July 27, 2023

Rafi Alam
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

Re: Remedial Design: Groundwater Monitoring
250 Water Street
New York, NY
BCP Site No. C231127
Langan Project No. 170381202

Dear Mr. Alam,

This Remedial Design was prepared on behalf of 250 Seaport District, LLC (the Volunteer) for the property at 250 Water Street in the South Street Seaport neighborhood of New York, NY (the site). The Volunteer will implement this remedial design under the New York State Brownfield Cleanup Program (BCP) (Site No. C231127), pursuant to the August 1, 2019 Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC). The site is currently being remediated in accordance with the NYSDEC-approved November 2021 Remedial Action Work Plan (RAWP) and the NYSDEC November 2021 Decision Document.

The November 2021 Decision Document requires pre- and post-dewatering monitoring for petroleum-related volatile organic compounds (VOCs) at two monitoring wells down-gradient of the former petroleum-impacted soil hotspot (referred to as the "treatment zone"[1] in the November 2021 Decision Document). This Remedial Design describes the scope of work and proposes remediation criteria that can be used to determine if additional groundwater treatment is necessary following removal of source material and site-wide dewatering as part of the Track 2 cleanup.

SITE BACKGROUND

The site is approximately 48,057 square feet (1.10 acres) in area and is located at 250 Water Street in the South Street Seaport neighborhood of New York, NY (Block 98, Lot 1 on the Borough of Manhattan Tax Map). The site occupies the entire city block bordered by Pearl Street to the

[1] The November 2021 Decision Document refers to this area as the "treatment zone" and the November 2021 Remedial Action Work Plan refers to this area as the "petroleum-impacted hotspot". For the purposes of this Remedial Design, this area will be referred to as the "petroleum-impacted hotspot".

northwest (project north), Peck Slip to the northeast (project east), Water Street to the southeast (project south), and Beekman Street to the southwest (project west). A site location map is provided as Figure 1.

Site remediation in accordance with the NYSDEC-approved RAWP commenced in April 2022. Remedial activities completed to date include the following:

- Installation of support-of-excavation (SOE) along portions of the Pearl Street and Water Street and along the entirety of the Peck Slip.
- Excavation and off-site disposal of approximately 23,850 tons (about 17,000 cubic yards) of soil/fill from the site, including petroleum-impacted soil/fill from the petroleum-impacted hotspot.
- Dewatering within the former petroleum-impacted hotspot was completed to facilitate excavation activities. Groundwater removed during dewatering operations was treated and discharged into the NYCDEP combined sewer in accordance with a NYCDEP temporary discharge permit (Permit No. C001712214).
    - The petroleum-impacted soil hotspot excavation consisted of an approximately 90-foot by 90-foot area excavated to depths between about 16 to 18 feet bgs (elevation [el] -8).
- Removal, decommissioning, and off-site disposal of 8 underground storage tanks (USTs).
- Collection of confirmation endpoint soil samples to evaluate achievement of a Track 2 cleanup in excavated areas.

At the completion of the first phase of remediation, the northeastern part of the site was excavated to depths between 8 and 15 feet bgs (about el 1), with deeper localized excavation to depths between 16 and 18 feet bgs (about el -8) for removal of petroleum-impacted soil/fill in the former petroleum-impacted hotspot (i.e. source material). The northeastern part of the site, including the former petroleum-impacted hotspot, was confirmed to meet Track 2 criteria based on remedial excavation depth and/or the results of confirmation endpoint soil sampling. The former petroleum-impacted soil hotspot was backfilled using imported fill meeting the lower of the NYSDEC Protection of Groundwater (PGW) and Restricted Use Restricted-Residential (RURR) soil cleanup objectives (SCOs).

The site is currently between the first and second (and final) phases of remediation. It is enclosed by construction fencing and site access is restricted by locked ingress/egress gates and site security personnel. The northeastern part of the site remains in the remediated condition (i.e., with soil meeting the Track 2 SCOs or with imported fill as a temporary cover in select areas that have not achieved Track 2 SCOs, but have satisfied Track 2 remediation criteria by meeting the minimum excavation depth of 15 feet bgs) and the southwestern part of the site is covered with asphalt from the former parking lot. The second phase of remediation is anticipated to begin in

June 2023 and will include installation of SOE, dewatering to accommodate remedial excavation, and excavation and off-site disposal of soil/fill to meet Track 2 criteria in the remainder of the site.

GROUNDWATER CONDITIONS

Site groundwater depths range from about 9 to 15.5 feet below the initial site grade (about el -0.65 to el -1.10) and the groundwater flow direction is to the southeast (towards Water Street).

The NYSDEC-approved June 2021 RIR identified petroleum-impacted groundwater, characterized by field observations (petroleum-like odors, photoionization detector [PID] readings above background and free-phase non-aqueous phase liquid [LNAPL]) and petroleum-related VOC and semivolatile organic compound (SVOC) concentrations above the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values (SGVs) for Class GA drinking water (collectively referred to the NYSDEC SGVs) in the eastern and northwestern parts of the site.

The highest concentrations of petroleum-related VOCs and/or SVOCs above the NYSDEC SGVs were identified in temporary monitoring well TMW09 and monitoring well MW31, which were located hydraulically up-gradient of the former USTs in the northeastern part of the site. Total VOC concentrations in temporary monitoring well TMW09 and monitoring well MW31 were 32.6 milligrams per liter (mg/L) and 4.0 mg/L, respectively. The petroleum-related impacts to groundwater were attributed to historical site use as an oil company and garage with two 550-gallon USTs, and open NYSDEC Spill No. 1507371 (reported during due diligence for the Volunteer's purchase of the site and associated with the former USTs). Groundwater sample analytical results from these two monitoring wells are summarized in Table 1 and Figure 2.

PROPOSED SCOPE OF WORK

Dewatering and petroleum source material excavation completed during the first phase of remediation contributed to site-wide groundwater remediation. Groundwater samples were collected from the influent of the dewatering system during the first phase of remediation and were analyzed for NYSDEC Part 375/TCL VOCs and SVOCs. Petroleum-related VOCs (benzene, toluene, ethylbenzene, and total xylenes [BTEX]) were detected at concentrations of 0.00089 mg/L and 0.00053 mg/L during the first and second influent groundwater sampling events, respectively, which demonstrates a bulk reduction of groundwater contaminant concentrations in the former petroleum-impacted hotspot. The laboratory analytical reports for the two influent groundwater samples are provided as Attachment 1.

Additional dewatering will be completed during the next phase of remediation to accommodate excavation of soil/fill exceeding the RURR SCOs. Site-wide dewatering will supplement the groundwater remediation completed during the first phase of remediation.

The scope described herein includes the proposed methods, procedures, and criteria to be implemented during the next phase of remediation to document the achievement of the Remedial Action Objectives (RAOs) related to groundwater or to determine if additional treatment is necessary.

Monitoring Well Installation

An environmental drilling subcontractor will use a direct-push drill rig to install two groundwater monitoring wells, prior to commissioning of the dewatering system, as follows:

- One monitoring well (MW35) will be installed between former monitoring wells TMW09 and MW31 (the locations with the highest degree of petroleum-related groundwater impacts during due diligence and the remedial investigation)
- One monitoring well (MW36) will be installed at a hydraulically down-gradient location of monitoring wells TMW09 and MW31 (towards the Peck Slip/Water Street corner of the site)

The proposed groundwater monitoring well locations are shown on Figure 2.

Prior to monitoring well installation, each borehole will be expanded using a 6-inch-diameter hollow stem auger to maintain a minimum annular space of 2 inches around the well. Each monitoring well will be constructed using 2-foot-long, 2-inch-diameter polyvinyl chloride (PVC) riser pipe attached to 10-foot-long, schedule-40, 0.01-inch slotted, 2-inch-diameter PVC screen. The well annulus around the screen will be backfilled with clean sand to about 1 foot above the top of the screen and a minimum 1-foot-thick bentonite seal will be installed above the sand to surface grade.

Following installation, the wells will be developed by surging a surge block and/or weighted bailer across the well screen to agitate and remove fine particles. The surge block and/or bailer will be surged across the submerged well screen in 2- to 3-foot increments for approximately 2 minutes per increment. After surging, the well will be purged via pumping until the water is clear.

The monitoring well installation will be implemented in accordance with the safety guidelines outlined in the NYSDEC-approved November 2021 RAWP, including the Construction Health and Safety Plan (CHASP) and the Community Air Monitoring Plan (CAMP).

Groundwater Sampling and Analysis

Groundwater samples will be collected from each monitoring well at the following frequencies:

1. Once prior to commissioning of the site-wide dewatering system; and
2. Monthly during operation of the site-wide dewatering system, until commencement of building foundation construction.

Prior to sampling, the monitoring wells will be gauged for static water levels and each well will be purged. Physical and chemical parameters (e.g., temperature, dissolved oxygen, oxidation-reduction potential, pH, turbidity) will be allowed to stabilize to the ranges specified in the United States Environmental Protection Agency (US EPA) Low Stress Purging and Sampling Procedure for the Collection of Groundwater Samples from Monitoring Wells, dated July 30, 1996 (revised September 19, 2017). Samples will be collected with a peristaltic or submersible pump, or equivalent, and dedicated polyethylene tubing. If a submersible pump is used, the pump will be decontaminated with Alconox® (or similar) and water between each sample location. Development and purge water will be containerized for off-site disposal.

Groundwater samples will be analyzed for NYSDEC Part 375/Target Compound List (TCL) VOCs and SVOCs via US EPA Method 8260C and 8270D, respectively. Quality assurance/quality control (QA/QC) samples, including duplicate samples and field blank samples, will be collected in accordance with the Quality Assurance Project Plan (QAPP), which is included as Appendix E of the NYSDEC-approved November 2021 RAWP. Laboratory analysis will be conducted in accordance with US EPA SW-846 methods and NYSDEC ASP Category B deliverable format. QA/QC procedures required by the NYSDEC ASP and SW-846 methods will be followed, including instrument calibration, standard compound spikes, surrogate compound spikes, and analysis of quality control samples. Where there are differences in the SW-846 and NYSDEC ASP requirements, the NYSDEC ASP shall take precedence.

Groundwater samples will be collected into laboratory-supplied containers and will be sealed, labeled, and placed in a cooler containing ice (to attempt to maintain a temperature of approximately 4 degrees Celsius) for delivery to a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory under standard chain-of-custody protocols.

Management of Investigation-Derived Waste

Excess investigation-derived waste (IDW), including soil cuttings, will be disposed of off-site with soil/fill removed as part of remedial excavation activities during the second (and final) phase of remediation. In the event that soil cuttings require additional sampling to secure disposal facility approvals, the soil/fill will be containerized in properly-labeled and sealed in UN/DOT-approved 55-gallon drums and staged for future off-site disposal at a facility permitted to accept the waste.

Purged groundwater and decontamination fluid will be containerized and transferred to the dewatering system for treatment prior to discharge into the NYCDEP combined sewer system in accordance with a NYCDEP temporary discharge permit.

REMEDIAL PERFORMANCE EVAULATION

Groundwater sample analytical results will be compared to the NYSDEC SGVs for VOCs and SVOCs. Dewatering and monthly groundwater sampling will continue until the groundwater

sample analytical results demonstrate that a bulk reduction (90% from the maximum total VOC concentration during the remedial investigation) in groundwater concentrations has been achieved. The groundwater sample analytical results from a minimum of two consecutive monthly sampling events will be used to demonstrate a bulk reduction in groundwater concentrations.

Groundwater sample results will be provided in NYSDEC electronic data deliverable (EDD) format for EQuIS™. A data usability summary report (DUSR) and a tabular summary of groundwater sampling results will be included in the Final Engineering Report (FER) to document achievement of the RAOs.

CONTINGENCY GROUNDWATER TREATMENT

If bulk reduction is not achieved after continuous dewatering in support of remedial excavation (prior to commencement of building foundation construction), an in-situ remedy will be evaluated in coordination with the NYSDEC. In accordance with the NYSDEC-approved November 2021 RAWP, the contingent in-situ remedy may consist of an application of Oxygen Release Compound (ORC) or a chemical oxidant to treat the residual impacted groundwater. Any in-situ treatment area and approach will be determined based on the post-excavation soil and groundwater samples and will be proposed to NYSDEC approval in a future remedial design document.

Sincerely,
Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

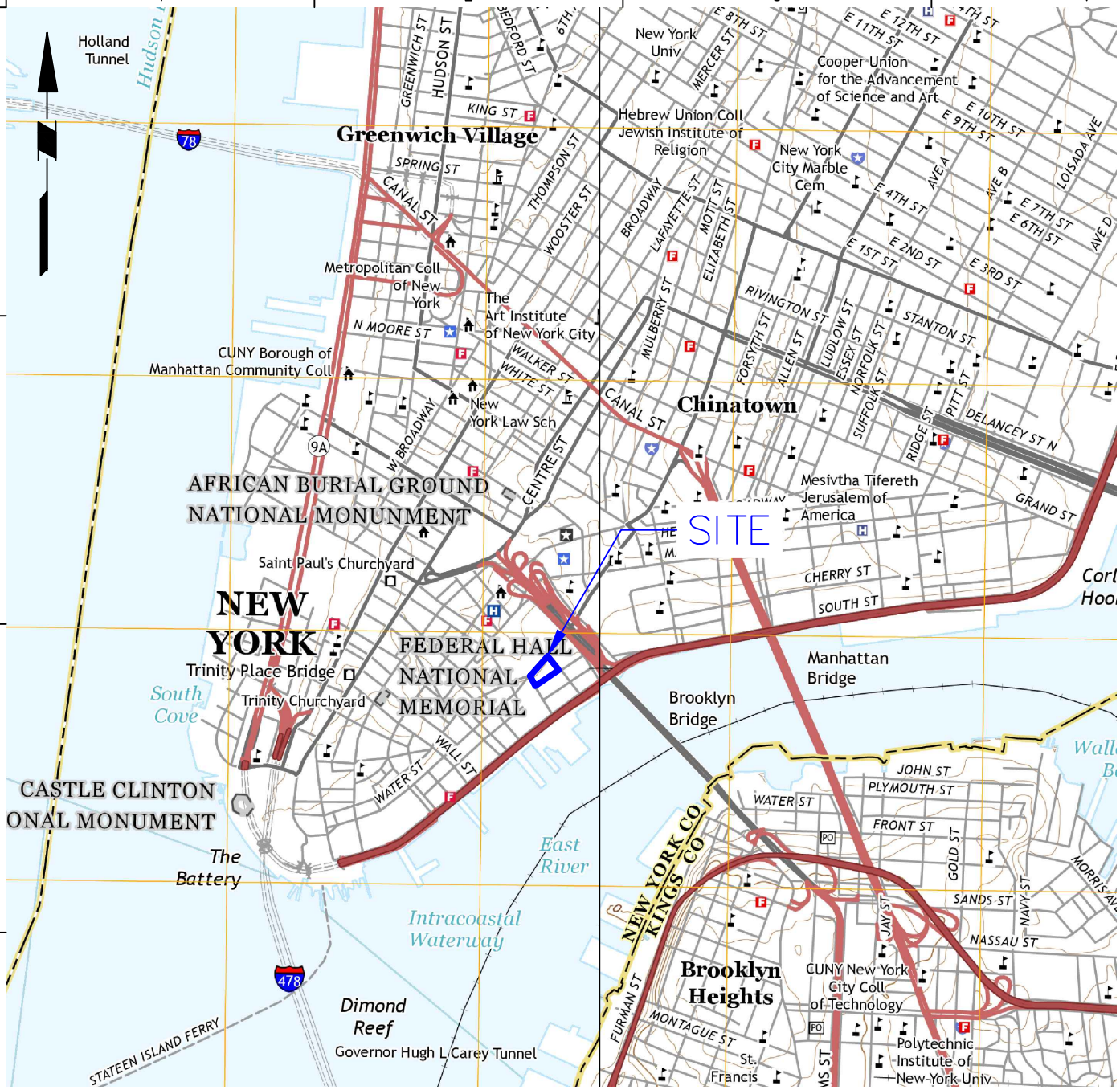
Mimi S. Raygorodetsky
Principal/Vice President

Enclosure(s):

	Figure 1	Site Location Map
	Figure 2	Proposed Monitoring Well Location Plan
	Table 1	Baseline Groundwater Sample Analytical Results
	Attachment 1	Laboratory Analytical Reports

cc: P. McMahon, M. Au, J. Frey

FIGURES



NOTES:

1. BASE MAP REFERENCE: USGS 7.5 MINUTE SERIES QUADRANGLE MAP OF JERSEY CITY, NJ, AND BROOKLYN, NY, DATED 2016

2000 0 1000 2000

SCALE IN FEET

WARNING: IT IS A VIOLATION OF THE NYS EDUCATION LAW ARTICLE 145 FOR ANY PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS ITEM IN ANY WAY.

LANGAN

Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C.

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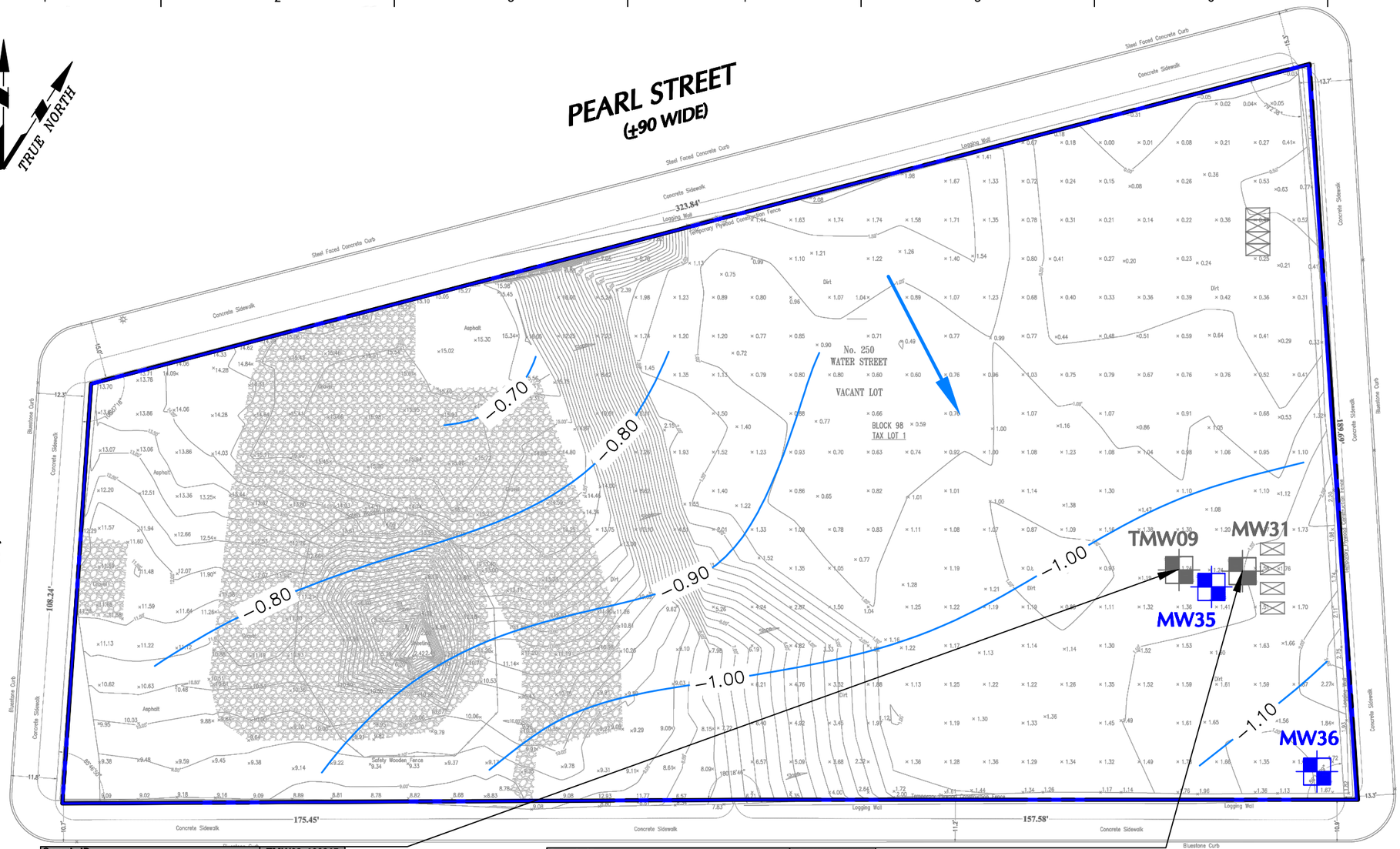
Project	Drawing Title	Project No.	Drawing No.
250 WATER STREET BLOCK No. 98, LOT No.1 NEW YORK NEW YORK	SITE LOCATION MAP	170381202 Date 12/23/2020 Drawn By JFY Checked By PM	1

Filename: \\langan.com\data\NY\data2\170381202\Project Data\CAD\02\SheetFiles\Environmental\BCP RIWP\Figure 1 - Site Location Map.dwg Date: 12/23/2020 Time: 09:47 User: jyanowitz Style Table: Langan.stb Layout: ANSIA-BP



LEGEND

- APPROXIMATE SITE BOUNDARY
- −0.90 — GROUNDWATER CONTOUR
- APPROXIMATE GROUNDWATER FLOW DIRECTION
- SB9/TMW09 — APPROXIMATE LOCATION OF PHASE II ESI OR RI GROUNDWATER MONITORING WELL
- MW35 — PROPOSED GROUNDWATER MONITORING WELL LOCATION
- APPROXIMATE LOCATION OF FORMER UNDERGROUND STORAGE TANK

Analyte	NYSDEC SGVs
VOCs (µg/L)	
1,2,4,5-Tetramethylbenzene	5
1,2,4-Trimethylbenzene	5
1,3,5-Trimethylbenzene (Mesitylene)	5
Benzene	1
Ethylbenzene	5
Isopropylbenzene (Cumene)	5
M,P-Xylene	5
Naphthalene	10
n-Butylbenzene	5
n-Propylbenzene	5
o-Xylene (1,2-Dimethylbenzene)	5
Sec-Butylbenzene	5
Toluene	5
Total Xylenes	5
SVOCs (µg/L)	
2,4-Dimethylphenol	1
Benzo(a)anthracene	0.002
Benzo(a)pyrene	0
Benzo(b)fluoranthene	0.002
Benzo(k)fluoranthene	0.002
Biphenyl (Diphenyl)	5
Chrysene	0.002
Indeno(1,2,3-cd)pyrene	0.002
Naphthalene	10
Phenol	1

NOTES:

1. BASE MAP IS REFERENCED FROM THE DRAWING TITLED TOPO SURVEY - CONTOUR, PREPARED BY NEW YORK CITY LAND SURVEYORS, P.C., DATED DECEMBER 27, 2022.
2. ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
3. GROUNDWATER ELEVATIONS ARE REFERENCED FROM FIGURE 6A INCLUDED IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC)-APPROVED REMEDIAL INVESTIGATION REPORT (RIR), TITLED 'GROUNDWATER ELEVATION CONTOUR MAP', DATED JANUARY 14, 2021.
4. GROUNDWATER CONTOURS INTERVAL IS 0.1 FOOT.
5. GROUNDWATER SAMPLE ANALYTICAL RESULTS ARE COMPARED TO THE NYSDEC TECHNICAL AND OPERATIONAL GUIDANCE SERIES (TOGS) 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES (SGVs) FOR DRINKING WATER (CLASS GA).
6. ONLY VOCs AND SVOCs DETECTED AT CONCENTRATIONS ABOVE THE NYSDEC SGVs ARE SHOWN.
7. NYSDEC SGV EXCEEDANCES ARE HIGHLIGHTED AND IN BOLD.
8. µg/L = MICROGRAM PER LITER
9. VOC = VOLATILE ORGANIC COMPOUND
10. SVOC = SEMIVOLATILE ORGANIC COMPOUND
11. J = THE ANALYTE WAS DETECTED ABOVE THE METHOD DETECTION LIMIT BUT BELOW THE REPORTING LIMIT; THEREFORE, THE RESULT IS AN ESTIMATE.
12. J- = THE REPORTED VALUE MAY BE BIASED LOW. THE ACTUAL VALUE IS EXPECTED TO BE GREATER THAN THE REPORTED VALUE.

Sample ID	TMW09_100315	
Sample Date	10/3/2015	
VOCs (µg/L)		
1,2,4,5-Tetramethylbenzene	**550**	
1,2,4-Trimethylbenzene	**6,100**	
1,3,5-Trimethylbenzene	**1,800**	
Benzene	**330**	
Ethylbenzene	**1,800**	
Isopropylbenzene	**240**	J
n-Butylbenzene	**240**	J
n-Propylbenzene	**760**	
Naphthalene	**1,700**	
o-Xylene	**3,400**	
p-Isopropyltoluene	**83**	J
p/m-Xylene	**8,400**	
sec-Butylbenzene	**86**	J
Toluene	**2,700**	
SVOCs (µg/L)		
Biphenyl	**28**	
Phenol	**44**	
Acenaphthene	**53**	
Benzo(a)anthracene	**4.6**	J
Benzo(a)pyrene	**2.2**	J
Benzo(b)fluoranthene	**2.8**	J
Chrysene	**3.7**	J
Naphthalene	**540**	
Phenanthrene	**77**	

Sample ID	MW31_090220	
Sample Date	9/2/2020	
VOCs (µg/L)		
1,2,4,5-Tetramethylbenzene	**35**	
1,2,4-Trimethylbenzene	**550**	
1,3,5-Trimethylbenzene (Mesitylene)	**140**	
Benzene	**53**	
Ethylbenzene	**390**	
Isopropylbenzene (Cumene)	**34**	
M,P-Xylene	**1,300**	
n-Butylbenzene	**6.6**	J
n-Propylbenzene	**74**	
o-Xylene (1,2-Dimethylbenzene)	**390**	
Sec-Butylbenzene	**5.8**	J
Toluene	**290**	
Total Xylenes	**1,700**	
SVOCs (µg/L)		
2,4-Dimethylphenol	**4.9**	J-
Biphenyl (Diphenyl)	**7.9**	
Naphthalene	**210**	
Phenol	**2.5**	J-

30 0 15 30

SCALE: 1 INCH = 30 FEET

LANGAN

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Project
250 WATER STREET
BLOCK No. 98, LOT No. 1
CITY
NEW YORK NEW YORK

Figure Title
PROPOSED MONITORING WELL LOCATION PLAN

Project No.	170381202
Date	5/11/2023
Drawn By	JF
Checked By	PM

Figure **2**

Filename: \\langan.com\data\NY\data2\170381202\Project Data\CAD\02\SheetFiles\Environmental\BCP Groundwater Monitoring Work Plan\Figure 2 - Proposed Monitoring Well Location Map.dwg Date: 5/12/2023 Time: 16:34 User: mau Style Table: Langan.stb
Layout: Figure 1 - Proposed Monitoring Well Location Plan

TABLE

Table 1
Groundwater Monitoring Work Plan
Baseline Groundwater Sample Analytical Results

250 Water Street
New York, New York
NYSDEC BCP Site No.: C231127
Langan Project No.: 170381202

Location Sample ID Laboratory ID Sample Date	NYSDEC SGVs	TMW09 TMW09_100315 L1525052-27 10/3/2015		MW31 MW31_090220 L2036293-02 9/2/2020	
Volatile Organic Compounds (µg/L)					
1,1,1,2-Tetrachloroethane	5	*250*	U	*12*	U
1,1,1-Trichloroethane	5	*250*	U	*12*	U
1,1,2,2-Tetrachloroethane	5	*50*	U	2.5	U
1,1,2-Trichloroethane	1	*150*	U	*7.5*	U
1,1-Dichloroethane	5	*250*	U	*12*	U
1,1-Dichloroethene	5	*50*	U	2.5	U
1,1-Dichloropropene	5	*250*	U	*12*	U
1,2,3-Trichlorobenzene	5	*250*	U	*12*	U
1,2,3-Trichloropropane	0.04	*250*	U	*12*	U
1,2,4,5-Tetramethylbenzene	5	**550**		**35**	
1,2,4-Trichlorobenzene	5	*250*	U	*12*	U
1,2,4-Trimethylbenzene	5	**6,100**		**550**	
1,2-Dibromo-3-Chloropropane	0.04	*250*	U	*12*	U
1,2-Dibromoethane (Ethylene Dibromide)	0.0006	*200*	U	*10*	U
1,2-Dichlorobenzene	3	*250*	U	*12*	U
1,2-Dichloroethane	0.6	*50*	U	*2.5*	U
1,2-Dichloropropane	1	*100*	U	*5*	U
1,3,5-Trimethylbenzene (Mesitylene)	5	**1,800**		**140**	
1,3-Dichlorobenzene	3	*250*	U	*12*	U
1,3-Dichloropropane	5	*250*	U	*12*	U
1,4-Dichlorobenzene	3	*250*	U	*12*	U
1,4-Diethyl Benzene	~	200	U	77	
1,4-Dioxane (P-Dioxane)	~	25,000	U	1,200	U
2,2-Dichloropropane	5	*250*	U	*12*	U
2-Chlorotoluene	5	*250*	U	*12*	U
2-Hexanone	50	*500*	U	25	U
4-Chlorotoluene	5	*250*	U	*12*	U
4-Ethyltoluene	~	4,400		410	
Acetone	50	*500*	U	25	U
Acrylonitrile	5	*500*	U	*25*	U
Benzene	1	**330**		**53**	
Bromobenzene	5	*250*	U	*12*	U
Bromochloromethane	5	*250*	U	*12*	U
Bromodichloromethane	50	50	U	2.5	U
Bromoform	50	*200*	U	10	U
Bromomethane	5	*250*	U	*12*	UJ
Carbon Disulfide	60	*500*	U	25	U
Carbon Tetrachloride	5	*50*	U	2.5	U
Chlorobenzene	5	*250*	U	*12*	U
Chloroethane	5	*250*	U	*12*	U
Chloroform	7	*250*	U	*12*	U
Chloromethane	5	*250*	U	*12*	U
Cis-1,2-Dichloroethene	5	*250*	U	*12*	U
Cis-1,3-Dichloropropene	0.4	*50*	U	*2.5*	U
Cymene	5	**83**	J	*12*	U
Dibromochloromethane	50	50	U	2.5	U
Dibromomethane	5	*500*	U	*25*	U
Dichlorodifluoromethane	5	*500*	U	*25*	U
Diethyl Ether (Ethyl Ether)	~	250	U	12	U
Ethylbenzene	5	**1,800**		**390**	
Hexachlorobutadiene	0.5	*250*	U	*12*	U
Isopropylbenzene (Cumene)	5	**240**	J	**34**	
M,P-Xylene	5	**8,400**		**1,300**	
Methyl Ethyl Ketone (2-Butanone)	50	*500*	U	25	U
Methyl Isobutyl Ketone (4-Methyl-2-Pentanone)	~	500	U	25	U
Methylene Chloride	5	*250*	U	*12*	U
Naphthalene	10	**1,700**		**240**	
n-Butylbenzene	5	**240**	J	**6.6**	J
n-Propylbenzene	5	**760**		**74**	
o-Xylene (1,2-Dimethylbenzene)	5	**3,400**		**390**	
Sec-Butylbenzene	5	**86**	J	**5.8**	J
Styrene	5	*250*	U	*12*	U
T-Butylbenzene	5	*250*	U	*12*	U
Tert-Butyl Methyl Ether	10	*250*	U	*12*	U
Tetrachloroethene (PCE)	5	*50*	U	2.5	U
Toluene	5	**2,700**		**290**	
Total 1,2-Dichloroethene (Cis and Trans)	~	250	U	12	U
Total Xylenes	5	**12,000**		**1,700**	
Total, 1,3-Dichloropropene (Cis And Trans)	0.4	*50*	U	*2.5*	U
Trans-1,2-Dichloroethene	5	*250*	U	*12*	U
Trans-1,3-Dichloropropene	0.4	*50*	U	*2.5*	U
Trans-1,4-Dichloro-2-Butene	5	*250*	U	*12*	U
Trichloroethene (TCE)	5	*50*	U	2.5	U
Trichlorofluoromethane	5	*250*	U	*12*	U
Vinyl Acetate	~	500	U	25	U
Vinyl Chloride	2	*100*	U	*5*	U
Total BTEX	~	16,800		2,430	
Total VOCs	~	32,600		4,000	
Semivolatile Organic Compounds (µg/L)					
1,2,4,5-Tetrachlorobenzene	5	*10*	U	*10*	U
1,2,4-Trichlorobenzene	5	5	U	5	U
1,2-Dichlorobenzene	3	2	U	2	U
1,3-Dichlorobenzene	3	2	U	2	U
1,4-Dichlorobenzene	3	2	U	2	UJ
1,4-Dioxane (P-Dioxane)	~	NA		0.15	U
2,4,5-Trichlorophenol	~	5	U	5	UJ
2,4,6-Trichlorophenol	~	5	U	5	UJ
2,4-Dichlorophenol	1	*5*	U	*5*	UJ
2,4-Dimethylphenol	1	**7.6**		**4.9**	J-
2,4-Dinitrophenol	1	*20*	U	*20*	U
2,4-Dinitrotoluene	5	5	U	5	U
2,6-Dinitrotoluene	5	5	U	5	U
2-Chloronaphthalene	10	10	U	0.2	U
2-Chlorophenol	~	2	U	2	UJ
2-Methylnaphthalene	~	220		52	
2-Methylphenol (o-Cresol)	~	14		2.3	J-
2-Nitroaniline	5	5	U	5	U
2-Nitrophenol	~	10	U	10	UJ
3 & 4 Methylphenol (m&p Cresol)	~	57		3.7	J-
3,3'-Dichlorobenzidine	5	5	U	5	U
3-Nitroaniline	5	5	U	5	U
4,6-Dinitro-2-Methylphenol	~	10	U	10	U
4-Bromophenyl Phenyl Ether	~	2	U	2	U
4-Chloro-3-Methylphenol	~	2	U	2	U
4-Chloroaniline	5	5	U	5	U
4-Chlorophenyl Phenyl Ether	~	2	U	2	U
4-Nitroaniline	5	5	U	5	U
4-Nitrophenol	~	10	U	10	UJ
Acenaphthene	20	**53**		12	
Acenaphthylene	~	10	U	0.24	JN
Acetophenone	~	5	U	5	U
Anthracene	50	13		0.97	
Benzo(a)anthracene	0.002	**4.6**	J	*0.1*	UJ
Benzo(a)pyrene	0	**2.2**	J	*0.1*	U
Benzo(b)fluoranthene	0.002	**2.8**	J	*0.1*	U
Benzo(g,h,i)Perylene	~	10	U	0.1	U
Benzo(k)fluoranthene	0.002	*10*	U	*0.1*	U
Benzoic Acid	~	50	U	50	R
Benzyl Alcohol	~	2	U	2	U
Benzyl Butyl Phthalate	50	5	U	5	U
Biphenyl (Diphenyl)	5	**28**		**7.9**	
Bis(2-chloroethoxy) methane	5	5	U	5	U
Bis(2-chloroethyl) ether (2-chloroethyl ether)	1	*2*	U	*2*	U
Bis(2-chloroisopropyl) ether	5	2	U	2	U
Bis(2-ethylhexyl) phthalate	5	3	U	3	U
Carbazole	~	3.8		2.2	
Chrysene	0.002	**3.7**	J	*0.1*	U
Dibenz(a,h)anthracene	~	10	U	0.1	U
Dibenzofuran	~	36		8.7	
Dibutyl phthalate	50	5	U	5	U
Diethyl phthalate	50	5	U	5	U
Dimethyl phthalate	50	5	U	5	U
Dioctyl phthalate	50	5	U	5	U
Fluoranthene	50	27		1.1	J+
Fluorene	50	46		8.2	
Hexachlorobenzene	0.04	*40*	U	*0.8*	U
Hexachlorobutadiene	0.5	*25*	U	0.5	U
Hexachlorocyclopentadiene	5	*20*	U	*20*	UJ
Hexachloroethane	5	*40*	U	0.8	U
Indeno(1,2,3-cd)pyrene	0.002	*10*	U	*0.1*	U
Isophorone	50	5	U	5	U
Naphthalene	10	**540**		**210**	
Nitrobenzene	0.4	*2*	U	*2*	U
n-Nitrosodi-N-Propylamine	~	5	U	5	U
n-Nitrosodiphenylamine	50	2	U	2	U
Pentachlorophenol	1	*40*	U	0.8	U
Phenanthrene	50	**77**		7.5	
Phenol	1	**44**		**2.5**	J-
Pyrene	50	17		0.75	J+

Table 1
Groundwater Monitoring Work Plan
Baseline Groundwater Sample Analytical Results

250 Water Street
New York, New York
NYSDEC BCP Site No.: C231127
Langan Project No.: 170381202

Notes:

1. Groundwater sample analytical results are compared to the New York State Department of Environmental Conservation (NYSDEC) Title 6 of the Official Compilation of New York Codes, Rules and Regulations (NYCRR) Part 703.5 and the NYSDEC Technical and Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Guidance Values for Class GA Water (herein collectively referenced as "NYSDEC SGVs").

2. Criterion comparisons for total xylenes and m,p-xylene are provided for reference. Promulgated NYSDEC SGVs are for o-xylene, m-xylene, and p-xylene.

3. Detected analytical results above NYSDEC SGVs are bolded and shaded.

4. Analytical results with reporting limits (RL) above the applicable criteria are italicized.

5. ~ = Regulatory limit for this analyte does not exist

6. µg/l = micrograms per liter

Qualifiers:

R = The sample results are unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

J = The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample.

J+ = The reported value may be biased high. The actual value is expected to be less than the reported value

J- = The reported value may be biased low. The actual value is expected to be greater than the reported value

UJ = The analyte was not detected at a level greater than or equal to the RL; however, the reported RL is approximate and may be inaccurate or imprecise.

U = The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the RL or the sample concentration for results impacted by blank contamination.

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

ATTACHMENT 1
LABORATORY ANALYTICAL REPORTS

ANALYTICAL REPORT

Lab Number:	L2251905
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Paul McMahon
Phone:	(212) 479-5429
Project Name:	250 WATER ST
Project Number:	170381202
Report Date:	09/27/22

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

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

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2251905-01	GW01_20220921	WATER	MANHATTAN NY	09/21/22 13:07	09/21/22

Project Name:	250 WATER ST	**Lab Number:**	L2251905
Project Number:	170381202	**Report Date:**	09/27/22

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: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

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.

Volatile Organics

L2251905-01: The trichloroethene result should be considered estimated due to co-elution with a non-target compound.

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

Authorized Signature: Caitlin Walukevich

Title: Technical Director/Representative Date: 09/27/22

ORGANICS

VOLATILES

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

SAMPLE RESULTS

Lab ID: L2251905-01
Client ID: GW01_20220921
Sample Location: MANHATTAN NY

Date Collected: 09/21/22 13:07
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 09/27/22 08:52
Analyst: PD

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	0.24	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	20		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
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	0.89		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: 250 WATER ST **Lab Number:** L2251905

Project Number: 170381202 **Report Date:** 09/27/22

SAMPLE RESULTS

Lab ID: L2251905-01 Date Collected: 09/21/22 13:07

Client ID: GW01_20220921 Date Received: 09/21/22

Sample Location: MANHATTAN NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	1.2		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	4.2	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	0.94	J	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	7.6		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: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

SAMPLE RESULTS

Lab ID: L2251905-01
Client ID: GW01_20220921
Sample Location: MANHATTAN NY
Date Collected: 09/21/22 13:07
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	11		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	1.3	J	ug/l	2.0	0.70	1
p-Ethyltoluene	0.79	J	ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	5.4		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	103		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	97		70-130

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/27/22 08:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1692549-5					
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: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/27/22 08:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1692549-5					
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: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/27/22 08:29
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1692549-5					
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	104		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	109		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1692549-3 WG1692549-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		110		70-130	10		20
Carbon tetrachloride	100		110		63-132	10		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	100		110		63-130	10		20
1,1,2-Trichloroethane	99		100		70-130	1		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	98		100		75-130	2		20
Trichlorofluoromethane	140		150		62-150	7		20
1,2-Dichloroethane	100		110		70-130	10		20
1,1,1-Trichloroethane	100		110		67-130	10		20
Bromodichloromethane	100		110		67-130	10		20
trans-1,3-Dichloropropene	100		110		70-130	10		20
cis-1,3-Dichloropropene	100		110		70-130	10		20
1,1-Dichloropropene	98		100		70-130	2		20
Bromoform	93		98		54-136	5		20
1,1,2,2-Tetrachloroethane	96		100		67-130	4		20
Benzene	100		100		70-130	0		20
Toluene	98		100		70-130	2		20
Ethylbenzene	96		100		70-130	4		20
Chloromethane	100		100		64-130	0		20
Bromomethane	110		110		39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2251905

Report Date: 09/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1692549-3 WG1692549-4								
Vinyl chloride	120		130		55-140	8		20
Chloroethane	**170**	Q	**180**	Q	55-138	6		20
1,1-Dichloroethene	98		100		61-145	2		20
trans-1,2-Dichloroethene	100		110		70-130	10		20
Trichloroethene	96		100		70-130	4		20
1,2-Dichlorobenzene	97		100		70-130	3		20
1,3-Dichlorobenzene	98		100		70-130	2		20
1,4-Dichlorobenzene	97		100		70-130	3		20
Methyl tert butyl ether	93		100		63-130	7		20
p/m-Xylene	95		100		70-130	5		20
o-Xylene	90		95		70-130	5		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Dibromomethane	110		110		70-130	0		20
1,2,3-Trichloropropane	98		100		64-130	2		20
Acrylonitrile	100		110		70-130	10		20
Styrene	95		100		70-130	5		20
Dichlorodifluoromethane	120		120		36-147	0		20
Acetone	98		100		58-148	2		20
Carbon disulfide	98		100		51-130	2		20
2-Butanone	100		98		63-138	2		20
Vinyl acetate	91		99		70-130	8		20
4-Methyl-2-pentanone	86		92		59-130	7		20
2-Hexanone	77		88		57-130	13		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1692549-3 WG1692549-4								
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	100		100		63-133	0		20
1,2-Dibromoethane	100		110		70-130	10		20
1,3-Dichloropropane	100		110		70-130	10		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	97		100		70-130	3		20
n-Butylbenzene	99		100		53-136	1		20
sec-Butylbenzene	100		100		70-130	0		20
tert-Butylbenzene	96		100		70-130	4		20
o-Chlorotoluene	97		96		70-130	1		20
p-Chlorotoluene	94		95		70-130	1		20
1,2-Dibromo-3-chloropropane	90		100		41-144	11		20
Hexachlorobutadiene	97		100		63-130	3		20
Isopropylbenzene	96		100		70-130	4		20
p-Isopropyltoluene	97		100		70-130	3		20
Naphthalene	88		98		70-130	11		20
n-Propylbenzene	97		100		69-130	3		20
1,2,3-Trichlorobenzene	94		100		70-130	6		20
1,2,4-Trichlorobenzene	96		100		70-130	4		20
1,3,5-Trimethylbenzene	96		98		64-130	2		20
1,2,4-Trimethylbenzene	96		98		70-130	2		20
1,4-Dioxane	128		126		56-162	2		20
p-Diethylbenzene	94		97		70-130	3		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1692549-3 WG1692549-4								
p-Ethyltoluene	96		99		70-130	3		20
1,2,4,5-Tetramethylbenzene	91		93		70-130	2		20
Ethyl ether	**150**	Q	**170**	Q	59-134	13		20
trans-1,4-Dichloro-2-butene	94		100		70-130	6		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		110		70-130
Toluene-d8	101		102		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	103		106		70-130

SEMIVOLATILES

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

SAMPLE RESULTS

Lab ID: L2251905-01
Client ID: GW01_20220921
Sample Location: MANHATTAN NY

Date Collected: 09/21/22 13:07
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 09/27/22 14:51
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 09/26/22 03:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

SAMPLE RESULTS

Lab ID: L2251905-01
Client ID: GW01_20220921
Sample Location: MANHATTAN NY
Date Collected: 09/21/22 13:07
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	46		23-120
2-Fluorobiphenyl	34		15-120
2,4,6-Tribromophenol	38		10-120
4-Terphenyl-d14	**37**	Q	41-149

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

SAMPLE RESULTS

Lab ID: L2251905-01
Client ID: GW01_20220921
Sample Location: MANHATTAN NY

Date Collected: 09/21/22 13:07
Date Received: 09/21/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 09/27/22 09:32
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 09/26/22 03:21

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.11		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	0.38		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	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	0.01	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.01	1
Fluorene	0.03	J	ug/l	0.10	0.01	1
Phenanthrene	0.03	J	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	0.02	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.19		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: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

SAMPLE RESULTS

Lab ID: L2251905-01
Client ID: GW01_20220921
Sample Location: MANHATTAN NY
Date Collected: 09/21/22 13:07
Date Received: 09/21/22
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	71		21-120
Phenol-d6	62		10-120
Nitrobenzene-d5	92		23-120
2-Fluorobiphenyl	85		15-120
2,4,6-Tribromophenol	**127**	Q	10-120
4-Terphenyl-d14	111		41-149

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/27/22 13:34
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 09/26/22 03:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1691882-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
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
Fluoranthene	ND		ug/l	2.0	0.26
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
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
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

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/27/22 13:34
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 09/26/22 03:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1691882-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
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
2-Methylnaphthalene	ND		ug/l	2.0	0.45
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
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

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/27/22 13:34
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 09/26/22 03:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1691882-1					
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
Pentachlorophenol	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
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**17**	Q	21-120
Phenol-d6	14		10-120
Nitrobenzene-d5	24		23-120
2-Fluorobiphenyl	16		15-120
2,4,6-Tribromophenol	14		10-120
4-Terphenyl-d14	**14**	Q	41-149

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 09/27/22 08:42
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 09/26/22 03:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1691884-1					
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	0.04	J	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: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 09/27/22 08:42
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 09/26/22 03:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1691884-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	50		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	96		10-120
4-Terphenyl-d14	87		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2251905

Report Date: 09/27/22

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: WG1691882-2 WG1691882-3								
Acenaphthene	67		78		37-111	15		30
1,2,4-Trichlorobenzene	60		62		39-98	3		30
Hexachlorobenzene	58		63		40-140	8		30
Bis(2-chloroethyl)ether	69		74		40-140	7		30
2-Chloronaphthalene	60		64		40-140	6		30
1,2-Dichlorobenzene	60		66		40-140	10		30
1,3-Dichlorobenzene	60		64		40-140	6		30
1,4-Dichlorobenzene	59		64		36-97	8		30
3,3'-Dichlorobenzidine	62		74		40-140	18		30
2,4-Dinitrotoluene	87		91		48-143	4		30
2,6-Dinitrotoluene	71		75		40-140	5		30
Fluoranthene	64		72		40-140	12		30
4-Chlorophenyl phenyl ether	66		70		40-140	6		30
4-Bromophenyl phenyl ether	61		67		40-140	9		30
Bis(2-chloroisopropyl)ether	79		81		40-140	3		30
Bis(2-chloroethoxy)methane	71		73		40-140	3		30
Hexachlorobutadiene	52		58		40-140	11		30
Hexachlorocyclopentadiene	62		68		40-140	9		30
Hexachloroethane	68		71		40-140	4		30
Isophorone	74		77		40-140	4		30
Naphthalene	62		70		40-140	12		30
Nitrobenzene	86		92		40-140	7		30
NDPA/DPA	70		72		40-140	3		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

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: WG1691882-2 WG1691882-3								
n-Nitrosodi-n-propylamine	76		79		29-132	4		30
Bis(2-ethylhexyl)phthalate	91		101		40-140	10		30
Butyl benzyl phthalate	101		104		40-140	3		30
Di-n-butylphthalate	77		80		40-140	4		30
Di-n-octylphthalate	96		109		40-140	13		30
Diethyl phthalate	76		82		40-140	8		30
Dimethyl phthalate	62		67		40-140	8		30
Benzo(a)anthracene	69		82		40-140	17		30
Benzo(a)pyrene	72		87		40-140	19		30
Benzo(b)fluoranthene	68		91		40-140	29		30
Benzo(k)fluoranthene	69		78		40-140	12		30
Chrysene	63		73		40-140	15		30
Acenaphthylene	65		71		45-123	9		30
Anthracene	66		74		40-140	11		30
Benzo(ghi)perylene	58		73		40-140	23		30
Fluorene	70		77		40-140	10		30
Phenanthrene	60		70		40-140	15		30
Dibenzo(a,h)anthracene	59		74		40-140	23		30
Indeno(1,2,3-cd)pyrene	77		94		40-140	20		30
Pyrene	64		72		26-127	12		30
Biphenyl	63		70		40-140	11		30
4-Chloroaniline	62		66		40-140	6		30
2-Nitroaniline	85		90		52-143	6		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

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: WG1691882-2 WG1691882-3								
3-Nitroaniline	77		88		25-145	13		30
4-Nitroaniline	86		88		51-143	2		30
Dibenzofuran	66		75		40-140	13		30
2-Methylnaphthalene	62		68		40-140	9		30
1,2,4,5-Tetrachlorobenzene	55		59		2-134	7		30
Acetophenone	76		80		39-129	5		30
2,4,6-Trichlorophenol	63		67		30-130	6		30
p-Chloro-m-cresol	75		80		23-97	6		30
2-Chlorophenol	71		75		27-123	5		30
2,4-Dichlorophenol	69		69		30-130	0		30
2,4-Dimethylphenol	64		69		30-130	8		30
2-Nitrophenol	103		107		30-130	4		30
4-Nitrophenol	**85**	Q	**88**	Q	10-80	3		30
2,4-Dinitrophenol	105		109		20-130	4		30
4,6-Dinitro-o-cresol	104		110		20-164	6		30
Pentachlorophenol	67		64		9-103	5		30
Phenol	61		64		12-110	5		30
2-Methylphenol	70		76		30-130	8		30
3-Methylphenol/4-Methylphenol	77		81		30-130	5		30
2,4,5-Trichlorophenol	64		67		30-130	5		30
Benzoic Acid	72		70		10-164	3		30
Benzyl Alcohol	75		78		26-116	4		30
Carbazole	72		81		55-144	12		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2251905

Report Date: 09/27/22

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: WG1691882-2 WG1691882-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		76		21-120
Phenol-d6	62		66		10-120
Nitrobenzene-d5	95		100		23-120
2-Fluorobiphenyl	62		68		15-120
2,4,6-Tribromophenol	82		83		10-120
4-Terphenyl-d14	70		73		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1691884-2 WG1691884-3								
Acenaphthene	92		93		40-140	1		40
2-Chloronaphthalene	96		96		40-140	0		40
Fluoranthene	109		115		40-140	5		40
Hexachlorobutadiene	92		92		40-140	0		40
Naphthalene	92		92		40-140	0		40
Benzo(a)anthracene	96		100		40-140	4		40
Benzo(a)pyrene	106		110		40-140	4		40
Benzo(b)fluoranthene	107		108		40-140	1		40
Benzo(k)fluoranthene	104		109		40-140	5		40
Chrysene	85		90		40-140	6		40
Acenaphthylene	102		103		40-140	1		40
Anthracene	98		102		40-140	4		40
Benzo(ghi)perylene	105		112		40-140	6		40
Fluorene	96		100		40-140	4		40
Phenanthrene	90		94		40-140	4		40
Dibenzo(a,h)anthracene	119		127		40-140	7		40
Indeno(1,2,3-cd)pyrene	124		131		40-140	5		40
Pyrene	111		118		40-140	6		40
2-Methylnaphthalene	96		96		40-140	0		40
Pentachlorophenol	117		124		40-140	6		40
Hexachlorobenzene	92		93		40-140	1		40
Hexachloroethane	92		92		40-140	0		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1691884-2 WG1691884-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	82		80		21-120
Phenol-d6	71		69		10-120
Nitrobenzene-d5	102		101		23-120
2-Fluorobiphenyl	92		92		15-120
2,4,6-Tribromophenol	**137**	Q	**143**	Q	10-120
4-Terphenyl-d14	112		118		41-149

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2251905
Report Date: 09/27/22

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(*)
L2251905-01A	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260(14)
L2251905-01B	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260(14)
L2251905-01C	Vial HCl preserved	A	NA		4.4	Y	Absent		NYTCL-8260(14)
L2251905-01D	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2251905-01E	Amber 250ml unpreserved	A	7	7	4.4	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)

*Values in parentheses indicate holding time in days

Project Name:	250 WATER ST	**Lab Number:**	L2251905
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GLOSSARY

Acronyms

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

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

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

EPA - Environmental Protection Agency.

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

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

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

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

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

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

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

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

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

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

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

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

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

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

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

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

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

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

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

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

Report Format: DU Report with 'J' Qualifiers

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Footnotes

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

Terms

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

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	250 WATER ST	**Lab Number:**	L2251905
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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.)

Report Format: DU Report with 'J' Qualifiers

Project Name:	250 WATER ST	**Lab Number:**	L2251905
Project Number:	170381202	**Report Date:**	09/27/22

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

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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: 9/21/22

ALPHA Job #: L2251905

Client Information

Client: Langan
Address: 360 W 31st St
Phone: 212-479-5400
Fax:
Email: PMcMahon@Langan.com

Project Information

Project Name: 250 Water St
Project Location: Manhattan NY
Project #: 170381202
(Use Project name as Project #) ☐
Project Manager: Paul McMahon
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

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:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
cc: datamanagement@Langan.com
mail@Langan.com

Please specify Metals or TAL.

ANALYSIS

TCL VOCs / Part 375
SVOCs / Part 375

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOCs / Part 375	SVOCs / Part 375	Sample Specific Comments	Total Bottle
51905-01	GW01_20220921	9/21/22	13:07	GW	BK	✓	✓		

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
BKenneally/Langan	9/21/22	GJAC (AAL)	9/21/22, 15:45
GJAC AAL	9/21/22, 18:08	AAL	9/21/22 19:30
	9/21/22 2200		9/21/22 2200
	9/21/22 2355		9/21/22 2355

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)

ANALYTICAL REPORT

Lab Number:	L2254404
Client:	Langan Engineering & Environmental 21 Penn Plaza 360 W. 31st Street, 8th Floor New York, NY 10001-2727
ATTN:	Paul McMahon
Phone:	(212) 479-5429
Project Name:	250 WATER ST
Project Number:	170381202
Report Date:	10/06/22

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

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

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2254404
Report Date: 10/06/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2254404-01	GW02_20221003	WATER	MANHATTAN, NY	10/03/22 10:30	10/03/22
L2254404-02	TRIP BLANK	WATER	MANHATTAN, NY	10/03/22 00:00	10/03/22

Project Name:	250 WATER ST	**Lab Number:**	L2254404
Project Number:	170381202	**Report Date:**	10/06/22

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:	250 WATER ST	**Lab Number:**	L2254404
Project Number:	170381202	**Report Date:**	10/06/22

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.

Sample Receipt

L2254404-02: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody. At the client's request, 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: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 10/06/22

ORGANICS

VOLATILES

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2254404-01
Client ID: GW02_20221003
Sample Location: MANHATTAN, NY

Date Collected: 10/03/22 10:30
Date Received: 10/03/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/05/22 11:50
Analyst: PD

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	0.23	J	ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	10		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
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	0.53		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: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2254404-01
Client ID: GW02_20221003
Sample Location: MANHATTAN, NY
Date Collected: 10/03/22 10:30
Date Received: 10/03/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Trichloroethene	0.56		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	1.7	J	ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
Xylenes, Total	1.7	J	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	3.6	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	1.4	J	ug/l	2.5	0.70	1
sec-Butylbenzene	1.4	J	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	10		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	3.6		ug/l	2.5	0.70	1

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2254404-01
Client ID: GW02_20221003
Sample Location: MANHATTAN, NY
Date Collected: 10/03/22 10:30
Date Received: 10/03/22
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
n-Propylbenzene	19		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	2.3		ug/l	2.0	0.70	1
p-Ethyltoluene	1.6	J	ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	10		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	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	93		70-130

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/05/22 10:39
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1696331-5					
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: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/05/22 10:39
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1696331-5					
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: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/05/22 10:39
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1696331-5					
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	96		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2254404

Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1696331-3 WG1696331-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	100		100		63-132	0		20
1,2-Dichloropropane	110		110		70-130	0		20
Dibromochloromethane	93		94		63-130	1		20
1,1,2-Trichloroethane	97		100		70-130	3		20
Tetrachloroethene	100		100		70-130	0		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	94		96		70-130	2		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
1,1-Dichloropropene	110		110		70-130	0		20
Bromoform	84		86		54-136	2		20
1,1,2,2-Tetrachloroethane	91		95		67-130	4		20
Benzene	110		110		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	99		99		70-130	0		20
Chloromethane	73		76		64-130	4		20
Bromomethane	49		49		39-139	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2254404

Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1696331-3 WG1696331-4								
Vinyl chloride	100		100		55-140	0		20
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	110		110		70-130	0		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	96		98		70-130	2		20
1,3-Dichlorobenzene	97		97		70-130	0		20
1,4-Dichlorobenzene	96		98		70-130	2		20
Methyl tert butyl ether	99		100		63-130	1		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	110		110		70-130	0		20
Dibromomethane	100		110		70-130	10		20
1,2,3-Trichloropropane	89		92		64-130	3		20
Acrylonitrile	95		99		70-130	4		20
Styrene	95		100		70-130	5		20
Dichlorodifluoromethane	84		83		36-147	1		20
Acetone	83		83		58-148	0		20
Carbon disulfide	100		100		51-130	0		20
2-Butanone	87		87		63-138	0		20
Vinyl acetate	110		120		70-130	9		20
4-Methyl-2-pentanone	84		88		59-130	5		20
2-Hexanone	83		89		57-130	7		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2254404

Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1696331-3 WG1696331-4								
Bromochloromethane	120		120		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	96		99		70-130	3		20
1,3-Dichloropropane	96		99		70-130	3		20
1,1,1,2-Tetrachloroethane	97		98		64-130	1		20
Bromobenzene	97		98		70-130	1		20
n-Butylbenzene	98		99		53-136	1		20
sec-Butylbenzene	98		100		70-130	2		20
tert-Butylbenzene	98		99		70-130	1		20
o-Chlorotoluene	100		100		70-130	0		20
p-Chlorotoluene	97		98		70-130	1		20
1,2-Dibromo-3-chloropropane	73		80		41-144	9		20
Hexachlorobutadiene	94		97		63-130	3		20
Isopropylbenzene	99		99		70-130	0		20
p-Isopropyltoluene	97		100		70-130	3		20
Naphthalene	83		92		70-130	10		20
n-Propylbenzene	99		99		69-130	0		20
1,2,3-Trichlorobenzene	84		94		70-130	11		20
1,2,4-Trichlorobenzene	89		96		70-130	8		20
1,3,5-Trimethylbenzene	96		97		64-130	1		20
1,2,4-Trimethylbenzene	97		98		70-130	1		20
1,4-Dioxane	106		114		56-162	7		20
p-Diethylbenzene	97		98		70-130	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2254404

Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1696331-3 WG1696331-4								
p-Ethyltoluene	98		100		70-130	2		20
1,2,4,5-Tetramethylbenzene	96		98		70-130	2		20
Ethyl ether	100		100		59-134	0		20
trans-1,4-Dichloro-2-butene	82		89		70-130	8		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	94		95		70-130
Toluene-d8	96		96		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	101		100		70-130

SEMIVOLATILES

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2254404-01
Client ID: GW02_20221003
Sample Location: MANHATTAN, NY

Date Collected: 10/03/22 10:30
Date Received: 10/03/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E
Analytical Date: 10/05/22 23:58
Analyst: JG

Extraction Method: EPA 3510C
Extraction Date: 10/04/22 15:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43	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

Project Name: 250 WATER ST **Lab Number:** L2254404

Project Number: 170381202 **Report Date:** 10/06/22

SAMPLE RESULTS

Lab ID: L2254404-01 Date Collected: 10/03/22 10:30

Client ID: GW02_20221003 Date Received: 10/03/22

Sample Location: MANHATTAN, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
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
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
Benzoic Acid	ND		ug/l	50	2.6	1
Benzyl Alcohol	ND		ug/l	2.0	0.59	1
Carbazole	ND		ug/l	2.0	0.49	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	51		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	74		15-120
2,4,6-Tribromophenol	58		10-120
4-Terphenyl-d14	78		41-149

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

SAMPLE RESULTS

Lab ID: L2254404-01
Client ID: GW02_20221003
Sample Location: MANHATTAN, NY

Date Collected: 10/03/22 10:30
Date Received: 10/03/22
Field Prep: Not Specified

Sample Depth:
Matrix: Water
Analytical Method: 1,8270E-SIM
Analytical Date: 10/06/22 10:52
Analyst: AH

Extraction Method: EPA 3510C
Extraction Date: 10/04/22 15:31

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.12		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.55		ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	2.7		ug/l	0.10	0.05	1
Benzo(a)anthracene	1.2		ug/l	0.10	0.02	1
Benzo(a)pyrene	0.98		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	2.2		ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.64		ug/l	0.10	0.01	1
Chrysene	1.6		ug/l	0.10	0.01	1
Acenaphthylene	0.07	J	ug/l	0.10	0.01	1
Anthracene	0.06	J	ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.84		ug/l	0.10	0.01	1
Fluorene	0.04	J	ug/l	0.10	0.01	1
Phenanthrene	0.11		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	0.29		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	1.0		ug/l	0.10	0.01	1
Pyrene	0.47		ug/l	0.10	0.02	1
2-Methylnaphthalene	0.33		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: 250 WATER ST **Lab Number:** L2254404

Project Number: 170381202 **Report Date:** 10/06/22

SAMPLE RESULTS

Lab ID: L2254404-01 Date Collected: 10/03/22 10:30

Client ID: GW02_20221003 Date Received: 10/03/22

Sample Location: MANHATTAN, NY 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	62		21-120
Phenol-d6	61		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	79		15-120
2,4,6-Tribromophenol	71		10-120
4-Terphenyl-d14	79		41-149

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/05/22 09:16
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/04/22 15:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1695389-1					
Acenaphthene	ND		ug/l	2.0	0.44
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.50
Hexachlorobenzene	ND		ug/l	2.0	0.46
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
2-Chloronaphthalene	ND		ug/l	2.0	0.44
1,2-Dichlorobenzene	ND		ug/l	2.0	0.45
1,3-Dichlorobenzene	ND		ug/l	2.0	0.40
1,4-Dichlorobenzene	ND		ug/l	2.0	0.43
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
Fluoranthene	ND		ug/l	2.0	0.26
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
Hexachlorobutadiene	ND		ug/l	2.0	0.66
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Hexachloroethane	ND		ug/l	2.0	0.58
Isophorone	ND		ug/l	5.0	1.2
Naphthalene	ND		ug/l	2.0	0.46
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

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/05/22 09:16
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/04/22 15:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1695389-1					
Dimethyl phthalate	ND		ug/l	5.0	1.8
Benzo(a)anthracene	ND		ug/l	2.0	0.32
Benzo(a)pyrene	ND		ug/l	2.0	0.41
Benzo(b)fluoranthene	ND		ug/l	2.0	0.35
Benzo(k)fluoranthene	ND		ug/l	2.0	0.37
Chrysene	ND		ug/l	2.0	0.34
Acenaphthylene	ND		ug/l	2.0	0.46
Anthracene	ND		ug/l	2.0	0.33
Benzo(ghi)perylene	ND		ug/l	2.0	0.30
Fluorene	ND		ug/l	2.0	0.41
Phenanthrene	ND		ug/l	2.0	0.33
Dibenzo(a,h)anthracene	ND		ug/l	2.0	0.32
Indeno(1,2,3-cd)pyrene	ND		ug/l	2.0	0.40
Pyrene	ND		ug/l	2.0	0.28
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
2-Methylnaphthalene	ND		ug/l	2.0	0.45
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
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

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E
Analytical Date: 10/05/22 09:16
Analyst: SZ

Extraction Method: EPA 3510C
Extraction Date: 10/04/22 15:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1695389-1					
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
Pentachlorophenol	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
Benzoic Acid	ND		ug/l	50	2.6
Benzyl Alcohol	ND		ug/l	2.0	0.59
Carbazole	ND		ug/l	2.0	0.49

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	54		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	63		10-120
4-Terphenyl-d14	76		41-149

Project Name: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/05/22 07:52
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/04/22 15:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1695395-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	0.08	J	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	0.02	J	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	0.02	J	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	0.03	J	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: 250 WATER ST
Project Number: 170381202
Lab Number: L2254404
Report Date: 10/06/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270E-SIM
Analytical Date: 10/05/22 07:52
Analyst: JJW

Extraction Method: EPA 3510C
Extraction Date: 10/04/22 15:31

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1695395-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	60		21-120
Phenol-d6	53		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	85		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2254404
Report Date: 10/06/22

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: WG1695389-2 WG1695389-3								
Acenaphthene	67		66		37-111	2		30
1,2,4-Trichlorobenzene	61		58		39-98	5		30
Hexachlorobenzene	75		69		40-140	8		30
Bis(2-chloroethyl)ether	60		60		40-140	0		30
2-Chloronaphthalene	63		63		40-140	0		30
1,2-Dichlorobenzene	56		56		40-140	0		30
1,3-Dichlorobenzene	56		57		40-140	2		30
1,4-Dichlorobenzene	57		55		36-97	4		30
3,3'-Dichlorobenzidine	57		58		40-140	2		30
2,4-Dinitrotoluene	73		66		48-143	10		30
2,6-Dinitrotoluene	69		64		40-140	8		30
Fluoranthene	73		69		40-140	6		30
4-Chlorophenyl phenyl ether	73		69		40-140	6		30
4-Bromophenyl phenyl ether	75		71		40-140	5		30
Bis(2-chloroisopropyl)ether	59		60		40-140	2		30
Bis(2-chloroethoxy)methane	64		62		40-140	3		30
Hexachlorobutadiene	60		59		40-140	2		30
Hexachlorocyclopentadiene	60		55		40-140	9		30
Hexachloroethane	62		59		40-140	5		30
Isophorone	62		60		40-140	3		30
Naphthalene	60		60		40-140	0		30
Nitrobenzene	63		64		40-140	2		30
NDPA/DPA	75		72		40-140	4		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2254404
Report Date: 10/06/22

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: WG1695389-2 WG1695389-3								
n-Nitrosodi-n-propylamine	67		62		29-132	8		30
Bis(2-ethylhexyl)phthalate	87		85		40-140	2		30
Butyl benzyl phthalate	83		79		40-140	5		30
Di-n-butylphthalate	77		74		40-140	4		30
Di-n-octylphthalate	86		83		40-140	4		30
Diethyl phthalate	77		73		40-140	5		30
Dimethyl phthalate	70		64		40-140	9		30
Benzo(a)anthracene	78		76		40-140	3		30
Benzo(a)pyrene	80		78		40-140	3		30
Benzo(b)fluoranthene	81		75		40-140	8		30
Benzo(k)fluoranthene	76		75		40-140	1		30
Chrysene	73		71		40-140	3		30
Acenaphthylene	66		62		45-123	6		30
Anthracene	72		66		40-140	9		30
Benzo(ghi)perylene	71		68		40-140	4		30
Fluorene	71		67		40-140	6		30
Phenanthrene	68		62		40-140	9		30
Dibenzo(a,h)anthracene	71		68		40-140	4		30
Indeno(1,2,3-cd)pyrene	83		76		40-140	9		30
Pyrene	73		68		26-127	7		30
Biphenyl	66		64		40-140	3		30
4-Chloroaniline	64		72		40-140	12		30
2-Nitroaniline	69		64		52-143	8		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2254404
Report Date: 10/06/22

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: WG1695389-2 WG1695389-3								
3-Nitroaniline	66		66		25-145	0		30
4-Nitroaniline	72		72		51-143	0		30
Dibenzofuran	71		68		40-140	4		30
2-Methylnaphthalene	64		62		40-140	3		30
1,2,4,5-Tetrachlorobenzene	70		66		2-134	6		30
Acetophenone	64		64		39-129	0		30
2,4,6-Trichlorophenol	70		66		30-130	6		30
p-Chloro-m-cresol	75		70		23-97	7		30
2-Chlorophenol	62		63		27-123	2		30
2,4-Dichlorophenol	71		66		30-130	7		30
2,4-Dimethylphenol	56		56		30-130	0		30
2-Nitrophenol	62		62		30-130	0		30
4-Nitrophenol	79		77		10-80	3		30
2,4-Dinitrophenol	78		78		20-130	0		30
4,6-Dinitro-o-cresol	74		70		20-164	6		30
Pentachlorophenol	72		71		9-103	1		30
Phenol	53		49		12-110	8		30
2-Methylphenol	62		62		30-130	0		30
3-Methylphenol/4-Methylphenol	66		66		30-130	0		30
2,4,5-Trichlorophenol	78		69		30-130	12		30
Benzoic Acid	79		77		10-164	3		30
Benzyl Alcohol	63		65		26-116	3		30
Carbazole	76		71		55-144	7		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2254404
Report Date: 10/06/22

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: WG1695389-2 WG1695389-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	63		62		21-120
Phenol-d6	57		53		10-120
Nitrobenzene-d5	67		63		23-120
2-Fluorobiphenyl	68		65		15-120
2,4,6-Tribromophenol	90		82		10-120
4-Terphenyl-d14	84		73		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2254404

Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1695395-2 WG1695395-3								
Acenaphthene	89		81		40-140	9		40
2-Chloronaphthalene	81		72		40-140	12		40
Fluoranthene	91		87		40-140	4		40
Hexachlorobutadiene	68		63		40-140	8		40
Naphthalene	84		82		40-140	2		40
Benzo(a)anthracene	96		87		40-140	10		40
Benzo(a)pyrene	82		76		40-140	8		40
Benzo(b)fluoranthene	97		85		40-140	13		40
Benzo(k)fluoranthene	88		86		40-140	2		40
Chrysene	94		86		40-140	9		40
Acenaphthylene	78		72		40-140	8		40
Anthracene	88		80		40-140	10		40
Benzo(ghi)perylene	96		88		40-140	9		40
Fluorene	91		85		40-140	7		40
Phenanthrene	87		81		40-140	7		40
Dibenzo(a,h)anthracene	99		90		40-140	10		40
Indeno(1,2,3-cd)pyrene	104		94		40-140	10		40
Pyrene	95		89		40-140	7		40
2-Methylnaphthalene	83		77		40-140	8		40
Pentachlorophenol	80		77		40-140	4		40
Hexachlorobenzene	89		81		40-140	9		40
Hexachloroethane	65		58		40-140	11		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: 250 WATER ST

Project Number: 170381202

Lab Number: L2254404

Report Date: 10/06/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1695395-2 WG1695395-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	74		66		21-120
Phenol-d6	65		56		10-120
Nitrobenzene-d5	85		77		23-120
2-Fluorobiphenyl	78		71		15-120
2,4,6-Tribromophenol	109		106		10-120
4-Terphenyl-d14	91		86		41-149

Project Name: 250 WATER ST
Project Number: 170381202

Lab Number: L2254404
Report Date: 10/06/22

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(*)
L2254404-01A	Vial HCl preserved	A	NA		4.8	Y	Absent		NYTCL-8260(14)
L2254404-01B	Vial HCl preserved	A	NA		4.8	Y	Absent		NYTCL-8260(14)
L2254404-01C	Vial HCl preserved	A	NA		4.8	Y	Absent		NYTCL-8260(14)
L2254404-01D	Amber 250ml unpreserved	A	7	7	4.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2254404-01E	Amber 250ml unpreserved	A	7	7	4.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2254404-02A	Vial HCl preserved	A	NA		4.8	Y	Absent		HOLD-8260(14)
L2254404-02B	Vial HCl preserved	A	NA		4.8	Y	Absent		HOLD-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	250 WATER ST	**Lab Number:**	L2254404
Project Number:	170381202	**Report Date:**	10/06/22

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:	250 WATER ST	**Lab Number:**	L2254404
Project Number:	170381202	**Report Date:**	10/06/22

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	250 WATER ST	**Lab Number:**	L2254404
Project Number:	170381202	**Report Date:**	10/06/22

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.)

Report Format: DU Report with 'J' Qualifiers

Project Name:	250 WATER ST	**Lab Number:**	L2254404
Project Number:	170381202	**Report Date:**	10/06/22

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

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

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

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

Westborough Facility:

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

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

Mansfield Facility:

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

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

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

NEW YORK CHAIN OF CUSTODY

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: 10/3/22

ALPHA Job #: L2254404

Client Information

Client: Langan
Address: 360 W 31st St
Phone: 212 4795400
Fax:
Email: PMcMahon@langan.com

Project Information

Project Name: 250 Water St
Project Location: Manhattan NY
Project #: 170381202
(Use Project name as Project #)
Project Manager: Paul McMahon
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

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:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

cc: datamanagement@langan.com
mau@langan.com

Please specify Metals or TAL.

ANALYSIS

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	Part 375/TCL	VOCs 35 VOCs	Total Bottle	Sample Specific Comments
54404-01	GW02_20221003	10/3/22	10:30	GW	BK	X	X		

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
Brian Kenneally/Langan	10/3/22 13:40		10/3/22 17:40
	10/3/22 18:55		10/3/22 19:30
	10/3/22 21:30		10/3/22 21:30
	10/3/22 23:40		10/3/22 23:40

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)