

FORMER SPEEDWAY STATION
39-04 NORTHERN BOULEVARD
LONG ISLAND CITY, NEW YORK 11101

QUARTERLY GROUNDWATER MONITORING REPORT

THRID QUARTER 2021

NYSDEC SPILL #95-00846

SUBMITTED TO:



New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A, Section C
625 Broadway
Albany, New York 12233

PREPARED FOR:

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322 West 52nd Street. #523
New York, New York 10101

PREPARED BY:



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PWGC Project Number: RDC2002

SEPTEMBER 2021



3RD QUARTER 2021 - QUARTERLY GROUNDWATER MONITORING REPORT
NYSDEC SPILL #95-00846

TABLE OF CONTENTS		Page
1.0	INTRODUCTION	1
1.1	Site Description and History.....	1
2.0	QUARTERLY GROUNDWATER MONITORING AND SAMPLING.....	2
2.1	Groundwater Monitoring.....	2
2.2	Monitoring Well Sampling	2
2.3	Monitoring Well Sampling Results.....	3
3.0	CONCLUSIONS.....	4
4.0	RECOMMENDATIONS.....	4
5.0	REFERENCES.....	4

FIGURES

- Figure 1 Vicinity Map
Figure 2 Site Plan with MBTE and BTEX Concentrations and GW Flow

TABLES

- Table 1 Monitoring Well Sampling Data - VOCs
Table 2 Historical Monitoring Well Sampling Data – BTEX and MBTE

APPENDICES

- Appendix A Monitoring Well Sampling Logs
Appendix B Hydrographs
Appendix C Laboratory Analytical Report

Confidentially provided to
James Lorain
Goodman
168.149.143.115
10/01/2021 9:07 AM



1.0 INTRODUCTION

P.W. Grosser Consulting, Inc. (PWGC) has prepared this report to document the results of the third quarter 2021 groundwater monitoring at 39-04 Northern Boulevard, Long Island City, New York. Quarterly groundwater monitoring at the site had been conducted by Envirotrac LTD. (Envirotrac) starting in June 2013 until August 2018. Envirotrac conducted twenty-two monitoring events from June 2013 to August 2018. The property's ownership entity changed in November 2018 and PWGC was retained to continue groundwater monitoring at the site. This report documents the twelfth monitoring event performed by PWGC since November 2018.

1.1 Site Description and History

The subject property consists of one parcel located at 39-04 Northern Boulevard in Long Island City, New York. The property is identified as Block 183, Lot 12 in the New York City Tax Map. A Site Location Map is included as **Figure 1**.

The subject property is a former retail gasoline fueling station, fueling operations ceased in October 2018. The lot measures approximately 38,917 square feet in total and is improved with one single-story commercial building measuring 2,520 square feet, one storage unit measuring approximately 720 square feet, a pump island canopy, and an asphalt paved parking area. The site was first developed in approximately 1936 and has been used as a fueling station since the late 1930's.

Impacted soils were encountered during an underground storage tank upgrade project in April 1995. As part of the Underground Storage Tank (UST) upgrade, four (4) 4,000 gallon, two (2) 2,000-gallon, and thirty-eight (38) 550-gallon steel gasoline and one (1) 1,000-gallon steel fuel-oil underground storage tanks (USTs) were removed from the site, and two (2) 550-gallon USTs were abandoned in place at the central portion of the site. The UST upgrade included the installation of four (4) 4,000-gallon gasoline USTs, one (1) 4,000-gallon diesel UST, and one (1) 550-gallon wastewater UST. During this project, 846 tons of impacted soils were removed for off-site disposal. New York State Department of Environmental Conservation (NYSDEC) Spill number 95-00846 was subsequently opened following the discovery of impacted media. Nine groundwater monitoring wells were installed as part of the monitoring and remedial effort. The nine monitoring wells have been periodically monitored since their installation.

A geophysical survey conducted by PWGC in September 2018 identified the presence of four (4) 550-gallon out of service gasoline USTs on the northwest corner of the property and two (2) out of service 2,000-gallon USTs on the southern portion of the property.



In October 2018, four (4) 4,000-gallon gasoline USTs, one (1) 4,000-gallon diesel UST, one (1) 550-gallon wastewater UST, and four (4) 550-gallon out of service gasoline USTs were closed and removed from the Site. UST closure activities were documented in a UST Closure Report (Envirotrac, November 2018). During the October 2018 UST removal activities, monitoring well MW-9, which was located in the central portion of the property, was destroyed.

Two abandoned 550-gallon USTs and two out of service 2,000-gallon USTs remain at the site and are expected to be removed during future site redevelopment activities.

2.0 QUARTERLY GROUNDWATER MONITORING AND SAMPLING

PWGC mobilized to the site on Wednesday, September 8, 2021 to perform quarterly groundwater monitoring activities.

2.1 Groundwater Monitoring

Groundwater monitoring consisted of collecting and recording depth to water and total well depth measurements for the three monitoring wells on the central and downgradient portion of the site. Groundwater monitoring data is recorded in the Groundwater Monitoring Well Sampling Logs attached in **Appendix A**. Water levels were measured using a Solinst Oil / Water Interface Probe. The locations of the three wells sampled are as follows:

- MW-2: Located on the western portion of the property, downgradient from the former UST locations.
- MW-7: Located on the south-central portion of the property, south of the former UST locations.
- MW-8: Located on the southwest corner of the property, downgradient of the former UST locations.

A site plan illustrating the location of the monitoring wells and the former UST locations is included as **Figure 2**.

2.2 Monitoring Well Sampling

Groundwater analytical results were compared to the NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (AWQS) as specified in New York Codes, Rules, and Regulations (NYCRR) Part 703 guidance documents.

Samples were collected utilizing low-flow purging and sampling procedures outlined in the USEPA Standard Operating Procedures (SOP) No. 2007 at each well. These monitoring wells were purged using location dedicated polyethylene and silicone tubing connected to a peristaltic pump. During purging, the groundwater parameters pH, temperature, conductivity, oxygen reduction potential (ORP), turbidity, and dissolved oxygen were monitored every three minutes with a Horiba U-52 water quality instrument. When measurements stabilized in



accordance with the United States Environmental Protection Agency (USEPA) standard operating procedure EQASOP-GW001, purging was completed, and the Horiba was disconnected. The groundwater samples were then collected directly from the tubing and placed in pre-cleaned laboratory-supplied glassware and packed in a cooler with ice. Samples were delivered under chain-of-custody seal to Alpha Analytical of Westborough, Massachusetts.

The samples were analyzed for the presence of:

- Volatile Organic Compounds (VOCs) by USEPA method 8260 – NYSDEC CP-51 List

All non-disposable sampling equipment (i.e. oil / water interface probe) was decontaminated prior to and between each well by using a distilled water and non-phosphate detergent wash followed by a distilled water rinse.

2.3 Monitoring Well Sampling Results

Analytical results from each well were compared to NYSDEC AWQS. During this sampling period, methyl tert-butyl ether (MTBE) was not detected in the three wells sampled, which is consistent with recent sampling events. The highest concentrations of combined benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected in MW-2 (813.4 ug/L). Lower concentrations of BTEX were observed in MW-8 (36.97 ug/L) and MW-7 (73.9 ug/L). Concentrations of Isopropylbenzene, n-butylbenzene, n-propylbenzene, sec-butylbenzene, and Naphthalene were detected at concentrations greater than AWQS at MW-2 and MW-8, with highest concentrations of these compounds being detected at MW-8. At MW-7, Naphthalene, 1,2,4-Trimethylbenzene, and 1,3,5-Trimethylbenzene were detected at a concentration greater than AWQS.

Based on these results, the highest degree of impact appears to be located directly downgradient of the former UST locations located in the western portion of the property. These findings are consistent with the findings of previous monitoring events performed at this site. The analytical results for BTEX were generally consistent with recent monitoring events and the concentrations detected during this sampling period are less than concentrations observed in 2017 and 2018.

A blind duplicate sample, labeled DUP001, was collected from MW-7 for quality assurance/quality control. Similar results were detected in both the MW-7 sample and DUP001 sample supporting proper sampling collection and laboratory protocol. Additionally, a trip blank sample was placed in the cooler which the samples were transported to the laboratory to determine if the handling and transport of the samples affected sample integrity. No VOCs were detected in the trip blank.



Analytical data results are summarized on **Table 1** and the complete analytical data report is included as **Appendix C**.

Generally, concentrations of VOCs were similar to previous sampling events. Hygrographs are included as **Appendix B**. Historical data dating back to December 2017 for MW-2, MW-7, and MW-8 is included on **Table 2**. Hydrographs have been developed for each of the three monitoring wells illustrating the trends in BTEX and MBTE concentrations over time compared to groundwater elevations. Based on information illustrated on the hydrographs, there is a slight correlation between higher groundwater elevations and decreased BTEX concentrations.

3.0 CONCLUSIONS

Based on analytical data, it appears that the highest levels of residual impact are located directly downgradient from the former UST areas located in the western portion of the site. Petroleum VOC concentrations has remained generally consistent since 2017 with seasonal fluctuations observed that appear to be associated with changes in groundwater elevation.

4.0 RECOMMENDATIONS

Based on the past several years of data demonstrating that petroleum impact in groundwater has remained consistent and generally fluctuates with seasonal trends in groundwater elevations, PWGC recommends that routine groundwater monitoring of MW-2, MW-7, and MW-8 be reduced from quarterly to semi-annual. IF a reduction in the monitoring schedule is approved by NYSDEC, the next scheduled sampling event would occur in March 2022.

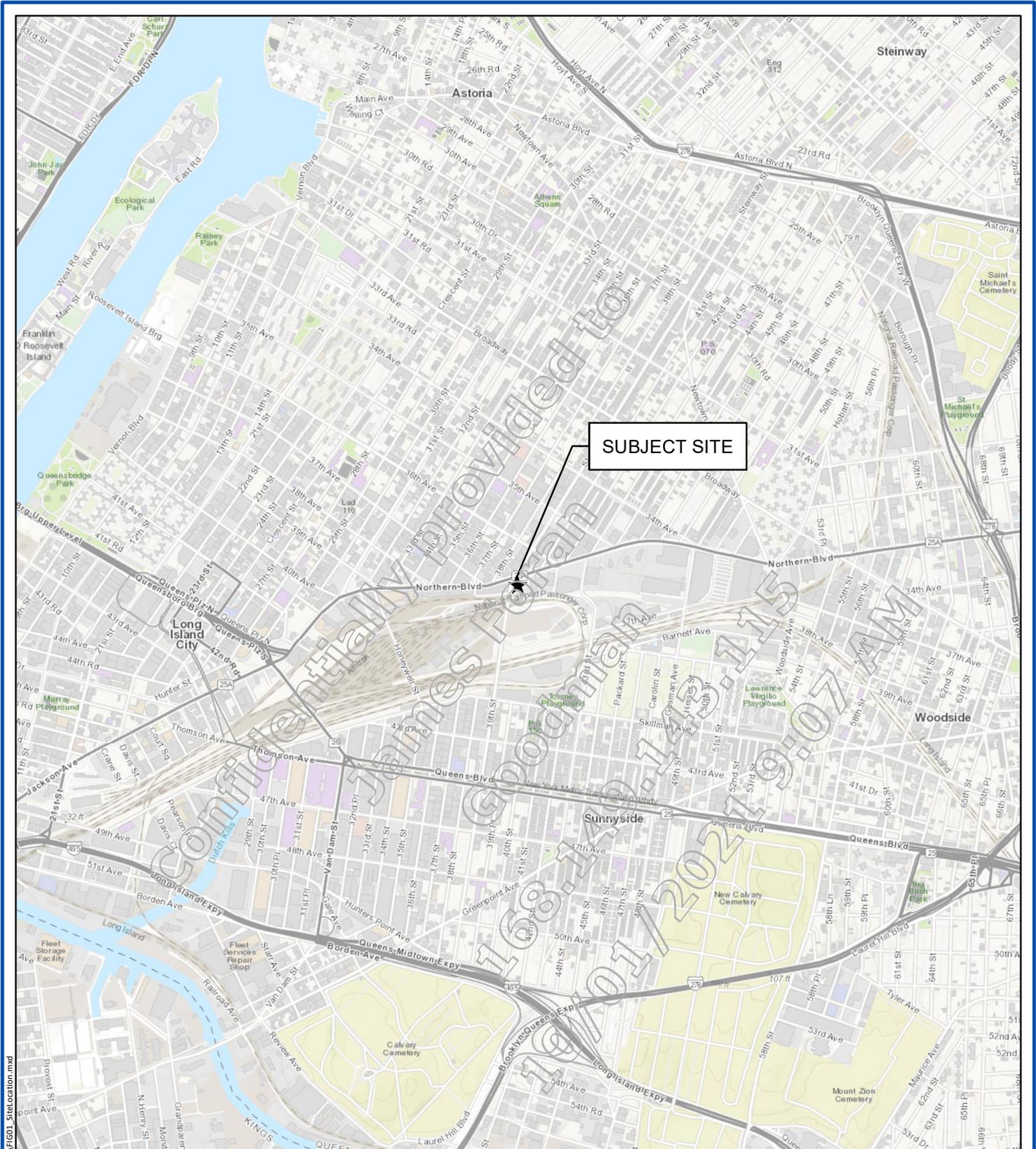
5.0 REFERENCES

NYSDEC, Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance Values; June 1998 and addendum April 2000.

Envirotrac, Tank System Closure Report, Speedway #7830, 39-04 Northern Boulevard, Long Island City, NY, NYSDEC Spill # 95-00846, November 2018.

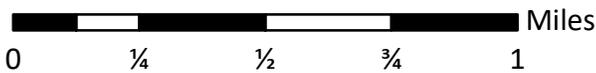
FIGURES

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SITE LOCATION

39-09 Northern Boulevard
Long Island City, NY



Project:	RDC1815
Date:	1/4/2019
Designed by:	RM
Drawn by:	WY
Approved by:	RM
Figure No:	1



PWGC
CLIENT DRIVEN SOLUTIONS

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TABLES

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Table 1

Groundwater Analytical Data for 3rd Quarter 2021 - VOCs 39-04 Northern Boulevard, Long Island City, New York

Sample ID:	NYSDEC	MW-2	MW-7	MW-8	DUP001	TRIP BLANK
Sampling Date:	Ambient Water	9/8/2021	9/8/2021	9/8/2021	9/8/2021	9/8/2021
Laboratory Sample ID:	Quality Standards	L2148123-01	L2148123-02	L2148123-03	L2148123-04	L2148123-05
VOCs by USEPA Method 8260 (CP-51 List) - in ug/L						
1,2,4-Trimethylbenzene	5	3.5 U	24	1.4 U	1.8 U	0.7 U
1,3,5-Trimethylbenzene	5	4.9 J	5.1	1.4 U	1.8 U	0.7 U
Benzene*	1	610	0.16 U	0.67 J	0.48 J	0.16 U
Ethylbenzene*	5	51	4.9	22	22	0.7 U
Isopropylbenzene	5	92	7.5	110	110	0.7 U
Methyl tert butyl ether (MBTE)	10	3.5 U	0.7 U	1.4 U	1.8 U	0.7 U
n-Butylbenzene	5	15	1.5 J	20	21	0.7 U
n-Propylbenzene	5	260	3.1	260	290	0.7 U
Naphthalene	10	56	15	320	350	0.7 U
o-Xylene*	5	7.4 J	18	1.4 U	1.8 U	0.7 U
p-Isopropyltoluene	5	3.5 U	0.7 U	1.4 U	1.8 U	0.7 U
p/m-Xylene*	5	95	51	7.9	8.2	0.7 U
sec-Butylbenzene	5	8.7 J	2.7	14	14	0.7 U
tert-Butylbenzene	5	3.5 U	0.7 U	1.4 U	1.8 U	0.7 U
Toluene*	5	50	0.7 U	6.4	6.2	0.7 U
BTEX	NS	813.4	73.9	36.97	36.88	ND

Notes:

NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.

DUP001 is a blind duplicate of MW-8

NS - No Standard

ND - Non-detect

* - Compounds associated with BTEX

U - Indicates that the analyte was not detected above the laboratory MDL

J - Indicates an estimated value

Highlighted text denotes concentrations exceeding AWQS

Table 2
 Historical Monitoring Well Data
 39-04 Northern Boulevard, LIC, NY

MW-2			
Date	GW Elevation (ft.)	BTEX (ug/L)	MBTE (ug/L)
12/26/2017	16.16	936.9	1.9
1/25/2018	16.15	100.6	ND
3/18/2018	17.10	585.6	ND
6/11/2018	17.19	1,504	1.2
9/27/2018	17.63	1,632.50	1.1
12/7/2018	17.08	701.2	ND
3/22/2019	17.21	160.8	ND
6/27/2019	17.58	1,356	ND
9/26/2019	17.42	1,036	ND
12/18/2019	18.21	522	ND
3/17/2020	16.38	577	ND
6/30/2020	17.04	993	ND
9/25/2020	17.38	1,291	ND
12/29/2020	16.78	1,539	ND
3/31/2021	17.74	573	ND
6/7/2021	17.74	631	ND
9/8/2021	23.33	813	ND

MW-7			
Date	GW Elevation (ft.)	BTEX (ug/L)	MBTE (ug/L)
12/26/2017	15.99	118.8	ND
1/25/2018	16.14	2,374	ND
3/18/2018	17.11	726.5	ND
6/11/2018	17.15	ND	ND
9/27/2018	17.68	12.7	ND
12/7/2018	17.66	ND	ND
3/22/2019	17.73	ND	ND
6/27/2019	17.60	ND	ND
9/26/2019	17.65	5.8	ND
12/18/2019	16.32	ND	ND
3/17/2020	16.90	ND	ND
6/30/2020	16.83	26.7	ND
9/25/2020	15.65	335.0	ND
12/29/2020	17.20	114.2	ND
3/31/2021	17.53	ND	ND
7/28/2021	17.71	3.50	ND
9/8/2021	18.06	73.90	ND

MW-8			
Date	GW Elevation (ft.)	BTEX (ug/L)	MBTE (ug/L)
12/26/2017	16.13	40.00	ND
1/25/2018	16.13	23.1	ND
3/18/2018	17.11	64.1	ND
6/11/2018	17.14	11.5	ND
9/27/2018	17.60	32.5	ND
12/7/2018	17.79	39.29	ND
3/22/2019	18.17	5.15	ND
6/27/2019	17.52	65	ND
9/26/2019	17.43	51	ND
12/18/2019	18.48	36	ND
3/17/2020	18.56	67	ND
6/30/2020	17.00	78	ND
9/25/2020	18.89	102	ND
12/29/2020	17.34	97	ND
3/31/2021	17.71	65	ND
6/7/2021	17.70	38	ND
9/8/2021	18.25	36.97	ND

ND - Not Detected

12/26/2017 result for MW-8 is an aggregate of recent events as the result on this event appeared to be an outlier.

APPENDIX A

Monitoring Well Sampling Logs

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Goodman
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Well Sampling Log

Well Designation:	MW-7	Sampled By:	KC
Site Address:	39-04 Northern Blvd, LIC NY	Project Manager:	Ryan Morley
Project Name:	Speedway	Project Number:	RDC2002
Reference Elevation (ft):	35.35	Well Use:	Monitoring/Observation
Depth to Product (ft):	NP	Product Elevation (ft):	NP
Depth to Water (ft):	17.29	Groundwater Elevation (ft):	18.06
Depth to Bottom (ft):	24.85	Bottom Elevation (ft):	NM
Height of Water Column (ft):	7.56	Well Diameter (in):	4
Standing Water Volume (gal):	4.70	Calculated Purge Volume (gal):	N/A
Sample Date:	9/8/2021	Begin Purge Time:	7:54
Sample Time:	8:15	Complete Purge Time:	8:12
Purge Method:	Low Flow-Peristaltic Pump	Sample Method:	Low Flow-Peristaltic Pump
Purge Rate (l/m):	250.00	Purge Time (min):	15
Actual Purge Volume (l):	10		
Sample Appearance:	Clear	Odors Observed:	None
Analytical Laboratory:	Alpha Analytical	Notes:	
Date Shipped:	9/8/2021		
Analyses Requested:	VOCs (CP-51)		

Field Indicator Parameters

volume (l) total	Time	Temp (°C)	pH	Turbidity NTU	ORP mV	Cond. (mS/cm)	DO mg/L		
0	7:54	17.29	7.49	18.4	38	2.52	1.45		
2	7:57	15.96	7.01	6.5	22	2.52	0.52		
4	8:00	15.89	6.86	4.6	23	2.52	0.26		
6	8:03	15.94	6.81	3.2	22	2.51	0.15		
8	8:06	15.93	6.79	2.3	22	2.51	0.11		
10	8:09	15.98	6.76	1.6	22	2.51	0.11		
12	8:12	15.93	6.74	0.0	24	2.51	0.14		

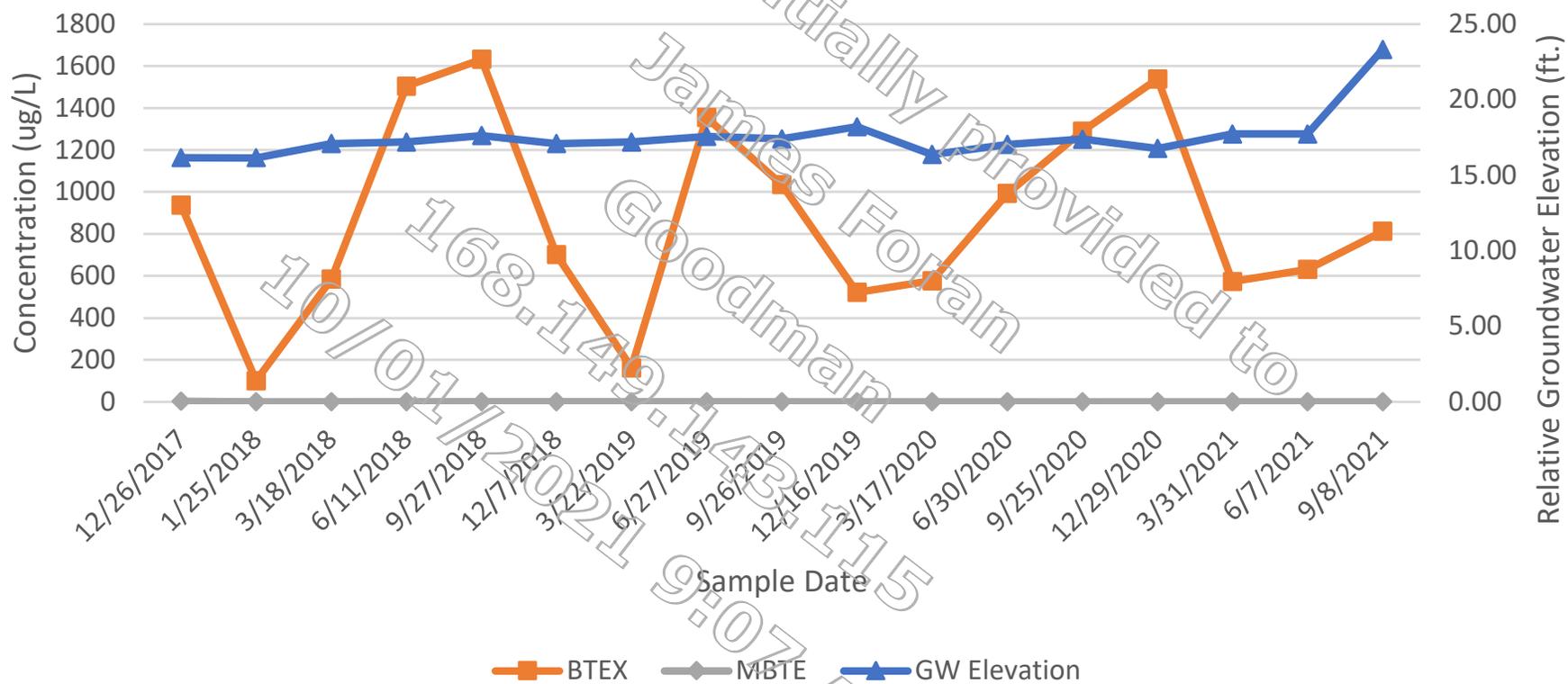
Take readings every three minutes

APPENDIX B

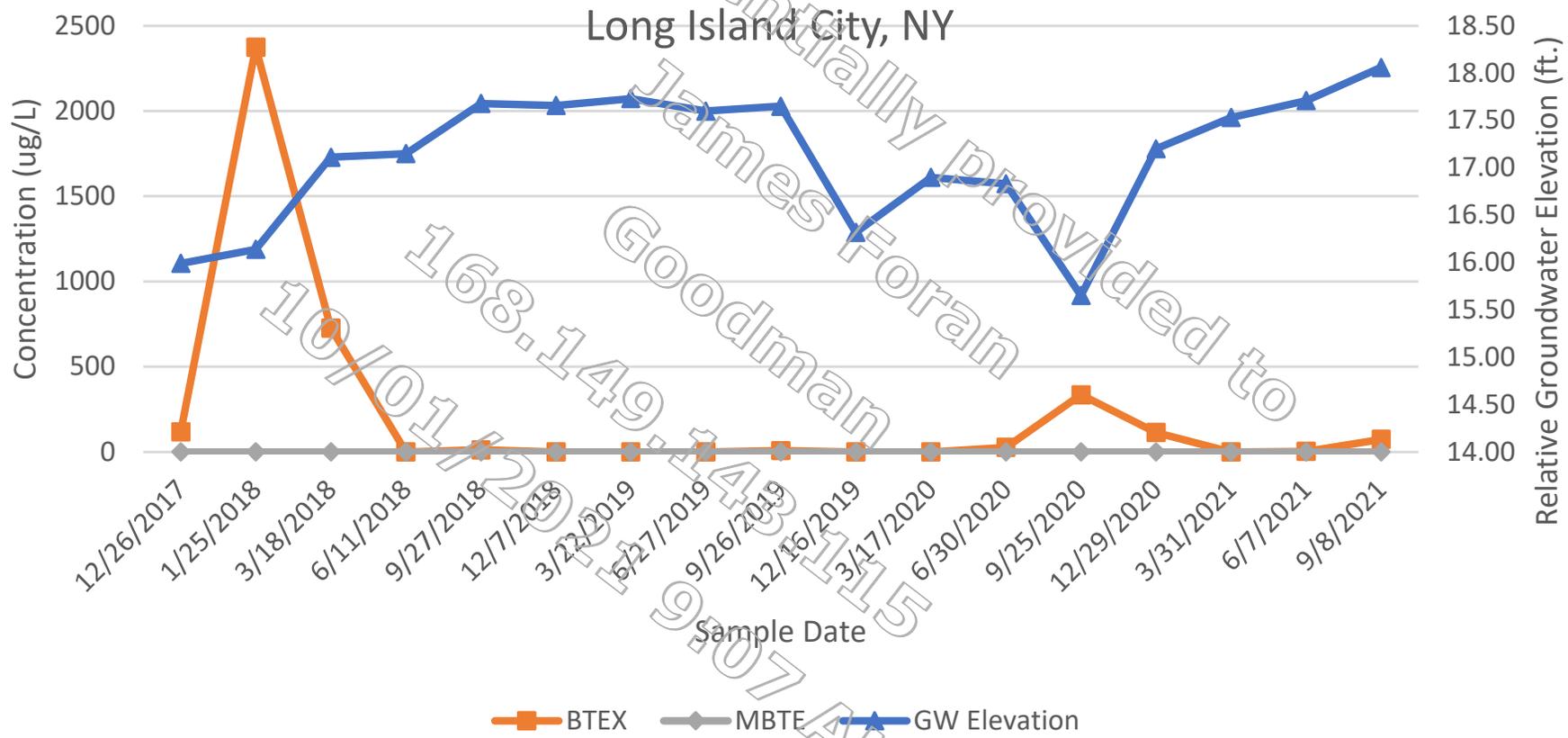
Hydrographs

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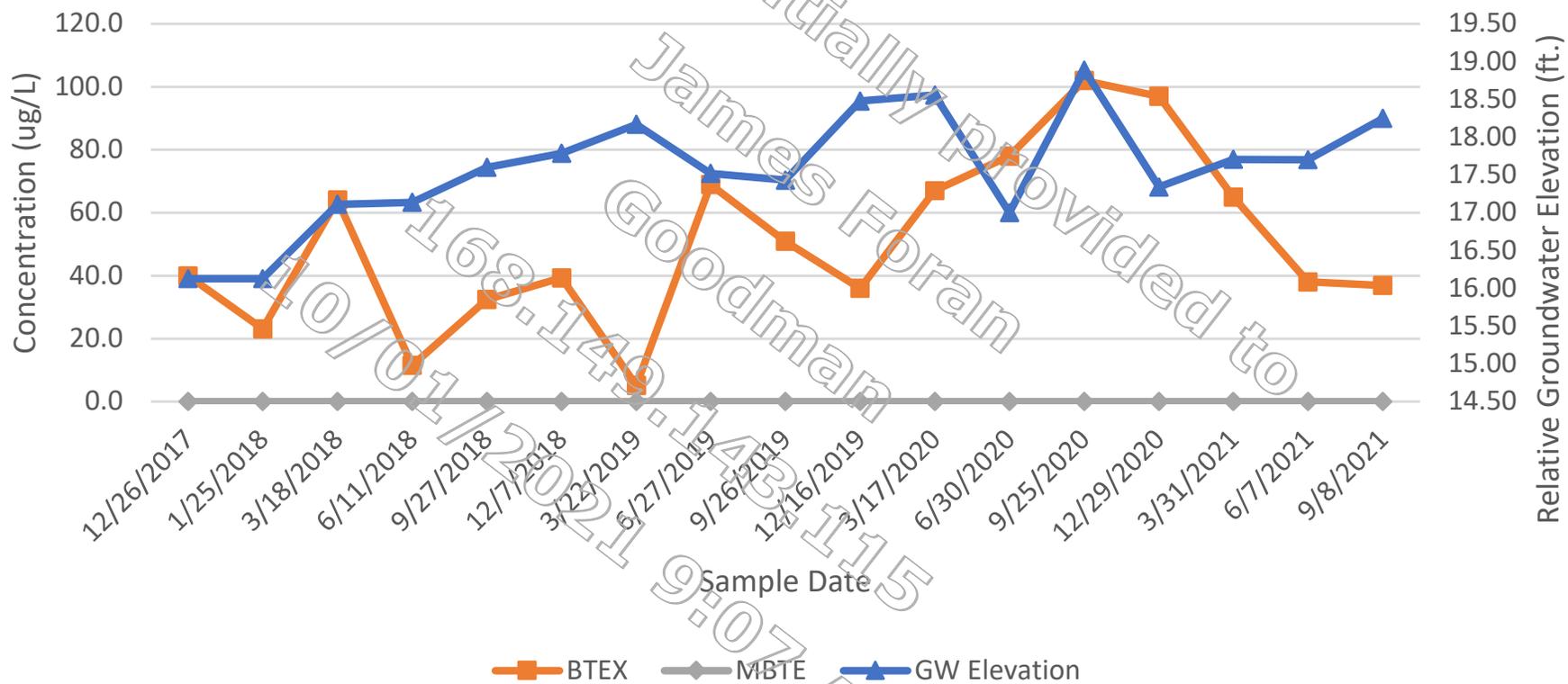
Hydrograph of MW-2
3904 Northern Boulevard
Lond Island City, NY



Hydrograph of MW-7
3904 Northern Boulevard
Long Island City, NY



Hydrograph of MW-8
3904 Northern Boulevard
Long Island City, NY



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APPENDIX C
Analytical Data Report



ANALYTICAL REPORT

Lab Number: L2148123
Client: P. W. Grosser
630 Johnson Avenue
Suite 7
Bohemia, NY 11716
ATTN: Ryan Morley
Phone: (631) 589-6353
Project Name: RDC2002
Project Number: RDC2002
Report Date: 09/14/21

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

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: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2148123-01	MW-2	WATER	39-09 NORTHERN BLVD, LIC, NY	09/08/21 09:45	09/08/21
L2148123-02	MW-7	WATER	39-09 NORTHERN BLVD, LIC, NY	09/08/21 08:15	09/08/21
L2148123-03	MW-8	WATER	39-09 NORTHERN BLVD, LIC, NY	09/08/21 09:05	09/08/21
L2148123-04	DUP001	WATER	39-09 NORTHERN BLVD, LIC, NY	09/08/21 00:00	09/08/21
L2148123-05	TB	WATER	39-09 NORTHERN BLVD, LIC, NY	09/08/21 00:00	09/08/21

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Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

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: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

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.

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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:



Michelle M. Morris

Title: Technical Director/Representative

Date: 09/14/21

ORGANICS

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VOLATILES

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Project Name: RDC2002

Lab Number: L2148123

Project Number: RDC2002

Report Date: 09/14/21

SAMPLE RESULTS

Lab ID: L2148123-01 D
 Client ID: MW-2
 Sample Location: 39-09 NORTHERN BLVD, LIC, NY

Date Collected: 09/08/21 09:45
 Date Received: 09/08/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/11/21 17:18
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	610		ug/l	2.5	0.80	5
Toluene	50		ug/l	12	3.5	5
Ethylbenzene	51		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	95		ug/l	12	3.5	5
o-Xylene	7.4	J	ug/l	12	3.5	5
n-Butylbenzene	15		ug/l	12	3.5	5
sec-Butylbenzene	8.7	J	ug/l	12	3.5	5
tert-Butylbenzene	ND		ug/l	12	3.5	5
Isopropylbenzene	92		ug/l	12	3.5	5
p-Isopropyltoluene	ND		ug/l	12	3.5	5
Naphthalene	56		ug/l	12	3.5	5
n-Propylbenzene	260		ug/l	12	3.5	5
1,3,5-Trimethylbenzene	4.9	J	ug/l	12	3.5	5
1,2,4-Trimethylbenzene	ND		ug/l	12	3.5	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	83		70-130

Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

SAMPLE RESULTS

Lab ID: L2148123-02
Client ID: MW-7
Sample Location: 39-09 NORTHERN BLVD, LIC, NY

Date Collected: 09/08/21 08:15
Date Received: 09/08/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/11/21 16:58
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	4.9		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	51		ug/l	2.5	0.70	1
o-Xylene	18		ug/l	2.5	0.70	1
n-Butylbenzene	1.5	J	ug/l	2.5	0.70	1
sec-Butylbenzene	2.7		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	7.5		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	15		ug/l	2.5	0.70	1
n-Propylbenzene	3.1		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	5.1		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	24		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	100		70-130

Project Name: RDC2002

Lab Number: L2148123

Project Number: RDC2002

Report Date: 09/14/21

SAMPLE RESULTS

Lab ID: L2148123-03 D
 Client ID: MW-8
 Sample Location: 39-09 NORTHERN BLVD, LIC, NY

Date Collected: 09/08/21 09:05
 Date Received: 09/08/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/11/21 17:39
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.67	J	ug/l	1.0	0.32	2
Toluene	6.4		ug/l	5.0	1.4	2
Ethylbenzene	22		ug/l	5.0	1.4	2
Methyl tert butyl ether	ND		ug/l	5.0	1.4	2
p/m-Xylene	7.9		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
n-Butylbenzene	20		ug/l	5.0	1.4	2
sec-Butylbenzene	14		ug/l	5.0	1.4	2
tert-Butylbenzene	ND		ug/l	5.0	1.4	2
Isopropylbenzene	110		ug/l	5.0	1.4	2
p-Isopropyltoluene	ND		ug/l	5.0	1.4	2
Naphthalene	320		ug/l	5.0	1.4	2
n-Propylbenzene	260		ug/l	5.0	1.4	2
1,3,5-Trimethylbenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trimethylbenzene	ND		ug/l	5.0	1.4	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	81		70-130

Project Name: RDC2002

Lab Number: L2148123

Project Number: RDC2002

Report Date: 09/14/21

SAMPLE RESULTS

Lab ID: L2148123-04 D
 Client ID: DUP001
 Sample Location: 39-09 NORTHERN BLVD, LIC, NY

Date Collected: 09/08/21 00:00
 Date Received: 09/08/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Water
 Analytical Method: 1,8260C
 Analytical Date: 09/11/21 17:59
 Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	0.48	J	ug/l	1.2	0.40	2.5
Toluene	6.2		ug/l	6.2	1.8	2.5
Ethylbenzene	22		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	8.2		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
n-Butylbenzene	21		ug/l	6.2	1.8	2.5
sec-Butylbenzene	14		ug/l	6.2	1.8	2.5
tert-Butylbenzene	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	110		ug/l	6.2	1.8	2.5
p-Isopropyltoluene	ND		ug/l	6.2	1.8	2.5
Naphthalene	350		ug/l	6.2	1.8	2.5
n-Propylbenzene	290		ug/l	6.2	1.8	2.5
1,3,5-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	113		70-130
Dibromofluoromethane	85		70-130

Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

SAMPLE RESULTS

Lab ID: L2148123-05
Client ID: TB
Sample Location: 39-09 NORTHERN BLVD, LIC, NY

Date Collected: 09/08/21 00:00
Date Received: 09/08/21
Field Prep: Not Specified

Sample Depth:

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/11/21 13:55
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
tert-Butylbenzene	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	103		70-130

Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/11/21 13:34
Analyst: LAC

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-05 Batch: WG1546189-5					
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
tert-Butylbenzene	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-05 Batch: WG1546189-3 WG1546189-4								
Benzene	95		95		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Methyl tert butyl ether	60	Q	61	Q	63-130	2		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	95		95		70-130	0		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	110		99		70-130	11		20
tert-Butylbenzene	100		95		70-130	5		20
Isopropylbenzene	100		100		70-130	0		20
p-Isopropyltoluene	100		99		70-130	1		20
Naphthalene	81		86		70-130	6		20
n-Propylbenzene	110		100		69-130	10		20
1,3,5-Trimethylbenzene	100		99		64-130	1		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20

Surrogate	LCS		LCSD		Acceptance Criteria
	%Recovery	Qual	%Recovery	Qual	
1,2-Dichloroethane-d4	101		102		70-130
Toluene-d8	105		104		70-130
4-Bromofluorobenzene	109		110		70-130
Dibromofluoromethane	101		100		70-130

Project Name: RDC2002

Lab Number: L2148123

Project Number: RDC2002

Report Date: 09/14/21

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(*)
L2148123-01A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-01B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-01C	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-02A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-02B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-02C	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-03A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-03B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-03C	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-04A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-04B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-04C	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-05A	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)
L2148123-05B	Vial HCl preserved	A	NA		2.4	Y	Absent		NYTCL-8260(14)

Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers



Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

Footnotes

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

Terms

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

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

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

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

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

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

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

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

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

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

Data Qualifiers

- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

Confidentially provided to
James Foran
Goodman
168.149.143.115
10/01/2021 9:07 AM

Report Format: DU Report with 'J' Qualifiers



Project Name: RDC2002
Project Number: RDC2002

Lab Number: L2148123
Report Date: 09/14/21

REFERENCES

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

Confidentially provided to
James Foran
Goodman
168.149.143.115
10/01/2021 9:07 AM

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, SM4500CI-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, **LCHAT 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, Tl, 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.

