



**PHASE II  
ENVIRONMENTAL  
SITE ASSESSMENT**

**11-24 Wyckoff Avenue  
Borough of Queens  
New York City, New York**

**September 5, 2018**

**WCD File: PQ18052.20**

**Environmental & Construction Risk Management**

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# PHASE II

## ENVIRONMENTAL

### SITE ASSESSMENT

**September 5, 2018**

**WCD File: PQ18052.20**

**Prepared By:**

**WCD Group  
24 Davis Avenue  
Poughkeepsie, New York 12603**

**Prepared For:**

**Ben Pomeroy & Helen Pomeroy  
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The undersigned has reviewed this Phase II Environmental Site Assessment and certifies to Ben Pomeroy & Helen Pomeroy - Whitlock Group LLC that the information provided in this document is accurate as of the date of issuance by this office.

The undersigned is a Qualified Environmental Professional as defined by 6 NYCRR Part 375-1.2 (ak) and supporting documents. The undersigned possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding the presence of releases or threatened releases to the surface or subsurface of the site or off-site areas, sufficient to meet the objectives and performance factors for the areas of practice identified in NYSDEC guidance document DER-10.

Paul H. Ciminello

September 5, 2018



Qualified Environmental Professional

Date

Signature



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## 1.0 INTRODUCTION

### 1.1 Purpose

This Phase II Environmental Site Assessment (Report) documents environmental fieldwork performed by WCD Group (WCD) at the property located at 11-24 Wyckoff Avenue, Borough of Queens, New York City, New York (Site). Investigative and analytical work were performed to address potential environmental liabilities on specified portions of the subject property, which were identified during a previous Phase I investigation (see Section 1.4, below). The specific purpose of this Report is to summarize the work performed by WCD and WCD's subcontractors, and to suggest, if appropriate, further investigative and/or remedial options regarding identified on-site conditions.

This Report describes all fieldwork methodologies for the work conducted by WCD, includes discussions of the resulting analytical data from collected samples and provides conclusions and recommendations drawn from the fieldwork and analytical data.

### 1.2 Limitations

This written analysis summarizes the site characterization activities conducted on a specified portion of the above-referenced property and is not relevant to other portions of this property or any other property. It is a representation of those portions of the property analyzed as of the respective dates of fieldwork. This Report cannot be held accountable for activities or events resulting in contamination after the dates of fieldwork.

Services summarized in this Report were performed in accordance with generally accepted practices and established New York State Department of Environmental Conservation (NYSDEC) protocols. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties, but as probabilities based on professional judgement.

### 1.3 Site Location and Description

The property is a 0.34-acre parcel located on the southern side of Wyckoff Avenue, occupied by a vacant, high one-story commercial building. [Note: For clarity of presentation, Wyckoff Avenue, which has an actual northwest/southeast orientation, is described in this Report as having an east/west orientation, and all other road and property descriptions have been likewise appropriately adjusted for descriptive purposes. All report maps indicate approximate true north.] An asphalt parking/loading area is located at the northern-central portion of the property. A Fieldwork Map indicating specific Site characteristics is provided in Appendix A.

### 1.4 Previous Environmental Reports

A Phase I Environmental Site Assessment (Phase I ESA) performed on the property by WCD in July 2018 identified an on-site, 2,000-gallon fuel-oil underground storage tank (UST) of unknown

integrity, and historical on- and off-site commercial/industrial uses (including former on-site uses as a garage and a knitting mill and a former filling station at an eastern adjoining property) as potential sources of contamination.

## 2.0 SUBSURFACE INVESTIGATION

### 2.1 Summary of Services

WCD extended five soil borings and installed four temporary soil vapor implants the Site and collected soil and soil vapor samples to document the presence or absence of contamination. This Report is divided into individual sections that document fieldwork methodology (Section 2.2) and laboratory results (Section 2.3), and present WCD's conclusions and recommendations (Section 3.0). A map indicating fieldwork locations and Site features is provided in Appendix A.

### 2.2 Fieldwork Activities

#### 2.2.1 Site Preparation Services

WCD requested a complete utility markout (as required by New York State Department of Labor regulations) and on-site personnel reviewed the markout and underground utility locations prior to the initiation of fieldwork.

#### 2.2.2 Fieldwork Methodology

##### General Protocols

All encountered material was screened with a properly calibrated RKI Instruments GX-6000 photo-ionization detector (PID) for the presence of any volatile organic vapors where appropriate. WCD described all encountered media in field log books, including specific characteristics, the presence of foreign materials, and field and instrument indications of contamination (e.g., staining, odors, PID readings). Soil boring logs are provided in Appendix B.

WCD collected samples in general conformance with NYSDEC and NYSDOH fieldwork protocols. All field personnel wore dedicated, disposable gloves during relevant fieldwork activities, and any non-dedicated sampling instruments were decontaminated prior to media collection.

All samples were collected into appropriately-sized containers provided by the laboratory (with preservatives as required for the specific analysis), and were maintained at proper temperatures (using ice-packs and coolers as needed) while in WCD's custody. Samples were transported via courier to York Analytical Laboratories, Inc., a New York State Department of Health-certified laboratory (ELAP Certification Number 10854) for chemical analyses. Appropriate chain-of-custody procedures were followed.

### Extension of Soil Borings

Five mechanized soil borings were extended on August 21 and 23, 2018 at the central portion of the building to the east (SB-01) and northwest (SB-02) of the UST, at the eastern portion of the building near the eastern property border (SB-03 and SB-04), and at the western portion of the building (SB-05).

All soil borings were extended by personnel from Core Down Drilling using a track-mounted Geoprobe direct-push corer equipped with disposable acetate sleeves (used to prevent the cross contamination of soil samples). Soil was recovered at each boring location at intervals of 4 or 5 feet to a maximum depth of 20 feet below surface grade (bsg) at borings SB-01 and SB-02 and until refusal was reached at all remaining borings (between 7 and 12' bsg).

Subsurface soils encountered at the Site during the extension of the soil borings generally consisted of variable-texture fill materials (unsorted sands with gravel and minimal building debris to depths ranging from 2-6' bsg) overlying likely native, brown sands with trace rocks.

No field evidence of contamination was observed at any boring location. Groundwater was not encountered during the extension of the soil borings.

Soil samples were collected directly from the acetate sleeves, utilizing clean, disposable equipment. Soil collection for VOC analysis was conducted according to USEPA Method 5035 fieldwork protocols, utilizing laboratory sampling kits.

### Collection of Soil Vapor

Four soil vapor samples (SV-01 through SV-04) were collected from beneath the on-site building on August 21, 2018. SV-01 was collected from the western portion, SV-02 was collected from the eastern portion, SV-03 was collected from beneath the partial basement at the southeastern corner, and SV-04 was collected from the southern-central portion near the UST.

At each location, the slab was breached utilizing a concrete drill and the holes were extended to a depth of 16 inches below the top of the slab. The end of the sample stubbing (0.188-inch inner diameter Teflon) was attached to an "air stone" filter and inserted through the borehole. Clean sand was poured into the void surrounding the air stone. The holes were backfilled leaving approximately two inches of depth between the top of the sand and the ground/slab surface. The remaining space at the top of each hole was sealed off with bentonite to prevent surface air from entering the system. A properly calibrated PID was used to measure volatile organics before purging. PID readings at all four boreholes were less than 1 part per million (ppm, equivalent to milligrams per kilogram). A vacuum pump was utilized to purge the standing air from the tubing. At least three borehole and tubing volumes were purged prior to sample collection at a rate of 0.2 liters per minute. Following purging, the vapor samples were collected over a two-hour period using 6-liter stainless steel, laboratory supplied Summa canisters with two-hour calibrated flow controllers.

## 2.3 Laboratory Analysis

### 2.3.1 Standards, Criteria and/or Guidance

#### Soil

Laboratory results for organic compounds detected in soils are compared to NYSDEC Remedial Program Soil Cleanup Objectives (SCOs) for Unrestricted Use (UU) as provided in 6 NYCRR Subpart 375, Table 375-6.8(a), and (as needed) Soil Cleanup Levels (for gasoline and fuel oil contaminated Soils) presented in NYSDEC CP-51 (Soil Cleanup Guidance, October 2010) Tables 2 through 3.

#### Vapor

The State of New York does not have any standards, criteria or guidance values (SCG) for volatile chemicals in subsurface vapors; the NYSDOH does, however, utilize several decision matrices for evaluating potential soil vapor intrusion for a limited number of compounds under specific circumstances (see NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York [October 2006]). Potentially applicable matrix values and/or relatively high concentrations of VOCs are identified in the report text and in data summary tables, as warranted.

### 2.3.2 Sample Submission

Submission of samples for laboratory analysis was based on observations made by WCD personnel during the extension of the soil borings, including the presence or absence of elevated PID readings, unusual odors, discoloration, or, any other unusual patterns. Samples were collected from borings SB-01 and SB-02 from the 13-15' interval (beneath the likely invert of the 2,000-gallon UST). Samples from all remaining borings were collected from the bottom 2' interval of the boring (5-7' at SB-03 and SB-04 and 9.5-11.5' at SB-05).

Soil samples were analyzed for volatile organic compounds (VOCs) using USEPA Method 8260, and polycyclic aromatic hydrocarbons (PAHs) using USEPA Method 8270.

Soil vapor samples were analyzed for VOCs using USEPA Method TO-15.

### 2.3.3 Laboratory Results

A summary of the results of the laboratory analyses is presented below. Results are referenced as parts per million (ppm, equivalent to milligrams per kilogram) for soil and micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) for soil vapor. Data summary tables and the laboratory reports are provided as Appendices C and D, respectively.

#### SOIL

#### VOCS

No VOCs were detected in any of the soil samples.

*PAHs*

No PAHs were detected above SCOs. Trace- to low-level concentrations of several PAHs were detected in SB-03 5-7 and SB-04 5-7.

**SOIL VAPOR**

Relatively elevated concentrations of tetrachloroethene (PCE; a dry cleaning solvent) were detected in SV-03 (2,700 µg/m<sup>3</sup>) and SV-04 (1,700 µg/m<sup>3</sup>). A relatively elevated concentration of 1,1,1-trichloroethane (1,1,1-TCA; an industrial solvent) was also detected at SV-04 (620 µg/m<sup>3</sup>). Low-level concentrations of numerous other VOCs typically encountered in urban settings were detected in all samples.

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

This office has completed the services summarized in Section 2.0 on specified portions of the property located at 11-24 Wyckoff Avenue, Borough of Queens, New York City, New York. Services included the extension of five soil borings, installation of four temporary soil vapor implants, and collection of soil and soil vapor samples to document the presence or absence of contamination resulting from an on-site underground storage tank (UST) of unknown integrity and from historical on- and off-site historical commercial/industrial uses.

Based on the services provided and data generated, the following conclusions and recommendations (in **bold**) have been made.

1. No field evidence of petroleum contamination was encountered in two soil borings extended in the vicinity of the on-site 2,000-gallon fuel-oil UST and laboratory data document an absence of volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs). These findings support the conclusion that no significant releases have occurred in the vicinity of the UST.

**No further investigation is recommended. The UST should be removed or closed-in-place in accordance with applicable regulations.**

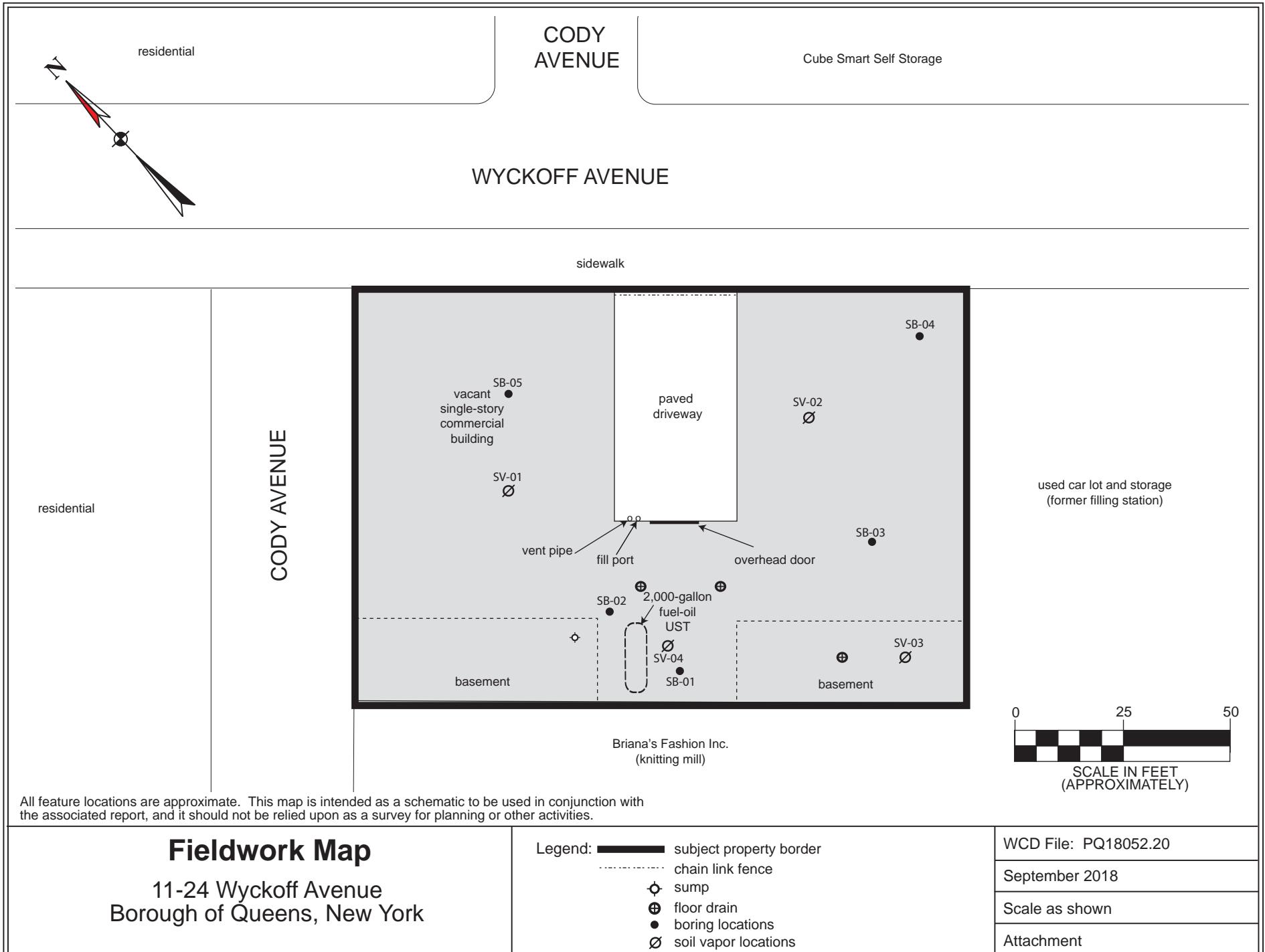
2. Relatively elevated concentrations of the solvents tetrachloroethene (PCE) and 1,1,1-trichloroethane (1,1,1-TCA) were detected in soil vapor samples beneath the southeastern and southern-central portions of the property. These compounds were not detected in any of the soil samples collected beneath the building. The likely source of these compounds is unknown and cannot be determined based on current data.

**The following actions are recommended:**

- **Additional subsurface investigation should be conducted to further investigate the likely source of PCE and 1,1,1-TCA in on-site soil vapor.**
- **In the event of future occupancy of the building, installation of a sub-slab depressurization system (SSDS) is recommended to prevent vapor intrusion into interior spaces.**

## APPENDIX A

# Fieldwork Map



## APPENDIX B

### Boring Logs

# Soil Boring Log



<b>SB-01</b>  (SHEET 1 OF 1)		<b>Phase II Environmental Site Assessment</b> <b>11-24 Wyckoff Avenue, Queens, New York</b>						
		DATE: 2018-08-21 DRILLER (RIG) Core Down Drilling (7822DT Geoprobe, 5' macrocore) WCD STAFF: T. Goodnough WEATHER: Sunny, 85°F						
WCD FILE PQ18052.20								
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: CONCRETE + GRAVEL (6-8")	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED	
<b>0 – 5'</b> (40%)	White/tan, M-C SAND  Dark brown/orange, M-F SAND with trace gravel	Dry  Dry	0.0  0.0	ND  ND	ND  ND	ND  ND		
<b>5 – 10'</b> (25%)	Gray/brown, M-F SAND with trace gravel	Dry	0.0	ND	ND	ND		
<b>10 – 15'</b> (60%)	Brown, M-F SAND with trace rock at ~14'	Dry	0.0	Faint	ND	ND	<b>13-15</b>	
<b>15 – 20'</b> (50%)	Brown, M-F SAND with trace rock  ***** End of Boring at 20' *****	Dry	0.0	ND	ND	ND		
<b>Notes</b>	<b>Fill Materials</b> Potential fill from ~0 - 7' <b>Field Evidence of Contamination</b> Not encountered <b>Saturated Soils</b> Not encountered							

ND (non-detect) PID (photoionization detector) ppm (parts per million) NAPL (non-aqueous phase liquid)  
 F (fine) M (medium) C (coarse) P (plastic) LP (low plastic) NP (non-plastic)

# Soil Boring Log



<b>SB-02</b>  (SHEET 1 OF 1)		<b>Phase II Environmental Site Assessment</b> <b>11-24 Wyckoff Avenue, Queens, New York</b>						
		DATE: 2018-08-21 DRILLER (RIG) Core Down Drilling (7822DT Geoprobe, 5' macrocore) WCD STAFF: T. Goodnough WEATHER: Sunny, 85°F						
WCD FILE PQ18052.20								
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: CONCRETE + GRAVEL (6-8")	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED	
<b>0 – 5'</b> (50%)	Dark brown/orange, M-F SAND with patches of SILT and trace rock and gravel	Dry	0.0	ND	ND	ND		
<b>5 – 10'</b> (50%)	Brown/orange, M-F SAND with trace rock and gravel	Dry	0.0	ND	ND	ND		
<b>10 – 15'</b> (75%)	Brown, M-F SAND	Dry	0.0	ND	ND	ND	<b>13-15</b>	
<b>15 – 20'</b> (40%)	Brown, M-F SAND becoming more C SAND at ~20'  ***** End of Boring at 20' *****	Dry	0.0	ND	ND	ND		
<b>Notes</b>	<b>Fill Materials</b> Potential fill from ~0 - 5' <b>Field Evidence of Contamination</b> Not encountered <b>Saturated Soils</b> Not encountered							

ND (non-detect) PID (photoionization detector) ppm (parts per million) NAPL (non-aqueous phase liquid)  
 F (fine) M (medium) C (coarse) P (plastic) LP (low plastic) NP (non-plastic)

# Soil Boring Log



<b>SB-03</b>  (SHEET 1 OF 1)		<b>Phase II Environmental Site Assessment</b> <b>11-24 Wyckoff Avenue, Queens, New York</b>						
		DATE: 2018-08-23 DRILLER (RIG) Core Down Drilling (Geoprobe, 4' macrocore) WCD STAFF: B. Silveri WEATHER: Sunny, 85°F						
WCD FILE PQ18052.20								
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: PLYWOOD + CONCRETE (1')	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED	
<b>0 – 4'</b> (50%)	Brown/gray, M-F SAND with trace rock  Light gray/brown, M-F SAND with trace rock	Dry  Dry	0.0  0.0	ND  ND	ND  ND	ND  ND		
<b>4 – 8'</b> (50%)	Brown, M-F SAND with trace rock  ***** End of Boring at 7' - Refusal *****	Dry	0.0	ND	ND	ND	<b>5-7</b>	
<b>Notes</b>	<b>Fill Materials</b> Potential fill from ~0 - 2' <b>Field Evidence of Contamination</b> Not encountered <b>Saturated Soils</b> Not encountered <b>Field Notes</b> Two other attempts made in vicinity – shallow refusal at each location (~2-3')							

ND (non-detect) PID (photoionization detector) ppm (parts per million) NAPL (non-aqueous phase liquid)  
 F (fine) M (medium) C (coarse) P (plastic) LP (low plastic) NP (non-plastic)

# Soil Boring Log



SB-04 (SHEET 1 OF 1)		Phase II Environmental Site Assessment 11-24 Wyckoff Avenue, Queens, New York						
		WCD FILE PQ18052.20						
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: PLYWOOD + CONCRETE (6")	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED	
	SOIL / MATERIAL DESCRIPTION							
0 - 4' (40%)	Brown, variable texture SAND with brick and stone Brown, M-F SAND with trace gravel	Dry Dry	0.0 0.0	ND ND	ND ND	ND ND		
4 - 8' (40%)	Brown, M-F SAND with trace gravel ***** End of Boring at 7' – Refusal*****	Dry	0.0	ND	ND	ND	5-7	
<b>Notes</b>	<b>Fill Materials</b> Potential fill from ~0 - 5' <b>Field Evidence of Contamination</b> Not encountered <b>Saturated Soils</b> Not encountered							

ND (non-detect) PID (photoionization detector) ppm (parts per million) NAPL (non-aqueous phase liquid)  
 F (fine) M (medium) C (coarse) P (plastic) LP (low plastic) NP (non-plastic)

# Soil Boring Log



<b>SB-05</b>  (SHEET 1 OF 1)		<b>Phase II Environmental Site Assessment</b> <b>11-24 Wyckoff Avenue, Queens, New York</b>						
		DATE: 2018-08-23 DRILLER (RIG) Core Down Drilling (Geoprobe, 4' macrocore) WCD STAFF: B. Silveri WEATHER: Sunny, 85°F						
BORING INTERVAL (RECOVERY)	SURFACE MATERIAL: PLYWOOD + CONCRETE (6")	MOISTURE	PID (PPM)	ODORS	STAINING	NAPL	SAMPLES COLLECTED	
<b>0 – 4'</b> (30%)	Gray/brown, variable texture SAND with trace rock	Dry	0.0	ND	ND	ND		
<b>4 – 8'</b> (40%)	Gray/brown, variable texture SAND with trace rock  Brown, M-F SAND with trace rock	Dry  Dry	0.0  0.0	ND  ND	ND  ND	ND  ND		
<b>8 – 12'</b> (25%)	Brown, M-F SAND  ***** End of Boring at 11.5' – Refusal *****	Dry	0.0	ND	ND	ND	<b>9.5-11.5</b>	
<b>Notes</b>	<b>Fill Materials</b> Potential fill materials from ~0 - 6' <b>Field Evidence of Contamination</b> Not encountered <b>Saturated Soils</b> Not encountered <b>Field Notes</b> One other attempt made in vicinity – shallow refusal at (~3') with apparent coal cinders in bottom of sleeve							

ND (non-detect) PID (photoionization detector) ppm (parts per million) NAPL (non-aqueous phase liquid)  
 F (fine) M (medium) C (coarse) P (plastic) LP (low plastic) NP (non-plastic)

## APPENDIX C

# Data Summary Tables

**Table 1: VOCs in Soils**

WCD File: PQ18052.20



All data in mg/Kg (ppm) U= Not Detected ≥ indicated value Data above SCOs shown in Bold	Sample ID Sample Date Dilution Factor	SB-01 13-15		SB-02 13-15		SB-03 5-7		SB-04 5-7	
		(2018-08-21)		(2018-08-21)		(2018-08-23)		(2018-08-23)	
		1	1	1	1	1	1	1	1
VOCs, 8260	UUSCO	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1,1,2-Tetrachloroethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,1,1-Trichloroethane	0.68	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,1,2,2-Tetrachloroethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,1,2-Trichloroethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,1-Dichloroethane	0.27	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,1-Dichloroethylene (1,1-DCE)	0.33	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2,3-Trichlorobenzene	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2,3-Trichloropropane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2,4-Trichlorobenzene	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2,4-Trimethylbenzene	3.6	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2-Dibromo-3-chloropropane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2-Dibromoethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2-Dichlorobenzene	1.1	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2-Dichloroethane	0.02	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,2-Dichloropropane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,3,5-Trimethylbenzene	8.4	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,3-Dichlorobenzene	2.4	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,4-Dichlorobenzene	1.8	0.0025	U	0.0024	U	0.0033	U	0.0029	U
1,4-Dioxane	0.1	0.05	U	0.049	U	0.065	U	0.057	U
2-Butanone (MEK)	0.12	0.0025	U	0.0024	U	0.0033	U	0.0029	U
2-Hexanone	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
4-Methyl-2-pentanone	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Acetone	0.05	0.005	U	0.0049	U	0.0065	U	0.0057	U
Acrolein	NA	0.005	U	0.0049	U	0.0065	U	0.0057	U
Acrylonitrile	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Benzene	0.06	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Bromochloromethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Bromodichloromethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Bromoform	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Bromomethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Carbon disulfide	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Carbon tetrachloride	0.76	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Chlorobenzene	1.1	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Chloroethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Chloroform	0.37	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Chloromethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
cis-1,2-Dichloroethylene (cis-DCE)	0.25	0.0025	U	0.0024	U	0.0033	U	0.0029	U
cis-1,3-Dichloropropylene	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Cyclohexane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Dibromochloromethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Dibromomethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Dichlorodifluoromethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Ethyl Benzene	1	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Hexachlorobutadiene	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Isopropylbenzene	2.3	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Methyl acetate	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Methyl tert-butyl ether (MTBE)	0.93	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Methylcyclohexane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Methylene chloride	0.05	0.005	U	0.0049	U	0.0065	U	0.0057	U
n-Butylbenzene	12	0.0025	U	0.0024	U	0.0033	U	0.0029	U
n-Propylbenzene	3.9	0.0025	U	0.0024	U	0.0033	U	0.0029	U
o-Xylene	0.26	0.0025	U	0.0024	U	0.0033	U	0.0029	U
p- & m- Xylenes	0.26	0.005	U	0.0049	U	0.0065	U	0.0057	U
p-Isopropyltoluene	10	0.0025	U	0.0024	U	0.0033	U	0.0029	U
sec-Butylbenzene	11	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Styrene	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
tert-Butyl alcohol (TBA)	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
tert-Butylbenzene	5.9	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Tetrachloroethylene (PCE)	1.3	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Toluene	0.7	0.0025	U	0.0024	U	0.0033	U	0.0029	U
trans-1,2-Dichloroethylene (trans-DCE)	0.19	0.0025	U	0.0024	U	0.0033	U	0.0029	U
trans-1,3-Dichloropropylene	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Trichloroethylene (TCE)	0.47	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Trichlorofluoromethane	NA	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Vinyl chloride (VC)	0.02	0.0025	U	0.0024	U	0.0033	U	0.0029	U
Xylenes, Total	0.26	0.0076	U	0.0073	U	0.0098	U	0.0086	U

Analyte Detected

Analyte Above UUSCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 1: VOCs in Soils**

WCD File: PQ18052.20



All data in mg/Kg (ppm)		Sample ID	SB-05 9.5-11.5	
U= Not Detected ≥ indicated value		Sample Date	(2018-08-23)	
Data above SCOs shown in <b>Bold</b>		Dilution Factor	1	
VOCs, 8260	UUSCO		Result	Qualifier
1,1,1,2-Tetrachloroethane	NA	0.0026	U	
1,1,1-Trichloroethane	0.68	0.0026	U	
1,1,2,2-Tetrachloroethane	NA	0.0026	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	0.0026	U	
1,1,2-Trichloroethane	NA	0.0026	U	
1,1-Dichloroethane	0.27	0.0026	U	
1,1-Dichloroethylene (1,1-DCE)	0.33	0.0026	U	
1,2,3-Trichlorobenzene	NA	0.0026	U	
1,2,3-Trichloropropane	NA	0.0026	U	
1,2,4-Trichlorobenzene	NA	0.0026	U	
1,2,4-Trimethylbenzene	3.6	0.0026	U	
1,2-Dibromo-3-chloropropane	NA	0.0026	U	
1,2-Dibromoethane	NA	0.0026	U	
1,2-Dichlorobenzene	1.1	0.0026	U	
1,2-Dichloroethane	0.02	0.0026	U	
1,2-Dichloropropane	NA	0.0026	U	
1,3,5-Trimethylbenzene	8.4	0.0026	U	
1,3-Dichlorobenzene	2.4	0.0026	U	
1,4-Dichlorobenzene	1.8	0.0026	U	
1,4-Dioxane	0.1	0.053	U	
2-Butanone (MEK)	0.12	0.0026	U	
2-Hexanone	NA	0.0026	U	
4-Methyl-2-pentanone	NA	0.0026	U	
Acetone	0.05	0.0053	U	
Acrolein	NA	0.0053	U	
Acrylonitrile	NA	0.0026	U	
Benzene	0.06	0.0026	U	
Bromochloromethane	NA	0.0026	U	
Bromodichloromethane	NA	0.0026	U	
Bromoform	NA	0.0026	U	
Bromomethane	NA	0.0026	U	
Carbon disulfide	NA	0.0026	U	
Carbon tetrachloride	0.76	0.0026	U	
Chlorobenzene	1.1	0.0026	U	
Chloroethane	NA	0.0026	U	
Chloroform	0.37	0.0026	U	
Chloromethane	NA	0.0026	U	
cis-1,2-Dichloroethylene (cis-DCE)	0.25	0.0026	U	
cis-1,3-Dichloropropylene	NA	0.0026	U	
Cyclohexane	NA	0.0026	U	
Dibromochloromethane	NA	0.0026	U	
Dibromomethane	NA	0.0026	U	
Dichlorodifluoromethane	NA	0.0026	U	
Ethyl Benzene	1	0.0026	U	
Hexachlorobutadiene	NA	0.0026	U	
Isopropylbenzene	2.3	0.0026	U	
Methyl acetate	NA	0.0026	U	
Methyl tert-butyl ether (MTBE)	0.93	0.0026	U	
Methylcyclohexane	NA	0.0026	U	
Methylene chloride	0.05	0.0053	U	
n-Butylbenzene	12	0.0026	U	
n-Propylbenzene	3.9	0.0026	U	
o-Xylene	0.26	0.0026	U	
p- & m- Xylenes	0.26	0.0053	U	
p-Isopropyltoluene	10	0.0026	U	
sec-Butylbenzene	11	0.0026	U	
Styrene	NA	0.0026	U	
tert-Butyl alcohol (TBA)	NA	0.0026	U	
tert-Butylbenzene	5.9	0.0026	U	
Tetrachloroethylene (PCE)	1.3	0.0026	U	
Toluene	0.7	0.0026	U	
trans-1,2-Dichloroethylene (trans-DCE)	0.19	0.0026	U	
trans-1,3-Dichloropropylene	NA	0.0026	U	
Trichloroethylene (TCE)	0.47	0.0026	U	
Trichlorofluoromethane	NA	0.0026	U	
Vinyl chloride (VC)	0.02	0.0026	U	
Xylenes, Total	0.26	0.0079	U	

Analyte Detected

Analyte Above UUSCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 2: PAHs in Soils**

WCD File: PQ18052.20



All data in mg/Kg (ppm)		Sample ID U= Not Detected ≥ indicated value Data above SCOs shown in <b>Bold</b>	SB-01 13-15		SB-02 13-15		SB-03 5-7		
			(2018-08-21)		(2018-08-21)		(2018-08-23)		
			2		2		2		
<b>SVOCs, 8270</b>	<b>UUSCO</b>		<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>	
2-Methylnaphthalene	NA	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0501	<i>U</i>		
Acenaphthene	20	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0501	<i>U</i>		
Acenaphthylene	100	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0501	<i>U</i>		
Anthracene	100	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0501	<i>U</i>		
Benzo(a)anthracene	1	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0856	<i>JD</i>		
Benzo(a)pyrene	1	0.0432	<i>U</i>	0.0431	<i>U</i>	0.122	<i>D</i>		
Benzo(b)fluoranthene	1	0.0432	<i>U</i>	0.0431	<i>U</i>	0.12	<i>D</i>		
Benzo(g,h,i)perylene	100	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0776	<i>JD</i>		
Benzo(k)fluoranthene	0.8	0.0432	<i>U</i>	0.0431	<i>U</i>	0.114	<i>D</i>		
Chrysene	1	0.0432	<i>U</i>	0.0431	<i>U</i>	0.136	<i>D</i>		
Dibenzo(a,h)anthracene	0.33	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0501	<i>U</i>		
Fluoranthene	100	0.0432	<i>U</i>	0.0431	<i>U</i>	0.314	<i>D</i>		
Fluorene	30	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0501	<i>U</i>		
Indeno(1,2,3-cd)pyrene	0.5	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0656	<i>JD</i>		
Naphthalene	12	0.0432	<i>U</i>	0.0431	<i>U</i>	0.0501	<i>U</i>		
Phenanthrene	100	0.0432	<i>U</i>	0.0431	<i>U</i>	0.192	<i>D</i>		
Pyrene	100	0.0432	<i>U</i>	0.0431	<i>U</i>	0.228	<i>D</i>		

Analyte Detected

Analyte Above UUSCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 2: PAHs in Soils**

WCD File: PQ18052.20



All data in mg/Kg (ppm)		Sample ID	SB-04 5-7		SB-05 9.5-11.5	
U= Not Detected ≥ indicated value		Sample Date	(2018-08-23)		(2018-08-23)	
Data above SCOs shown in <b>Bold</b>		Dilution Factor	2		2	
<b>SVOCs, 8270</b>		<b>UUSCO</b>	<i>Result</i>	<i>Qualifier</i>	<i>Result</i>	<i>Qualifier</i>
2-Methylnaphthalene		NA	0.0458	<i>U</i>	0.0432	<i>U</i>
Acenaphthene		20	0.0458	<i>U</i>	0.0432	<i>U</i>
Acenaphthylene		100	0.0458	<i>U</i>	0.0432	<i>U</i>
Anthracene		100	<b>0.0461</b>	<i>JD</i>	0.0432	<i>U</i>
Benzo(a)anthracene		1	0.284	<i>D</i>	0.0432	<i>U</i>
Benzo(a)pyrene		1	0.316	<i>D</i>	0.0432	<i>U</i>
Benzo(b)fluoranthene		1	0.306	<i>D</i>	0.0432	<i>U</i>
Benzo(g,h,i)perylene		100	0.193	<i>D</i>	0.0432	<i>U</i>
Benzo(k)fluoranthene		0.8	0.274	<i>D</i>	0.0432	<i>U</i>
Chrysene		1	0.279	<i>D</i>	0.0432	<i>U</i>
Dibenzo(a,h)anthracene		0.33	0.057	<i>JD</i>	0.0432	<i>U</i>
Fluoranthene		100	<b>0.455</b>	<i>D</i>	0.0432	<i>U</i>
Fluorene		30	0.0458	<i>U</i>	0.0432	<i>U</i>
Indeno(1,2,3-cd)pyrene		0.5	0.2	<i>D</i>	0.0432	<i>U</i>
Naphthalene		12	0.0458	<i>U</i>	0.0432	<i>U</i>
Phenanthrene		100	0.224	<i>D</i>	0.0432	<i>U</i>
Pyrene		100	0.393	<i>D</i>	0.0432	<i>U</i>

Analyte Detected

Analyte Above UUSCO

Notes: SCOs based on NYSDEC Part 375-6.8 and CP-51 NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank D = diluted

**Table 3: VOCs in Soil Vapor**

WCD File: PQ18052.20



Sample ID All data in $\mu\text{g}/\text{m}^3$ U= Not Detected $\geq$ value	Sample Date (2018-08-21) Dilution Factor 1.383	SV-01		SV-02		SV-03		SV-04	
		(2018-08-21)		(2018-08-21)		(2018-08-21)		(2018-08-21)	
		Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
<b>VOCs, TO-15</b>									
1,1,1,2-Tetrachloroethane	0.95	U	0.97	U	0.93	U	0.94	U	
1,1,1-Trichloroethane	4.7	D	0.77	U	27	D	620	D	
1,1,2-Tetrachloroethane	0.95	U	0.97	U	0.93	U	0.94	U	
1,1,2-Trichloro-1,2,2-trifluoroethane	1.1	U	1.1	U	1	U	1	U	
1,1,2-Trichloroethane	0.76	U	0.77	U	0.74	U	0.75	U	
1,1-Dichloroethane	0.56	U	0.57	U	0.55	U	7.8	D	
1,1-Dichloroethene	0.55	U	0.56	U	0.54	U	0.54	U	
1,2,4-Trichlorobenzene	1	U	1	U	1	U	1	U	
1,2,4-Trimethylbenzene	29	D	110	D	20	D	17	D	
1,2-Dibromoethane	1.1	U	1.1	U	1	U	1.1	U	
1,2-Dichlorobenzene	0.83	U	0.85	U	0.82	U	0.82	U	
1,2-Dichloroethane	0.56	U	0.57	U	0.55	U	0.55	U	
1,2-Dichloropropane	0.64	U	0.65	U	0.63	U	0.63	U	
1,2-Dichlorotetrafluoroethane	0.97	U	0.98	U	0.95	U	0.96	U	
1,3,5-Trimethylbenzene	8.9	D	28	D	4.9	D	3.7	D	
1,3-Butadiene	2	D	0.93	U	0.9	U	0.91	U	
1,3-Dichlorobenzene	0.83	U	0.85	U	0.82	U	0.82	U	
1,3-Dichloropropane	0.64	U	0.65	U	0.63	U	0.63	U	
1,4-Dichlorobenzene	0.83	U	0.85	U	0.82	U	0.82	U	
1,4-Dioxane	1	U	1	U	0.98	U	0.99	U	
2-Butanone	28	D	73	D	6.1	D	3.7	D	
2-Hexanone	3	D	8.8	D	1.1	U	1.1	U	
3-Chloropropene	2.2	U	2.2	U	2.1	U	2.1	U	
4-Methyl-2-pentanone	5.5	D	9.6	D	0.56	U	0.56	U	
Acetone	160	D	370	D	32	D	18	D	
Acrylonitrile	0.3	U	0.31	U	0.29	U	0.3	U	
Benzene	11	D	6.7	D	9.2	D	6.7	D	
Benzyl chloride	0.72	U	0.73	U	0.7	U	0.71	U	
Bromodichloromethane	0.93	U	0.94	U	0.91	U	0.92	U	
Bromoform	1.4	U	1.5	U	1.4	U	1.4	U	
Bromomethane	0.54	U	0.55	U	0.53	U	0.53	U	
Carbon disulfide	3.5	D	0.44	U	0.42	U	0.43	U	
Carbon tetrachloride	0.22	U	0.22	U	0.21	U	0.22	U	
Chlorobenzene	0.64	U	0.65	U	0.63	U	0.63	U	
Chloroethane	0.37	U	0.37	U	0.36	U	0.36	U	
Chloroform	0.68	U	0.69	U	35	D	86	D	
Chloromethane	3.1	D	10	D	0.28	U	0.28	U	
cis-1,2-Dichloroethene	0.55	U	0.56	U	0.54	U	0.54	U	
cis-1,3-Dichloropropene	0.63	U	0.64	U	0.62	U	0.62	U	
Cyclohexane	14	D	51	D	6.9	D	0.47	U	
Dibromochemicalthane	1.2	U	1.2	U	1.2	U	1.2	U	
Dichlorodifluoromethane	0.69	U	0.7	U	0.67	U	0.68	U	
Ethyl Acetate	3.9	D	5.6	D	0.98	U	0.99	U	
Ethylbenzene	30	D	25	D	24	D	19	D	
Hexachlorobutadiene	1.5	U	1.5	U	1.4	U	1.5	U	
Isopropanol	4.7	D	17	D	3.1	D	3.9	D	
Methyl Methacrylate	0.57	U	0.58	U	0.56	U	0.56	U	
Methyl tert butyl ether	0.5	U	0.51	U	0.49	U	0.49	U	
Methylene chloride	4.8	D	4.8	D	0.94	U	0.95	U	
Naphthalene	9.4	D	9.8	D	8.9	D	7.3	D	
n-Heptane	13	D	40	D	12	D	12	D	
n-Hexane	6.6	D	6	D	4.5	D	6.6	D	
o-Xylene	31	D	35	D	22	D	18	D	
p/m-Xylene	90	D	91	D	67	D	53	D	
p-Ethyltoluene	31	D	100	D	19	D	16	D	
Propylene	11	D	11	D	2.9	D	2.4	D	
Styrene	4.5	D	6.5	D	3.6	D	0.58	U	
Tetrachloroethene	8.4	D	7.4	D	2,700	D	1,700	D	
Tetrahydrofuran	20	D	30	D	5	D	4.4	D	
Toluene	110	D	74	D	90	D	68	D	
trans-1,2-Dichloroethene	0.55	U	0.56	U	0.54	U	0.54	U	
trans-1,3-Dichloropropene	0.63	U	0.64	U	0.62	U	0.62	U	
Trichloroethene	0.19	U	0.19	U	10	D	5.3	D	
Trichlorofluoromethane	0.78	U	0.79	U	4.9	D	0.77	U	
Vinyl acetate	0.49	U	0.5	U	0.48	U	0.48	U	
Vinyl bromide	0.61	U	0.62	U	0.59	U	0.6	U	
Vinyl chloride	0.35	U	0.36	U	0.35	U	0.35	U	

Detected concentrations

Relatively elevated concentrations

Notes: NA = not available

Result Qualifiers: J = approximate E = estimated B = detected in blank

## APPENDIX D

# Laboratory Reports



# Technical Report

prepared for:

**WCD Group - Poughkeepsie NY**  
24 Davis Avenue  
Poughkeepsie NY, 12603  
**Attention: Tyler Goodnough**

Report Date: 08/27/2018  
**Client Project ID: PQ18052**  
York Project (SDG) No.: 18H0990

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
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■  
132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 08/27/2018  
Client Project ID: PQ18052  
York Project (SDG) No.: 18H0990

**WCD Group - Poughkeepsie NY**  
24 Davis Avenue  
Poughkeepsie NY, 12603  
Attention: Tyler Goodnough

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on August 21, 2018 and listed below. The project was identified as your project: **PQ18052**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18H0990-01	SV-01	Soil Vapor	08/21/2018	08/21/2018
18H0990-02	SV-02	Soil Vapor	08/21/2018	08/21/2018
18H0990-03	SV-03	Soil Vapor	08/21/2018	08/21/2018
18H0990-04	SV-04	Soil Vapor	08/21/2018	08/21/2018

## **General Notes for York Project (SDG) No.: 18H0990**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 08/27/2018





## Sample Information

Client Sample ID: **SV-01**

York Sample ID: **18H0990-01**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.95	1.386	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 08:24	LDS
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>4.7</b>		ug/m³	0.76	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.95	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.1	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.76	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.56	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.55	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.0	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>29</b>		ug/m³	0.68	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.83	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.56	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.64	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.97	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>8.9</b>		ug/m³	0.68	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
106-99-0	<b>1,3-Butadiene</b>	<b>2.0</b>		ug/m³	0.92	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.83	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.64	1.386	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 08:24	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.83	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.0	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
78-93-3	<b>2-Butanone</b>	<b>28</b>		ug/m³	0.41	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
591-78-6	* <b>2-Hexanone</b>	<b>3.0</b>		ug/m³	1.1	1.386	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 08:24	LDS



## Sample Information

Client Sample ID: SV-01

York Sample ID: 18H0990-01

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	2.2	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>5.5</b>		ug/m³	0.57	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
67-64-1	<b>Acetone</b>	<b>160</b>		ug/m³	0.66	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.30	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
71-43-2	<b>Benzene</b>	<b>11</b>		ug/m³	0.44	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.72	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.93	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
75-25-2	Bromoform	ND		ug/m³	1.4	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
74-83-9	Bromomethane	ND		ug/m³	0.54	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
75-15-0	<b>Carbon disulfide</b>	<b>3.5</b>		ug/m³	0.43	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.22	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.64	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
75-00-3	Chloroethane	ND		ug/m³	0.37	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
67-66-3	Chloroform	ND		ug/m³	0.68	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
74-87-3	<b>Chloromethane</b>	<b>3.1</b>		ug/m³	0.29	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.55	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.63	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
110-82-7	<b>Cyclohexane</b>	<b>14</b>		ug/m³	0.48	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.2	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	0.69	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
141-78-6	* <b>Ethyl acetate</b>	<b>3.9</b>		ug/m³	1.0	1.386	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 08:24	LDS
100-41-4	<b>Ethyl Benzene</b>	<b>30</b>		ug/m³	0.60	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.5	1.386	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 08:24	LDS



## Sample Information

Client Sample ID: SV-01

York Sample ID: 18H0990-01

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	<b>Isopropanol</b>	<b>4.7</b>		ug/m³	0.68	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.57	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.50	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-09-2	<b>Methylene chloride</b>	<b>4.8</b>		ug/m³	0.96	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
91-20-3	* <b>Naphthalene</b>	<b>9.4</b>		ug/m³	7.3	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NJDEP-Queens			
142-82-5	<b>n-Heptane</b>	<b>13</b>		ug/m³	0.57	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-54-3	<b>n-Hexane</b>	<b>6.6</b>		ug/m³	0.49	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
95-47-6	<b>o-Xylene</b>	<b>31</b>		ug/m³	0.60	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>90</b>		ug/m³	1.2	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
622-96-8	* <b>p-Ethyltoluene</b>	<b>31</b>		ug/m³	0.68	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:					
115-07-1	* <b>Propylene</b>	<b>11</b>		ug/m³	0.24	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:					
100-42-5	<b>Styrene</b>	<b>4.5</b>		ug/m³	0.59	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
127-18-4	<b>Tetrachloroethylene</b>	<b>8.4</b>		ug/m³	0.24	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
109-99-9	* <b>Tetrahydrofuran</b>	<b>20</b>		ug/m³	0.82	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:					
108-88-3	<b>Toluene</b>	<b>110</b>		ug/m³	0.52	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.55	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.63	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	ND		ug/m³	0.19	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	0.78	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.49	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.61	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.35	1.386	EPA TO-15	08/23/2018 17:30	08/24/2018 08:24	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			

#### Surrogate Recoveries      Result      Acceptance Range

120 RESEARCH DRIVE

www.YORKLAB.com

STRATFORD, CT 06615

(203) 325-1371

■ 132-02 89th AVENUE

FAX (203) 357-0166

RICHMOND HILL, NY 11418

ClientServices@

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## Sample Information

Client Sample ID: **SV-01**

York Sample ID: **18H0990-01**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	102 %			70-130					

## Sample Information

Client Sample ID: **SV-02**

York Sample ID: **18H0990-02**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.97	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.77	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.97	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.1	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.77	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.57	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.56	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.0	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>110</b>		ug/m³	0.69	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.85	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.57	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.65	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.98	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>28</b>		ug/m³	0.69	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.93	1.406	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 09:15	LDS



## Sample Information

Client Sample ID: SV-02

York Sample ID: 18H0990-02

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.85	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.65	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.85	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.0	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
78-93-3	<b>2-Butanone</b>	<b>73</b>		ug/m³	0.41	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
591-78-6	* 2-Hexanone	<b>8.8</b>		ug/m³	1.2	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.2	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>9.6</b>		ug/m³	0.58	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
67-64-1	<b>Acetone</b>	<b>370</b>		ug/m³	6.7	14.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 13:14	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.31	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
71-43-2	<b>Benzene</b>	<b>6.7</b>		ug/m³	0.45	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.73	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.94	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
75-25-2	Bromoform	ND		ug/m³	1.5	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
74-83-9	Bromomethane	ND		ug/m³	0.55	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
75-15-0	Carbon disulfide	ND		ug/m³	0.44	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.22	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.65	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
75-00-3	Chloroethane	ND		ug/m³	0.37	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
67-66-3	Chloroform	ND		ug/m³	0.69	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
74-87-3	<b>Chloromethane</b>	<b>10</b>		ug/m³	0.29	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.56	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.64	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS



## Sample Information

Client Sample ID: **SV-02**

York Sample ID: **18H0990-02**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
110-82-7	<b>Cyclohexane</b>	<b>51</b>		ug/m³	0.48	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	1.2	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-71-8	Dichlorodifluoromethane	ND		ug/m³	0.70	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	<b>5.6</b>		ug/m³	1.0	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:					
100-41-4	<b>Ethyl Benzene</b>	<b>25</b>		ug/m³	0.61	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.5	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-63-0	<b>Isopropanol</b>	<b>17</b>		ug/m³	0.69	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	0.58	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.51	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-09-2	<b>Methylene chloride</b>	<b>4.8</b>		ug/m³	0.98	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
91-20-3	* Naphthalene	<b>9.8</b>		ug/m³	7.4	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NJDEP-Queens			
142-82-5	<b>n-Heptane</b>	<b>40</b>		ug/m³	0.58	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-54-3	<b>n-Hexane</b>	<b>6.0</b>		ug/m³	0.50	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
95-47-6	<b>o-Xylene</b>	<b>35</b>		ug/m³	0.61	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>91</b>		ug/m³	1.2	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	<b>100</b>		ug/m³	0.69	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:					
115-07-1	* Propylene	<b>11</b>		ug/m³	0.24	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:					
100-42-5	<b>Styrene</b>	<b>6.5</b>		ug/m³	0.60	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
127-18-4	<b>Tetrachloroethylene</b>	<b>7.4</b>		ug/m³	0.24	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	<b>30</b>		ug/m³	0.83	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:					
108-88-3	<b>Toluene</b>	<b>74</b>		ug/m³	0.53	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.56	1.406	EPA TO-15	08/23/2018 17:30	08/24/2018 09:15	LDS
					Certifications:		NELAC-NY12058,NJDEP-Queens			



## Sample Information

Client Sample ID: **SV-02**

York Sample ID: **18H0990-02**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.64	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
79-01-6	Trichloroethylene	ND		ug/m³	0.19	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	0.79	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.50	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.62	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.36	1.406	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 09:15	LDS
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: p-Bromofluorobenzene	108 %			70-130					

## Sample Information

Client Sample ID: **SV-03**

York Sample ID: **18H0990-03**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.93	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>27</b>		ug/m³	0.74	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.93	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.0	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.74	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.55	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.54	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.0	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>20</b>		ug/m³	0.67	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS



## Sample Information

Client Sample ID: **SV-03**

York Sample ID: **18H0990-03**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.0	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.82	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.55	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.63	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.95	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>4.9</b>		ug/m³	0.67	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.90	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.82	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.63	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.82	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.98	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
78-93-3	<b>2-Butanone</b>	<b>6.1</b>		ug/m³	0.40	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.1	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.1	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.56	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
67-64-1	<b>Acetone</b>	<b>32</b>		ug/m³	0.65	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.29	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
71-43-2	<b>Benzene</b>	<b>9.2</b>		ug/m³	0.43	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.70	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.91	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-25-2	Bromoform	ND		ug/m³	1.4	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
74-83-9	Bromomethane	ND		ug/m³	0.53	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-15-0	Carbon disulfide	ND		ug/m³	0.42	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS



## Sample Information

Client Sample ID: **SV-03**

York Sample ID: **18H0990-03**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
56-23-5	Carbon tetrachloride	ND		ug/m³	0.21	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.63	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-00-3	Chloroethane	ND		ug/m³	0.36	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
67-66-3	<b>Chloroform</b>	<b>35</b>		ug/m³	0.66	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
74-87-3	Chloromethane	ND		ug/m³	0.28	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.54	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.62	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
110-82-7	<b>Cyclohexane</b>	<b>6.9</b>		ug/m³	0.47	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.2	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	0.67	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	0.98	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS
100-41-4	<b>Ethyl Benzene</b>	<b>24</b>		ug/m³	0.59	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.4	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
67-63-0	<b>Isopropanol</b>	<b>3.1</b>		ug/m³	0.67	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.56	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.49	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
75-09-2	Methylene chloride	ND		ug/m³	0.94	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
91-20-3	* <b>Naphthalene</b>	<b>8.9</b>		ug/m³	7.1	1.358	EPA TO-15 Certifications: NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
142-82-5	<b>n-Heptane</b>	<b>12</b>		ug/m³	0.56	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
110-54-3	<b>n-Hexane</b>	<b>4.5</b>		ug/m³	0.48	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
95-47-6	<b>o-Xylene</b>	<b>22</b>		ug/m³	0.59	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>67</b>		ug/m³	1.2	1.358	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:07	LDS
622-96-8	* <b>p-Ethyltoluene</b>	<b>19</b>		ug/m³	0.67	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS



## Sample Information

Client Sample ID: **SV-03**

York Sample ID: **18H0990-03**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
115-07-1	* Propylene	2.9		ug/m³	0.23	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
100-42-5	Styrene	3.6		ug/m³	0.58	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
127-18-4	Tetrachloroethylene	2700		ug/m³	2.3	13.58	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 13:59	LDS	
109-99-9	* Tetrahydrofuran	5.0		ug/m³	0.80	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
108-88-3	Toluene	90		ug/m³	0.51	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.54	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.62	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
79-01-6	Trichloroethylene	10		ug/m³	0.18	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
75-69-4	Trichlorofluoromethane (Freon 11)	4.9		ug/m³	0.76	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
108-05-4	Vinyl acetate	ND		ug/m³	0.48	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
593-60-2	Vinyl bromide	ND		ug/m³	0.59	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
75-01-4	Vinyl Chloride	ND		ug/m³	0.35	1.358	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:07	LDS	
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
460-00-4	Surrogate: p-Bromofluorobenzene	107 %				70-130					

## Sample Information

Client Sample ID: **SV-04**

York Sample ID: **18H0990-04**

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.94	1.367	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:59	LDS
71-55-6	1,1,1-Trichloroethane	620		ug/m³	15	27.34	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 14:45	LDS
NELAC-NY12058,NJDEP-Queens										



## Sample Information

Client Sample ID: SV-04

York Sample ID: 18H0990-04

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.94	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.0	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.75	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-34-3	<b>1,1-Dichloroethane</b>	<b>7.8</b>		ug/m³	0.55	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.54	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.0	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>17</b>		ug/m³	0.67	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.82	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.55	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.63	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.96	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>3.7</b>		ug/m³	0.67	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.91	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.82	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.63	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.82	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.99	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
78-93-3	<b>2-Butanone</b>	<b>3.7</b>		ug/m³	0.40	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.1	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.1	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.56	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
67-64-1	<b>Acetone</b>	<b>18</b>		ug/m³	0.65	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS



## Sample Information

Client Sample ID: SV-04

York Sample ID: 18H0990-04

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-13-1	Acrylonitrile	ND		ug/m³	0.30	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
71-43-2	<b>Benzene</b>	<b>6.7</b>		ug/m³	0.44	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.71	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.92	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-25-2	Bromoform	ND		ug/m³	1.4	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
74-83-9	Bromomethane	ND		ug/m³	0.53	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-15-0	Carbon disulfide	ND		ug/m³	0.43	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.22	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.63	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-00-3	Chloroethane	ND		ug/m³	0.36	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
67-66-3	<b>Chloroform</b>	<b>86</b>		ug/m³	0.67	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
74-87-3	Chloromethane	ND		ug/m³	0.28	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.54	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.62	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
110-82-7	Cyclohexane	ND		ug/m³	0.47	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.2	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	0.68	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	0.99	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
100-41-4	<b>Ethyl Benzene</b>	<b>19</b>		ug/m³	0.59	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.5	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
67-63-0	<b>Isopropanol</b>	<b>3.9</b>		ug/m³	0.67	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.56	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.49	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS



## Sample Information

Client Sample ID: SV-04

York Sample ID: 18H0990-04

York Project (SDG) No.

18H0990

Client Project ID

PQ18052

Matrix

Soil Vapor

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	ND		ug/m³	0.95	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
91-20-3	* Naphthalene	7.3		ug/m³	7.2	1.367	EPA TO-15 Certifications: NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
142-82-5	n-Heptane	12		ug/m³	0.56	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
110-54-3	n-Hexane	6.6		ug/m³	0.48	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
95-47-6	o-Xylene	18		ug/m³	0.59	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
179601-23-1	p- & m- Xylenes	53		ug/m³	1.2	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
622-96-8	* p-Ethyltoluene	16		ug/m³	0.67	1.367	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:59	LDS
115-07-1	* Propylene	2.4		ug/m³	0.24	1.367	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:59	LDS
100-42-5	Styrene	ND		ug/m³	0.58	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
127-18-4	Tetrachloroethylene	1700		ug/m³	4.6	27.34	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 14:45	LDS
109-99-9	* Tetrahydrofuran	4.4		ug/m³	0.81	1.367	EPA TO-15 Certifications:	08/23/2018 17:30	08/24/2018 10:59	LDS
108-88-3	Toluene	68		ug/m³	0.52	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.54	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.62	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
79-01-6	Trichloroethylene	5.3		ug/m³	0.18	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	0.77	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.48	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.60	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.35	1.367	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	08/23/2018 17:30	08/24/2018 10:59	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	105 %	70-130							



## Analytical Batch Summary

**Batch ID:** BH81219

**Preparation Method:** EPA TO15 PREP

**Prepared By:** LDS

YORK Sample ID	Client Sample ID	Preparation Date
18H0990-01	SV-01	08/23/18
18H0990-02	SV-02	08/23/18
18H0990-02RE1	SV-02	08/23/18
18H0990-03	SV-03	08/23/18
18H0990-03RE1	SV-03	08/23/18
18H0990-04	SV-04	08/23/18
18H0990-04RE1	SV-04	08/23/18
BH81219-BLK1	Blank	08/23/18
BH81219-BS1	LCS	08/23/18



## Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BH81219 - EPA TO15 PREP

#### Blank (BH81219-BLK1)

Prepared & Analyzed: 08/23/2018

1,1,1,2-Tetrachloroethane	ND	0.69	ug/m <sup>3</sup>								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.40	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.40	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								
Naphthalene	ND	5.2	"								



## Volatile Organic Compounds in Air by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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#### Batch BH81219 - EPA TO15 PREP

##### Blank (BH81219-BLK1)

n-Heptane	ND	0.41	ug/m³								
n-Hexane	ND	0.35	"								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.17	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.26	"								
<i>Surrogate: p-Bromofluorobenzene</i>	8.84		ppbv	10.0		88.4	70-130				

##### LCS (BH81219-BS1)

1,1,1,2-Tetrachloroethane	9.24	ppbv	10.0	92.4	70-130						
1,1,1-Trichloroethane	9.84	"	10.0	98.4	70-130						
1,1,2,2-Tetrachloroethane	9.39	"	10.0	93.9	70-130						
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	10.2	"	10.0	102	70-130						
1,1,2-Trichloroethane	9.17	"	10.0	91.7	70-130						
1,1-Dichloroethane	9.86	"	10.0	98.6	70-130						
1,1-Dichloroethylene	8.97	"	10.0	89.7	70-130						
1,2,4-Trichlorobenzene	9.35	"	10.0	93.5	70-130						
1,2,4-Trimethylbenzene	9.22	"	10.0	92.2	70-130						
1,2-Dibromoethane	9.30	"	10.0	93.0	70-130						
1,2-Dichlorobenzene	10.3	"	10.0	103	70-130						
1,2-Dichloroethane	9.52	"	10.0	95.2	70-130						
1,2-Dichloropropane	8.84	"	10.0	88.4	70-130						
1,2-Dichlorotetrafluoroethane	11.3	"	10.0	113	70-130						
1,3,5-Trimethylbenzene	8.55	"	10.0	85.5	70-130						
1,3-Butadiene	11.6	"	10.0	116	70-130						
1,3-Dichlorobenzene	10.6	"	10.0	106	70-130						
1,3-Dichloropropane	8.90	"	10.0	89.0	70-130						
1,4-Dichlorobenzene	10.9	"	10.0	109	70-130						
1,4-Dioxane	6.22	"	10.0	62.2	70-130	Low Bias					
2-Butanone	9.19	"	10.0	91.9	70-130						
2-Hexanone	7.86	"	10.0	78.6	70-130						
3-Chloropropene	9.15	"	10.0	91.5	70-130						
4-Methyl-2-pentanone	7.70	"	10.0	77.0	70-130						
Acetone	8.77	"	10.0	87.7	70-130						
Acrylonitrile	10.5	"	10.0	105	70-130						
Benzene	9.47	"	10.0	94.7	70-130						
Benzyl chloride	9.89	"	10.0	98.9	70-130						
Bromodichloromethane	9.10	"	10.0	91.0	70-130						
Bromoform	9.86	"	10.0	98.6	70-130						
Bromomethane	9.38	"	10.0	93.8	70-130						



## Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH81219 - EPA TO15 PREP</b>											
<b>LCS (BH81219-BS1)</b>											
Carbon disulfide	10.8		ppbv	10.0	108	70-130					
Carbon tetrachloride	8.92		"	10.0	89.2	70-130					
Chlorobenzene	9.47		"	10.0	94.7	70-130					
Chloroethane	11.0		"	10.0	110	70-130					
Chloroform	9.77		"	10.0	97.7	70-130					
Chloromethane	11.7		"	10.0	117	70-130					
cis-1,2-Dichloroethylene	9.27		"	10.0	92.7	70-130					
cis-1,3-Dichloropropylene	9.19		"	10.0	91.9	70-130					
Cyclohexane	9.89		"	10.0	98.9	70-130					
Dibromochloromethane	9.18		"	10.0	91.8	70-130					
Dichlorodifluoromethane	10.4		"	10.0	104	70-130					
Ethyl acetate	9.35		"	10.0	93.5	70-130					
Ethyl Benzene	8.79		"	10.0	87.9	70-130					
Hexachlorobutadiene	9.71		"	10.0	97.1	70-130					
Isopropanol	10.7		"	10.0	107	70-130					
Methyl Methacrylate	8.87		"	10.0	88.7	70-130					
Methyl tert-butyl ether (MTBE)	16.9		"	10.0	169	70-130	High Bias				
Methylene chloride	9.77		"	10.0	97.7	70-130					
Naphthalene	9.44		"	10.0	94.4	70-130					
n-Heptane	9.09		"	10.0	90.9	70-130					
n-Hexane	10.0		"	10.0	100	70-130					
o-Xylene	8.42		"	10.0	84.2	70-130					
p- & m- Xylenes	17.7		"	20.0	88.6	70-130					
p-Ethyltoluene	9.58		"	10.0	95.8	70-130					
Propylene	9.46		"	10.0	94.6	70-130					
Styrene	9.58		"	10.0	95.8	70-130					
Tetrachloroethylene	9.68		"	10.0	96.8	70-130					
Tetrahydrofuran	9.36		"	10.0	93.6	70-130					
Toluene	8.73		"	10.0	87.3	70-130					
trans-1,2-Dichloroethylene	10.3		"	10.0	103	70-130					
trans-1,3-Dichloropropylene	8.76		"	10.0	87.6	70-130					
Trichloroethylene	8.31		"	10.0	83.1	70-130					
Trichlorofluoromethane (Freon 11)	9.76		"	10.0	97.6	70-130					
Vinyl acetate	14.1		"	10.0	141	70-130	High Bias				
Vinyl bromide	10.4		"	10.0	104	70-130					
Vinyl Chloride	11.3		"	10.0	113	70-130					
Surrogate: p-Bromofluorobenzene	10.2		"	10.0	102	70-130					





## Sample and Data Qualifiers Relating to This Work Order

- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- CCV-A The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to detected analytes only.

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence . This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

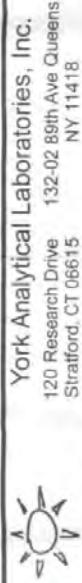
2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.



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Stratford, CT 06615  
NY 11418  
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**YORK**  
ANALYTICAL LABORATORIES, INC.

132-02 89th Ave Queens,  
NY 11418  
www.yorklab.com

## Field Chain-of-Custody Record - AIR

YORK Project No.  
**18N0970**

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document.  
This document serves as your written authorization for YORK to proceed with the analyses requested below.  
Signature binds you to YORK's Standard Terms & Conditions.

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: <b>WCD Group</b>	Address: <b>24 Dawn Ave Roughneck NY</b>	Company: Phone: Contact: E-mail:	Address: Phone: Contact: E-mail:	PQ18052	RUSH - Next Day
Phone: <b>845-452-1688</b>					RUSH - Two Day
Contact: <b>Tyler Goodrich</b>					RUSH - Three Day
E-mail: <b>[Signature]</b>					RUSH - Four Day
					Standard (5-7 Day) <b>X</b>

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

**Tyler Goodrich**

Samples Collected By: (print your name above and sign below)

**[Signature]**

Certified Canisters: Batch \_\_\_\_\_ Individual \_\_\_\_\_

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hz)	Canister Vacuum After Sampling (in Hz)	Canister ID	Flow Cont. ID	Reporting Units: ug/m <sup>3</sup>	ppbv	ppmv
SV-01	8/21/18	A5	-30	-1	28308	7607	Analysis Requested		
SV-02			-32	-4	10722	6862			
SV-03			-32	-2	10045	6875			
SV-04			-33	-4	24058	6861			

Comments:

Detection Limits Required		Sampling Media	
≤ 1 ug/m <sup>3</sup>	NYSDEC V1 Limits	6 Liter Canister	
Routine Survey	Other	Tedlar Bag	
Samples Relinquished by / Company	Date/Time	Date/Time	
<b>Tyler - WCD</b>	8/21/18 - 12:56	John [Signature]	8/21/18 12:50
Samples Received by / Company	Date/Time	Date/Time	
Samples Relinquished by / Company	Date/Time	Date/Time	



# Technical Report

prepared for:

**WCD Group - Poughkeepsie NY**  
24 Davis Avenue  
Poughkeepsie NY, 12603  
**Attention: Tyler Goodnough**

Report Date: 08/28/2018  
**Client Project ID: PQ18052**  
York Project (SDG) No.: 18H0955

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

120 RESEARCH DRIVE  
[www.YORKLAB.com](http://www.YORKLAB.com)

STRATFORD, CT 06615  
(203) 325-1371

■  
132-02 89th AVENUE  
FAX (203) 357-0166

RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 08/28/2018  
Client Project ID: PQ18052  
York Project (SDG) No.: 18H0955

**WCD Group - Poughkeepsie NY**  
24 Davis Avenue  
Poughkeepsie NY, 12603  
Attention: Tyler Goodnough

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on August 21, 2018 and listed below. The project was identified as your project: **PQ18052**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18H0955-01	SB-01 13-15	Soil	08/21/2018	08/21/2018
18H0955-02	SB-02 13-15	Soil	08/21/2018	08/21/2018

## **General Notes for York Project (SDG) No.: 18H0955**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 08/28/2018





## Sample Information

Client Sample ID: SB-01 13-15

York Sample ID: 18H0955-01

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/23/2018 14:00	08/23/2018 22:37	LL
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	08/23/2018 14:00	08/23/2018 22:37	LL
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
123-91-1	1,4-Dioxane	ND		ug/kg dry	50	100	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
78-93-3	2-Butanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
591-78-6	2-Hexanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL



## Sample Information

Client Sample ID: SB-01 13-15

York Sample ID: 18H0955-01

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
67-64-1	Acetone	ND		ug/kg dry	5.0	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
107-02-8	Acrolein	ND		ug/kg dry	5.0	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
107-13-1	Acrylonitrile	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
71-43-2	Benzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
74-97-5	Bromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-25-2	Bromoform	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
74-83-9	Bromomethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-15-0	Carbon disulfide	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
108-90-7	Chlorobenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-00-3	Chloroethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
67-66-3	Chloroform	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
74-87-3	Chloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
110-82-7	Cyclohexane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
74-95-3	Dibromomethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL



## Sample Information

Client Sample ID: SB-01 13-15

York Sample ID: 18H0955-01

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
79-20-9	Methyl acetate	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-09-2	Methylene chloride	ND		ug/kg dry	5.0	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
95-47-6	o-Xylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.0	10	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
100-42-5	Styrene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
108-88-3	Toluene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
79-01-6	Trichloroethylene	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.5	5.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 22:37	LL
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.6	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/23/2018 14:00	08/23/2018 22:37	LL

#### Surrogate Recoveries

	Result	Acceptance Range
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	93.7 %
2037-26-5	Surrogate: Toluene-d8	93.7 %



## Sample Information

Client Sample ID: SB-01 13-15

York Sample ID: 18H0955-01

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	108 %			76-130						

### Semi-Volatiles, PAH Target List

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
83-32-9	Acenaphthene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
120-12-7	Anthracene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
218-01-9	Chrysene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
53-70-3	Dibenz(a,h)anthracene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
206-44-0	Fluoranthene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
86-73-7	Fluorene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
91-20-3	Naphthalene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
85-01-8	Phenanthrene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW
129-00-0	Pyrene	ND		ug/kg dry	43.2	86.1	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 12:32	OW

#### Surrogate Recoveries

#### Result

#### Acceptance Range

4165-60-0	Surrogate: Nitrobenzene-d5	94.7 %	22-108
321-60-8	Surrogate: 2-Fluorobiphenyl	88.6 %	21-113
1718-51-0	Surrogate: Terphenyl-d14	93.7 %	24-116



## Sample Information

Client Sample ID: SB-01 13-15

York Sample ID: 18H0955-01

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Total Solids

Sample Prepared by Method: % Solids Prep

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	96.5		%	0.100	1	SM 2540G Certifications: CTDOH	08/25/2018 10:07	08/27/2018 12:37	TAJ

## Sample Information

Client Sample ID: SB-02 13-15

York Sample ID: 18H0955-02

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/23/2018 14:00	08/23/2018 23:07	LL
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
96-18-4	1,2,3-Trichloroproppane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	08/23/2018 14:00	08/23/2018 23:07	LL
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL



## Sample Information

**Client Sample ID:** SB-02 13-15

**York Sample ID:** 18H0955-02

**York Project (SDG) No.**

18H0955

**Client Project ID**

PQ18052

**Matrix**

Soil

**Collection Date/Time**

August 21, 2018 12:00 pm

**Date Received**

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
123-91-1	1,4-Dioxane	ND		ug/kg dry	49	98	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
78-93-3	2-Butanone	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
591-78-6	2-Hexanone	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
67-64-1	Acetone	ND		ug/kg dry	4.9	9.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
107-02-8	Acrolein	ND		ug/kg dry	4.9	9.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
107-13-1	Acrylonitrile	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
71-43-2	Benzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
74-97-5	Bromochloromethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-25-2	Bromoform	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
74-83-9	Bromomethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-15-0	Carbon disulfide	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
108-90-7	Chlorobenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-00-3	Chloroethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
67-66-3	Chloroform	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
74-87-3	Chloromethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL



## Sample Information

Client Sample ID: SB-02 13-15

York Sample ID: 18H0955-02

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
110-82-7	Cyclohexane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
74-95-3	Dibromomethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
79-20-9	Methyl acetate	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-09-2	Methylene chloride	ND		ug/kg dry	4.9	9.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
95-47-6	o-Xylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	4.9	9.8	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
100-42-5	Styrene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL



## Sample Information

Client Sample ID: SB-02 13-15

York Sample ID: 18H0955-02

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
79-01-6	Trichloroethylene	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.4	4.9	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/23/2018 14:00	08/23/2018 23:07	LL
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.3	15	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/23/2018 14:00	08/23/2018 23:07	LL
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	91.7 %	77-125								
2037-26-5	Surrogate: Toluene-d8	93.9 %	85-120								
460-00-4	Surrogate: p-Bromofluorobenzene	104 %	76-130								

### Semi-Volatiles, PAH Target List

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
83-32-9	Acenaphthene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
208-96-8	Acenaphthylene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
120-12-7	Anthracene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
218-01-9	Chrysene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
53-70-3	Dibenz(a,h)anthracene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW



## Sample Information

Client Sample ID: SB-02 13-15

York Sample ID: 18H0955-02

York Project (SDG) No.

18H0955

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 21, 2018 12:00 pm

Date Received

08/21/2018

### Semi-Volatiles, PAH Target List

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
206-44-0	Fluoranthene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
86-73-7	Fluorene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
91-20-3	Naphthalene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
85-01-8	Phenanthrene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
129-00-0	Pyrene	ND		ug/kg dry	43.1	86.0	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/27/2018 09:18	08/27/2018 13:03	OW
Surrogate Recoveries		Result	Acceptance Range								
4165-60-0	Surrogate: Nitrobenzene-d5	90.5 %	22-108								
321-60-8	Surrogate: 2-Fluorobiphenyl	74.2 %	21-113								
1718-51-0	Surrogate: Terphenyl-d14	85.8 %	24-116								

### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	97.0		%	0.100	1	SM 2540G Certifications: CTDOH	08/25/2018 10:07	08/27/2018 12:37	TAJ



## Analytical Batch Summary

**Batch ID:** BH81146

**Preparation Method:** EPA 5035A

**Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
18H0955-01	SB-01 13-15	08/23/18
18H0955-02	SB-02 13-15	08/23/18
BH81146-BLK1	Blank	08/23/18
BH81146-BS1	LCS	08/23/18
BH81146-BSD1	LCS Dup	08/23/18

**Batch ID:** BH81294

**Preparation Method:** % Solids Prep

**Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
18H0955-01	SB-01 13-15	08/25/18
18H0955-02	SB-02 13-15	08/25/18
BH81294-DUP1	Duplicate	08/25/18

**Batch ID:** BH81310

**Preparation Method:** EPA 3550C

**Prepared By:** SGM

YORK Sample ID	Client Sample ID	Preparation Date
18H0955-01	SB-01 13-15	08/27/18
18H0955-02	SB-02 13-15	08/27/18
BH81310-BLK1	Blank	08/27/18
BH81310-BS1	LCS	08/27/18



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	RPD Limit	Flag
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### Batch BH81146 - EPA 5035A

#### Blank (BH81146-BLK1)

Prepared & Analyzed: 08/23/2018

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet								
1,1,1-Trichloroethane	ND	5.0	"								
1,1,2,2-Tetrachloroethane	ND	5.0	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"								
1,1,2-Trichloroethane	ND	5.0	"								
1,1-Dichloroethane	ND	5.0	"								
1,1-Dichloroethylene	ND	5.0	"								
1,2,3-Trichlorobenzene	ND	5.0	"								
1,2,3-Trichloropropane	ND	5.0	"								
1,2,4-Trichlorobenzene	ND	5.0	"								
1,2,4-Trimethylbenzene	ND	5.0	"								
1,2-Dibromo-3-chloropropane	ND	5.0	"								
1,2-Dibromoethane	ND	5.0	"								
1,2-Dichlorobenzene	ND	5.0	"								
1,2-Dichloroethane	ND	5.0	"								
1,2-Dichloropropane	ND	5.0	"								
1,3,5-Trimethylbenzene	ND	5.0	"								
1,3-Dichlorobenzene	ND	5.0	"								
1,4-Dichlorobenzene	ND	5.0	"								
1,4-Dioxane	ND	100	"								
2-Butanone	ND	5.0	"								
2-Hexanone	ND	5.0	"								
4-Methyl-2-pentanone	ND	5.0	"								
Acetone	ND	10	"								
Acrolein	ND	10	"								
Acrylonitrile	ND	5.0	"								
Benzene	ND	5.0	"								
Bromochloromethane	ND	5.0	"								
Bromodichloromethane	ND	5.0	"								
Bromoform	ND	5.0	"								
Bromomethane	ND	5.0	"								
Carbon disulfide	ND	5.0	"								
Carbon tetrachloride	ND	5.0	"								
Chlorobenzene	ND	5.0	"								
Chloroethane	ND	5.0	"								
Chloroform	ND	5.0	"								
Chloromethane	ND	5.0	"								
cis-1,2-Dichloroethylene	ND	5.0	"								
cis-1,3-Dichloropropylene	ND	5.0	"								
Cyclohexane	ND	5.0	"								
Dibromochloromethane	ND	5.0	"								
Dibromomethane	ND	5.0	"								
Dichlorodifluoromethane	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Hexachlorobutadiene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl acetate	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Methylcyclohexane	ND	5.0	"								
Methylene chloride	ND	10	"								



## Volatile Organic Compounds by GC/MS - Quality Control Data

## York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	RPD Limit	RPD Flag
<b>Batch BH81146 - EPA 5035A</b>											
<b>Blank (BH81146-BLK1)</b>											
n-Butylbenzene	ND	5.0	ug/kg wet								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
Styrene	ND	5.0	"								
tert-Butyl alcohol (TBA)	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								
Surrogate: 1,2-Dichloroethane-d4	45.8		ug/L	50.0		91.7	77-125				
Surrogate: Toluene-d8	47.3		"	50.0		94.6	85-120				
Surrogate: p-Bromofluorobenzene	52.1		"	50.0		104	76-130				
<b>LCS (BH81146-BS1)</b>											
Prepared & Analyzed: 08/23/2018											
1,1,1,2-Tetrachloroethane	56		ug/L	50.0		112	75-129				
1,1,1-Trichloroethane	53		"	50.0		106	71-137				
1,1,2,2-Tetrachloroethane	62		"	50.0		124	79-129				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	49		"	50.0		98.3	58-146				
1,1,2-Trichloroethane	53		"	50.0		105	83-123				
1,1-Dichloroethane	50		"	50.0		100	75-130				
1,1-Dichloroethylene	46		"	50.0		92.3	64-137				
1,2,3-Trichlorobenzene	62		"	50.0		125	81-140				
1,2,3-Trichloropropane	62		"	50.0		125	81-126				
1,2,4-Trichlorobenzene	62		"	50.0		124	80-141				
1,2,4-Trimethylbenzene	57		"	50.0		114	84-125				
1,2-Dibromo-3-chloropropane	64		"	50.0		127	74-142				
1,2-Dibromoethane	58		"	50.0		116	86-123				
1,2-Dichlorobenzene	55		"	50.0		111	85-122				
1,2-Dichloroethane	47		"	50.0		94.7	71-133				
1,2-Dichloropropane	50		"	50.0		100	81-122				
1,3,5-Trimethylbenzene	56		"	50.0		111	82-126				
1,3-Dichlorobenzene	58		"	50.0		117	84-124				
1,4-Dichlorobenzene	58		"	50.0		117	84-124				
1,4-Dioxane	400		"	1050		38.4	10-228				
2-Butanone	57		"	50.0		115	58-147				
2-Hexanone	53		"	50.0		107	70-139				
4-Methyl-2-pentanone	38		"	50.0		75.6	72-132				
Acetone	46		"	50.0		91.8	36-155				
Acrolein	33		"	50.0		66.9	10-238				
Acrylonitrile	55		"	50.0		110	66-141				
Benzene	50		"	50.0		101	77-127				
Bromochloromethane	50		"	50.0		99.7	74-129				
Bromodichloromethane	54		"	50.0		109	81-124				



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH81146 - EPA 5035A</b>											
<b>LCS (BH81146-BS1)</b>											
Prepared & Analyzed: 08/23/2018											
Bromoform	63		ug/L	50.0	127	80-136					
Bromomethane	24		"	50.0	47.7	32-177					
Carbon disulfide	50		"	50.0	100	10-136					
Carbon tetrachloride	54		"	50.0	109	66-143					
Chlorobenzene	52		"	50.0	104	86-120					
Chloroethane	26		"	50.0	51.1	51-142					
Chloroform	53		"	50.0	105	76-131					
Chloromethane	28		"	50.0	56.8	49-132					
cis-1,2-Dichloroethylene	51		"	50.0	102	74-132					
cis-1,3-Dichloropropylene	55		"	50.0	111	81-129					
Cyclohexane	43		"	50.0	86.1	70-130					
Dibromochloromethane	57		"	50.0	115	10-200					
Dibromomethane	51		"	50.0	103	83-124					
Dichlorodifluoromethane	71		"	50.0	143	28-158					
Ethyl Benzene	52		"	50.0	104	84-125					
Hexachlorobutadiene	63		"	50.0	125	83-133					
Isopropylbenzene	56		"	50.0	113	81-127					
Methyl acetate	49		"	50.0	98.6	41-143					
Methyl tert-butyl ether (MTBE)	51		"	50.0	102	74-131					
Methylcyclohexane	52		"	50.0	104	70-130					
Methylene chloride	47		"	50.0	94.7	57-141					
n-Butylbenzene	53		"	50.0	107	80-130					
n-Propylbenzene	56		"	50.0	112	74-136					
o-Xylene	51		"	50.0	101	83-123					
p- & m- Xylenes	96		"	100	95.8	82-128					
p-Isopropyltoluene	58		"	50.0	116	85-125					
sec-Butylbenzene	59		"	50.0	118	83-125					
Styrene	50		"	50.0	99.5	86-126					
tert-Butyl alcohol (TBA)	260		"	250	105	70-130					
tert-Butylbenzene	52		"	50.0	105	80-127					
Tetrachloroethylene	41		"	50.0	82.8	80-129					
Toluene	50		"	50.0	99.7	85-121					
trans-1,2-Dichloroethylene	49		"	50.0	97.3	72-132					
trans-1,3-Dichloropropylene	55		"	50.0	110	78-132					
Trichloroethylene	55		"	50.0	110	84-123					
Trichlorofluoromethane	25		"	50.0	49.3	62-140	Low Bias				
Vinyl Chloride	27		"	50.0	53.8	52-130					
Surrogate: 1,2-Dichloroethane-d4	45.9		"	50.0	91.8	77-125					
Surrogate: Toluene-d8	47.2		"	50.0	94.5	85-120					
Surrogate: p-Bromofluorobenzene	57.4		"	50.0	115	76-130					



## Volatile Organic Compounds by GC/MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### **Batch BH81146 - EPA 5035A**

LCS Dup (BH81146-BSD1)									Prepared & Analyzed: 08/23/2018		
1,1,1,2-Tetrachloroethane	55		ug/L	50.0	110	75-129			1.78	30	
1,1,1-Trichloroethane	52		"	50.0	103	71-137			2.43	30	
1,1,2,2-Tetrachloroethane	60		"	50.0	120	79-129			2.57	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	48		"	50.0	95.9	58-146			2.45	30	
1,1,2-Trichloroethane	51		"	50.0	101	83-123			3.73	30	
1,1-Dichloroethane	49		"	50.0	97.7	75-130			2.35	30	
1,1-Dichloroethylene	45		"	50.0	90.2	64-137			2.32	30	
1,2,3-Trichlorobenzene	61		"	50.0	122	81-140			2.43	30	
1,2,3-Trichloropropane	60		"	50.0	120	81-126			3.36	30	
1,2,4-Trichlorobenzene	63		"	50.0	127	80-141			2.12	30	
1,2,4-Trimethylbenzene	57		"	50.0	114	84-125			0.123	30	
1,2-Dibromo-3-chloropropane	60		"	50.0	121	74-142			4.95	30	
1,2-Dibromoethane	56		"	50.0	113	86-123			3.16	30	
1,2-Dichlorobenzene	56		"	50.0	111	85-122			0.667	30	
1,2-Dichloroethane	45		"	50.0	90.9	71-133			4.03	30	
1,2-Dichloropropane	50		"	50.0	100	81-122			0.160	30	
1,3,5-Trimethylbenzene	55		"	50.0	109	82-126			1.98	30	
1,3-Dichlorobenzene	58		"	50.0	116	84-124			0.189	30	
1,4-Dichlorobenzene	59		"	50.0	118	84-124			0.837	30	
1,4-Dioxane	380		"	1050	36.3	10-228			5.68	30	
2-Butanone	56		"	50.0	112	58-147			2.06	30	
2-Hexanone	50		"	50.0	99.5	70-139			6.89	30	
4-Methyl-2-pentanone	36		"	50.0	72.7	72-132			3.88	30	
Acetone	41		"	50.0	81.3	36-155			12.0	30	
Acrolein	31		"	50.0	61.6	10-238			8.34	30	
Acrylonitrile	53		"	50.0	105	66-141			4.90	30	
Benzene	49		"	50.0	97.8	77-127			3.02	30	
Bromochloromethane	49		"	50.0	97.4	74-129			2.37	30	
Bromodichloromethane	53		"	50.0	106	81-124			2.20	30	
Bromoform	63		"	50.0	127	80-136			0.189	30	
Bromomethane	23		"	50.0	45.3	32-177			5.25	30	
Carbon disulfide	48		"	50.0	95.5	10-136			4.98	30	
Carbon tetrachloride	52		"	50.0	104	66-143			4.18	30	
Chlorobenzene	51		"	50.0	103	86-120			1.31	30	
Chloroethane	25		"	50.0	50.1	51-142	Low Bias		2.02	30	
Chloroform	51		"	50.0	101	76-131			3.75	30	
Chloromethane	27		"	50.0	53.4	49-132			6.14	30	
cis-1,2-Dichloroethylene	50		"	50.0	99.5	74-132			2.89	30	
cis-1,3-Dichloropropylene	53		"	50.0	106	81-129			4.00	30	
Cyclohexane	41		"	50.0	82.3	70-130			4.49	30	
Dibromochloromethane	55		"	50.0	111	10-200			3.19	30	
Dibromomethane	51		"	50.0	101	83-124			1.61	30	
Dichlorodifluoromethane	68		"	50.0	136	28-158			4.40	30	
Ethyl Benzene	51		"	50.0	102	84-125			2.18	30	
Hexachlorobutadiene	62		"	50.0	124	83-133			1.08	30	
Isopropylbenzene	56		"	50.0	112	81-127			0.373	30	
Methyl acetate	46		"	50.0	92.2	41-143			6.77	30	
Methyl tert-butyl ether (MTBE)	50		"	50.0	99.2	74-131			3.31	30	
Methylcyclohexane	50		"	50.0	100	70-130			3.88	30	
Methylene chloride	48		"	50.0	95.6	57-141			0.883	30	
n-Butylbenzene	53		"	50.0	107	80-130			0.112	30	



## Volatile Organic Compounds by GC/MS - Quality Control Data

### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH81146 - EPA 5035A</b>											
<b>LCS Dup (BH81146-BSD1)</b>											
Prepared & Analyzed: 08/23/2018											
n-Propylbenzene	56		ug/L	50.0	111	74-136			0.179	30	
o-Xylene	49		"	50.0	98.8	83-123			2.48	30	
p- & m- Xylenes	95		"	100	94.6	82-128			1.23	30	
p-Isopropyltoluene	58		"	50.0	115	85-125			0.727	30	
sec-Butylbenzene	58		"	50.0	116	83-125			1.49	30	
Styrene	49		"	50.0	97.4	86-126			2.09	30	
tert-Butyl alcohol (TBA)	250		"	250	98.2	70-130			6.70	30	
tert-Butylbenzene	52		"	50.0	103	80-127			1.43	30	
Tetrachloroethylene	40		"	50.0	80.9	80-129			2.37	30	
Toluene	49		"	50.0	97.7	85-121			2.01	30	
trans-1,2-Dichloroethylene	47		"	50.0	93.1	72-132			4.43	30	
trans-1,3-Dichloropropylene	53		"	50.0	105	78-132			4.45	30	
Trichloroethylene	53		"	50.0	107	84-123			2.55	30	
Trichlorofluoromethane	24		"	50.0	47.8	62-140	Low Bias		3.25	30	
Vinyl Chloride	26		"	50.0	52.1	52-130			3.06	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.5		"	50.0	91.0	77-125					
<i>Surrogate: Toluene-d8</i>	46.5		"	50.0	93.1	85-120					
<i>Surrogate: p-Bromofluorobenzene</i>	56.5		"	50.0	113	76-130					



## Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BH81310 - EPA 3550C

#### Blank (BH81310-BLK1)

2-Methylnaphthalene	ND	41.7	ug/kg wet								
Acenaphthene	ND	41.7	"								
Acenaphthylene	ND	41.7	"								
Anthracene	ND	41.7	"								
Benzo(a)anthracene	ND	41.7	"								
Benzo(a)pyrene	ND	41.7	"								
Benzo(b)fluoranthene	ND	41.7	"								
Benzo(g,h,i)perylene	ND	41.7	"								
Benzo(k)fluoranthene	ND	41.7	"								
Chrysene	ND	41.7	"								
Dibenz(a,h)anthracene	ND	41.7	"								
Fluoranthene	ND	41.7	"								
Fluorene	ND	41.7	"								
Indeno(1,2,3-cd)pyrene	ND	41.7	"								
Naphthalene	ND	41.7	"								
Phenanthrene	ND	41.7	"								
Pyrene	ND	41.7	"								
Surrogate: Nitrobenzene-d5	934		"	833		112		22-108			
Surrogate: 2-Fluorobiphenyl	746		"	833		89.5		21-113			
Surrogate: Terphenyl-d14	874		"	833		105		24-116			

#### LCS (BH81310-BS1)

2-Methylnaphthalene	820	41.7	ug/kg wet	833	98.4	16-127
Acenaphthene	746	41.7	"	833	89.6	17-124
Acenaphthylene	642	41.7	"	833	77.0	16-124
Anthracene	766	41.7	"	833	92.0	24-124
Benzo(a)anthracene	843	41.7	"	833	101	25-134
Benzo(a)pyrene	963	41.7	"	833	116	29-144
Benzo(b)fluoranthene	889	41.7	"	833	107	20-151
Benzo(g,h,i)perylene	761	41.7	"	833	91.3	10-153
Benzo(k)fluoranthene	874	41.7	"	833	105	10-148
Chrysene	833	41.7	"	833	100	24-116
Dibenz(a,h)anthracene	805	41.7	"	833	96.6	17-147
Fluoranthene	928	41.7	"	833	111	36-125
Fluorene	793	41.7	"	833	95.1	16-130
Indeno(1,2,3-cd)pyrene	778	41.7	"	833	93.4	10-155
Naphthalene	828	41.7	"	833	99.4	20-121
Phenanthrene	802	41.7	"	833	96.2	24-123
Pyrene	768	41.7	"	833	92.2	24-132
Surrogate: Nitrobenzene-d5	973		"	833	117	22-108
Surrogate: 2-Fluorobiphenyl	784		"	833	94.1	21-113
Surrogate: Terphenyl-d14	924		"	833	111	24-116



### Miscellaneous Physical Parameters - Quality Control Data

#### York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	RPD Limit	RPD Flag
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#### Batch BH81294 - % Solids Prep

Duplicate (BH81294-DUP1)	*Source sample: 18H0955-01 (SB-01 13-15)						Prepared: 08/25/2018 Analyzed: 08/27/2018				
% Solids	96.7	0.100	%		96.5				0.181	20	



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18H0955-01	SB-01 13-15	40mL Vial with Stir Bar-Cool 4° C
18H0955-02	SB-02 13-15	40mL Vial with Stir Bar-Cool 4° C



## Sample and Data Qualifiers Relating to This Work Order

- S-08 The recovery of this surrogate was outside of QC limits.
- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence . This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.

Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.



For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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# Technical Report

prepared for:

**WCD Group - Poughkeepsie NY**  
24 Davis Avenue  
Poughkeepsie NY, 12603  
**Attention: Tyler Goodnough**

Report Date: 08/30/2018  
**Client Project ID: PQ18052**  
York Project (SDG) No.: 18H1121

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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Report Date: 08/30/2018  
Client Project ID: PQ18052  
York Project (SDG) No.: 18H1121

**WCD Group - Poughkeepsie NY**  
24 Davis Avenue  
Poughkeepsie NY, 12603  
Attention: Tyler Goodnough

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on August 23, 2018 and listed below. The project was identified as your project: **PQ18052**.

The analyses were conducted utilizing appropriate EPA, Standard Methods, and ASTM methods as detailed in the data summary tables.

All samples were received in proper condition meeting the customary acceptance requirements for environmental samples except those indicated under the Sample and Analysis Qualifiers section of this report.

All analyses met the method and laboratory standard operating procedure requirements except as indicated by any data flags, the meaning of which are explained in the Sample and Data Qualifiers Relating to This Work Order section of this report and case narrative if applicable.

The results of the analyses, which are all reported on dry weight basis (soils) unless otherwise noted, are detailed in the following pages.

Please contact Client Services at 203.325.1371 with any questions regarding this report.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
18H1121-01	SB-03 5-7	Soil	08/23/2018	08/23/2018
18H1121-02	SB-04 5-7	Soil	08/23/2018	08/23/2018
18H1121-03	SB-05 9.5-11.5	Soil	08/23/2018	08/23/2018

## **General Notes for York Project (SDG) No.: 18H1121**

1. The RLs and MDLs (Reporting Limit and Method Detection Limit respectively) reported are adjusted for any dilution necessary due to the levels of target and/or non-target analytes and matrix interference. The RL(REPORTING LIMIT) is based upon the lowest standard utilized for the calibration where applicable.
2. Samples are retained for a period of thirty days after submittal of report, unless other arrangements are made.
3. York's liability for the above data is limited to the dollar value paid to York for the referenced project.
4. This report shall not be reproduced without the written approval of York Analytical Laboratories, Inc.
5. All analyses conducted met method or Laboratory SOP requirements. See the Sample and Data Qualifiers Section for further information.
6. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
7. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.
8. Analyses conducted at York Analytical Laboratories, Inc. Stratford, CT are indicated by NY Cert. No. 10854; those conducted at York Analytical Laboratories, Inc., Richmond Hill, NY are indicated by NY Cert. No. 12058.

**Approved By:**



Benjamin Gulizia  
Laboratory Director

**Date:** 08/30/2018





## Sample Information

Client Sample ID: SB-03 5-7

York Sample ID: 18H1121-01

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/27/2018 08:00	08/27/2018 21:55	LL
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	08/27/2018 08:00	08/27/2018 21:55	LL
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
123-91-1	1,4-Dioxane	ND		ug/kg dry	65	130	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
78-93-3	2-Butanone	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
591-78-6	2-Hexanone	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL



## Sample Information

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Client Project ID

PQ18052

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Date Received

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### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
67-64-1	Acetone	ND		ug/kg dry	6.5	13	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
107-02-8	Acrolein	ND		ug/kg dry	6.5	13	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
107-13-1	Acrylonitrile	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
71-43-2	Benzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
74-97-5	Bromochloromethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-27-4	Bromodichloromethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-25-2	Bromoform	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
74-83-9	Bromomethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-15-0	Carbon disulfide	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
56-23-5	Carbon tetrachloride	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
108-90-7	Chlorobenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-00-3	Chloroethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
67-66-3	Chloroform	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
74-87-3	Chloromethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
110-82-7	Cyclohexane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
124-48-1	Dibromochloromethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
74-95-3	Dibromomethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
100-41-4	Ethyl Benzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL



## Sample Information

Client Sample ID: SB-03 5-7

York Sample ID: 18H1121-01

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

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August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
98-82-8	Isopropylbenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
79-20-9	Methyl acetate	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
108-87-2	Methylcyclohexane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-09-2	Methylene chloride	ND		ug/kg dry	6.5	13	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
104-51-8	n-Butylbenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
103-65-1	n-Propylbenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
95-47-6	o-Xylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	6.5	13	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
135-98-8	sec-Butylbenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
100-42-5	Styrene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
98-06-6	tert-Butylbenzene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
127-18-4	Tetrachloroethylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
108-88-3	Toluene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
79-01-6	Trichloroethylene	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
75-01-4	Vinyl Chloride	ND		ug/kg dry	3.3	6.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 21:55	LL
1330-20-7	Xylenes, Total	ND		ug/kg dry	9.8	20	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/27/2018 08:00	08/27/2018 21:55	LL
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	99.8 %	77-125								
2037-26-5	Surrogate: Toluene-d8	94.0 %	85-120								



## Sample Information

Client Sample ID: SB-03 5-7

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### Volatile Organics, 8260 - Comprehensive

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	105 %			76-130						

### Semi-Volatiles, PAH Target List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA 3550C

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
83-32-9	Acenaphthene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
120-12-7	Anthracene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>85.6</b>	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
50-32-8	<b>Benzo(a)pyrene</b>	<b>122</b>		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
205-99-2	<b>Benzo(b)fluoranthene</b>	<b>120</b>		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
191-24-2	<b>Benzo(g,h,i)perylene</b>	<b>77.6</b>	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
207-08-9	<b>Benzo(k)fluoranthene</b>	<b>114</b>		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
218-01-9	<b>Chrysene</b>	<b>136</b>		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
53-70-3	Dibenzo(a,h)anthracene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
206-44-0	<b>Fluoranthene</b>	<b>314</b>		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
86-73-7	Fluorene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
193-39-5	<b>Indeno(1,2,3-cd)pyrene</b>	<b>65.6</b>	J	ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
91-20-3	Naphthalene	ND		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
85-01-8	<b>Phenanthrene</b>	<b>192</b>		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR
129-00-0	<b>Pyrene</b>	<b>228</b>		ug/kg dry	50.1	100	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:14	SR

#### Surrogate Recoveries

#### Result

#### Acceptance Range

4165-60-0	Surrogate: Nitrobenzene-d5	44.2 %	22-108
321-60-8	Surrogate: 2-Fluorobiphenyl	42.3 %	21-113



## Sample Information

Client Sample ID: SB-03 5-7

York Sample ID: 18H1121-01

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Semi-Volatiles, PAH Target List

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1718-51-0	Surrogate: Terphenyl-d14	82.8 %			24-116						

### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	83.1		%	0.100	1	SM 2540G	08/25/2018 10:07	08/27/2018 12:37	TAJ

## Sample Information

Client Sample ID: SB-04 5-7

York Sample ID: 18H1121-02

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
96-18-4	1,2,3-Trichloropropane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			NELAC-NY10854,NELAC-NY12058,NJDEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C	08/27/2018 08:00	08/27/2018 22:27	LL
					Certifications:			CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP			



## Sample Information

Client Sample ID: SB-04 5-7

York Sample ID: 18H1121-02

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
123-91-1	1,4-Dioxane	ND		ug/kg dry	57	110	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
78-93-3	2-Butanone	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
591-78-6	2-Hexanone	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
67-64-1	Acetone	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
107-02-8	Acrolein	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
107-13-1	Acrylonitrile	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
71-43-2	Benzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
74-97-5	Bromochloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
75-25-2	Bromoform	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
74-83-9	Bromomethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
75-15-0	Carbon disulfide	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
108-90-7	Chlorobenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL



## Sample Information

Client Sample ID: SB-04 5-7

York Sample ID: 18H1121-02

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-00-3	Chloroethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
67-66-3	Chloroform	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
74-87-3	Chloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
110-82-7	Cyclohexane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
74-95-3	Dibromomethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
79-20-9	Methyl acetate	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
75-09-2	Methylene chloride	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
95-47-6	o-Xylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.7	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL
100-42-5	Styrene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL



## Sample Information

Client Sample ID: SB-04 5-7

York Sample ID: 18H1121-02

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst		
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
108-88-3	Toluene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
79-01-6	Trichloroethylene	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.9	5.7	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:27	LL		
1330-20-7	Xylenes, Total	ND		ug/kg dry	8.6	17	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/27/2018 08:00	08/27/2018 22:27	LL		
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>										
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	97.0 %			77-125								
2037-26-5	Surrogate: Toluene-d8	93.9 %			85-120								
460-00-4	Surrogate: p-Bromoformobenzene	107 %			76-130								

### Semi-Volatiles, PAH Target List

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	45.8	91.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:44	SR
83-32-9	Acenaphthene	ND		ug/kg dry	45.8	91.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:44	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	45.8	91.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:44	SR
120-12-7	<b>Anthracene</b>	<b>46.1</b>	J	ug/kg dry	45.8	91.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:44	SR
56-55-3	<b>Benzo(a)anthracene</b>	<b>284</b>		ug/kg dry	45.8	91.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:44	SR
50-32-8	<b>Benzo(a)pyrene</b>	<b>316</b>		ug/kg dry	45.8	91.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:44	SR
205-99-2	<b>Benzo(b)fluoranthene</b>	<b>306</b>		ug/kg dry	45.8	91.4	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 19:44	SR



## Sample Information

Client Sample ID: SB-04 5-7

York Sample ID: 18H1121-02

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Semi-Volatiles, PAH Target List

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
191-24-2	<b>Benzo(g,h,i)perylene</b>	<b>193</b>		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
207-08-9	<b>Benzo(k)fluoranthene</b>	<b>274</b>		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
218-01-9	<b>Chrysene</b>	<b>279</b>		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
53-70-3	<b>Dibenzo(a,h)anthracene</b>	<b>57.0</b>	J	ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
206-44-0	<b>Fluoranthene</b>	<b>455</b>		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
86-73-7	Fluorene	ND		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	NELAC-NY10854,NJDEP,PADEP		
193-39-5	<b>Indeno(1,2,3-cd)pyrene</b>	<b>200</b>		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
91-20-3	Naphthalene	ND		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
85-01-8	<b>Phenanthrene</b>	<b>224</b>		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
129-00-0	<b>Pyrene</b>	<b>393</b>		ug/kg dry	45.8	91.4	2	EPA 8270D	08/28/2018 15:52	08/29/2018 19:44	SR
								Certifications:	CTDOH,NELAC-NY10854,NJDEP,PADEP		
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
4165-60-0	<i>Surrogate: Nitrobenzene-d5</i>	41.0 %	22-108								
321-60-8	<i>Surrogate: 2-Fluorobiphenyl</i>	42.2 %	21-113								
1718-51-0	<i>Surrogate: Terphenyl-d14</i>	71.8 %	24-116								

### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	90.9		%	0.100	1	SM 2540G	08/25/2018 10:07	08/27/2018 12:37	TAJ
							Certifications:	CTDOH		

## Sample Information

Client Sample ID: SB-05 9.5-11.5

York Sample ID: 18H1121-03

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

#### Log-in Notes:

#### Sample Notes:

120 RESEARCH DRIVE www.YORKLAB.com	STRATFORD, CT 06615 (203) 325-1371	■	132-02 89th AVENUE FAX (203) 357-0166	RICHMOND HILL, NY 11418 ClientServices@
				Page 12 of 28



## Sample Information

Client Sample ID: SB-05 9.5-11.5

York Sample ID: 18H1121-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
18H1121	PQ18052	Soil	August 23, 2018 3:00 pm	08/23/2018

Sample Prepared by Method: EPA 5035A

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
71-55-6	1,1,1-Trichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/27/2018 08:00	08/27/2018 22:59	LL
79-00-5	1,1,2-Trichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-34-3	1,1-Dichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-35-4	1,1-Dichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
87-61-6	1,2,3-Trichlorobenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
96-18-4	1,2,3-Trichloroproppane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP	08/27/2018 08:00	08/27/2018 22:59	LL
120-82-1	1,2,4-Trichlorobenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
95-63-6	1,2,4-Trimethylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
106-93-4	1,2-Dibromoethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
95-50-1	1,2-Dichlorobenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
107-06-2	1,2-Dichloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
78-87-5	1,2-Dichloropropane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
108-67-8	1,3,5-Trimethylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
541-73-1	1,3-Dichlorobenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
106-46-7	1,4-Dichlorobenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
123-91-1	1,4-Dioxane	ND		ug/kg dry	53	110	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
78-93-3	2-Butanone	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
591-78-6	2-Hexanone	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
108-10-1	4-Methyl-2-pentanone	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
67-64-1	Acetone	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL



## Sample Information

Client Sample ID: SB-05 9.5-11.5

York Sample ID: 18H1121-03

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-02-8	Acrolein	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
107-13-1	Acrylonitrile	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
71-43-2	Benzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
74-97-5	Bromochloromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-27-4	Bromodichloromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-25-2	Bromoform	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
74-83-9	Bromomethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-15-0	Carbon disulfide	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
56-23-5	Carbon tetrachloride	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
108-90-7	Chlorobenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-00-3	Chloroethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
67-66-3	Chloroform	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
74-87-3	Chloromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
156-59-2	cis-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
110-82-7	Cyclohexane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
124-48-1	Dibromochloromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
74-95-3	Dibromomethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-71-8	Dichlorodifluoromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
100-41-4	Ethyl Benzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
87-68-3	Hexachlorobutadiene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
98-82-8	Isopropylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
79-20-9	Methyl acetate	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL



## Sample Information

Client Sample ID: SB-05 9.5-11.5

York Sample ID: 18H1121-03

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Volatile Organics, 8260 - Comprehensive

Sample Prepared by Method: EPA 5035A

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
108-87-2	Methylcyclohexane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-09-2	Methylene chloride	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
104-51-8	n-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
103-65-1	n-Propylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
95-47-6	o-Xylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
179601-23-1	p- & m- Xylenes	ND		ug/kg dry	5.3	11	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
99-87-6	p-Isopropyltoluene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
135-98-8	sec-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
100-42-5	Styrene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
98-06-6	tert-Butylbenzene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
127-18-4	Tetrachloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
108-88-3	Toluene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
156-60-5	trans-1,2-Dichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
79-01-6	Trichloroethylene	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-69-4	Trichlorofluoromethane	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
75-01-4	Vinyl Chloride	ND		ug/kg dry	2.6	5.3	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP,PADEP	08/27/2018 08:00	08/27/2018 22:59	LL
1330-20-7	Xylenes, Total	ND		ug/kg dry	7.9	16	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJDEP	08/27/2018 08:00	08/27/2018 22:59	LL

#### **Surrogate Recoveries**

	<b>Result</b>	<b>Acceptance Range</b>
17060-07-0	Surrogate: 1,2-Dichloroethane-d4	101 %
2037-26-5	Surrogate: Toluene-d8	92.5 %
460-00-4	Surrogate: p-Bromofluorobenzene	104 %
		77-125
		85-120
		76-130



## Sample Information

Client Sample ID: SB-05 9.5-11.5

York Sample ID:

18H1121-03

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Semi-Volatiles, PAH Target List

Sample Prepared by Method: EPA 3550C

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
91-57-6	2-Methylnaphthalene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
83-32-9	Acenaphthene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
208-96-8	Acenaphthylene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
120-12-7	Anthracene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
56-55-3	Benzo(a)anthracene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
50-32-8	Benzo(a)pyrene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
205-99-2	Benzo(b)fluoranthene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
191-24-2	Benzo(g,h,i)perylene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
207-08-9	Benzo(k)fluoranthene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
218-01-9	Chrysene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
53-70-3	Dibenz(a,h)anthracene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
206-44-0	Fluoranthene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
86-73-7	Fluorene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
193-39-5	Indeno(1,2,3-cd)pyrene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
91-20-3	Naphthalene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
85-01-8	Phenanthrene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR
129-00-0	Pyrene	ND		ug/kg dry	43.2	86.2	2	EPA 8270D Certifications: CTDOH,NELAC-NY10854,NJDEP,PADEP	08/28/2018 15:52	08/29/2018 20:14	SR

#### Surrogate Recoveries      Result      Acceptance Range

4165-60-0	Surrogate: Nitrobenzene-d5	60.2 %	22-108
321-60-8	Surrogate: 2-Fluorobiphenyl	54.4 %	21-113
1718-51-0	Surrogate: Terphenyl-d14	62.9 %	24-116

### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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## Sample Information

Client Sample ID: SB-05 9.5-11.5

York Sample ID: 18H1121-03

York Project (SDG) No.

18H1121

Client Project ID

PQ18052

Matrix

Soil

Collection Date/Time

August 23, 2018 3:00 pm

Date Received

08/23/2018

### Total Solids

Sample Prepared by Method: % Solids Prep

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
solids	* % Solids	96.3		%	0.100	1	SM 2540G	08/25/2018 10:07	08/27/2018 12:37	TAJ



## Analytical Batch Summary

**Batch ID:** BH81294

**Preparation Method:** % Solids Prep

**Prepared By:** TAJ

YORK Sample ID	Client Sample ID	Preparation Date
18H1121-01	SB-03 5-7	08/25/18
18H1121-02	SB-04 5-7	08/25/18
18H1121-03	SB-05 9.5-11.5	08/25/18

**Batch ID:** BH81362

**Preparation Method:** EPA 5035A

**Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
18H1121-01	SB-03 5-7	08/27/18
18H1121-02	SB-04 5-7	08/27/18
18H1121-03	SB-05 9.5-11.5	08/27/18
BH81362-BLK1	Blank	08/27/18
BH81362-BS1	LCS	08/27/18
BH81362-BSD1	LCS Dup	08/27/18

**Batch ID:** BH81412

**Preparation Method:** EPA 3550C

**Prepared By:** MAT

YORK Sample ID	Client Sample ID	Preparation Date
18H1121-01	SB-03 5-7	08/28/18
18H1121-02	SB-04 5-7	08/28/18
18H1121-03	SB-05 9.5-11.5	08/28/18
BH81412-BLK1	Blank	08/28/18
BH81412-BS1	LCS	08/28/18



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD RPD	RPD Limit	Flag
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### Batch BH81362 - EPA 5035A

#### Blank (BH81362-BLK1)

Prepared & Analyzed: 08/27/2018

1,1,1,2-Tetrachloroethane	ND	5.0	ug/kg wet								
1,1,1-Trichloroethane	ND	5.0	"								
1,1,2,2-Tetrachloroethane	ND	5.0	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	5.0	"								
1,1,2-Trichloroethane	ND	5.0	"								
1,1-Dichloroethane	ND	5.0	"								
1,1-Dichloroethylene	ND	5.0	"								
1,2,3-Trichlorobenzene	ND	5.0	"								
1,2,3-Trichloropropane	ND	5.0	"								
1,2,4-Trichlorobenzene	ND	5.0	"								
1,2,4-Trimethylbenzene	ND	5.0	"								
1,2-Dibromo-3-chloropropane	ND	5.0	"								
1,2-Dibromoethane	ND	5.0	"								
1,2-Dichlorobenzene	ND	5.0	"								
1,2-Dichloroethane	ND	5.0	"								
1,2-Dichloropropane	ND	5.0	"								
1,3,5-Trimethylbenzene	ND	5.0	"								
1,3-Dichlorobenzene	ND	5.0	"								
1,4-Dichlorobenzene	ND	5.0	"								
1,4-Dioxane	ND	100	"								
2-Butanone	ND	5.0	"								
2-Hexanone	ND	5.0	"								
4-Methyl-2-pentanone	ND	5.0	"								
Acetone	ND	10	"								
Acrolein	ND	10	"								
Acrylonitrile	ND	5.0	"								
Benzene	ND	5.0	"								
Bromochloromethane	ND	5.0	"								
Bromodichloromethane	ND	5.0	"								
Bromoform	ND	5.0	"								
Bromomethane	ND	5.0	"								
Carbon disulfide	ND	5.0	"								
Carbon tetrachloride	ND	5.0	"								
Chlorobenzene	ND	5.0	"								
Chloroethane	ND	5.0	"								
Chloroform	ND	5.0	"								
Chloromethane	ND	5.0	"								
cis-1,2-Dichloroethylene	ND	5.0	"								
cis-1,3-Dichloropropylene	ND	5.0	"								
Cyclohexane	ND	5.0	"								
Dibromochloromethane	ND	5.0	"								
Dibromomethane	ND	5.0	"								
Dichlorodifluoromethane	ND	5.0	"								
Ethyl Benzene	ND	5.0	"								
Hexachlorobutadiene	ND	5.0	"								
Isopropylbenzene	ND	5.0	"								
Methyl acetate	ND	5.0	"								
Methyl tert-butyl ether (MTBE)	ND	5.0	"								
Methylcyclohexane	ND	5.0	"								
Methylene chloride	ND	10	"								



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BH81362 - EPA 5035A

#### Blank (BH81362-BLK1)

n-Butylbenzene	ND	5.0	ug/kg wet								
n-Propylbenzene	ND	5.0	"								
o-Xylene	ND	5.0	"								
p- & m- Xylenes	ND	10	"								
p-Isopropyltoluene	ND	5.0	"								
sec-Butylbenzene	ND	5.0	"								
Styrene	ND	5.0	"								
tert-Butyl alcohol (TBA)	ND	5.0	"								
tert-Butylbenzene	ND	5.0	"								
Tetrachloroethylene	ND	5.0	"								
Toluene	ND	5.0	"								
trans-1,2-Dichloroethylene	ND	5.0	"								
trans-1,3-Dichloropropylene	ND	5.0	"								
Trichloroethylene	ND	5.0	"								
Trichlorofluoromethane	ND	5.0	"								
Vinyl Chloride	ND	5.0	"								
Xylenes, Total	ND	15	"								

Prepared & Analyzed: 08/27/2018

#### Surrogate: 1,2-Dichloroethane-d4

48.7 ug/L 50.0 97.4 77-125

#### Surrogate: Toluene-d8

47.6 " 50.0 95.1 85-120

#### Surrogate: p-Bromofluorobenzene

54.1 " 50.0 108 76-130

#### LCS (BH81362-BS1)

Prepared & Analyzed: 08/27/2018

1,1,1,2-Tetrachloroethane	46	ug/L	50.0	91.1	75-129
1,1,1-Trichloroethane	51	"	50.0	102	71-137
1,1,2,2-Tetrachloroethane	47	"	50.0	93.0	79-129
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	53	"	50.0	107	58-146
1,1,2-Trichloroethane	46	"	50.0	91.4	83-123
1,1-Dichloroethane	54	"	50.0	107	75-130
1,1-Dichloroethylene	50	"	50.0	100	64-137
1,2,3-Trichlorobenzene	41	"	50.0	82.3	81-140
1,2,3-Trichloropropane	44	"	50.0	88.9	81-126
1,2,4-Trichlorobenzene	41	"	50.0	82.5	80-141
1,2,4-Trimethylbenzene	41	"	50.0	82.9	84-125
1,2-Dibromo-3-chloropropane	46	"	50.0	91.3	74-142
1,2-Dibromoethane	48	"	50.0	95.8	86-123
1,2-Dichlorobenzene	44	"	50.0	87.5	85-122
1,2-Dichloroethane	53	"	50.0	106	71-133
1,2-Dichloropropane	47	"	50.0	94.0	81-122
1,3,5-Trimethylbenzene	44	"	50.0	87.3	82-126
1,3-Dichlorobenzene	43	"	50.0	86.4	84-124
1,4-Dichlorobenzene	43	"	50.0	85.9	84-124
1,4-Dioxane	490	"	1050	46.4	10-228
2-Butanone	51	"	50.0	102	58-147
2-Hexanone	48	"	50.0	96.1	70-139
4-Methyl-2-pentanone	50	"	50.0	99.4	72-132
Acetone	41	"	50.0	81.4	36-155
Acrolein	13	"	50.0	26.3	10-238
Acrylonitrile	56	"	50.0	113	66-141
Benzene	52	"	50.0	105	77-127
Bromochloromethane	52	"	50.0	105	74-129
Bromodichloromethane	48	"	50.0	95.1	81-124



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
<b>Batch BH81362 - EPA 5035A</b>											
<b>LCS (BH81362-BS1)</b>											
Prepared & Analyzed: 08/27/2018											
Bromoform	40		ug/L	50.0	80.7	80-136					
Bromomethane	60		"	50.0	121	32-177					
Carbon disulfide	48		"	50.0	95.9	10-136					
Carbon tetrachloride	50		"	50.0	101	66-143					
Chlorobenzene	45		"	50.0	90.7	86-120					
Chloroethane	49		"	50.0	98.3	51-142					
Chloroform	53		"	50.0	106	76-131					
Chloromethane	51		"	50.0	102	49-132					
cis-1,2-Dichloroethylene	51		"	50.0	102	74-132					
cis-1,3-Dichloropropylene	46		"	50.0	93.0	81-129					
Cyclohexane	54		"	50.0	108	70-130					
Dibromochloromethane	45		"	50.0	90.2	10-200					
Dibromomethane	47		"	50.0	94.5	83-124					
Dichlorodifluoromethane	72		"	50.0	143	28-158					
Ethyl Benzene	47		"	50.0	94.0	84-125					
Hexachlorobutadiene	41		"	50.0	81.3	83-133	Low Bias				
Isopropylbenzene	44		"	50.0	87.2	81-127					
Methyl acetate	45		"	50.0	89.9	41-143					
Methyl tert-butyl ether (MTBE)	52		"	50.0	104	74-131					
Methylcyclohexane	47		"	50.0	93.1	70-130					
Methylene chloride	48		"	50.0	96.8	57-141					
n-Butylbenzene	45		"	50.0	89.5	80-130					
n-Propylbenzene	43		"	50.0	86.9	74-136					
o-Xylene	46		"	50.0	92.3	83-123					
p- & m- Xylenes	94		"	100	94.4	82-128					
p-Isopropyltoluene	46		"	50.0	91.7	85-125					
sec-Butylbenzene	47		"	50.0	93.1	83-125					
Styrene	47		"	50.0	93.1	86-126					
tert-Butyl alcohol (TBA)	1100		"	250	444	70-130	High Bias				
tert-Butylbenzene	44		"	50.0	87.8	80-127					
Tetrachloroethylene	41		"	50.0	82.4	80-129					
Toluene	46		"	50.0	92.0	85-121					
trans-1,2-Dichloroethylene	52		"	50.0	103	72-132					
trans-1,3-Dichloropropylene	47		"	50.0	94.0	78-132					
Trichloroethylene	47		"	50.0	94.5	84-123					
Trichlorofluoromethane	52		"	50.0	104	62-140					
Vinyl Chloride	54		"	50.0	108	52-130					
Surrogate: 1,2-Dichloroethane-d4	51.1		"	50.0	102	77-125					
Surrogate: Toluene-d8	46.6		"	50.0	93.1	85-120					
Surrogate: p-Bromofluorobenzene	49.8		"	50.0	99.5	76-130					



## Volatile Organic Compounds by GC/MS - Quality Control Data

**York Analytical Laboratories, Inc.**

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BH81362 - EPA 5035A

LCS Dup (BH81362-BSD1)										Prepared & Analyzed: 08/27/2018	
1,1,1,2-Tetrachloroethane	46		ug/L	50.0	91.0	75-129			0.0659	30	
1,1,1-Trichloroethane	51		"	50.0	103	71-137			0.468	30	
1,1,2,2-Tetrachloroethane	46		"	50.0	92.8	79-129			0.215	30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	54		"	50.0	108	58-146			1.28	30	
1,1,2-Trichloroethane	46		"	50.0	92.9	83-123			1.63	30	
1,1-Dichloroethane	54		"	50.0	107	75-130			0.0559	30	
1,1-Dichloroethylene	51		"	50.0	102	64-137			2.09	30	
1,2,3-Trichlorobenzene	41		"	50.0	82.7	81-140			0.582	30	
1,2,3-Trichloropropane	44		"	50.0	88.0	81-126			1.04	30	
1,2,4-Trichlorobenzene	41		"	50.0	82.1	80-141			0.510	30	
1,2,4-Trimethylbenzene	42		"	50.0	84.7	84-125			2.10	30	
1,2-Dibromo-3-chloropropane	46		"	50.0	91.4	74-142			0.0438	30	
1,2-Dibromoethane	48		"	50.0	95.7	86-123			0.0836	30	
1,2-Dichlorobenzene	44		"	50.0	88.5	85-122			1.23	30	
1,2-Dichloroethane	53		"	50.0	107	71-133			0.563	30	
1,2-Dichloropropane	48		"	50.0	95.9	81-122			1.94	30	
1,3,5-Trimethylbenzene	43		"	50.0	86.9	82-126			0.436	30	
1,3-Dichlorobenzene	44		"	50.0	87.9	84-124			1.74	30	
1,4-Dichlorobenzene	44		"	50.0	87.4	84-124			1.68	30	
1,4-Dioxane	450		"	1050	43.1	10-228			7.40	30	
2-Butanone	55		"	50.0	111	58-147			8.03	30	
2-Hexanone	48		"	50.0	95.2	70-139			0.941	30	
4-Methyl-2-pentanone	50		"	50.0	101	72-132			1.38	30	
Acetone	41		"	50.0	81.7	36-155			0.442	30	
Acrolein	13		"	50.0	26.9	10-238			2.26	30	
Acrylonitrile	53		"	50.0	105	66-141			6.70	30	
Benzene	53		"	50.0	105	77-127			0.305	30	
Bromochloromethane	54		"	50.0	107	74-129			2.09	30	
Bromodichloromethane	48		"	50.0	95.7	81-124			0.650	30	
Bromoform	42		"	50.0	83.0	80-136			2.76	30	
Bromomethane	62		"	50.0	124	32-177			2.51	30	
Carbon disulfide	49		"	50.0	97.7	10-136			1.88	30	
Carbon tetrachloride	50		"	50.0	101	66-143			0.417	30	
Chlorobenzene	46		"	50.0	92.2	86-120			1.73	30	
Chloroethane	56		"	50.0	111	51-142			12.3	30	
Chloroform	53		"	50.0	106	76-131			0.169	30	
Chloromethane	53		"	50.0	106	49-132			3.65	30	
cis-1,2-Dichloroethylene	52		"	50.0	104	74-132			2.39	30	
cis-1,3-Dichloropropylene	47		"	50.0	93.5	81-129			0.558	30	
Cyclohexane	54		"	50.0	108	70-130			0.612	30	
Dibromochloromethane	46		"	50.0	92.3	10-200			2.28	30	
Dibromomethane	46		"	50.0	93.0	83-124			1.56	30	
Dichlorodifluoromethane	62		"	50.0	123	28-158			14.9	30	
Ethyl Benzene	47		"	50.0	94.3	84-125			0.319	30	
Hexachlorobutadiene	42		"	50.0	84.9	83-133			4.26	30	
Isopropylbenzene	44		"	50.0	87.4	81-127			0.275	30	
Methyl acetate	52		"	50.0	103	41-143			13.6	30	
Methyl tert-butyl ether (MTBE)	53		"	50.0	105	74-131			0.840	30	
Methylcyclohexane	47		"	50.0	94.5	70-130			1.47	30	
Methylene chloride	49		"	50.0	98.8	57-141			2.02	30	
n-Butylbenzene	46		"	50.0	91.1	80-130			1.73	30	



## Volatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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### Batch BH81362 - EPA 5035A

LCS Dup (BH81362-BSD1)									Prepared & Analyzed: 08/27/2018		
n-Propylbenzene	44		ug/L	50.0	88.0	74-136			1.21	30	
o-Xylene	46		"	50.0	92.8	83-123			0.540	30	
p- & m- Xylenes	95		"	100	94.7	82-128			0.317	30	
p-Isopropyltoluene	46		"	50.0	92.6	85-125			1.04	30	
sec-Butylbenzene	47		"	50.0	94.4	83-125			1.32	30	
Styrene	47		"	50.0	93.8	86-126			0.728	30	
tert-Butyl alcohol (TBA)	1100		"	250	435	70-130	High Bias		2.04	30	
tert-Butylbenzene	45		"	50.0	89.3	80-127			1.72	30	
Tetrachloroethylene	42		"	50.0	83.4	80-129			1.21	30	
Toluene	46		"	50.0	92.0	85-121			0.0870	30	
trans-1,2-Dichloroethylene	52		"	50.0	104	72-132			0.579	30	
trans-1,3-Dichloropropylene	48		"	50.0	95.2	78-132			1.25	30	
Trichloroethylene	48		"	50.0	95.5	84-123			0.990	30	
Trichlorofluoromethane	56		"	50.0	113	62-140			8.05	30	
Vinyl Chloride	55		"	50.0	110	52-130			1.93	30	
Surrogate: 1,2-Dichloroethane-d4	51.0		"	50.0	102	77-125					
Surrogate: Toluene-d8	46.0		"	50.0	92.0	85-120					
Surrogate: p-Bromofluorobenzene	49.1		"	50.0	98.2	76-130					



## Semivolatile Organic Compounds by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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**Batch BH81412 - EPA 3550C****Blank (BH81412-BLK1)**

Prepared: 08/28/2018 Analyzed: 08/29/2018

2-Methylnaphthalene	ND	41.7	ug/kg wet								
Acenaphthene	ND	41.7	"								
Acenaphthylene	ND	41.7	"								
Anthracene	ND	41.7	"								
Benzo(a)anthracene	ND	41.7	"								
Benzo(a)pyrene	ND	41.7	"								
Benzo(b)fluoranthene	ND	41.7	"								
Benzo(g,h,i)perylene	ND	41.7	"								
Benzo(k)fluoranthene	ND	41.7	"								
Chrysene	ND	41.7	"								
Dibenzo(a,h)anthracene	ND	41.7	"								
Fluoranthene	ND	41.7	"								
Fluorene	ND	41.7	"								
Indeno(1,2,3-cd)pyrene	ND	41.7	"								
Naphthalene	ND	41.7	"								
Phenanthrene	ND	41.7	"								
Pyrene	ND	41.7	"								

Surrogate: Nitrobenzene-d5

873 " 833 105 22-108

Surrogate: 2-Fluorobiphenyl

758 " 833 91.0 21-113

Surrogate: Terphenyl-d14

1330 " 833 160 24-116

**LCS (BH81412-BS1)**

Prepared: 08/28/2018 Analyzed: 08/29/2018

2-Methylnaphthalene	590	41.7	ug/kg wet	833	70.8	16-127
Acenaphthene	536	41.7	"	833	64.3	17-124
Acenaphthylene	464	41.7	"	833	55.7	16-124
Anthracene	581	41.7	"	833	69.8	24-124
Benzo(a)anthracene	577	41.7	"	833	69.2	25-134
Benzo(a)pyrene	652	41.7	"	833	78.2	29-144
Benzo(b)fluoranthene	590	41.7	"	833	70.8	20-151
Benzo(g,h,i)perylene	575	41.7	"	833	69.0	10-153
Benzo(k)fluoranthene	623	41.7	"	833	74.7	10-148
Chrysene	578	41.7	"	833	69.3	24-116
Dibenzo(a,h)anthracene	615	41.7	"	833	73.8	17-147
Fluoranthene	639	41.7	"	833	76.7	36-125
Fluorene	566	41.7	"	833	67.9	16-130
Indeno(1,2,3-cd)pyrene	598	41.7	"	833	71.8	10-155
Naphthalene	578	41.7	"	833	69.3	20-121
Phenanthrene	603	41.7	"	833	72.4	24-123
Pyrene	722	41.7	"	833	86.7	24-132

Surrogate: Nitrobenzene-d5

682 " 833 81.8 22-108

Surrogate: 2-Fluorobiphenyl

623 " 833 74.8 21-113

Surrogate: Terphenyl-d14

995 " 833 119 24-116



### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
18H1121-01	SB-03 5-7	40mL Vial with Stir Bar-Cool 4° C
18H1121-02	SB-04 5-7	40mL Vial with Stir Bar-Cool 4° C
18H1121-03	SB-05 9.5-11.5	40mL Vial with Stir Bar-Cool 4° C



## Sample and Data Qualifiers Relating to This Work Order

- S-08 The recovery of this surrogate was outside of QC limits.
- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- J Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

### Definitions and Other Explanations

*	Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.
ND	NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)
RL	REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.
LOQ	LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence . This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.
LOD	LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.
MDL	METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.
Reported to	This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.
NR	Not reported
RPD	Relative Percent Difference
Wet	The data has been reported on an as-received (wet weight) basis
Low Bias	Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
High Bias	High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.
Non-Dir.	Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

If EPA SW-846 method 8270 is included herein it is noted that the target compound N-nitrosodiphenylamine (NDPA) decomposes in the gas chromatographic inlet and cannot be separated from diphenylamine (DPA). These results could actually represent 100% DPA, 100% NDPA or some combination of the two. For this reason, York reports the combined result for n-nitrosodiphenylamine and diphenylamine for either of these compounds as a combined concentration as Diphenylamine.

If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

2-chloroethylvinyl ether readily breaks down under acidic conditions. Samples that are acid preserved, including standards will exhibit breakdown. The data user should take note.

Certification for pH is no longer offered by NYDOH ELAP.



Semi-Volatile and Volatile analyses are reported down to the LOD/MDL, with values between the LOD/MDL and the LOQ being "J" flagged as estimated results.

For analyses by EPA SW-846-8270D, the Limit of Quantitation (LOQ) reported for benzidine is based upon the lowest standard used for calibration and is not a verified LOQ due to this compound's propensity for oxidative losses during extraction/concentration procedures and non-reproducible chromatographic performance.

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# Field Chain-of-Custody Record

NOTE: YORK's Standard Terms & Conditions are listed on the back side of this document.  
Your signature binds you to YORK's Standard Terms & Conditions.

Page 1 of 1

YOUR Information		Report To:	Invoice To:	YOUR Project Number	Turn-Around Time
Company: <b>WCD Group</b>	Company: Address: <b>24 Davis Avenue Rockaway Beach, NY</b>	Address:		PQ18052	RUSH - Next Day
Phone: <b>845-452-1658</b>	Phone:	Contact: <b>Tyler Gauthier</b>	Contact: <b>Brenda Wells</b>	YOUR Project Name <b>PQ18052.20</b>	RUSH - Two Day
Contact: <b>Tyler Gauthier</b>	E-mail:				RUSH - Three Day
E-mail:					RUSH - Four Day
					Standard (5-7 Day) <input checked="" type="checkbox"/>
<i>Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.</i>		Matrix Codes	Samples From	Report / EDD Type (circle selections)	YORK Reg. Comp.
		S - soil / solid	New York	<input checked="" type="checkbox"/> Summary Report	Compared to the following Regulation(s); (please fill in)
		GW - groundwater	New Jersey	<input type="checkbox"/> CT RCP	Standard Excel EDD
		DW - drinking water	Connecticut	<input type="checkbox"/> CT RCP DOA/DUE	
		VW - wastewater	Pennsylvania	<input type="checkbox"/> EQuIS (Standard)	
		O - Oil	Other	<input type="checkbox"/> NYSDEC EQuIS	
				<input type="checkbox"/> NJDEP SRP HazSite	
				<input type="checkbox"/> NJDKQP	
				<input type="checkbox"/> Other:	
Samples Collected by: (print your name above and sign below)		Sample Matrix	Date/Time Sampled	Analysis Requested	Container Description
		<b>S</b>	<b>8/23/18</b>	<b>YOC 8260, PAHS 8270</b>	<b>1x10AKIT, 1X02015</b>
		<b>SB-03 5-7</b>			
		<b>SB-04 4-5-15 5-7</b>			
		<b>SB-05 9-5-11-5</b>			
Comments:					
<p><b>Preservation:</b> (check all that apply)</p> <p>HCl <input type="checkbox"/> MeOH <input type="checkbox"/> HNO<sub>3</sub> <input type="checkbox"/> NaOH <input type="checkbox"/> ZnAC <input type="checkbox"/>  Ascorbic Acid <input type="checkbox"/> Other: _____</p> <p>Samples Reinquished by / Company</p> <p><i>John J. Gauthier</i></p> <p>Date/Time: <b>8/23/18 1pm</b></p>					
<p><b>Special Instruction</b></p> <p>Field Filtered <input type="checkbox"/>  Lab to Filter <input type="checkbox"/></p> <p>Date/Time: <b>8/23/18 1pm</b></p>					
<p>Samples Received by / Company</p> <p><i>John J. Gauthier</i></p> <p>Date/Time: <b>8/23/18 1pm</b></p>					
<p>Samples Received by / Company</p> <p><i>John J. Gauthier</i></p> <p>Date/Time: <b>8/23/18 1pm</b></p>					
<p>Samples Received by / Company</p> <p><i>John J. Gauthier</i></p> <p>Date/Time: <b>8/23/18 1pm</b></p>					
<p><b>Temp. Received at Lab</b> <b>1.8</b> Degrees C</p>					