HALEY & ALDRICH OF NEW YORK
237 W 35th Street
16th Floor
New York, NY 10001
646.277.5685

11 November 2022
File No. 0205805-001

New York City Office of Environmental Remediation
100 Gold Street, 2nd Floor
New York NY 10038

Attention: William Quinones

Subject: Supplemental Remedial Investigation Report
817 Bedford Avenue
Brooklyn, New York
OER Project No. 22TMP1712K

Dear William Quinones:

On behalf of Mazel Mit Brucha 104 LLC, Haley & Aldrich of New York (Haley & Aldrich) is submitting for review and approval of the New York City Office of Environmental Remediation (NYCOER) this Supplemental Remedial Investigation (Supplemental RI) Report for the Site located at 817 Bedford Avenue in Brooklyn, NY (Site). The Site is listed with an environmental E-Designation (E-102) for hazardous materials resulting from a City Environmental Quality Review (CEQR) effective 9 May 2001 (CEQR # 00DCP015K) for the Flushing Bedford Rezoning Action. This Supplemental RI was conducted in response to the NYCOER's request for additional groundwater data for the Site. It is our understanding, based on correspondence with the NYCOER during the Remedial Action Work Plan Scoping call for the Site on 15 September 2022, that the NYCOER and New York State Department of Environmental Conservation (NYSDEC) seek to better understand the presence of volatile organic compounds (VOCs), specifically chlorinated VOCs, in groundwater at the Site.

This Supplemental RI was designed to supplement the findings and information presented in the August 2022 RIR and should be reviewed as an Addendum to the August 2022 RIR. The scope of work detailed in this Supplemental RI Report was conducted in accordance with the NYSDEC's Technical Guidance for Site Investigation and Remediation" (DER-10 dated May 2010); the NYCOER-approved Remedial Investigation Work Plan dated July 2022; and per correspondence with the NYSDEC on 15 September 2022 and 9 November 2022.

SUPPLEMENTAL REMEDIAL INVESTIGATION ACTIVITIES

On 28 October 2022, Haley & Aldrich remobilized to the Site to install three permanent groundwater monitoring wells and collect three groundwater samples for VOC analysis. Drilling was performed utilizing a track-mounted sonic drill rig (Geoprobe®) operated by a licensed operator provided by Eastern Environmental Solutions (Eastern), a licensed drilling subcontractor.

Drill rig refusal was encountered Site-wide at depths between 14 and 16 feet below ground surface (bgs) resulting from rocky subsurface conditions, consistent with the geology throughout this region of Brooklyn. Due to drill rig refusal, two of the three proposed wells were installed, and two groundwater samples were collected. The locations of groundwater samples collected during the July 2022 RI and the October 2022 Supplemental RI are displayed on Figure 1.

Two new permanent groundwater monitoring wells were installed at the Site during this Supplemental RI: TW-1 located in the eastern region of the Site and TW-3 located in the central region of the Site. Each well was installed to 40 feet bgs. Groundwater was encountered at approximately 30 ft bgs during the Supplemental RI.

Groundwater samples were collected in accordance the NYCOER-approved Remedial Investigation Work Plan dated July 2022, placed on ice in coolers immediately after sample collection, and transported under standard chain of custody protocols to Alpha Analytical for VOC analysis.

SUMMARY OF ANALYTICAL DATA

Groundwater analytical results were compared to NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS). A summary of the analytical data for the groundwater samples collected during the October 2022 Supplemental RI is provided below:

- Two VOCs were detected in one or both groundwater samples at concentrations exceeding AWQSs, including: chloroform in both samples, with a maximum concentration of 45 micrograms per liter (ug/L) in TW-3 (above the AWQS of 7 ug/L); and tetrachloroethene (PCE) in one sample, TW-1, with a concentration of 15 ug/L (above the AWQS of 5 ug/L). No other VOCs were detected above AWQSs in groundwater samples analyzed.
- Three chlorinated VOCs were detected above laboratory detection limits in one or both groundwater samples analyzed, including: cis-1,2-dichloroethene in one sample, TW-1, with a concentration of 1 ug/L; PCE in both samples, with a maximum concentration of 15 ug/L in TW-1, which exceeds the AWQS for PCE, as indicated above; and, trichloroethene in both samples, with a maximum concentration of 0.84 ug/L in TW-1.

Table 1 summarizes the analytical results for the two groundwater samples collected during the Supplemental RI. Figure 1 displays groundwater results that exceed AWQSs as well as all chlorinated VOCs detected in groundwater samples analyzed as part of the July 2022 RI and the October 2022 Supplemental RI. The analytical laboratory report for the samples collected during the October 2022 Supplemental RI is provided as Attachment 1.

Please do not hesitate to contact us if there are any questions regarding this RI Addendum or any other aspects of the project.

Sincerely yours,
HALEY & ALDRICH OF NEW YORK

James M. Bellew	Suzanne M. Bell, P.E.	Elizabeth R. Scheuerman
Principal	Project Manager	Assistant Project Manager

Attachments:

Table 1 – Groundwater Analytical Results - Volatile Organic Compounds

Figure 1 – Volatile Organic Compounds in Groundwater Chemistry Map

Appendix A – Laboratory Analytical Data Report from Alpha Analytical, dated 8 November 2022

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TABLES

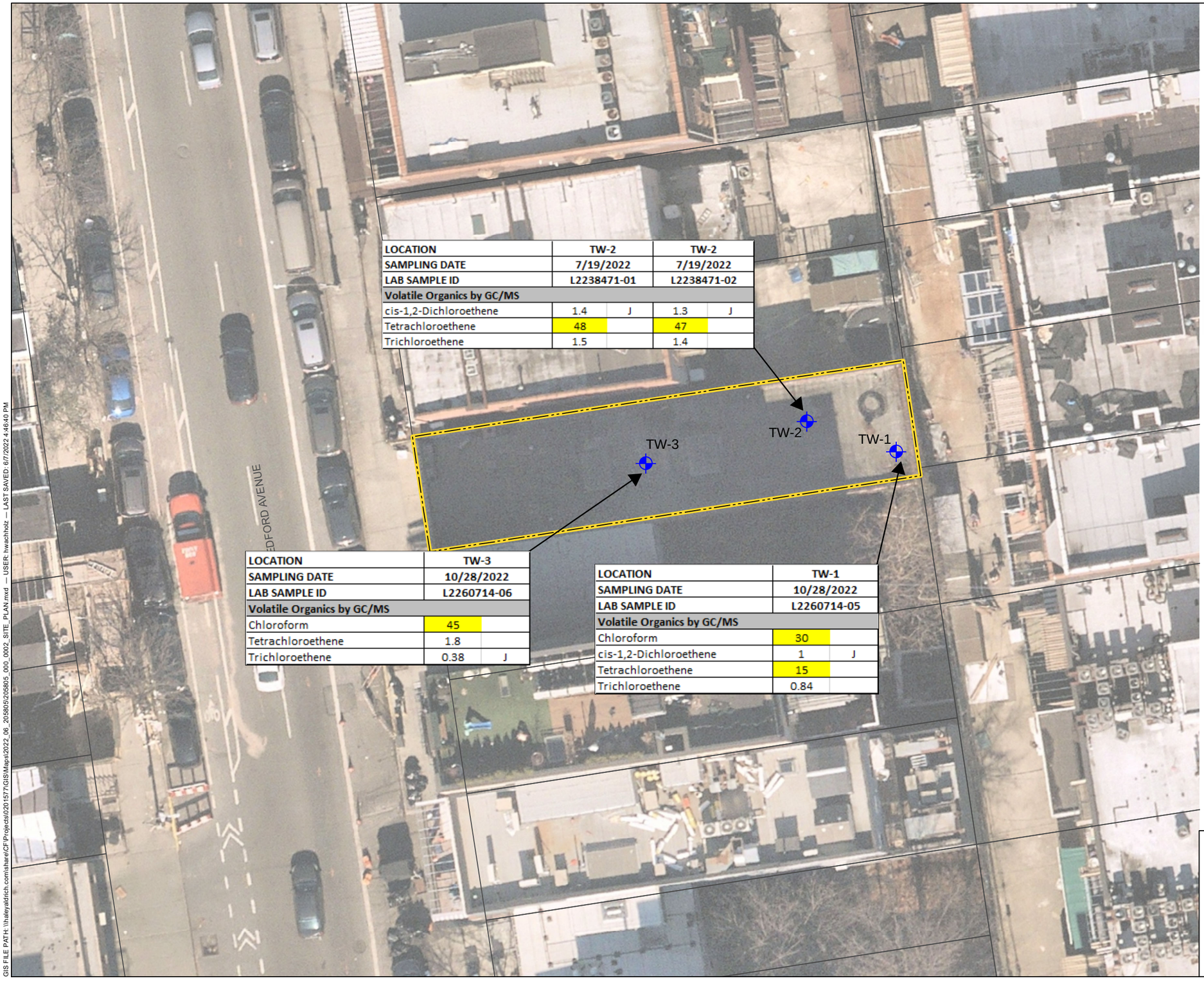
Table 1: Groundwater Analytical Results - Volatile Organic Compounds
Supplemental Remedial Investigation - October 2022
817 Bedford Avenue, Brooklyn, NY

LOCATION			TW-1		TW-3	
SAMPLING DATE			10/28/2022		10/28/2022	
SAMPLE ID			TW-1_102822		TW-3_102822	
LAB SAMPLE ID			L2260714-05		L2260714-06	
SAMPLE TYPE			WATER		WATER	
SAMPLE DEPTH			35' bgs		35' bgs	
	NY-AWQS	Units	Results	Qual	Results	Qual
Volatile Organics by GC/MS						
1,1,1,2-Tetrachloroethane	5	µg/L	2.5	U	2.5	U
1,1,1-Trichloroethane	5	µg/L	2.5	U	2.5	U
1,1,2,2-Tetrachloroethane	5	µg/L	0.5	U	0.5	U
1,1,2-Trichloroethane	1	µg/L	1.5	U	1.5	U
1,1-Dichloroethane	5	µg/L	2.5	U	2.5	U
1,1-Dichloroethene	5	µg/L	0.5	U	0.5	U
1,1-Dichloropropene	5	µg/L	2.5	U	2.5	U
1,2,3-Trichlorobenzene	5	µg/L	2.5	U	2.5	U
1,2,3-Trichloropropane	0.04	µg/L	2.5	U	2.5	U
1,2,4,5-Tetramethylbenzene	5	µg/L	2	U	2	U
1,2,4-Trichlorobenzene	5	µg/L	2.5	U	2.5	U
1,2,4-Trimethylbenzene	5	µg/L	2.5	U	2.5	U
1,2-Dibromo-3-chloropropane	0.04	µg/L	2.5	U	2.5	U
1,2-Dibromoethane	0.0006	µg/L	2	U	2	U
1,2-Dichlorobenzene	3	µg/L	2.5	U	2.5	U
1,2-Dichloroethane	0.6	µg/L	0.5	U	0.5	U
1,2-Dichloroethene, Total	~	µg/L	1	J	2.5	U
1,2-Dichloropropane	1	µg/L	1	U	1	U
1,3,5-Trimethylbenzene	5	µg/L	2.5	U	2.5	U
1,3-Dichlorobenzene	3	µg/L	2.5	U	2.5	U
1,3-Dichloropropane	5	µg/L	2.5	U	2.5	U
1,3-Dichloropropene, Total	~	µg/L	0.5	U	0.5	U
1,4-Dichlorobenzene	3	µg/L	2.5	U	2.5	U
1,4-Dioxane	~	µg/L	250	U	250	U
2,2-Dichloropropane	5	µg/L	2.5	U	2.5	U
2-Butanone	50	µg/L	5	U	5	U
2-Hexanone	50	µg/L	5	U	5	U
4-Methyl-2-pentanone	~	µg/L	5	U	5	U
Acetone	50	µg/L	2.1	J	5.5	
Acrylonitrile	5	µg/L	5	U	5	U
Benzene	1	µg/L	0.5	U	0.5	U
Bromobenzene	5	µg/L	2.5	U	2.5	U
Bromochloromethane	5	µg/L	2.5	U	2.5	U
Bromodichloromethane	50	µg/L	2.5		3.7	
Bromoform	50	µg/L	2	U	2	U
Bromomethane	5	µg/L	2.5	U	2.5	U
Carbon disulfide	60	µg/L	5	U	5	U
Carbon tetrachloride	5	µg/L	0.5	U	0.5	U
Chlorobenzene	5	µg/L	2.5	U	2.5	U
Chloroethane	5	µg/L	2.5	U	2.5	U
Chloroform	7	µg/L	30		45	
Chloromethane	~	µg/L	2.5	U	2.5	U
cis-1,2-Dichloroethene	5	µg/L	1	J	2.5	U
cis-1,3-Dichloropropene	0.4	µg/L	0.5	U	0.5	U
Dibromochloromethane	50	µg/L	0.5	U	0.18	J
Dibromomethane	5	µg/L	5	U	5	U
Dichlorodifluoromethane	5	µg/L	5	U	5	U
Ethyl ether	~	µg/L	2.5	U	2.5	U
Ethylbenzene	5	µg/L	2.5	U	2.5	U
Hexachlorobutadiene	0.5	µg/L	2.5	U	2.5	U
Isopropylbenzene	5	µg/L	2.5	U	2.5	U
Methyl tert butyl ether	10	µg/L	2.5	U	2.5	U
Methylene chloride	5	µg/L	2.5	U	2.5	U
n-Butylbenzene	5	µg/L	2.5	U	2.5	U
n-Propylbenzene	5	µg/L	2.5	U	2.5	U
Naphthalene	10	µg/L	2.5	U	2.5	U
o-Chlorotoluene	5	µg/L	2.5	U	2.5	U
o-Xylene	5	µg/L	2.5	U	2.5	U
p-Chlorotoluene	5	µg/L	2.5	U	2.5	U
p-Diethylbenzene	~	µg/L	2	U	2	U
p-Ethyltoluene	~	µg/L	2	U	2	U
p-Isopropyltoluene	5	µg/L	2.5	U	2.5	U
p/m-Xylene	5	µg/L	2.5	U	2.5	U
sec-Butylbenzene	5	µg/L	2.5	U	2.5	U
Styrene	5	µg/L	2.5	U	2.5	U
tert-Butylbenzene	5	µg/L	2.5	U	2.5	U
Tetrachloroethene	5	µg/L	15		1.8	
Toluene	5	µg/L	2.5	U	2.5	U
trans-1,2-Dichloroethene	5	µg/L	2.5	U	2.5	U
trans-1,3-Dichloropropene	0.4	µg/L	0.5	U	0.5	U
trans-1,4-Dichloro-2-butene	5	µg/L	2.5	U	2.5	U
Trichloroethene	5	µg/L	0.84		0.38	J
Trichlorofluoromethane	5	µg/L	2.5	U	2.5	U
Vinyl acetate	~	µg/L	5	U	5	U
Vinyl chloride	2	µg/L	1	U	1	U
Xylenes, Total	~	µg/L	2.5	U	2.5	U

Notes:
1. Groundwater results are compared to the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS)
2. ~ = Regulatory limit for the analyte does not exist
3. µg/L = micrograms per liter
4. Exceedances of the NY-AWQS are shaded yellow

Qualifiers:
J = The analyte was detected above the Method Detection Limit (MDL), but below the RL; therefore, the result is an estimated concentration.
U = The analyte was analyzed for, but was not detected at a level greater than or equal to the reporting limit (RL); the value shown in the table is the RL.

FIGURES



LOCATION	TW-2		TW-2	
SAMPLING DATE	7/19/2022		7/19/2022	
LAB SAMPLE ID	L2238471-01		L2238471-02	
Volatile Organics by GC/MS				
cis-1,2-Dichloroethene	1.4	J	1.3	J
Tetrachloroethene	48		47	
Trichloroethene	1.5		1.4	

LOCATION	TW-3	
SAMPLING DATE	10/28/2022	
LAB SAMPLE ID	L2260714-06	
Volatile Organics by GC/MS		
Chloroform	45	
Tetrachloroethene	1.8	
Trichloroethene	0.38	J

LOCATION	TW-1	
SAMPLING DATE	10/28/2022	
LAB SAMPLE ID	L2260714-05	
Volatile Organics by GC/MS		
Chloroform	30	
cis-1,2-Dichloroethene	1	J
Tetrachloroethene	15	
Trichloroethene	0.84	

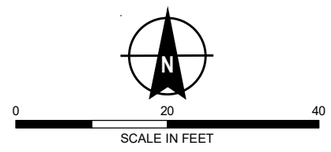
LEGEND

- PARCEL BOUNDARY
- SITE BOUNDARY
- MONITORING WELL LOCATION AND GROUNDWATER SAMPLE LOCATION

NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards (AWQS) and Guidance Values (SGVs) for Class A Drinking Water		
Analytes	**AWQS**	**Unit**
Volatile Organics by GC/MS		
Tetrachloroethene	5	µg/L
Chloroform	7	µg/L

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.
2. AERIAL IMAGERY SOURCE: NEARMAP, 27 FEBRUARY 2022
3. GROUNDWATER SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS (AWQS)
4. EXCEEDANCES OF THE NYSDEC AWQS ARE SHADED YELLOW.
5. MICROGRAMS PER LITER (ug/L).
6. TW-2 WAS A TEMPORARY MONITORING WELL THAT WAS INSTALLED AND SAMPLED ON 19 JULY 2022 AS PART OF THE INITIAL REMEDIAL INVESTIGATION.
7. TW-1 & TW-3 ARE PERMANENT MONITORING WELLS THAT WERE INSTALLED AND SAMPLED ON 28 OCTOBER 2022 AS PART OF THE SUPPLEMENTAL REMEDIAL INVESTIGATION.
8. J - THE ANALYTE WAS DETECTED ABOVE THE METHOD DETECTION LIMIT (MDL), BUT BELOW THE REPORTING LIMIT (RL); THEREFORE, THE RESULT IS AN ESTIMATED CONCENTRATION.



HALEY ALDRICH

817 BEDFORD AVENUE
BROOKLYN, NEW YORK

VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER CHEMISTRY MAP

NOVEMBER 2022

FIGURE 1

APPENDIX A
Laboratory Analytical Data Report

ANALYTICAL REPORT

Lab Number:	L2262454
Client:	Haley & Aldrich 237 West 35th Street 16th Floor New York, NY 10123
ATTN:	Elizabeth Scheuerman
Phone:	(646) 277-5692
Project Name:	817 BEDFORD AVENUE
Project Number:	0205805
Report Date:	11/08/22

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

Project Name: 817 BEDFORD AVENUE
Project Number: 0205805

Lab Number: L2262454
Report Date: 11/08/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2262454-01	TW-1_102822	WATER	817 BEDFORD AVE, BROOKLYN, NY	10/28/22 16:45	10/28/22
L2262454-02	TW-3_102822	WATER	817 BEDFORD AVE, BROOKLYN, NY	10/28/22 18:45	10/28/22

Project Name:	817 BEDFORD AVENUE	**Lab Number:**	L2262454
Project Number:	0205805	**Report Date:**	11/08/22

Case Narrative

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

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

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

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

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

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

Project Name:	817 BEDFORD AVENUE	**Lab Number:**	L2262454
Project Number:	0205805	**Report Date:**	11/08/22

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Melissa Sturgis Melissa Sturgis

Title: Technical Director/Representative Date: 11/08/22

ORGANICS

VOLATILES

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

SAMPLE RESULTS

Lab ID: L2262454-01 Date Collected: 10/28/22 16:45
Client ID: TW-1_102822 Date Received: 10/28/22
Sample Location: 817 BEDFORD AVE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/02/22 10:21
Analyst: PID

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	30		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	15		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	2.5		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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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	ND		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

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

SAMPLE RESULTS

Lab ID: L2262454-01 Date Collected: 10/28/22 16:45

Client ID: TW-1_102822 Date Received: 10/28/22

Sample Location: 817 BEDFORD AVE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.84		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	1.0	J	ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	1.0	J	ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.1	J	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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

SAMPLE RESULTS

Lab ID: L2262454-01 Date Collected: 10/28/22 16:45

Client ID: TW-1_102822 Date Received: 10/28/22

Sample Location: 817 BEDFORD AVE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	107		70-130

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

SAMPLE RESULTS

Lab ID: L2262454-02 Date Collected: 10/28/22 18:45
Client ID: TW-3_102822 Date Received: 10/28/22
Sample Location: 817 BEDFORD AVE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260D
Analytical Date: 11/02/22 10:40
Analyst: PID

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	45		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	0.18	J	ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	1.8		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	3.7		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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14	1
1,1-Dichloropropene	ND		ug/l	2.5	0.70	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	ND		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

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

SAMPLE RESULTS

Lab ID: L2262454-02 Date Collected: 10/28/22 18:45

Client ID: TW-3_102822 Date Received: 10/28/22

Sample Location: 817 BEDFORD AVE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.38	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
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	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
Xylenes, Total	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.5		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
Vinyl acetate	ND		ug/l	5.0	1.0	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
2,2-Dichloropropane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,3-Dichloropropane	ND		ug/l	2.5	0.70	1
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70	1
Bromobenzene	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
o-Chlorotoluene	ND		ug/l	2.5	0.70	1
p-Chlorotoluene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Hexachlorobutadiene	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

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

SAMPLE RESULTS

Lab ID: L2262454-02 Date Collected: 10/28/22 18:45

Client ID: TW-3_102822 Date Received: 10/28/22

Sample Location: 817 BEDFORD AVE, BROOKLYN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,4-Dioxane	ND		ug/l	250	61.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54	1
Ethyl ether	ND		ug/l	2.5	0.70	1
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	112		70-130

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/02/22 08:44
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1707450-5					
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
1,3-Dichloropropene, Total	ND		ug/l	0.50	0.14
1,1-Dichloropropene	ND		ug/l	2.5	0.70
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

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/02/22 08:44
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1707450-5					
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70
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
Xylenes, Total	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
1,2-Dichloroethene, Total	ND		ug/l	2.5	0.70
Dibromomethane	ND		ug/l	5.0	1.0
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70
Acrylonitrile	ND		ug/l	5.0	1.5
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
Vinyl acetate	ND		ug/l	5.0	1.0
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
2,2-Dichloropropane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,3-Dichloropropane	ND		ug/l	2.5	0.70
1,1,1,2-Tetrachloroethane	ND		ug/l	2.5	0.70
Bromobenzene	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

Project Name: 817 BEDFORD AVENUE **Lab Number:** L2262454

Project Number: 0205805 **Report Date:** 11/08/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260D
Analytical Date: 11/02/22 08:44
Analyst: PID

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1707450-5					
o-Chlorotoluene	ND		ug/l	2.5	0.70
p-Chlorotoluene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Hexachlorobutadiene	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
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	250	61.
p-Diethylbenzene	ND		ug/l	2.0	0.70
p-Ethyltoluene	ND		ug/l	2.0	0.70
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.54
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 817 BEDFORD AVENUE
Project Number: 0205805
Lab Number: L2262454
Report Date: 11/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1707450-3 WG1707450-4								
Methylene chloride	110		110		70-130	0		20
1,1-Dichloroethane	120		120		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	99		100		63-132	1		20
1,2-Dichloropropane	100		110		70-130	10		20
Dibromochloromethane	86		90		63-130	5		20
1,1,2-Trichloroethane	92		99		70-130	7		20
Tetrachloroethene	99		100		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	88		88		62-150	0		20
1,2-Dichloroethane	96		100		70-130	4		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	92		96		67-130	4		20
trans-1,3-Dichloropropene	83		86		70-130	4		20
cis-1,3-Dichloropropene	89		93		70-130	4		20
1,1-Dichloropropene	96		100		70-130	4		20
Bromoform	77		83		54-136	8		20
1,1,2,2-Tetrachloroethane	94		100		67-130	6		20
Benzene	110		110		70-130	0		20
Toluene	110		110		70-130	0		20
Ethylbenzene	110		110		70-130	0		20
Chloromethane	130		130		64-130	0		20
Bromomethane	56		61		39-139	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 817 BEDFORD AVENUE

Project Number: 0205805

Lab Number: L2262454

Report Date: 11/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1707450-3 WG1707450-4								
Vinyl chloride	120		120		55-140	0		20
Chloroethane	90		87		55-138	3		20
1,1-Dichloroethene	85		85		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	100		110		70-130	10		20
1,2-Dichlorobenzene	100		100		70-130	0		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	88		97		63-130	10		20
p/m-Xylene	110		110		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		110		70-130	10		20
Dibromomethane	93		99		70-130	6		20
1,2,3-Trichloropropane	96		100		64-130	4		20
Acrylonitrile	110		120		70-130	9		20
Styrene	105		105		70-130	0		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	110		120		58-148	9		20
Carbon disulfide	66		66		51-130	0		20
2-Butanone	110		94		63-138	16		20
Vinyl acetate	87		90		70-130	3		20
4-Methyl-2-pentanone	94		100		59-130	6		20
2-Hexanone	100		120		57-130	18		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 817 BEDFORD AVENUE

Project Number: 0205805

Lab Number: L2262454

Report Date: 11/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1707450-3 WG1707450-4								
Bromochloromethane	99		99		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	92		94		70-130	2		20
1,3-Dichloropropane	97		100		70-130	3		20
1,1,1,2-Tetrachloroethane	89		91		64-130	2		20
Bromobenzene	98		100		70-130	2		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	100		100		70-130	0		20
o-Chlorotoluene	110		110		70-130	0		20
p-Chlorotoluene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	94		99		41-144	5		20
Hexachlorobutadiene	89		94		63-130	5		20
Isopropylbenzene	110		110		70-130	0		20
p-Isopropyltoluene	97		99		70-130	2		20
Naphthalene	90		95		70-130	5		20
n-Propylbenzene	110		110		69-130	0		20
1,2,3-Trichlorobenzene	91		94		70-130	3		20
1,2,4-Trichlorobenzene	92		95		70-130	3		20
1,3,5-Trimethylbenzene	110		110		64-130	0		20
1,2,4-Trimethylbenzene	100		110		70-130	10		20
1,4-Dioxane	68		78		56-162	14		20
p-Diethylbenzene	100		100		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 817 BEDFORD AVENUE
Project Number: 0205805
Lab Number: L2262454
Report Date: 11/08/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1707450-3 WG1707450-4								
p-Ethyltoluene	110		110		70-130	0		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	72		79		59-134	9		20
trans-1,4-Dichloro-2-butene	96		110		70-130	14		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	93		96		70-130
Toluene-d8	105		105		70-130
4-Bromofluorobenzene	112		113		70-130
Dibromofluoromethane	96		96		70-130

Project Name: 817 BEDFORD AVENUE
Project Number: 0205805

Lab Number: L2262454
Report Date: 11/08/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2262454-01A	Vial HCl preserved	A	NA		2.0	Y	Absent		NYTCL-8260(14)
L2262454-01B	Vial HCl preserved	A	NA		2.0	Y	Absent		NYTCL-8260(14)
L2262454-01C	Vial HCl preserved	A	NA		2.0	Y	Absent		NYTCL-8260(14)
L2262454-02A	Vial HCl preserved	A	NA		2.0	Y	Absent		NYTCL-8260(14)
L2262454-02B	Vial HCl preserved	A	NA		2.0	Y	Absent		NYTCL-8260(14)
L2262454-02C	Vial HCl preserved	A	NA		2.0	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	817 BEDFORD AVENUE	**Lab Number:**	L2262454
Project Number:	0205805	**Report Date:**	11/08/22

GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	817 BEDFORD AVENUE	**Lab Number:**	L2262454
Project Number:	0205805	**Report Date:**	11/08/22

Footnotes

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

Terms

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

Chlordane: 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.)

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'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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.

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

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Data Qualifiers

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 Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

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

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

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REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

GROUNDWATER

L2262454

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

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Date Rec'd in Lab 10/29/22

ALPHA Job # ~~L2260714~~

Client Information

Client: Haley & Aldrich
Address: 237 W 35th Street
Floor 11e, New York, NY 10123
Phone: 646-277-5612
Fax:
Email: EScheuerman@haleyaldrich.com

Project Information

Project Name: 817 Bedford Avenue
Project Location: 817 Bedford Ave, Brooklyn, NY
Project # 0205805
(Use Project name as Project #) ☐
Project Manager: Elizabeth Scheuerman
ALPHAQuote #:

Turn-Around Time

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

Deliverables

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

Billing Information

☑ Same as Client Info
PO #

Regulatory Requirement

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

Disposal Site Information

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

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

* INCLUDE ALL CVOCs

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs INCL.	CVOCs	Total Bottles
-01 ~~607-04~~ 05	TW-1_102822	10/28/22	1645	GW	LM	X		
~~62459-02~~ 06	TW-3_102822	10/28/22	1845	GW	LM	X		

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

Sample Specific Comments

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
Preservative

Relinquished By:	Date/Time	Received By:	Date/Time
	10/28/22 1850		10/28/22 1850
	10/28/22 19:50		10.28.22 2142
	10.29.22		10/29/22 0670
E/AM	10/29/22 0150		10/29/22 0150

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)