

May 4, 2020

Richmond SI Owner LLC  
c/o Madison Realty Capital  
520 Madison Avenue, Suite 3501  
New York, NY 10022

Attn: Zachary Kadden

Re: Limited Due Diligence Site Investigation Report  
170-194 Richmond Terrace and 8-20 Stuyvesant Place, Staten Island, NY 10301  
Block 13, Lots 8 (partial), 82, 92 and 100 (the “Site”)

Dear Mr. Kadden,

Tenen Environmental, LLC (“Tenen”) conducted a Limited Due Diligence Site Investigation (“LDDSI”) at 170-194 Richmond Terrace and 8-20 Stuyvesant Place, Staten Island, NY 10301 (“Site”) between March 3 and March 4, 2020 on behalf of Richmond SI Owner LLC (“Owner”). This letter report provides a summary of our findings, including the results of the laboratory analysis, conclusions and recommendations.

#### Background

The Site, located at 170-194 Richmond Terrace and 8-20 Stuyvesant Place, Staten Island, New York (Tax Block 13, Lots 8 (partial), 82, 92 and 100), is an irregularly shaped parcel located on the northern corner of Stuyvesant Place and extending to the west side of Richmond Terrace, as shown in Figures 1 and 2. The total Site area is approximately 98,669 square feet (SF). The Site has approximately 321 feet of frontage along Richmond Terrace and approximately 184 feet of frontage along Stuyvesant Place and is zoned R6, denoting a built-up, medium density residential area with a C2-2 commercial overlay (excluding Lot 8). The Site is currently vacant, densely forested and contains remnants of building foundations associated with prior unfinished construction on the northern portion of the property.

The proposed development consists of a mixed-use commercial and residential building with a large affordable housing overlay. The anticipated development of the property is consistent with the current zoning.

#### Limited Due Diligence Investigation

Soil and soil vapor sampling was completed by Tenen to further evaluate soil in areas of the Site which were not previously investigated, and to evaluate soil vapor across the Site which was also not previously investigated. Tenen’s investigation was conducted on March 3 and 4, 2020. Sampling locations are shown in Figure 3.

#### Hydrogeology

The Site lithology consists of fill material (silt, brick fragments, concrete fragments, cobbles and pebbles) from the surface to approximately five feet below grade (ft-bg). The fill is underlain by silt and medium grain sand. Native soil is underlain by weathered bedrock, with competent bedrock found at approximately 25 ft-bg<sup>1</sup>. Soil boring logs are included in Attachment 1. Perched groundwater is anticipated to be seasonal and present between 25 to 35 ft-bg. Groundwater is assumed to be tidally influenced and flow east toward New York Bay. Groundwater was not encountered during Tenen’s LDDSI.

---

<sup>1</sup> Bedrock depth information was obtained from a Geotechnical Investigation performed by others. Bedrock was not encountered during the LDDSI.

### Sample Collection

#### Soil

On March 3, 2020, eight soil borings (SB-1 through SB-7 and TMW-1) were advanced to depths between two to ten ft-bg. Soil boring TMW-1 was advanced to 25 ft-bg (soil screening concluded at five ft-bg) and converted to a temporary monitoring well. Boring locations are shown on Figure 3. A table detailing soil sampling locations and sample designations is provided below.

**Soil Sample Designation and Descriptions of Location**

Sample Name	Depth Below Grade (ft-bg)	Location
SB-1 (0-2)	0-2	Lot 100, southeast former foundation
SB-2 (0-2)	0-2	Lot 100, southwest former foundation
SB-3 (0-2)	0-2	Lot 100, northwest former foundation
SB-4 (0-2)	0-2	Lot 8, center
SB-5 (0-2)	0-2	Lot 82, northwest portion
SB-6 (0-2)	0-2	Lot 82, southern portion
SB-7 (0-2)	0-2	Lot 92, center
TMW-1 (0-2)	0-2	Lot 92, southeastern portion, along Richmond Terrace

The boring and monitoring well installation was performed by AARCO Environmental Services (AARCO) utilizing a direct push track-mounted Geoprobe® and hand tools. The soil from all borings was screened with a PID, capable of detecting the potential presence of volatile organic compounds (VOCs), from grade to termination depth. PID readings were non-detect for all screened soils. As a result, one soil sample was collected from the shallow historic fill interval (0-2 feet) from each boring. All samples were collected using dedicated acetate liners from five-foot macrocores.

No evidence of visual or olfactory impacts to soil was observed during this investigation. Following the completion of the soil sampling, boreholes were backfilled with clean soil cuttings. Boring and monitoring well construction logs are included as Attachment 1.

All soil samples were containerized in accordance with EPA analytical protocols. Each sample was labeled, sealed, and placed in a chilled cooler for shipment to the laboratory. A record of each sample, including notation of any odors, color, and sample matrix, was kept in the sampler's field logbook. A chain of custody was maintained throughout the field sampling, transport of samples to the laboratory and lab analysis. Soil samples were analyzed for the following:

- VOCs via EPA Method 8260C;
- Semi-volatile organic compounds (SVOCs) via EPA Method 8270D; and,
- Total metals via EPA Method 6010C.

#### Soil Vapor

On March 4, 2020, Tenen collected six soil vapor samples (SV-1 through SV-6) from six temporary soil vapor points installed the Site. See Figure 3 for sample locations.

**Soil Vapor Sample Designations – March 2020**

Sample Name	Sample Location
SV-1	Lot 100, southeast portion, along Stuyvesant Place
SV-2	Lot 100, northwest portion
SV-3	Lot 8, northeast portion, along Richmond Terrace
SV-4	Lot 92, northwest portion
SV-5	Lot 82, southeast portion, along Richmond Terrace
SV-6	Lot 82, northwest portion

Soil vapor points were installed by AARCO using hand tools. Upon penetration through the surface material, a 1.5-inch long hardened point and a six-inch long perforated vapor intake was installed to three feet below grade (ft-bg). The soil vapor sampling probes were connected to 3/8-inch diameter tubing to the surface. The screen was surrounded by #1-size quartzite sand to approximately one foot above the screen. The screen and sand pack were isolated from ambient air by placing wetted bentonite pellets to grade.

Ambient air was purged from the borehole by attaching the surface end of the tubing to an air valve and then to a vacuum pump. The vacuum pump was used to remove three volumes of air prior to all soil vapor sample collection.

All soil vapor samples were screened for organic vapors using a photoionization detector (PID). PID readings ranged from 20 parts per million (ppm) to 37.2 ppm. Samples were collected in 2.7-liter (L), batch-certified clean Summa canisters using two-hour regulators. Samples were collected at flow rates no greater than 0.2 liters per minute and analyzed for VOCs via EPA Method TO-15.

Field notes were maintained summarizing sample identification, date and time of sample collection, identity of samplers, sampling methods and devices, vacuum of canisters before and after samples were collected and chain of custody protocols. Soil vapor sampling logs are included in Attachment 2.

**Groundwater**

One, one-inch diameter, temporary groundwater monitoring well TMW-1 was installed concurrent with the soil boring of the same designation on March 3, 2020, using a direct push track-mounted Geoprobe®. Temporary well TMW-1 was installed in Lot 92 along Richmond Terrace to a depth of 25 ft-bg, in the approximate area where perched groundwater was previously identified by others.

Temporary monitoring well TMW-1 was gauged with a water level meter on March 4, 2020 and determined to be dry. As a result, groundwater was not sampled as part of the LDDSI.

**Analytical Results**

All samples were sent under chain-of-custody documentation to Alpha Analytical, Inc. (Alpha). Alpha is certified by the NYSDOH Environmental Laboratory Approval Program (ELAP) as LABIDs 11627 and 11148.

**Soil**

Soil results were compared to the New York State Department of Environmental Conservation (NYSDEC) Restricted-Residential Use Soil Cleanup Objectives (RRUSCOs) as listed in 6 NYCRR Part 375-6.8(b). The Restricted-Residential Use SCOs are consistent with the anticipated future use of the Site.

Soil sample results are included in Tables 1 through 3, and Figure 4. Laboratory deliverables are included in Attachment 3. The analytical results are summarized below.

No VOCs were detected above the RRUSCOs in soil samples.

Several SVOCs, specifically polycyclic aromatic hydrocarbons (PAHs), were detected above the RRUSCOs in one soil sample, SB-7 (0-2): benzo(a)anthracene [max: 2.1 milligrams per kilogram (mg/kg) above the RRUSCO of 1 mg/kg], benzo(a)pyrene [max: 1.2 mg/kg above the RRUSCO of 1 mg/kg], benzo(b)fluoranthene [max: 1.6 mg/kg above the RRUSCO of 1 mg/kg] and indeno(1,2,3-cd)pyrene [max: 0.76 mg/kg above the Restricted-Residential Use SCO of 0.5 mg/kg].

Various metals were detected in six of eight soil samples above Restricted-Residential Use SCOs. The following metals were detected in samples above the RRUSCOs: Arsenic [max: 19.9 mg/kg above the RRUSCO of 16 mg/kg in SB-4 (0-2)], barium [max: 508 mg/kg above the RRUSCO of 400 mg/kg in SB-6 (0-2)], lead [max: 2,430 mg/kg above the RRUSCO of 400 mg/kg in SB-6 (0-2)], mercury [max: 2.07 mg/kg above the RRUSCO of 0.81 mg/kg in SB-6 (0-2)] and Nickel [max: 753 mg/kg above the RRUSCO of 310 mg/kg in SB-2 (0-2)].

#### *Soil Vapor*

Soil vapor sampling results are included in Table 3 and Figure 5. Laboratory deliverables are included in Attachment 3. The analytical results are summarized below.

The chlorinated VOC (cVOC) tetrachloroethene (PCE) was detected in all six soil vapor samples ranging in concentration from 11.9 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 86.1  $\mu\text{g}/\text{m}^3$ . No other cVOCs were detected in soil vapor samples.

Several petroleum-related VOCs were detected in soil vapor samples, including the following: benzene [max: 6.07  $\mu\text{g}/\text{m}^3$ ], toluene [max: 46.7  $\mu\text{g}/\text{m}^3$ ], ethylbenzene [max: 40.7  $\mu\text{g}/\text{m}^3$ ], p/m-xylene [max: 160  $\mu\text{g}/\text{m}^3$ ], o-xylene [max: 236  $\mu\text{g}/\text{m}^3$ ], 1,2,4-trimethylbenzene [max: 362  $\mu\text{g}/\text{m}^3$ ], 1,3,5-trimethylbenzene [max: 147  $\mu\text{g}/\text{m}^3$ ] and 2,2,4-trimethylpentane [max: 2,110  $\mu\text{g}/\text{m}^3$ ].

#### Findings and Conclusions

Results of the LDDSI indicate the following:

#### **Soil:**

- No VOCs were detected above the Restricted-Residential Use SCOs in soil samples.
- SVOCs, specifically PAHs, were detected above the Restricted-Residential Use SCOs in one shallow soil sample.
- Various metals were detected in six of eight shallow soil samples above the RRUSCOs.

#### **Soil Vapor:**

- PCE was present in all soil vapor samples, at a maximum concentration of 86.1  $\mu\text{g}/\text{m}^3$ .
- Petroleum-related VOCs were present in soil vapor samples.
- An onsite source of soil vapor impacts was not found.

Elevated concentrations of PAHs and metals in shallow soil are consistent with presence of historic fill material. Soil vapor mitigation may be required for new construction of residential housing.

Sincerely,  
Tenen Environmental, LLC



Matthew Carroll, P.E.  
Principal / Environmental Engineer

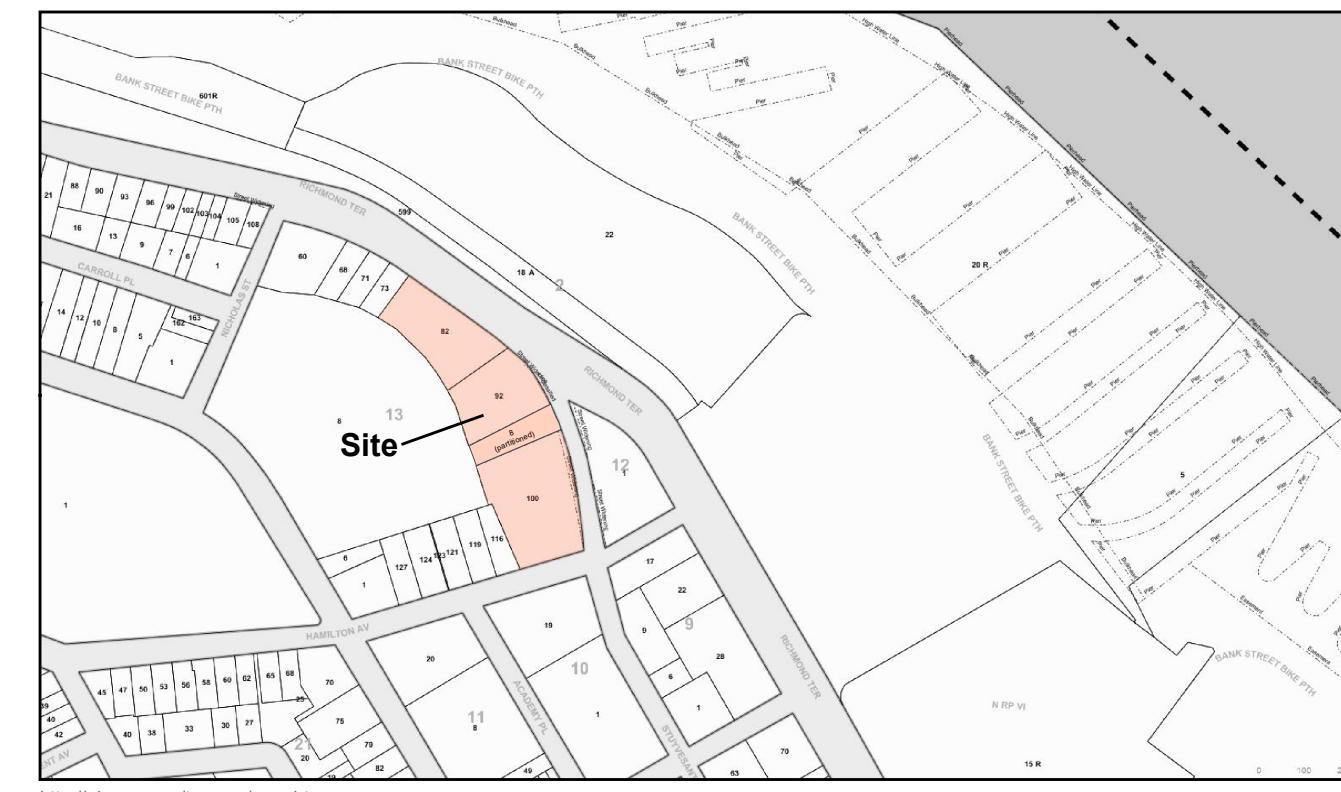
Figure 1 Site Location  
Figure 2 Site Plan  
Figure 3 Sample Locations  
Figure 4 Detections in Soil Samples  
Figure 5 Detections in Soil Vapor Samples

Table 1 Volatile Organic Compounds in Soil  
Table 2 Semi-volatile Organic Compounds in Soil  
Table 3 Total Metals in Soil  
Table 4 Volatile Organic Compounds in Soil Vapor

Attachment 1 Soil Boring and Monitoring Well Construction Logs  
Attachment 2 Soil Vapor Sampling Logs  
Attachment 3 Laboratory Deliverables

Liberty Towers – Staten Island, NY  
Limited Due Diligence Investigation Letter Report

## Figures

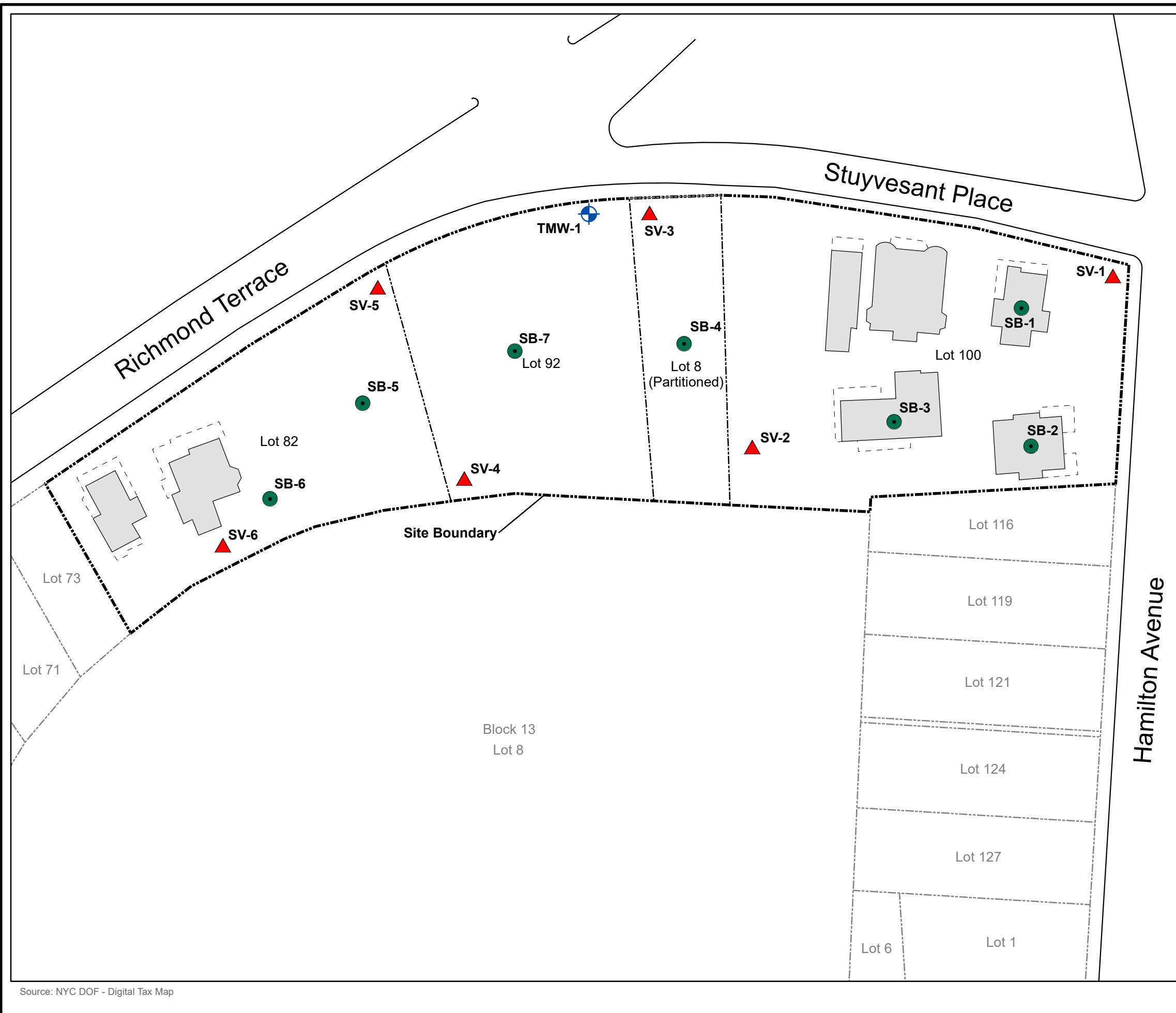


**Department of City Planning MapPLUTO - 2020 v1**

Drawing Title	TEN ENVIRONMENTAL	Site	Liberty Towers & 8-20 Stuyvesant Place Staten Island, New York Block 13, Lots 82, 92, 100 & Lot 8 (partitioned)
Figure 1	<p>Drawn By LM Checked By AC</p> <p>Date February 2020 Scale As Noted</p>	<p>Ten Environmental, LLC 131 West 27th Street Suite 702 New York, NY 10001 O: (646) 606-2332 F: (646) 606-2379</p>	



Drawing Title	Site Plan	
Drawn By	LM	Checked By
Date	February 2020	AC
Scale	As Noted	
Drawing No	170-194 Richmond Terrace & 8-20 Stuyvesant Place Staten Island, New York Block 13, Lots 82, 92, 100 & Lot 8 (partitioned)	
TENEN ENVIRONMENTAL	<b>TENEN ENVIRONMENTAL</b> Tenen Environmental, LLC 1321 West 27th Street Suite 702 New York, NY 10001 O: (646) 606-2332 F: (646) 606-2379	
Figure 2		



Drawing Title		Sample Locations	
Drawing No			
Figure 3			
Site		Liberty Towers 170-194 Richmond Terrace & 8-20 Stuyvesant Place Staten Island, New York Block 13, Lots 82, 92, 100 & Lot 8 (partitioned)	
TEN ENVIRONMENTAL		TEN ENVIRONMENTAL	
Drawn By LM		Tenen Environmental, LLC	
Checked By CZ		121 West 27th Street Suite 702 New York, NY 10001 O: (646) 606-2332 F: (646) 606-2379	
Date February 2020			
Scale As Noted			
0 30 60 120 Feet			

**Liberty Towers &  
8-20 Stuyvesant Place  
Staten Island, New York  
Block 13, Lots 82, 92, 100 &  
Lot 8 (partitioned)**

**TEN ENVIRONMENTAL**  
Tenen Environmental, LLC  
121 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

**Figure 4**

**Detections in Soil**

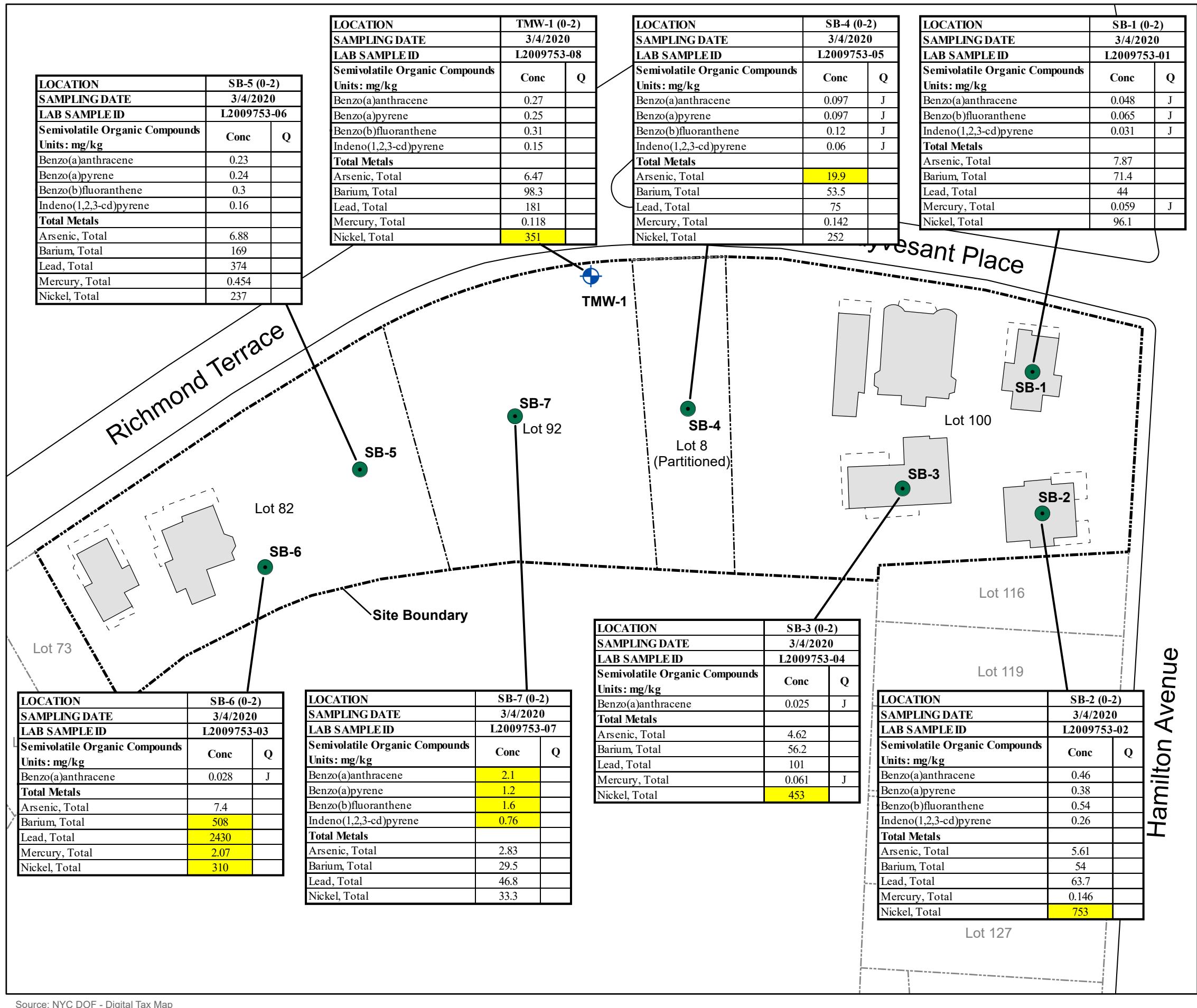
<b>LOCATION</b>			<b>NY-RESRR</b>	
<b>SAMPLING DATE</b>				
<b>LAB SAMPLE ID</b>				
<b>Semivolatile Organic Compounds</b>				
<b>Units: mg/kg</b>	<b>Conc</b>	<b>Q</b>		
Benzo(a)anthracene	0.27			

**Notes:**  
NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.  
Cells highlighted in yellow indicate a concentration above the NY-RESRR  
**Conc** = Concentration  
**Q** = Laboratory qualifier  
For J qualified entries, an estimated concentration is shown, indicating the concentration is below the RL but above the MDL  
**RL** = Reporting Limit  
**MDL** = Method of Detection Limit  
All concentrations are in milligrams per kilogram (mg/kg)

**Legend**

- Soil Boring
- Temporary Monitoring Well
- - - Tax Lots
- Structures (Approx.) - 1962 Sanborn Map
- Site Boundary

0 30 60 120 Feet



# Liberty Towers 170-194 Richmond Terrace & 8-20 Stuyvesant Place Staten Island, New York

Block 13, Lots 82, 92, 100 &

Lot 8 (partitioned)

**Site**  
170-194 Richmond Terrace &  
8-20 Stuyvesant Place  
Staten Island, New York  
Block 13, Lots 82, 92, 100 &  
Lot 8 (partitioned)

**TEN ENVIRONMENTAL**  
Tenen Environmental, LLC  
1321 West 27th Street  
Suite 702  
New York, NY 10001  
O: (646) 606-2332  
F: (646) 606-2379

Drawn By LM  
Checked By AC  
Date February 2020  
Scale As Noted

**Figure 2**

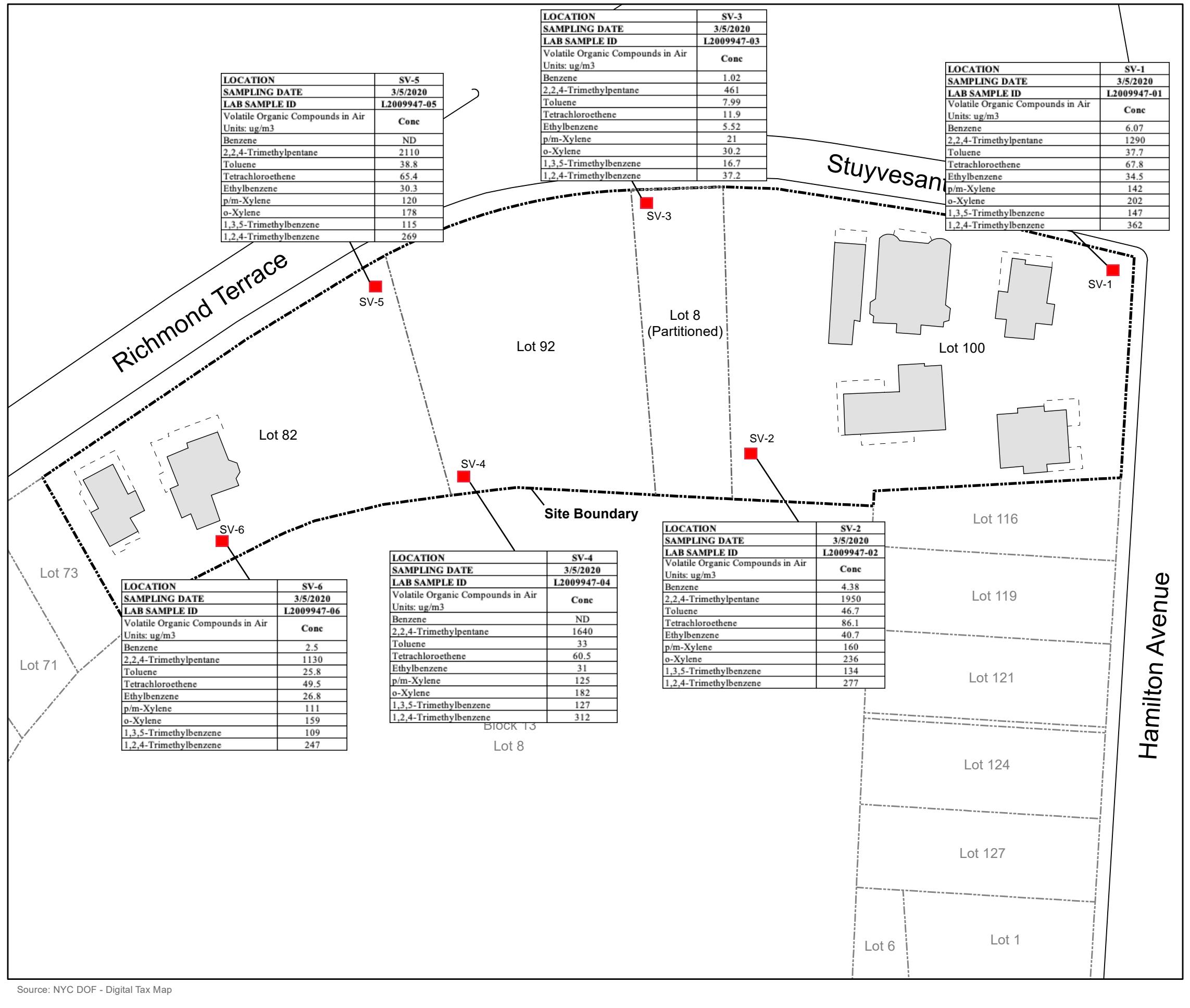


### Legend

- Soil Vapor Sample
- - - Tax Lots
- Site Boundary
- Structures (Approx.) -1962 Sanborn Map

Notes:  
ND= Not Detected  
Conc = Concentration

0 30 60 120 Feet



Liberty Towers – Staten Island, NY  
Limited Due Diligence Investigation Letter Report

## Tables

**Table 1 - Volatile Organic Compounds in Soil**  
**Limited Due Diligence Site Investigation**  
**Liberty Towers - Staten Island, NY**

SAMPLE ID:	LAB ID:	SB-1 (0-2)		SB-2 (0-2)		SB-3 (0-2)		SB-4 (0-2)		SB-5 (0-2)		SB-6 (0-2)		SB-7 (0-2)		TMW-1 (0-2)	
		L2009753-01		L2009753-02		L2009753-04		L2009753-05		L2009753-06		L2009753-03		L2009753-07		L2009753-08	
		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020	
Cone	Q	Cone	Q	Cone	Q	Cone	Q	Cone	Q	Cone	Q	Cone	Q	Cone	Q	Cone	Q
Methylene chloride	100	0.0023	U	0.0031	U	0.0023	U	0.0028	U	0.0028	U	0.0026	U	0.0028	U	0.0025	U
1,1-Dichloroethane	26	0.00015	U	0.00019	U	0.00014	U	0.00018	U	0.00017	U	0.00016	U	0.00018	U	0.00016	U
Chloroform	49	0.00014	U	0.00019	U	0.00014	U	0.00017	U	0.00017	U	0.00016	U	0.00017	U	0.00015	U
Carbon tetrachloride	2.4	0.00023	U	0.00031	U	0.00023	U	0.00028	U	0.00028	U	0.00026	U	0.00028	U	0.00025	U
1,2-Dichloropropane	--	0.00013	U	0.00017	U	0.00012	U	0.00016	U	0.00015	U	0.00014	U	0.00016	U	0.00014	U
Dibromochloromethane	--	0.00014	U	0.00019	U	0.00014	U	0.00017	U	0.00017	U	0.00016	U	0.00017	U	0.00015	U
1,1,2-Trichloroethane	--	0.00027	U	0.00036	U	0.00026	U	0.00033	U	0.00032	U	0.0003	U	0.00033	U	0.00029	U
Tetrachloroethene	19	0.0002	U	0.00026	U	0.0002	U	0.00024	U	0.00024	U	0.00022	U	0.00024	U	0.00022	U
Chlorobenzene	100	0.00013	U	0.00017	U	0.00013	U	0.00016	U	0.00015	U	0.00014	U	0.00016	U	0.00014	U
Trichlorofluoromethane	--	0.0007	U	0.00093	U	0.00069	U	0.00086	U	0.00084	U	0.00078	U	0.00086	U	0.00077	U
1,2-Dichloroethane	3.1	0.00026	U	0.00034	U	0.00026	U	0.00032	U	0.00031	U	0.00029	U	0.00032	U	0.00028	U
1,1,1-Trichloroethane	100	0.00017	U	0.00022	U	0.00017	U	0.00021	U	0.0002	U	0.00019	U	0.00021	U	0.00018	U
Bromodichloromethane	--	0.00011	U	0.00014	U	0.00011	U	0.00014	U	0.00013	U	0.00012	U	0.00014	U	0.00012	U
trans-1,3-Dichloropropene	--	0.00028	U	0.00036	U	0.00027	U	0.00034	U	0.00033	U	0.00031	U	0.00034	U	0.0003	U
cis-1,3-Dichloropropene	--	0.00016	U	0.00021	U	0.00016	U	0.0002	U	0.00019	U	0.00018	U	0.0002	U	0.00017	U
1,3-Dichloropropene, Total	--	0.00016	U	0.00021	U	0.00016	U	0.0002	U	0.00019	U	0.00018	U	0.0002	U	0.00017	U
1,1-Dichloropropene	--	0.00016	U	0.00021	U	0.00016	U	0.0002	U	0.00019	U	0.00018	U	0.0002	U	0.00018	U
Bromoform	--	0.00025	U	0.00033	U	0.00024	U	0.0003	U	0.0003	U	0.00028	U	0.0003	U	0.00027	U
1,1,2,2-Tetrachloroethane	--	0.00017	U	0.00022	U	0.00016	U	0.0002	U	0.0002	U	0.00019	U	0.00021	U	0.00018	U
Benzene	4.8	0.00017	U	0.00022	U	0.00016	U	0.0002	U	0.00032	J	0.00019	U	0.00021	U	0.00018	U
Toluene	100	0.00055	U	0.00073	U	0.00054	U	0.00067	U	0.00079	J	0.00061	U	0.00067	U	0.0006	U
Ethylbenzene	41	0.00014	U	0.00019	U	0.00014	U	0.00017	U	0.00033	J	0.00016	U	0.00018	U	0.00016	U
Chloromethane	--	0.00094	U	0.0012	U	0.00093	U	0.0012	U	0.0011	U	0.0011	U	0.0012	U	0.001	U
Bromomethane	--	0.00059	U	0.00078	U	0.00058	U	0.00072	U	0.0007	U	0.00065	U	0.00072	U	0.00064	U
Vinyl chloride	0.9	0.00034	U	0.00045	U	0.00033	U	0.00042	U	0.0004	U	0.00038	U	0.00042	U	0.00037	U
Chloroethane	--	0.00046	U	0.0006	U	0.00045	U	0.00056	U	0.00054	U	0.00051	U	0.00056	U	0.0005	U
1,1-Dichloroethene	100	0.00024	U	0.00032	U	0.00024	U	0.0003	U	0.00029	U	0.00027	U	0.0003	U	0.00026	U
trans-1,2-Dichloroethene	100	0.00068	J	0.00081	J	0.00014	U	0.001	J	0.0014	J	0.00074	J	0.00087	J	0.00078	J
Trichloroethene	21	0.00014	U	0.00018	U	0.00014	U	0.00017	U	0.00016	U	0.00015	U	0.00017	U	0.00015	U
1,2-Dichlorobenzene	100	0.00014	U	0.00019	U	0.00014	U	0.00018	U	0.00017	U	0.00016	U	0.00018	U	0.00016	U
1,3-Dichlorobenzene	49	0.00015	U	0.0002	U	0.00015	U	0.00018	U	0.00018	U	0.00017	U	0.00018	U	0.00016	U
1,4-Dichlorobenzene	13	0.00017	U	0.00023	U	0.00017	U	0.00021	U	0.00021	U	0.00019	U	0.00021	U	0.00019	U
Methyl tert butyl ether	100	0.0002	U	0.00027	U	0.0002	U	0.00025	U	0.00024	U	0.00023	U	0.00025	U	0.00022	U
p,m-Xylene	--	0.00056	U	0.00075	U	0.00056	U	0.00069	U	0.00068	U	0.00063	U	0.0007	U	0.00062	U
o-Xylene	--	0.00029	U	0.00039	U	0.00029	U	0.00036	U	0.00066	J	0.00033	U	0.00036	U	0.00032	U
Xylenes, Total	100	0.00029	U	0.00039	U	0.00029	U	0.00036	U	0.00066	J	0.00033	U	0.00036	U	0.00032	U
cis-1,2-Dichloroethene	100	0.00018	U	0.00023	U	0.00017	U	0.00022	U	0.00021	U	0.0002	U	0.00022	U	0.00019	U
1,2-Dichloroethene, Total	--	0.00068	J	0.00081	J	0.00014	U	0.001	J	0.0014	J	0.00074	J	0.00087	J	0.00078	J
Dibromomethane	--	0.00024	U	0.00032	U	0.00024	U	0.0003	U	0.00029	U	0.00027	U	0.0003	U	0.00026	U
Styrene	--	0.0002	U	0.00026	U	0.0002	U	0.00024	U	0.00024	U	0.00022	U	0.00024	U	0.00022	U
Dichlorodifluoromethane	--	0.00092	U	0.0012	U	0.00091	U	0.0011	U	0.0011	U	0.001	U	0.0011	U	0.001	U
Acetone	100	0.0048	U	0.0064	U	0.0048	U	0.006	U	0.2		0.0054	U	0.081		0.0053	U
Carbon disulfide	--	0.0046	U	0.0061	U	0.0045	U	0.0056	U	0.0055	U	0.0051	U	0.0056	U	0.005	U
2-Butanone	100	0.0022	U	0.003	U	0.0022	U	0.0028	U	0.05		0.0025	U	0.018		0.0024	U
Vinyl acetate	--	0.0022	U	0.0029	U	0.0021	U	0.0027	U	0.0026	U	0.0024	U	0.0027	U	0.0024	U
4-Methyl-2-pentanone	--	0.0013	U	0.0017	U	0.0013	U	0.0016	U	0.0015	U	0.0014	U	0.0016	U	0.0014	U
1,2,3-Trichloropropene	--	0.00013	U	0.00017	U	0.00013	U	0.00016	U	0.00016	U	0.00015	U	0.00014	U	0.00014	U
2-Hexanone	--	0.0012	U	0.0016	U	0.0012	U	0.0015	U	0.0014	U	0.0013	U	0.0015	U	0.0013	U
Bromochloromethane	--	0.00021	U	0.00027	U	0.0002	U	0.00025	U	0.00025	U	0.00023	U	0.00025	U	0.00023	U
2,2-Dichloropropane	--	0.0002	U	0.00027	U	0.0002	U	0.00025	U	0.00024	U	0.00023	U	0.00025	U	0.00022	U
1,2-Dibromoethane	--	0.00028	U	0.00037	U	0.00028	U	0.00035	U	0.00034	U	0.00031	U	0.00035	U	0.00031	U
1,3-Dichloropropane	--	0.00017	U	0.00022	U	0.00017	U	0.00021	U	0.0002	U	0.00019	U	0.00021	U	0.00018	U
1,1,1,2-Tetrachloroethane	--	0.00013	U	0.00018	U	0.00013	U	0.00016	U	0.00016	U	0.00015	U	0.00016	U	0.00014	U
Bromobenzene	--	0.00015	U	0.00019	U	0.00014	U	0.00018	U	0.00017	U	0.00016	U	0.00018	U	0.00016	U
n-Butylbenzene	100	0.00017	U	0.00022	U	0.00017	U	0.00021	U	0.0002	U	0.00019	U	0.00021	U	0.00018	U
sec-Butylbenzene	100	0.00015	U	0.0002	U	0.00014	U	0.00018	U	0.00018	U	0.00016	U	0.00018	U	0.00016	U
tert-Butylbenzene	100	0.00012	U	0.00016	U	0.00012	U	0.00015	U	0.00014	U	0.00013	U	0.00015	U	0.00013	U
o-Chlorotoluene	--	0.00019	U	0.00026	U	0.00019	U	0.00024	U	0.00023	U	0.00022	U	0.00024	U	0.00021	U
p-Chlorotoluene	--	0.00011	U	0.00014	U	0.00011	U	0.00013	U	0.00013	U	0.00012	U	0.00013	U	0.00012	U
1,2-Dibromo-3-chloropropane	--	0.001	U	0.0013	U												

**Table 2 - Semivolatile Organic Compounds in Soil**  
**Limited Due Diligence Site Investigation**  
**Liberty Towers - Staten Island, NY**

SAMPLE ID: LAB ID: COLLECTION DATE: semivolatile Organic Compounds in Soil	NY-RESRR	SB-1 (0-2)		SB-2 (0-2)		SB-3 (0-2)		SB-4 (0-2)		SB-5 (0-2)		SB-6 (0-2)		SB-7 (0-2)		TMW-1 (0-2)		
		L2009753-01		L2009753-02		L2009753-04		L2009753-05		L2009753-06		L2009753-03		L2009753-07		L2009753-08		
		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		
		Conc	Q	Conc	Q													
Acenaphthene		100	0.021	U	0.025	U	0.021	U	0.024	U	0.018	U	0.021	U	0.028	J	0.02	U
1,2,4-Trichlorobenzene	--	0.023	U	0.028	U	0.023	U	0.026	U	0.02	U	0.023	U	0.022	U	0.022	U	
Hexachlorobenzene	1.2	0.022	U	0.027	U	0.022	U	0.025	U	0.02	U	0.023	U	0.022	U	0.021	U	
Bis(2-chloroethyl)ether	--	0.027	U	0.033	U	0.027	U	0.031	U	0.024	U	0.028	U	0.026	U	0.026	U	
2-Chloronaphthalene	--	0.02	U	0.024	U	0.02	U	0.022	U	0.017	U	0.02	U	0.019	U	0.019	U	
1,2-Dichlorobenzene	100	0.036	U	0.044	U	0.036	U	0.041	U	0.032	U	0.037	U	0.035	U	0.034	U	
1,3-Dichlorobenzene	49	0.035	U	0.042	U	0.034	U	0.039	U	0.03	U	0.035	U	0.034	U	0.033	U	
1,4-Dichlorobenzene	13	0.035	U	0.042	U	0.035	U	0.04	U	0.031	U	0.036	U	0.034	U	0.033	U	
3,3'-Dichlorobenzidine	--	0.054	U	0.065	U	0.053	U	0.06	U	0.047	U	0.054	U	0.052	U	0.051	U	
2,4-Dinitrotoluene	--	0.04	U	0.048	U	0.04	U	0.046	U	0.035	U	0.041	U	0.039	U	0.038	U	
2,6-Dinitrotoluene	--	0.034	U	0.042	U	0.034	U	0.039	U	0.03	U	0.035	U	0.034	U	0.033	U	
Fluoranthene	100	0.082	J	0.71		0.037	J	0.19		0.39		0.041	J	3.7		0.46		
4-Chlorophenyl phenyl ether	--	0.022	U	0.026	U	0.021	U	0.024	U	0.019	U	0.022	U	0.021	U	0.02	U	
4-Bromophenyl phenyl ether	--	0.031	U	0.037	U	0.03	U	0.035	U	0.027	U	0.031	U	0.03	U	0.029	U	
Bis(2-chloroisopropyl)ether	--	0.034	U	0.041	U	0.034	U	0.039	U	0.03	U	0.035	U	0.033	U	0.032	U	
Bis(2-chlorooxy)methane	--	0.02	U	0.024	U	0.02	U	0.023	U	0.018	U	0.02	U	0.02	U	0.019	U	
Hexachlorobutadiene	--	0.029	U	0.036	U	0.029	U	0.033	U	0.026	U	0.03	U	0.029	U	0.028	U	
Hexachlorocyclopentadiene	--	0.18	U	0.22	U	0.18	U	0.21	U	0.16	U	0.18	U	0.18	U	0.17	U	
Hexachloroethane	--	0.032	U	0.039	U	0.032	U	0.037	U	0.028	U	0.033	U	0.032	U	0.031	U	
Isophorone	--	0.026	U	0.032	U	0.026	U	0.03	U	0.023	U	0.026	U	0.025	U	0.025	U	
Naphthalene	100	0.024	U	0.03	U	0.024	U	0.028	U	0.032	J	0.034	J	0.065	J	0.023	U	
Nitrobenzene	--	0.03	U	0.036	U	0.03	U	0.034	U	0.026	U	0.03	U	0.029	U	0.028	U	
NDPA/DPA	--	0.023	U	0.028	U	0.023	U	0.026	U	0.02	U	0.023	U	0.022	U	0.022	U	
n-Nitrosodi-n-propylamine	--	0.031	U	0.038	U	0.031	U	0.035	U	0.027	U	0.031	U	0.03	U	0.029	U	
Bis(2-ethylhexyl)phthalate	--	0.07	U	0.11	J	0.069	U	0.088	J	0.22		0.07	U	0.068	U	0.066	U	
Butyl benzyl phthalate	--	0.051	U	0.061	U	0.05	U	0.057	U	0.044	U	0.051	U	0.049	U	0.048	U	
Di-n-butylphthalate	--	0.038	U	0.046	U	0.038	U	0.043	U	0.033	U	0.039	U	0.037	U	0.036	U	
Di-n-octylphthalate	--	0.068	U	0.082	U	0.068	U	0.077	U	0.06	U	0.069	U	0.066	U	0.065	U	
Diethyl phthalate	--	0.019	U	0.022	U	0.018	U	0.021	U	0.016	U	0.019	U	0.018	U	0.018	U	
Dimethyl phthalate	--	0.042	U	0.051	U	0.042	U	0.048	U	0.037	U	0.043	U	0.041	U	0.04	U	
Benzo(a)anthracene	1	0.048	J	0.46		0.025	J	0.097	J	0.23		0.028	J	2.1		0.27		
Benzo(a)pyrene	1	0.049	U	0.38		0.049	U	0.097	J	0.24		0.05	U	1.2		0.25		
Benzo(b)fluoranthene	1	0.065	J	0.54		0.034	U	0.12	J	0.3		0.034	U	1.6		0.31		
Benzo(k)fluoranthene	3.9	0.032	U	0.13	J	0.032	U	0.036	U	0.1		0.033	U	0.5		0.094	J	
Chrysene	3.9	0.04	J	0.36		0.023	J	0.099	J	0.24		0.021	J	2.1		0.25		
Acenaphthylene	100	0.031	U	0.038	U	0.031	U	0.035	U	0.046	J	0.031	U	0.45		0.04	J	
Anthracene	100	0.039	U	0.073	J	0.039	U	0.044	U	0.051	J	0.04	U	0.42		0.071	J	
Benzog(hi)perylene	100	0.03	J	0.26		0.023	J	0.054	J	0.16		0.024	U	0.78		0.15		
Fluorene	100	0.02	U	0.024	U	0.019	U	0.022	U	0.017	U	0.02	U	0.27		0.019	J	
Phenanthrene	100	0.038	J	0.29		0.024	U	0.1	J	0.17		0.028	J	3.8		0.22		
Dibenzo(a,h)anthracene	0.33	0.023	U	0.052	J	0.023	U	0.026	U	0.042	J	0.024	U	0.19		0.044	J	
Indeno(1,2,3-cd)pyrene	0.5	0.031	J	0.26		0.028	U	0.06	J	0.16		0.028	U	0.76		0.15		
Pyrene	100	0.066	J	0.74		0.033	J	0.17		0.39		0.037	J	5.2		0.43		
Biphenyl	--	0.047	U	0.056	U	0.046	U	0.053	U	0.041	U	0.047	U	0.045	U	0.044	U	
4-Chloroaniline	--	0.037	U	0.044	U	0.036	U	0.041	U	0.032	U	0.037	U	0.036	U	0.035	U	
2-Nitroaniline	--	0.039	U	0.047	U	0.038	U	0.044	U	0.034	U	0.039	U	0.038	U	0.037	U	
3-Nitroaniline	--	0.038	U	0.046	U	0.038	U	0.043	U	0.033	U	0.038	U	0.037	U	0.036	U	
4-Nitroaniline	--	0.083	U	0.1	U	0.083	U	0.094	U	0.073	U	0.084	U	0.081	U	0.079	U	
Dibenzofuran	59	0.019	U	0.023	U	0.019	U	0.022	U	0.017	U	0.019	U	0.023	J	0.018	U	
2-Methylnaphthalene	--	0.024	U	0.029	U	0.024	U	0.027	U	0.021	U	0.025	U	0.027	J	0.023	U	
1,2,4,5-Tetrachlorobenzene	--	0.021	U	0.025	U	0.021	U	0.024	U	0.018	U	0.021	U	0.02	U	0.02	U	
Acetophenone	--	0.025	U	0.03	U	0.025	U	0.028	U	0.022	U	0.025	U	0.027	J	0.024	U	
2,4,6-Trichlorophenol	--	0.038	U	0.046	U	0.038	U	0.043	U	0.033	U	0.039	U	0.037	U	0.036	U	
p-Chloro-m-cresol	--	0.03	U	0.036	U	0.03	U	0.034	U	0.026	U	0.03	U	0.029	U	0.028	U	
2-Chlorophenol	--	0.024	U	0.029	U	0.024	U	0.027	U	0.021	U	0.024	U	0.023	U	0.022	U	
2,4-Dichlorophenol	--	0.032	U	0.039	U	0.032	U	0.036	U	0.028	U	0.033	U	0.031	U	0.031	U	
2,4-Dimethylphenol	--	0.066	U	0.08	U	0.066	U	0.075	U	0.058	U	0.067	U	0.064	U	0.063	U	
2-Nitrophenol	--	0.076	U	0.091	U	0.075	U	0.086	U	0.066	U	0.077	U	0.074	U	0.072	U	
4-Nitrophenol	--	0.082	U	0.099	U	0.081	U	0.093	U	0.072	U	0.083	U	0.08	U	0.078	U	
2,4-Dinitrophenol	--	0.094	U	0.11	U	0.093	U	0.11	U	0.082	U	0.095	U	0.091	U	0.089	U	
4,6-Dinitro-o-cresol	--	0.097	U	0.12	U	0.096	U	0.11	U	0.084	U	0.098	U	0.094	U	0.092	U	
Pentachlorophenol	6.7	0.044	U	0.053	U	0.044	U	0.05	U	0.039	U	0.045	U	0.043	U	0.042	U	
Phenol	100	0.03	U	0.037	U	0.03	U	0.034	U	0.027	U	0.031	U	0.03	U	0.029	U	
2-Methylphenol	100	0.031	U	0.038	U	0.031	U	0.035	U	0.027	U	0.032	U	0.03	U	0.03	U	
3-Methylphenol/4-Methylphenol	100	0.032	U	0.038	U	0.031	U	0.036	U	0.028	U	0.032	U	0.031	U	0.03	U	
2,4,5-Trichlorophenol	--	0.038	U	0.046	U	0.038	U	0.044	U	0.034	U	0.039	U	0.037	U	0.036		

**Table 3 - Total Metals in Soil**  
**Limited Due Diligence Site Investigation**  
**Liberty Towers - Staten Island, NY**

SAMPLE ID:	NY-RESRR	SB-1 (0-2)		SB-2 (0-2)		SB-3 (0-2)		SB-4 (0-2)		SB-5 (0-2)		SB-6 (0-2)		SB-7 (0-2)		TMW-1 (0-2)	
		L2009753-01		L2009753-02		L2009753-04		L2009753-05		L2009753-06		L2009753-03		L2009753-07		L2009753-08	
		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020		3/4/2020	
		Conc	Q														
Aluminum, Total	--	7900		4950		4660		10200		5050		4670		2650		4920	
Antimony, Total	--	0.382	J	0.509	J	0.351	U	0.413	U	1.59	J	0.879	J	0.475	J	0.484	J
Arsenic, Total	16	7.87		5.61		4.62		19.9		6.88		7.4		2.83		6.47	
Barium, Total	400	71.4		54		56.2		53.5		169		508		29.5		98.3	
Beryllium, Total	72	0.354	J	0.197	J	0.314	J	0.424	J	0.236	J	0.296	J	0.031	U	0.201	J
Cadmium, Total	4.3	0.354	J	0.44	J	0.425	J	0.391	J	2.31		0.926	J	0.27	J	0.703	J
Calcium, Total	--	1260		6230		1490		3340		6920		8130		68300		9570	
Chromium, Total	--	18.8		47.9		36.7		37.1		39		61.4		9.84		57.9	
Cobalt, Total	--	10.3		37.3		23.9		16.3		16.1		17.8		5.63		20.2	
Copper, Total	270	15.4		24.2		25.4		28.3		68		52.2		27.5		31.5	
Iron, Total	--	17500		23400		19000		18600		16300		17400		9440		18000	
Lead, Total	400	44		63.7		101		75		374		2430		46.8		181	
Magnesium, Total	--	5850		61200		34600		17600		14000		20700		30200		26700	
Manganese, Total	2000	197		452		327		353		307		425		150		493	
Mercury, Total	0.81	0.059	J	0.146		0.061	J	0.142		0.454		2.07		0.058	U	0.118	
Nickel, Total	310	96.1		753		453		252		237		310		33.3		351	
Potassium, Total	--	303		882		1060		443		601		395		526		598	
Selenium, Total	180	0.234	U	0.298	U	0.238	U	0.28	U	0.218	U	0.246	U	0.24	U	0.236	U
Silver, Total	180	0.257	U	0.327	U	0.262	U	0.307	U	0.304	J	0.27	U	0.263	U	0.258	U
Sodium, Total	--	29.7	J	93.3	J	78.6	J	50.1	J	74.4	J	62.7	J	153	J	60	J
Thallium, Total	--	0.286	U	0.59	J	0.291	U	0.342	U	0.266	U	0.301	U	0.293	U	0.288	U
Vanadium, Total	--	22.9		18		22.8		25.7		25		21.3		31.9		27.5	
Zinc, Total	10000	64.2		62.1		89.2		67.2		290		277		45.2		133	

Notes:

NY-RESRR: New York NYCRR Part 375 Restricted-Residential Criteria, New York Restricted use Criteria per 6 NYCRR Part 375 Environmental Remediation Programs, effective December 14, 2006.

Cells highlighted in yellow indicate a concentration above the NY-RESRR

Conc = Concentration

Q = Laboratory qualifier

For U qualified entries, the MDL is shown

U= not detected at or above the MDL

For J qualified entries, an estimated concentration is shown, indicating the concentration is below the RL but above the MDL

RL = Reporting Limit

MDL = Method of Detection Limit

All concentrations are in milligrams per kilogram (mg/kg)

**Table 4 - Volatile Organic Compounds in Soil Vapor**  
**Limited Due Diligence Site Investigation**  
**Liberty Towers - Staten Island, NY**

LOCATION	SV-1		SV-2		SV-3		SV-4		SV-5		SV-6	
SAMPLING DATE	3/5/2020		3/5/2020		3/5/2020		3/5/2020		3/5/2020		3/5/2020	
LAB SAMPLE ID	L2009947-01		L2009947-02		L2009947-03		L2009947-04		L2009947-05		L2009947-06	
<b>Volatile Organics in Air</b>												
Units: ug/m <sup>3</sup>	Conc	Q										
Dichlorodifluoromethane	4.12	U	6.18	U	1.99		4.94	U	7.07	U	2.47	U
Chloromethane	1.72	U	2.58	U	1.07		2.07	U	2.95	U	1.03	U
Freon-114	5.82	U	8.74	U	2.05	U	6.99	U	10	U	3.49	U
Vinyl chloride	2.13	U	3.2	U	0.752	U	2.56	U	3.66	U	1.28	U
1,3-Butadiene	3.47		2.77	U	0.65	U	2.21	U	3.16	U	1.43	
Bromomethane	3.23	U	4.85	U	1.14	U	3.88	U	5.55	U	1.94	U
Chloroethane	2.2	U	3.3	U	0.776	U	2.64	U	3.77	U	1.32	U
Ethanol	39.2	U	58.8	U	13.8	U	47.1	U	67.3	U	23.6	U
Vinyl bromide	3.64	U	5.47	U	1.29	U	4.37	U	6.25	U	2.19	U
Acetone	159		268		42.5		138		206		78.9	
Trichlorofluoromethane	4.68	U	7.02	U	1.65	U	5.62	U	8.04	U	2.81	U
Isopropanol	5.11	U	7.67	U	1.81	U	6.15	U	8.78	U	3.07	U
1,1-Dichlorethene	3.3	U	4.96	U	1.17	U	3.96	U	5.67	U	1.98	U
Tertiary butyl Alcohol	6.31	U	9.46	U	2.23	U	7.58	U	10.8	U	3.79	U
Methylene chloride	7.23	U	10.8	U	2.55	U	8.69	U	12.4	U	4.34	U
3-Chloropropene	2.61	U	3.91	U	0.92	U	3.13	U	4.48	U	1.57	U
Carbon disulfide	5.61		6.17		0.916	U	3.11	U	4.45	U	2.79	
Freon-113	6.38	U	9.58	U	2.25	U	7.66	U	11	U	3.83	U
trans-1,2-Dichloroethene	3.3	U	4.96	U	1.17	U	3.96	U	5.67	U	1.98	U
1,1-Dichloroethane	3.37	U	5.06	U	1.19	U	4.05	U	5.79	U	2.02	U
Methyl tert butyl ether	3	U	4.51	U	1.06	U	3.61	U	5.16	U	1.8	U
2-Butanone	15.4		42.2		4.19		8.38		13.7		4.19	
cis-1,2-Dichloroethene	3.3	U	4.96	U	1.17	U	3.96	U	5.67	U	1.98	U
Ethyl Acetate	7.5	U	11.2	U	2.65	U	9.01	U	12.9	U	4.5	U
Chloroform	4.07	U	6.1	U	1.44	U	4.88	U	6.98	U	8.3	
Tetrahydrofuran	6.13	U	9.2	U	2.17	U	7.37	U	10.5	U	3.69	U
1,2-Dichloroethane	3.37	U	5.06	U	1.19	U	4.05	U	5.79	U	2.02	U
n-Hexane	15.2		9.8		2.72		7.54		9.37		6.59	
1,1,1-Trichloroethane	4.54	U	6.82	U	1.6	U	5.46	U	7.8	U	2.73	U
Benzene	6.07		4.38		1.02		3.19		4.57		2.5	
Carbon tetrachloride	5.24	U	7.86	U	1.85	U	6.29	U	9	U	3.15	U
Cyclohexane	53		79.5		20.4		71.6		93.3		52.3	
1,2-Dichloropropane	3.85	U	5.78	U	1.36	U	4.62	U	6.61	U	2.31	U
Bromodichloromethane	5.58	U	8.37	U	1.97	U	6.7	U	9.58	U	3.35	U
1,4-Dioxane	3	U	4.5	U	1.06	U	3.6	U	5.15	U	1.8	U
Trichloroethene	4.48	U	6.72	U	1.58	U	5.37	U	7.69	U	2.69	U
2,2,4-Trimethylpentane	1290		1950		461		1640		2110		1130	
Heptane	31.3		45.1		9.43		33.8		41.8		26.6	
cis-1,3-Dichloropropene	3.78	U	5.67	U	1.33	U	4.54	U	6.49	U	2.27	U
4-Methyl-2-pentanone	8.52	U	12.8	U	3.01	U	10.2	U	14.6	U	5.12	U
trans-1,3-Dichloropropene	3.78	U	5.67	U	1.33	U	4.54	U	6.49	U	2.27	U
1,1,2-Trichloroethane	4.54	U	6.82	U	1.6	U	5.46	U	7.8	U	2.73	U
Toluene	37.7		46.7		7.99		33		38.8		25.8	
2-Hexanone	3.41	U	5.12	U	1.2	U	4.1	U	5.86	U	2.05	U
Dibromochloromethane	7.1	U	10.6	U	2.5	U	8.52	U	12.2	U	4.26	U
1,2-Dibromoethane	6.4	U	9.61	U	2.26	U	7.69	U	11	U	3.84	U
Tetrachloroethene	67.8		86.1		11.9		60.5		65.4		49.5	
Chlorobenzene	3.84	U	5.76	U	1.35	U	4.61	U	6.59	U	2.3	U
Ethylbenzene	34.5		40.7		5.52		31		30.3		26.8	
p/m-Xylene	142		160		21		125		120		111	
Bromoform	8.61	U	12.9	U	3.04	U	10.3	U	14.8	U	5.17	U
Styrene	3.55	U	5.32	U	1.25	U	4.26	U	6.09	U	2.13	U
1,1,2,2-Tetrachloroethane	5.72	U	8.58	U	2.02	U	6.87	U	9.82	U	3.43	U
o-Xylene	202		236		30.2		182		178		159	
4-Ethyltoluene	23		21.5		2.01		15.9		7.03		15.9	
1,3,5-Trimethylbenzene	147		134		16.7		127		115		109	
1,2,4-Trimethylbenzene	362		277		37.2		312		269		247	
Benzyl chloride	4.31	U	6.47	U	1.52	U	5.18	U	7.4	U	2.59	U
1,3-Dichlorobenzene	5.01	U	7.52	U	1.77	U	6.01	U	8.6	U	3.01	U
1,4-Dichlorobenzene	5.01	U	7.52	U	1.77	U	6.01	U	8.6	U	3.01	U
1,2-Dichlorobenzene	5.01	U	7.52	U	1.77	U	6.01	U	8.6	U	3.01	U
1,2,4-Trichlorobenzene	6.18	U	9.28	U	2.18	U	7.42	U	10.6	U	3.71	U
Hexachlorobutadiene	8.89	U	13.3	U	3.14	U	10.7	U	15.3	U	5.33	U

Notes:

Conc= Concentration

Q = Laboratory qualifier

RL = Reporting Limit

U = not detected at or above the RL

For all U qualified entries, the RL is shown

Results and RL values are in micrograms per cubic meter (ug/m<sup>3</sup>)

## Attachment 1

### *Boring and Monitoring Well Construction Logs*

**Attachment 1 - Boring and Well Construction Logs**  
**Liberty Towers - Staten Island, NY**  
**Limited Due Diligence Investigation**

TENEN ENVIRONMENTAL			Boring No. <b>SB-1</b> Sheet: <b>1 OF 1</b>
Site:	<b>Liberty Towers, Staten Island, NY</b>		Drilling Method: <b>Geoprobe</b>
Weather:	<b>50°F, sunny</b>		Driller: <b>AARCO</b>
Date:	<b>3/4/2020</b>		Soil Sampling Method: <b>Acetate Liner</b>
Observers:	<b>C. Zaccero</b>		
Depth (feet)	PID Reading (ppm)	Soil Samples	Soil Description
1	0.0	SB-1 (0-2)	0-5: FILL (dark brown silt and pebbles)
2			
3			
4			
5			
6	0.0		5-10: SAA 10 ft. - EOB
7			
8			
9			
10			
<b>Notes:</b> PID - Photoionization Detector      EOB - End of Boring      SAA - Same as above      GW = Groundwater N/A - Not Applicable      ft-bg - Feet Below Grade      DTW = Depth to Water			

**TENEN  
ENVIRONMENTAL**

Site:	Liberty Towers, Staten Island, NY	Boring No.	SB-2
Weather:	50°F, sunny	Sheet:	1 OF 1
Date:	3/4/2020	Drilling Method:	Geoprobe
Observers:	C. Zaccheo	Driller:	AARCO
		Soil Sampling Method:	Acetate Liner

Depth (feet)	PID Reading (ppm)	Soil Samples	Soil Description
1			
2		SB-2 (0-2)	
3	0.0		0-3: FILL (silt, cobbles, brick fragments)
4			3-5: Olive grey medium grain sand, some silt
5			
6			
7	0.0		5-10: SAA
8			10 ft. - EOB
9			
10			

**Notes:**

PID - Photoionization Detector  
N/A - Not Applicable

EOB - End of Boring  
ft-bg - Feet Below Grade

SAA - Same as above

GW = Groundwater  
DTW = Depth to Water

**TENEN  
ENVIRONMENTAL**

<b>Site:</b>	Liberty Towers, Staten Island, NY	<b>Boring No.</b>	SB-3
<b>Weather:</b>	50°F, sunny	<b>Sheet:</b>	1 OF 1
<b>Date:</b>	3/4/2020	<b>Drilling Method:</b>	Hand tools
<b>Observers:</b>	C. Zaccheo	<b>Driller:</b>	AARCO
<b>Soil Sampling Method:</b>	Hand tools		

Depth (feet)	PID Reading (ppm)	Soil Samples	Soil Description
1			
2			
3	0.0	SB-3 (0-2)	0-2: FILL (brown silt, some pebbles, some cobbles and brick fragments)
4			2 ft - EOB
5			

**Notes:**

PID - Photoionization Detector

EOB - End of Boring

SAA - Same as above

GW = Groundwater

N/A - Not Applicable

ft-bg - Feet Below Grade

DTW = Depth to Water

# TENEN ENVIRONMENTAL

			Boring No. <b>SB-4</b>
			Sheet: <b>1 OF 1</b>
Site:	Liberty Towers, Staten Island, NY	Drilling Method:	Hand tools
Weather:	50°F, sunny	Driller:	AARCO
Date:	3/4/2020	Soil Sampling Method:	Hand tools
Observers:	C. Zaccheo		
Depth (feet)	PID Reading (ppm)	Soil Samples	Soil Description
1			
2			
3	0.0	SB-4 (0-2)	0-2: Brown clayey silt, some pebbles and cobbles
4			2 ft - EOB
5			
<b>Notes:</b>			
PID - Photoionization Detector		EOB - End of Boring	SAA - Same as above
N/A - Not Applicable		ft-bg - Feet Below Grade	GW = Groundwater
			DTW = Depth to Water

<b>TENEN ENVIRONMENTAL</b>			Boring No. <b>SB-4</b> Sheet: <b>1 OF 1</b>
Site:	Liberty Towers, Staten Island, NY	Drilling Method:	Geoprobe
Weather:	50°F, sunny	Driller:	AARCO
Date:	3/4/2020	Soil Sampling Method:	Acetate liner
Observers:	C. Zaccheo		
Depth (feet)	PID Reading (ppm)	Soil Samples	Soil Description
1			
2			
3	0.0	SB-5 (0-2)	0-3: FILL (dark olive grey silt, some wood fragments)
4			3-5: Brown silt
5			5 ft - EOB
<b>Notes:</b>			
PID - Photoionization Detector N/A - Not Applicable		EOB - End of Boring ft-bg - Feet Below Grade	SAA - Same as above GW = Groundwater DTW = Depth to Water

**TENEN  
ENVIRONMENTAL**

Site:	Liberty Towers, Staten Island, NY	Boring No.	SB-6
Weather:	50°F, sunny	Sheet:	1 OF 1
Date:	3/4/2020	Drilling Method:	Geoprobe
Observers:	C. Zacheo	Driller:	AARCO
		Soil Sampling Method:	Acetate Liner

Depth (feet)	PID Reading (ppm)	Soil Samples	Soil Description
1			
2			
3	0.0	SB-6 (0-2)	0-2: FILL (silt, brick and concrete fragments)
4			
5			
6	0.0		5-10: Clayey brown silt
7			
8			10 ft. - EOB
9			
10			

**Notes:**

PID - Photoionization Detector  
N/A - Not Applicable

EOB - End of Boring  
ft-bg - Feet Below Grade

SAA - Same as above

GW = Groundwater  
DTW = Depth to Water

<b>TENEN ENVIRONMENTAL</b>			Boring No. <b>SB-7</b> Sheet: <b>1 OF 1</b>	
Site:	Liberty Towers, Staten Island, NY	Drilling Method:	Geoprobe	
Weather:	50°F, sunny	Driller:	AARCO	
Date:	3/4/2020	Soil Sampling Method:	Acetate liner	
Observers:	C. Zaccheo			
Depth (feet)	PID Reading (ppm)	Soil Samples	Soil Description	
1	0.0	SB-7 (0-2)	0-2: Dark olive grey-black silt, some pebbles	
2			2-5: Red-brown silt, some brick fragments	
3			5 ft - EOB	
4				
5				
<b>Notes:</b>				
PID - Photoionization Detector N/A - Not Applicable		EOB - End of Boring ft-bg - Feet Below Grade	SAA - Same as above GW = Groundwater DTW = Depth to Water	

# TENEN ENVIRONMENTAL

				Boring No. <b>TMW-1</b> Sheet: <b>1 OF 1</b>
Site: <b>Liberty Towers, Staten Island, NY</b>		Drilling Method: <b>Geoprobe</b>		
Weather: <b>50°F, sunny</b>		Driller: <b>AARCO</b>		
Date: <b>3/4/2020</b>		Soil Sampling Method: <b>Acetate Liner</b>		
Observers: <b>C. Zaccheo</b>				
Depth (feet)	PID Reading (ppm)	Soil Samples	Well Construction	Soil Description
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

PID - Photoionization Detector  
N/A - Not Applicable

EOB - End of Boring  
ft-bg - Feet Below Grade

SAA - Same as above

GW = Groundwater  
DTW = Depth to Water

Attachment 2  
*Soil Vapor Sampling Logs*

**Attachment 2 - Soil Vapor Sampling Logs**  
**Liberty Towers - Staten Island, NY**  
**Limited Due Diligence Investigation**

Soil Vapor Sampling Logs							
Sample ID	Cannister	Regulator ID	PID (ppm)	Start Time	Start Pressure (in-Hg)	End Time	End Pressure (in-Hg)
SV-1	2764	01510	21.8	0942	-30.72	1146	-5.36
SV-2	479	01809	31.9	0954	-30.48	1152	-5.42
SV-3	216	01723	37.2	0930	-29.85	1125	-0.08
SV-4	3199	01713	20.0	0913	-30.59	1113	-5.35
SV-5	102	01493	36.9	0922	-30.58	1120	-5.40
SV-6	2372	0797	22.6	0902	-30.28	1100	-4.90

Attachment 3  
*Laboratory Deliverables*



## ANALYTICAL REPORT

Lab Number:	L2009753
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matthew Carroll
Phone:	(646) 606-2332
Project Name:	LIBERTY TOWERS
Project Number:	LIBERTY TOWERS
Report Date:	03/11/20

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

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

---

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



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2009753-01	SB-1 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 09:20	03/04/20
L2009753-02	SB-2 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 09:35	03/04/20
L2009753-03	SB-6 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 12:05	03/04/20
L2009753-04	SB-3 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 13:15	03/04/20
L2009753-05	SB-4 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 13:50	03/04/20
L2009753-06	SB-5 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 15:00	03/04/20
L2009753-07	SB-7 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 15:20	03/04/20
L2009753-08	TMW-1 (0-2)	SOIL	STATEN ISLAND, NY	03/04/20 15:30	03/04/20
L2009753-09	TRIP BLANK	WATER	STATEN ISLAND, NY	03/04/20 00:00	03/04/20

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### Case Narrative

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

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

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

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

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

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

---

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### Case Narrative (continued)

#### Report Submission

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

#### Volatile Organics

L2009753-06: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (32%) and the surrogate recoveries for 1,2-dichloroethane-d4 (133%) and 4-bromofluorobenzene (143%) were outside the acceptance criteria; however, re-analysis achieved similar results: 1,4-dichlorobenzene-d4 (40%) and 4-bromofluorobenzene (141%). The results of both analyses are reported.

#### Total Metals

L2009753-01 through -08: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

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: 03/11/20

# ORGANICS



# VOLATILES



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-01  
Client ID: SB-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/09/20 07:42  
Analyst: MV  
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	5.0	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.0	0.15	1
Chloroform	ND		ug/kg	1.5	0.14	1
Carbon tetrachloride	ND		ug/kg	1.0	0.23	1
1,2-Dichloropropane	ND		ug/kg	1.0	0.13	1
Dibromochloromethane	ND		ug/kg	1.0	0.14	1
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27	1
Tetrachloroethene	ND		ug/kg	0.50	0.20	1
Chlorobenzene	ND		ug/kg	0.50	0.13	1
Trichlorofluoromethane	ND		ug/kg	4.0	0.70	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17	1
Bromodichloromethane	ND		ug/kg	0.50	0.11	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16	1
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16	1
1,1-Dichloropropene	ND		ug/kg	0.50	0.16	1
Bromoform	ND		ug/kg	4.0	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17	1
Benzene	ND		ug/kg	0.50	0.17	1
Toluene	ND		ug/kg	1.0	0.55	1
Ethylbenzene	ND		ug/kg	1.0	0.14	1
Chloromethane	ND		ug/kg	4.0	0.94	1
Bromomethane	ND		ug/kg	2.0	0.59	1
Vinyl chloride	ND		ug/kg	1.0	0.34	1
Chloroethane	ND		ug/kg	2.0	0.46	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.24	1
trans-1,2-Dichloroethene	0.68	J	ug/kg	1.5	0.14	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-01	Date Collected:	03/04/20 09:20
Client ID:	SB-1 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.50	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14	1
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17	1
Methyl tert butyl ether	ND		ug/kg	2.0	0.20	1
p/m-Xylene	ND		ug/kg	2.0	0.56	1
o-Xylene	ND		ug/kg	1.0	0.29	1
Xylenes, Total	ND		ug/kg	1.0	0.29	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18	1
1,2-Dichloroethene, Total	0.68	J	ug/kg	1.0	0.14	1
Dibromomethane	ND		ug/kg	2.0	0.24	1
Styrene	ND		ug/kg	1.0	0.20	1
Dichlorodifluoromethane	ND		ug/kg	10	0.92	1
Acetone	ND		ug/kg	10	4.8	1
Carbon disulfide	ND		ug/kg	10	4.6	1
2-Butanone	ND		ug/kg	10	2.2	1
Vinyl acetate	ND		ug/kg	10	2.2	1
4-Methyl-2-pentanone	ND		ug/kg	10	1.3	1
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13	1
2-Hexanone	ND		ug/kg	10	1.2	1
Bromochloromethane	ND		ug/kg	2.0	0.21	1
2,2-Dichloropropane	ND		ug/kg	2.0	0.20	1
1,2-Dibromoethane	ND		ug/kg	1.0	0.28	1
1,3-Dichloropropane	ND		ug/kg	2.0	0.17	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13	1
Bromobenzene	ND		ug/kg	2.0	0.15	1
n-Butylbenzene	ND		ug/kg	1.0	0.17	1
sec-Butylbenzene	ND		ug/kg	1.0	0.15	1
tert-Butylbenzene	ND		ug/kg	2.0	0.12	1
o-Chlorotoluene	ND		ug/kg	2.0	0.19	1
p-Chlorotoluene	ND		ug/kg	2.0	0.11	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0	1
Hexachlorobutadiene	ND		ug/kg	4.0	0.17	1
Isopropylbenzene	ND		ug/kg	1.0	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.11	1
Naphthalene	ND		ug/kg	4.0	0.66	1
Acrylonitrile	ND		ug/kg	4.0	1.2	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-01  
Client ID: SB-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.34	1
1,4-Dioxane	ND		ug/kg	81	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.39	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	106		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-02  
Client ID: SB-2 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:35  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/09/20 08:21  
Analyst: MV  
Percent Solids: 67%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	6.7	3.1	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.19	1
Chloroform	ND		ug/kg	2.0	0.19	1
Carbon tetrachloride	ND		ug/kg	1.3	0.31	1
1,2-Dichloropropane	ND		ug/kg	1.3	0.17	1
Dibromochloromethane	ND		ug/kg	1.3	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.36	1
Tetrachloroethene	ND		ug/kg	0.67	0.26	1
Chlorobenzene	ND		ug/kg	0.67	0.17	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.93	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.34	1
1,1,1-Trichloroethane	ND		ug/kg	0.67	0.22	1
Bromodichloromethane	ND		ug/kg	0.67	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.36	1
cis-1,3-Dichloropropene	ND		ug/kg	0.67	0.21	1
1,3-Dichloropropene, Total	ND		ug/kg	0.67	0.21	1
1,1-Dichloropropene	ND		ug/kg	0.67	0.21	1
Bromoform	ND		ug/kg	5.4	0.33	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.67	0.22	1
Benzene	ND		ug/kg	0.67	0.22	1
Toluene	ND		ug/kg	1.3	0.73	1
Ethylbenzene	ND		ug/kg	1.3	0.19	1
Chloromethane	ND		ug/kg	5.4	1.2	1
Bromomethane	ND		ug/kg	2.7	0.78	1
Vinyl chloride	ND		ug/kg	1.3	0.45	1
Chloroethane	ND		ug/kg	2.7	0.60	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.32	1
trans-1,2-Dichloroethene	0.81	J	ug/kg	2.0	0.18	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-02	Date Collected:	03/04/20 09:35
Client ID:	SB-2 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.67	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	2.7	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	2.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	2.7	0.23	1
Methyl tert butyl ether	ND		ug/kg	2.7	0.27	1
p/m-Xylene	ND		ug/kg	2.7	0.75	1
o-Xylene	ND		ug/kg	1.3	0.39	1
Xylenes, Total	ND		ug/kg	1.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.23	1
1,2-Dichloroethene, Total	0.81	J	ug/kg	1.3	0.18	1
Dibromomethane	ND		ug/kg	2.7	0.32	1
Styrene	ND		ug/kg	1.3	0.26	1
Dichlorodifluoromethane	ND		ug/kg	13	1.2	1
Acetone	ND		ug/kg	13	6.4	1
Carbon disulfide	ND		ug/kg	13	6.1	1
2-Butanone	ND		ug/kg	13	3.0	1
Vinyl acetate	ND		ug/kg	13	2.9	1
4-Methyl-2-pentanone	ND		ug/kg	13	1.7	1
1,2,3-Trichloropropane	ND		ug/kg	2.7	0.17	1
2-Hexanone	ND		ug/kg	13	1.6	1
Bromochloromethane	ND		ug/kg	2.7	0.27	1
2,2-Dichloropropane	ND		ug/kg	2.7	0.27	1
1,2-Dibromoethane	ND		ug/kg	1.3	0.37	1
1,3-Dichloropropane	ND		ug/kg	2.7	0.22	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.67	0.18	1
Bromobenzene	ND		ug/kg	2.7	0.19	1
n-Butylbenzene	ND		ug/kg	1.3	0.22	1
sec-Butylbenzene	ND		ug/kg	1.3	0.20	1
tert-Butylbenzene	ND		ug/kg	2.7	0.16	1
o-Chlorotoluene	ND		ug/kg	2.7	0.26	1
p-Chlorotoluene	ND		ug/kg	2.7	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.0	1.3	1
Hexachlorobutadiene	ND		ug/kg	5.4	0.23	1
Isopropylbenzene	ND		ug/kg	1.3	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.14	1
Naphthalene	ND		ug/kg	5.4	0.87	1
Acrylonitrile	ND		ug/kg	5.4	1.5	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-02  
Client ID: SB-2 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:35  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.3	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.7	0.43	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.7	0.36	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.7	0.26	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.7	0.45	1
1,4-Dioxane	ND		ug/kg	110	47.	1
p-Diethylbenzene	ND		ug/kg	2.7	0.24	1
p-Ethyltoluene	ND		ug/kg	2.7	0.51	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.7	0.26	1
Ethyl ether	ND		ug/kg	2.7	0.46	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.7	1.9	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	112		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-03  
Client ID: SB-6 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 12:05  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/09/20 09:00  
Analyst: MV  
Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	5.6	2.6	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.7	0.16	1
Carbon tetrachloride	ND		ug/kg	1.1	0.26	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.30	1
Tetrachloroethene	ND		ug/kg	0.56	0.22	1
Chlorobenzene	ND		ug/kg	0.56	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.5	0.78	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.29	1
1,1,1-Trichloroethane	ND		ug/kg	0.56	0.19	1
Bromodichloromethane	ND		ug/kg	0.56	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.31	1
cis-1,3-Dichloropropene	ND		ug/kg	0.56	0.18	1
1,3-Dichloropropene, Total	ND		ug/kg	0.56	0.18	1
1,1-Dichloropropene	ND		ug/kg	0.56	0.18	1
Bromoform	ND		ug/kg	4.5	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.56	0.19	1
Benzene	ND		ug/kg	0.56	0.19	1
Toluene	ND		ug/kg	1.1	0.61	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.5	1.0	1
Bromomethane	ND		ug/kg	2.2	0.65	1
Vinyl chloride	ND		ug/kg	1.1	0.38	1
Chloroethane	ND		ug/kg	2.2	0.51	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.27	1
trans-1,2-Dichloroethene	0.74	J	ug/kg	1.7	0.15	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-03	Date Collected:	03/04/20 12:05
Client ID:	SB-6 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.56	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.23	1
p/m-Xylene	ND		ug/kg	2.2	0.63	1
o-Xylene	ND		ug/kg	1.1	0.33	1
Xylenes, Total	ND		ug/kg	1.1	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.20	1
1,2-Dichloroethene, Total	0.74	J	ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.27	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.4	1
Carbon disulfide	ND		ug/kg	11	5.1	1
2-Butanone	ND		ug/kg	11	2.5	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.23	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.19	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.56	0.15	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.19	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.22	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.4	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.5	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.5	0.73	1
Acrylonitrile	ND		ug/kg	4.5	1.3	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-03  
Client ID: SB-6 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 12:05  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.31	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.38	1
1,4-Dioxane	ND		ug/kg	90	40.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.43	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.22	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.6	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	111		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-04  
Client ID: SB-3 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:15  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/09/20 09:39  
Analyst: MV  
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND	ug/kg	5.0	2.3	1	
1,1-Dichloroethane	ND	ug/kg	1.0	0.14	1	
Chloroform	ND	ug/kg	1.5	0.14	1	
Carbon tetrachloride	ND	ug/kg	1.0	0.23	1	
1,2-Dichloropropane	ND	ug/kg	1.0	0.12	1	
Dibromochloromethane	ND	ug/kg	1.0	0.14	1	
1,1,2-Trichloroethane	ND	ug/kg	1.0	0.26	1	
Tetrachloroethene	ND	ug/kg	0.50	0.20	1	
Chlorobenzene	ND	ug/kg	0.50	0.13	1	
Trichlorofluoromethane	ND	ug/kg	4.0	0.69	1	
1,2-Dichloroethane	ND	ug/kg	1.0	0.26	1	
1,1,1-Trichloroethane	ND	ug/kg	0.50	0.17	1	
Bromodichloromethane	ND	ug/kg	0.50	0.11	1	
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.27	1	
cis-1,3-Dichloropropene	ND	ug/kg	0.50	0.16	1	
1,3-Dichloropropene, Total	ND	ug/kg	0.50	0.16	1	
1,1-Dichloropropene	ND	ug/kg	0.50	0.16	1	
Bromoform	ND	ug/kg	4.0	0.24	1	
1,1,2,2-Tetrachloroethane	ND	ug/kg	0.50	0.16	1	
Benzene	ND	ug/kg	0.50	0.16	1	
Toluene	ND	ug/kg	1.0	0.54	1	
Ethylbenzene	ND	ug/kg	1.0	0.14	1	
Chloromethane	ND	ug/kg	4.0	0.93	1	
Bromomethane	ND	ug/kg	2.0	0.58	1	
Vinyl chloride	ND	ug/kg	1.0	0.33	1	
Chloroethane	ND	ug/kg	2.0	0.45	1	
1,1-Dichloroethene	ND	ug/kg	1.0	0.24	1	
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.14	1	



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-04	Date Collected:	03/04/20 13:15
Client ID:	SB-3 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND	ug/kg	0.50	0.14	1	
1,2-Dichlorobenzene	ND	ug/kg	2.0	0.14	1	
1,3-Dichlorobenzene	ND	ug/kg	2.0	0.15	1	
1,4-Dichlorobenzene	ND	ug/kg	2.0	0.17	1	
Methyl tert butyl ether	ND	ug/kg	2.0	0.20	1	
p/m-Xylene	ND	ug/kg	2.0	0.56	1	
o-Xylene	ND	ug/kg	1.0	0.29	1	
Xylenes, Total	ND	ug/kg	1.0	0.29	1	
cis-1,2-Dichloroethene	ND	ug/kg	1.0	0.17	1	
1,2-Dichloroethene, Total	ND	ug/kg	1.0	0.14	1	
Dibromomethane	ND	ug/kg	2.0	0.24	1	
Styrene	ND	ug/kg	1.0	0.20	1	
Dichlorodifluoromethane	ND	ug/kg	10	0.91	1	
Acetone	ND	ug/kg	10	4.8	1	
Carbon disulfide	ND	ug/kg	10	4.5	1	
2-Butanone	ND	ug/kg	10	2.2	1	
Vinyl acetate	ND	ug/kg	10	2.1	1	
4-Methyl-2-pentanone	ND	ug/kg	10	1.3	1	
1,2,3-Trichloropropane	ND	ug/kg	2.0	0.13	1	
2-Hexanone	ND	ug/kg	10	1.2	1	
Bromochloromethane	ND	ug/kg	2.0	0.20	1	
2,2-Dichloropropane	ND	ug/kg	2.0	0.20	1	
1,2-Dibromoethane	ND	ug/kg	1.0	0.28	1	
1,3-Dichloropropane	ND	ug/kg	2.0	0.17	1	
1,1,1,2-Tetrachloroethane	ND	ug/kg	0.50	0.13	1	
Bromobenzene	ND	ug/kg	2.0	0.14	1	
n-Butylbenzene	ND	ug/kg	1.0	0.17	1	
sec-Butylbenzene	ND	ug/kg	1.0	0.14	1	
tert-Butylbenzene	ND	ug/kg	2.0	0.12	1	
o-Chlorotoluene	ND	ug/kg	2.0	0.19	1	
p-Chlorotoluene	ND	ug/kg	2.0	0.11	1	
1,2-Dibromo-3-chloropropane	ND	ug/kg	3.0	0.99	1	
Hexachlorobutadiene	ND	ug/kg	4.0	0.17	1	
Isopropylbenzene	ND	ug/kg	1.0	0.11	1	
p-Isopropyltoluene	ND	ug/kg	1.0	0.11	1	
Naphthalene	ND	ug/kg	4.0	0.65	1	
Acrylonitrile	ND	ug/kg	4.0	1.1	1	



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-04  
Client ID: SB-3 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:15  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.0	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33	1
1,4-Dioxane	ND		ug/kg	80	35.	1
p-Diethylbenzene	ND		ug/kg	2.0	0.18	1
p-Ethyltoluene	ND		ug/kg	2.0	0.38	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19	1
Ethyl ether	ND		ug/kg	2.0	0.34	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	109		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-05  
Client ID: SB-4 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:50  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/09/20 10:19  
Analyst: JC  
Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	6.2	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.86	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.21	1
Bromodichloromethane	ND		ug/kg	0.62	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	5.0	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.20	1
Benzene	ND		ug/kg	0.62	0.20	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.72	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	1.0	J	ug/kg	1.9	0.17	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-05	Date Collected:	03/04/20 13:50
Client ID:	SB-4 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.69	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	1.0	J	ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.81	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-05  
Client ID: SB-4 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:50  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.41	1
1,4-Dioxane	ND		ug/kg	99	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	122		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	111		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-06  
Client ID: SB-5 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/09/20 10:58  
Analyst: JC  
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	6.0	2.7	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.27	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.23	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.83	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.32	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	ND		ug/kg	0.60	0.20	1
Toluene	ND		ug/kg	1.2	0.65	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.69	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.54	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.28	1
trans-1,2-Dichloroethene	0.96	J	ug/kg	1.8	0.16	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-06	Date Collected:	03/04/20 15:00
Client ID:	SB-5 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.20	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.67	1
o-Xylene	ND		ug/kg	1.2	0.35	1
Xylenes, Total	ND		ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	0.96	J	ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.28	1
Styrene	ND		ug/kg	1.2	0.23	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	ND		ug/kg	12	5.7	1
Carbon disulfide	ND		ug/kg	12	5.4	1
2-Butanone	ND		ug/kg	12	2.6	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.24	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.33	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.17	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.13	1
Naphthalene	ND		ug/kg	4.8	0.78	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-06  
Client ID: SB-5 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.2	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.38	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.32	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	95	42.	1
p-Diethylbenzene	ND		ug/kg	2.4	0.21	1
p-Ethyltoluene	ND		ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	133	Q	70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	143	Q	70-130
Dibromofluoromethane	118		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-06	R	Date Collected:	03/04/20 15:00
Client ID:	SB-5 (0-2)		Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY		Field Prep:	Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/10/20 10:02  
Analyst: MV  
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.17	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
1,3-Dichloropropene, Total	ND		ug/kg	0.60	0.19	1
1,1-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	0.32	J	ug/kg	0.60	0.20	1
Toluene	0.79	J	ug/kg	1.2	0.66	1
Ethylbenzene	0.33	J	ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.54	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	1.4	J	ug/kg	1.8	0.16	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-06	R	Date Collected:	03/04/20 15:00
Client ID:	SB-5 (0-2)		Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	ND		ug/kg	2.4	0.68	1
o-Xylene	0.66	J	ug/kg	1.2	0.35	1
Xylenes, Total	0.66	J	ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
1,2-Dichloroethene, Total	1.4	J	ug/kg	1.2	0.16	1
Dibromomethane	ND		ug/kg	2.4	0.29	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	200		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	50		ug/kg	12	2.7	1
Vinyl acetate	ND		ug/kg	12	2.6	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
1,2,3-Trichloropropane	ND		ug/kg	2.4	0.15	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.4	0.24	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,3-Dichloropropane	ND		ug/kg	2.4	0.20	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.60	0.16	1
Bromobenzene	ND		ug/kg	2.4	0.17	1
n-Butylbenzene	ND		ug/kg	1.2	0.20	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.4	0.14	1
o-Chlorotoluene	ND		ug/kg	2.4	0.23	1
p-Chlorotoluene	ND		ug/kg	2.4	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Hexachlorobutadiene	ND		ug/kg	4.8	0.20	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	0.25	J	ug/kg	1.2	0.13	1
Naphthalene	0.78	J	ug/kg	4.8	0.78	1
Acrylonitrile	ND		ug/kg	4.8	1.4	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-06	R	Date Collected:	03/04/20 15:00
Client ID:	SB-5 (0-2)		Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY		Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	0.21	J	ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
1,3,5-Trimethylbenzene	0.53	J	ug/kg	2.4	0.23	1
1,2,4-Trimethylbenzene	1.2	J	ug/kg	2.4	0.40	1
1,4-Dioxane	ND		ug/kg	96	42.	1
p-Diethylbenzene	0.38	J	ug/kg	2.4	0.21	1
p-Ethyltoluene	0.80	J	ug/kg	2.4	0.46	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.4	0.23	1
Ethyl ether	ND		ug/kg	2.4	0.41	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.0	1.7	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	107		70-130
Toluene-d8	115		70-130
4-Bromofluorobenzene	141	Q	70-130
Dibromofluoromethane	107		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-07  
Client ID: SB-7 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/09/20 11:38  
Analyst: JC  
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	6.2	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.9	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.16	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.62	0.24	1
Chlorobenzene	ND		ug/kg	0.62	0.16	1
Trichlorofluoromethane	ND		ug/kg	5.0	0.86	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.62	0.21	1
Bromodichloromethane	ND		ug/kg	0.62	0.14	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.62	0.20	1
1,3-Dichloropropene, Total	ND		ug/kg	0.62	0.20	1
1,1-Dichloropropene	ND		ug/kg	0.62	0.20	1
Bromoform	ND		ug/kg	5.0	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.62	0.21	1
Benzene	ND		ug/kg	0.62	0.21	1
Toluene	ND		ug/kg	1.2	0.67	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	5.0	1.2	1
Bromomethane	ND		ug/kg	2.5	0.72	1
Vinyl chloride	ND		ug/kg	1.2	0.42	1
Chloroethane	ND		ug/kg	2.5	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	0.87	J	ug/kg	1.9	0.17	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-07  
Client ID: SB-7 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.62	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	2.5	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.5	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.5	0.25	1
p/m-Xylene	ND		ug/kg	2.5	0.70	1
o-Xylene	ND		ug/kg	1.2	0.36	1
Xylenes, Total	ND		ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
1,2-Dichloroethene, Total	0.87	J	ug/kg	1.2	0.17	1
Dibromomethane	ND		ug/kg	2.5	0.30	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	81		ug/kg	12	6.0	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	18		ug/kg	12	2.8	1
Vinyl acetate	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
1,2,3-Trichloropropane	ND		ug/kg	2.5	0.16	1
2-Hexanone	ND		ug/kg	12	1.5	1
Bromochloromethane	ND		ug/kg	2.5	0.25	1
2,2-Dichloropropane	ND		ug/kg	2.5	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.35	1
1,3-Dichloropropane	ND		ug/kg	2.5	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.62	0.16	1
Bromobenzene	ND		ug/kg	2.5	0.18	1
n-Butylbenzene	ND		ug/kg	1.2	0.21	1
sec-Butylbenzene	ND		ug/kg	1.2	0.18	1
tert-Butylbenzene	ND		ug/kg	2.5	0.15	1
o-Chlorotoluene	ND		ug/kg	2.5	0.24	1
p-Chlorotoluene	ND		ug/kg	2.5	0.13	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Hexachlorobutadiene	ND		ug/kg	5.0	0.21	1
Isopropylbenzene	ND		ug/kg	1.2	0.14	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	ND		ug/kg	5.0	0.81	1
Acrylonitrile	ND		ug/kg	5.0	1.4	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-07	Date Collected:	03/04/20 15:20
Client ID:	SB-7 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.2	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.5	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.5	0.34	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.5	0.24	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.5	0.41	1
1,4-Dioxane	ND		ug/kg	99	44.	1
p-Diethylbenzene	ND		ug/kg	2.5	0.22	1
p-Ethyltoluene	ND		ug/kg	2.5	0.48	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.5	0.24	1
Ethyl ether	ND		ug/kg	2.5	0.42	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	1.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	128		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	115		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-08  
Client ID: TMW-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:30  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8260C  
Analytical Date: 03/10/20 10:41  
Analyst: MV  
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Methylene chloride	ND		ug/kg	5.5	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.1	0.16	1
Chloroform	ND		ug/kg	1.6	0.15	1
Carbon tetrachloride	ND		ug/kg	1.1	0.25	1
1,2-Dichloropropane	ND		ug/kg	1.1	0.14	1
Dibromochloromethane	ND		ug/kg	1.1	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.1	0.29	1
Tetrachloroethene	ND		ug/kg	0.55	0.22	1
Chlorobenzene	ND		ug/kg	0.55	0.14	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.77	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.28	1
1,1,1-Trichloroethane	ND		ug/kg	0.55	0.18	1
Bromodichloromethane	ND		ug/kg	0.55	0.12	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.30	1
cis-1,3-Dichloropropene	ND		ug/kg	0.55	0.17	1
1,3-Dichloropropene, Total	ND		ug/kg	0.55	0.17	1
1,1-Dichloropropene	ND		ug/kg	0.55	0.18	1
Bromoform	ND		ug/kg	4.4	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.55	0.18	1
Benzene	ND		ug/kg	0.55	0.18	1
Toluene	ND		ug/kg	1.1	0.60	1
Ethylbenzene	ND		ug/kg	1.1	0.16	1
Chloromethane	ND		ug/kg	4.4	1.0	1
Bromomethane	ND		ug/kg	2.2	0.64	1
Vinyl chloride	ND		ug/kg	1.1	0.37	1
Chloroethane	ND		ug/kg	2.2	0.50	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.26	1
trans-1,2-Dichloroethene	0.78	J	ug/kg	1.6	0.15	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-08	Date Collected:	03/04/20 15:30
Client ID:	TMW-1 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
Trichloroethene	ND		ug/kg	0.55	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	2.2	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	2.2	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.2	0.22	1
p/m-Xylene	ND		ug/kg	2.2	0.62	1
o-Xylene	ND		ug/kg	1.1	0.32	1
Xylenes, Total	ND		ug/kg	1.1	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.19	1
1,2-Dichloroethene, Total	0.78	J	ug/kg	1.1	0.15	1
Dibromomethane	ND		ug/kg	2.2	0.26	1
Styrene	ND		ug/kg	1.1	0.22	1
Dichlorodifluoromethane	ND		ug/kg	11	1.0	1
Acetone	ND		ug/kg	11	5.3	1
Carbon disulfide	ND		ug/kg	11	5.0	1
2-Butanone	ND		ug/kg	11	2.4	1
Vinyl acetate	ND		ug/kg	11	2.4	1
4-Methyl-2-pentanone	ND		ug/kg	11	1.4	1
1,2,3-Trichloropropane	ND		ug/kg	2.2	0.14	1
2-Hexanone	ND		ug/kg	11	1.3	1
Bromochloromethane	ND		ug/kg	2.2	0.23	1
2,2-Dichloropropane	ND		ug/kg	2.2	0.22	1
1,2-Dibromoethane	ND		ug/kg	1.1	0.31	1
1,3-Dichloropropane	ND		ug/kg	2.2	0.18	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.55	0.14	1
Bromobenzene	ND		ug/kg	2.2	0.16	1
n-Butylbenzene	ND		ug/kg	1.1	0.18	1
sec-Butylbenzene	ND		ug/kg	1.1	0.16	1
tert-Butylbenzene	ND		ug/kg	2.2	0.13	1
o-Chlorotoluene	ND		ug/kg	2.2	0.21	1
p-Chlorotoluene	ND		ug/kg	2.2	0.12	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.3	1.1	1
Hexachlorobutadiene	ND		ug/kg	4.4	0.19	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.12	1
Naphthalene	ND		ug/kg	4.4	0.72	1
Acrylonitrile	ND		ug/kg	4.4	1.3	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-08  
Client ID: TMW-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:30  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by EPA 5035 Low - Westborough Lab</b>						
n-Propylbenzene	ND		ug/kg	1.1	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.2	0.36	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.2	0.30	1
1,3,5-Trimethylbenzene	ND		ug/kg	2.2	0.21	1
1,2,4-Trimethylbenzene	ND		ug/kg	2.2	0.37	1
1,4-Dioxane	ND		ug/kg	88	39.	1
p-Diethylbenzene	ND		ug/kg	2.2	0.20	1
p-Ethyltoluene	ND		ug/kg	2.2	0.42	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.2	0.21	1
Ethyl ether	ND		ug/kg	2.2	0.38	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.5	1.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	108		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-09  
Client ID: TRIP BLANK  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 00:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Water  
Analytical Method: 1,8260C  
Analytical Date: 03/06/20 14:41  
Analyst: MKS

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



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-09	Date Collected:	03/04/20 00:00
Client ID:	TRIP BLANK	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Trichloroethene	ND	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	ND	ug/l	5.0	1.5	1	
Carbon disulfide	ND	ug/l	5.0	1.0	1	
2-Butanone	ND	ug/l	5.0	1.9	1	
Vinyl acetate	ND	ug/l	5.0	1.0	1	
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	1	
2-Hexanone	ND	ug/l	5.0	1.0	1	
Bromochloromethane	ND	ug/l	2.5	0.70	1	
2,2-Dichloropropane	ND	ug/l	2.5	0.70	1	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	1	
1,3-Dichloropropane	ND	ug/l	2.5	0.70	1	
1,1,1,2-Tetrachloroethane	ND	ug/l	2.5	0.70	1	
Bromobenzene	ND	ug/l	2.5	0.70	1	
n-Butylbenzene	ND	ug/l	2.5	0.70	1	
sec-Butylbenzene	ND	ug/l	2.5	0.70	1	
tert-Butylbenzene	ND	ug/l	2.5	0.70	1	
o-Chlorotoluene	ND	ug/l	2.5	0.70	1	
p-Chlorotoluene	ND	ug/l	2.5	0.70	1	
1,2-Dibromo-3-chloropropane	ND	ug/l	2.5	0.70	1	
Hexachlorobutadiene	ND	ug/l	2.5	0.70	1	
Isopropylbenzene	ND	ug/l	2.5	0.70	1	
p-Isopropyltoluene	ND	ug/l	2.5	0.70	1	
Naphthalene	ND	ug/l	2.5	0.70	1	



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-09  
Client ID: TRIP BLANK  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 00:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	96		70-130

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/06/20 11:24  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09			Batch:	WG1348135-5	
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:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/06/20 11:24  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09			Batch:	WG1348135-5	
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	
Bromoform	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:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/06/20 11:24  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09			Batch:	WG1348135-5	
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	122		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/10/20 08:16  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	06,08			Batch:	WG1348763-10
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	1.3	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/10/20 08:16  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	06,08			Batch:	WG1348763-10
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/10/20 08:16  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	06,08			Batch:	WG1348763-10
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	106		70-130



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/09/20 07:03  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	01-07		Batch:	WG1348763-5	
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
1,3-Dichloropropene, Total	ND		ug/kg	0.50	0.16
1,1-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	1.2	J	ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/09/20 07:03  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):		01-07	Batch:	WG1348763-5	
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
Xylenes, Total	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
1,2-Dichloroethene, Total	ND		ug/kg	1.0	0.14
Dibromomethane	ND		ug/kg	2.0	0.24
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
Vinyl acetate	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
1,2,3-Trichloropropane	ND		ug/kg	2.0	0.13
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
2,2-Dichloropropane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,3-Dichloropropane	ND		ug/kg	2.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	0.13
Bromobenzene	ND		ug/kg	2.0	0.14
n-Butylbenzene	ND		ug/kg	1.0	0.17
sec-Butylbenzene	ND		ug/kg	1.0	0.15
tert-Butylbenzene	ND		ug/kg	2.0	0.12
o-Chlorotoluene	ND		ug/kg	2.0	0.19

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8260C  
Analytical Date: 03/09/20 07:03  
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s):	01-07		Batch:	WG1348763-5	
p-Chlorotoluene	ND		ug/kg	2.0	0.11
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Hexachlorobutadiene	ND		ug/kg	4.0	0.17
Isopropylbenzene	ND		ug/kg	1.0	0.11
p-Isopropyltoluene	ND		ug/kg	1.0	0.11
Naphthalene	ND		ug/kg	4.0	0.65
Acrylonitrile	ND		ug/kg	4.0	1.2
n-Propylbenzene	ND		ug/kg	1.0	0.17
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	0.19
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	0.33
1,4-Dioxane	ND		ug/kg	80	35.
p-Diethylbenzene	ND		ug/kg	2.0	0.18
p-Ethyltoluene	ND		ug/kg	2.0	0.38
1,2,4,5-Tetramethylbenzene	ND		ug/kg	2.0	0.19
Ethyl ether	ND		ug/kg	2.0	0.34
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	1.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	108		70-130



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1348135-3 WG1348135-4								
Methylene chloride	97		94		70-130	3		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	86		87		70-130	1		20
Dibromochloromethane	100		100		63-130	0		20
1,1,2-Trichloroethane	99		96		70-130	3		20
Tetrachloroethene	98		99		70-130	1		20
Chlorobenzene	100		98		75-130	2		20
Trichlorofluoromethane	110		110		62-150	0		20
1,2-Dichloroethane	92		94		70-130	2		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	110		120		70-130	9		20
cis-1,3-Dichloropropene	98		100		70-130	2		20
1,1-Dichloropropene	97		100		70-130	3		20
Bromoform	96		100		54-136	4		20
1,1,2,2-Tetrachloroethane	91		96		67-130	5		20
Benzene	96		98		70-130	2		20
Toluene	100		100		70-130	0		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	100		95		64-130	5		20
Bromomethane	31	Q	44		39-139	35	Q	20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1348135-3 WG1348135-4								
Vinyl chloride	88		90		55-140	2		20
Chloroethane	78		77		55-138	1		20
1,1-Dichloroethene	96		98		61-145	2		20
trans-1,2-Dichloroethene	96		97		70-130	1		20
Trichloroethene	91		95		70-130	4		20
1,2-Dichlorobenzene	97		97		70-130	0		20
1,3-Dichlorobenzene	98		99		70-130	1		20
1,4-Dichlorobenzene	98		100		70-130	2		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	97		97		70-130	0		20
Dibromomethane	95		94		70-130	1		20
1,2,3-Trichloropropane	99		100		64-130	1		20
Acrylonitrile	91		87		70-130	4		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	94		96		36-147	2		20
Acetone	83		69		58-148	18		20
Carbon disulfide	110		100		51-130	10		20
2-Butanone	78		78		63-138	0		20
Vinyl acetate	99		120		70-130	19		20
4-Methyl-2-pentanone	97		99		59-130	2		20
2-Hexanone	90		90		57-130	0		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1348135-3 WG1348135-4								
Bromochloromethane	97		97		70-130	0		20
2,2-Dichloropropane	120		160	Q	63-133	29	Q	20
1,2-Dibromoethane	96		94		70-130	2		20
1,3-Dichloropropane	100		100		70-130	0		20
1,1,1,2-Tetrachloroethane	100		100		64-130	0		20
Bromobenzene	96		99		70-130	3		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	89		100		70-130	12		20
tert-Butylbenzene	96		97		70-130	1		20
o-Chlorotoluene	100		110		70-130	10		20
p-Chlorotoluene	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	83		83		41-144	0		20
Hexachlorobutadiene	110		120		63-130	9		20
Isopropylbenzene	98		99		70-130	1		20
p-Isopropyltoluene	93		95		70-130	2		20
Naphthalene	87		91		70-130	4		20
n-Propylbenzene	98		100		69-130	2		20
1,2,3-Trichlorobenzene	100		100		70-130	0		20
1,2,4-Trichlorobenzene	100		100		70-130	0		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	100		100		70-130	0		20
1,4-Dioxane	100		84		56-162	17		20
p-Diethylbenzene	97		100		70-130	3		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG1348135-3 WG1348135-4								
p-Ethyltoluene	99		100		70-130	1		20
1,2,4,5-Tetramethylbenzene	100		100		70-130	0		20
Ethyl ether	94		94		59-134	0		20
trans-1,4-Dichloro-2-butene	91		100		70-130	9		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	122		123		70-130
Toluene-d8	103		104		70-130
4-Bromofluorobenzene	97		99		70-130
Dibromofluoromethane	93		95		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1348763-3 WG1348763-4								
Methylene chloride	89		88		70-130	1		30
1,1-Dichloroethane	93		90		70-130	3		30
Chloroform	99		96		70-130	3		30
Carbon tetrachloride	119		110		70-130	8		30
1,2-Dichloropropane	86		85		70-130	1		30
Dibromochloromethane	102		98		70-130	4		30
1,1,2-Trichloroethane	88		87		70-130	1		30
Tetrachloroethene	97		92		70-130	5		30
Chlorobenzene	92		90		70-130	2		30
Trichlorofluoromethane	112		105		70-139	6		30
1,2-Dichloroethane	112		103		70-130	8		30
1,1,1-Trichloroethane	117		109		70-130	7		30
Bromodichloromethane	106		100		70-130	6		30
trans-1,3-Dichloropropene	97		94		70-130	3		30
cis-1,3-Dichloropropene	99		95		70-130	4		30
1,1-Dichloropropene	104		97		70-130	7		30
Bromoform	93		92		70-130	1		30
1,1,2,2-Tetrachloroethane	81		83		70-130	2		30
Benzene	90		87		70-130	3		30
Toluene	88		86		70-130	2		30
Ethylbenzene	94		91		70-130	3		30
Chloromethane	82		82		52-130	0		30
Bromomethane	90		90		57-147	0		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1348763-3 WG1348763-4								
Vinyl chloride	89		87		67-130	2		30
Chloroethane	82		82		50-151	0		30
1,1-Dichloroethene	91		88		65-135	3		30
trans-1,2-Dichloroethene	93		90		70-130	3		30
Trichloroethene	102		97		70-130	5		30
1,2-Dichlorobenzene	93		89		70-130	4		30
1,3-Dichlorobenzene	92		90		70-130	2		30
1,4-Dichlorobenzene	92		89		70-130	3		30
Methyl tert butyl ether	98		96		66-130	2		30
p/m-Xylene	93		90		70-130	3		30
o-Xylene	92		90		70-130	2		30
cis-1,2-Dichloroethene	91		88		70-130	3		30
Dibromomethane	100		96		70-130	4		30
Styrene	93		91		70-130	2		30
Dichlorodifluoromethane	90		85		30-146	6		30
Acetone	115		101		54-140	13		30
Carbon disulfide	91		90		59-130	1		30
2-Butanone	88		84		70-130	5		30
Vinyl acetate	90		89		70-130	1		30
4-Methyl-2-pentanone	83		84		70-130	1		30
1,2,3-Trichloropropane	86		87		68-130	1		30
2-Hexanone	87		85		70-130	2		30
Bromochloromethane	98		94		70-130	4		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1348763-3 WG1348763-4								
2,2-Dichloropropane	110		104		70-130	6		30
1,2-Dibromoethane	94		92		70-130	2		30
1,3-Dichloropropane	90		88		69-130	2		30
1,1,1,2-Tetrachloroethane	103		98		70-130	5		30
Bromobenzene	90		87		70-130	3		30
n-Butylbenzene	96		92		70-130	4		30
sec-Butylbenzene	93		90		70-130	3		30
tert-Butylbenzene	94		91		70-130	3		30
o-Chlorotoluene	91		88		70-130	3		30
p-Chlorotoluene	92		89		70-130	3		30
1,2-Dibromo-3-chloropropane	96		94		68-130	2		30
Hexachlorobutadiene	102		96		67-130	6		30
Isopropylbenzene	91		89		70-130	2		30
p-Isopropyltoluene	95		92		70-130	3		30
Naphthalene	93		90		70-130	3		30
Acrylonitrile	87		86		70-130	1		30
n-Propylbenzene	91		89		70-130	2		30
1,2,3-Trichlorobenzene	96		92		70-130	4		30
1,2,4-Trichlorobenzene	98		94		70-130	4		30
1,3,5-Trimethylbenzene	93		90		70-130	3		30
1,2,4-Trimethylbenzene	93		90		70-130	3		30
1,4-Dioxane	115		98		65-136	16		30
p-Diethylbenzene	96		92		70-130	4		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01-07 Batch: WG1348763-3 WG1348763-4								
p-Ethyltoluene	92		90		70-130	2		30
1,2,4,5-Tetramethylbenzene	100		94		70-130	6		30
Ethyl ether	85		86		67-130	1		30
trans-1,4-Dichloro-2-butene	97		95		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	119		114		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	98		100		70-130
Dibromofluoromethane	107		106		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06,08 Batch: WG1348763-8 WG1348763-9								
Methylene chloride	86		85		70-130	1		30
1,1-Dichloroethane	88		88		70-130	0		30
Chloroform	94		93		70-130	1		30
Carbon tetrachloride	104		100		70-130	4		30
1,2-Dichloropropane	85		85		70-130	0		30
Dibromochloromethane	95		95		70-130	0		30
1,1,2-Trichloroethane	86		86		70-130	0		30
Tetrachloroethene	89		88		70-130	1		30
Chlorobenzene	89		88		70-130	1		30
Trichlorofluoromethane	95		93		70-139	2		30
1,2-Dichloroethane	103		100		70-130	3		30
1,1,1-Trichloroethane	104		100		70-130	4		30
Bromodichloromethane	100		98		70-130	2		30
trans-1,3-Dichloropropene	92		92		70-130	0		30
cis-1,3-Dichloropropene	95		93		70-130	2		30
1,1-Dichloropropene	94		93		70-130	1		30
Bromoform	90		90		70-130	0		30
1,1,2,2-Tetrachloroethane	82		84		70-130	2		30
Benzene	86		86		70-130	0		30
Toluene	84		83		70-130	1		30
Ethylbenzene	89		88		70-130	1		30
Chloromethane	78		76		52-130	3		30
Bromomethane	86		88		57-147	2		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06,08 Batch: WG1348763-8 WG1348763-9								
Vinyl chloride	81		78		67-130	4		30
Chloroethane	80		78		50-151	3		30
1,1-Dichloroethene	83		84		65-135	1		30
trans-1,2-Dichloroethene	87		87		70-130	0		30
Trichloroethene	95		93		70-130	2		30
1,2-Dichlorobenzene	88		88		70-130	0		30
1,3-Dichlorobenzene	88		88		70-130	0		30
1,4-Dichlorobenzene	88		88		70-130	0		30
Methyl tert butyl ether	95		94		66-130	1		30
p/m-Xylene	88		87		70-130	1		30
o-Xylene	89		88		70-130	1		30
cis-1,2-Dichloroethene	87		87		70-130	0		30
Dibromomethane	96		94		70-130	2		30
Styrene	90		89		70-130	1		30
Dichlorodifluoromethane	73		69		30-146	6		30
Acetone	99		99		54-140	0		30
Carbon disulfide	85		85		59-130	0		30
2-Butanone	86		86		70-130	0		30
Vinyl acetate	88		88		70-130	0		30
4-Methyl-2-pentanone	84		84		70-130	0		30
1,2,3-Trichloropropane	86		87		68-130	1		30
2-Hexanone	85		85		70-130	0		30
Bromochloromethane	94		92		70-130	2		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06,08 Batch: WG1348763-8 WG1348763-9								
2,2-Dichloropropane	100		96		70-130	4		30
1,2-Dibromoethane	91		90		70-130	1		30
1,3-Dichloropropane	87		88		69-130	1		30
1,1,1,2-Tetrachloroethane	96		95		70-130	1		30
Bromobenzene	86		86		70-130	0		30
n-Butylbenzene	89		88		70-130	1		30
sec-Butylbenzene	86		85		70-130	1		30
tert-Butylbenzene	88		87		70-130	1		30
o-Chlorotoluene	87		86		70-130	1		30
p-Chlorotoluene	88		88		70-130	0		30
1,2-Dibromo-3-chloropropane	94		94		68-130	0		30
Hexachlorobutadiene	90		89		67-130	1		30
Isopropylbenzene	86		86		70-130	0		30
p-Isopropyltoluene	89		88		70-130	1		30
Naphthalene	90		90		70-130	0		30
Acrylonitrile	87		89		70-130	2		30
n-Propylbenzene	86		86		70-130	0		30
1,2,3-Trichlorobenzene	90		90		70-130	0		30
1,2,4-Trichlorobenzene	93		92		70-130	1		30
1,3,5-Trimethylbenzene	88		88		70-130	0		30
1,2,4-Trimethylbenzene	88		88		70-130	0		30
1,4-Dioxane	98		94		65-136	4		30
p-Diethylbenzene	91		89		70-130	2		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 06,08 Batch: WG1348763-8 WG1348763-9								
p-Ethyltoluene	87		87		70-130	0		30
1,2,4,5-Tetramethylbenzene	94		93		70-130	1		30
Ethyl ether	84		86		67-130	2		30
trans-1,4-Dichloro-2-butene	94		92		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	113		110		70-130
Toluene-d8	97		98		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	106		107		70-130

# **SEMIVOLATILES**



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-01  
Client ID: SB-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/06/20 16:23  
Analyst: EK  
Percent Solids: 83%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	82	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-01	Date Collected:	03/04/20 09:20
Client ID:	SB-1 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	48	J	ug/kg	120	23.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	65	J	ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	40	J	ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	30	J	ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	38	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	31	J	ug/kg	160	28.	1
Pyrene	66	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	83.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	76.	1
4-Nitrophenol	ND		ug/kg	280	82.	1
2,4-Dinitrophenol	ND		ug/kg	970	94.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	97.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-01  
Client ID: SB-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1
1,4-Dioxane	ND		ug/kg	30	9.3	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	66		30-120
2,4,6-Tribromophenol	64		10-136
4-Terphenyl-d14	56		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-02  
Client ID: SB-2 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:35  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/06/20 19:06  
Analyst: EK  
Percent Solids: 67%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	190	25.	1
1,2,4-Trichlorobenzene	ND		ug/kg	240	28.	1
Hexachlorobenzene	ND		ug/kg	140	27.	1
Bis(2-chloroethyl)ether	ND		ug/kg	220	33.	1
2-Chloronaphthalene	ND		ug/kg	240	24.	1
1,2-Dichlorobenzene	ND		ug/kg	240	44.	1
1,3-Dichlorobenzene	ND		ug/kg	240	42.	1
1,4-Dichlorobenzene	ND		ug/kg	240	42.	1
3,3'-Dichlorobenzidine	ND		ug/kg	240	65.	1
2,4-Dinitrotoluene	ND		ug/kg	240	48.	1
2,6-Dinitrotoluene	ND		ug/kg	240	42..	1
Fluoranthene	710		ug/kg	140	28.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	240	26.	1
4-Bromophenyl phenyl ether	ND		ug/kg	240	37.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	290	41.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	260	24.	1
Hexachlorobutadiene	ND		ug/kg	240	36.	1
Hexachlorocyclopentadiene	ND		ug/kg	690	220	1
Hexachloroethane	ND		ug/kg	190	39.	1
Isophorone	ND		ug/kg	220	32.	1
Naphthalene	ND		ug/kg	240	30.	1
Nitrobenzene	ND		ug/kg	220	36.	1
NDPA/DPA	ND		ug/kg	190	28.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	240	38.	1
Bis(2-ethylhexyl)phthalate	110	J	ug/kg	240	84.	1
Butyl benzyl phthalate	ND		ug/kg	240	61.	1
Di-n-butylphthalate	ND		ug/kg	240	46.	1
Di-n-octylphthalate	ND		ug/kg	240	82.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-02	Date Collected:	03/04/20 09:35
Client ID:	SB-2 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	240	22.	1
Dimethyl phthalate	ND		ug/kg	240	51.	1
Benzo(a)anthracene	460		ug/kg	140	27.	1
Benzo(a)pyrene	380		ug/kg	190	59.	1
Benzo(b)fluoranthene	540		ug/kg	140	41.	1
Benzo(k)fluoranthene	130	J	ug/kg	140	39.	1
Chrysene	360		ug/kg	140	25.	1
Acenaphthylene	ND		ug/kg	190	38.	1
Anthracene	73	J	ug/kg	140	47.	1
Benzo(ghi)perylene	260		ug/kg	190	28.	1
Fluorene	ND		ug/kg	240	24.	1
Phenanthrene	290		ug/kg	140	30.	1
Dibenzo(a,h)anthracene	52	J	ug/kg	140	28.	1
Indeno(1,2,3-cd)pyrene	260		ug/kg	190	34.	1
Pyrene	740		ug/kg	140	24.	1
Biphenyl	ND		ug/kg	550	56.	1
4-Chloroaniline	ND		ug/kg	240	44.	1
2-Nitroaniline	ND		ug/kg	240	47.	1
3-Nitroaniline	ND		ug/kg	240	46.	1
4-Nitroaniline	ND		ug/kg	240	100	1
Dibenzofuran	ND		ug/kg	240	23.	1
2-Methylnaphthalene	ND		ug/kg	290	29.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	240	25.	1
Acetophenone	ND		ug/kg	240	30.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	46.	1
p-Chloro-m-cresol	ND		ug/kg	240	36.	1
2-Chlorophenol	ND		ug/kg	240	29.	1
2,4-Dichlorophenol	ND		ug/kg	220	39.	1
2,4-Dimethylphenol	ND		ug/kg	240	80.	1
2-Nitrophenol	ND		ug/kg	520	91.	1
4-Nitrophenol	ND		ug/kg	340	99.	1
2,4-Dinitrophenol	ND		ug/kg	1200	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	630	120	1
Pentachlorophenol	ND		ug/kg	190	53.	1
Phenol	ND		ug/kg	240	37.	1
2-Methylphenol	ND		ug/kg	240	38.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	350	38.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-02  
Client ID: SB-2 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:35  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	240	46.	1
Benzoic Acid	ND		ug/kg	790	240	1
Benzyl Alcohol	ND		ug/kg	240	74.	1
Carbazole	24	J	ug/kg	240	24.	1
1,4-Dioxane	ND		ug/kg	36	11.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	79		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	79		10-136
4-Terphenyl-d14	74		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-03  
Client ID: SB-6 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 12:05  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/06/20 19:29  
Analyst: EK  
Percent Solids: 81%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:45

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	37.	1
1,3-Dichlorobenzene	ND		ug/kg	200	35.	1
1,4-Dichlorobenzene	ND		ug/kg	200	36.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	41	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	34	J	ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	70.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	39.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-03  
Client ID: SB-6 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 12:05  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1
Benzo(a)anthracene	28	J	ug/kg	120	23.	1
Benzo(a)pyrene	ND		ug/kg	160	50.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	33.	1
Chrysene	21	J	ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	40.	1
Benzo(ghi)perylene	ND		ug/kg	160	24.	1
Fluorene	ND		ug/kg	200	20.	1
Phenanthrene	28	J	ug/kg	120	25.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	37	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	25.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	39.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	77.	1
4-Nitrophenol	ND		ug/kg	280	83.	1
2,4-Dinitrophenol	ND		ug/kg	980	95.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	98.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	200	31.	1
2-Methylphenol	ND		ug/kg	200	32.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	32.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-03  
Client ID: SB-6 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 12:05  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Benzoic Acid	ND		ug/kg	660	210	1
Benzyl Alcohol	ND		ug/kg	200	62.	1
Carbazole	ND		ug/kg	200	20.	1
1,4-Dioxane	ND		ug/kg	30	9.4	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	83		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	68		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-04  
Client ID: SB-3 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:15  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/07/20 19:31  
Analyst: EK  
Percent Solids: 83%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	160	21.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	23.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
1,2-Dichlorobenzene	ND		ug/kg	200	36.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	35.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	53.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	37	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	570	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	31.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	69.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	38.	1
Di-n-octylphthalate	ND		ug/kg	200	68.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-04	Date Collected:	03/04/20 13:15
Client ID:	SB-3 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	25	J	ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	49.	1
Benzo(b)fluoranthene	ND		ug/kg	120	34.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
Chrysene	23	J	ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	31.	1
Anthracene	ND		ug/kg	120	39.	1
Benzo(ghi)perylene	23	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	33	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	83.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	38.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	66.	1
2-Nitrophenol	ND		ug/kg	430	75.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	960	93.	1
4,6-Dinitro-o-cresol	ND		ug/kg	520	96.	1
Pentachlorophenol	ND		ug/kg	160	44.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	290	31.	1

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-04  
Client ID: SB-3 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:15  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Benzoic Acid	ND		ug/kg	650	200	1
Benzyl Alcohol	ND		ug/kg	200	61.	1
Carbazole	ND		ug/kg	200	19.	1
1,4-Dioxane	ND		ug/kg	30	9.2	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	95		23-120
2-Fluorobiphenyl	81		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	80		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-05  
Client ID: SB-4 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:50  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/07/20 19:54  
Analyst: EK  
Percent Solids: 72%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	180	24.	1
1,2,4-Trichlorobenzene	ND		ug/kg	230	26.	1
Hexachlorobenzene	ND		ug/kg	140	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	31.	1
2-Chloronaphthalene	ND		ug/kg	230	22.	1
1,2-Dichlorobenzene	ND		ug/kg	230	41.	1
1,3-Dichlorobenzene	ND		ug/kg	230	39.	1
1,4-Dichlorobenzene	ND		ug/kg	230	40.	1
3,3'-Dichlorobenzidine	ND		ug/kg	230	60.	1
2,4-Dinitrotoluene	ND		ug/kg	230	46.	1
2,6-Dinitrotoluene	ND		ug/kg	230	39.	1
Fluoranthene	190		ug/kg	140	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	230	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	230	35.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	39.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	23.	1
Hexachlorobutadiene	ND		ug/kg	230	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	650	210	1
Hexachloroethane	ND		ug/kg	180	37.	1
Isophorone	ND		ug/kg	200	30.	1
Naphthalene	ND		ug/kg	230	28.	1
Nitrobenzene	ND		ug/kg	200	34.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	230	35.	1
Bis(2-ethylhexyl)phthalate	88	J	ug/kg	230	79.	1
Butyl benzyl phthalate	ND		ug/kg	230	57.	1
Di-n-butylphthalate	ND		ug/kg	230	43.	1
Di-n-octylphthalate	ND		ug/kg	230	77.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-05	Date Collected:	03/04/20 13:50
Client ID:	SB-4 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	230	21.	1
Dimethyl phthalate	ND		ug/kg	230	48.	1
Benzo(a)anthracene	97	J	ug/kg	140	26.	1
Benzo(a)pyrene	97	J	ug/kg	180	56.	1
Benzo(b)fluoranthene	120	J	ug/kg	140	38.	1
Benzo(k)fluoranthene	ND		ug/kg	140	36.	1
Chrysene	99	J	ug/kg	140	24.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	ND		ug/kg	140	44.	1
Benzo(ghi)perylene	54	J	ug/kg	180	27.	1
Fluorene	ND		ug/kg	230	22.	1
Phenanthrene	100	J	ug/kg	140	28.	1
Dibenzo(a,h)anthracene	ND		ug/kg	140	26.	1
Indeno(1,2,3-cd)pyrene	60	J	ug/kg	180	32.	1
Pyrene	170		ug/kg	140	23.	1
Biphenyl	ND		ug/kg	520	53.	1
4-Chloroaniline	ND		ug/kg	230	41.	1
2-Nitroaniline	ND		ug/kg	230	44.	1
3-Nitroaniline	ND		ug/kg	230	43.	1
4-Nitroaniline	ND		ug/kg	230	94.	1
Dibenzofuran	ND		ug/kg	230	22.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	230	24.	1
Acetophenone	ND		ug/kg	230	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	140	43.	1
p-Chloro-m-cresol	ND		ug/kg	230	34.	1
2-Chlorophenol	ND		ug/kg	230	27.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	230	75.	1
2-Nitrophenol	ND		ug/kg	490	86.	1
4-Nitrophenol	ND		ug/kg	320	93.	1
2,4-Dinitrophenol	ND		ug/kg	1100	110	1
4,6-Dinitro-o-cresol	ND		ug/kg	590	110	1
Pentachlorophenol	ND		ug/kg	180	50.	1
Phenol	ND		ug/kg	230	34.	1
2-Methylphenol	ND		ug/kg	230	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	330	36.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-05  
Client ID: SB-4 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:50  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	230	44.	1
Benzoic Acid	ND		ug/kg	740	230	1
Benzyl Alcohol	ND		ug/kg	230	70.	1
Carbazole	ND		ug/kg	230	22.	1
1,4-Dioxane	ND		ug/kg	34	10.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	78		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-06  
Client ID: SB-5 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/09/20 16:03  
Analyst: EK  
Percent Solids: 92%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND		ug/kg	140	18.	1
1,2,4-Trichlorobenzene	ND		ug/kg	180	20.	1
Hexachlorobenzene	ND		ug/kg	100	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	17.	1
1,2-Dichlorobenzene	ND		ug/kg	180	32.	1
1,3-Dichlorobenzene	ND		ug/kg	180	30.	1
1,4-Dichlorobenzene	ND		ug/kg	180	31.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	47.	1
2,4-Dinitrotoluene	ND		ug/kg	180	35.	1
2,6-Dinitrotoluene	ND		ug/kg	180	30.	1
Fluoranthene	390		ug/kg	100	20.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	27.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	210	30.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	500	160	1
Hexachloroethane	ND		ug/kg	140	28.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	32	J	ug/kg	180	21.	1
Nitrobenzene	ND		ug/kg	160	26.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	27.	1
Bis(2-ethylhexyl)phthalate	220		ug/kg	180	61.	1
Butyl benzyl phthalate	ND		ug/kg	180	44.	1
Di-n-butylphthalate	ND		ug/kg	180	33.	1
Di-n-octylphthalate	ND		ug/kg	180	60.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-06  
Client ID: SB-5 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	180	16.	1
Dimethyl phthalate	ND		ug/kg	180	37.	1
Benzo(a)anthracene	230		ug/kg	100	20.	1
Benzo(a)pyrene	240		ug/kg	140	43.	1
Benzo(b)fluoranthene	300		ug/kg	100	30.	1
Benzo(k)fluoranthene	100		ug/kg	100	28.	1
Chrysene	240		ug/kg	100	18.	1
Acenaphthylene	46	J	ug/kg	140	27.	1
Anthracene	51	J	ug/kg	100	34.	1
Benzo(ghi)perylene	160		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	17.	1
Phenanthrene	170		ug/kg	100	21.	1
Dibenzo(a,h)anthracene	42	J	ug/kg	100	20.	1
Indeno(1,2,3-cd)pyrene	160		ug/kg	140	24.	1
Pyrene	390		ug/kg	100	18.	1
Biphenyl	ND		ug/kg	400	41.	1
4-Chloroaniline	ND		ug/kg	180	32.	1
2-Nitroaniline	ND		ug/kg	180	34.	1
3-Nitroaniline	ND		ug/kg	180	33.	1
4-Nitroaniline	ND		ug/kg	180	73.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	210	21.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	18.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	100	33.	1
p-Chloro-m-cresol	ND		ug/kg	180	26.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	28.	1
2,4-Dimethylphenol	ND		ug/kg	180	58.	1
2-Nitrophenol	ND		ug/kg	380	66.	1
4-Nitrophenol	ND		ug/kg	250	72.	1
2,4-Dinitrophenol	ND		ug/kg	840	82.	1
4,6-Dinitro-o-cresol	ND		ug/kg	460	84.	1
Pentachlorophenol	ND		ug/kg	140	39.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	27.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	28.	1

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-06  
Client ID: SB-5 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Benzoic Acid	ND		ug/kg	570	180	1
Benzyl Alcohol	ND		ug/kg	180	54.	1
Carbazole	20	J	ug/kg	180	17.	1
1,4-Dioxane	ND		ug/kg	26	8.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	82		30-120
2,4,6-Tribromophenol	93		10-136
4-Terphenyl-d14	80		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-07  
Client ID: SB-7 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/09/20 16:27  
Analyst: EK  
Percent Solids: 84%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	28	J	ug/kg	160	20.	1
1,2,4-Trichlorobenzene	ND		ug/kg	200	22.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
1,2-Dichlorobenzene	ND		ug/kg	200	35.	1
1,3-Dichlorobenzene	ND		ug/kg	200	34.	1
1,4-Dichlorobenzene	ND		ug/kg	200	34.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	3700		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	65	J	ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	49.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	66.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-07  
Client ID: SB-7 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	2100		ug/kg	120	22.	1
Benzo(a)pyrene	1200		ug/kg	160	48.	1
Benzo(b)fluoranthene	1600		ug/kg	120	33.	1
Benzo(k)fluoranthene	500		ug/kg	120	31.	1
Chrysene	2100		ug/kg	120	20.	1
Acenaphthylene	450		ug/kg	160	30.	1
Anthracene	420		ug/kg	120	38.	1
Benzo(ghi)perylene	780		ug/kg	160	23.	1
Fluorene	270		ug/kg	200	19.	1
Phenanthrene	3800		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	190		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	760		ug/kg	160	27.	1
Pyrene	5200		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	450	45.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	23	J	ug/kg	200	18.	1
2-Methylnaphthalene	27	J	ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	72	J	ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	200	64.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-07  
Client ID: SB-7 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
2,4,5-Trichlorophenol	ND		ug/kg	200	37.	1
Benzoic Acid	ND		ug/kg	630	200	1
Benzyl Alcohol	ND		ug/kg	200	60.	1
Carbazole	31	J	ug/kg	200	19.	1
1,4-Dioxane	ND		ug/kg	29	9.0	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	47		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-08  
Client ID: TMW-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:30  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Analytical Method: 1,8270D  
Analytical Date: 03/09/20 16:51  
Analyst: EK  
Percent Solids: 86%

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Acenaphthene	ND	ug/kg	150	20.	1	
1,2,4-Trichlorobenzene	ND	ug/kg	190	22.	1	
Hexachlorobenzene	ND	ug/kg	110	21.	1	
Bis(2-chloroethyl)ether	ND	ug/kg	170	26.	1	
2-Chloronaphthalene	ND	ug/kg	190	19.	1	
1,2-Dichlorobenzene	ND	ug/kg	190	34.	1	
1,3-Dichlorobenzene	ND	ug/kg	190	33.	1	
1,4-Dichlorobenzene	ND	ug/kg	190	33.	1	
3,3'-Dichlorobenzidine	ND	ug/kg	190	51.	1	
2,4-Dinitrotoluene	ND	ug/kg	190	38.	1	
2,6-Dinitrotoluene	ND	ug/kg	190	33.	1	
Fluoranthene	460	ug/kg	110	22.	1	
4-Chlorophenyl phenyl ether	ND	ug/kg	190	20.	1	
4-Bromophenyl phenyl ether	ND	ug/kg	190	29.	1	
Bis(2-chloroisopropyl)ether	ND	ug/kg	230	32.	1	
Bis(2-chloroethoxy)methane	ND	ug/kg	210	19.	1	
Hexachlorobutadiene	ND	ug/kg	190	28.	1	
Hexachlorocyclopentadiene	ND	ug/kg	540	170	1	
Hexachloroethane	ND	ug/kg	150	31.	1	
Isophorone	ND	ug/kg	170	25.	1	
Naphthalene	ND	ug/kg	190	23.	1	
Nitrobenzene	ND	ug/kg	170	28.	1	
NDPA/DPA	ND	ug/kg	150	22.	1	
n-Nitrosodi-n-propylamine	ND	ug/kg	190	29.	1	
Bis(2-ethylhexyl)phthalate	ND	ug/kg	190	66.	1	
Butyl benzyl phthalate	ND	ug/kg	190	48.	1	
Di-n-butylphthalate	ND	ug/kg	190	36.	1	
Di-n-octylphthalate	ND	ug/kg	190	65.	1	



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID:	L2009753-08	Date Collected:	03/04/20 15:30
Client ID:	TMW-1 (0-2)	Date Received:	03/04/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Semivolatile Organics by GC/MS - Westborough Lab</b>						
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	270		ug/kg	110	21.	1
Benzo(a)pyrene	250		ug/kg	150	46.	1
Benzo(b)fluoranthene	310		ug/kg	110	32.	1
Benzo(k)fluoranthene	94	J	ug/kg	110	30.	1
Chrysene	250		ug/kg	110	20.	1
Acenaphthylene	40	J	ug/kg	150	29.	1
Anthracene	71	J	ug/kg	110	37.	1
Benzo(ghi)perylene	150		ug/kg	150	22.	1
Fluorene	19	J	ug/kg	190	18.	1
Phenanthrene	220		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	44	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	150		ug/kg	150	26.	1
Pyrene	430		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	440	44.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	89.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-08  
Client ID: TMW-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:30  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Benzoic Acid	ND		ug/kg	620	190	1
Benzyl Alcohol	ND		ug/kg	190	58.	1
Carbazole	ND		ug/kg	190	18.	1
1,4-Dioxane	ND		ug/kg	29	8.8	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	94		10-136
4-Terphenyl-d14	82		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 03/05/20 23:46  
Analyst: JG

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 14:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04-08				Batch:	WG1347680-1
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	19.
Hexachlorobenzene	ND		ug/kg	100	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	30.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	29.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	100	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 03/05/20 23:46  
Analyst: JG

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 14:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	04-08		Batch:	WG1347680-1	
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	69.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	100	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 03/05/20 23:46  
Analyst: JG

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 14:09

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	04-08		Batch:	WG1347680-1	
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Benzoic Acid	ND		ug/kg	540	170
Benzyl Alcohol	ND		ug/kg	160	51.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	77		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	96		18-120

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 03/06/20 12:52  
Analyst: EK

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-03		Batch:	WG1347791-1	
Acenaphthene	ND		ug/kg	130	17.
1,2,4-Trichlorobenzene	ND		ug/kg	160	18.
Hexachlorobenzene	ND		ug/kg	97	18.
Bis(2-chloroethyl)ether	ND		ug/kg	140	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
1,2-Dichlorobenzene	ND		ug/kg	160	29.
1,3-Dichlorobenzene	ND		ug/kg	160	28.
1,4-Dichlorobenzene	ND		ug/kg	160	28.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	97	18.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	190	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	170	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	140	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	140	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 03/06/20 12:52  
Analyst: EK

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-03		Batch:	WG1347791-1	
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	97	18.
Benzo(a)pyrene	ND		ug/kg	130	39.
Benzo(b)fluoranthene	ND		ug/kg	97	27.
Benzo(k)fluoranthene	ND		ug/kg	97	26.
Chrysene	ND		ug/kg	97	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	97	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	97	20.
Dibenzo(a,h)anthracene	ND		ug/kg	97	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	22.
Pyrene	ND		ug/kg	97	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	29.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	30.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	190	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	97	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	140	26.
2,4-Dimethylphenol	ND		ug/kg	160	53.
2-Nitrophenol	ND		ug/kg	350	61.



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**Method Blank Analysis**  
**Batch Quality Control**

Analytical Method: 1,8270D  
Analytical Date: 03/06/20 12:52  
Analyst: EK

Extraction Method: EPA 3546  
Extraction Date: 03/05/20 19:41

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s):	01-03		Batch:	WG1347791-1	
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	75.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Benzoic Acid	ND		ug/kg	520	160
Benzyl Alcohol	ND		ug/kg	160	49.
Carbazole	ND		ug/kg	160	16.
1,4-Dioxane	ND		ug/kg	24	7.4

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	90		18-120

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG1347680-2 WG1347680-3								
Acenaphthene	69		59		31-137	16		50
1,2,4-Trichlorobenzene	64		55		38-107	15		50
Hexachlorobenzene	66		55		40-140	18		50
Bis(2-chloroethyl)ether	69		59		40-140	16		50
2-Chloronaphthalene	66		57		40-140	15		50
1,2-Dichlorobenzene	63		55		40-140	14		50
1,3-Dichlorobenzene	62		54		40-140	14		50
1,4-Dichlorobenzene	61		53		28-104	14		50
3,3'-Dichlorobenzidine	48		42		40-140	13		50
2,4-Dinitrotoluene	79		66		40-132	18		50
2,6-Dinitrotoluene	75		63		40-140	17		50
Fluoranthene	68		59		40-140	14		50
4-Chlorophenyl phenyl ether	68		58		40-140	16		50
4-Bromophenyl phenyl ether	68		57		40-140	18		50
Bis(2-chloroisopropyl)ether	55		47		40-140	16		50
Bis(2-chloroethoxy)methane	68		59		40-117	14		50
Hexachlorobutadiene	61		52		40-140	16		50
Hexachlorocyclopentadiene	43		37	Q	40-140	15		50
Hexachloroethane	66		56		40-140	16		50
Isophorone	69		59		40-140	16		50
Naphthalene	65		57		40-140	13		50
Nitrobenzene	68		59		40-140	14		50
NDPA/DPA	76		63		36-157	19		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG1347680-2 WG1347680-3								
n-Nitrosodi-n-propylamine	69		58		32-121	17		50
Bis(2-ethylhexyl)phthalate	76		64		40-140	17		50
Butyl benzyl phthalate	72		62		40-140	15		50
Di-n-butylphthalate	73		63		40-140	15		50
Di-n-octylphthalate	74		62		40-140	18		50
Diethyl phthalate	74		62		40-140	18		50
Dimethyl phthalate	65		57		40-140	13		50
Benzo(a)anthracene	66		56		40-140	16		50
Benzo(a)pyrene	65		54		40-140	18		50
Benzo(b)fluoranthene	68		59		40-140	14		50
Benzo(k)fluoranthene	67		55		40-140	20		50
Chrysene	66		57		40-140	15		50
Acenaphthylene	65		55		40-140	17		50
Anthracene	70		60		40-140	15		50
Benzo(ghi)perylene	67		55		40-140	20		50
Fluorene	71		60		40-140	17		50
Phenanthrene	68		59		40-140	14		50
Dibenzo(a,h)anthracene	69		57		40-140	19		50
Indeno(1,2,3-cd)pyrene	65		54		40-140	18		50
Pyrene	67		58		35-142	14		50
Biphenyl	63		54		37-127	15		50
4-Chloroaniline	54		47		40-140	14		50
2-Nitroaniline	76		64		47-134	17		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG1347680-2 WG1347680-3								
3-Nitroaniline	67		58		26-129	14		50
4-Nitroaniline	69		56		41-125	21		50
Dibenzofuran	69		59		40-140	16		50
2-Methylnaphthalene	66		58		40-140	13		50
1,2,4,5-Tetrachlorobenzene	61		52		40-117	16		50
Acetophenone	66		57		14-144	15		50
2,4,6-Trichlorophenol	63		56		30-130	12		50
p-Chloro-m-cresol	73		62		26-103	16		50
2-Chlorophenol	73		62		25-102	16		50
2,4-Dichlorophenol	70		60		30-130	15		50
2,4-Dimethylphenol	74		64		30-130	14		50
2-Nitrophenol	79		68		30-130	15		50
4-Nitrophenol	102		88		11-114	15		50
2,4-Dinitrophenol	75		65		4-130	14		50
4,6-Dinitro-o-cresol	81		68		10-130	17		50
Pentachlorophenol	52		44		17-109	17		50
Phenol	74		64		26-90	14		50
2-Methylphenol	72		61		30-130.	17		50
3-Methylphenol/4-Methylphenol	72		61		30-130	17		50
2,4,5-Trichlorophenol	66		57		30-130	15		50
Benzoic Acid	70		62		10-110	12		50
Benzyl Alcohol	72		61		40-140	17		50
Carbazole	69		60		54-128	14		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04-08 Batch: WG1347680-2 WG1347680-3								
1,4-Dioxane	39	Q	39	Q	40-140	0		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	68		58		25-120
Phenol-d6	68		58		10-120
Nitrobenzene-d5	69		60		23-120
2-Fluorobiphenyl	62		54		30-120
2,4,6-Tribromophenol	53		45		10-136
4-Terphenyl-d14	67		58		18-120

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1347791-2 WG1347791-3								
Acenaphthene	92		86		31-137	7		50
1,2,4-Trichlorobenzene	94		90		38-107	4		50
Hexachlorobenzene	97		92		40-140	5		50
Bis(2-chloroethyl)ether	91		84		40-140	8		50
2-Chloronaphthalene	102		95		40-140	7		50
1,2-Dichlorobenzene	88		81		40-140	8		50
1,3-Dichlorobenzene	86		77		40-140	11		50
1,4-Dichlorobenzene	86		77		28-104	11		50
3,3'-Dichlorobenzidine	65		59		40-140	10		50
2,4-Dinitrotoluene	95		94		40-132	1		50
2,6-Dinitrotoluene	106		99		40-140	7		50
Fluoranthene	98		92		40-140	6		50
4-Chlorophenyl phenyl ether	96		91		40-140	5		50
4-Bromophenyl phenyl ether	94		91		40-140	3		50
Bis(2-chloroisopropyl)ether	82		77		40-140	6		50
Bis(2-chloroethoxy)methane	97		90		40-117	7		50
Hexachlorobutadiene	100		92		40-140	8		50
Hexachlorocyclopentadiene	88		81		40-140	8		50
Hexachloroethane	89		82		40-140	8		50
Isophorone	94		88		40-140	7		50
Naphthalene	92		86		40-140	7		50
Nitrobenzene	91		87		40-140	4		50
NDPA/DPA	94		92		36-157	2		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1347791-2 WG1347791-3								
n-Nitrosodi-n-propylamine	98		91		32-121	7		50
Bis(2-ethylhexyl)phthalate	118		110		40-140	7		50
Butyl benzyl phthalate	104		97		40-140	7		50
Di-n-butylphthalate	107		100		40-140	7		50
Di-n-octylphthalate	118		112		40-140	5		50
Diethyl phthalate	103		98		40-140	5		50
Dimethyl phthalate	106		98		40-140	8		50
Benzo(a)anthracene	96		93		40-140	3		50
Benzo(a)pyrene	102		96		40-140	6		50
Benzo(b)fluoranthene	112		106		40-140	6		50
Benzo(k)fluoranthene	96		92		40-140	4		50
Chrysene	101		94		40-140	7		50
Acenaphthylene	100		92		40-140	8		50
Anthracene	98		91		40-140	7		50
Benzo(ghi)perylene	92		87		40-140	6		50
Fluorene	95		91		40-140	4		50
Phenanthrene	95		89		40-140	7		50
Dibenzo(a,h)anthracene	89		83		40-140	7		50
Indeno(1,2,3-cd)pyrene	94		88		40-140	7		50
Pyrene	97		91		35-142	6		50
Biphenyl	95		89		37-127	7		50
4-Chloroaniline	81		84		40-140	4		50
2-Nitroaniline	98		92		47-134	6		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1347791-2 WG1347791-3								
3-Nitroaniline	75		68		26-129	10		50
4-Nitroaniline	88		84		41-125	5		50
Dibenzofuran	97		91		40-140	6		50
2-Methylnaphthalene	92		87		40-140	6		50
1,2,4,5-Tetrachlorobenzene	98		91		40-117	7		50
Acetophenone	95		89		14-144	7		50
2,4,6-Trichlorophenol	109		101		30-130	8		50
p-Chloro-m-cresol	105	Q	97		26-103	8		50
2-Chlorophenol	94		88		25-102	7		50
2,4-Dichlorophenol	103		98		30-130	5		50
2,4-Dimethylphenol	99		94		30-130	5		50
2-Nitrophenol	96		89		30-130	8		50
4-Nitrophenol	84		84		11-114	0		50
2,4-Dinitrophenol	83		81		4-130	2		50
4,6-Dinitro-o-cresol	94		93		10-130	1		50
Pentachlorophenol	94		89		17-109	5		50
Phenol	89		82		26-90	8		50
2-Methylphenol	96		90		30-130.	6		50
3-Methylphenol/4-Methylphenol	103		96		30-130	7		50
2,4,5-Trichlorophenol	110		100		30-130	10		50
Benzoic Acid	67		72		10-110	7		50
Benzyl Alcohol	100		95		40-140	5		50
Carbazole	95		90		54-128	5		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1347791-2 WG1347791-3								
1,4-Dioxane	54		45		40-140	18		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	88		83		25-120
Phenol-d6	90		85		10-120
Nitrobenzene-d5	87		82		23-120
2-Fluorobiphenyl	90		83		30-120
2,4,6-Tribromophenol	86		86		10-136
4-Terphenyl-d14	93		87		18-120

## METALS



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-01  
Client ID: SB-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	----	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**Total Metals - Mansfield Lab**

Aluminum, Total	7900		mg/kg	9.09	2.45	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Antimony, Total	0.382	J	mg/kg	4.54	0.345	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Arsenic, Total	7.87		mg/kg	0.909	0.189	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Barium, Total	71.4		mg/kg	0.909	0.158	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Beryllium, Total	0.354	J	mg/kg	0.454	0.030	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Cadmium, Total	0.354	J	mg/kg	0.909	0.089	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Calcium, Total	1260		mg/kg	9.09	3.18	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Chromium, Total	18.8		mg/kg	0.909	0.087	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Cobalt, Total	10.3		mg/kg	1.82	0.151	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Copper, Total	15.4		mg/kg	0.909	0.234	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Iron, Total	17500		mg/kg	4.54	0.821	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Lead, Total	44.0		mg/kg	4.54	0.244	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Magnesium, Total	5850		mg/kg	9.09	1.40	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Manganese, Total	197		mg/kg	0.909	0.144	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Mercury, Total	0.059	J	mg/kg	0.082	0.054	1	03/06/20 21:03 03/09/20 16:33	EPA 7471B	1,7471B	GD
Nickel, Total	96.1		mg/kg	2.27	0.220	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Potassium, Total	303		mg/kg	227	13.1	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.82	0.234	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.909	0.257	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Sodium, Total	29.7	J	mg/kg	182	2.86	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.82	0.286	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Vanadium, Total	22.9		mg/kg	0.909	0.184	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC
Zinc, Total	64.2		mg/kg	4.54	0.266	2	03/06/20 20:24 03/11/20 17:51	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-02  
Client ID: SB-2 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:35  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 67%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	----	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**Total Metals - Mansfield Lab**

Aluminum, Total	4950		mg/kg	11.6	3.12	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Antimony, Total	0.509	J	mg/kg	5.78	0.440	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Arsenic, Total	5.61		mg/kg	1.16	0.241	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Barium, Total	54.0		mg/kg	1.16	0.201	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Beryllium, Total	0.197	J	mg/kg	0.578	0.038	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Cadmium, Total	0.440	J	mg/kg	1.16	0.113	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Calcium, Total	6230		mg/kg	11.6	4.05	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Chromium, Total	47.9		mg/kg	1.16	0.111	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Cobalt, Total	37.3		mg/kg	2.31	0.192	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Copper, Total	24.2		mg/kg	1.16	0.298	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Iron, Total	23400		mg/kg	5.78	1.04	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Lead, Total	63.7		mg/kg	5.78	0.310	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Magnesium, Total	61200		mg/kg	11.6	1.78	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Manganese, Total	452		mg/kg	1.16	0.184	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Mercury, Total	0.146		mg/kg	0.096	0.063	1	03/06/20 21:03 03/09/20 16:37	EPA 7471B	1,7471B	GD
Nickel, Total	753		mg/kg	2.89	0.280	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Potassium, Total	882		mg/kg	289	16.7	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	2.31	0.298	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.16	0.327	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Sodium, Total	93.3	J	mg/kg	231	3.64	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Thallium, Total	0.590	J	mg/kg	2.31	0.364	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Vanadium, Total	18.0		mg/kg	1.16	0.235	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC
Zinc, Total	62.1		mg/kg	5.78	0.339	2	03/06/20 20:24 03/11/20 17:55	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-03  
Client ID: SB-6 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 12:05  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	----	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**Total Metals - Mansfield Lab**

Aluminum, Total	4670		mg/kg	9.55	2.58	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Antimony, Total	0.879	J	mg/kg	4.78	0.363	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Arsenic, Total	7.40		mg/kg	0.955	0.199	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Barium, Total	508		mg/kg	0.955	0.166	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Beryllium, Total	0.296	J	mg/kg	0.478	0.032	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Cadmium, Total	0.926	J	mg/kg	0.955	0.094	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Calcium, Total	8130		mg/kg	9.55	3.34	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Chromium, Total	61.4		mg/kg	0.955	0.092	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Cobalt, Total	17.8		mg/kg	1.91	0.158	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Copper, Total	52.2		mg/kg	0.955	0.246	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Iron, Total	17400		mg/kg	4.78	0.862	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Lead, Total	2430		mg/kg	4.78	0.256	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Magnesium, Total	20700		mg/kg	9.55	1.47	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Manganese, Total	425		mg/kg	0.955	0.152	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Mercury, Total	2.07		mg/kg	0.092	0.060	1	03/06/20 21:03	03/09/20 16:40	EPA 7471B	1,7471B	GD
Nickel, Total	310		mg/kg	2.39	0.231	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Potassium, Total	395		mg/kg	239	13.8	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.91	0.246	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.955	0.270	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Sodium, Total	62.7	J	mg/kg	191	3.01	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.91	0.301	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Vanadium, Total	21.3		mg/kg	0.955	0.194	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC
Zinc, Total	277		mg/kg	4.78	0.280	2	03/06/20 20:24	03/11/20 18:00	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-04  
Client ID: SB-3 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:15  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	----	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**Total Metals - Mansfield Lab**

Aluminum, Total	4660		mg/kg	9.24	2.50	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.62	0.351	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Arsenic, Total	4.62		mg/kg	0.924	0.192	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Barium, Total	56.2		mg/kg	0.924	0.161	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Beryllium, Total	0.314	J	mg/kg	0.462	0.031	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Cadmium, Total	0.425	J	mg/kg	0.924	0.091	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Calcium, Total	1490		mg/kg	9.24	3.24	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Chromium, Total	36.7		mg/kg	0.924	0.089	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Cobalt, Total	23.9		mg/kg	1.85	0.153	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Copper, Total	25.4		mg/kg	0.924	0.238	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Iron, Total	19000		mg/kg	4.62	0.835	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Lead, Total	101		mg/kg	4.62	0.248	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Magnesium, Total	34600		mg/kg	9.24	1.42	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Manganese, Total	327		mg/kg	0.924	0.147	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Mercury, Total	0.061	J	mg/kg	0.080	0.052	1	03/06/20 21:03 03/09/20 16:43	EPA 7471B	1,7471B	GD
Nickel, Total	453		mg/kg	2.31	0.224	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Potassium, Total	1060		mg/kg	231	13.3	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.85	0.238	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.924	0.262	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Sodium, Total	78.6	J	mg/kg	185	2.91	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.85	0.291	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Vanadium, Total	22.8		mg/kg	0.924	0.188	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC
Zinc, Total	89.2		mg/kg	4.62	0.271	2	03/06/20 20:24 03/11/20 18:05	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-05  
Client ID: SB-4 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:50  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 72%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	----	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**Total Metals - Mansfield Lab**

Aluminum, Total	10200		mg/kg	10.9	2.93	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	5.43	0.413	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Arsenic, Total	19.9		mg/kg	1.09	0.226	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Barium, Total	53.5		mg/kg	1.09	0.189	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Beryllium, Total	0.424	J	mg/kg	0.543	0.036	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Cadmium, Total	0.391	J	mg/kg	1.09	0.106	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Calcium, Total	3340		mg/kg	10.9	3.80	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Chromium, Total	37.1		mg/kg	1.09	0.104	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Cobalt, Total	16.3		mg/kg	2.17	0.180	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Copper, Total	28.3		mg/kg	1.09	0.280	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Iron, Total	18600		mg/kg	5.43	0.981	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Lead, Total	75.0		mg/kg	5.43	0.291	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Magnesium, Total	17600		mg/kg	10.9	1.67	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Manganese, Total	353		mg/kg	1.09	0.173	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Mercury, Total	0.142		mg/kg	0.100	0.065	1	03/06/20 21:03 03/09/20 16:55	EPA 7471B	1,7471B	GD
Nickel, Total	252		mg/kg	2.72	0.263	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Potassium, Total	443		mg/kg	272	15.6	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	2.17	0.280	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	1.09	0.307	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Sodium, Total	50.1	J	mg/kg	217	3.42	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	2.17	0.342	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Vanadium, Total	25.7		mg/kg	1.09	0.220	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC
Zinc, Total	67.2		mg/kg	5.43	0.318	2	03/06/20 20:24 03/11/20 18:09	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-06  
Client ID: SB-5 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 92%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab</b>											
Aluminum, Total	5050		mg/kg	8.44	2.28	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Antimony, Total	1.59	J	mg/kg	4.22	0.321	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Arsenic, Total	6.88		mg/kg	0.844	0.176	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Barium, Total	169		mg/kg	0.844	0.147	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Beryllium, Total	0.236	J	mg/kg	0.422	0.028	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Cadmium, Total	2.31		mg/kg	0.844	0.083	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Calcium, Total	6920		mg/kg	8.44	2.95	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Chromium, Total	39.0		mg/kg	0.844	0.081	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Cobalt, Total	16.1		mg/kg	1.69	0.140	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Copper, Total	68.0		mg/kg	0.844	0.218	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Iron, Total	16300		mg/kg	4.22	0.762	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Lead, Total	374		mg/kg	4.22	0.226	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Magnesium, Total	14000		mg/kg	8.44	1.30	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Manganese, Total	307		mg/kg	0.844	0.134	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Mercury, Total	0.454		mg/kg	0.073	0.048	1	03/06/20 21:03	03/09/20 16:58	EPA 7471B	1,7471B	GD
Nickel, Total	237		mg/kg	2.11	0.204	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Potassium, Total	601		mg/kg	211	12.2	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.69	0.218	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Silver, Total	0.304	J	mg/kg	0.844	0.239	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Sodium, Total	74.4	J	mg/kg	169	2.66	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.69	0.266	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Vanadium, Total	25.0		mg/kg	0.844	0.171	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC
Zinc, Total	290		mg/kg	4.22	0.247	2	03/06/20 20:24	03/11/20 18:14	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-07  
Client ID: SB-7 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	----	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**Total Metals - Mansfield Lab**

Aluminum, Total	2650		mg/kg	9.31	2.51	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Antimony, Total	0.475	J	mg/kg	4.65	0.354	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Arsenic, Total	2.83		mg/kg	0.931	0.194	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Barium, Total	29.5		mg/kg	0.931	0.162	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.465	0.031	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Cadmium, Total	0.270	J	mg/kg	0.931	0.091	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Calcium, Total	68300		mg/kg	93.1	32.6	20	03/06/20 20:24 03/11/20 18:28	EPA 3050B	1,6010D	LC
Chromium, Total	9.84		mg/kg	0.931	0.089	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Cobalt, Total	5.63		mg/kg	1.86	0.154	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Copper, Total	27.5		mg/kg	0.931	0.240	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Iron, Total	9440		mg/kg	4.65	0.840	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Lead, Total	46.8		mg/kg	4.65	0.249	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Magnesium, Total	30200		mg/kg	9.31	1.43	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Manganese, Total	150		mg/kg	0.931	0.148	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.090	0.058	1	03/06/20 21:03 03/09/20 17:01	EPA 7471B	1,7471B	GD
Nickel, Total	33.3		mg/kg	2.33	0.225	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Potassium, Total	526		mg/kg	233	13.4	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.86	0.240	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.931	0.263	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Sodium, Total	153	J	mg/kg	186	2.93	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.86	0.293	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Vanadium, Total	31.9		mg/kg	0.931	0.189	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC
Zinc, Total	45.2		mg/kg	4.65	0.273	2	03/06/20 20:24 03/11/20 18:18	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

**SAMPLE RESULTS**

Lab ID: L2009753-08  
Client ID: TMW-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:30  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
-----------	--------	-----------	-------	----	-----	-----------------	---------------	---------------	-------------	-------------------	---------

**Total Metals - Mansfield Lab**

Aluminum, Total	4920		mg/kg	9.13	2.46	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Antimony, Total	0.484	J	mg/kg	4.56	0.347	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Arsenic, Total	6.47		mg/kg	0.913	0.190	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Barium, Total	98.3		mg/kg	0.913	0.159	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Beryllium, Total	0.201	J	mg/kg	0.456	0.030	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Cadmium, Total	0.703	J	mg/kg	0.913	0.090	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Calcium, Total	9570		mg/kg	9.13	3.20	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Chromium, Total	57.9		mg/kg	0.913	0.088	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Cobalt, Total	20.2		mg/kg	1.83	0.152	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Copper, Total	31.5		mg/kg	0.913	0.236	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Iron, Total	18000		mg/kg	4.56	0.824	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Lead, Total	181		mg/kg	4.56	0.245	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Magnesium, Total	26700		mg/kg	9.13	1.41	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Manganese, Total	493		mg/kg	0.913	0.145	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Mercury, Total	0.118		mg/kg	0.084	0.055	1	03/06/20 21:03 03/09/20 17:05	EPA 7471B	1,7471B	GD
Nickel, Total	351		mg/kg	2.28	0.221	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Potassium, Total	598		mg/kg	228	13.1	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Selenium, Total	ND		mg/kg	1.83	0.236	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.913	0.258	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Sodium, Total	60.0	J	mg/kg	183	2.88	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.83	0.288	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Vanadium, Total	27.5		mg/kg	0.913	0.185	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC
Zinc, Total	133		mg/kg	4.56	0.268	2	03/06/20 20:24 03/11/20 18:23	EPA 3050B	1,6010D	LC



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

## Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1348147-1</b>									
Aluminum, Total	1.22	J	mg/kg	4.00	1.08	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Barium, Total	ND		mg/kg	0.400	0.070	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Chromium, Total	ND		mg/kg	0.400	0.038	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Copper, Total	0.124	J	mg/kg	0.400	0.103	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Iron, Total	0.776	J	mg/kg	2.00	0.361	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Lead, Total	ND		mg/kg	2.00	0.107	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Manganese, Total	ND		mg/kg	0.400	0.064	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Nickel, Total	ND		mg/kg	1.00	0.097	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Potassium, Total	ND		mg/kg	100	5.76	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Selenium, Total	ND		mg/kg	0.800	0.103	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Silver, Total	ND		mg/kg	0.400	0.113	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Sodium, Total	ND		mg/kg	80.0	1.26	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	03/06/20 20:24	03/11/20 16:52	1,6010D LC

### Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>Total Metals - Mansfield Lab for sample(s): 01-08 Batch: WG1348149-1</b>									
Mercury, Total	ND	mg/kg	0.083	0.054	1	03/06/20 21:03	03/09/20 15:34	1,7471B	GD



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

## Method Blank Analysis Batch Quality Control

### Prep Information

---

Digestion Method: EPA 7471B



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1348147-2 SRM Lot Number: D105-540								
Aluminum, Total	58	-	-	-	51-149	-	-	-
Antimony, Total	146	-	-	-	19-249	-	-	-
Arsenic, Total	112	-	-	-	70-130	-	-	-
Barium, Total	95	-	-	-	75-125	-	-	-
Beryllium, Total	98	-	-	-	75-125	-	-	-
Cadmium, Total	104	-	-	-	75-125	-	-	-
Calcium, Total	86	-	-	-	73-127	-	-	-
Chromium, Total	100	-	-	-	70-130	-	-	-
Cobalt, Total	105	-	-	-	75-125	-	-	-
Copper, Total	102	-	-	-	75-125	-	-	-
Iron, Total	76	-	-	-	38-162	-	-	-
Lead, Total	107	-	-	-	71-128	-	-	-
Magnesium, Total	83	-	-	-	63-137	-	-	-
Manganese, Total	90	-	-	-	76-124	-	-	-
Nickel, Total	106	-	-	-	70-131	-	-	-
Potassium, Total	76	-	-	-	60-140	-	-	-
Selenium, Total	106	-	-	-	63-137	-	-	-
Silver, Total	103	-	-	-	69-131	-	-	-
Sodium, Total	92	-	-	-	37-162	-	-	-
Thallium, Total	106	-	-	-	68-132	-	-	-
Vanadium, Total	95	-	-	-	65-135	-	-	-

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1348147-2 SRM Lot Number: D105-540					
Zinc, Total	107	-	70-130	-	-
Total Metals - Mansfield Lab Associated sample(s): 01-08 Batch: WG1348149-2 SRM Lot Number: D105-540					
Mercury, Total	80	-	60-141	-	-

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1348147-3 QC Sample: L2009717-01 Client ID: MS Sample												
Aluminum, Total	2170	163	2800	386	Q	-	-	-	75-125	-	-	20
Antimony, Total	ND	40.8	36.8	90		-	-	-	75-125	-	-	20
Arsenic, Total	2.59	9.78	12.8	104		-	-	-	75-125	-	-	20
Barium, Total	9.44	163	172	100		-	-	-	75-125	-	-	20
Beryllium, Total	0.142J	4.08	4.36	107		-	-	-	75-125	-	-	20
Cadmium, Total	0.142J	4.16	4.29	103		-	-	-	75-125	-	-	20
Calcium, Total	23000	815	29900	846	Q	-	-	-	75-125	-	-	20
Chromium, Total	3.41	16.3	19.8	100		-	-	-	75-125	-	-	20
Cobalt, Total	2.99	40.8	41.8	95		-	-	-	75-125	-	-	20
Copper, Total	7.40	20.4	28.0	101		-	-	-	75-125	-	-	20
Iron, Total	7060	81.5	7740	834	Q	-	-	-	75-125	-	-	20
Lead, Total	2.77J	41.6	42.7	103		-	-	-	75-125	-	-	20
Magnesium, Total	2370	815	3220	104		-	-	-	75-125	-	-	20
Manganese, Total	180	40.8	235	135	Q	-	-	-	75-125	-	-	20
Nickel, Total	5.96	40.8	45.0	96		-	-	-	75-125	-	-	20
Potassium, Total	186J	815	1010	124		-	-	-	75-125	-	-	20
Selenium, Total	ND	9.78	10.1	103		-	-	-	75-125	-	-	20
Silver, Total	ND	24.5	26.1	107		-	-	-	75-125	-	-	20
Sodium, Total	96.7J	815	923	113		-	-	-	75-125	-	-	20
Thallium, Total	ND	9.78	9.30	95		-	-	-	75-125	-	-	20
Vanadium, Total	7.41	40.8	47.9	99		-	-	-	75-125	-	-	20

**Matrix Spike Analysis**  
**Batch Quality Control**

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1348147-3 QC Sample: L2009717-01 Client ID: MS Sample									
Zinc, Total	18.0	40.8	59.0	100	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1348149-3 QC Sample: L2009717-02 Client ID: MS Sample									
Mercury, Total	ND	0.158	0.162	102	-	-	80-120	-	20

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1348147-4 QC Sample: L2009717-01 Client ID: DUP Sample						
Aluminum, Total	2170	2150	mg/kg	1		20
Antimony, Total	ND	ND	mg/kg	NC		20
Arsenic, Total	2.59	2.09	mg/kg	21	Q	20
Barium, Total	9.44	10.1	mg/kg	7		20
Beryllium, Total	0.142J	0.130J	mg/kg	NC		20
Cadmium, Total	0.142J	0.130J	mg/kg	NC		20
Calcium, Total	23000	24500	mg/kg	6		20
Chromium, Total	3.41	3.78	mg/kg	10		20
Cobalt, Total	2.99	2.77	mg/kg	8		20
Copper, Total	7.40	7.17	mg/kg	3		20
Iron, Total	7060	6780	mg/kg	4		20
Lead, Total	2.77J	3.17J	mg/kg	NC		20
Magnesium, Total	2370	2380	mg/kg	0		20
Manganese, Total	180	178	mg/kg	1		20
Nickel, Total	5.96	6.26	mg/kg	5		20
Potassium, Total	186J	188J	mg/kg	NC		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	96.7J	89.6J	mg/kg	NC		20

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1348147-4 QC Sample: L2009717-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	7.41	7.10	mg/kg	4	20
Zinc, Total	18.0	18.6	mg/kg	3	20
Total Metals - Mansfield Lab Associated sample(s): 01-08 QC Batch ID: WG1348149-4 QC Sample: L2009717-02 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/kg	NC	20

# **INORGANICS & MISCELLANEOUS**



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-01  
Client ID: SB-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	82.6		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-02  
Client ID: SB-2 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 09:35  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	67.1		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-03  
Client ID: SB-6 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 12:05  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	81.1		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-04  
Client ID: SB-3 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:15  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	83.4		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-05  
Client ID: SB-4 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 13:50  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	71.7		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-06  
Client ID: SB-5 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:00  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	91.7		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-07  
Client ID: SB-7 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:20  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	84.4		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

### SAMPLE RESULTS

Lab ID: L2009753-08  
Client ID: TMW-1 (0-2)  
Sample Location: STATEN ISLAND, NY

Date Collected: 03/04/20 15:30  
Date Received: 03/04/20  
Field Prep: Not Specified

Sample Depth:  
Matrix: Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	85.5		%	0.100	NA	1	-	03/05/20 14:05	121,2540G	RI

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Duplicate Analysis**  
*Batch Quality Control*

**Lab Number:** L2009753  
**Report Date:** 03/11/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-08 QC Batch ID: WG1347634-1 QC Sample: L2009749-01 Client ID: DUP Sample						
Solids, Total	83.8	84.6	%	1		20

### **Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

#### **Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

#### **Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2009753-01A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-01B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-01C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-01D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)
L2009753-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),NI-TI(180),TL-TI(180),CR-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CU-TI(180),CO-TI(180),V-TI(180),HG-T(28),MG-TI(180),MN-TI(180),FE-TI(180),CD-TI(180),K-TI(180),NA-TI(180),CA-TI(180)
L2009753-01F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-01X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-01Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-01Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-02A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-02B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-02C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-02D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)
L2009753-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2009753-02F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-02X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-02Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-02Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2009753-03A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-03B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-03C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-03D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)
L2009753-03E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2009753-03F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-03X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-03Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-03Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-04A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-04B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-04C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-04D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)
L2009753-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2009753-04F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-04X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-04Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-04Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-05A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-05B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-05C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-05D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2009753-05E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2009753-05F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-05X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-05Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-05Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-06A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-06B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-06C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-06D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)
L2009753-06E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2009753-06F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-06X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-06Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-06Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-07A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-07B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-07C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-07D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)
L2009753-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2009753-07F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-07X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)

\*Values in parentheses indicate holding time in days

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2009753-07Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-07Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-08A	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-08B	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-08C	5 gram Encore Sampler	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-08D	Plastic 2oz unpreserved for TS	A	NA		5.7	Y	Absent		TS(7)
L2009753-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.7	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L2009753-08F	Glass 120ml/4oz unpreserved	A	NA		5.7	Y	Absent		NYTCL-8270(14)
L2009753-08X	Vial MeOH preserved split	A	NA		5.7	Y	Absent		NYTCL-8260HLW(14)
L2009753-08Y	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-08Z	Vial Water preserved split	A	NA		5.7	Y	Absent	05-MAR-20 15:28	NYTCL-8260HLW(14)
L2009753-09A	Vial HCl preserved	A	NA		5.7	Y	Absent		NYTCL-8260(14)
L2009753-09B	Vial HCl preserved	A	NA		5.7	Y	Absent		NYTCL-8260(14)

\*Values in parentheses indicate holding time in days

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### Footnotes

Report Format: DU Report with 'J' Qualifiers



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

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

#### Terms

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

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

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

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

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

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

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

#### Data Qualifiers

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

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

***Data Qualifiers***

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

- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

*Report Format: DU Report with 'J' Qualifiers*



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009753  
**Report Date:** 03/11/20

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

## 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 its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

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



## Certification Information

---

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

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene  
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.  
EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.  
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

SM 2540D: TSS  
EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.  
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.  
EPA TO-12 Non-methane organics  
EPA 3C Fixed gases  
Biological Tissue Matrix: EPA 3050B

---

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

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**  
EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.  
Microbiology: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

**Non-Potable Water**

**SM4500H-B**, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **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 6004-81-045**: PCB-Oil.  
Microbiology: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**.

**Mansfield Facility:**

**Drinking Water**

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

**Non-Potable Water**

**EPA 200.7**: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, 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		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 3/5/20		ALPHA Job # L2009753		
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		Project Information Project Name: <u>LININGY HUNERS</u> Project Location: <u>SARATOGA, NY</u>		Deliverables <input type="checkbox"/> ASP-A <input checked="" type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		Billing Information <input checked="" type="checkbox"/> Same as Client Info PO #		
Client Information Client: <u>TENEN ENVIRONMENTAL</u> Address: <u>121 W 27TH STREET</u> NY NY 10001 Phone: <u>646-404-2332</u> Fax: Email: <u>MLARROU@TENEN-LINN.COM</u>		Project # (Use Project name as Project #) <input checked="" type="checkbox"/>				Regulatory Requirement <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities.		
		Project Manager: <u>MATT CARRELL</u> ALPHAQuote #:		Turn-Around Time Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:				Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:		
These samples have been previously analyzed by Alpha <input type="checkbox"/>										
Other project specific requirements/comments:										
Please specify Metals or TAL.										
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials	ANALYSIS				Sample Filtration  <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input checked="" type="checkbox"/> Preservation <input type="checkbox"/> Lab to do  (Please Specify below)
		Date	Time			VOC	SVOC	TAL metals		
09753-01	SB-1(0-2)	3/4/2020	0920	S	CZ	X	X	X		
-02	SB-2(0-2)		0935	S	CZ	X	X	X		
-03	SB-4(0-2)		1205	S	CZ	X	X	X		
-04	SB-3(0-2)		1315	S	CZ	X	X	X		
-05	SB-4(0-2)		1350	S	CZ	X	X	X		
-06	SB-5(0-2)		1500	S	CZ	X	X	X		
-07	SB-7(0-2)		1520	S	CZ	X	X	X		
-08	TRW-1(0-2)	3/4/2020	1530	S	CZ	X	X	X		
-09	TRIP BAGK	—	—	N	—	X				
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> 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						Pleas 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.)
				Preservative						
Relinquished By: <u>J. L. HUNTER</u>		Date/Time 03/04/2020 10:00		Received By: <u>P. SATTLER HAL</u>		Date/Time 3/4/2020 16:07				
<u>P. SATTLER</u> 3/4/2020		3/4/2020 18:00		<u>J. L. HUNTER</u>		3/4/2020 20:00				
<u>J. L. HUNTER</u> 3/5/2020		3/5/2020 00:01		<u>P. SATTLER</u>		3/5/2020 00:01				



## ANALYTICAL REPORT

Lab Number:	L2009947
Client:	Tenen Environmental, LLC 121 West 27th Street Suite 702 New York City, NY 10001
ATTN:	Matthew Carroll
Phone:	(646) 606-2332
Project Name:	LIBERTY TOWERS
Project Number:	LIBERTY TOWERS
Report Date:	03/12/20

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

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

---

320 Forbes Boulevard, Mansfield, MA 02048-1806  
508-822-9300 (Fax) 508-822-3288 800-624-9220 - [www.alphalab.com](http://www.alphalab.com)



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2009947-01	SV-1	SOIL_VAPOR	STATEN ISLAND, NY	03/05/20 11:46	03/05/20
L2009947-02	SV-2	SOIL_VAPOR	STATEN ISLAND, NY	03/05/20 11:52	03/05/20
L2009947-03	SV-3	SOIL_VAPOR	STATEN ISLAND, NY	03/05/20 11:25	03/05/20
L2009947-04	SV-4	SOIL_VAPOR	STATEN ISLAND, NY	03/05/20 11:13	03/05/20
L2009947-05	SV-5	SOIL_VAPOR	STATEN ISLAND, NY	03/05/20 11:20	03/05/20
L2009947-06	SV-6	SOIL_VAPOR	STATEN ISLAND, NY	03/05/20 11:00	03/05/20

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### Case Narrative

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

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

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

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

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

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

---

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

#### Case Narrative (continued)

##### Volatile Organics in Air

Canisters were released from the laboratory on March 5, 2020. The canister certification results are provided as an addendum.

L2009947-01-06: The sample has elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the sample.

The WG1349866-3 LCS recovery for 1,2,4-trichlorobenzene (132%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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:

*Christopher J. Anderson* Christopher J. Anderson

Title: Technical Director/Representative

Date: 03/12/20

**AIR**



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-01 D	Date Collected:	03/05/20 11:46
Client ID:	SV-1	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
Anaytical Method: 48,TO-15  
Analytical Date: 03/11/20 20:35  
Analyst: TS

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Dichlorodifluoromethane	ND	0.833	--	ND	4.12	--	4.167
Chloromethane	ND	0.833	--	ND	1.72	--	4.167
Freon-114	ND	0.833	--	ND	5.82	--	4.167
Vinyl chloride	ND	0.833	--	ND	2.13	--	4.167
1,3-Butadiene	1.57	0.833	--	3.47	1.84	--	4.167
Bromomethane	ND	0.833	--	ND	3.23	--	4.167
Chloroethane	ND	0.833	--	ND	2.20	--	4.167
Ethanol	ND	20.8	--	ND	39.2	--	4.167
Vinyl bromide	ND	0.833	--	ND	3.64	--	4.167
Acetone	66.8	4.17	--	159	9.91	--	4.167
Trichlorofluoromethane	ND	0.833	--	ND	4.68	--	4.167
Isopropanol	ND	2.08	--	ND	5.11	--	4.167
1,1-Dichloroethene	ND	0.833	--	ND	3.30	--	4.167
Tertiary butyl Alcohol	ND	2.08	--	ND	6.31	--	4.167
Methylene chloride	ND	2.08	--	ND	7.23	--	4.167
3-Chloropropene	ND	0.833	--	ND	2.61	--	4.167
Carbon disulfide	1.80	0.833	--	5.61	2.59	--	4.167
Freon-113	ND	0.833	--	ND	6.38	--	4.167
trans-1,2-Dichloroethene	ND	0.833	--	ND	3.30	--	4.167
1,1-Dichloroethane	ND	0.833	--	ND	3.37	--	4.167
Methyl tert butyl ether	ND	0.833	--	ND	3.00	--	4.167
2-Butanone	5.22	2.08	--	15.4	6.13	--	4.167
cis-1,2-Dichloroethene	ND	0.833	--	ND	3.30	--	4.167



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID: L2009947-01 D Date Collected: 03/05/20 11:46  
Client ID: SV-1 Date Received: 03/05/20  
Sample Location: STATEN ISLAND, NY Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	2.08	--	ND	7.50	--		4.167
Chloroform	ND	0.833	--	ND	4.07	--		4.167
Tetrahydrofuran	ND	2.08	--	ND	6.13	--		4.167
1,2-Dichloroethane	ND	0.833	--	ND	3.37	--		4.167
n-Hexane	4.31	0.833	--	15.2	2.94	--		4.167
1,1,1-Trichloroethane	ND	0.833	--	ND	4.54	--		4.167
Benzene	1.90	0.833	--	6.07	2.66	--		4.167
Carbon tetrachloride	ND	0.833	--	ND	5.24	--		4.167
Cyclohexane	15.4	0.833	--	53.0	2.87	--		4.167
1,2-Dichloropropane	ND	0.833	--	ND	3.85	--		4.167
Bromodichloromethane	ND	0.833	--	ND	5.58	--		4.167
1,4-Dioxane	ND	0.833	--	ND	3.00	--		4.167
Trichloroethene	ND	0.833	--	ND	4.48	--		4.167
2,2,4-Trimethylpentane	277	0.833	--	1290	3.89	--		4.167
Heptane	7.64	0.833	--	31.3	3.41	--		4.167
cis-1,3-Dichloropropene	ND	0.833	--	ND	3.78	--		4.167
4-Methyl-2-pentanone	ND	2.08	--	ND	8.52	--		4.167
trans-1,3-Dichloropropene	ND	0.833	--	ND	3.78	--		4.167
1,1,2-Trichloroethane	ND	0.833	--	ND	4.54	--		4.167
Toluene	10.0	0.833	--	37.7	3.14	--		4.167
2-Hexanone	ND	0.833	--	ND	3.41	--		4.167
Dibromochloromethane	ND	0.833	--	ND	7.10	--		4.167
1,2-Dibromoethane	ND	0.833	--	ND	6.40	--		4.167
Tetrachloroethene	10.0	0.833	--	67.8	5.65	--		4.167
Chlorobenzene	ND	0.833	--	ND	3.84	--		4.167
Ethylbenzene	7.95	0.833	--	34.5	3.62	--		4.167



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID: L2009947-01 D Date Collected: 03/05/20 11:46  
Client ID: SV-1 Date Received: 03/05/20  
Sample Location: STATEN ISLAND, NY Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	32.7	1.67	--	142	7.25	--		4.167
Bromoform	ND	0.833	--	ND	8.61	--		4.167
Styrene	ND	0.833	--	ND	3.55	--		4.167
1,1,2,2-Tetrachloroethane	ND	0.833	--	ND	5.72	--		4.167
o-Xylene	46.6	0.833	--	202	3.62	--		4.167
4-Ethyltoluene	4.68	0.833	--	23.0	4.10	--		4.167
1,3,5-Trimethylbenzene	30.0	0.833	--	147	4.10	--		4.167
1,2,4-Trimethylbenzene	73.6	0.833	--	362	4.10	--		4.167
Benzyl chloride	ND	0.833	--	ND	4.31	--		4.167
1,3-Dichlorobenzene	ND	0.833	--	ND	5.01	--		4.167
1,4-Dichlorobenzene	ND	0.833	--	ND	5.01	--		4.167
1,2-Dichlorobenzene	ND	0.833	--	ND	5.01	--		4.167
1,2,4-Trichlorobenzene	ND	0.833	--	ND	6.18	--		4.167
Hexachlorobutadiene	ND	0.833	--	ND	8.89	--		4.167

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	97		60-140



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-02 D	Date Collected:	03/05/20 11:52
Client ID:	SV-2	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
Anaytical Method: 48,TO-15  
Analytical Date: 03/11/20 21:13  
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	ND	1.25	--	ND	6.18	--		6.25
Chloromethane	ND	1.25	--	ND	2.58	--		6.25
Freon-114	ND	1.25	--	ND	8.74	--		6.25
Vinyl chloride	ND	1.25	--	ND	3.20	--		6.25
1,3-Butadiene	ND	1.25	--	ND	2.77	--		6.25
Bromomethane	ND	1.25	--	ND	4.85	--		6.25
Chloroethane	ND	1.25	--	ND	3.30	--		6.25
Ethanol	ND	31.2	--	ND	58.8	--		6.25
Vinyl bromide	ND	1.25	--	ND	5.47	--		6.25
Acetone	113	6.25	--	268	14.8	--		6.25
Trichlorofluoromethane	ND	1.25	--	ND	7.02	--		6.25
Isopropanol	ND	3.12	--	ND	7.67	--		6.25
1,1-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25
Tertiary butyl Alcohol	ND	3.12	--	ND	9.46	--		6.25
Methylene chloride	ND	3.12	--	ND	10.8	--		6.25
3-Chloropropene	ND	1.25	--	ND	3.91	--		6.25
Carbon disulfide	1.98	1.25	--	6.17	3.89	--		6.25
Freon-113	ND	1.25	--	ND	9.58	--		6.25
trans-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25
1,1-Dichloroethane	ND	1.25	--	ND	5.06	--		6.25
Methyl tert butyl ether	ND	1.25	--	ND	4.51	--		6.25
2-Butanone	14.3	3.12	--	42.2	9.20	--		6.25
cis-1,2-Dichloroethene	ND	1.25	--	ND	4.96	--		6.25



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-02 D	Date Collected:	03/05/20 11:52
Client ID:	SV-2	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	3.12	--	ND	11.2	--	6.25
Chloroform	ND	1.25	--	ND	6.10	--	6.25
Tetrahydrofuran	ND	3.12	--	ND	9.20	--	6.25
1,2-Dichloroethane	ND	1.25	--	ND	5.06	--	6.25
n-Hexane	2.78	1.25	--	9.80	4.41	--	6.25
1,1,1-Trichloroethane	ND	1.25	--	ND	6.82	--	6.25
Benzene	1.37	1.25	--	4.38	3.99	--	6.25
Carbon tetrachloride	ND	1.25	--	ND	7.86	--	6.25
Cyclohexane	23.1	1.25	--	79.5	4.30	--	6.25
1,2-Dichloropropane	ND	1.25	--	ND	5.78	--	6.25
Bromodichloromethane	ND	1.25	--	ND	8.37	--	6.25
1,4-Dioxane	ND	1.25	--	ND	4.50	--	6.25
Trichloroethene	ND	1.25	--	ND	6.72	--	6.25
2,2,4-Trimethylpentane	418	1.25	--	1950	5.84	--	6.25
Heptane	11.0	1.25	--	45.1	5.12	--	6.25
cis-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	6.25
4-Methyl-2-pentanone	ND	3.12	--	ND	12.8	--	6.25
trans-1,3-Dichloropropene	ND	1.25	--	ND	5.67	--	6.25
1,1,2-Trichloroethane	ND	1.25	--	ND	6.82	--	6.25
Toluene	12.4	1.25	--	46.7	4.71	--	6.25
2-Hexanone	ND	1.25	--	ND	5.12	--	6.25
Dibromochloromethane	ND	1.25	--	ND	10.6	--	6.25
1,2-Dibromoethane	ND	1.25	--	ND	9.61	--	6.25
Tetrachloroethene	12.7	1.25	--	86.1	8.48	--	6.25
Chlorobenzene	ND	1.25	--	ND	5.76	--	6.25
Ethylbenzene	9.37	1.25	--	40.7	5.43	--	6.25



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### **SAMPLE RESULTS**

Lab ID:	L2009947-02 D	Date Collected:	03/05/20 11:52
Client ID:	SV-2	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	36.9	2.50	--	160	10.9	--		6.25
Bromoform	ND	1.25	--	ND	12.9	--		6.25
Styrene	ND	1.25	--	ND	5.32	--		6.25
1,1,2,2-Tetrachloroethane	ND	1.25	--	ND	8.58	--		6.25
o-Xylene	54.4	1.25	--	236	5.43	--		6.25
4-Ethyltoluene	4.37	1.25	--	21.5	6.15	--		6.25
1,3,5-Trimethylbenzene	27.2	1.25	--	134	6.15	--		6.25
1,2,4-Trimethylbenzene	56.4	1.25	--	277	6.15	--		6.25
Benzyl chloride	ND	1.25	--	ND	6.47	--		6.25
1,3-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,4-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,2-Dichlorobenzene	ND	1.25	--	ND	7.52	--		6.25
1,2,4-Trichlorobenzene	ND	1.25	--	ND	9.28	--		6.25
Hexachlorobutadiene	ND	1.25	--	ND	13.3	--		6.25

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	94		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	93		60-140



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-03 D	Date Collected:	03/05/20 11:25
Client ID:	SV-3	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
Anaytical Method: 48,TO-15  
Analytical Date: 03/11/20 21:51  
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.403	0.294	--	1.99	1.45	--		1.471
Chloromethane	0.516	0.294	--	1.07	0.607	--		1.471
Freon-114	ND	0.294	--	ND	2.05	--		1.471
Vinyl chloride	ND	0.294	--	ND	0.752	--		1.471
1,3-Butadiene	ND	0.294	--	ND	0.650	--		1.471
Bromomethane	ND	0.294	--	ND	1.14	--		1.471
Chloroethane	ND	0.294	--	ND	0.776	--		1.471
Ethanol	ND	7.35	--	ND	13.8	--		1.471
Vinyl bromide	ND	0.294	--	ND	1.29	--		1.471
Acetone	17.9	1.47	--	42.5	3.49	--		1.471
Trichlorofluoromethane	ND	0.294	--	ND	1.65	--		1.471
Isopropanol	ND	0.735	--	ND	1.81	--		1.471
1,1-Dichloroethene	ND	0.294	--	ND	1.17	--		1.471
Tertiary butyl Alcohol	ND	0.735	--	ND	2.23	--		1.471
Methylene chloride	ND	0.735	--	ND	2.55	--		1.471
3-Chloropropene	ND	0.294	--	ND	0.920	--		1.471
Carbon disulfide	ND	0.294	--	ND	0.916	--		1.471
Freon-113	ND	0.294	--	ND	2.25	--		1.471
trans-1,2-Dichloroethene	ND	0.294	--	ND	1.17	--		1.471
1,1-Dichloroethane	ND	0.294	--	ND	1.19	--		1.471
Methyl tert butyl ether	ND	0.294	--	ND	1.06	--		1.471
2-Butanone	1.42	0.735	--	4.19	2.17	--		1.471
cis-1,2-Dichloroethene	ND	0.294	--	ND	1.17	--		1.471



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-03 D	Date Collected:	03/05/20 11:25
Client ID:	SV-3	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	0.735	--	ND	2.65	--	1.471
Chloroform	ND	0.294	--	ND	1.44	--	1.471
Tetrahydrofuran	ND	0.735	--	ND	2.17	--	1.471
1,2-Dichloroethane	ND	0.294	--	ND	1.19	--	1.471
n-Hexane	0.773	0.294	--	2.72	1.04	--	1.471
1,1,1-Trichloroethane	ND	0.294	--	ND	1.60	--	1.471
Benzene	0.319	0.294	--	1.02	0.939	--	1.471
Carbon tetrachloride	ND	0.294	--	ND	1.85	--	1.471
Cyclohexane	5.93	0.294	--	20.4	1.01	--	1.471
1,2-Dichloropropane	ND	0.294	--	ND	1.36	--	1.471
Bromodichloromethane	ND	0.294	--	ND	1.97	--	1.471
1,4-Dioxane	ND	0.294	--	ND	1.06	--	1.471
Trichloroethene	ND	0.294	--	ND	1.58	--	1.471
2,2,4-Trimethylpentane	98.6	0.294	--	461	1.37	--	1.471
Heptane	2.30	0.294	--	9.43	1.20	--	1.471
cis-1,3-Dichloropropene	ND	0.294	--	ND	1.33	--	1.471
4-Methyl-2-pentanone	ND	0.735	--	ND	3.01	--	1.471
trans-1,3-Dichloropropene	ND	0.294	--	ND	1.33	--	1.471
1,1,2-Trichloroethane	ND	0.294	--	ND	1.60	--	1.471
Toluene	2.12	0.294	--	7.99	1.11	--	1.471
2-Hexanone	ND	0.294	--	ND	1.20	--	1.471
Dibromochloromethane	ND	0.294	--	ND	2.50	--	1.471
1,2-Dibromoethane	ND	0.294	--	ND	2.26	--	1.471
Tetrachloroethene	1.76	0.294	--	11.9	1.99	--	1.471
Chlorobenzene	ND	0.294	--	ND	1.35	--	1.471
Ethylbenzene	1.27	0.294	--	5.52	1.28	--	1.471



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### **SAMPLE RESULTS**

Lab ID:	L2009947-03 D	Date Collected:	03/05/20 11:25
Client ID:	SV-3	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	4.83	0.294	--	21.0	2.55	--		1.471
Bromoform	ND	0.294	--	ND	3.04	--		1.471
Styrene	ND	0.294	--	ND	1.25	--		1.471
1,1,2,2-Tetrachloroethane	ND	0.294	--	ND	2.02	--		1.471
o-Xylene	6.96	0.294	--	30.2	1.28	--		1.471
4-Ethyltoluene	0.409	0.294	--	2.01	1.45	--		1.471
1,3,5-Trimethylbenzene	3.40	0.294	--	16.7	1.45	--		1.471
1,2,4-Trimethylbenzene	7.57	0.294	--	37.2	1.45	--		1.471
Benzyl chloride	ND	0.294	--	ND	1.52	--		1.471
1,3-Dichlorobenzene	ND	0.294	--	ND	1.77	--		1.471
1,4-Dichlorobenzene	ND	0.294	--	ND	1.77	--		1.471
1,2-Dichlorobenzene	ND	0.294	--	ND	1.77	--		1.471
1,2,4-Trichlorobenzene	ND	0.294	--	ND	2.18	--		1.471
Hexachlorobutadiene	ND	0.294	--	ND	3.14	--		1.471

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-04 D	Date Collected:	03/05/20 11:13
Client ID:	SV-4	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
Anaytical Method: 48,TO-15  
Analytical Date: 03/11/20 22:29  
Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
Freon-114	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethanol	ND	25.0	--	ND	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	58.2	5.00	--	138	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
Isopropanol	ND	2.50	--	ND	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Tertiary butyl Alcohol	ND	2.50	--	ND	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	ND	1.00	--	ND	3.11	--		5
Freon-113	ND	1.00	--	ND	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	2.84	2.50	--	8.38	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID: L2009947-04 D Date Collected: 03/05/20 11:13  
Client ID: SV-4 Date Received: 03/05/20  
Sample Location: STATEN ISLAND, NY Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	2.50	--	ND	9.01	--	5
Chloroform	ND	1.00	--	ND	4.88	--	5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--	5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--	5
n-Hexane	2.14	1.00	--	7.54	3.52	--	5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--	5
Benzene	ND	1.00	--	ND	3.19	--	5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--	5
Cyclohexane	20.8	1.00	--	71.6	3.44	--	5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--	5
Bromodichloromethane	ND	1.00	--	ND	6.70	--	5
1,4-Dioxane	ND	1.00	--	ND	3.60	--	5
Trichloroethene	ND	1.00	--	ND	5.37	--	5
2,2,4-Trimethylpentane	351	1.00	--	1640	4.67	--	5
Heptane	8.24	1.00	--	33.8	4.10	--	5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--	5
4-Methyl-2-pentanone	ND	2.50	--	ND	10.2	--	5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--	5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--	5
Toluene	8.76	1.00	--	33.0	3.77	--	5
2-Hexanone	ND	1.00	--	ND	4.10	--	5
Dibromochloromethane	ND	1.00	--	ND	8.52	--	5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--	5
Tetrachloroethene	8.92	1.00	--	60.5	6.78	--	5
Chlorobenzene	ND	1.00	--	ND	4.61	--	5
Ethylbenzene	7.14	1.00	--	31.0	4.34	--	5



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### **SAMPLE RESULTS**

Lab ID:	L2009947-04 D	Date Collected:	03/05/20 11:13
Client ID:	SV-4	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	28.8	2.00	--	125	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	42.0	1.00	--	182	4.34	--		5
4-Ethyltoluene	3.24	1.00	--	15.9	4.92	--		5
1,3,5-Trimethylbenzene	25.8	1.00	--	127	4.92	--		5
1,2,4-Trimethylbenzene	63.5	1.00	--	312	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	93		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-05 D	Date Collected:	03/05/20 11:20
Client ID:	SV-5	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
Anaytical Method: 48,TO-15  
Analytical Date: 03/11/20 23:06  
Analyst: TS

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
<b>Volatile Organics in Air - Mansfield Lab</b>							
Dichlorodifluoromethane	ND	1.43	--	ND	7.07	--	7.143
Chloromethane	ND	1.43	--	ND	2.95	--	7.143
Freon-114	ND	1.43	--	ND	10.0	--	7.143
Vinyl chloride	ND	1.43	--	ND	3.66	--	7.143
1,3-Butadiene	ND	1.43	--	ND	3.16	--	7.143
Bromomethane	ND	1.43	--	ND	5.55	--	7.143
Chloroethane	ND	1.43	--	ND	3.77	--	7.143
Ethanol	ND	35.7	--	ND	67.3	--	7.143
Vinyl bromide	ND	1.43	--	ND	6.25	--	7.143
Acetone	86.7	7.14	--	206	17.0	--	7.143
Trichlorofluoromethane	ND	1.43	--	ND	8.04	--	7.143
Isopropanol	ND	3.57	--	ND	8.78	--	7.143
1,1-Dichloroethene	ND	1.43	--	ND	5.67	--	7.143
Tertiary butyl Alcohol	ND	3.57	--	ND	10.8	--	7.143
Methylene chloride	ND	3.57	--	ND	12.4	--	7.143
3-Chloropropene	ND	1.43	--	ND	4.48	--	7.143
Carbon disulfide	ND	1.43	--	ND	4.45	--	7.143
Freon-113	ND	1.43	--	ND	11.0	--	7.143
trans-1,2-Dichloroethene	ND	1.43	--	ND	5.67	--	7.143
1,1-Dichloroethane	ND	1.43	--	ND	5.79	--	7.143
Methyl tert butyl ether	ND	1.43	--	ND	5.16	--	7.143
2-Butanone	4.65	3.57	--	13.7	10.5	--	7.143
cis-1,2-Dichloroethene	ND	1.43	--	ND	5.67	--	7.143



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-05 D	Date Collected:	03/05/20 11:20
Client ID:	SV-5	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Ethyl Acetate	ND	3.57	--	ND	12.9	--	7.143
Chloroform	ND	1.43	--	ND	6.98	--	7.143
Tetrahydrofuran	ND	3.57	--	ND	10.5	--	7.143
1,2-Dichloroethane	ND	1.43	--	ND	5.79	--	7.143
n-Hexane	2.66	1.43	--	9.37	5.04	--	7.143
1,1,1-Trichloroethane	ND	1.43	--	ND	7.80	--	7.143
Benzene	ND	1.43	--	ND	4.57	--	7.143
Carbon tetrachloride	ND	1.43	--	ND	9.00	--	7.143
Cyclohexane	27.1	1.43	--	93.3	4.92	--	7.143
1,2-Dichloropropane	ND	1.43	--	ND	6.61	--	7.143
Bromodichloromethane	ND	1.43	--	ND	9.58	--	7.143
1,4-Dioxane	ND	1.43	--	ND	5.15	--	7.143
Trichloroethene	ND	1.43	--	ND	7.69	--	7.143
2,2,4-Trimethylpentane	452	1.43	--	2110	6.68	--	7.143
Heptane	10.2	1.43	--	41.8	5.86	--	7.143
cis-1,3-Dichloropropene	ND	1.43	--	ND	6.49	--	7.143
4-Methyl-2-pentanone	ND	3.57	--	ND	14.6	--	7.143
trans-1,3-Dichloropropene	ND	1.43	--	ND	6.49	--	7.143
1,1,2-Trichloroethane	ND	1.43	--	ND	7.80	--	7.143
Toluene	10.3	1.43	--	38.8	5.39	--	7.143
2-Hexanone	ND	1.43	--	ND	5.86	--	7.143
Dibromochloromethane	ND	1.43	--	ND	12.2	--	7.143
1,2-Dibromoethane	ND	1.43	--	ND	11.0	--	7.143
Tetrachloroethene	9.64	1.43	--	65.4	9.70	--	7.143
Chlorobenzene	ND	1.43	--	ND	6.59	--	7.143
Ethylbenzene	6.98	1.43	--	30.3	6.21	--	7.143



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### **SAMPLE RESULTS**

Lab ID:	L2009947-05 D	Date Collected:	03/05/20 11:20
Client ID:	SV-5	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	27.6	2.86	--	120	12.4	--		7.143
Bromoform	ND	1.43	--	ND	14.8	--		7.143
Styrene	ND	1.43	--	ND	6.09	--		7.143
1,1,2,2-Tetrachloroethane	ND	1.43	--	ND	9.82	--		7.143
o-Xylene	41.0	1.43	--	178	6.21	--		7.143
4-Ethyltoluene	ND	1.43	--	ND	7.03	--		7.143
1,3,5-Trimethylbenzene	23.3	1.43	--	115	7.03	--		7.143
1,2,4-Trimethylbenzene	54.8	1.43	--	269	7.03	--		7.143
Benzyl chloride	ND	1.43	--	ND	7.40	--		7.143
1,3-Dichlorobenzene	ND	1.43	--	ND	8.60	--		7.143
1,4-Dichlorobenzene	ND	1.43	--	ND	8.60	--		7.143
1,2-Dichlorobenzene	ND	1.43	--	ND	8.60	--		7.143
1,2,4-Trichlorobenzene	ND	1.43	--	ND	10.6	--		7.143
Hexachlorobutadiene	ND	1.43	--	ND	15.3	--		7.143

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	91		60-140



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-06 D	Date Collected:	03/05/20 11:00
Client ID:	SV-6	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Matrix: Soil\_Vapor  
Anaytical Method: 48,TO-15  
Analytical Date: 03/11/20 23:44  
Analyst: TS

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Dichlorodifluoromethane	ND	0.500	--	ND	2.47	--	2.5
Chloromethane	ND	0.500	--	ND	1.03	--	2.5
Freon-114	ND	0.500	--	ND	3.49	--	2.5
Vinyl chloride	ND	0.500	--	ND	1.28	--	2.5
1,3-Butadiene	0.648	0.500	--	1.43	1.11	--	2.5
Bromomethane	ND	0.500	--	ND	1.94	--	2.5
Chloroethane	ND	0.500	--	ND	1.32	--	2.5
Ethanol	ND	12.5	--	ND	23.6	--	2.5
Vinyl bromide	ND	0.500	--	ND	2.19	--	2.5
Acetone	33.2	2.50	--	78.9	5.94	--	2.5
Trichlorofluoromethane	ND	0.500	--	ND	2.81	--	2.5
Isopropanol	ND	1.25	--	ND	3.07	--	2.5
1,1-Dichloroethene	ND	0.500	--	ND	1.98	--	2.5
Tertiary butyl Alcohol	ND	1.25	--	ND	3.79	--	2.5
Methylene chloride	ND	1.25	--	ND	4.34	--	2.5
3-Chloropropene	ND	0.500	--	ND	1.57	--	2.5
Carbon disulfide	0.895	0.500	--	2.79	1.56	--	2.5
Freon-113	ND	0.500	--	ND	3.83	--	2.5
trans-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	2.5
1,1-Dichloroethane	ND	0.500	--	ND	2.02	--	2.5
Methyl tert butyl ether	ND	0.500	--	ND	1.80	--	2.5
2-Butanone	1.42	1.25	--	4.19	3.69	--	2.5
cis-1,2-Dichloroethene	ND	0.500	--	ND	1.98	--	2.5



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### SAMPLE RESULTS

Lab ID:	L2009947-06 D	Date Collected:	03/05/20 11:00
Client ID:	SV-6	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Ethyl Acetate	ND	1.25	--	ND	4.50	--		2.5
Chloroform	1.70	0.500	--	8.30	2.44	--		2.5
Tetrahydrofuran	ND	1.25	--	ND	3.69	--		2.5
1,2-Dichloroethane	ND	0.500	--	ND	2.02	--		2.5
n-Hexane	1.87	0.500	--	6.59	1.76	--		2.5
1,1,1-Trichloroethane	ND	0.500	--	ND	2.73	--		2.5
Benzene	0.782	0.500	--	2.50	1.60	--		2.5
Carbon tetrachloride	ND	0.500	--	ND	3.15	--		2.5
Cyclohexane	15.2	0.500	--	52.3	1.72	--		2.5
1,2-Dichloropropane	ND	0.500	--	ND	2.31	--		2.5
Bromodichloromethane	ND	0.500	--	ND	3.35	--		2.5
1,4-Dioxane	ND	0.500	--	ND	1.80	--		2.5
Trichloroethene	ND	0.500	--	ND	2.69	--		2.5
2,2,4-Trimethylpentane	241	0.500	--	1130	2.34	--		2.5
Heptane	6.50	0.500	--	26.6	2.05	--		2.5
cis-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
4-Methyl-2-pentanone	ND	1.25	--	ND	5.12	--		2.5
trans-1,3-Dichloropropene	ND	0.500	--	ND	2.27	--		2.5
1,1,2-Trichloroethane	ND	0.500	--	ND	2.73	--		2.5
Toluene	6.85	0.500	--	25.8	1.88	--		2.5
2-Hexanone	ND	0.500	--	ND	2.05	--		2.5
Dibromochloromethane	ND	0.500	--	ND	4.26	--		2.5
1,2-Dibromoethane	ND	0.500	--	ND	3.84	--		2.5
Tetrachloroethene	7.30	0.500	--	49.5	3.39	--		2.5
Chlorobenzene	ND	0.500	--	ND	2.30	--		2.5
Ethylbenzene	6.16	0.500	--	26.8	2.17	--		2.5



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### **SAMPLE RESULTS**

Lab ID:	L2009947-06 D	Date Collected:	03/05/20 11:00
Client ID:	SV-6	Date Received:	03/05/20
Sample Location:	STATEN ISLAND, NY	Field Prep:	Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
p/m-Xylene	25.5	1.00	--	111	4.34	--		2.5
Bromoform	ND	0.500	--	ND	5.17	--		2.5
Styrene	ND	0.500	--	ND	2.13	--		2.5
1,1,2,2-Tetrachloroethane	ND	0.500	--	ND	3.43	--		2.5
o-Xylene	36.6	0.500	--	159	2.17	--		2.5
4-Ethyltoluene	3.24	0.500	--	15.9	2.46	--		2.5
1,3,5-Trimethylbenzene	22.1	0.500	--	109	2.46	--		2.5
1,2,4-Trimethylbenzene	50.2	0.500	--	247	2.46	--		2.5
Benzyl chloride	ND	0.500	--	ND	2.59	--		2.5
1,3-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,4-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2-Dichlorobenzene	ND	0.500	--	ND	3.01	--		2.5
1,2,4-Trichlorobenzene	ND	0.500	--	ND	3.71	--		2.5
Hexachlorobutadiene	ND	0.500	--	ND	5.33	--		2.5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	92		60-140



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 03/11/20 13:48

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1349866-4</b>							
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	1
Chloromethane	ND	0.200	--	ND	0.413	--	1
Freon-114	ND	0.200	--	ND	1.40	--	1
Vinyl chloride	ND	0.200	--	ND	0.511	--	1
1,3-Butadiene	ND	0.200	--	ND	0.442	--	1
Bromomethane	ND	0.200	--	ND	0.777	--	1
Chloroethane	ND	0.200	--	ND	0.528	--	1
Ethanol	ND	5.00	--	ND	9.42	--	1
Vinyl bromide	ND	0.200	--	ND	0.874	--	1
Acetone	ND	1.00	--	ND	2.38	--	1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	1
Isopropanol	ND	0.500	--	ND	1.23	--	1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	1
Methylene chloride	ND	0.500	--	ND	1.74	--	1
3-Chloropropene	ND	0.200	--	ND	0.626	--	1
Carbon disulfide	ND	0.200	--	ND	0.623	--	1
Freon-113	ND	0.200	--	ND	1.53	--	1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	1
2-Butanone	ND	0.500	--	ND	1.47	--	1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 03/11/20 13:48

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1349866-4</b>							
Tetrahydrofuran	ND	0.500	--	ND	1.47	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	ND	0.200	--	ND	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	ND	0.200	--	ND	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	ND	0.200	--	ND	0.754	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	ND	0.200	--	ND	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 03/11/20 13:48

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-06 Batch: WG1349866-4</b>							
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	ND	0.200	--	ND	0.869	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1349866-3								
Dichlorodifluoromethane	95		-		70-130	-		
Chloromethane	95		-		70-130	-		
Freon-114	98		-		70-130	-		
Vinyl chloride	96		-		70-130	-		
1,3-Butadiene	96		-		70-130	-		
Bromomethane	97		-		70-130	-		
Chloroethane	91		-		70-130	-		
Ethanol	87		-		40-160	-		
Vinyl bromide	89		-		70-130	-		
Acetone	81		-		40-160	-		
Trichlorofluoromethane	90		-		70-130	-		
Isopropanol	80		-		40-160	-		
1,1-Dichloroethene	101		-		70-130	-		
Tertiary butyl Alcohol	91		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	107		-		70-130	-		
Carbon disulfide	93		-		70-130	-		
Freon-113	103		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	101		-		70-130	-		
Methyl tert butyl ether	92		-		70-130	-		
2-Butanone	103		-		70-130	-		
cis-1,2-Dichloroethene	104		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1349866-3								
Ethyl Acetate	105		-		70-130	-		
Chloroform	101		-		70-130	-		
Tetrahydrofuran	102		-		70-130	-		
1,2-Dichloroethane	98		-		70-130	-		
n-Hexane	100		-		70-130	-		
1,1,1-Trichloroethane	98		-		70-130	-		
Benzene	97		-		70-130	-		
Carbon tetrachloride	102		-		70-130	-		
Cyclohexane	100		-		70-130	-		
1,2-Dichloropropane	103		-		70-130	-		
Bromodichloromethane	101		-		70-130	-		
1,4-Dioxane	101		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	102		-		70-130	-		
Heptane	102		-		70-130	-		
cis-1,3-Dichloropropene	106		-		70-130	-		
4-Methyl-2-pentanone	105		-		70-130	-		
trans-1,3-Dichloropropene	91		-		70-130	-		
1,1,2-Trichloroethane	106		-		70-130	-		
Toluene	100		-		70-130	-		
2-Hexanone	111		-		70-130	-		
Dibromochloromethane	108		-		70-130	-		
1,2-Dibromoethane	104		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-06 Batch: WG1349866-3								
Tetrachloroethene	102		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	105		-		70-130	-		
p/m-Xylene	105		-		70-130	-		
Bromoform	108		-		70-130	-		
Styrene	105		-		70-130	-		
1,1,2,2-Tetrachloroethane	111		-		70-130	-		
o-Xylene	106		-		70-130	-		
4-Ethyltoluene	103		-		70-130	-		
1,3,5-Trimethylbenzene	106		-		70-130	-		
1,2,4-Trimethylbenzene	111		-		70-130	-		
Benzyl chloride	115		-		70-130	-		
1,3-Dichlorobenzene	111		-		70-130	-		
1,4-Dichlorobenzene	110		-		70-130	-		
1,2-Dichlorobenzene	112		-		70-130	-		
1,2,4-Trichlorobenzene	132	Q	-		70-130	-		
Hexachlorobutadiene	123		-		70-130	-		

Project Name: LIBERTY TOWERS

Serial\_No:03122016:09

Project Number: LIBERTY TOWERS

Lab Number: L2009947

Report Date: 03/12/20

**Canister and Flow Controller Information**

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2009947-01	SV-1	01510	Flow 3	03/05/20	315762		-	-	-	Pass	18.0	17.5	3
L2009947-01	SV-1	2764	2.7L Can	03/05/20	315762	L2009142-02	Pass	-28.7	-3.8	-	-	-	-
L2009947-02	SV-2	01809	Flow 3	03/05/20	315762		-	-	-	Pass	18.0	17.6	2
L2009947-02	SV-2	479	2.7L Can	03/05/20	315762	L2009142-02	Pass	-28.5	-5.2	-	-	-	-
L2009947-03	SV-3	01723	Flow 3	03/05/20	315762		-	-	-	Pass	18.0	17.5	3
L2009947-03	SV-3	216	2.7L Can	03/05/20	315762	L2009142-02	Pass	-28.7	0.0	-	-	-	-
L2009947-04	SV-4	01713	Flow 3	03/05/20	315762		-	-	-	Pass	18.0	17.8	1
L2009947-04	SV-4	3199	2.7L Can	03/05/20	315762	L2009142-02	Pass	-28.7	-4.5	-	-	-	-
L2009947-05	SV-5	01493	Flow 3	03/05/20	315762		-	-	-	Pass	18.0	17.7	2
L2009947-05	SV-5	102	2.7L Can	03/05/20	315762	L2009142-02	Pass	-28.8	-4.2	-	-	-	-
L2009947-06	SV-6	0797	Flow 1	03/05/20	315762		-	-	-	Pass	18.0	17.7	2
L2009947-06	SV-6	2372	2.7L Can	03/05/20	315762	L2009142-02	Pass	-28.5	-3.7	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2009142

Project Number: CANISTER QC BAT

Report Date: 03/12/20

## Air Canister Certification Results

Lab ID:	L2009142-02	Date Collected:	02/28/20 16:00
Client ID:	CAN 2200 SHELF 14	Date Received:	03/02/20
Sample Location:		Field Prep:	Not Specified

Sample Depth:

Matrix:	Air
Anaytical Method:	48,TO-15
Analytical Date:	03/02/20 17:35
Analyst:	TS

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Chlorodifluoromethane	ND	0.200	--	0.707	--		1
Propylene	ND	0.500	--	0.861	--		1
Propane	ND	0.500	--	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	0.989	--		1
Chloromethane	ND	0.200	--	0.413	--		1
Freon-114	ND	0.200	--	1.40	--		1
Methanol	ND	5.00	--	6.55	--		1
Vinyl chloride	ND	0.200	--	0.511	--		1
1,3-Butadiene	ND	0.200	--	0.442	--		1
Butane	ND	0.200	--	0.475	--		1
Bromomethane	ND	0.200	--	0.777	--		1
Chloroethane	ND	0.200	--	0.528	--		1
Ethanol	ND	5.00	--	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	0.842	--		1
Vinyl bromide	ND	0.200	--	0.874	--		1
Acrolein	ND	0.500	--	1.15	--		1
Acetone	ND	1.00	--	2.38	--		1
Acetonitrile	ND	0.200	--	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	1.12	--		1
Isopropanol	ND	0.500	--	1.23	--		1
Acrylonitrile	ND	0.500	--	1.09	--		1
Pentane	ND	0.200	--	0.590	--		1
Ethyl ether	ND	0.200	--	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2009142

Project Number: CANISTER QC BAT

Report Date: 03/12/20

**Air Canister Certification Results**

Lab ID: L2009142-02 Date Collected: 02/28/20 16:00  
 Client ID: CAN 2200 SHELF 14 Date Received: 03/02/20  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2009142

Project Number: CANISTER QC BAT

Report Date: 03/12/20

**Air Canister Certification Results**

Lab ID: L2009142-02 Date Collected: 02/28/20 16:00  
 Client ID: CAN 2200 SHELF 14 Date Received: 03/02/20  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2009142

Project Number: CANISTER QC BAT

Report Date: 03/12/20

**Air Canister Certification Results**

Lab ID: L2009142-02 Date Collected: 02/28/20 16:00  
 Client ID: CAN 2200 SHELF 14 Date Received: 03/02/20  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

Serial\_No:03122016:09

**Lab Number:** L2009142  
**Report Date:** 03/12/20

## Air Canister Certification Results

Lab ID: L2009142-02 Date Collected: 02/28/20 16:00  
Client ID: CAN 2200 SHELF 14 Date Received: 03/02/20  
Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							

Tentatively Identified Compounds

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Units	RDL	Dilution Factor
1,4-Difluorobenzene	91			60-140	
Bromochloromethane	93			60-140	
chlorobenzene-d5	87			60-140	

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2009142

Project Number: CANISTER QC BAT

Report Date: 03/12/20

**Air Canister Certification Results**

Lab ID:	L2009142-02	Date Collected:	02/28/20 16:00
Client ID:	CAN 2200 SHELF 14	Date Received:	03/02/20
Sample Location:		Field Prep:	Not Specified

Sample Depth:

Matrix:	Air
Anaytical Method:	48,TO-15-SIM
Analytical Date:	03/02/20 17:35
Analyst:	RY

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
Dichlorodifluoromethane	ND	0.200	--	0.989	--		1
Chloromethane	ND	0.200	--	0.413	--		1
Freon-114	ND	0.050	--	0.349	--		1
Vinyl chloride	ND	0.020	--	0.051	--		1
1,3-Butadiene	ND	0.020	--	0.044	--		1
Bromomethane	ND	0.020	--	0.078	--		1
Chloroethane	ND	0.100	--	0.264	--		1
Acetone	ND	1.00	--	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	0.281	--		1
Acrylonitrile	ND	0.500	--	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	0.079	--		1
Methylene chloride	ND	0.500	--	1.74	--		1
Freon-113	ND	0.050	--	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	0.721	--		1
2-Butanone	ND	0.500	--	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	0.079	--		1
Chloroform	ND	0.020	--	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	0.109	--		1
Benzene	ND	0.100	--	0.319	--		1
Carbon tetrachloride	ND	0.020	--	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	0.092	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2009142

Project Number: CANISTER QC BAT

Report Date: 03/12/20

## Air Canister Certification Results

Lab ID: L2009142-02 Date Collected: 02/28/20 16:00  
 Client ID: CAN 2200 SHELF 14 Date Received: 03/02/20  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	Results	RL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
Bromodichloromethane	ND	0.020	--	ND	0.134	--	1
1,4-Dioxane	ND	0.100	--	ND	0.360	--	1
Trichloroethene	ND	0.020	--	ND	0.107	--	1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--	1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Toluene	ND	0.050	--	ND	0.188	--	1
Dibromochloromethane	ND	0.020	--	ND	0.170	--	1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--	1
Tetrachloroethene	ND	0.020	--	ND	0.136	--	1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	1
Chlorobenzene	ND	0.100	--	ND	0.461	--	1
Ethylbenzene	ND	0.020	--	ND	0.087	--	1
p/m-Xylene	ND	0.040	--	ND	0.174	--	1
Bromoform	ND	0.020	--	ND	0.207	--	1
Styrene	ND	0.020	--	ND	0.085	--	1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	1
o-Xylene	ND	0.020	--	ND	0.087	--	1
Isopropylbenzene	ND	0.200	--	ND	0.983	--	1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--	1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2009142

Project Number: CANISTER QC BAT

Report Date: 03/12/20

## Air Canister Certification Results

Lab ID: L2009142-02 Date Collected: 02/28/20 16:00  
 Client ID: CAN 2200 SHELF 14 Date Received: 03/02/20  
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--	1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
n-Butylbenzene	ND	0.200	--	ND	1.10	--	1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Naphthalene	ND	0.050	--	ND	0.262	--	1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	91		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

Serial\_No:03122016:09  
**Lab Number:** L2009947  
**Report Date:** 03/12/20

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
NA	Absent

**Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>Initial pH</b>	<b>Final pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Frozen Date/Time</b>	<b>Analysis(*)</b>
L2009947-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2009947-02A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2009947-03A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2009947-04A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2009947-05A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)
L2009947-06A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-LL(30)

**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### Footnotes

Report Format: Data Usability Report



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

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

#### Terms

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

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

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

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

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

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

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

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

#### Data Qualifiers

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

**Report Format:** Data Usability Report



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

***Data Qualifiers***

than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

*Report Format: Data Usability Report*



**Project Name:** LIBERTY TOWERS  
**Project Number:** LIBERTY TOWERS

**Lab Number:** L2009947  
**Report Date:** 03/12/20

## REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

## 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 its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

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



## Certification Information

---

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

**Westborough Facility**

EPA 624/624.1: m/p-xylene, o-xylene

EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D: NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**Mansfield Facility**

**SM 2540D: TSS**

EPA 8082A: NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics

EPA 3C Fixed gases

**Biological Tissue Matrix: EPA 3050B**

---

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

**Westborough Facility:**

**Drinking Water**

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D.**

**Non-Potable Water**

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, EPA 350.1: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, EPA 351.1, SM4500NO3-F, EPA 353.2: Nitrate-N, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

**Mansfield Facility:**

**Drinking Water**

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Na, Sr, Ti, V, Zn. **EPA 245.1 Hg**. **EPA 522.**

**Non-Potable Water**

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

**SM2340B**

---

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



## AIR ANALYSIS

**CHAIN OF CUSTODY**

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

Client Information

Client: Tennen Environmental

Address: 121 W 21<sup>st</sup> Street  
NY NY 10001

Phone: 645-604-2332

Fax

Email: [MCARROL@LENIN-ENV.COM](mailto:MCARROL@LENIN-ENV.COM)

These samples have been previously analyzed by Alpha

**Other Project Specific Requirements/Comments:**

### Project-Specific Target Compound List:

 <b>AIR ANALYSIS</b> <b>CHAIN OF CUSTODY</b>		PAGE <u>1</u> OF _____	Date Rec'd in Lab: <u>3/6/20</u>	ALPHA Job #: <u>L2009947</u>
<b>Client Information</b> Client: <u>Tenen Environmental</u> Address: <u>121 W 27<sup>th</sup> Street</u> NY NY 10001 Phone: <u>(212) - 606 - 2332</u> Fax: Email: <u>MCarroll@tenen-env.com</u>		<b>Project Information</b> Project Name: <u>Liberty towers</u> Project Location: <u>Staten Island, NY</u> Project #: <u>LIBERTY TOWERS</u> Project Manager: <u>Matt Carroll</u> ALPHA Quote #: <b>Turn-Around Time</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> RUSH <small>(only confirmed if pre-approved)</small> Date Due: _____ Time: _____		<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info      PO #: _____    <b>Regulatory Requirements/Report Limits</b> State/Fed      Program      Res / Comm        <b>ANALYSIS</b> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
<input type="checkbox"/> These samples have been previously analyzed by Alpha				

**All Columns Below Must Be Filled Out**

**\*SAMPLE MATRIX CODES**

AA = Ambient Air (Indoor/Outdoor)

SV = Soil Vapor/Landfill Gas/SVE

Other = Please Specify

**Container Type**

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions.

Relinquished By: Date/Time Received By: Date/Time:  
Orange Richard 3/5/2020 13:00 MEATBALLS (AM) 3/5/2020 13:40  
MEATBALLS (AM) 3/5/2020 13:30 100% BEEF 3/5/2020 13:40  
3/5/2020 13:00