.04	U
86-73-7	Fluorene		5.5	0.10	0.04	
85-01-8	Phenanthrene		1.9	0.10	0.02	
53-70-3	Dibenzo(a,h)anthracene		ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene		ND	0.10	0.04	U UJ
129-00-0	Pyrene		ND	0.10	0.04	U
91-57-6	2-Methylnaphthalene		0.10	0.10	0.05	J

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

Client	: Paradigm Environmental Services	**Lab Number**	: L2228058
Project Name	: 222457	**Project Number**	: 222457
Lab ID	: L2228058-07D	**Date Collected**	: 05/25/22 14:45
Client ID	: GEN-MW6-052522 222457-07	**Date Received**	: 05/26/22
Sample Location	:	**Date Analyzed**	: 06/09/22 16:56
Sample Matrix	: WATER	**Date Extracted**	: 05/29/22
Analytical Method	: 1,8270D-SIM	**Dilution Factor**	: 10
Lab File ID	: 58-07D1	**Analyst**	: RP
Sample Amount	: 1000 ml	**Instrument ID**	: SV118
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
91-20-3	Naphthalene	180	1.0	0.43	
208-96-8	Acenaphthylene	21	1.0	0.35	

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-08	Date Collected	: 05/25/22 16:30
Client ID	: GEN-MW8-052522 222457-08	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/31/22 20:17
Sample Matrix	: WATER	Date Extracted	: 05/29/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-08	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

CAS NO.	Parameter		ug/L Results	RL	MDL	Qualifier	
83-32-9	Acenaphthene		ND	0.10	0.04	U	
91-58-7	2-Chloronaphthalene		ND	0.20	0.04	U	
206-44-0	Fluoranthene		ND	0.10	0.04	U	
91-20-3	Naphthalene		ND	0.10	0.04	U	
56-55-3	Benzo(a)anthracene	0.10 UJ	~~0.02~~	0.10	0.02	J	
50-32-8	Benzo(a)pyrene		ND	0.10	0.04	U	UJ
205-99-2	Benzo(b)fluoranthene		ND	0.10	0.02	U	
207-08-9	Benzo(k)fluoranthene		ND	0.10	0.04	U	
218-01-9	Chrysene		ND	0.10	0.04	U	
208-96-8	Acenaphthylene		ND	0.10	0.04	U	
120-12-7	Anthracene		ND	0.10	0.04	U	
191-24-2	Benzo(ghi)perylene		ND	0.10	0.04	U	
86-73-7	Fluorene		ND	0.10	0.04	U	
85-01-8	Phenanthrene		ND	0.10	0.02	U	
53-70-3	Dibenzo(a,h)anthracene		ND	0.10	0.04	U	
193-39-5	Indeno(1,2,3-cd)pyrene		ND	0.10	0.04	U	UJ
129-00-0	Pyrene		ND	0.10	0.04	U	
91-57-6	2-Methylnaphthalene		ND	0.10	0.05	U	

MKP 9/8/2022

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: L2228058-09	Date Collected	: 05/26/22 13:00
Client ID	: GEN-MW7-052622 222457-09	Date Received	: 05/26/22
Sample Location	:	Date Analyzed	: 05/31/22 20:34
Sample Matrix	: WATER	Date Extracted	: 05/29/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 28058-09	Analyst	: RP
Sample Amount	: 900 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 900 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
83-32-9	Acenaphthene	ND	0.11	0.04	U	
91-58-7	2-Chloronaphthalene	ND	0.22	0.04	U	
206-44-0	Fluoranthene	ND	0.11	0.04	U	
91-20-3	Naphthalene	ND	0.11	0.05	U	
56-55-3	Benzo(a)anthracene	ND	0.11	0.02	U	
50-32-8	Benzo(a)pyrene	ND	0.11	0.04	U	UJ
205-99-2	Benzo(b)fluoranthene	ND	0.11	0.02	U	
207-08-9	Benzo(k)fluoranthene	ND	0.11	0.05	U	
218-01-9	Chrysene	ND	0.11	0.04	U	
208-96-8	Acenaphthylene	ND	0.11	0.04	U	
120-12-7	Anthracene	ND	0.11	0.04	U	
191-24-2	Benzo(ghi)perylene	ND	0.11	0.05	U	
86-73-7	Fluorene	ND	0.11	0.04	U	
85-01-8	Phenanthrene	0.03	0.11	0.02	J	
53-70-3	Dibenzo(a,h)anthracene	ND	0.11	0.04	U	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.11	0.04	U	UJ
129-00-0	Pyrene	ND	0.11	0.04	U	
91-57-6	2-Methylnaphthalene	ND	0.11	0.05	U	

MKP 9/8/2022

Appendix B

Laboratory QC Documentation

VOLATILE SURROGATE RECOVERY

Lab Name: Paradigm Environmental Services
Lab Project #: 222457
Client Name: Neu-Velle
Client Project Name: RGE Geneseo Fmr. MGP Site
Client Project #: N/A
SDG No.: 2457-01
Matrix: Groundwater
QC Batch: voaw220602

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

	LAB SAMPLE NO.	CLIENT SAMPLE ID	PFB %REC	12DCEd4 %REC	TD8 %REC	4BFB %REC	Total Out
1	Blk 1	N/A	116	82.6	107	79.3	0
2	LCS 1	N/A	116	67.0 *	97.8	75.3 *	2
3	222457-01	GEN - MW3 - 052322	121	83.7	115	87.0	0
4	222457-02	GEN - EB - 052322	126	74.1 *	106	76.6	1
5	222457-03	GEN - DUP - 052322	129	72.5 *	109	74.3 *	2
6	222457-04	GEN - MW2 - 052322	126	70.5 *	100	68.1 *	2
7	222457-04MS	GEN - MW2 - 052322 MS	123	75.1 *	108	89.5	1
8	222457-04MSD	GEN - MW2 - 052322 MSD	122	86.6	110	95.7	0
9	222457-05	GEN - MW1 - 052422	125	72.8 *	106	72.2 *	2
10	222457-06	GEN - MW4 - 052422	122	68.6 *	98.6	68.9 *	2
11	222457-07	GEN - MW6 - 052522	122	79.8 *	108	88.8	1
12	222457-08	GEN - MW8 - 052522	121	75.4 *	106	79.3	1
13	222457-09	GEN - MW7 - 052622	113	81.6	103	78.8	0
14	222457-10	Trip Blank	121	75.8 *	107	78.7	1
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

	QC LIMITS %
PFB = Pentafluorobenzene	(82 - 132)
12DCEd4 = 1,2-Dichloroethane-d4	(81.1 - 136)
TD8 = Toluene-d8	(64.6 - 137)
4BFB = 4-Bromofluorobenzene	(75.8 - 132)

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

PARADIGM ENVIRONMENTAL SERVICES, INC.

QC Report for Matrix Spike and Matrix Spike Duplicate

SDG #: 2457-01

Client: Neu-Velle

Lab Project ID: 222457

Project Reference: RGE Geneseo Fmr. MGP Site

Lab Sample ID: 222457-04

Sample Identifier: GEN - MW2 - 052322

Matrix: Groundwater

Date Sampled: 5/23/2022

Date Received: 5/26/2022

Date Analyzed: 6/2/2022

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	56.4	113	50.0	53.7	107	81.6 - 114			4.81	15	
Ethylbenzene	< 2.00	ug/L	50.0	57.7	115	50.0	52.6	105	72.1 - 110	*		9.27	20	
Toluene	< 2.00	ug/L	50.0	58.2	116	50.0	56.4	113	62.9 - 125			3.11	32	

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

Data File(s): z09598.D
z09599.D
z09597.D
1

QC Batch ID: voaw220602

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

Report Prepared *Friday, September 2, 2022*

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Client Sample ID	: GEN-MW2-052322 222457-04	Matrix	: WATER
Lab Sample ID	: L2228058-04	Analysis Date	: 05/29/22 17:08
Matrix Spike	: WG1643559-4	MS Analysis Date	: 06/09/22 17:48
Matrix Spike Dup	: WG1643559-5	MSD Analysis Date	: 06/09/22 18:04

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Acenaphthene	ND	10	6.4	64	10	7.8	78	20	40-140	40
2-Chloronaphthalene	ND	10	6.3	63	10	7.7	77	20	40-140	40
Fluoranthene	ND	10	7.8	78	10	9.3	93	18	40-140	40
Naphthalene	ND	10	6.2	62	10	7.5	75	19	40-140	40
Benzo(a)anthracene	ND	10	7.0	70	10	8.5	85	19	40-140	40
Benzo(a)pyrene	ND	10	4.4	44	10	5.0	50	13	40-140	40
Benzo(b)fluoranthene	ND	10	4.2	42	10	5.0	50	17	40-140	40
Benzo(k)fluoranthene	ND	10	3.8	38 Q	10	4.2	42	10	40-140	40
Chrysene	ND	10	5.3	53	10	6.2	62	16	40-140	40
Acenaphthylene	ND	10	6.9	69	10	8.4	84	20	40-140	40
Anthracene	ND	10	6.7	67	10	8.1	81	19	40-140	40
Benzo(ghi)perylene	ND	10	1.2	12 Q	10	1.4	14 Q	15	40-140	40
Fluorene	ND	10	6.8	68	10	8.2	82	19	40-140	40
Phenanthrene	ND	10	6.1	61	10	7.5	75	21	40-140	40
Dibenzo(a,h)anthracene	ND	10	1.4	14 Q	10	1.6	16 Q	13	40-140	40
Indeno(1,2,3-cd)pyrene	ND	10	1.4	14 Q	10	1.7	17 Q	19	40-140	40
Pyrene	ND	10	8.1	81	10	9.5	95	16	40-140	40
2-Methylnaphthalene	ND	10	6.2	62	10	7.5	75	19	40-140	40

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

Client	: Paradigm Environmental Services	Lab Number	: L2228058
Project Name	: 222457	Project Number	: 222457
Lab ID	: WG1644257-1	Date Collected	: NA
Client ID	: WG1644257-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 05/31/22 19:45
Sample Matrix	: WATER	Date Extracted	: 05/29/22
Analytical Method	: 1,8270D-SIM	Dilution Factor	: 1
Lab File ID	: 644257-1	Analyst	: RP
Sample Amount	: 1000 ml	Instrument ID	: SV115
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.04	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.04	U
206-44-0	Fluoranthene	ND	0.10	0.04	U
91-20-3	Naphthalene	ND	0.10	0.04	U
56-55-3	Benzo(a)anthracene	0.02	0.10	0.02	J
50-32-8	Benzo(a)pyrene	ND	0.10	0.04	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.02	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.04	U
218-01-9	Chrysene	ND	0.10	0.04	U
208-96-8	Acenaphthylene	ND	0.10	0.04	U
120-12-7	Anthracene	ND	0.10	0.04	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.04	U
86-73-7	Fluorene	ND	0.10	0.04	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.04	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.04	U
129-00-0	Pyrene	ND	0.10	0.04	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.05	U

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Paradigm Environmental Services	Lab Number	: L2228058		
Project Name	: 222457	Project Number	: 222457		
Instrument ID	: SV115	Calibration Date	: 05/29/22 07:24		
Lab File ID	: CCV0529A	Init. Calib. Date(s)	: 02/04/22	02/04/22	
Sample No	: WG1644230-3	Init. Calib. Times	: 15:41	18:08	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	100	0
2-Fluorophenol	0.944	1.021	.05	-8.2	20	104	0
Phenol-d6	1.196	1.289	.05	-7.8	20	101	0
Hexachloroethane	0.496	0.531	.05	-7.1	20	103	0
Bis(2-chloroethyl)ether	1.127	1.097	.05	2.7	20	95	0
n-nitrosodi-n-propylamine	0.764	0.857	.05	-12.2	20	104	0
Nitrobenzene-d5	0.917	1.295	.05	-41.2*	20	127	0
Naphthalene-d8	1	1	.05	0	20	105	0
Naphthalene	1.025	0.953	.05	7	20	98	0
Hexachlorobutadiene	0.189	0.182	.05	3.7	20	102	0
2-Methylnaphthalene	0.627	0.611	.05	2.6	20	101	0
1-Methylnaphthalene	0.607	0.597	.05	1.6	20	105	0
2-Fluorobiphenyl	0.735	0.688	.05	6.4	20	106	0
2-Chloronaphthalene	0.649	0.632	.05	2.6	20	103	0
Acenaphthylene	0.972	1.102	.05	-13.4	20	112	0
Acenaphthene-d10	1	1	.05	0	20	118	0
Acenaphthene	1.325	1.202	.05	9.3	20	107	0
Fluorene	1.404	1.392	.05	0.9	20	112	0
2,4,6-Tribromophenol	0.127	0.198	.05	-55.9*	20	157	0
Phenanthrene-d10	1	1	.05	0	20	126	0
4,6-Dinitro-o-cresol	5	9.924	.05	-98.5*	20	276	0
Hexachlorobenzene	0.228	0.207	.05	9.2	20	115	0
Pentachlorophenol	5	8.051	.05	-61*	20	223	0
Phenanthrene	1.104	0.962	.05	12.9	20	110	0
Anthracene	1.024	0.944	.05	7.8	20	110	0
O-Terphenyl-MS	0.531	0.512	.05	3.6	20	122	0
Fluoranthene	1.146	1.162	.05	-1.4	20	120	0
Pyrene	1.198	1.221	.05	-1.9	20	119	0
4-Terphenyl-d14	0.726	0.711	.05	2.1	20	126	0
Chrysene-d12	1	1	.05	0	20	126	0
Benzo[a]anthracene	1.263	1.173	.05	7.1	20	114	0
Chrysene	1.312	1.257	.05	4.2	20	121	0
Bis(2-ethylhexyl)phthalate	5	7.877	.05	-57.5*	20	206	0
Perylene-d12	1	1	.05	0	20	116	0
Benzo[b]fluoranthene	1.265	1.375	.05	-8.7	20	116	0
Benzo[k]fluoranthene	1.252	1.414	.05	-12.9	20	116	0
Benzo[a]pyrene	1.044	1.281	.05	-22.7*	20	125	0
Indeno[1,2,3-cd]pyrene	0.926	0.891	.05	3.8	20	100	0
Dibenzo[a,h]anthracene	0.989	1.131	.05	-14.4	20	115	0
Benzo[g,h,i]perylene	1.108	1.123	.05	-1.4	20	107	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Paradigm Environmental Services	Lab Number	: L2228058		
Project Name	: 222457	Project Number	: 222457		
Instrument ID	: SV115	Calibration Date	: 05/31/22 12:43		
Lab File ID	: CCV0531B	Init. Calib. Date(s)	: 02/04/22	02/04/22	
Sample No	: WG1644744-3	Init. Calib. Times	: 15:41	18:08	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	78	0
2-Fluorophenol	0.944	1.118	.05	-18.4	20	89	0
Phenol-d6	1.196	1.381	.05	-15.5	20	84	0
Hexachloroethane	0.496	0.556	.05	-12.1	20	84	0
Bis(2-chloroethyl)ether	1.127	1.168	.05	-3.6	20	79	0
n-nitrosodi-n-propylamine	0.764	0.915	.05	-19.8	20	86	0
Nitrobenzene-d5	0.917	1.381	.05	-50.6*	20	106	0
Naphthalene-d8	1	1	.05	0	20	81	0
Naphthalene	1.025	1.036	.05	-1.1	20	82	0
Hexachlorobutadiene	0.189	0.198	.05	-4.8	20	86	0
2-Methylnaphthalene	0.627	0.677	.05	-8	20	86	0
1-Methylnaphthalene	0.607	0.637	.05	-4.9	20	86	0
2-Fluorobiphenyl	0.735	0.744	.05	-1.2	20	89	0
2-Chloronaphthalene	0.649	0.669	.05	-3.1	20	84	0
Acenaphthylene	0.972	1.147	.05	-18	20	90	0
Acenaphthene-d10	1	1	.05	0	20	88	0
Acenaphthene	1.325	1.326	.05	-0.1	20	87	0
Fluorene	1.404	1.508	.05	-7.4	20	90	0
2,4,6-Tribromophenol	0.127	0.222	.05	-74.8*	20	130	0
Phenanthrene-d10	1	1	.05	0	20	89	0
4,6-Dinitro-o-cresol	5	10.361	.05	-107.2*	20	205	0
Hexachlorobenzene	0.228	0.236	.05	-3.5	20	93	0
Pentachlorophenol	5	8.297	.05	-65.9*	20	163	0
Phenanthrene	1.104	1.12	.05	-1.4	20	90	0
Anthracene	1.024	1.133	.05	-10.6	20	93	0
O-Terphenyl-MS	0.531	0.578	.05	-8.9	20	98	0
Fluoranthene	1.146	1.291	.05	-12.7	20	94	0
Pyrene	1.198	1.337	.05	-11.6	20	92	0
4-Terphenyl-d14	0.726	0.797	.05	-9.8	20	100	0
Chrysene-d12	1	1	.05	0	20	91	0
Benzo[a]anthracene	1.263	1.391	.05	-10.1	20	97	0
Chrysene	1.312	1.308	.05	0.3	20	91	0
Bis(2-ethylhexyl)phthalate	5	7.775	.05	-55.5*	20	147	0
Perylene-d12	1	1	.05	0	20	94	0
Benzo[b]fluoranthene	1.265	1.447	.05	-14.4	20	99	0
Benzo[k]fluoranthene	1.252	1.383	.05	-10.5	20	92	0
Benzo[a]pyrene	1.044	1.341	.05	-28.4*	20	106	0
Indeno[1,2,3-cd]pyrene	0.926	1.151	.05	-24.3*	20	105	0
Dibenzo[a,h]anthracene	0.989	1.187	.05	-20	20	98	0
Benzo[g,h,i]perylene	1.108	1.226	.05	-10.6	20	95	0

* Value outside of QC limits.

Appendix C

Validator Qualifications

KENNETH R. APPLIN
Geochemist/Data Validator

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

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

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

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

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

MICHAEL K. PERRY
Chemist/Data Validator

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

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

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

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