

542 WEST 29<sup>TH</sup> STREET  
MANHATTAN, NEW YORK  
BLOCK 00700, LOT 0057

## PHASE II ENVIRONMENTAL SITE ASSESSMENT

**PREPARED FOR:**

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542 West 29th St.  
New York, New York 10001

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## 1.0 INTRODUCTION

P.W. Grosser Consulting, Inc. (PWGC) has prepared this report to document the results of the Phase II Environmental Site Assessment (ESA) performed for the property located at 542 West 29<sup>th</sup> Street, Manhattan, New York. The scope of work for this Phase II ESA was based upon a Phase I ESA for the site prepared by AEI Consultants (AEI) dated April 2, 2008. The scope of work included collection and analysis of soil, groundwater, indoor air and soil vapor samples.

### 1.1 Site Background

The subject site is located at 542 West 29<sup>th</sup> Street in the Chelsea neighborhood of Manhattan, New York (Block 00700, Lot 0057 on the New York City Tax Map). The property measures approximately 4,937 square feet and is improved with one single-story commercial building that occupies the entire footprint of the site. The building is currently used as a wholesale fish market. Based on the Phase I ESA, the property was previously used as a auto repair shop from approximately 1945 to 1995.

The site is located at an elevation of approximately 12 feet above sea level. Groundwater is present at approximately eight feet below grade at the site. Based on topographic and hydrogeologic conditions, regional groundwater flow beneath the site appears to be toward the west.

A Vicinity Map is included as **Figure 1**; a Site Plan is included as **Figure 2**.

### 1.2 Environmental History

#### 1.2.1 Phase I ESA

The AEI Phase I ESA identified the following Recognized Environmental Conditions (RECs) associated with the subject property:

- According to New York State Department of Environmental Conservation (NYSDEC) records, petroleum and solvent impact to groundwater was identified at an adjacent property to the south (539 to 545 West 28<sup>th</sup> Street). The identified impact was determined to be related to an undetermined offsite source, likely an auto repair shop. The subject property was historically used as an auto repair facility; several other auto repair facilities are located in the general vicinity of the subject property as well. Investigation of this adjacent site identified potential groundwater impact in the vicinity of the subject property, but no evidence of soil impact.
- A closed NYSDEC spills site is located upgradient of the subject property (524 West 29<sup>th</sup> Street, NYSDEC Spill 0307633). According to the Phase I ESA, NYSDEC records indicate that residual groundwater

impact may be present at this site, and may be migrating onto the subject property.

Based on the findings of the AEI Phase I ESA, PWGC recommended a Phase II ESA consisting of the following:

- Collection and analysis of soil and groundwater samples from throughout the site to identify potential onsite source areas and/or groundwater impact related to offsite sources.
- Collection and analysis of soil vapor and indoor air samples to evaluate whether a soil vapor intrusion condition is present at the subject property.

## 2.0 FIELD ACTIVITIES

Based on review of the ASE Phase I ESA, PWGC performed a Phase II ESA consisting of the collection and analysis of soil, groundwater, air and soil vapor samples.

### 2.1 Subsurface Investigation

To evaluate subsurface soil and groundwater conditions at the site, PWGC installed five soil borings throughout the property. Based on information in the Phase I ESA, the investigation focused primarily on potential VOC impact to soil and groundwater, as that is what had been documented at the adjacent property. Drilling services were provided by Associated Environmental Services, Ltd. (AES) of Hauppauge, New York.

Soil borings were installed using a limited access Geoprobe® direct-push drill rig outfitted with a macro-core sampler and disposable acetate liners. Non-dedicated sampling equipment was decontaminated with a laboratory grade detergent and clean water rinse. Soil samples were field screened for the presence of volatile organic compounds (VOCs) with a photo-ionization detector (PID). Groundwater was encountered at approximately eight feet below grade. Soil boring locations are illustrated in **Figure 2**; soil boring logs are included as **Appendix A**.

#### 2.1.1 *Soil Sampling*

Five soil borings (SB001 to SB005) were installed throughout the site. At each boring location, soil samples were collected continuously from grade to the top of the water table (approximately 8 feet below grade), or until refusal was encountered.

Recovered soils consisted primarily of fine-grained sand; evidence of fill material (e.g., brick fragments) were identified throughout the site. Elevated PID responses were not detected in soils collected from the site. Based on field screening, soil samples were collected at each boring location from the deepest two-foot interval above the water table. At location SB002, refusal was encountered at 3.5 feet below grade (sampled from 1.5 to 3.5 feet); at location SB003 refusal was encountered at 1.5 feet below grade (no sample collected due to no soil recovery).

#### 2.1.2 *Groundwater Sampling*

Following soil sample collection, three groundwater samples were collected from the site. Groundwater samples were collected from boring locations SB001, SB004 and SB005. Groundwater was collected through a four-foot stainless steel screen set at the top of the water table.

### 2.1.3 Sample Analysis

A total of four soil samples and three groundwater sample were collected for laboratory analysis. Samples were contained in pre-cleaned, pre-preserved, laboratory supplied glassware, stored in a cooler with ice, and submitted to Alpha Analytical of Westborough, Massachusetts, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory (ELAP ID 11148).

Soil and groundwater samples were analyzed for VOCs by USEPA Method 8260.

## 2.2 Soil Vapor Intrusion Evaluation

To evaluate potential soil vapor intrusion (SVI) at the subject property, PWGC collected three soil vapor samples, three indoor air samples, and one outdoor (ambient) air sample from the site. Air sampling was performed in accordance with NYSDOH *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006). Due to a technical problem with the sample canister and/or flow controller, no air was collected in the canister at indoor air sample location IA003.

Sub slab soil vapor and air samples were collected using laboratory provided, batch certified clean, SUMMA® vacuum canisters fitted with a pre-set flow regulator. Canisters were pre-set with an initial vacuum of approximately 29 inches of mercury (in. of Hg) for sample collection and flow regulators were pre-set to provide uniform sample collection over an approximate two-hour sampling period. Sample collection was ceased (i.e., the valve on the canister closed) with a minimum of one inch of Hg vacuum remained in the canister, leaving a vacuum in the canister as a means for the laboratory to verify the canister did not leak while in transit.

### 2.2.1 Sub-Slab Soil Vapor Sampling

At each sub slab soil vapor sample location, a small diameter hole was cut in the concrete slab. Sub slab soil vapor sampling ports were constructed by installing dedicated polyethylene tubing to a depth of two inches below the concrete slab at each sample location. Porous, inert backfill material was added to create a sampling zone. Each sampling point was sealed above the sampling zone with bentonite slurry, to prevent ambient air infiltration.

Approximately one to three implant volumes was purged from each soil vapor sampling point prior to sample collection. A tracer gas (helium) was used prior to and subsequent to sample collection to verify that adequate sampling techniques were used and that the implant seal did not leak. The sample flow rate did not exceed

0.2 liters per minute. Soil vapor samples were collected directly into SUMMA® vacuum canisters over a two hour period.

#### *2.2.2 Indoor Air Sampling*

At each soil vapor sampling location, PWGC also collected one indoor air sample. Indoor air samples were collected directly into SUMMA® vacuum canisters over a two hour period. Sample canisters were placed in the breathing zone (three to five feet above floor level) at each sample location. Indoor air and soil vapor samples were collected concurrently.

#### *2.2.3 Ambient Air Sampling*

To evaluate background air quality in the vicinity of the site, PWGC collected one outdoor air sample. Outdoor air samples were collected directly into SUMMA® vacuum canisters over a two hour period. Sample canisters were placed in the breathing zone (three to five feet above floor level) outside the property in the upwind direction. Outdoor air samples were collected concurrently with indoor air and soil vapor.

#### *2.2.4 Sample Analysis*

Air samples were collected in batch certified clean SUMMA® vacuum canisters provided by the analytical laboratory. Sample analysis was provided by Alpha Analytical of Mansfield, Massachusetts, a NYSDOH ELAP certified laboratory (ELAP ID: 11627). Air samples were analyzed for VOCs by USEPA Method TO-15.

### 3.0 ANALYTICAL RESULTS

Soil sample analytical data are compared to the NYSDEC Unrestricted Soil Cleanup Objectives (SCOs) specified in 6 NYCRR Part 375-6, Remediation Program Soil Cleanup Objectives (December 2006). Groundwater analytical results are compared to the AWQS specified in TOGS 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (June 1998). Air sample analytical data are compared to the Air Guideline Values (AGV) and Soil Vapor/Indoor Air Matrices specified in NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006.

Analytical data are summarized in **Table 1**, **Table 2** and **Table 3**; a copy of the laboratory analytical report is included as **Appendix B**.

#### 3.1 Soil Sample Analytical Results

Four soil samples were collected from the site. No staining, odors or elevated PID response was detected in collected soils. With the exception of acetone, VOCs were not detected at concentrations exceeding Unrestricted Use SCOs in soil samples collected from the site. Acetone was detected at a concentration exceeding its Unrestricted Use SCO of 50 ppb at boring locations SB002 and SB005. Acetone is a common laboratory reagent, and its presence in soil samples at the site is likely the result of laboratory contamination. Concentrations of acetone detected at the site were below the Restricted Residential SCO of 100,000 ppb.

#### 3.2 Groundwater Sample Analytical Results

Three groundwater samples were collected from the site. With the exception of benzene and MTBE in the sample collected from location SB001, VOCs were not detected at concentrations exceeding their respective AWQS in groundwater samples collected form the site.

Contaminants detected at location SB001 (benzene, MTBE) are gasoline constituents. Based on the lack of evidence of an onsite source of impact, and the documented presence of residual groundwater impact associated with a gasoline release at a nearby upgradient NYSDEC Spill site (524 West 29<sup>th</sup> Street), it appears likely that VOC impact in groundwater at the subject property is related to an offsite source.

#### 3.3 Air Sample Analytical Results

PWGC collected two soil vapor and two indoor air samples from the site. Samples were analyzed for VOCs by USEPA Method TO-15.

##### 3.3.1 Indoor Air Data Summary

NYSDOH AGVs are generally applicable to indoor and ambient air concentrations. VOCs were not detected at

concentrations exceeding their respective AGVs in indoor air samples collected from the site. Based on analytical data, it does not appear that a soil vapor intrusion condition currently exists at the site.

### *3.3.2 Soil Vapor Intrusion Evaluation*

NYSDOH has established Soil Vapor/Indoor Air Matrices to compare VOC concentrations in indoor air and soil vapor to determine whether soil vapor intrusion is a potential issue for a site and/or whether further evaluation or mitigation measures are necessary. NYSDOH decision matrices have been established for tetrachloroethene (PCE), trichloroethene (TCE), 1,1-dichloroethene, cis-1,2-dichloroethene, 1,1,1-trichloroethane, carbon tetrachloride, and vinyl chloride. Copies of NYSDOH decision matrices are included in **Appendix C**.

Based on evaluation of air sample lab data, and NYSDOH matrices, it does not appear that a soil vapor intrusion condition exists at the site. With the exception of TCE and carbon tetrachloride, the range of concentrations for VOCs at the site fell within the “no further action” category on the decision matrices. Due to slightly elevated concentrations in indoor air for TCE and carbon tetrachloride, these compounds fell within the “take reasonable and practical measures to identify sources and reduce exposures”. It should be noted that carbon tetrachloride concentrations in indoor air were comparable to what was detected in ambient air indicating that its presence may be due to a regional issue rather than a site specific issue.

## 4.0 CONCLUSIONS AND RECOMMENDAITONS

PWGC has prepared this report to document the results of the Phase II ESA performed for the property located at 542 West 29<sup>th</sup> Street, Manhattan, New York. The scope of work for this Phase II ESA was based upon a Phase I ESA for the site prepared by AEI dated April 2, 2008. The scope of work included collection and analysis of soil, groundwater, indoor air and soil vapor samples.

### 4.1 Conclusions

#### 4.1.1 *Soil and Groundwater*

Four soil samples were collected from the site. No evidence of impact such as staining, odors, and/or PID response was identified in collected soils. With the exception of acetone (a common laboratory contaminant), VOCs were not identified at concentrations exceeding NYSDEC Unrestricted Use SCOs in soil samples submitted for laboratory analysis.

Three groundwater samples were collected from the site. Multiple petroleum (gasoline) related VOCs were detected in one sample at concentrations exceeding their respective NYSDEC AWQS. Based on the nature of the compounds detected, and information regarding the nearby NYSDEC spill site to the east of the subject property, it appears that groundwater impact is related to an offsite, upgradient source. As such, in the event that groundwater remediation is necessary, it would likely be the responsibility of the party that caused the release (e.g., property owner at upgradient source location).

#### 4.1.2 *Indoor Air and Soil Vapor*

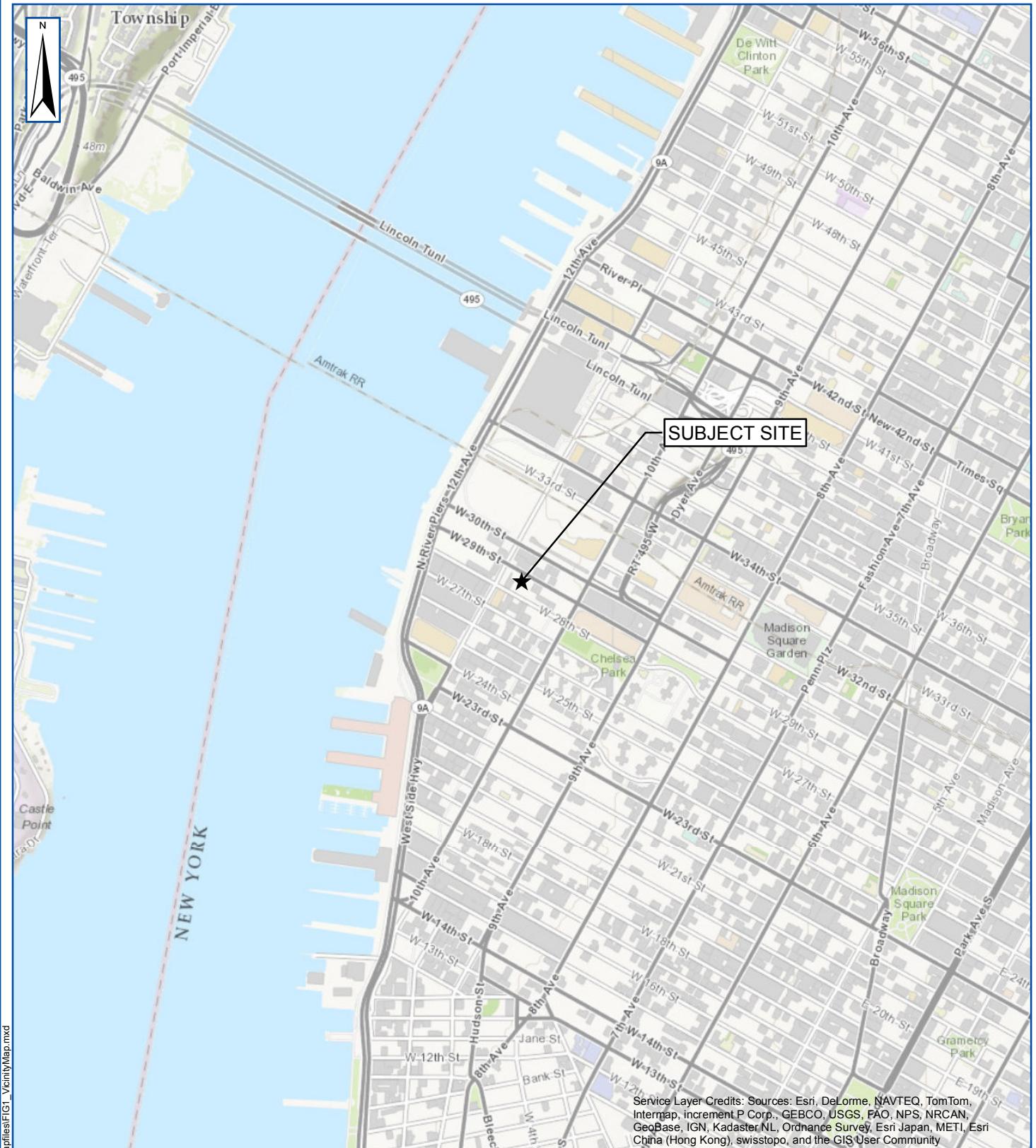
Two indoor air and three soil vapor samples were collected from the site. VOCs were not detected at concentrations exceeding NYSDOH AGVs in indoor air at the subject property. Based on evaluation of indoor air and sub slab soil vapor data using NYSDOH decision matrices, potential sources of TCE and carbon tetrachloride should be evaluated at the site.

### 4.2 Recommendations

Based on the findings of this Phase II ESA, PWGC offers the following recommendations:

- Based on soil vapor/indoor air data, potential sources of VOC impact (TCE, carbon tetrachloride) to indoor air should be evaluated and eliminated if possible. These compounds are commonly found in industrial solvents. Any materials stored onsite containing these compounds should be stored in tightly sealed containers and/or in well ventilated areas.

## FIGURES



## SUBJECT SITE VICINITY

542 WEST 29th ST  
NEW YORK, NY

Project:	SSH1401
Date:	05/28/2014
Designed by:	TJM
Drawn by:	JCG
Approved by:	TJM
Figure No:	1



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0  $\frac{1}{4}$   $\frac{1}{2}$   $\frac{3}{4}$  1 Miles



## TABLES

Table 1

**Soil Sample Analytical Data Summary - Volatile Organic Compounds**  
**542 West 29th Street, New York, New York**

LOCATION SAMPLING DATE LAB SAMPLE ID	CAS Number	Unrestricted Use SCO <sup>1</sup>	SB-1 (6-8) 5/14/2014 L1410502-01	SB-2 (1.5-3.5) 5/14/2014 L1410502-02	SB-4 (6-8) 5/14/2014 L1410502-03	SB-5 (6-8) 5/14/2014 L1410502-04
<b>Volatile Organic Compounds</b>						
1,1,1,2-Tetrachloroethane	630-20-6	NS	1.2 U	1.3 U	1.8 U	1.8 U
1,1,1-Trichloroethane	71-55-6	680	1.2 U	1.3 U	1.8 U	1.8 U
1,1,2,2-Tetrachloroethane	79-34-5	NS	1.2 U	1.3 U	1.8 U	1.8 U
1,1,2-Trichloroethane	79-00-5	NS	1.8 U	2 U	2.8 U	2.8 U
1,1-Dichloroethane	75-34-3	270	1.8 U	2 U	2.8 U	2.8 U
1,1-Dichloroethene	75-35-4	330	1.2 U	1.3 U	1.8 U	1.8 U
1,1-Dichloropropene	563-58-6	NS	6.2 U	6.7 U	9.3 U	9.2 U
1,2,3-Trichlorobenzene	87-61-6	NS	6.2 U	6.7 U	9.3 U	9.2 U
1,2,3-Trichloropropane	96-18-4	NS	12 U	13 U	18 U	18 U
1,2,4,5-Tetramethylbenzene	95-93-2	NS	4.9 U	5.3 U	7.4 U	7.4 U
1,2,4-Trichlorobenzene	120-82-1	NS	6.2 U	6.7 U	9.3 U	9.2 U
1,2,4-Trimethylbenzene	95-63-6	3600	6.2 U	6.7 U	9.3 U	9.2 U
1,2-Dibromo-3-chloropropane	96-12-8	NS	6.2 U	6.7 U	9.3 U	9.2 U
1,2-Dibromoethane	106-93-4	NS	4.9 U	5.3 U	7.4 U	7.4 U
1,2-Dichlorobenzene	95-50-1	1100	6.2 U	6.7 U	9.3 U	9.2 U
1,2-Dichloroethane	107-06-2	20	1.2 U	1.3 U	1.8 U	1.8 U
1,2-Dichloropropane	78-87-5	NS	4.3 U	4.7 U	6.5 U	6.4 U
1,3,5-Trimethylbenzene	108-67-8	8400	6.2 U	6.7 U	9.3 U	9.2 U
1,3-Dichlorobenzene	541-73-1	2400	6.2 U	6.7 U	9.3 U	9.2 U
1,3-Dichloropropane	142-28-9	NS	6.2 U	6.7 U	9.3 U	9.2 U
1,4-Dichlorobenzene	106-46-7	1800	6.2 U	6.7 U	9.3 U	9.2 U
1,4-Diethylbenzene	105-05-5	NS	4.9 U	5.3 U	7.4 U	7.4 U
1,4-Dioxane	123-91-1	100	120 U	130 U	180 U	180 U
2,2-Dichloropropane	594-20-7	NS	6.2 U	6.7 U	9.3 U	9.2 U
2-Butanone	78-93-3	120	12 U	3.6 J	18 U	18 U
2-Hexanone	591-78-6	NS	12 U	13 U	18 U	18 U
4-Ethyltoluene	622-96-8	NS	4.9 U	5.3 U	7.4 U	7.4 U
4-Methyl-2-pentanone	108-10-1	NS	12 U	13 U	18 U	18 U
Acetone	67-64-1	50	11 J	74	24	66
Acrylonitrile	107-13-1	NS	12 U	13 U	18 U	18 U
Benzene	71-43-2	60	1.2 U	1.3 U	1.8 U	1.8 U
Bromobenzene	108-86-1	NS	6.2 U	6.7 U	9.3 U	9.2 U
Bromochloromethane	74-97-5	NS	6.2 U	6.7 U	9.3 U	9.2 U
Bromodichloromethane	75-27-4	NS	1.2 U	1.3 U	1.8 U	1.8 U
Bromoform	75-25-2	NS	4.9 U	5.3 U	7.4 U	7.4 U
Bromomethane	74-83-9	NS	2.5 U	2.7 U	3.7 U	3.7 U
Carbon disulfide	75-15-0	NS	12 U	13 U	18 U	18 U
Carbon tetrachloride	56-23-5	760	1.2 U	1.3 U	1.8 U	1.8 U
Chlorobenzene	108-90-7	1100	1.2 U	1.3 U	1.8 U	1.8 U
Chloroethane	75-00-3	NS	2.5 U	2.7 U	3.7 U	3.7 U
Chloroform	67-66-3	370	1.8 U	2 U	1.3 J	2.8 U
Chloromethane	74-87-3	NS	6.2 U	6.7 U	9.3 U	9.2 U
cis-1,2-Dichloroethene	156-59-2	250	1.2 U	1.3 U	1.8 U	1.8 U
cis-1,3-Dichloropropene	10061-01-5	NS	1.2 U	1.3 U	1.8 U	1.8 U
Dibromochloromethane	124-48-1	NS	1.2 U	1.3 U	1.8 U	1.8 U
Dibromomethane	74-95-3	NS	12 U	13 U	18 U	18 U
Dichlorodifluoromethane	75-71-8	NS	12 U	130	18 U	18 U
Ethyl ether	60-29-7	NS	6.2 U	6.7 U	9.3 U	9.2 U
Ethylbenzene	100-41-4	1000	1.2 U	1.3 U	1.8 U	1.8 U
Hexachlorobutadiene	87-68-3	NS	6.2 U	6.7 U	9.3 U	9.2 U
Isopropylbenzene	98-82-8	NS	1.2 U	1.3 U	1.8 U	1.8 U
Methyl tert butyl ether	1634-04-4	930	2.5 U	2.7 U	3.7 U	3.7 U
Methylene chloride	75-09-2	50	2.8 J	3.2 J	4 J	6.8 J
n-Butylbenzene	104-51-8	12000	1.2 U	1.3 U	1.8 U	1.8 U
n-Propylbenzene	103-65-1	3900	1.2 U	1.3 U	1.8 U	1.8 U
Naphthalene	91-20-3	12000	6.2 U	6.7 U	9.3 U	9.2 U
o-Chlorotoluene	95-49-8	NS	6.2 U	6.7 U	9.3 U	9.2 U
o-Xylene	95-47-6	260	2.5 U	2.7 U	3.7 U	3.7 U
p-Chlorotoluene	106-43-4	NS	6.2 U	6.7 U	9.3 U	9.2 U
p-Isopropyltoluene	99-87-6	NS	1.2 U	1.3 U	1.8 U	1.8 U
p/m-Xylene	179601-23-1	260	2.5 U	2.7 U	3.7 U	3.7 U
sec-Butylbenzene	135-98-8	11000	1.2 U	1.3 U	1.8 U	1.8 U
Styrene	100-42-5	NS	2.5 U	2.7 U	3.7 U	3.7 U
tert-Butylbenzene	98-06-6	5900	6.2 U	6.7 U	9.3 U	9.2 U
Tetrachloroethene	127-18-4	1300	1.2 U	1.3 U	1.8 U	1.8 U
Toluene	108-88-3	700	1.8 U	2 U	2.8 U	2.8 U
trans-1,2-Dichloroethene	156-60-5	190	1.8 U	2 U	2.8 U	2.8 U
trans-1,3-Dichloropropene	10061-02-6	NS	1.2 U	1.3 U	1.8 U	1.8 U
trans-1,4-Dichloro-2-butene	110-57-6	NS	6.2 U	6.7 U	9.3 U	9.2 U
Trichloroethene	79-01-6	470	1.2 U	1.3 U	1.8 U	1.8 U
Trichlorofluoromethane	75-69-4	NS	6.2 U	7.1	9.3 U	9.2 U
Vinyl acetate	108-05-4	NS	12 U	13 U	18 U	18 U
Vinyl chloride	75-01-4	20	2.5 U	2.7 U	3.7 U	3.7 U
Xylene (Total)	1330-20-7	260	2.5 U	2.7 U	3.7 U	3.7 U

## Notes:

All Concentrations are ppb (ug/kg)

1 - Unrestricted Use SCO, 6NYCRR Part 375-6, Remediation Program Soil Cleanup Objectives

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL).

U - Not detected at the reported detection limit for the sample.

NS - No standard established

Highlighted values exceed Unrestricted Use SCO

**Table 2**

Groundwater Sample Analytical Data Summary - Volatile Organic Compounds  
542 West 29th Street, New York, New York

LOCATION	CAS Number	AWQS <sup>1</sup>	SB-1 (GW) 5/14/2014 L1410502-05	SB-4 (GW) 5/14/2014 L1410502-06	SB-5 (GW) 5/14/2014 L1410502-07
<b>Volatile Organic Compounds</b>					
1,1,1,2-Tetrachloroethane	630-20-6	5	2.5 U	2.5 U	2.5 U
1,1,1-Trichloroethane	71-55-6	5	2.5 U	2.5 U	2.5 U
1,1,2,2-Tetrachloroethane	79-34-5	5	0.5 U	0.5 U	0.5 U
1,1,2-Trichloroethane	79-00-5	1	1.5 U	1.5 U	1.5 U
1,1-Dichloroethane	75-34-3	5	0.87 J	2.5 U	0.7 J
1,1-Dichloroethylene	75-35-4	5	0.5 U	0.5 U	0.5 U
1,1-Dichloropropene	563-58-6	5	2.5 U	2.5 U	2.5 U
1,2,3-Trichlorobenzene	87-61-6	5	2.5 U	2.5 U	2.5 U
1,2,3-Trichloropropane	96-18-4	0.04	2.5 U	2.5 U	2.5 U
1,2,4,5-Tetramethylbenzene	95-93-2	NS	2 U	2 U	2 U
1,2,4-Trichlorobenzene	120-82-1	5	2.5 U	2.5 U	2.5 U
1,2,4-Trimethylbenzene	95-63-6	5	2.5 U	2.5 U	2.5 U
1,2-Dibromo-3-chloropropane	96-12-8	0.04	2.5 U	2.5 U	2.5 U
1,2-Dibromoethane	106-93-4	0.0006	2 U	2 U	2 U
1,2-Dichlorobenzene	95-50-1	3	2.5 U	2.5 U	2.5 U
1,2-Dichloroethane	107-06-2	0.6	0.5 U	0.5 U	0.5 U
1,2-Dichloropropane	78-87-5	1	1 U	1 U	1 U
1,3,5-Trimethylbenzene	108-67-8	5	2.5 U	2.5 U	2.5 U
1,3-Dichlorobenzene	541-73-1	3	2.5 U	2.5 U	2.5 U
1,3-Dichloropropane	142-28-9	5	2.5 U	2.5 U	2.5 U
1,4-Dichlorobenzene	106-46-7	3	2.5 U	2.5 U	2.5 U
1,4-Dioxane	123-91-1	NS	250 U	250 U	250 U
2,2-Dichloropropane	594-20-7	5	2.5 U	2.5 U	2.5 U
2-Butanone	78-93-3	50	5 U	5 U	5 U
2-Hexanone	591-78-6	50	5 U	5 U	5 U
4-Methyl-2-pentanone	108-10-1	NS	5 U	5 U	5 U
Acetone	67-64-1	50	4.6 J	5 U	2 J
Acrylonitrile	107-13-1	5	5 U	5 U	5 U
Benzene	71-43-2	1	1.4	0.5 U	0.5 U
Bromobenzene	108-86-1	5	2.5 U	2.5 U	2.5 U
Bromochloromethane	74-97-5	5	2.5 U	2.5 U	2.5 U
Bromodichloromethane	75-27-4	50	0.5 U	0.5 U	0.5 U
Bromoform	75-25-2	50	2 U	2 U	2 U
Bromomethane	74-83-9	5	2.5 U	2.5 U	2.5 U
Carbon disulfide	75-15-0	60	5 U	5 U	5 U
Carbon tetrachloride	56-23-5	5	0.5 U	0.5 U	0.5 U
Chlorobenzene	108-90-7	5	2.5 U	2.5 U	2.5 U
Chloroethane	75-00-3	5	2.5 U	2.5 U	2.5 U
Chloroform	67-66-3	7	2.5 U	2.5 U	2.5 U
Chloromethane	74-87-3	NS	2.5 U	2.5 U	2.5 U
cis-1,2-Dichloroethene	156-59-2	5	2.5 U	0.88 J	2.5 U
cis-1,3-Dichloropropene	10061-01-5	0.4	0.5 U	0.5 U	0.5 U
Dibromochloromethane	124-48-1	50	0.5 U	0.5 U	0.5 U
Dibromomethane	74-95-3	5	5 U	5 U	5 U
Dichlorodifluoromethane	75-71-8	5	5 U	5 U	5 U
Ethyl ether	60-29-7	NS	2.5 U	2.5 U	2.5 U
Ethylbenzene	100-41-4	5	2.5 U	2.5 U	2.5 U
Hexachlorobutadiene	87-68-3	0.5	2.5 U	2.5 U	2.5 U
Isopropylbenzene	98-82-8	5	2.5 U	2.5 U	2.5 U
Methyl tert butyl ether	1634-04-4	10	11	1.1 J	1.8 J
Methylene chloride	75-09-2	5	2.5 U	2.5 U	2.5 U
n-Butylbenzene	104-51-8	5	2.5 U	2.5 U	2.5 U
n-Propylbenzene	103-65-1	5	2.5 U	2.5 U	2.5 U
Naphthalene	91-20-3	10	2.5 U	2.5 U	2.5 U
o-Chlorotoluene	95-49-8	5	2.5 U	2.5 U	2.5 U
o-Xylene	95-47-6	5	2.5 U	2.5 U	2.5 U
p-Chlorotoluene	106-43-4	5	2.5 U	2.5 U	2.5 U
p-Diethylbenzene	105-05-5	NS	2 U	2 U	2 U
p-Ethyltoluene	622-96-8	NS	2 U	2 U	2 U
p-Isopropyltoluene	99-87-6	5	2.5 U	2.5 U	2.5 U
p/m-Xylene	179601-23-1	5	2.5 U	2.5 U	2.5 U
sec-Butylbenzene	135-98-8	5	2.5 U	2.5 U	2.5 U
Styrene	100-42-5	5	2.5 U	2.5 U	2.5 U
tert-Butylbenzene	98-06-6	5	2.5 U	2.5 U	2.5 U
Tetrachloroethene	127-18-4	5	0.5 U	0.5 U	0.5 U
Toluene	108-88-3	5	2.5 U	2.5 U	2.5 U
trans-1,2-Dichloroethene	156-60-5	5	2.5 U	2.5 U	2.5 U
trans-1,3-Dichloropropene	10061-02-6	0.4	0.5 U	0.5 U	0.5 U
trans-1,4-Dichloro-2-butene	110-57-6	5	2.5 U	2.5 U	2.5 U
Trichloroethylene	79-01-6	5	0.5 U	0.33 J	0.5 U
Trichlorofluoromethane	75-69-4	5	2.5 U	2.5 U	2.5 U
Vinyl acetate	108-05-4	NS	5 U	5 U	5 U
Vinyl chloride	75-01-4	2	1 U	1 U	1 U
Xylenes, Total	1330-20-7	5	2.5 U	2.5 U	2.5 U

Notes:

All Concentrations are ppb (ug/L)

1 - Ambient Water Quality Standard, NYSDEC TOGS 1.1.1, Ambient Water Quality Standards and Groundwater Effluent Limitations

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL).

U - Not detected at the reported detection limit for the sample.

NS - No standard established

Highlighted values exceed AWQS



## **APPENDIX A**

### **SOIL BORING LOGS**



Boring Designation:	SB001				Logged By:	JE		
Site Address:	542 West 29th Street, Manhattan, New York				Project Manager:	TM		
Project Name:	Sean-Sakie Holdings, Ltd.				Project Number:	AVB0801		
Drilling Contractor:	Associated Environmental				Driller Name:	John V.		
Drilling Method:	Direct Push				Borehole Diameter:	3"		
Sampling Method:	Macro-Core				Borehole Depth:	9'		
Start Time:					Completion Time:			
Start Date:	5/14/2014				Completion Date:	5/14/2014		
Depth (ft)	Advance (ft)	Recovery (ft)	Graphic Log	USCS Code	Soil Color	Moisture Content	Soil Description	Notes
0	3	2.0		n/a	Grey	Dry	Concrete	
				SW	Lt. brown	Dry	F sand, trace brick	
3	3	2.0						
6	3	0.5		SW	Lt. brown	Wet	F sand, brick and rock	
9							EOB @ 9 feet bgs	
12								
15								
18								
21								
24								
27								
30								
33								
36								

P.W. GROSSER CONSULTING



Boring Designation:	SB002				Logged By:	JE		
Site Address:	542 West 29th Street, Manhattan, New York				Project Manager:	TM		
Project Name:	Sean-Sakie Holdings, Ltd.				Project Number:	AVB0801		
Drilling Contractor:	Associated Environmental				Driller Name:	John V.		
Drilling Method:	Direct Push				Borehole Diameter:	3"		
Sampling Method:	Macro-Core				Borehole Depth:	9'		
Start Time:					Completion Time:			
Start Date:	5/14/2014				Completion Date:	5/14/2014		
Depth (ft)	Advance (ft)	Recovery (ft)	Graphic Log	USCS Code	Soil Color	Moisture Content	Soil Description	Notes
0	3	1.0		n/a	Grey	Dry	Concrete	
				SW	Brown	Dry	F sand trace brick	
3	0.5	0.5						
6								
9								
12								
15								
18								
21								
24								
27								
30								
33								
36								

P.W. GROSSER CONSULTING



Boring Designation:	SB003				Logged By:	JE		
Site Address:	542 West 29th Street, Manhattan, New York				Project Manager:	TM		
Project Name:	Sean-Sakie Holdings, Ltd.				Project Number:	AVB0801		
Drilling Contractor:	Associated Environmental				Driller Name:	John V.		
Drilling Method:	Direct Push				Borehole Diameter:	3"		
Sampling Method:	Macro-Core				Borehole Depth:	9'		
Start Time:					Completion Time:			
Start Date:	5/14/2014				Completion Date:	5/14/2014		
Depth (ft)	Advance (ft)	Recovery (ft)	Graphic Log	USCS Code	Soil Color	Moisture Content	Soil Description	Notes
0	1.5	0.0		n/a	Grey	Dry	Concrete	
							Refusal @ 1.5 feet	
3								
6								
9								
12								
15								
18								
21								
24								
27								
30								
33								
36								

P.W. GROSSER CONSULTING



Boring Designation:	SB004				Logged By:	JE		
Site Address:	542 West 29th Street, Manhattan, New York				Project Manager:	TM		
Project Name:	Sean-Sakie Holdings, Ltd.				Project Number:	AVB0801		
Drilling Contractor:	Associated Environmental				Driller Name:	John V.		
Drilling Method:	Direct Push				Borehole Diameter:	3"		
Sampling Method:	Macro-Core				Borehole Depth:	9'		
Start Time:					Completion Time:			
Start Date:	5/14/2014				Completion Date:	5/14/2014		
Depth (ft)	Advance (ft)	Recovery (ft)	Graphic Log	USCS Code	Soil Color	Moisture Content	Soil Description	Notes
0	3	1.5		n/a	Grey	Dry	Concrete	
				SW	Lt. brown	Dry	F sand, trace brick	
3	3	2.0						
6	3	1.0						
				SW	Lt. brown	Wet	F sand, brick and rock	
9							EOB @ 9 feet bgs	
12								
15								
18								
21								
24								
27								
30								
33								
36								

P.W. GROSSER CONSULTING



Boring Designation:	SB005				Logged By:	JE		
Site Address:	542 West 29th Street, Manhattan, New York				Project Manager:	TM		
Project Name:	Sean-Sakie Holdings, Ltd.				Project Number:	AVB0801		
Drilling Contractor:	Associated Environmental				Driller Name:	John V.		
Drilling Method:	Direct Push				Borehole Diameter:	3"		
Sampling Method:	Macro-Core				Borehole Depth:	9'		
Start Time:					Completion Time:			
Start Date:	5/14/2014				Completion Date:	5/14/2014		
Depth (ft)	Advance (ft)	Recovery (ft)	Graphic Log	USCS Code	Soil Color	Moisture Content	Soil Description	Notes
0	3	1.5		n/a	Grey	Dry	Concrete	
				SW	Lt. brown	Dry	F sand, trace brick	
3	3	2.0						
6	3	1.0						
				SW	Lt. brown	Wet	F sand, brick and rock	
9							EOB @ 9 feet bgs	
12								
15								
18								
21								
24								
27								
30								
33								
36								

## **APPENDIX B**

### **LABORATORY ANALYTICAL REPORT**



## ANALYTICAL REPORT

Lab Number:	L1410518
Client:	P. W. Grosser 630 Johnson Avenue Suite 7 Bohemia, NY 11716
ATTN:	Thomas Melia
Phone:	(631) 589-6353
Project Name:	GOTHAM
Project Number:	SSH1401
Report Date:	05/27/14

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: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

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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:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1410518-01	SS-1	542 W29 STREET, NY, NY	05/14/14 14:54
L1410518-02	SS-2	542 W29 STREET, NY, NY	05/14/14 14:54
L1410518-03	SS-3	542 W29 STREET, NY, NY	05/14/14 14:54
L1410518-04	IA-1	542 W29 STREET, NY, NY	05/14/14 14:54
L1410518-05	IA-2	542 W29 STREET, NY, NY	05/14/14 14:54
L1410518-06	IA-3	542 W29 STREET, NY, NY	05/14/14 14:54
L1410518-07	OA-1	542 W29 STREET, NY, NY	05/14/14 14:54

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### 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 all of the requirements of NELAC, for all NELAC accredited parameters. 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. 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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### 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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### Case Narrative (continued)

#### Volatile Organics in Air

Canisters were released from the laboratory on May 14, 2014. The canister certification results are provided as an addendum.

Sample L1410518-01 has elevated detection limits due to the dilution required by the elevated concentrations of non-target compounds in the sample.

Samples L1410518-01 through -05 The presence of Isopropyl Alcohol could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

Sample L1410518-01 The presence of Chloromethane could not be determined in this sample due to a non-target compound interfering with the identification and quantification of this compound.

Samples L1410518-02, -03 and -07 results for Acetone should be considered estimated due to co-elution with a non-target peak.

Samples L1410518-02, -04 and -05 results for Chloromethane should be considered estimated due to co-elution with a non-target peak.

Samples L1410518-04 and -05 The presence of Acetone could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

The flow controller ID numbers were not recorded on the chain of custody form. The client was contacted and the numbers were not recorded in field notes.

The sample designated IA-3 (L1410518-06) was received at a final pressure of -29.0 inHg which indicates that no sample was collected. The client was contacted and the sample was cancelled.

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: 05/27/14

**AIR**



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-01 D	Date Collected:	05/14/14 14:54
Client ID:	SS-1	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	05/24/14 21:05		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	ND	5.61	--	ND	27.7	--		28.03
Chloromethane	ND	5.61	--	ND	11.6	--		28.03
Freon-114	ND	5.61	--	ND	39.2	--		28.03
Vinyl chloride	ND	5.61	--	ND	14.3	--		28.03
1,3-Butadiene	ND	5.61	--	ND	12.4	--		28.03
Bromomethane	ND	5.61	--	ND	21.8	--		28.03
Chloroethane	ND	5.61	--	ND	14.8	--		28.03
Ethanol	ND	70.1	--	ND	132	--		28.03
Vinyl bromide	ND	5.61	--	ND	24.5	--		28.03
Acetone	125	28.0	--	297	66.5	--		28.03
Trichlorofluoromethane	118	5.61	--	663	31.5	--		28.03
Isopropanol	ND	14.0	--	ND	34.4	--		28.03
1,1-Dichloroethene	ND	5.61	--	ND	22.2	--		28.03
Tertiary butyl Alcohol	ND	14.0	--	ND	42.4	--		28.03
Methylene chloride	ND	28.0	--	ND	97.3	--		28.03
3-Chloropropene	ND	5.61	--	ND	17.6	--		28.03
Carbon disulfide	ND	5.61	--	ND	17.5	--		28.03
Freon-113	ND	5.61	--	ND	43.0	--		28.03
trans-1,2-Dichloroethene	ND	5.61	--	ND	22.2	--		28.03
1,1-Dichloroethane	ND	5.61	--	ND	22.7	--		28.03
Methyl tert butyl ether	ND	5.61	--	ND	20.2	--		28.03
2-Butanone	ND	5.61	--	ND	16.5	--		28.03
cis-1,2-Dichloroethene	ND	5.61	--	ND	22.2	--		28.03
Ethyl Acetate	ND	14.0	--	ND	50.5	--		28.03



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-01 D Date Collected: 05/14/14 14:54  
Client ID: SS-1 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
<b>Volatile Organics in Air - Mansfield Lab</b>							
Chloroform	ND	5.61	--	ND	27.4	--	28.03
Tetrahydrofuran	ND	5.61	--	ND	16.5	--	28.03
1,2-Dichloroethane	ND	5.61	--	ND	22.7	--	28.03
n-Hexane	ND	5.61	--	ND	19.8	--	28.03
1,1,1-Trichloroethane	ND	5.61	--	ND	30.6	--	28.03
Benzene	ND	5.61	--	ND	17.9	--	28.03
Carbon tetrachloride	ND	5.61	--	ND	35.3	--	28.03
Cyclohexane	ND	5.61	--	ND	19.3	--	28.03
1,2-Dichloropropane	ND	5.61	--	ND	25.9	--	28.03
Bromodichloromethane	ND	5.61	--	ND	37.6	--	28.03
1,4-Dioxane	ND	5.61	--	ND	20.2	--	28.03
Trichloroethylene	ND	5.61	--	ND	30.1	--	28.03
2,2,4-Trimethylpentane	ND	5.61	--	ND	26.2	--	28.03
Heptane	ND	5.61	--	ND	23.0	--	28.03
cis-1,3-Dichloropropene	ND	5.61	--	ND	25.5	--	28.03
4-Methyl-2-pentanone	ND	5.61	--	ND	23.0	--	28.03
trans-1,3-Dichloropropene	ND	5.61	--	ND	25.5	--	28.03
1,1,2-Trichloroethane	ND	5.61	--	ND	30.6	--	28.03
Toluene	ND	5.61	--	ND	21.1	--	28.03
2-Hexanone	ND	5.61	--	ND	23.0	--	28.03
Dibromochloromethane	ND	5.61	--	ND	47.8	--	28.03
1,2-Dibromoethane	ND	5.61	--	ND	43.1	--	28.03
Tetrachloroethylene	ND	5.61	--	ND	38.0	--	28.03
Chlorobenzene	ND	5.61	--	ND	25.8	--	28.03
Ethylbenzene	ND	5.61	--	ND	24.4	--	28.03
p/m-Xylene	ND	11.2	--	ND	48.6	--	28.03
Bromoform	ND	5.61	--	ND	58.0	--	28.03
Styrene	ND	5.61	--	ND	23.9	--	28.03



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-01 D Date Collected: 05/14/14 14:54  
Client ID: SS-1 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
1,1,2,2-Tetrachloroethane	ND	5.61	--	ND	38.5	--	28.03
o-Xylene	ND	5.61	--	ND	24.4	--	28.03
4-Ethyltoluene	ND	5.61	--	ND	27.6	--	28.03
1,3,5-Trimethylbenzene	ND	5.61	--	ND	27.6	--	28.03
1,2,4-Trimethylbenzene	ND	5.61	--	ND	27.6	--	28.03
Benzyl chloride	ND	5.61	--	ND	29.0	--	28.03
1,3-Dichlorobenzene	ND	5.61	--	ND	33.7	--	28.03
1,4-Dichlorobenzene	ND	5.61	--	ND	33.7	--	28.03
1,2-Dichlorobenzene	ND	5.61	--	ND	33.7	--	28.03
1,2,4-Trichlorobenzene	ND	5.61	--	ND	41.6	--	28.03
Hexachlorobutadiene	ND	5.61	--	ND	59.8	--	28.03

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	107		60-140
Bromochloromethane	112		60-140
chlorobenzene-d5	104		60-140

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-02	Date Collected:	05/14/14 14:54
Client ID:	SS-2	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	05/24/14 21:37		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.478	0.200	--	2.36	0.989	--		1
Chloromethane	0.259	0.200	--	0.535	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	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	145	1.00	--	344	2.38	--		1
Trichlorofluoromethane	1.02	0.200	--	5.73	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	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	0.597	0.200	--	1.86	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	2.27	0.200	--	6.69	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-02 Date Collected: 05/14/14 14:54  
Client ID: SS-2 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab</b>							
Chloroform	2.20	0.200	--	10.7	0.977	--	1
Tetrahydrofuran	0.334	0.200	--	0.985	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	1.77	0.200	--	6.24	0.705	--	1
1,1,1-Trichloroethane	0.583	0.200	--	3.18	1.09	--	1
Benzene	3.36	0.200	--	10.7	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	1.90	0.200	--	6.54	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
Trichloroethylene	ND	0.200	--	ND	1.07	--	1
2,2,4-Trimethylpentane	0.845	0.200	--	3.95	0.934	--	1
Heptane	1.04	0.200	--	4.26	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	5.09	0.200	--	19.2	0.754	--	1
2-Hexanone	0.230	0.200	--	0.943	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethylene	0.218	0.200	--	1.48	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	0.881	0.200	--	3.83	0.869	--	1
p/m-Xylene	2.60	0.400	--	11.3	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	0.277	0.200	--	1.18	0.852	--	1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-02 Date Collected: 05/14/14 14:54  
Client ID: SS-2 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	0.960	0.200	--	4.17	0.869	--	1
4-Ethyltoluene	0.271	0.200	--	1.33	0.983	--	1
1,3,5-Trimethylbenzene	0.255	0.200	--	1.25	0.983	--	1
1,2,4-Trimethylbenzene	0.872	0.200	--	4.29	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	102		60-140
chlorobenzene-d5	102		60-140



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-03	Date Collected:	05/14/14 14:54
Client ID:	SS-3	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Soil_Vapor		
Anaytical Method:	48,TO-15		
Analytical Date:	05/24/14 22:09		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.666	0.200	--	3.29	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	0.830	0.200	--	1.84	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	169	1.00	--	401	2.38	--		1
Trichlorofluoromethane	1.28	0.200	--	7.19	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	1.00	--	ND	3.47	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	1.56	0.200	--	4.86	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	0.265	0.200	--	1.07	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	3.69	0.200	--	10.9	0.590	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-03 Date Collected: 05/14/14 14:54  
Client ID: SS-3 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
<b>Volatile Organics in Air - Mansfield Lab</b>							
Chloroform	5.52	0.200	--	27.0	0.977	--	1
Tetrahydrofuran	0.300	0.200	--	0.885	0.590	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.671	0.200	--	2.36	0.705	--	1
1,1,1-Trichloroethane	2.20	0.200	--	12.0	1.09	--	1
Benzene	0.850	0.200	--	2.72	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	0.568	0.200	--	1.96	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
Trichloroethylene	0.518	0.200	--	2.78	1.07	--	1
2,2,4-Trimethylpentane	0.244	0.200	--	1.14	0.934	--	1
Heptane	0.524	0.200	--	2.15	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	3.70	0.200	--	13.9	0.754	--	1
2-Hexanone	0.539	0.200	--	2.21	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethylene	ND	0.200	--	ND	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	0.632	0.200	--	2.75	0.869	--	1
p/m-Xylene	2.20	0.400	--	9.56	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-03 Date Collected: 05/14/14 14:54  
Client ID: SS-3 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	Results	ppbV			Results	ug/m3			Dilution Factor
		RL	MDL	Qualifier		RL	MDL	Qualifier	
<b>Volatile Organics in Air - Mansfield Lab</b>									
1,1,2,2-Tetrachloroethane	ND	0.200	--		ND	1.37	--		1
o-Xylene	0.727	0.200	--		3.16	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	0.513	0.200	--		2.52	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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	102		60-140
chlorobenzene-d5	101		60-140



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-04	Date Collected:	05/14/14 14:54
Client ID:	IA-1	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	05/24/14 19:30		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.966	0.200	--	4.78	0.989	--		1
Chloromethane	0.491	0.200	--	1.01	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		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	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	1.32	0.200	--	7.42	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		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	1.63	0.200	--	4.81	0.590	--		1
Ethyl Acetate	0.650	0.500	--	2.34	1.80	--		1
Chloroform	4.27	0.200	--	20.9	0.977	--		1
Tetrahydrofuran	0.346	0.200	--	1.02	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-04 Date Collected: 05/14/14 14:54  
Client ID: IA-1 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
<b>Volatile Organics in Air - Mansfield Lab</b>							
n-Hexane	2.89	0.200	--	10.2	0.705	--	1
Benzene	7.59	0.200	--	24.2	0.639	--	1
Cyclohexane	2.81	0.200	--	9.67	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	0.353	0.200	--	2.36	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
2,2,4-Trimethylpentane	1.61	0.200	--	7.52	0.934	--	1
Heptane	1.71	0.200	--	7.01	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	5.84	0.200	--	22.0	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
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	1.38	0.200	--	5.99	0.869	--	1
p/m-Xylene	3.59	0.400	--	15.6	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	0.508	0.200	--	2.16	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	1.42	0.200	--	6.17	0.869	--	1
4-Ethyltoluene	0.551	0.200	--	2.71	0.983	--	1
1,3,5-Trimethylbenzene	0.595	0.200	--	2.93	0.983	--	1
1,2,4-Trimethylbenzene	2.01	0.200	--	9.88	0.983	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-04	Date Collected:	05/14/14 14:54
Client ID:	IA-1	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab</b>							
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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	100		60-140

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### SAMPLE RESULTS

Lab ID:	L1410518-04	Date Collected:	05/14/14 14:54
Client ID:	IA-1	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	05/24/14 19:30		
Analyst:	RY		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	0.034	0.020	--	0.087	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.050	0.020	--	0.198	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.074	0.020	--	0.465	0.126	--		1
Trichloroethene	0.133	0.020	--	0.715	0.107	--		1
Tetrachloroethene	0.394	0.020	--	2.67	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	100		60-140

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-05	Date Collected:	05/14/14 14:54
Client ID:	IA-2	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	05/24/14 20:33		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.564	0.200	--	2.79	0.989	--		1
Chloromethane	0.467	0.200	--	0.964	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		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	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	1.32	0.200	--	7.42	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		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	1.29	0.200	--	3.80	0.590	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	3.73	0.200	--	18.2	0.977	--		1
Tetrahydrofuran	0.293	0.200	--	0.864	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-05 Date Collected: 05/14/14 14:54  
Client ID: IA-2 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab</b>							
n-Hexane	2.71	0.200	--	9.55	0.705	--	1
Benzene	6.12	0.200	--	19.6	0.639	--	1
Cyclohexane	2.39	0.200	--	8.23	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	0.318	0.200	--	2.13	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
2,2,4-Trimethylpentane	1.42	0.200	--	6.63	0.934	--	1
Heptane	1.42	0.200	--	5.82	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	5.33	0.200	--	20.1	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
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	1.22	0.200	--	5.30	0.869	--	1
p/m-Xylene	3.31	0.400	--	14.4	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
o-Xylene	1.32	0.200	--	5.73	0.869	--	1
4-Ethyltoluene	0.498	0.200	--	2.45	0.983	--	1
1,3,5-Trimethylbenzene	0.523	0.200	--	2.57	0.983	--	1
1,2,4-Trimethylbenzene	1.76	0.200	--	8.65	0.983	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-05	Date Collected:	05/14/14 14:54
Client ID:	IA-2	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab</b>							
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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	99		60-140



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### SAMPLE RESULTS

Lab ID:	L1410518-05	Date Collected:	05/14/14 14:54
Client ID:	IA-2	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	05/24/14 20:33		
Analyst:	RY		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	0.030	0.020	--	0.077	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.063	0.020	--	0.250	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.078	0.020	--	0.491	0.126	--		1
Trichloroethene	0.132	0.020	--	0.709	0.107	--		1
Tetrachloroethene	0.416	0.020	--	2.82	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	98		60-140
bromochloromethane	98		60-140
chlorobenzene-d5	100		60-140



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-07	Date Collected:	05/14/14 14:54
Client ID:	OA-1	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15		
Analytical Date:	05/24/14 18:58		
Analyst:	MB		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Dichlorodifluoromethane	0.376	0.200	--	1.86	0.989	--		1
Chloromethane	0.696	0.200	--	1.44	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	0.471	0.200	--	1.04	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	14.7	2.50	--	27.7	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.60	1.00	--	10.9	2.38	--		1
Trichlorofluoromethane	0.302	0.200	--	1.70	1.12	--		1
Isopropanol	1.04	0.500	--	2.56	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	3.47	--		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	0.483	0.200	--	1.42	0.590	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID: L1410518-07 Date Collected: 05/14/14 14:54  
Client ID: OA-1 Date Received: 05/15/14  
Sample Location: 542 W29 STREET, NY, NY Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
<b>Volatile Organics in Air - Mansfield Lab</b>							
n-Hexane	0.461	0.200	--	1.62	0.705	--	1
Benzene	0.525	0.200	--	1.68	0.639	--	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
2,2,4-Trimethylpentane	0.350	0.200	--	1.63	0.934	--	1
Heptane	0.212	0.200	--	0.869	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.200	--	ND	0.820	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	0.949	0.200	--	3.58	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
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	0.521	0.400	--	2.26	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
o-Xylene	0.206	0.200	--	0.895	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	0.209	0.200	--	1.03	0.983	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-07	Date Collected:	05/14/14 14:54
Client ID:	OA-1	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab</b>							
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

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	98		60-140

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### **SAMPLE RESULTS**

Lab ID:	L1410518-07	Date Collected:	05/14/14 14:54
Client ID:	OA-1	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Air		
Anaytical Method:	48,TO-15-SIM		
Analytical Date:	05/24/14 18:58		
Analyst:	RY		

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	0.067	0.020	--	0.266	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.066	0.020	--	0.415	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.120	0.020	--	0.814	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	95		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	99		60-140



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM  
Analytical Date: 05/24/14 13:43

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04-05,07 Batch: WG692306-4</b>							
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--	1
Chloromethane	ND	0.500	--	ND	1.03	--	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--	1
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,3-Butadiene	ND	0.020	--	ND	0.044	--	1
Bromomethane	ND	0.020	--	ND	0.078	--	1
Chloroethane	ND	0.020	--	ND	0.053	--	1
Acetone	ND	2.00	--	ND	4.75	--	1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--	1
Acrylonitrile	ND	0.500	--	ND	1.09	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Methylene chloride	ND	1.00	--	ND	3.47	--	1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--	1
Halothane	ND	0.050	--	ND	0.404	--	1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--	1
2-Butanone	ND	0.500	--	ND	1.47	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Chloroform	ND	0.020	--	ND	0.098	--	1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Benzene	ND	0.100	--	ND	0.319	--	1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--	1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--	1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM  
Analytical Date: 05/24/14 13:43

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04-05,07 Batch: WG692306-4</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	0.020	--	ND	0.092	--	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	0.500	--	ND	2.46	--	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
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15-SIM  
Analytical Date: 05/24/14 13:43

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 04-05,07 Batch: WG692306-4</b>							
sec-Butylbenzene	ND	0.500	--	ND	2.74	--	1
p-Isopropyltoluene	ND	0.500	--	ND	2.74	--	1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
n-Butylbenzene	ND	0.500	--	ND	2.74	--	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



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 48,TO-15  
Analytical Date: 05/24/14 13:11

<b>Parameter</b>	<b>ppbV</b>			<b>ug/m3</b>			<b>Dilution Factor</b>
	<b>Results</b>	<b>RL</b>	<b>MDL</b>	<b>Results</b>	<b>RL</b>	<b>MDL</b>	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-05,07 Batch: WG692307-4</b>							
Propylene	ND	0.500	--	ND	0.861	--	1
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	2.50	--	ND	4.71	--	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	1.00	--	ND	3.47	--	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	0.200	--	ND	0.704	--	1
2-Butanone	ND	0.200	--	ND	0.590	--	1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1



Project Name: GOTHAM

Lab Number: L1410518

Project Number: SSH1401

Report Date: 05/27/14

## Method Blank Analysis

### Batch Quality Control

Analytical Method: 48,TO-15  
 Analytical Date: 05/24/14 13:11

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-05,07 Batch: WG692307-4</b>							
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1
Tetrahydrofuran	ND	0.200	--	ND	0.590	--	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	0.200	--	ND	0.820	--	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



Project Name: GOTHAM

Lab Number: L1410518

Project Number: SSH1401

Report Date: 05/27/14

## Method Blank Analysis

### Batch Quality Control

Analytical Method: 48,TO-15  
 Analytical Date: 05/24/14 13:11

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
<b>Volatile Organics in Air - Mansfield Lab for sample(s): 01-05,07 Batch: WG692307-4</b>							
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
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

	Results	Qualifier	Units	RDL	Dilution Factor
<b>Tentatively Identified Compounds</b>					
No Tentatively Identified Compounds					



# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05,07 Batch: WG692306-3								
Dichlorodifluoromethane	110		-		70-130	-		25
Chloromethane	95		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	110		-		70-130	-		25
Vinyl chloride	101		-		70-130	-		25
1,3-Butadiene	99		-		70-130	-		25
Bromomethane	108		-		70-130	-		25
Chloroethane	101		-		70-130	-		25
Acetone	98		-		70-130	-		25
Trichlorofluoromethane	111		-		70-130	-		25
Acrylonitrile	91		-		70-130	-		25
1,1-Dichloroethene	101		-		70-130	-		25
Methylene chloride	104		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	113		-		70-130	-		25
Halothane	118		-		70-130	-		25
trans-1,2-Dichloroethene	94		-		70-130	-		25
1,1-Dichloroethane	109		-		70-130	-		25
Methyl tert butyl ether	95		-		70-130	-		25
2-Butanone	86		-		70-130	-		25
cis-1,2-Dichloroethene	111		-		70-130	-		25
Chloroform	110		-		70-130	-		25
1,2-Dichloroethane	104		-		70-130	-		25

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05,07 Batch: WG692306-3								
1,1,1-Trichloroethane	98		-		70-130	-		25
Benzene	91		-		70-130	-		25
Carbon tetrachloride	98		-		70-130	-		25
1,2-Dichloropropane	94		-		70-130	-		25
Bromodichloromethane	90		-		70-130	-		25
1,4-Dioxane	77		-		70-130	-		25
Trichloroethene	100		-		70-130	-		25
cis-1,3-Dichloropropene	97		-		70-130	-		25
4-Methyl-2-pentanone	88		-		70-130	-		25
trans-1,3-Dichloropropene	82		-		70-130	-		25
1,1,2-Trichloroethane	102		-		70-130	-		25
Toluene	99		-		70-130	-		25
Dibromochloromethane	92		-		70-130	-		25
1,2-Dibromoethane	107		-		70-130	-		25
Tetrachloroethene	106		-		70-130	-		25
1,1,1,2-Tetrachloroethane	96		-		70-130	-		25
Chlorobenzene	105		-		70-130	-		25
Ethylbenzene	103		-		70-130	-		25
p/m-Xylene	104		-		70-130	-		25
Bromoform	85		-		70-130	-		25
Styrene	107		-		70-130	-		25

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05,07 Batch: WG692306-3								
1,1,2,2-Tetrachloroethane	110		-		70-130	-		25
o-Xylene	105		-		70-130	-		25
Isopropylbenzene	102		-		70-130	-		25
4-Ethyltoluene	96		-		70-130	-		25
1,3,5-Trimethylbenzene	104		-		70-130	-		25
1,2,4-Trimethylbenzene	110		-		70-130	-		25
1,3-Dichlorobenzene	117		-		70-130	-		25
1,4-Dichlorobenzene	112		-		70-130	-		25
sec-Butylbenzene	103		-		70-130	-		25
p-Isopropyltoluene	97		-		70-130	-		25
1,2-Dichlorobenzene	116		-		70-130	-		25
n-Butylbenzene	107		-		70-130	-		25
1,2,4-Trichlorobenzene	124		-		70-130	-		25
Naphthalene	111		-		70-130	-		25
1,2,3-Trichlorobenzene	113		-		70-130	-		25
Hexachlorobutadiene	116		-		70-130	-		25

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 Batch: WG692307-3								
Chlorodifluoromethane	100		-		70-130	-		
Propylene	107		-		70-130	-		
Propane	88		-		70-130	-		
Dichlorodifluoromethane	106		-		70-130	-		
Chloromethane	103		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	122		-		70-130	-		
Methanol	83		-		70-130	-		
Vinyl chloride	108		-		70-130	-		
1,3-Butadiene	105		-		70-130	-		
Butane	95		-		70-130	-		
Bromomethane	109		-		70-130	-		
Chloroethane	107		-		70-130	-		
Ethyl Alcohol	92		-		70-130	-		
Dichlorofluoromethane	101		-		70-130	-		
Vinyl bromide	111		-		70-130	-		
Acrolein	84		-		70-130	-		
Acetone	109		-		70-130	-		
Acetonitrile	92		-		70-130	-		
Trichlorofluoromethane	121		-		70-130	-		
iso-Propyl Alcohol	99		-		70-130	-		
Acrylonitrile	93		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 Batch: WG692307-3								
Pentane	93		-		70-130	-		
Ethyl ether	91		-		70-130	-		
1,1-Dichloroethene	108		-		70-130	-		
tert-Butyl Alcohol	96		-		70-130	-		
Methylene chloride	109		-		70-130	-		
3-Chloropropene	103		-		70-130	-		
Carbon disulfide	101		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	123		-		70-130	-		
trans-1,2-Dichloroethene	98		-		70-130	-		
1,1-Dichloroethane	107		-		70-130	-		
Methyl tert butyl ether	99		-		70-130	-		
Vinyl acetate	105		-		70-130	-		
2-Butanone	91		-		70-130	-		
cis-1,2-Dichloroethene	120		-		70-130	-		
Ethyl Acetate	105		-		70-130	-		
Chloroform	117		-		70-130	-		
Tetrahydrofuran	93		-		70-130	-		
2,2-Dichloropropane	95		-		70-130	-		
1,2-Dichloroethane	113		-		70-130	-		
n-Hexane	79		-		70-130	-		
Isopropyl Ether	81		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 Batch: WG692307-3								
Ethyl-Tert-Butyl-Ether	75		-		70-130	-		
1,1,1-Trichloroethane	91		-		70-130	-		
1,1-Dichloropropene	82		-		70-130	-		
Benzene	86		-		70-130	-		
Carbon tetrachloride	91		-		70-130	-		
Cyclohexane	79		-		70-130	-		
Tertiary-Amyl Methyl Ether	74		-		70-130	-		
Dibromomethane	86		-		70-130	-		
1,2-Dichloropropane	90		-		70-130	-		
Bromodichloromethane	85		-		70-130	-		
1,4-Dioxane	81		-		70-130	-		
Trichloroethene	96		-		70-130	-		
2,2,4-Trimethylpentane	81		-		70-130	-		
Methyl methacrylate	74		-		70-130	-		
Heptane	76		-		70-130	-		
cis-1,3-Dichloropropene	90		-		70-130	-		
4-Methyl-2-pentanone	76		-		70-130	-		
trans-1,3-Dichloropropene	77		-		70-130	-		
1,1,2-Trichloroethane	95		-		70-130	-		
Toluene	97		-		70-130	-		
1,3-Dichloropropane	92		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 Batch: WG692307-3								
2-Hexanone	87		-		70-130	-		
Dibromochloromethane	91		-		70-130	-		
1,2-Dibromoethane	103		-		70-130	-		
Butyl Acetate	86		-		70-130	-		
Octane	88		-		70-130	-		
Tetrachloroethene	103		-		70-130	-		
1,1,1,2-Tetrachloroethane	93		-		70-130	-		
Chlorobenzene	103		-		70-130	-		
Ethylbenzene	100		-		70-130	-		
p/m-Xylene	99		-		70-130	-		
Bromoform	84		-		70-130	-		
Styrene	100		-		70-130	-		
1,1,2,2-Tetrachloroethane	104		-		70-130	-		
o-Xylene	102		-		70-130	-		
1,2,3-Trichloropropane	92		-		70-130	-		
Nonane (C9)	85		-		70-130	-		
Isopropylbenzene	96		-		70-130	-		
Bromobenzene	91		-		70-130	-		
o-Chlorotoluene	95		-		70-130	-		
n-Propylbenzene	98		-		70-130	-		
p-Chlorotoluene	92		-		70-130	-		

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 Batch: WG692307-3								
4-Ethyltoluene	88		-		70-130	-		
1,3,5-Trimethylbenzene	102		-		70-130	-		
tert-Butylbenzene	97		-		70-130	-		
1,2,4-Trimethylbenzene	104		-		70-130	-		
Decane (C10)	91		-		70-130	-		
Benzyl chloride	71		-		70-130	-		
1,3-Dichlorobenzene	109		-		70-130	-		
1,4-Dichlorobenzene	109		-		70-130	-		
sec-Butylbenzene	97		-		70-130	-		
p-Isopropyltoluene	91		-		70-130	-		
1,2-Dichlorobenzene	107		-		70-130	-		
n-Butylbenzene	99		-		70-130	-		
1,2-Dibromo-3-chloropropane	91		-		70-130	-		
Undecane	95		-		70-130	-		
Dodecane (C12)	107		-		70-130	-		
1,2,4-Trichlorobenzene	113		-		70-130	-		
Naphthalene	102		-		70-130	-		
1,2,3-Trichlorobenzene	101		-		70-130	-		
Hexachlorobutadiene	106		-		70-130	-		

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 04-05,07 QC Batch ID: WG692306-5 QC Sample: L1410518-04 Client ID: IA-1						
Vinyl chloride	0.034	0.036	ppbV	6		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	0.050	0.051	ppbV	2		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.074	0.076	ppbV	3		25
Trichloroethene	0.133	0.131	ppbV	2		25
Tetrachloroethene	0.394	0.406	ppbV	3		25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 QC Batch ID: WG692307-5 QC Sample: L1410670-01 Client ID: DUP Sample					
Propylene	1.94	1.73	ppbV	11	25
Dichlorodifluoromethane	ND	ND	ppbV	NC	25
Chloromethane	1.19	1.13	ppbV	5	25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC	25
Vinyl chloride	ND	ND	ppbV	NC	25
1,3-Butadiene	ND	ND	ppbV	NC	25
Bromomethane	ND	ND	ppbV	NC	25
Chloroethane	ND	ND	ppbV	NC	25
Ethyl Alcohol	105	97.6	ppbV	7	25
Vinyl bromide	ND	ND	ppbV	NC	25
Acetone	21.4	19.7	ppbV	8	25
Trichlorofluoromethane	ND	ND	ppbV	NC	25
iso-Propyl Alcohol	12.4	11.6	ppbV	7	25
1,1-Dichloroethene	ND	ND	ppbV	NC	25
Methylene chloride	ND	ND	ppbV	NC	25
3-Chloropropene	ND	ND	ppbV	NC	25
Carbon disulfide	0.615	0.605	ppbV	2	25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC	25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC	25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 QC Batch ID: WG692307-5 QC Sample: L1410670-01 Client ID: DUP Sample					
1,1-Dichloroethane	ND	ND	ppbV	NC	25
Methyl tert butyl ether	ND	ND	ppbV	NC	25
Vinyl acetate	ND	ND	ppbV	NC	25
2-Butanone	0.726	0.736	ppbV	1	25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC	25
Ethyl Acetate	ND	ND	ppbV	NC	25
Chloroform	0.955	0.790	ppbV	19	25
Tetrahydrofuran	ND	ND	ppbV	NC	25
1,2-Dichloroethane	ND	ND	ppbV	NC	25
n-Hexane	1.14	1.06	ppbV	7	25
1,1,1-Trichloroethane	ND	ND	ppbV	NC	25
Benzene	2.01	1.90	ppbV	6	25
Carbon tetrachloride	ND	ND	ppbV	NC	25
Cyclohexane	ND	ND	ppbV	NC	25
1,2-Dichloropropane	ND	ND	ppbV	NC	25
Bromodichloromethane	ND	ND	ppbV	NC	25
1,4-Dioxane	ND	ND	ppbV	NC	25
Trichloroethene	ND	ND	ppbV	NC	25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC	25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 QC Batch ID: WG692307-5 QC Sample: L1410670-01 Client ID: DUP Sample					
Heptane	1.29	1.22	ppbV	6	25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC	25
4-Methyl-2-pentanone	ND	ND	ppbV	NC	25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC	25
1,1,2-Trichloroethane	ND	ND	ppbV	NC	25
Toluene	4.96	4.81	ppbV	3	25
2-Hexanone	ND	ND	ppbV	NC	25
Dibromochloromethane	ND	ND	ppbV	NC	25
1,2-Dibromoethane	ND	ND	ppbV	NC	25
Tetrachloroethene	3.79	3.79	ppbV	0	25
Chlorobenzene	ND	ND	ppbV	NC	25
Ethylbenzene	0.932	0.916	ppbV	2	25
p/m-Xylene	3.60	3.40	ppbV	6	25
Bromoform	ND	ND	ppbV	NC	25
Styrene	ND	ND	ppbV	NC	25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC	25
o-Xylene	1.24	1.18	ppbV	5	25
4-Ethyltoluene	ND	ND	ppbV	NC	25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC	25

**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05,07 QC Batch ID: WG692307-5 QC Sample: L1410670-01 Client ID: DUP Sample					
1,2,4-Trimethylbenzene	1.87	1.78	ppbV	5	25
Benzyl chloride	ND	ND	ppbV	NC	25
1,3-Dichlorobenzene	ND	ND	ppbV	NC	25
1,4-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2-Dichlorobenzene	ND	ND	ppbV	NC	25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC	25
Hexachlorobutadiene	ND	ND	ppbV	NC	25

Project Name: GOTHAM

Serial\_No:05271415:35

Project Number: SSH1401

Lab Number: L1410518

Report Date: 05/27/14

**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
L1410518-01	SS-1	1722	2.7L Can	05/14/14	102622	L1410129-01	Pass	-29.4	-0.2	-	-	-	-
L1410518-02	SS-2	482	2.7L Can	05/14/14	102622	L1410129-01	Pass	-29.8	-3.2	-	-	-	-
L1410518-03	SS-3	244	2.7L Can	05/14/14	102622	L1410129-01	Pass	-29.9	-2.9	-	-	-	-
L1410518-04	IA-1	116	2.7L Can	05/14/14	102622	L1410129-01	Pass	-28.0	-3.9	-	-	-	-
L1410518-05	IA-2	552	2.7L Can	05/14/14	102622	L1410129-01	Pass	-29.7	-6.2	-	-	-	-
L1410518-06	IA-3	259	2.7L Can	05/14/14	102622	L1410129-01	Pass	-29.8	-29.0	-	-	-	-
L1410518-07	OA-1	236	2.7L Can	05/14/14	102622	L1409729-01	Pass	-29.8	-3.8	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1409729

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
 Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
 Sample Location: Field Prep: Not Specified  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/07/14 20:23  
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
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
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1409729

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
 Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Methylene chloride	ND	1.00	--	ND	3.47	--	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	0.200	--	ND	0.704	--	1
2-Butanone	ND	0.200	--	ND	0.590	--	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	0.200	--	ND	0.590	--	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
1,1,1-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
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



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1409729

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
 Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
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	0.200	--	ND	0.820	--	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
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



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1409729

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
 Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
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

Results	Qualifier	Units	RDL	Dilution Factor
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Tentatively Identified Compounds

No Tentatively Identified Compounds



**Project Name:** BATCH CANISTER CERTIFICATION  
**Project Number:** CANISTER QC BAT

Serial\_No:05271415:35

**Lab Number:** L1409729  
**Report Date:** 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	107		60-140
chlorobenzene-d5	100		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1409729

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
 Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
 Sample Location: Field Prep: Not Specified  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/07/14 20:23  
 Analyst: MB

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--	1
Chloromethane	ND	0.500	--	ND	1.03	--	1
Freon-114	ND	0.050	--	ND	0.349	--	1
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,3-Butadiene	ND	0.020	--	ND	0.044	--	1
Bromomethane	ND	0.020	--	ND	0.078	--	1
Chloroethane	ND	0.020	--	ND	0.053	--	1
Acetone	ND	2.00	--	ND	4.75	--	1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--	1
Acrylonitrile	ND	0.500	--	ND	1.09	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Methylene chloride	ND	1.00	--	ND	3.47	--	1
Freon-113	ND	0.050	--	ND	0.383	--	1
Halothane	ND	0.050	--	ND	0.404	--	1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--	1
2-Butanone	ND	0.500	--	ND	1.47	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Chloroform	ND	0.020	--	ND	0.098	--	1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Benzene	ND	0.100	--	ND	0.319	--	1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--	1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1409729

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
 Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
Bromodichloromethane	ND	0.020	--	0.134	--		1
1,4-Dioxane	ND	0.100	--	0.360	--		1
Trichloroethene	ND	0.020	--	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	0.109	--		1
Toluene	ND	0.050	--	0.188	--		1
Dibromochloromethane	ND	0.020	--	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	0.154	--		1
Tetrachloroethene	ND	0.020	--	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
Chlorobenzene	ND	0.020	--	0.092	--		1
Ethylbenzene	ND	0.020	--	0.087	--		1
p/m-Xylene	ND	0.040	--	0.174	--		1
Bromoform	ND	0.020	--	0.207	--		1
Styrene	ND	0.020	--	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
o-Xylene	ND	0.020	--	0.087	--		1
Isopropylbenzene	ND	0.500	--	2.46	--		1
4-Ethyltoluene	ND	0.020	--	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	0.120	--		1
sec-Butylbenzene	ND	0.500	--	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1409729

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1409729-01 Date Collected: 05/06/14 20:47  
 Client ID: CAN 492 SHELF 9 Date Received: 05/07/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
n-Butylbenzene	ND	0.500	--	ND	2.74	--	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	97		60-140
bromochloromethane	106		60-140
chlorobenzene-d5	101		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified  
 Matrix: Air  
 Analytical Method: 48,TO-15  
 Analytical Date: 05/13/14 11:35  
 Analyst: MB

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
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
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.200	--	ND	0.434	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
Methylene chloride	ND	1.00	--	ND	3.47	--	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	0.200	--	ND	0.704	--	1
2-Butanone	ND	0.200	--	ND	0.590	--	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	0.200	--	ND	0.590	--	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
1,1,1-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
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



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

**Air Canister Certification Results**

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>							
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	0.200	--	ND	0.820	--	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
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



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
<b>Volatile Organics in Air - Mansfield Lab</b>								
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

Results	Qualifier	Units	RDL	Dilution Factor
---------	-----------	-------	-----	-----------------

Tentatively Identified Compounds

No Tentatively Identified Compounds



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab							

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	112		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified  
 Matrix: Air  
 Analytical Method: 48,TO-15-SIM  
 Analytical Date: 05/13/14 11:35  
 Analyst: MB

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
Dichlorodifluoromethane	ND	0.050	--	ND	0.247	--	1
Chloromethane	ND	0.500	--	ND	1.03	--	1
Freon-114	ND	0.050	--	ND	0.349	--	1
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,3-Butadiene	ND	0.020	--	ND	0.044	--	1
Bromomethane	ND	0.020	--	ND	0.078	--	1
Chloroethane	ND	0.020	--	ND	0.053	--	1
Acetone	ND	2.00	--	ND	4.75	--	1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--	1
Acrylonitrile	ND	0.500	--	ND	1.09	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Methylene chloride	ND	1.00	--	ND	3.47	--	1
Freon-113	ND	0.050	--	ND	0.383	--	1
Halothane	ND	0.050	--	ND	0.404	--	1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--	1
Methyl tert butyl ether	ND	0.020	--	ND	0.072	--	1
2-Butanone	ND	0.500	--	ND	1.47	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
Chloroform	ND	0.020	--	ND	0.098	--	1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Benzene	ND	0.100	--	ND	0.319	--	1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--	1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

**Air Canister Certification Results**

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
Bromodichloromethane	ND	0.020	--	0.134	--		1
1,4-Dioxane	ND	0.100	--	0.360	--		1
Trichloroethene	ND	0.020	--	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	0.109	--		1
Toluene	ND	0.050	--	0.188	--		1
Dibromochloromethane	ND	0.020	--	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	0.154	--		1
Tetrachloroethene	ND	0.020	--	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
Chlorobenzene	ND	0.020	--	0.092	--		1
Ethylbenzene	ND	0.020	--	0.087	--		1
p/m-Xylene	ND	0.040	--	0.174	--		1
Bromoform	ND	0.020	--	0.207	--		1
Styrene	ND	0.020	--	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	0.137	--		1
o-Xylene	ND	0.020	--	0.087	--		1
Isopropylbenzene	ND	0.500	--	2.46	--		1
4-Ethyltoluene	ND	0.020	--	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	0.098	--		1
1,3-Dichlorobenzene	ND	0.020	--	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	0.120	--		1
sec-Butylbenzene	ND	0.500	--	2.74	--		1
p-Isopropyltoluene	ND	0.500	--	2.74	--		1
1,2-Dichlorobenzene	ND	0.020	--	0.120	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L1410129

Project Number: CANISTER QC BAT

Report Date: 05/27/14

## Air Canister Certification Results

Lab ID: L1410129-01 Date Collected: 05/12/14 21:21  
 Client ID: CAN 494 SHELF 1 Date Received: 05/13/14  
 Sample Location: Field Prep: Not Specified

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
<b>Volatile Organics in Air by SIM - Mansfield Lab</b>							
n-Butylbenzene	ND	0.500	--	ND	2.74	--	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	113		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	96		60-140

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** NA

#### **Cooler Information Custody Seal**

##### **Cooler**

N/A Present/Intact

#### **Container Information**

<b>Container ID</b>	<b>Container Type</b>	<b>Cooler</b>	<b>pH</b>	<b>Temp deg C</b>	<b>Pres</b>	<b>Seal</b>	<b>Analysis(*)</b>
L1410518-01A	Canister - 2.7 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1410518-02A	Canister - 2.7 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1410518-03A	Canister - 2.7 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30)
L1410518-04A	Canister - 2.7 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30),TO15-SIM(30)
L1410518-05A	Canister - 2.7 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30),TO15-SIM(30)
L1410518-06A	Canister - 2.7 Liter	N/A	N/A		Y	Present/Intact	CANCELLED()
L1410518-07A	Canister - 2.7 Liter	N/A	N/A		Y	Present/Intact	TO15-LL(30),TO15-SIM(30)

\*Values in parentheses indicate holding time in days

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

## GLOSSARY

### **Acronyms**

- 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).
- 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.
- 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.
- 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.
- NI - Not Ignitable.
- 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.

### **Footnotes**

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

### **Terms**

**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.

**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.

### **Data Qualifiers**

- A** - Spectra identified as "Aldol Condensation Product".
- 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.
- 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.

**Report Format:** Data Usability Report



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

**Data Qualifiers**

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

*Report Format:* Data Usability Report



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410518  
**Report Date:** 05/27/14

## 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**

Last revised April 15, 2014

**The following analytes are not included in our NELAP Scope of Accreditation:****Westborough Facility****EPA 524.2:** Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.**EPA 8260C:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.**EPA 8330A/B:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.**EPA 8270D:** 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 625:** 4-Chloroaniline, 4-Methylphenol.**SM4500:** Soil: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.**Mansfield Facility****EPA 8270D:** Biphenyl.**EPA 2540D:** TSS**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.**The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:****Drinking Water****EPA 200.8:** Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7:** Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;**EPA 300.0:** 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****EPA 332:** Perchlorate.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.****Non-Potable Water****EPA 200.8:** Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;**EPA 200.7:** Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;**EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC,****SM426C, SM4500NH3-BH, EPA 350.1:** Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **SM4500NO3-F,****EPA 353.2:** Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4,****SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

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
PAGE 1 OF 1**Client Information**

Client: PW Grosser

 Address: 630 Johnson Ave.  
 Bohemia, NY 11716  
 Phone: (631) 589-6353

Fax: Thomas M

Email: ~~████████~~ @PWGrosser.com These samples have been previously analyzed by Alpha**Project Information**

Project Name: Gotham

Project Location: 542 W 29 street  
NY, NY

Project #: SSH 1401

Project Manager: Tom Melia

ALPHA Quote #:

**Turn-Around Time** Standard RUSH (only confirmed if pre-approved!)

Date Due:

Time:

Date Rec'd in Lab:

ALPHA Job #: L1410518

**Report Information - Data Deliverables** FAX ADEx

Criteria Checker:

(Default based on Regulatory Criteria Indicated)

Other Formats:

 EMAIL (standard pdf report) Additional Deliverables:

Report to: (if different than Project Manager)

**Billing Information** Same as Client Info PO #:**Regulatory Requirements/Report Limits**

State/Fed      Program      Criteria

**ANALYSIS**
 TO-14 by TO-15  
 TO-15 SIM  
 APH  
 FIXED GASES  
 TO-13A  
 TO-4 / TO-10

Sample Comments (i.e. PID)

**All Columns Below Must Be Filled Out**

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection				Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-14 by TO-15	TO-15 SIM	APH	FIXED GASES	TO-13A	TO-4 / TO-10	Sample Comments (i.e. PID)
		Date	Start Time	End Time	Initial Vacuum												
16518-01	SS-1	5/14/14	1254	1454			SV JE	1722			X						
	02	SS-2					SV JE	244			X						
	03	SS-3					SV JE	482			X						
	04	IA-1					AA JE	116			X						
	05	IA-2					AA JE	552			X						
	06	IA-3					AA JE	259			X						
	07	OA-1					AA JE	236			X						

**\*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. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS &amp; CONDITIONS. (See reverse side.)

Relinquished By:

Date/Time:

Received By:

Date/Time:

 5-15-14 1145   
 5-15-14 1850   
 5-15-14 1145   
 5-15-14 1850



## ANALYTICAL REPORT

Lab Number:	L1410502
Client:	P. W. Grosser 630 Johnson Avenue Suite 7 Bohemia, NY 11716
ATTN:	Thomas Melia
Phone:	(631) 589-6353
Project Name:	GOTHAM
Project Number:	SSH1401
Report Date:	05/22/14

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), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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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:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1410502-01	SB-1 (6-8)	542 W29 STREET, NY, NY	05/14/14 13:25
L1410502-02	SB-2 (1.5-3.5)	542 W29 STREET, NY, NY	05/14/14 13:55
L1410502-03	SB-4 (6-8)	542 W29 STREET, NY, NY	05/14/14 15:40
L1410502-04	SB-5 (6-8)	542 W29 STREET, NY, NY	05/14/14 16:00
L1410502-05	SB-1 (GW)	542 W29 STREET, NY, NY	05/14/14 13:15
L1410502-06	SB-4 (GW)	542 W29 STREET, NY, NY	05/14/14 15:50
L1410502-07	SB-5 (GW)	542 W29 STREET, NY, NY	05/14/14 16:10

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### 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 all of the requirements of NELAC, for all NELAC accredited parameters. 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. 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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated 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.

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 table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEX data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### 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 Client Service Representative 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 Client Services at 800-624-9220 with any questions.

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### 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

L1410502-02: The internal standard (IS) response for 1,4-dichlorobenzene-d4 (41%) was below the acceptance criteria; however, re-analysis achieved a similar result for 1,4-dichlorobenzene-d4 (41%). The results of both analyses are reported.

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:

 Lisa Westerlind

Title: Technical Director/Representative

Date: 05/22/14

# ORGANICS

# VOLATILES



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-01	Date Collected:	05/14/14 13:25
Client ID:	SB-1 (6-8)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	05/19/14 17:11		
Analyst:	BN		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	2.8	J	ug/kg	12	2.5	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.22	1
Chloroform	ND		ug/kg	1.8	0.46	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	4.3	0.28	1
Dibromochloromethane	ND		ug/kg	1.2	0.38	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.37	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.43	1
Trichlorofluoromethane	ND		ug/kg	6.2	0.15	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.18	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.14	1
Bromodichloromethane	ND		ug/kg	1.2	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.16	1
1,1-Dichloropropene	ND		ug/kg	6.2	0.56	1
Bromoform	ND		ug/kg	4.9	0.51	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.21	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.14	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	6.2	0.96	1
Bromomethane	ND		ug/kg	2.5	0.42	1
Vinyl chloride	ND		ug/kg	2.5	0.17	1
Chloroethane	ND		ug/kg	2.5	0.39	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.26	1
Trichloroethene	ND		ug/kg	1.2	0.19	1
1,2-Dichlorobenzene	ND		ug/kg	6.2	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	6.2	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	6.2	0.30	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-01		Date Collected:	05/14/14 13:25		
Client ID:	SB-1 (6-8)		Date Received:	05/15/14		
Sample Location:	542 W29 STREET, NY, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.5	0.13	1
p/m-Xylene	ND		ug/kg	2.5	0.40	1
o-Xylene	ND		ug/kg	2.5	0.33	1
Xylene (Total)	ND		ug/kg	2.5	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.18	1
Dibromomethane	ND		ug/kg	12	0.20	1
Styrene	ND		ug/kg	2.5	0.38	1
Dichlorodifluoromethane	ND		ug/kg	12	0.27	1
Acetone	11	J	ug/kg	12	3.8	1
Carbon disulfide	ND		ug/kg	12	2.5	1
2-Butanone	ND		ug/kg	12	0.44	1
Vinyl acetate	ND		ug/kg	12	0.59	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.30	1
1,2,3-Trichloropropane	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.23	1
Bromochloromethane	ND		ug/kg	6.2	0.24	1
2,2-Dichloropropane	ND		ug/kg	6.2	0.28	1
1,2-Dibromoethane	ND		ug/kg	4.9	0.22	1
1,3-Dichloropropane	ND		ug/kg	6.2	0.21	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.2	0.39	1
Bromobenzene	ND		ug/kg	6.2	0.26	1
n-Butylbenzene	ND		ug/kg	1.2	0.24	1
sec-Butylbenzene	ND		ug/kg	1.2	0.25	1
tert-Butylbenzene	ND		ug/kg	6.2	0.69	1
o-Chlorotoluene	ND		ug/kg	6.2	0.20	1
p-Chlorotoluene	ND		ug/kg	6.2	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.2	0.97	1
Hexachlorobutadiene	ND		ug/kg	6.2	0.52	1
Isopropylbenzene	ND		ug/kg	1.2	0.21	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.24	1
Naphthalene	ND		ug/kg	6.2	0.95	1
Acrylonitrile	ND		ug/kg	12	0.29	1
n-Propylbenzene	ND		ug/kg	1.2	0.15	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.2	0.21	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.2	0.97	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.2	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.2	0.70	1
1,4-Dioxane	ND		ug/kg	120	21.	1
1,4-Diethylbenzene	ND		ug/kg	4.9	0.20	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-01	Date Collected:	05/14/14 13:25
Client ID:	SB-1 (6-8)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
4-Ethyltoluene	ND		ug/kg	4.9	0.14	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.9	0.16	1
Ethyl ether	ND		ug/kg	6.2	0.33	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.2	0.55	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	97		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-02	Date Collected:	05/14/14 13:55
Client ID:	SB-2 (1.5-3.5)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	05/19/14 17:38		
Analyst:	BN		
Percent Solids:	89%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	3.2	J	ug/kg	13	2.7	1
1,1-Dichloroethane	ND		ug/kg	2.0	0.24	1
Chloroform	ND		ug/kg	2.0	0.49	1
Carbon tetrachloride	ND		ug/kg	1.3	0.28	1
1,2-Dichloropropane	ND		ug/kg	4.7	0.30	1
Dibromochloromethane	ND		ug/kg	1.3	0.41	1
1,1,2-Trichloroethane	ND		ug/kg	2.0	0.40	1
Tetrachloroethene	ND		ug/kg	1.3	0.19	1
Chlorobenzene	ND		ug/kg	1.3	0.46	1
Trichlorofluoromethane	7.1		ug/kg	6.7	0.16	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.19	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	0.15	1
Bromodichloromethane	ND		ug/kg	1.3	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.16	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	0.17	1
1,1-Dichloropropene	ND		ug/kg	6.7	0.61	1
Bromoform	ND		ug/kg	5.3	0.55	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	0.23	1
Benzene	ND		ug/kg	1.3	0.16	1
Toluene	ND		ug/kg	2.0	0.15	1
Ethylbenzene	ND		ug/kg	1.3	0.20	1
Chloromethane	ND		ug/kg	6.7	1.0	1
Bromomethane	ND		ug/kg	2.7	0.45	1
Vinyl chloride	ND		ug/kg	2.7	0.19	1
Chloroethane	ND		ug/kg	2.7	0.42	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.28	1
Trichloroethene	ND		ug/kg	1.3	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	6.7	0.24	1
1,3-Dichlorobenzene	ND		ug/kg	6.7	0.24	1
1,4-Dichlorobenzene	ND		ug/kg	6.7	0.32	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-02		Date Collected:	05/14/14 13:55		
Client ID:	SB-2 (1.5-3.5)		Date Received:	05/15/14		
Sample Location:	542 W29 STREET, NY, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.7	0.14	1
p/m-Xylene	ND		ug/kg	2.7	0.43	1
o-Xylene	ND		ug/kg	2.7	0.36	1
Xylene (Total)	ND		ug/kg	2.7	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.20	1
Dibromomethane	ND		ug/kg	13	0.22	1
Styrene	ND		ug/kg	2.7	0.41	1
Dichlorodifluoromethane	130		ug/kg	13	0.29	1
Acetone	74		ug/kg	13	4.1	1
Carbon disulfide	ND		ug/kg	13	2.7	1
2-Butanone	3.6	J	ug/kg	13	0.47	1
Vinyl acetate	ND		ug/kg	13	0.64	1
4-Methyl-2-pentanone	ND		ug/kg	13	0.32	1
1,2,3-Trichloropropane	ND		ug/kg	13	0.30	1
2-Hexanone	ND		ug/kg	13	0.25	1
Bromochloromethane	ND		ug/kg	6.7	0.26	1
2,2-Dichloropropane	ND		ug/kg	6.7	0.30	1
1,2-Dibromoethane	ND		ug/kg	5.3	0.24	1
1,3-Dichloropropane	ND		ug/kg	6.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.3	0.42	1
Bromobenzene	ND		ug/kg	6.7	0.28	1
n-Butylbenzene	ND		ug/kg	1.3	0.26	1
sec-Butylbenzene	ND		ug/kg	1.3	0.27	1
tert-Butylbenzene	ND		ug/kg	6.7	0.75	1
o-Chlorotoluene	ND		ug/kg	6.7	0.21	1
p-Chlorotoluene	ND		ug/kg	6.7	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.7	1.0	1
Hexachlorobutadiene	ND		ug/kg	6.7	0.56	1
Isopropylbenzene	ND		ug/kg	1.3	0.22	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.25	1
Naphthalene	ND		ug/kg	6.7	1.0	1
Acrylonitrile	ND		ug/kg	13	0.32	1
n-Propylbenzene	ND		ug/kg	1.3	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.7	0.22	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.7	1.0	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.7	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.7	0.76	1
1,4-Dioxane	ND		ug/kg	130	23.	1
1,4-Diethylbenzene	ND		ug/kg	5.3	0.21	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-02	Date Collected:	05/14/14 13:55
Client ID:	SB-2 (1.5-3.5)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
4-Ethyltoluene	ND		ug/kg	5.3	0.16	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	5.3	0.17	1
Ethyl ether	ND		ug/kg	6.7	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.7	0.60	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	112		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	92		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-02	R	Date Collected:	05/14/14 13:55
Client ID:	SB-2 (1.5-3.5)		Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY		Field Prep:	Not Specified
Matrix:	Soil			
Analytical Method:	1,8260C			
Analytical Date:	05/20/14 15:10			
Analyst:	BN			
Percent Solids:	89%			

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	3.8	J	ug/kg	13	2.7	1
1,1-Dichloroethane	ND		ug/kg	2.0	0.24	1
Chloroform	ND		ug/kg	2.0	0.49	1
Carbon tetrachloride	ND		ug/kg	1.3	0.28	1
1,2-Dichloropropane	ND		ug/kg	4.7	0.30	1
Dibromochloromethane	ND		ug/kg	1.3	0.41	1
1,1,2-Trichloroethane	ND		ug/kg	2.0	0.40	1
Tetrachloroethene	ND		ug/kg	1.3	0.19	1
Chlorobenzene	ND		ug/kg	1.3	0.46	1
Trichlorofluoromethane	8.1		ug/kg	6.7	0.16	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.19	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	0.15	1
Bromodichloromethane	ND		ug/kg	1.3	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.16	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	0.17	1
1,1-Dichloropropene	ND		ug/kg	6.7	0.61	1
Bromoform	ND		ug/kg	5.3	0.55	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	0.23	1
Benzene	ND		ug/kg	1.3	0.16	1
Toluene	ND		ug/kg	2.0	0.15	1
Ethylbenzene	ND		ug/kg	1.3	0.20	1
Chloromethane	ND		ug/kg	6.7	1.0	1
Bromomethane	ND		ug/kg	2.7	0.45	1
Vinyl chloride	ND		ug/kg	2.7	0.19	1
Chloroethane	ND		ug/kg	2.7	0.42	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.27	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.28	1
Trichloroethene	ND		ug/kg	1.3	0.20	1
1,2-Dichlorobenzene	ND		ug/kg	6.7	0.24	1
1,3-Dichlorobenzene	ND		ug/kg	6.7	0.24	1
1,4-Dichlorobenzene	ND		ug/kg	6.7	0.32	1

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-02	R		Date Collected:	05/14/14 13:55	
Client ID:	SB-2 (1.5-3.5)			Date Received:	05/15/14	
Sample Location:	542 W29 STREET, NY, NY			Field Prep:	Not Specified	
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND		ug/kg	2.7	0.14	1
p/m-Xylene	ND		ug/kg	2.7	0.43	1
o-Xylene	ND		ug/kg	2.7	0.36	1
Xylene (Total)	ND		ug/kg	2.7	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.20	1
Dibromomethane	ND		ug/kg	13	0.22	1
Styrene	ND		ug/kg	2.7	0.41	1
Dichlorodifluoromethane	84		ug/kg	13	0.29	1
Acetone	61		ug/kg	13	4.1	1
Carbon disulfide	ND		ug/kg	13	2.7	1
2-Butanone	2.6	J	ug/kg	13	0.47	1
Vinyl acetate	ND		ug/kg	13	0.64	1
4-Methyl-2-pentanone	ND		ug/kg	13	0.32	1
1,2,3-Trichloropropane	ND		ug/kg	13	0.30	1
2-Hexanone	ND		ug/kg	13	0.25	1
Bromochloromethane	ND		ug/kg	6.7	0.26	1
2,2-Dichloropropane	ND		ug/kg	6.7	0.30	1
1,2-Dibromoethane	ND		ug/kg	5.3	0.24	1
1,3-Dichloropropane	ND		ug/kg	6.7	0.23	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.3	0.42	1
Bromobenzene	ND		ug/kg	6.7	0.28	1
n-Butylbenzene	ND		ug/kg	1.3	0.26	1
sec-Butylbenzene	ND		ug/kg	1.3	0.27	1
tert-Butylbenzene	ND		ug/kg	6.7	0.75	1
o-Chlorotoluene	ND		ug/kg	6.7	0.21	1
p-Chlorotoluene	ND		ug/kg	6.7	0.20	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.7	1.0	1
Hexachlorobutadiene	ND		ug/kg	6.7	0.56	1
Isopropylbenzene	ND		ug/kg	1.3	0.22	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.25	1
Naphthalene	ND		ug/kg	6.7	1.0	1
Acrylonitrile	ND		ug/kg	13	0.32	1
n-Propylbenzene	ND		ug/kg	1.3	0.17	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.7	0.22	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.7	1.0	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.7	0.19	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.7	0.76	1
1,4-Dioxane	ND		ug/kg	130	23.	1
1,4-Diethylbenzene	ND		ug/kg	5.3	0.21	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-02	R	Date Collected:	05/14/14 13:55
Client ID:	SB-2 (1.5-3.5)		Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY		Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
4-Ethyltoluene	ND		ug/kg	5.3	0.16	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	5.3	0.17	1
Ethyl ether	ND		ug/kg	6.7	0.35	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	6.7	0.60	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	93		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-03	Date Collected:	05/14/14 15:40
Client ID:	SB-4 (6-8)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	05/19/14 12:34		
Analyst:	BN		
Percent Solids:	90%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	4.0	J	ug/kg	18	3.7	1
1,1-Dichloroethane	ND		ug/kg	2.8	0.33	1
Chloroform	1.3	J	ug/kg	2.8	0.69	1
Carbon tetrachloride	ND		ug/kg	1.8	0.39	1
1,2-Dichloropropane	ND		ug/kg	6.5	0.42	1
Dibromochloromethane	ND		ug/kg	1.8	0.57	1
1,1,2-Trichloroethane	ND		ug/kg	2.8	0.56	1
Tetrachloroethene	ND		ug/kg	1.8	0.26	1
Chlorobenzene	ND		ug/kg	1.8	0.64	1
Trichlorofluoromethane	ND		ug/kg	9.3	0.22	1
1,2-Dichloroethane	ND		ug/kg	1.8	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	1.8	0.20	1
Bromodichloromethane	ND		ug/kg	1.8	0.42	1
trans-1,3-Dichloropropene	ND		ug/kg	1.8	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.8	0.24	1
1,1-Dichloropropene	ND		ug/kg	9.3	0.85	1
Bromoform	ND		ug/kg	7.4	0.77	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.8	0.32	1
Benzene	ND		ug/kg	1.8	0.22	1
Toluene	ND		ug/kg	2.8	0.21	1
Ethylbenzene	ND		ug/kg	1.8	0.27	1
Chloromethane	ND		ug/kg	9.3	1.4	1
Bromomethane	ND		ug/kg	3.7	0.63	1
Vinyl chloride	ND		ug/kg	3.7	0.26	1
Chloroethane	ND		ug/kg	3.7	0.59	1
1,1-Dichloroethene	ND		ug/kg	1.8	0.38	1
trans-1,2-Dichloroethene	ND		ug/kg	2.8	0.39	1
Trichloroethene	ND		ug/kg	1.8	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	9.3	0.34	1
1,3-Dichlorobenzene	ND		ug/kg	9.3	0.34	1
1,4-Dichlorobenzene	ND		ug/kg	9.3	0.45	1

Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-03		Date Collected:	05/14/14 15:40		
Client ID:	SB-4 (6-8)		Date Received:	05/15/14		
Sample Location:	542 W29 STREET, NY, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND	ug/kg	3.7	0.19	1	
p/m-Xylene	ND	ug/kg	3.7	0.60	1	
o-Xylene	ND	ug/kg	3.7	0.50	1	
Xylene (Total)	ND	ug/kg	3.7	0.50	1	
cis-1,2-Dichloroethene	ND	ug/kg	1.8	0.28	1	
Dibromomethane	ND	ug/kg	18	0.30	1	
Styrene	ND	ug/kg	3.7	0.57	1	
Dichlorodifluoromethane	ND	ug/kg	18	0.40	1	
Acetone	24	ug/kg	18	5.8	1	
Carbon disulfide	ND	ug/kg	18	3.7	1	
2-Butanone	ND	ug/kg	18	0.66	1	
Vinyl acetate	ND	ug/kg	18	0.89	1	
4-Methyl-2-pentanone	ND	ug/kg	18	0.45	1	
1,2,3-Trichloropropane	ND	ug/kg	18	0.42	1	
2-Hexanone	ND	ug/kg	18	0.35	1	
Bromochloromethane	ND	ug/kg	9.3	0.37	1	
2,2-Dichloropropane	ND	ug/kg	9.3	0.42	1	
1,2-Dibromoethane	ND	ug/kg	7.4	0.33	1	
1,3-Dichloropropane	ND	ug/kg	9.3	0.32	1	
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.8	0.59	1	
Bromobenzene	ND	ug/kg	9.3	0.39	1	
n-Butylbenzene	ND	ug/kg	1.8	0.37	1	
sec-Butylbenzene	ND	ug/kg	1.8	0.38	1	
tert-Butylbenzene	ND	ug/kg	9.3	1.0	1	
o-Chlorotoluene	ND	ug/kg	9.3	0.30	1	
p-Chlorotoluene	ND	ug/kg	9.3	0.28	1	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.3	1.5	1	
Hexachlorobutadiene	ND	ug/kg	9.3	0.78	1	
Isopropylbenzene	ND	ug/kg	1.8	0.31	1	
p-Isopropyltoluene	ND	ug/kg	1.8	0.36	1	
Naphthalene	ND	ug/kg	9.3	1.4	1	
Acrylonitrile	ND	ug/kg	18	0.44	1	
n-Propylbenzene	ND	ug/kg	1.8	0.23	1	
1,2,3-Trichlorobenzene	ND	ug/kg	9.3	0.31	1	
1,2,4-Trichlorobenzene	ND	ug/kg	9.3	1.5	1	
1,3,5-Trimethylbenzene	ND	ug/kg	9.3	0.27	1	
1,2,4-Trimethylbenzene	ND	ug/kg	9.3	1.1	1	
1,4-Dioxane	ND	ug/kg	180	32.	1	
1,4-Diethylbenzene	ND	ug/kg	7.4	0.30	1	



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-03	Date Collected:	05/14/14 15:40
Client ID:	SB-4 (6-8)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
4-Ethyltoluene	ND		ug/kg	7.4	0.22	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	7.4	0.24	1
Ethyl ether	ND		ug/kg	9.3	0.49	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	9.3	0.83	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	112		70-130

Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-04	Date Collected:	05/14/14 16:00
Client ID:	SB-5 (6-8)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Soil		
Analytical Method:	1,8260C		
Analytical Date:	05/19/14 13:01		
Analyst:	BN		
Percent Solids:	85%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methylene chloride	6.8	J	ug/kg	18	3.7	1
1,1-Dichloroethane	ND		ug/kg	2.8	0.33	1
Chloroform	ND		ug/kg	2.8	0.68	1
Carbon tetrachloride	ND		ug/kg	1.8	0.39	1
1,2-Dichloropropane	ND		ug/kg	6.4	0.42	1
Dibromochloromethane	ND		ug/kg	1.8	0.57	1
1,1,2-Trichloroethane	ND		ug/kg	2.8	0.56	1
Tetrachloroethene	ND		ug/kg	1.8	0.26	1
Chlorobenzene	ND		ug/kg	1.8	0.64	1
Trichlorofluoromethane	ND		ug/kg	9.2	0.22	1
1,2-Dichloroethane	ND		ug/kg	1.8	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	1.8	0.20	1
Bromodichloromethane	ND		ug/kg	1.8	0.42	1
trans-1,3-Dichloropropene	ND		ug/kg	1.8	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.8	0.23	1
1,1-Dichloropropene	ND		ug/kg	9.2	0.84	1
Bromoform	ND		ug/kg	7.4	0.76	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.8	0.31	1
Benzene	ND		ug/kg	1.8	0.22	1
Toluene	ND		ug/kg	2.8	0.21	1
Ethylbenzene	ND		ug/kg	1.8	0.27	1
Chloromethane	ND		ug/kg	9.2	1.4	1
Bromomethane	ND		ug/kg	3.7	0.62	1
Vinyl chloride	ND		ug/kg	3.7	0.26	1
Chloroethane	ND		ug/kg	3.7	0.58	1
1,1-Dichloroethene	ND		ug/kg	1.8	0.38	1
trans-1,2-Dichloroethene	ND		ug/kg	2.8	0.39	1
Trichloroethene	ND		ug/kg	1.8	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	9.2	0.34	1
1,3-Dichlorobenzene	ND		ug/kg	9.2	0.34	1
1,4-Dichlorobenzene	ND		ug/kg	9.2	0.45	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-04		Date Collected:	05/14/14 16:00		
Client ID:	SB-5 (6-8)		Date Received:	05/15/14		
Sample Location:	542 W29 STREET, NY, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
Methyl tert butyl ether	ND	ug/kg	3.7	0.19	1	
p/m-Xylene	ND	ug/kg	3.7	0.60	1	
o-Xylene	ND	ug/kg	3.7	0.50	1	
Xylene (Total)	ND	ug/kg	3.7	0.50	1	
cis-1,2-Dichloroethene	ND	ug/kg	1.8	0.28	1	
Dibromomethane	ND	ug/kg	18	0.30	1	
Styrene	ND	ug/kg	3.7	0.57	1	
Dichlorodifluoromethane	ND	ug/kg	18	0.40	1	
Acetone	66	ug/kg	18	5.7	1	
Carbon disulfide	ND	ug/kg	18	3.7	1	
2-Butanone	ND	ug/kg	18	0.66	1	
Vinyl acetate	ND	ug/kg	18	0.88	1	
4-Methyl-2-pentanone	ND	ug/kg	18	0.45	1	
1,2,3-Trichloropropane	ND	ug/kg	18	0.41	1	
2-Hexanone	ND	ug/kg	18	0.35	1	
Bromochloromethane	ND	ug/kg	9.2	0.36	1	
2,2-Dichloropropane	ND	ug/kg	9.2	0.42	1	
1,2-Dibromoethane	ND	ug/kg	7.4	0.33	1	
1,3-Dichloropropane	ND	ug/kg	9.2	0.32	1	
1,1,1,2-Tetrachloroethane	ND	ug/kg	1.8	0.59	1	
Bromobenzene	ND	ug/kg	9.2	0.38	1	
n-Butylbenzene	ND	ug/kg	1.8	0.36	1	
sec-Butylbenzene	ND	ug/kg	1.8	0.38	1	
tert-Butylbenzene	ND	ug/kg	9.2	1.0	1	
o-Chlorotoluene	ND	ug/kg	9.2	0.29	1	
p-Chlorotoluene	ND	ug/kg	9.2	0.28	1	
1,2-Dibromo-3-chloropropane	ND	ug/kg	9.2	1.4	1	
Hexachlorobutadiene	ND	ug/kg	9.2	0.78	1	
Isopropylbenzene	ND	ug/kg	1.8	0.31	1	
p-Isopropyltoluene	ND	ug/kg	1.8	0.35	1	
Naphthalene	ND	ug/kg	9.2	1.4	1	
Acrylonitrile	ND	ug/kg	18	0.44	1	
n-Propylbenzene	ND	ug/kg	1.8	0.23	1	
1,2,3-Trichlorobenzene	ND	ug/kg	9.2	0.31	1	
1,2,4-Trichlorobenzene	ND	ug/kg	9.2	1.4	1	
1,3,5-Trimethylbenzene	ND	ug/kg	9.2	0.26	1	
1,2,4-Trimethylbenzene	ND	ug/kg	9.2	1.0	1	
1,4-Dioxane	ND	ug/kg	180	32.	1	
1,4-Diethylbenzene	ND	ug/kg	7.4	0.29	1	



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-04	Date Collected:	05/14/14 16:00
Client ID:	SB-5 (6-8)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by 8260/5035 - Westborough Lab</b>						
4-Ethyltoluene	ND		ug/kg	7.4	0.22	1
1,2,4,5-Tetramethylbenzene	ND		ug/kg	7.4	0.24	1
Ethyl ether	ND		ug/kg	9.2	0.49	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	9.2	0.83	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	113		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-05	Date Collected:	05/14/14 13:15
Client ID:	SB-1 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	05/22/14 00:40		
Analyst:	MS		

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	0.87	J	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	0.13	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
1,1-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	0.14	1
Benzene	1.4		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	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	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

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-05		Date Collected:	05/14/14 13:15		
Client ID:	SB-1 (GW)		Date Received:	05/15/14		
Sample Location:	542 W29 STREET, NY, NY		Field Prep:	Not Specified		
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	11		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
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	4.6	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	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
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	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-05	Date Collected:	05/14/14 13:15
Client ID:	SB-1 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	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	98		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	98		70-130

Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-06	Date Collected:	05/14/14 15:50
Client ID:	SB-4 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	05/22/14 01:08		
Analyst:	MS		

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	0.13	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
1,1-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	0.14	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	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.33	J	ug/l	0.50	0.17	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



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-06	Date Collected:	05/14/14 15:50
Client ID:	SB-4 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	1.1	J	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	0.88	J	ug/l	2.5	0.70	1
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	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
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	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-06	Date Collected:	05/14/14 15:50
Client ID:	SB-4 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	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	99		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	84		70-130
Dibromofluoromethane	99		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-07	Date Collected:	05/14/14 16:10
Client ID:	SB-5 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified
Matrix:	Water		
Analytical Method:	1,8260C		
Analytical Date:	05/22/14 01:36		
Analyst:	MS		

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	0.70	J	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	0.13	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
1,1-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	0.14	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	0.33	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.14	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.17	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

Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-07	Date Collected:	05/14/14 16:10
Client ID:	SB-5 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methyl tert butyl ether	1.8	J	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
Dibromomethane	ND		ug/l	5.0	1.0	1
1,2,3-Trichloropropane	ND		ug/l	2.5	0.70	1
Acrylonitrile	ND		ug/l	5.0	1.5	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.0	J	ug/l	5.0	1.0	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.0	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
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	41.	1
p-Diethylbenzene	ND		ug/l	2.0	0.70	1



Project Name: GOTHAM

Lab Number: L1410502

Project Number: SSH1401

Report Date: 05/22/14

**SAMPLE RESULTS**

Lab ID:	L1410502-07	Date Collected:	05/14/14 16:10
Client ID:	SB-5 (GW)	Date Received:	05/15/14
Sample Location:	542 W29 STREET, NY, NY	Field Prep:	Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
p-Ethyltoluene	ND		ug/l	2.0	0.70	1
1,2,4,5-Tetramethylbenzene	ND		ug/l	2.0	0.65	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	99		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	83		70-130
Dibromofluoromethane	99		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 09:01  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03-04 Batch: WG690871-3					
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
1,1-Dichloropropene	ND		ug/kg	5.0	0.46
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	0.50	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 09:01  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03-04 Batch: WG690871-3					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
Xylene (Total)	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	3.6	J	ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
Vinyl acetate	ND		ug/kg	10	0.48
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.22
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
2,2-Dichloropropane	ND		ug/kg	5.0	0.22
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,3-Dichloropropane	ND		ug/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Hexachlorobutadiene	ND		ug/kg	5.0	0.42
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 09:01  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03-04 Batch: WG690871-3					
Naphthalene	ND		ug/kg	5.0	0.77
Acrylonitrile	ND		ug/kg	10	0.24
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	0.91
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Ethyl Acetate	ND		ug/kg	20	0.82
Acrolein	ND		ug/kg	25	9.2
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	0.38
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.58

#### Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/kg



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

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

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 09:01  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 03-04 Batch: WG690871-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	112		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	96		70-130
Dibromofluoromethane	104		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 08:37  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02 Batch: WG690887-3					
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
1,1-Dichloropropene	ND		ug/kg	5.0	0.46
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

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

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 08:37  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02 Batch: WG690887-3					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
Xylene (Total)	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
Vinyl acetate	ND		ug/kg	10	0.48
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.22
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
2,2-Dichloropropane	ND		ug/kg	5.0	0.22
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,3-Dichloropropane	ND		ug/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Hexachlorobutadiene	ND		ug/kg	5.0	0.42
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

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

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 08:37  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02 Batch: WG690887-3					
Naphthalene	ND		ug/kg	5.0	0.77
Acrylonitrile	ND		ug/kg	10	0.24
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	0.91
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Ethyl Acetate	ND		ug/kg	20	0.82
Acrolein	ND		ug/kg	25	9.2
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	0.38
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.58

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

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

Analytical Method: 1,8260C  
Analytical Date: 05/19/14 08:37  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02 Batch: WG690887-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/20/14 09:19  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02				Batch:	WG690887-6
Methylene chloride	ND		ug/kg	10	2.0
1,1-Dichloroethane	ND		ug/kg	1.5	0.18
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.31
2-Chloroethylvinyl ether	ND		ug/kg	20	0.62
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.12
1,2-Dichloroethane	ND		ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.13
1,3-Dichloropropene, Total	ND		ug/kg	1.0	0.12
1,1-Dichloropropene	ND		ug/kg	5.0	0.46
Bromoform	ND		ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.17
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.11
Ethylbenzene	ND		ug/kg	1.0	0.15
Chloromethane	ND		ug/kg	5.0	0.78
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.14
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

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

Analytical Method: 1,8260C  
Analytical Date: 05/20/14 09:19  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02				Batch: WG690887-6	
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.24
Methyl tert butyl ether	ND		ug/kg	2.0	0.10
p/m-Xylene	ND		ug/kg	2.0	0.32
o-Xylene	ND		ug/kg	2.0	0.27
Xylene (Total)	ND		ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.15
1,2-Dichloroethene (total)	ND		ug/kg	1.0	0.15
Dibromomethane	ND		ug/kg	10	0.16
Styrene	ND		ug/kg	2.0	0.31
Dichlorodifluoromethane	ND		ug/kg	10	0.22
Acetone	ND		ug/kg	10	3.1
Carbon disulfide	ND		ug/kg	10	2.0
2-Butanone	ND		ug/kg	10	0.36
Vinyl acetate	ND		ug/kg	10	0.48
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
1,2,3-Trichloropropane	ND		ug/kg	10	0.22
2-Hexanone	ND		ug/kg	10	0.19
Bromochloromethane	ND		ug/kg	5.0	0.20
2,2-Dichloropropane	ND		ug/kg	5.0	0.22
1,2-Dibromoethane	ND		ug/kg	4.0	0.18
1,3-Dichloropropane	ND		ug/kg	5.0	0.17
1,1,1,2-Tetrachloroethane	ND		ug/kg	1.0	0.32
Bromobenzene	ND		ug/kg	5.0	0.21
n-Butylbenzene	ND		ug/kg	1.0	0.20
sec-Butylbenzene	ND		ug/kg	1.0	0.20
tert-Butylbenzene	ND		ug/kg	5.0	0.56
o-Chlorotoluene	ND		ug/kg	5.0	0.16
p-Chlorotoluene	ND		ug/kg	5.0	0.15
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.79
Hexachlorobutadiene	ND		ug/kg	5.0	0.42



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/20/14 09:19  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02				Batch: WG690887-6	
Isopropylbenzene	ND		ug/kg	1.0	0.17
p-Isopropyltoluene	ND		ug/kg	1.0	0.19
Naphthalene	ND		ug/kg	5.0	0.77
Acrylonitrile	ND		ug/kg	10	0.24
Isopropyl Ether	ND		ug/kg	4.0	0.14
tert-Butyl Alcohol	ND		ug/kg	60	0.91
n-Propylbenzene	ND		ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.57
Methyl Acetate	ND		ug/kg	20	0.76
Ethyl Acetate	ND		ug/kg	20	0.82
Acrolein	ND		ug/kg	25	9.2
Cyclohexane	ND		ug/kg	20	1.1
1,4-Dioxane	ND		ug/kg	100	17.
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	20	0.27
1,4-Diethylbenzene	ND		ug/kg	4.0	0.16
4-Ethyltoluene	ND		ug/kg	4.0	0.12
1,2,4,5-Tetramethylbenzene	ND		ug/kg	4.0	0.13
Tetrahydrofuran	ND		ug/kg	20	0.38
Ethyl ether	ND		ug/kg	5.0	0.26
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	0.45
Methyl cyclohexane	ND		ug/kg	4.0	1.3
Ethyl-Tert-Butyl-Ether	ND		ug/kg	4.0	0.42
Tertiary-Amyl Methyl Ether	ND		ug/kg	4.0	0.58



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

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

Analytical Method: 1,8260C  
Analytical Date: 05/20/14 09:19  
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 02 Batch: WG690887-6					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	105		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	96		70-130

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/21/14 20:58  
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-07 Batch: WG691585-3					
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
2-Chloroethylvinyl ether	ND		ug/l	10	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.13
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	0.14
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	0.33
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.14
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.17
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/21/14 20:58  
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-07 Batch: WG691585-3					
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	
Diisopropyl Ether	ND	ug/l	2.0	0.65	
Tert-Butyl Alcohol	ND	ug/l	10	1.2	
Styrene	ND	ug/l	2.5	0.70	
Dichlorodifluoromethane	ND	ug/l	5.0	1.0	
Acetone	ND	ug/l	5.0	1.0	
Carbon disulfide	ND	ug/l	5.0	1.0	
2-Butanone	ND	ug/l	5.0	1.0	
Vinyl acetate	ND	ug/l	5.0	1.0	
4-Methyl-2-pentanone	ND	ug/l	5.0	1.0	
2-Hexanone	ND	ug/l	5.0	1.0	
Bromochloromethane	ND	ug/l	2.5	0.70	
2,2-Dichloropropane	ND	ug/l	2.5	0.70	
1,2-Dibromoethane	ND	ug/l	2.0	0.65	
1,3-Dichloropropane	ND	ug/l	2.5	0.70	
1,1,1,2-Tetrachloroethane	ND	ug/l	2.5	0.70	
Bromobenzene	ND	ug/l	2.5	0.70	
n-Butylbenzene	ND	ug/l	2.5	0.70	
sec-Butylbenzene	ND	ug/l	2.5	0.70	
tert-Butylbenzene	ND	ug/l	2.5	0.70	
o-Chlorotoluene	ND	ug/l	2.5	0.70	



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
Analytical Date: 05/21/14 20:58  
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-07 Batch: WG691585-3					
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
Methyl Acetate	ND		ug/l	2.0	0.23
Ethyl Acetate	ND		ug/l	10	0.70
Cyclohexane	ND		ug/l	10	0.24
Ethyl-Tert-Butyl-Ether	ND		ug/l	2.5	0.70
Tertiary-Amyl Methyl Ether	ND		ug/l	2.0	0.28
1,4-Dioxane	ND		ug/l	250	41.
Freon-113	ND		ug/l	2.5	0.70
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	0.65
Tetrahydrofuran	ND		ug/l	5.0	1.5
Ethyl ether	ND		ug/l	2.5	0.70
trans-1,4-Dichloro-2-butene	ND		ug/l	2.5	0.70
Iodomethane	ND		ug/l	5.0	5.0
Methyl cyclohexane	ND		ug/l	10	0.29



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

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

Analytical Method: 1,8260C  
Analytical Date: 05/21/14 20:58  
Analyst: MS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-07 Batch: WG691585-3					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	83		70-130
Dibromofluoromethane	99		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG690871-1 WG690871-2								
Methylene chloride	104		101		70-130	3		30
1,1-Dichloroethane	108		104		70-130	4		30
Chloroform	111		107		70-130	4		30
Carbon tetrachloride	96		88		70-130	9		30
1,2-Dichloropropane	111		108		70-130	3		30
Dibromochloromethane	87		86		70-130	1		30
2-Chloroethylvinyl ether	108		104		70-130	4		30
1,1,2-Trichloroethane	103		102		70-130	1		30
Tetrachloroethene	93		86		70-130	8		30
Chlorobenzene	94		91		70-130	3		30
Trichlorofluoromethane	100		90		70-139	11		30
1,2-Dichloroethane	117		115		70-130	2		30
1,1,1-Trichloroethane	107		100		70-130	7		30
Bromodichloromethane	113		109		70-130	4		30
trans-1,3-Dichloropropene	90		88		70-130	2		30
cis-1,3-Dichloropropene	96		94		70-130	2		30
1,1-Dichloropropene	104		99		70-130	5		30
Bromoform	78		79		70-130	1		30
1,1,2,2-Tetrachloroethane	97		96		70-130	1		30
Benzene	108		103		70-130	5		30
Toluene	89		86		70-130	3		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG690871-1 WG690871-2								
Ethylbenzene	94		89		70-130	5		30
Chloromethane	93		87		52-130	7		30
Bromomethane	101		94		57-147	7		30
Vinyl chloride	95		87		67-130	9		30
Chloroethane	129		114		50-151	12		30
1,1-Dichloroethene	99		92		65-135	7		30
trans-1,2-Dichloroethene	98		94		70-130	4		30
Trichloroethene	107		100		70-130	7		30
1,2-Dichlorobenzene	90		89		70-130	1		30
1,3-Dichlorobenzene	91		89		70-130	2		30
1,4-Dichlorobenzene	90		88		70-130	2		30
Methyl tert butyl ether	94		94		66-130	0		30
p/m-Xylene	94		90		70-130	4		30
o-Xylene	94		90		70-130	4		30
cis-1,2-Dichloroethene	104		101		70-130	3		30
Dibromomethane	116		113		70-130	3		30
Styrene	89		86		70-130	3		30
Dichlorodifluoromethane	73		66		30-146	10		30
Acetone	122		121		54-140	1		30
Carbon disulfide	84		79		59-130	6		30
2-Butanone	110		112		70-130	2		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG690871-1 WG690871-2								
Vinyl acetate	109		108		70-130	1		30
4-Methyl-2-pentanone	97		98		70-130	1		30
1,2,3-Trichloropropane	98		98		68-130	0		30
2-Hexanone	82		85		70-130	4		30
Bromochloromethane	115		112		70-130	3		30
2,2-Dichloropropane	107		100		70-130	7		30
1,2-Dibromoethane	99		96		70-130	3		30
1,3-Dichloropropane	98		97		69-130	1		30
1,1,1,2-Tetrachloroethane	100		97		70-130	3		30
Bromobenzene	88		87		70-130	1		30
n-Butylbenzene	93		87		70-130	7		30
sec-Butylbenzene	90		85		70-130	6		30
tert-Butylbenzene	87		82		70-130	6		30
o-Chlorotoluene	92		89		70-130	3		30
p-Chlorotoluene	91		87		70-130	4		30
1,2-Dibromo-3-chloropropane	79		80		68-130	1		30
Hexachlorobutadiene	87		80		67-130	8		30
Isopropylbenzene	85		81		70-130	5		30
p-Isopropyltoluene	81		76		70-130	6		30
Naphthalene	83		83		70-130	0		30
Acrylonitrile	109		111		70-130	2		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG690871-1 WG690871-2								
Isopropyl Ether	108		106		66-130	2		30
tert-Butyl Alcohol	105		110		70-130	5		30
n-Propylbenzene	89		84		70-130	6		30
1,2,3-Trichlorobenzene	87		85		70-130	2		30
1,2,4-Trichlorobenzene	82		81		70-130	1		30
1,3,5-Trimethylbenzene	91		86		70-130	6		30
1,2,4-Trimethylbenzene	89		86		70-130	3		30
Methyl Acetate	112		111		51-146	1		30
Ethyl Acetate	110		112		70-130	2		30
Acrolein	96		100		70-130	4		30
Cyclohexane	107		98		59-142	9		30
1,4-Dioxane	106		113		65-136	6		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	107		97		50-139	10		30
1,4-Diethylbenzene	86		80		70-130	7		30
4-Ethyltoluene	88		84		70-130	5		30
1,2,4,5-Tetramethylbenzene	82		78		70-130	5		30
Tetrahydrofuran	98		102		66-130	4		30
Ethyl ether	91		91		67-130	0		30
trans-1,4-Dichloro-2-butene	88		89		70-130	1		30
Methyl cyclohexane	104		94		70-130	10		30
Ethyl-Tert-Butyl-Ether	104		104		70-130	0		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 03-04 Batch: WG690871-1 WG690871-2								
Tertiary-Amyl Methyl Ether	102		102		70-130	0		30

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	95		94		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	108		108		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG690887-1 WG690887-2								
Methylene chloride	105		97		70-130	8		30
1,1-Dichloroethane	102		94		70-130	8		30
Chloroform	105		96		70-130	9		30
Carbon tetrachloride	101		91		70-130	10		30
1,2-Dichloropropane	101		93		70-130	8		30
Dibromochloromethane	92		87		70-130	6		30
2-Chloroethylvinyl ether	96		92		70-130	4		30
1,1,2-Trichloroethane	99		94		70-130	5		30
Tetrachloroethene	98		89		70-130	10		30
Chlorobenzene	98		92		70-130	6		30
Trichlorofluoromethane	139		124		70-139	11		30
1,2-Dichloroethane	111		104		70-130	7		30
1,1,1-Trichloroethane	104		94		70-130	10		30
Bromodichloromethane	100		95		70-130	5		30
trans-1,3-Dichloropropene	96		90		70-130	6		30
cis-1,3-Dichloropropene	98		92		70-130	6		30
1,1-Dichloropropene	101		92		70-130	9		30
Bromoform	86		82		70-130	5		30
1,1,2,2-Tetrachloroethane	93		90		70-130	3		30
Benzene	102		94		70-130	8		30
Toluene	94		86		70-130	9		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG690887-1 WG690887-2								
Ethylbenzene	100		92		70-130	8		30
Chloromethane	90		84		52-130	7		30
Bromomethane	150	Q	128		57-147	16		30
Vinyl chloride	128		114		67-130	12		30
Chloroethane	143		128		50-151	11		30
1,1-Dichloroethene	101		91		65-135	10		30
trans-1,2-Dichloroethene	102		93		70-130	9		30
Trichloroethene	105		96		70-130	9		30
1,2-Dichlorobenzene	97		91		70-130	6		30
1,3-Dichlorobenzene	98		90		70-130	9		30
1,4-Dichlorobenzene	98		90		70-130	9		30
Methyl tert butyl ether	101		94		66-130	7		30
p/m-Xylene	100		92		70-130	8		30
o-Xylene	101		93		70-130	8		30
cis-1,2-Dichloroethene	104		96		70-130	8		30
Dibromomethane	104		99		70-130	5		30
Styrene	103		96		70-130	7		30
Dichlorodifluoromethane	90		82		30-146	9		30
Acetone	113		105		54-140	7		30
Carbon disulfide	101		91		59-130	10		30
2-Butanone	94		85		70-130	10		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG690887-1 WG690887-2								
Vinyl acetate	100		92		70-130	8		30
4-Methyl-2-pentanone	96		90		70-130	6		30
1,2,3-Trichloropropane	98		94		68-130	4		30
2-Hexanone	86		81		70-130	6		30
Bromochloromethane	104		97		70-130	7		30
2,2-Dichloropropane	101		92		70-130	9		30
1,2-Dibromoethane	94		90		70-130	4		30
1,3-Dichloropropane	97		92		69-130	5		30
1,1,1,2-Tetrachloroethane	95		89		70-130	7		30
Bromobenzene	94		89		70-130	5		30
n-Butylbenzene	101		92		70-130	9		30
sec-Butylbenzene	97		88		70-130	10		30
tert-Butylbenzene	96		88		70-130	9		30
o-Chlorotoluene	103		95		70-130	8		30
p-Chlorotoluene	99		92		70-130	7		30
1,2-Dibromo-3-chloropropane	86		80		68-130	7		30
Hexachlorobutadiene	99		88		67-130	12		30
Isopropylbenzene	96		86		70-130	11		30
p-Isopropyltoluene	98		90		70-130	9		30
Naphthalene	92		88		70-130	4		30
Acrylonitrile	100		92		70-130	8		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG690887-1 WG690887-2								
Isopropyl Ether	96		89		66-130	8		30
tert-Butyl Alcohol	95		91		70-130	4		30
n-Propylbenzene	98		90		70-130	9		30
1,2,3-Trichlorobenzene	97		90		70-130	7		30
1,2,4-Trichlorobenzene	100		92		70-130	8		30
1,3,5-Trimethylbenzene	99		90		70-130	10		30
1,2,4-Trimethylbenzene	98		90		70-130	9		30
Methyl Acetate	89		84		51-146	6		30
Ethyl Acetate	97		91		70-130	6		30
Acrolein	88		84		70-130	5		30
Cyclohexane	97		86		59-142	12		30
1,4-Dioxane	102		96		65-136	6		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	102		91		50-139	11		30
1,4-Diethylbenzene	99		90		70-130	10		30
4-Ethyltoluene	97		88		70-130	10		30
1,2,4,5-Tetramethylbenzene	99		90		70-130	10		30
Tetrahydrofuran	93		86		66-130	8		30
Ethyl ether	105		94		67-130	11		30
trans-1,4-Dichloro-2-butene	96		92		70-130	4		30
Methyl cyclohexane	98		88		70-130	11		30
Ethyl-Tert-Butyl-Ether	102		95		70-130	7		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG690887-1 WG690887-2								
Tertiary-Amyl Methyl Ether	100		93		70-130	7		30

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
1,2-Dichloroethane-d4	108		107		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	98		98		70-130
Dibromofluoromethane	102		102		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG690887-4 WG690887-5								
Methylene chloride	104		109		70-130	4		30
1,1-Dichloroethane	102		110		70-130	8		30
Chloroform	104		112		70-130	6		30
Carbon tetrachloride	102		116		70-130	14		30
1,2-Dichloropropane	101		107		70-130	6		30
Dibromochloromethane	91		96		70-130	4		30
2-Chloroethylvinyl ether	100		103		70-130	7		30
1,1,2-Trichloroethane	100		102		70-130	3		30
Tetrachloroethene	97		107		70-130	9		30
Chlorobenzene	98		105		70-130	7		30
Trichlorofluoromethane	134		153	Q	70-139	10		30
1,2-Dichloroethane	113		118		70-130	6		30
1,1,1-Trichloroethane	105		115		70-130	9		30
Bromodichloromethane	102		107		70-130	5		30
trans-1,3-Dichloropropene	94		98		70-130	4		30
cis-1,3-Dichloropropene	99		104		70-130	5		30
1,1-Dichloropropene	102		114		70-130	11		30
Bromoform	86		89		70-130	3		30
1,1,2,2-Tetrachloroethane	93		96		70-130	3		30
Benzene	101		109		70-130	8		30
Toluene	92		100		70-130	8		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG690887-4 WG690887-5								
Ethylbenzene	98		108		70-130	10		30
Chloromethane	88		97		52-130	10		30
Bromomethane	122		135		57-147	10		30
Vinyl chloride	127		142	Q	67-130	11		30
Chloroethane	132		146		50-151	10		30
1,1-Dichloroethene	100		110		65-135	10		30
trans-1,2-Dichloroethene	100		110		70-130	10		30
Trichloroethene	106		116		70-130	9		30
1,2-Dichlorobenzene	96		102		70-130	6		30
1,3-Dichlorobenzene	96		103		70-130	7		30
1,4-Dichlorobenzene	96		101		70-130	5		30
Methyl tert butyl ether	102		104		66-130	2		30
p/m-Xylene	98		106		70-130	8		30
o-Xylene	100		108		70-130	8		30
cis-1,2-Dichloroethene	104		110		70-130	6		30
Dibromomethane	105		108		70-130	3		30
Styrene	102		108		70-130	6		30
Dichlorodifluoromethane	89		102		30-146	14		30
Acetone	117		122		54-140	4		30
Carbon disulfide	98		108		59-130	10		30
2-Butanone	112		111		70-130	1		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG690887-4 WG690887-5								
Vinyl acetate	100		102		70-130	2		30
4-Methyl-2-pentanone	100		102		70-130	2		30
1,2,3-Trichloropropane	99		103		68-130	4		30
2-Hexanone	89		91		70-130	2		30
Bromochloromethane	107		109		70-130	2		30
2,2-Dichloropropane	100		110		70-130	10		30
1,2-Dibromoethane	96		100		70-130	4		30
1,3-Dichloropropane	98		102		69-130	4		30
1,1,1,2-Tetrachloroethane	96		101		70-130	5		30
Bromobenzene	94		100		70-130	6		30
n-Butylbenzene	99		109		70-130	10		30
sec-Butylbenzene	95		106		70-130	11		30
tert-Butylbenzene	94		104		70-130	10		30
o-Chlorotoluene	101		110		70-130	9		30
p-Chlorotoluene	98		105		70-130	7		30
1,2-Dibromo-3-chloropropane	83		87		68-130	5		30
Hexachlorobutadiene	96		105		67-130	9		30
Isopropylbenzene	93		103		70-130	10		30
p-Isopropyltoluene	95		106		70-130	11		30
Naphthalene	93		95		70-130	2		30
Acrylonitrile	104		104		70-130	0		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG690887-4 WG690887-5								
Isopropyl Ether	98		102		66-130	4		30
tert-Butyl Alcohol	102		102		70-130	0		30
n-Propylbenzene	96		105		70-130	9		30
1,2,3-Trichlorobenzene	97		98		70-130	1		30
1,2,4-Trichlorobenzene	96		100		70-130	4		30
1,3,5-Trimethylbenzene	96		105		70-130	9		30
1,2,4-Trimethylbenzene	96		103		70-130	7		30
Methyl Acetate	96		99		51-146	3		30
Ethyl Acetate	99		101		70-130	2		30
Acrolein	86		86		70-130	0		30
Cyclohexane	101		116		59-142	14		30
1,4-Dioxane	107		113		65-136	5		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	106		119		50-139	12		30
1,4-Diethylbenzene	96		104		70-130	8		30
4-Ethyltoluene	94		103		70-130	9		30
1,2,4,5-Tetramethylbenzene	96		102		70-130	6		30
Tetrahydrofuran	99		98		66-130	1		30
Ethyl ether	104		105		67-130	1		30
trans-1,4-Dichloro-2-butene	93		96		70-130	3		30
Methyl cyclohexane	103		117		70-130	13		30
Ethyl-Tert-Butyl-Ether	103		106		70-130	3		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

<b>Parameter</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 02 Batch: WG690887-4 WG690887-5								
Tertiary-Amyl Methyl Ether	100		103		70-130	3		30

<b>Surrogate</b>	<i>LCS</i> %Recovery	<i>Qual</i>	<i>LCSD</i> %Recovery	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>
1,2-Dichloroethane-d4	109		109		70-130
Toluene-d8	97		97		70-130
4-Bromofluorobenzene	98		99		70-130
Dibromofluoromethane	101		100		70-130

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG691585-1 WG691585-2								
Methylene chloride	93		95		70-130	2		20
1,1-Dichloroethane	101		103		70-130	2		20
Chloroform	110		111		70-130	1		20
2-Chloroethylvinyl ether	79		87		70-130	10		20
Carbon tetrachloride	113		114		63-132	1		20
1,2-Dichloropropane	100		102		70-130	2		20
Dibromochloromethane	101		107		63-130	6		20
1,1,2-Trichloroethane	104		112		70-130	7		20
Tetrachloroethene	114		116		70-130	2		20
Chlorobenzene	106		108		75-130	2		20
Trichlorofluoromethane	112		112		62-150	0		20
1,2-Dichloroethane	103		108		70-130	5		20
1,1,1-Trichloroethane	112		113		67-130	1		20
Bromodichloromethane	103		105		67-130	2		20
trans-1,3-Dichloropropene	104		111		70-130	7		20
cis-1,3-Dichloropropene	97		101		70-130	4		20
1,1-Dichloropropene	106		106		70-130	0		20
Bromoform	92		100		54-136	8		20
1,1,2,2-Tetrachloroethane	82		91		67-130	10		20
Benzene	101		103		70-130	2		20
Toluene	104		106		70-130	2		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG691585-1 WG691585-2								
Ethylbenzene	110		112		70-130	2		20
Chloromethane	73		73		64-130	0		20
Bromomethane	72		74		39-139	3		20
Vinyl chloride	76		78		55-140	3		20
Chloroethane	97		102		55-138	5		20
1,1-Dichloroethene	98		99		61-145	1		20
trans-1,2-Dichloroethene	101		102		70-130	1		20
Trichloroethene	108		109		70-130	1		20
1,2-Dichlorobenzene	106		111		70-130	5		20
1,3-Dichlorobenzene	113		115		70-130	2		20
1,4-Dichlorobenzene	112		115		70-130	3		20
Methyl tert butyl ether	97		106		63-130	9		20
p/m-Xylene	121		123		70-130	2		20
o-Xylene	117		118		70-130	1		20
cis-1,2-Dichloroethene	101		106		70-130	5		20
Dibromomethane	96		103		70-130	7		20
1,2,3-Trichloropropane	96		101		64-130	5		20
Acrylonitrile	88		103		70-130	16		20
Diisopropyl Ether	102		106		70-130	4		20
Tert-Butyl Alcohol	94		113		70-130	18		20
Styrene	118		121		70-130	3		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG691585-1 WG691585-2								
Dichlorodifluoromethane	73		74		36-147	1		20
Acetone	100		116		58-148	15		20
Carbon disulfide	86		88		51-130	2		20
2-Butanone	92		107		63-138	15		20
Vinyl acetate	96		108		70-130	12		20
4-Methyl-2-pentanone	84		96		59-130	13		20
2-Hexanone	81		95		57-130	16		20
Bromochloromethane	104		107		70-130	3		20
2,2-Dichloropropane	111		115		63-133	4		20
1,2-Dibromoethane	94		103		70-130	9		20
1,3-Dichloropropane	98		106		70-130	8		20
1,1,1,2-Tetrachloroethane	114		117		64-130	3		20
Bromobenzene	88		90		70-130	2		20
n-Butylbenzene	120		121		53-136	1		20
sec-Butylbenzene	113		114		70-130	1		20
tert-Butylbenzene	107		108		70-130	1		20
o-Chlorotoluene	106		106		70-130	0		20
p-Chlorotoluene	102		103		70-130	1		20
1,2-Dibromo-3-chloropropane	93		101		41-144	8		20
Hexachlorobutadiene	91		95		63-130	4		20
Isopropylbenzene	95		95		70-130	0		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG691585-1 WG691585-2								
p-Isopropyltoluene	115		116		70-130	1		20
Naphthalene	76		91		70-130	18		20
n-Propylbenzene	103		104		69-130	1		20
1,2,3-Trichlorobenzene	77		90		70-130	16		20
1,2,4-Trichlorobenzene	99		109		70-130	10		20
1,3,5-Trimethylbenzene	116		118		64-130	2		20
1,2,4-Trimethylbenzene	110		112		70-130	2		20
Methyl Acetate	84		99		70-130	16		20
Ethyl Acetate	87		101		70-130	15		20
Cyclohexane	111		112		70-130	1		20
Ethyl-Tert-Butyl-Ether	103		109		70-130	6		20
Tertiary-Amyl Methyl Ether	97		105		66-130	8		20
1,4-Dioxane	92		108		56-162	16		20
Freon-113	114		115		70-130	1		20
p-Diethylbenzene	115		117		70-130	2		20
p-Ethyltoluene	109		110		70-130	1		20
1,2,4,5-Tetramethylbenzene	109		114		70-130	4		20
Ethyl ether	102		109		59-134	7		20
trans-1,4-Dichloro-2-butene	76		88		70-130	15		20
Iodomethane	76		76		70-130	0		20
Methyl cyclohexane	115		116		70-130	1		20

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

<b>Parameter</b>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>%Recovery</i> <i>Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD</i> <i>Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-07 Batch: WG691585-1 WG691585-2								
<i>Surrogate</i>	<i>LCS</i> <i>%Recovery</i>	<i>Qual</i>	<i>LCSD</i> <i>%Recovery</i>	<i>Qual</i>	<i>Acceptance</i> <i>Criteria</i>			
1,2-Dichloroethane-d4	101		104		70-130			
Toluene-d8	98		99		70-130			
4-Bromofluorobenzene	82		81		70-130			
Dibromofluoromethane	106		105		70-130			

# **INORGANICS & MISCELLANEOUS**



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### SAMPLE RESULTS

Lab ID: L1410502-01  
Client ID: SB-1 (6-8)  
Sample Location: 542 W29 STREET, NY, NY  
Matrix: Soil

Date Collected: 05/14/14 13:25  
Date Received: 05/15/14  
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	84.6		%	0.100	NA	1	-	05/17/14 00:52	30,2540G	RT



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### SAMPLE RESULTS

Lab ID: L1410502-02  
Client ID: SB-2 (1.5-3.5)  
Sample Location: 542 W29 STREET, NY, NY  
Matrix: Soil

Date Collected: 05/14/14 13:55  
Date Received: 05/15/14  
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	89.3		%	0.100	NA	1	-	05/17/14 00:52	30,2540G	RT



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### SAMPLE RESULTS

Lab ID: L1410502-03  
Client ID: SB-4 (6-8)  
Sample Location: 542 W29 STREET, NY, NY  
Matrix: Soil

Date Collected: 05/14/14 15:40  
Date Received: 05/15/14  
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	89.7		%	0.100	NA	1	-	05/17/14 00:52	30,2540G	RT



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### SAMPLE RESULTS

Lab ID: L1410502-04  
Client ID: SB-5 (6-8)  
Sample Location: 542 W29 STREET, NY, NY  
Matrix: Soil

Date Collected: 05/14/14 16:00  
Date Received: 05/15/14  
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
<b>General Chemistry - Westborough Lab</b>										
Solids, Total	84.7		%	0.100	NA	1	-	05/17/14 00:52	30,2540G	RT



**Lab Duplicate Analysis**  
Batch Quality Control

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-04 QC Batch ID: WG690344-1 QC Sample: L1410498-01 Client ID: DUP Sample						
Solids, Total	88.0	89.3	%	1		20

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

### Sample Receipt and Container Information

Were project specific reporting limits specified? YES

**Reagent H2O Preserved Vials Frozen on:** 05/16/2014 06:20

#### Cooler Information Custody Seal

##### Cooler

A Absent

#### Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1410502-01A	Vial MeOH preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-01B	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-01C	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-01D	Plastic 2oz unpreserved for TS	A	N/A	3.7	Y	Absent	TS(7)
L1410502-02A	Vial MeOH preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-02B	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-02C	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-02D	Plastic 2oz unpreserved for TS	A	N/A	3.7	Y	Absent	TS(7)
L1410502-03A	Vial MeOH preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-03B	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-03C	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-03D	Plastic 2oz unpreserved for TS	A	N/A	3.7	Y	Absent	TS(7)
L1410502-04A	Vial MeOH preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-04B	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-04C	Vial water preserved	A	N/A	3.7	Y	Absent	NYTCL-8260HLW(14)
L1410502-04D	Plastic 2oz unpreserved for TS	A	N/A	3.7	Y	Absent	TS(7)
L1410502-05A	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-05B	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-05C	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-06A	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-06B	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-06C	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-07A	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-07B	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)
L1410502-07C	Vial HCl preserved	A	N/A	3.7	Y	Absent	NYTCL-8260(14)

\*Values in parentheses indicate holding time in days

**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

## GLOSSARY

### **Acronyms**

- 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).
- 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.
- 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.
- 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.
- NI - Not Ignitable.
- 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.

### **Footnotes**

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

### **Terms**

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.

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.

### **Data Qualifiers**

- A - Spectra identified as "Aldol Condensation Product".
- 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.
- 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.

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



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

**Data Qualifiers**

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

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



**Project Name:** GOTHAM  
**Project Number:** SSH1401

**Lab Number:** L1410502  
**Report Date:** 05/22/14

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

## 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

Last revised April 15, 2014

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

#### **Westborough Facility**

**EPA 524.2:** Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

**EPA 8260C:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

**EPA 8330A/B:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

**EPA 8270D:** 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**EPA 625:** 4-Chloroaniline, 4-Methylphenol.

**SM4500:** Soil: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.

**EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

#### **Mansfield Facility**

**EPA 8270D:** Biphenyl.

**EPA 2540D:** TSS

**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.

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### **The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:**

#### **Drinking Water**

**EPA 200.8:** Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7:** Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;

**EPA 300.0:** 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**

**EPA 332:** Perchlorate.

**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

#### **Non-Potable Water**

**EPA 200.8:** Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;

**EPA 200.7:** Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;

**EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC,**

**SM426C, SM4500NH3-BH, EPA 350.1:** Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **SM4500NO3-F,**

**EPA 353.2:** Nitrate-N, **SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4,**

**SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**

**EPA 624:** Volatile Halocarbons & Aromatics,

**EPA 608:** 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:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.

**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.**

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

<b>NEW YORK CHAIN OF CUSTODY</b>		Service Centers		Page	Date Rec'd In Lab: <b>5/15/14</b>		ALPHA Job # <b>L410502</b>						
		Mahwah, NJ 07430: 35 Whitney Rd, Suite 5	1 of 1										
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		Deliverables		Billing Information					
				Project Name: <b>Gotham</b>		<input type="checkbox"/> ASP-A	<input type="checkbox"/> ASP-B	<input type="checkbox"/> Same as Client Info					
				Project Location: <b>542 W 29 street, NY, NY</b>		<input type="checkbox"/> EQuIS (1 File)	<input type="checkbox"/> EQuIS (4 File)	PO #					
				Project # <b>SSH 1401</b>		<input type="checkbox"/> Other							
Client Information				(Use Project name as Project #) <input type="checkbox"/>		Regulatory Requirement		Disposal Site Information					
Client: <b>PW Grosser</b>				Project Manager: <b>Tom Melia</b>		<input type="checkbox"/> NY TOGS	<input type="checkbox"/> NY Part 375	Please identify below location of applicable disposal facilities.					
Address: <b>630 Johnson Ave</b>				ALPHAQuote #:		<input type="checkbox"/> AWQ Standards	<input type="checkbox"/> NY CP-51						
<b>Bohemia, NY 11716</b>				Turn-Around Time		<input type="checkbox"/> NY Restricted Use	<input type="checkbox"/> Other	Disposal Facility:					
Phone: <b>(631) 589-6353</b>				Standard <input checked="" type="checkbox"/>		<input type="checkbox"/> NY Unrestricted Use		<input type="checkbox"/> NJ	<input type="checkbox"/> NY				
Fax:				Due Date: <b>5/22/14</b>		<input type="checkbox"/> NYC Sewer Discharge		Other:					
Email: <b>Thomas.M@PWGrosser.com</b>				Rush (only if pre approved) <input type="checkbox"/> # of Days:									
These samples have been previously analyzed by Alpha <input type="checkbox"/>										ANALYSIS		Sample Filtration	
										<b>8260</b>	<b>8260</b>	<b>8260</b>	<b>Done</b>
										<b>8260</b>	<b>8260</b>	<b>8260</b>	<b>Lab to do</b>
										<b>8260</b>	<b>8260</b>	<b>8260</b>	<b>Preservation</b>
										<b>8260</b>	<b>8260</b>	<b>8260</b>	<b>Lab to do</b>
										<b>(Please Specify below)</b>			
										Sample Specific Comments			
<b>ALPHA Lab ID (Lab Use Only)</b>  <b>05621</b>	<b>Sample ID</b>  <b>SB-1 (6-8)</b>	Collection		Sample Matrix	Sampler's Initials					Total Bottles			
		Date <b>5/14/14</b>	Time <b>1325</b>	Soil	<b>JE</b>	<input checked="" type="checkbox"/>				<b>4</b>			
		<b>SB-2 (1.5-3.5)</b>	<b>5/14/14</b>	<b>1355</b>	Soil		<input checked="" type="checkbox"/>			<b>4</b>			
		<b>SB-4 (6-8)</b>		<b>1540</b>	Soil		<input checked="" type="checkbox"/>			<b>4</b>			
		<b>SB-5 (6-8)</b>		<b>1600</b>	Soil		<input checked="" type="checkbox"/>			<b>4</b>			
		<b>SB-1 (GW)</b>		<b>1315</b>	GW		<input checked="" type="checkbox"/>			<b>3</b>			
		<b>SB-4 (GW)</b>		<b>1550</b>	GW		<input checked="" type="checkbox"/>			<b>3</b>			
		<b>SB-5 (GW)</b>		<b>1610</b>	GW		<input checked="" type="checkbox"/>			<b>3</b>			
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 <b>O V</b>					Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)		
						Preservative <b>O B</b>							
Relinquished By:  <b>Tom Melia</b>		Date/Time <b>5/15/14 1145</b>		Received By:  <b>AAC</b>		Date/Time <b>5/15/14 1145</b>							
		<b>5/15/14 1850</b>		<b>Tom Melia</b>		<b>5/15/14 1850</b>							
<b>Tom Melia</b>		<b>5/15/14 2340</b>		<b>Richard Scott</b>		<b>5/15/14 2340</b>							
Form No: 01-25 HC (rev. 30-Sept-2013)													

## **APPENDIX C**

### **NYSDOH DECISION MATRICES**

Appendix C  
 NYSDOH Decision Matrices - Tetrachloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA001/SV001			Indoor Air Concentration - TETRACHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - Tetrachloroethene ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	<b>2.67</b>					
	<100	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above			9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
 NYSDOH Decision Matrices - Tetrachloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA002/SV002			Indoor Air Concentration - TETRACHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - Tetrachloroethene ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	<b>2.82</b>					
	<100	<b>1.48</b>	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above			9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
NYSDOH Decision Matrices - Tetrachloroethene  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA003/SV003			Indoor Air Concentration - TETRACHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - Tetrachloroethene ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	<b>2.82</b>					
	<100	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above			9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

\*Indoor air data is for sample IA002 as a technical glitch prevented the collection of indoor air sample IA003

Appendix C  
 NYSDOH Decision Matrices - 1,1-Dichloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA001/SV001			Indoor Air Concentration - 1,1-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - 1,1-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	ND					
	<100	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
	1,000 and above		9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
 NYSDOH Decision Matrices - 1,1-Dichloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA002/SV002			Indoor Air Concentration - 1,1-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - 1,1-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	ND					
	<100	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
	1,000 and above		9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
 NYSDOH Decision Matrices - 1,1-Dichloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA003/SV003			Indoor Air Concentration - 1,1-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - 1,1-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	ND					
	<100	1.07	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
	1,000 and above		9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

\*Indoor air data is for sample IA002 as a technical glitch prevented the collection of indoor air sample IA003

Appendix C  
 NYSDOH Decision Matrices - cis-1,2-Dichloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA001/SV001			Indoor Air Concentration - CIS-1,2-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - CIS-1,2-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	0.198					
	<100	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to <1,000			5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above			9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
 NYSDOH Decision Matrices - cis-1,2-Dichloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA002/SV002			Indoor Air Concentration - CIS-1,2-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - CIS-1,2-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	<b>0.25</b>					
	<100	<b>ND</b>	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to <1,000			5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above			9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
 NYSDOH Decision Matrices - cis-1,2-Dichloroethene  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA003/SV003			Indoor Air Concentration - CIS-1,2-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - CIS-1,2-DICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	<b>0.25</b>					
	<100	<b>ND</b>	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to <1,000			5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above			9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

\*Indoor air data is for sample IA002 as a technical glitch prevented the collection of indoor air sample IA003

**Appendix C**  
**NYSDOH Decision Matrices - 1,1,1-Trichloroethane**  
**542 West 29th Street, New York, New York**

NYSDOH Decision Matrix 2 Sample Location IA001/SV001			Indoor Air Concentration - 1,1,1-TRICHLOROETHANE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - 1,1,1-TRICHLOROETHANE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	<b>ND</b>					
	<100	<b>ND</b>	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
100 to <1,000			5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
1,000 and above			9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

**Appendix C**  
**NYSDOH Decision Matrices - 1,1,1-Trichloroethane**  
**542 West 29th Street, New York, New York**

NYSDOH Decision Matrix 2 Sample Location IA002/SV002			Indoor Air Concentration - 1,1,1-TRICHLOROETHANE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - 1,1,1-TRICHLOROETHANE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	ND					
	<100	3.18	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
	1,000 and above		9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
 NYSDOH Decision Matrices - 1,1,1-Trichloroethane  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 2 Sample Location IA003/SV003			Indoor Air Concentration - 1,1,1-TRICHLOROETHANE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - 1,1,1-TRICHLOROETHANE ( $\mu\text{g}/\text{m}^3$ )	<3		3 to <30	30 to <100	100 and above	
	ND					
	<100	12	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	100 to <1,000		5. MONITOR	6. MONITOR / MITIGATE	7. MITIGATE	8. MITIGATE
	1,000 and above		9. MITIGATE	10. MITIGATE	11. MITIGATE	12. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

\*Indoor air data is for sample IA002 as a technical glitch prevented the collection of indoor air sample IA003

Appendix C  
NYSDOH Decision Matrices - Trichloroethene  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA001/SV001			Indoor Air Concentration - TRICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - TRICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<0.25		0.25 to <1	1 to <5.0	5.0 and above	
	<5		ND	0.715		
	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
250 and above			13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
NYSDOH Decision Matrices - Trichloroethene  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA002/SV002			Indoor Air Concentration - TRICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
			<0.25	0.25 to <1	1 to <5.0	5.0 and above
			0.709			
Sub-Slab Concentration - TRICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
	250 and above		13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
NYSDOH Decision Matrices - Trichloroethene  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA003/SV003			Indoor Air Concentration - TRICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )			
			<0.25	0.25 to <1	1 to <5.0	5.0 and above
			0.709			
Sub-Slab Concentration - TRICHLOROETHENE ( $\mu\text{g}/\text{m}^3$ )	<5	2.78	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
	250 and above		13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

\*Indoor air data is for sample IA002 as a technical glitch prevented the collection of indoor air sample IA003

Appendix C  
 NYSDOH Decision Matrices - Carbon Tetrachloride  
 542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA001/SV001			Indoor Air Concentration - CARBON TETRACHLORIDE ( $\mu\text{g}/\text{m}^3$ )			
Sub-Slab Concentration - CARBON TETRACHLORIDE ( $\mu\text{g}/\text{m}^3$ )	<0.25		0.25 to <1	1 to <5.0	5.0 and above	
			<b>0.465</b>			
	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
250 and above			13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
NYSDOH Decision Matrices - Carbon Tetrachloride  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA002/SV002			Indoor Air Concentration - CARBON TETRACHLORIDE ( $\mu\text{g}/\text{m}^3$ )			
			<0.25	0.25 to <1	1 to <5.0	5.0 and above
			0.491			
Sub-Slab Concentration - CARBON TETRACHLORIDE ( $\mu\text{g}/\text{m}^3$ )	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
	250 and above		13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
NYSDOH Decision Matrices - Carbon Tetrachloride  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA003/SV003			Indoor Air Concentration - CARBON TETRACHLORIDE ( $\mu\text{g}/\text{m}^3$ )			
			<0.25	0.25 to <1	1 to <5.0	5.0 and above
			0.491			
Sub-Slab Concentration - CARBON TETRACHLORIDE ( $\mu\text{g}/\text{m}^3$ )	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
	250 and above		13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

\*Indoor air data is for sample IA002 as a technical glitch prevented the collection of indoor air sample IA003

Appendix C  
NYSDOH Decision Matrices - Vinyl Chloride  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA001/SV001			Indoor Air Concentration - VINYL CHLORIDE ( $\mu\text{g}/\text{m}^3$ )			
			<0.25	0.25 to <1	1 to <5.0	5.0 and above
			<b>0.087</b>			
Sub-Slab Concentration - VINYL CHLORIDE ( $\mu\text{g}/\text{m}^3$ )	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
	250 and above		13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
NYSDOH Decision Matrices - Vinyl Chloride  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA002/SV002			Indoor Air Concentration - VINYL CHLORIDE ( $\mu\text{g}/\text{m}^3$ )			
			<0.25	0.25 to <1	1 to <5.0	5.0 and above
			0.077			
Sub-Slab Concentration - VINYL CHLORIDE ( $\mu\text{g}/\text{m}^3$ )	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
	250 and above		13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

Appendix C  
NYSDOH Decision Matrices - Vinyl Chloride  
542 West 29th Street, New York, New York

NYSDOH Decision Matrix 1 Sample Location IA003/SV003			Indoor Air Concentration - VINYL CHLORIDE ( $\mu\text{g}/\text{m}^3$ )			
			<0.25	0.25 to <1	1 to <5.0	5.0 and above
			0.077			
Sub-Slab Concentration - VINYL CHLORIDE ( $\mu\text{g}/\text{m}^3$ )	<5	ND	1. No further Action	2. Take reasonable and practical actions to identify source(s) and reduce exposures	3. Take reasonable and practical actions to identify source(s) and reduce exposures	4. Take reasonable and practical actions to identify source(s) and reduce exposures
	5 to <50		5. No further Action	6. MONITOR	7. MONITOR	8. MITIGATE
	50 to <250		9. MONITOR	10. MONITOR/MITIGATE	11. MITIGATE	12. MITIGATE
	250 and above		13. MITIGATE	14. MITIGATE	15. MITIGATE	16. MITIGATE

Notes:

Decision Matrices taken from Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, NYSDOH, October 2006.

Analytical data used is from samples collected November 12, 2013.

Highlighted column and rows represent columns and rows corresponding to analytical results for given compounds.

Highlighted cells represent NYSDOH recommendations based upon comparison of sub-slab and indoor air concentrations.

ND - not detected above the laboratory method detection limit

\*Indoor air data is for sample IA002 as a technical glitch prevented the collection of indoor air sample IA003