Groundwater Monitoring Report
Semi-Annual Sampling Event
First Half of 2020

Capital Center
705 Broadway
Albany, New York
BCP Site No. C401070

CHA Project Number: 031647.000

Prepared for:

FC 705 Broadway LLC
c/o Pioneer Companies
333 West Washington Street, Suite 600
Syracuse, New York 13202

Prepared by:

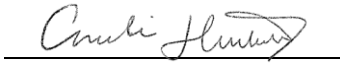
III Winners Circle
Albany, New York 12205
Phone: (518) 453-4500
Fax: (518) 453-4773

July 14, 2020

V:\Projects\ANY\K4\31647\Reports\Groundwater Monitoring\2020 Semi Annual Monitoring\1st Half\Final\H1_2020_Capital Ctr_Semiannual Rpt_2020-07-14.docx

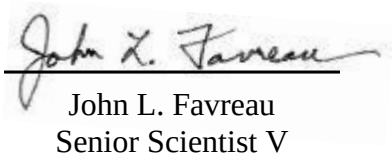
This report has been prepared and reviewed by the following qualified personnel employed by CHA.

Report Prepared By:



Caroline Hurlburt
Scientist I

Report Reviewed By:



John L. Favreau
Senior Scientist V

TABLE OF CONTENTS

FIGURES

TABLES

APPENDIX

1.0 INTRODUCTION

This report has been prepared by CHA Consulting, Inc. (CHA) on behalf of FC 705 Broadway LLC and Pioneer Companies to describe the field activities and present the findings associated with the first of two semiannual groundwater monitoring events in 2020 at the Capital Center Site (the Site), located at 705 Broadway in the City of Albany, Albany County, New York (Figure 1). The semiannual monitoring event conducted during the first half of the year was completed by CHA on April 9, 2020. The monitoring event was conducted in accordance with the New York State Department of Environmental Conservation (NYSDEC)-approved Site Management Plan (SMP), prepared by CHA in December 2017. The SMP includes periodic groundwater monitoring as a means to evaluate the effectiveness of the implemented remedy (soil excavation) and natural attenuation.

Six groundwater monitoring wells (MW-1 to MW-6) were installed across the Site in March 2018, all to a depth of 25 feet below ground surface (bgs). Monitoring well construction logs are included in Appendix C of the SMP. Monitoring wells MW-3 through MW-6 were decommissioned in October 2018, based on consistent quarterly analytical results from these wells showing concentrations of volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) below the TOGS 1.1.1 standard values. Monitoring well MW-2 was subsequently decommissioned in January 2020, based on analytical results from this well showing VOC and SVOC concentrations (particularly MTBE) below the TOGS 1.1.1 standard values. Monitoring well MW-1, located downgradient of the former on-site gasoline station building, was left in place to facilitate continued monitoring in this area; however, the PVC well riser was extended by five feet to accommodate filling and grading of the Site with crushed stone for construction purposes. The riser was subsequently extended another five feet as filling and grading progressed in this area of the Site. . A site plan showing the locations of the existing and former monitoring wells is included as Figure 2.

2.0 SAMPLING PROCEDURES

On April 9, 2020, CHA personnel conducted groundwater monitoring activities at well MW-1 in accordance with the NYSDEC-approved SMP and CHA's standard operating procedure (SOP) for monitoring well sampling.

Prior to conducting groundwater sampling activities, the water level in the well was measured from the top of the well riser using an electronic water level meter. The well was then purged via low-flow sampling methods, using a portable bladder pump and dedicated tubing. During purging, the following parameters were measured at approximately five-minute intervals using a YSI water quality meter equipped with a flow-through cell: specific conductivity; temperature; pH; and oxidation/reduction potential (ORP). Turbidity was also measured using a separate turbidity meter. Field parameter measurements and observations were recorded and are documented in the Monitoring Well Sampling Log included as Appendix A.

Following stabilization of field parameters, a groundwater sample was collected from the well via the portable bladder pump and dedicated tubing. The sample was collected in laboratory-provided, pre-preserved containers, which were labeled and then placed in a rigid cooler with ice, pending submittal to the laboratory.

Following sampling activities, the groundwater sample was delivered by CHA to Alpha Analytical's (Alpha) Service Center in Albany, New York, for subsequent transport by Alpha to its laboratory in Westborough, Massachusetts, in accordance with proper chain-of-custody protocol. Alpha is currently certified by the New York State Department of Health's (NYSDOH) Environmental Laboratory Approval Program (ELAP). The groundwater sample was analyzed for VOCs and SVOCs via EPA Methods 8260 and 8270, respectively, in accordance with applicable NYSDOH QA/QC procedures. A trip blank sample, prepared by the laboratory, accompanied the groundwater sample to the laboratory and was to have been analyzed for VOCs only; however, the sample identification was inadvertently omitted from the chain-of-custody and therefore was not analyzed. Groundwater samples from the Site were historically also analyzed for metals; however, based on evaluation of detected metals during the past few monitoring events, the NYSDEC approved the discontinuation of metals analysis, beginning with the April 2020 monitoring event.

3.0 GROUNDWATER FLOW DIRECTION

Groundwater elevation data from monitoring well MW-1 is included in Table 1. It should be noted that water level measurements are required from a minimum of three locations to triangulate and determine groundwater flow direction. Due to availability of only one data point, a groundwater contour map was not generated; however, the water level measurement at well MW-1 indicates a relative groundwater elevation similar to that exhibited during past monitoring events at this location. Based on this data, along with historical data and local topography, the expected groundwater flow direction continues to be generally to the east, toward the Hudson River.

4.0 LABORATORY ANALYTICAL RESULTS

Groundwater analytical results were compared to the groundwater standards and/or guidance values listed in the NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1). Those parameters in excess of their respective standards or guidance values are shaded in Table 2. Appendix B includes the laboratory deliverables package for the April 2020 sampling event. A discussion of the analytical results for the groundwater samples collected from each monitoring well is provided below.

MW-1

In the sample collected from well MW-1, the VOC methyl tert-butyl ether (MTBE) was detected in exceedance of its TOGS 1.1.1 standard; however, the detected concentration was significantly reduced (nearly 80 percent) as compared to the August 2019 sampling results. Acetone was also detected in the sample, but at a concentration below its TOGS 1.1.1 standard. It should be noted that acetone is a common laboratory artifact and as a result, the detection of acetone in the MW-1 sample may be a result of laboratory contamination. No SVOCs were detected at concentrations above laboratory reporting limits.

Summary

The VOC MTBE was detected at the location of well MW-1 (in the area downgradient of the former on-site gasoline station) at a concentration exceeding its TOGS 1.1.1 standard; however, the detected concentration (34 µg/l) represents a significant decrease from the previous sampling event in August 2019 and indicates a continued decreasing trend in the concentration of MTBE at this location. The continued decreasing trend in MTBE concentrations at well MW-1 is indicative

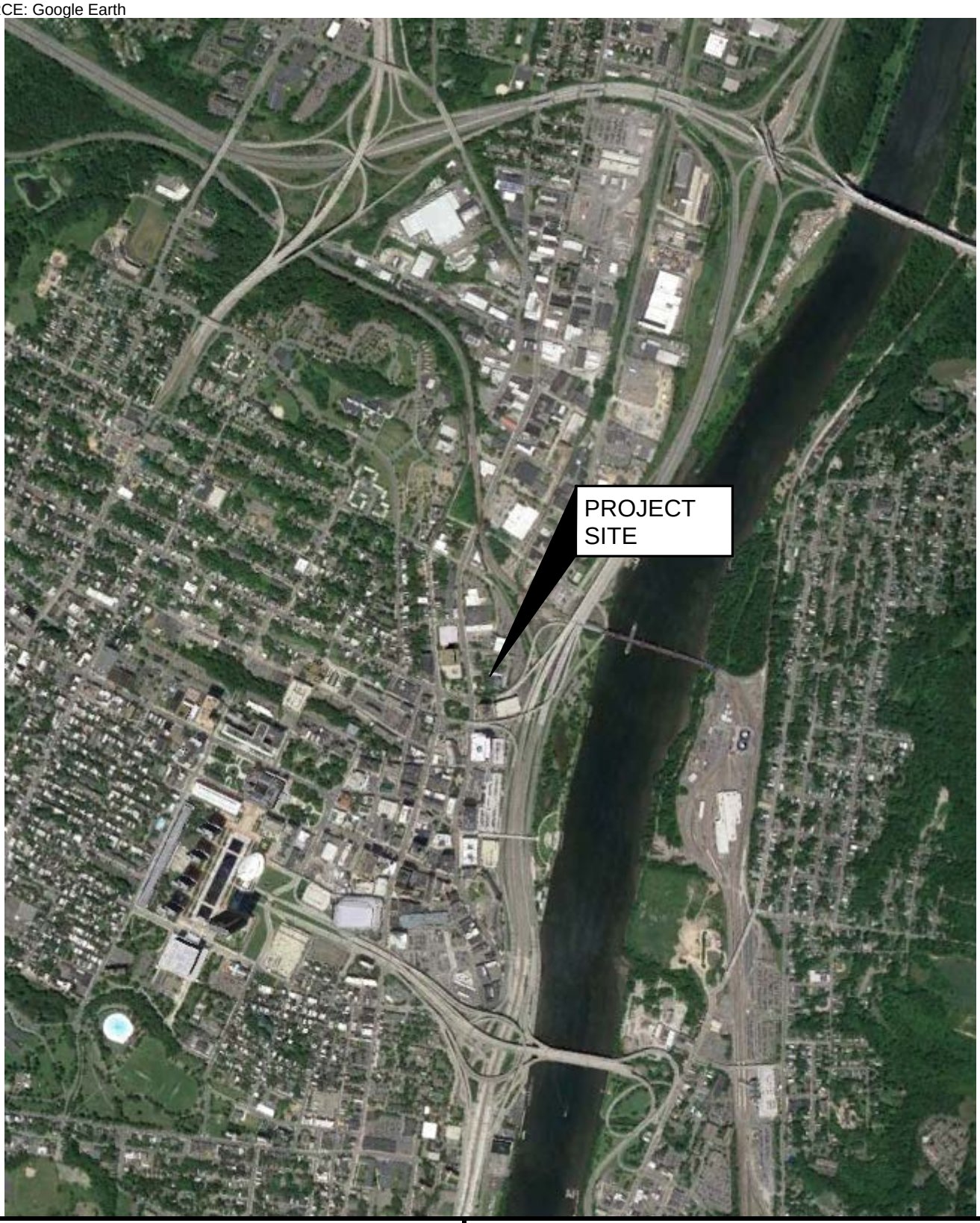
of the effectiveness of the implemented remedial activities at the Site, along with natural attenuation.

5.0 FUTURE ACTIVITIES

The next semiannual groundwater monitoring event is scheduled to occur in October 2020. Given the recent decreasing trend in MTBE concentration at well MW-1 and in particular, the significant decrease exhibited during the April 2020 monitoring event, if the analytical results from the October 2020 monitoring event indicate a continued decreasing trend, it is anticipated that CHA will recommend that groundwater monitoring be discontinued and monitoring well MW-1 be properly decommissioned.

FIGURES

SOURCE: Google Earth



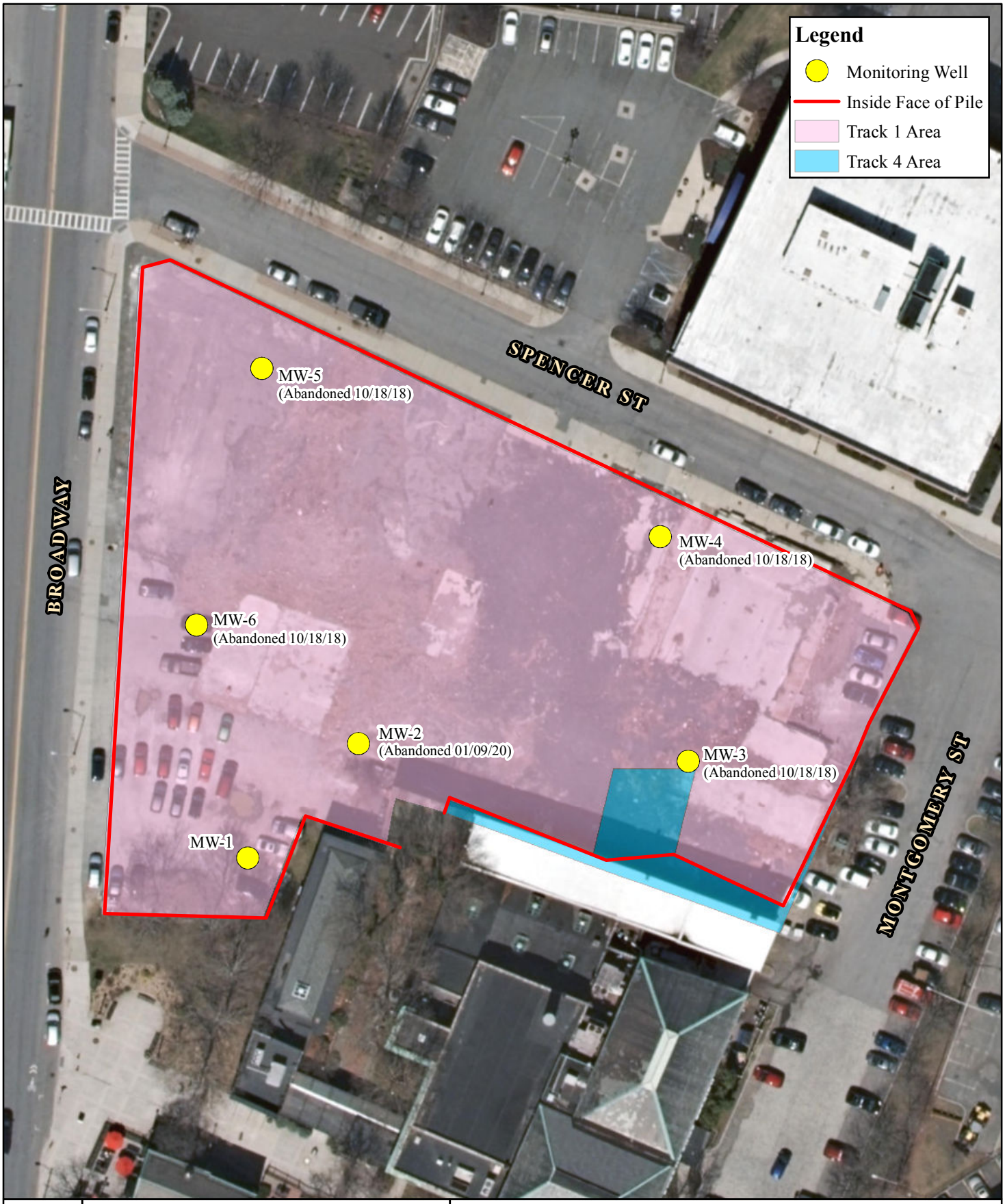
CHA
III Winners Circle, P.O. Box 5269 • Albany, NY 12205-0269
Main: (518)453-4600 • www.cloughharbour.com

NOT TO SCALE

DATE: December 2017

FIGURE 1
SITE LOCATION MAP
CAPITAL CENTER PROJECT
ALBANY COUNTY, NEW YORK

V:\Projects\ANY\K4\31647\Reports\Site Management Plan\Figures\DECupdated_Figure1_KE.doc



N

CHA

Figure 2 - Site Plan

Capital Center Site
Quackenbush Square, 705 Broadway
City of Albany, Albany County, New York

Scale 1" = 60'

CHA Project No. 31647

Service Layer Credits: Aerial imagery courtesy of Esri, DigitalGlobe, GeoEye, Earthstar
Image Date: 6/7/2015

TABLES

Table 1
Groundwater Elevations

Well ID	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
TOR Elevations (ft)	103.27	101.46	96.23	94.22	101.27	101.88
3/27/2018	98.93	96.78	90.53	89.42	100.02	96.21
6/6/2018	98.42	96.17	89.98	89.61	99.52	99.21
9/27/2018	98.46	96.70	85.83	86.27	99.99	99.46
12/19/2018	97.27	96.20	decommissioned	decommissioned	decommissioned	decommissioned
3/20/2019	99.11	97.15	decommissioned	decommissioned	decommissioned	decommissioned
8/23/2019	98.73	97.84	decommissioned	decommissioned	decommissioned	decommissioned
4/9/2020	98.92	decommissioned	decommissioned	decommissioned	decommissioned	decommissioned

Note: MW-3 through MW-6 decommissioned and removed in October 2018
MW-2 decommissioned and grouted in place in January 2020
TOR Elevation corrected to 113.27 for 4/9/2020 event, due to raising of well riser following filling/grading of site

Table 2
Capital Center, Albany, NY
Groundwater Analytical Monitoring Data
Detected Compounds Only

LOCATION			MW-1									
SAMPLING DATE			3/27/2018	6/6/2018	9/26/2018	12/19/2018	12/19/2018 DUPLICATE	3/20/2019	3/20/2019 DUPLICATE	8/23/2019	8/23/2019 DUPLICATE	4/9/2020
	NY-AWQS	Units	Results									
Dissolved Metals												
Aluminum, Dissolved	NS	ug/l	6.81 J	9.78 J	46.9	22 J	604 J	324 J	234 J	1580 J	310 J	NA
Antimony, Dissolved	3	ug/l	2.78 J	0.54 J	0.57 J	1.2 J	0.76 J	0.84 J+	1.32 J+	1.58 J	1.44 J	NA
Arsenic, Dissolved	25	ug/l	6.8	3.71	1.83	2.18	2.38	3.33	3.24	3.65	3.2	NA
Barium, Dissolved	1000	ug/l	185.2	53.62	215.8	149.8	148.1	19.97	17.12	30.06 J	17.28 J	NA
Cadmium, Dissolved	5	ug/l		0.28	0.22	0.11 J	0.1 J					NA
Calcium, Dissolved	NS	ug/l	57600	25100	146000	166000	165000	12000	11700	7730	6720	NA
Chromium, Dissolved	50	ug/l					0.74 J	0.43 J	0.33 J	1.81	0.19 J	NA
Cobalt, Dissolved	NS	ug/l	1.1	0.41 J	1.44	1.6 J	2.02 J	0.31 J	0.22 J	1.05	0.25 J	NA
Copper, Dissolved	200	ug/l	1.13	0.99 J	1.25	0.93 J	2.21	1.37	1.21	3.78 J	1.39 J	NA
Iron, Dissolved	300	ug/l			83.2	67.9 J+	998 J+	385 J	193 J	1860 J+	293 J+	NA
Lead, Dissolved	25	ug/l					0.73 J			1.22		NA
Magnesium, Dissolved	35000	ug/l	42300	16200	103000	141000	141000 J	7290	7140	4290	3550	NA
Manganese, Dissolved	300	ug/l	235.2	152.8	967.2	1041	1032	54.8	51.1	56.8 J	29.48 J	NA
Mercury, Dissolved	0.7	ug/l			0.2 UJ							NA
Nickel, Dissolved	100	ug/l	2.55	1.21 J	1.67 J	2.15	2.59	0.73 J		3.5	1.9 J	NA
Potassium, Dissolved	NS	ug/l	2080	871	2490	2300	2580	822	759	1120 J	633 J	NA
Silver, Dissolved	50	ug/l			0.22 J							NA
Sodium, Dissolved	20000	ug/l	97500	73400	193000	217000	214000	68200	68100	68700	65100	NA
Thallium, Dissolved	0.5	ug/l									0.19 J	NA
Vanadium, Dissolved	NS	ug/l	2.15 J				1.85 J	2.13 J	1.82 J	6.77	4.42 J	NA
Zinc, Dissolved	2000	ug/l			4.41 J					8.38 J		NA
Total Metals												
Aluminum, Total	NS	ug/l	3790	7650	2080	16100 J	20800 J	11700	9800	12000	11900	NA
Antimony, Total	3	ug/l	2.23 J	0.56 J		0.92 J	1.95 J	0.92 J	1.38 J		0.47 J	NA
Arsenic, Total	25	ug/l	9.06	6.7	3.3	18.12 J	24.9 J	12.27	10.76	12.09	12.18	NA
Barium, Total	1000	ug/l	228.5	99.23	244.4	511.3	518.6	98.99	86.21	125.8	127.2	NA
Beryllium, Total	3	ug/l	0.21 J	0.36 J	0.15 J	1.51	1.72	0.58	0.49 J	0.83 J	0.64 J	NA
Cadmium, Total	5	ug/l	0.06 J	0.57	0.47	1.14	1.12	0.13 J	0.14 J	0.19 J	0.22	NA
Calcium, Total	NS	ug/l	75500	42400	167000	820000	844000	57200	54000	69500	78100	NA
Chromium, Total	50	ug/l	5.3	11.2	3.67	29.51 J	39.21 J	16.91	14.59	21.48	20.49	NA
Cobalt, Total	NS	ug/l	4.29	6.63	4	36.94 J	46.53 J	14.23 J	10.83 J	14.64	14.69	NA
Copper, Total	200	ug/l	9	20.73	11.33	201.6	226.6	45.23 J	35.41 J	48.39	52.77	NA
Iron, Total	300	ug/l	7290	14400	4980 J+	88400	107000	27700 J+	21500 J+	31600 J-	31700 J-	NA
Lead, Total	25	ug/l	2.96	6.85	4.4	53.64	63.19	17.36	14.23	17.3	17.89	NA
Magnesium, Total	35000	ug/l	46100	23100	113000 J+	284000	274000	21600	19500	23800	25500	NA
Manganese, Total	300	ug/l	417	468	1270	10080	10390	869	784.5	1053	1131	NA
Nickel, Total	100	ug/l	9.82	13.88	6	57.34 J	77.78 J	29.38 J	23.4 J	31.6	33.02	NA
Potassium, Total	NS	ug/l	3230	2410	2930	6540 J	8910 J	2590	2330	2900	2820	NA
Selenium, Total	10	ug/l				8.83	9.54	3.37 J	3.16 J	5.71	5.33	NA
Silver, Total	50	ug/l		0.19 J			0.21 J					NA
Sodium, Total	20000	ug/l	99500	73100	200000	204000	195000	73400	74600	72900	75900	NA
Thallium, Total	0.5	ug/l				0.28 J	0.48 J	0.16 J	0.15 J	0.26 JR	0.29 J	NA
Vanadium, Total	NS	ug/l	9.07	12.62	5.75	47.17	55.38	21.65 J	17.37 J	27.04	26.61	NA
Zinc, Total	2000	ug/l	21.91	45.51	22.44	245 J	320.4 J	72.71	60.32	88.72	90.72	NA
Volatile Organics by GC/MS												
1,4-Dioxane		ug/l			250 UR		61 UR					
Acetone	50	ug/l										17
Bromomethane	5	ug/l			2.5 UJ							
Methyl tert butyl ether	10	ug/l	2300	660	3700	2800	2300	390	390	140	150	34
Tetrachloroethene	5	ug/l		0.59 J								
Semivolatile Organics by GC/MS												
3,3'-Dichlorobenzidine	5	ug/l				0.5 UJ	0.5 UJ					
4-Chloroaniline	5	ug/l			5 UJ	1.1 UJ	1.1 UJ					
4-Nitroaniline	5	ug/l				0.5 UJ	0.5 UJ					
Acetophenone		ug/l										
Bis(2-ethylhexyl)phthalate	5	ug/l	3.7			52 J+						
Di-n-butylphthalate	50	ug/l				0.84 J						
2-Chloronaphthalene	10	ug/l										
2-Methylnaphthalene	NS	ug/l						0.02 J				
Anthracene	50	ug/l	0.1									
Fluoranthene	50	ug/l	0.1				0.03 J					
Fluorene	50	ug/l	0.1									
Naphthalene	10	ug/l	0.1								0.42 BR	
Phenanthrene	50	ug/l	0.1					0.04 JU	0.05 JU			
Pyrene	5	ug/l					0.02 J					

Notes:
NY-AWQS: New York TOGS 111 Ambient Water Quality Standards criteria reflects all addendum to criteria through June 2004.
Samples were analyzed by Alpha Analytical Laboratory
Blank cells indicate parameters that were not detected
Shaded values indicate a value greater than NY TOGS 1.1.1 Ambient Water Quality Standards Limits
R - indicates a rejected, unusable value dictated by the DUSR report
J+ - indicates an estimated, biased high value dicated by the DUSR report
J - indicates an estimated value
J- - indiates an estimated, biased low value dictated by the DUSR report
UJ - indates an estimated value dicated by the DUSR report
NS - no standard
NA - Not Analyzed

APPENDIX A
MONITORING WELL SAMPLING LOG

CHA	**Monitoring Well Sampling/ Development Log**	**Sample/Well ID:** MW-1

Project Number: 031647.12000.31000 | Sampling Date: 4/9/2020

Project/Facility Name: Capital Center | Logged By: C. Hurlburt

Project Location/Sampling Event: 705 Broadway, Albany, NY /1st Half 2020 | Weather/Temp: 50° F, cloudy

Purging/Sampling Method: P = Purging Method S = Sampling Method

P	S		
☐	☐	Submersible Pump	Model: _____
☐	☐	Peristaltic Pump	Model: _____
☐	☐	Dedicated Pump	Model: _____
☒	☒	MicroPurge Pump	Model: _____ ☐ Dedicated ☐ Disposable
☐	☐	Bailer	Type: _____
☐	☐	Other: _____	

Water Level Measurement Device:
☒ Water Level Meter Model: Heron 200'
☐ Interface Probe Model: _____

Water Quality Instrumentation:
Instrument: YSI MPS 556
Instrument: Turbidimeter CHA03
Instrument: _____

Time Well Unlocked: _____ Time Well Locked: _____
Headspace Reading: _____ ppm ☐N/A
☐ Flush-mount casing ☒ Stickup casing

Depth to Static Water Level (ft.): 14.35

Pump Intake Depth (ft.): 25

Flow Rate (mL/min): 120

Controller ID No.: 120

Monitoring Well Condition: A = Acceptable U = Unacceptable

A	U		A	U		A	U	
☒	☐	Well visibility	☒	☐	Surface seal	☒	☐	Total depth 37. 51
☒	☐	Well Identification	☒	☐	Surface casing condition	☒	☐	Siltation level
☒	☐	Well lock/security	☒	☐	Corrosion of surface casing	☒	☐	Recharge Rate
☒	☐	Well cap & gripper plug	☒	☐	Inner Casing/Screen Integrity	☐	☐	Other: _____

Field Analysis:

Time	Depth to Water (ft.)	ORP/Eh (mV)	pH	Cond. (mS/cm)	Turbidity (NTU)	D.O. (mg/L)	Temp. (°C)	Other Field Data:	Other Field Data:	Other Field Data:	Other Field Data:
11:00	14.35	141.2	8.21	0.326	15.3	7.74	8.9				
11:10	14.4	134.7	8.33	0.327	17.7	7.64	9.1				
11:15	14.38	132.3	8.36	0.325	16.1	7.67	9.2				
11:20	14.42	131.4	8.38	0.327	17.9	7.5	9.2				

Start Purge Time: 10:45 Total Vol. Purged: Odor: None Purge Water Disposal Method: Ground Surf.
End Purge Time: 11:30 Total Purge Time: 45 min Color: Clear Sheen Observed? No

Sampling Information: Sampling Time: 11:45 Laboratory: Alpha Analytical
Sample Analyses: TCL VOCs/SVOCs (8260/8270) No. Bottles: 5

Comments/Additional Observations: Water is clear with no odor, sheen or effervescence. PVC well riser was extended 10 feet in January 2020.

Signature(s) of Sampling Team: CRH

APPENDIX B
LABORATORY ANALYTICAL DATA

ANALYTICAL REPORT

Lab Number:	L2015218
Client:	CHA Companies 3 Winners Circle Albany, NY 12205
ATTN:	C. Hurlburt
Phone:	(518) 453-4500
Project Name:	Not Specified
Project Number:	31647
Report Date:	04/16/20

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: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2015218-01	GW-MW1-040920	WATER	Not Specified	04/09/20 11:45	04/09/20
L2015218-02	TRIP BLANK	WATER	Not Specified	04/09/20 00:00	04/09/20

Project Name:	Not Specified	**Lab Number:**	L2015218
Project Number:	31647	**Report Date:**	04/16/20

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: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

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.

Sample Receipt

L2015218-02: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody. This sample was not analyzed.

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: 04/16/20

ORGANICS

VOLATILES

Project Name: Not Specified
Project Number: 31647
Lab Number: L2015218
Report Date: 04/16/20

SAMPLE RESULTS

Lab ID: L2015218-01
Client ID: GW-MW1-040920
Sample Location: Not Specified

Date Collected: 04/09/20 11:45
Date Received: 04/09/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 04/14/20 01:13
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
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
Chloromethane	1.6	J	ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: Not Specified
Project Number: 31647
Lab Number: L2015218
Report Date: 04/16/20

SAMPLE RESULTS

Lab ID: L2015218-01
Client ID: GW-MW1-040920
Sample Location: Not Specified
Date Collected: 04/09/20 11:45
Date Received: 04/09/20
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	34		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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	17		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	107		70-130

Project Name: Not Specified
Project Number: 31647
Lab Number: L2015218
Report Date: 04/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/13/20 17:43
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1360924-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: Not Specified
Project Number: 31647
Lab Number: L2015218
Report Date: 04/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/13/20 17:43
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1360924-5					
1,4-Dichlorobenzene	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
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: Not Specified
Project Number: 31647
Lab Number: L2015218
Report Date: 04/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 04/13/20 17:43
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1360924-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 31647

Lab Number: L2015218

Report Date: 04/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1360924-3 WG1360924-4								
Methylene chloride	120		110		70-130	9		20
1,1-Dichloroethane	130		120		70-130	8		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	99		95		63-132	4		20
1,2-Dichloropropane	120		110		70-130	9		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	97		94		70-130	3		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	130		120		62-150	8		20
1,2-Dichloroethane	120		120		70-130	0		20
1,1,1-Trichloroethane	96		100		67-130	4		20
Bromodichloromethane	110		110		67-130	0		20
trans-1,3-Dichloropropene	93		93		70-130	0		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	93		97		54-136	4		20
1,1,2,2-Tetrachloroethane	110		110		67-130	0		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	**140**	Q	130		64-130	7		20
Bromomethane	95		99		39-139	4		20
Vinyl chloride	130		120		55-140	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 31647

Lab Number: L2015218

Report Date: 04/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1360924-3 WG1360924-4								
Chloroethane	**150**	Q	**140**	Q	55-138	7		20
1,1-Dichloroethene	110		100		61-145	10		20
trans-1,2-Dichloroethene	110		100		70-130	10		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	100		98		70-130	2		20
1,3-Dichlorobenzene	100		99		70-130	1		20
1,4-Dichlorobenzene	100		95		70-130	5		20
Methyl tert butyl ether	97		110		63-130	13		20
p/m-Xylene	110		105		70-130	5		20
o-Xylene	105		105		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Styrene	105		100		70-130	5		20
Dichlorodifluoromethane	96		93		36-147	3		20
Acetone	130		130		58-148	0		20
Carbon disulfide	120		110		51-130	9		20
2-Butanone	130		130		63-138	0		20
4-Methyl-2-pentanone	110		120		59-130	9		20
2-Hexanone	110		120		57-130	9		20
Bromochloromethane	110		110		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	93		92		41-144	1		20
Isopropylbenzene	100		96		70-130	4		20
1,2,3-Trichlorobenzene	92		92		70-130	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 31647

Lab Number: L2015218

Report Date: 04/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1360924-3 WG1360924-4								
1,2,4-Trichlorobenzene	89		89		70-130	0		20
Methyl Acetate	120		130		70-130	8		20
Cyclohexane	110		110		70-130	0		20
1,4-Dioxane	154		158		56-162	3		20
Freon-113	110		100		70-130	10		20
Methyl cyclohexane	110		100		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		111		70-130
Toluene-d8	101		99		70-130
4-Bromofluorobenzene	94		91		70-130
Dibromofluoromethane	102		102		70-130

SEMIVOLATILES

Project Name: Not Specified
Project Number: 31647
Lab Number: L2015218
Report Date: 04/16/20

SAMPLE RESULTS

Lab ID: L2015218-01
Client ID: GW-MW1-040920
Sample Location: Not Specified

Date Collected: 04/09/20 11:45
Date Received: 04/09/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 04/16/20 00:22
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/15/20 15:24

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

Project Name: Not Specified **Lab Number:** L2015218

Project Number: 31647 **Report Date:** 04/16/20

SAMPLE RESULTS

Lab ID: L2015218-01 Date Collected: 04/09/20 11:45

Client ID: GW-MW1-040920 Date Received: 04/09/20

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	54		21-120
Phenol-d6	46		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	61		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	63		41-149

Project Name: Not Specified
Project Number: 31647
Lab Number: L2015218
Report Date: 04/16/20

SAMPLE RESULTS

Lab ID: L2015218-01
Client ID: GW-MW1-040920
Sample Location: Not Specified

Date Collected: 04/09/20 11:45
Date Received: 04/09/20
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 04/15/20 12:19
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 04/13/20 23:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	ND		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	ND		ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01	1
Pyrene	ND		ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

Project Name: Not Specified **Lab Number:** L2015218

Project Number: 31647 **Report Date:** 04/16/20

SAMPLE RESULTS

Lab ID: L2015218-01 Date Collected: 04/09/20 11:45

Client ID: GW-MW1-040920 Date Received: 04/09/20

Sample Location: Not Specified Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	48		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	50		10-120
4-Terphenyl-d14	63		41-149

Project Name: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/15/20 10:55
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/13/20 23:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1360851-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

Project Name: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 04/15/20 10:55
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 04/13/20 23:55

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1360851-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	58		23-120
2-Fluorobiphenyl	57		15-120
2,4,6-Tribromophenol	33		10-120
4-Terphenyl-d14	65		41-149

Project Name: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/15/20 23:11
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/15/20 15:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1361431-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

Project Name: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 04/15/20 23:11
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 04/15/20 15:24

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1361431-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	53		21-120
Phenol-d6	42		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	41		10-120
4-Terphenyl-d14	59		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 31647

Lab Number: L2015218

Report Date: 04/16/20

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 Batch: WG1360851-2 WG1360851-3								
Acenaphthene	53		51		40-140	4		40
2-Chloronaphthalene	52		49		40-140	6		40
Fluoranthene	51		54		40-140	6		40
Hexachlorobutadiene	47		**38**	Q	40-140	21		40
Naphthalene	50		43		40-140	15		40
Benzo(a)anthracene	53		56		40-140	6		40
Benzo(a)pyrene	56		59		40-140	5		40
Benzo(b)fluoranthene	54		57		40-140	5		40
Benzo(k)fluoranthene	52		56		40-140	7		40
Chrysene	52		56		40-140	7		40
Acenaphthylene	51		49		40-140	4		40
Anthracene	53		54		40-140	2		40
Benzo(ghi)perylene	57		59		40-140	3		40
Fluorene	52		52		40-140	0		40
Phenanthrene	53		54		40-140	2		40
Dibenzo(a,h)anthracene	61		62		40-140	2		40
Indeno(1,2,3-cd)pyrene	60		62		40-140	3		40
Pyrene	51		54		40-140	6		40
2-Methylnaphthalene	54		48		40-140	12		40
Pentachlorophenol	**39**	Q	42		40-140	7		40
Hexachlorobenzene	52		52		40-140	0		40
Hexachloroethane	43		**34**	Q	40-140	23		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 31647

Lab Number: L2015218

Report Date: 04/16/20

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 Batch: WG1360851-2 WG1360851-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	49		40		21-120
Phenol-d6	47		39		10-120
Nitrobenzene-d5	57		48		23-120
2-Fluorobiphenyl	52		48		15-120
2,4,6-Tribromophenol	54		49		10-120
4-Terphenyl-d14	55		58		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1361431-2 WG1361431-3

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Bis(2-chloroethyl)ether	64		74		40-140	14		30
3,3'-Dichlorobenzidine	**37**	Q	**33**	Q	40-140	11		30
2,4-Dinitrotoluene	53		65		48-143	20		30
2,6-Dinitrotoluene	53		63		40-140	17		30
4-Chlorophenyl phenyl ether	62		70		40-140	12		30
4-Bromophenyl phenyl ether	58		65		40-140	11		30
Bis(2-chloroisopropyl)ether	70		79		40-140	12		30
Bis(2-chloroethoxy)methane	62		70		40-140	12		30
Hexachlorocyclopentadiene	52		59		40-140	13		30
Isophorone	61		71		40-140	15		30
Nitrobenzene	62		73		40-140	16		30
NDPA/DPA	60		69		40-140	14		30
n-Nitrosodi-n-propylamine	65		76		29-132	16		30
Bis(2-ethylhexyl)phthalate	64		76		40-140	17		30
Butyl benzyl phthalate	54		63		40-140	15		30
Di-n-butylphthalate	60		71		40-140	17		30
Di-n-octylphthalate	58		68		40-140	16		30
Diethyl phthalate	62		70		40-140	12		30
Dimethyl phthalate	58		65		40-140	11		30
Biphenyl	58		64		40-140	10		30
4-Chloroaniline	**39**	Q	67		40-140	**53**	Q	30
2-Nitroaniline	**51**	Q	60		52-143	16		30
3-Nitroaniline	45		44		25-145	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1361431-2 WG1361431-3

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
4-Nitroaniline	**43**	Q	**49**	Q	51-143	13		30
Dibenzofuran	64		70		40-140	9		30
1,2,4,5-Tetrachlorobenzene	56		62		2-134	10		30
Acetophenone	57		66		39-129	15		30
2,4,6-Trichlorophenol	55		62		30-130	12		30
p-Chloro-m-cresol	59		68		23-97	14		30
2-Chlorophenol	58		68		27-123	16		30
2,4-Dichlorophenol	58		66		30-130	13		30
2,4-Dimethylphenol	53		66		30-130	22		30
2-Nitrophenol	54		65		30-130	18		30
4-Nitrophenol	50		62		10-80	21		30
2,4-Dinitrophenol	55		61		20-130	10		30
4,6-Dinitro-o-cresol	62		67		20-164	8		30
Phenol	43		49		12-110	13		30
2-Methylphenol	57		68		30-130	18		30
3-Methylphenol/4-Methylphenol	57		67		30-130	16		30
2,4,5-Trichlorophenol	56		63		30-130	12		30
Carbazole	62		73		55-144	16		30
Atrazine	67		78		40-140	15		30
Benzaldehyde	57		67		40-140	16		30
Caprolactam	27		31		10-130	14		30
2,3,4,6-Tetrachlorophenol	52		63		40-140	19		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 31647

Lab Number: L2015218

Report Date: 04/16/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1361431-2 WG1361431-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	52		61		21-120
Phenol-d6	44		50		10-120
Nitrobenzene-d5	59		68		23-120
2-Fluorobiphenyl	55		63		15-120
2,4,6-Tribromophenol	51		57		10-120
4-Terphenyl-d14	52		59		41-149

Project Name: Not Specified
Project Number: 31647

Lab Number: L2015218
Report Date: 04/16/20

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(*)
L2015218-01A	Vial HCl preserved	A	NA		5.1	Y	Absent		NYTCL-8260-R2(14)
L2015218-01B	Vial HCl preserved	A	NA		5.1	Y	Absent		NYTCL-8260-R2(14)
L2015218-01C	Vial HCl preserved	A	NA		5.1	Y	Absent		NYTCL-8260-R2(14)
L2015218-01D	Amber 250ml unpreserved	A	7	7	5.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2015218-01E	Amber 250ml unpreserved	A	7	7	5.1	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2015218-02A	Vial HCl preserved	A	NA		5.1	Y	Absent		HOLD-8260(14)
L2015218-02B	Vial HCl preserved	A	NA		5.1	Y	Absent		HOLD-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	Not Specified	**Lab Number:**	L2015218
Project Number:	31647	**Report Date:**	04/16/20

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.

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.

Footnotes

Report Format: DU Report with 'J' Qualifiers

Project Name:	Not Specified	**Lab Number:**	L2015218
Project Number:	31647	**Report Date:**	04/16/20

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. 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.

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.

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	Not Specified	**Lab Number:**	L2015218
Project Number:	31647	**Report Date:**	04/16/20

Data Qualifiers

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	Not Specified	**Lab Number:**	L2015218
Project Number:	31647	**Report Date:**	04/16/20

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

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
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; 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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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.**

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.

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.

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 4/10/20

ALPHA Job #: L2015218

Client Information
Client: CHA
Address: III Winners Circle
Albany, NY 12205
Phone: 518 453 4500
Fax:
Email: churlburt@chacompanies.com

Project Information
Project Name:
Project Location:
Project # 31647
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☑ Due Date:
Rush (only if pre approved) ☐ # of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Deliverables
☐ ASP-A ☑ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☑ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☑ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☑ NY
☐ Other:

ANALYSIS
TCL VOCs 8260C
TCL SVOCs 8270D

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

Total Bottle

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs 8260C	TCL SVOCs 8270D	Sample Specific Comments
L2015218-01	GW-MW1-040920	4/9/20	11:45	WATER	CRH	✓	✓	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V	A
Preservative	B	A

Relinquished By:	Date/Time	Received By:	Date/Time
	4/9/20 13:20	AAR	4/9/20 1320
	4/9/20 1325		4/10/20 00:20

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)