

**VOLATILE VAPOR INTRUSION (VVI)
REPORT**

**CHARLES CAMPAGNE ELEMENTARY
SCHOOL
601 PLAINVIEW ROAD
BETHPAGE, NEW YORK 11714**

**PREPARED FOR:
BETHPAGE UNION FREE SCHOOL DISTRICT
10 CHERRY AVENUE
BETHPAGE, NEW YORK 11714**

**JCB PROJECT #: 13-27694
JANUARY 2014**

**J.C. BRODERICK & ASSOCIATES, INC.
Environmental Consulting & Testing**

**1775 Expressway Drive North – Suite 1
Hauppauge, New York 11788
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Section No. 1.0: Introduction

J.C. Broderick and Associates (JCB) was retained by the Bethpage Union Free School District (Bethpage) to perform air sampling within the above reference school building. The sampling protocol was performed essentially in accordance with the requirements of the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", Final Version, October 2006.

Section No. 2.0: Site Description and Location

The Subject Site is located at 601 Plainview Road Bethpage, New York 11714. The Subject Site is located on the east side of Plainview Road between Evelyn Drive to the north and Broadway to the south. According to the United States Geological Survey (USGS) *Huntington, New York, 1979 7.5 Minute Series Topographical Map*, the Subject Site is situated at an approximate elevation of 120 feet (ft) above mean sea level. The location of the Subject Site is shown on the Site Location Map, Appendix-A Figure-1.

Section No. 3.0: Air Sampling Evaluation

The following sections describe the sampling procedures taken.

Section No. 3.1: Pre-Work Field Preparations

On December 26, 2013, a pre-sampling inspection was performed to evaluate the physical layout and conditions of the school building, to specifically determine the location of each sample, identify conditions that may affect or interfere with the proposed sampling and to prepare the building for sampling.

- To document conditions during indoor air sampling and ultimately to aid in the interpretation of the sampling results, the following actions were taken:
 - The storage of volatile chemicals was identified.
 - The use of heating or air conditioning systems during sampling was noted.
 - Floor plan sketches were drawn which include: the floor layout with sampling locations, chemical storage areas, garages, doorways, stairways, locations of basement sumps or subsurface drains and utility perforations through building foundations, HVAC system supply and return registers, compass orientation (north) and footings that create separate foundation sections. Photographs were taken to accompany the floor plan sketches.
 - Any pertinent observations, including readings from a photo-Ionization Detector (PID) and other field instrumentation, were recorded.

Section No. 3.2: Subsurface Vapor Sample Collection

The following summarizes the manner in which subsurface vapor samples were collected. Please refer to Figure No. 2 - Sub-slab, 1st Floor, 2nd Floor and Ambient Sampling Locations for additional details.

- For the collection of the subsurface vapor samples, a probe was fabricated from ½-inch diameter, threaded brass pipe with a barbed tubing connection. Using a hammer drill, a 1-inch hole was drilled into the concrete floor at least two inches below the base of the slab (three to four inches thick). The pipe was lowered into the hole, but not flush to the bottom, and set into place utilizing hydrated bentonite powder, which contains no volatile organic compounds (VOCs). A five (5) gallon plastic container was placed on top of the concrete floor and above the vapor point. The container was sealed to the concrete floor with modeling clay. Teflon-lined, ¼-inch I.D. disposable polyethylene tubing was then utilized to connect the barbed connection of the vapor point to a laboratory clean-certified, 6-liter SUMMA® canister, provided by York Analytical Laboratories, Inc. (York) through a flow controller pre-set for a twenty-four (24) hour long sample duration. The tubing included a tee connection and valve to a purging vacuum pump calibrated for a flow rate of less than 0.2 liters per minute. The tubing, probe and subsurface soil was purged of at least one (1) liter of vapor prior to sample collection. Upon completion of the sampling, the probe was removed from the concrete slab and the hole patched with concrete.
- Helium (He) was introduced into the atmosphere under the pail, as a tracer gas, to assure the viability of the vapor point seals with the atmosphere. The tracer gas was monitored in the purge air before sampling and outside of all seals before, during and after sampling, utilizing a Myron Helium Detector. In addition, Helium (He) was analyzed for in the SUMMA® canister and if detected at more than ten (10) percent, the sample would be considered invalid and retaken.
- A total of two (2) subsurface vapor samples were collected.
 - One (1) subsurface sample was collected from beneath the elevator mechanical room located at the north end of the school building.
 - One (1) subsurface sample was collected from beneath the boiler room located at the south end of the school building.

Section No. 3.3: Indoor Air Sample Collection

The following summarizes the manner in which indoor air samples were collected:

- Sample flow rates conformed to the specifications in the sample collection method (less than 0.2 liters per minute). Samples were taken from areas where personnel and occupants would not interfere with the sampling. The samples were collected, utilizing conventional sampling methods, in laboratory clean-certified, 6-liter SUMMA® canisters, provided by York Analytical Laboratories, Inc. (York) through a flow controller pre-set for a twenty-four (24) hour long sample duration. As per the guidance requirements, the samples were collected at a height approximately three (3) feet above the floor to represent a height at which occupants are normally seated.

Section No. 3.3.1: 1st Floor Air Sample Collection

Please refer to Figure No. 2 - Sub-slab, 1st Floor, 2nd Floor and Ambient Sampling Locations for additional details.

- A total of five (5) first floor air samples were collected.
 - One (1) air sample was collected from within the elevator mechanical room located at the north end of the school building.
 - One (1) air sample was collected from within Classroom K-C located at the north end of the school building.
 - One (1) air sample was collected from within Classroom 103 located in the main hallway of the school building.
 - One (1) air sample was collected from within the west Music Office located at the south end of the school building.
 - One (1) air sample was collected from within the boiler room located at the south end of the school building.

Section No. 3.3.2: 2nd Floor Air Sample Collection

Please refer to Figure No. 2 - Sub-slab, 1st Floor, 2nd Floor and Ambient Sampling Locations for additional details.

- One (1) second floor air sample was collected.
 - One (1) air sample was collected from within Classroom 207 located in the main hallway of the school building.

Section No. 3.4: Outdoor (Ambient) Air Sample Collection

An outdoor (ambient) air sample was collected simultaneously with subsurface and indoor samples to evaluate the potential influence, if any, of outdoor air on indoor air quality. To obtain a representative sample which meets the data quality objectives, the outdoor air sample was collected in a manner consistent with that for indoor air samples. The sample was collected, utilizing conventional sampling methods, in a laboratory clean-certified, 6-liter SUMMA® canister, provided by York Analytical Laboratories, Inc. (York) equipped with a flow controller pre-set for an twenty-four (24) hour sample duration. As per the guidance requirements, the sample was collected at a height approximately three (3) feet above the floor. Please refer to Figure No. 2 - Sub-slab, 1st Floor, 2nd Floor and Ambient Sampling Locations for additional details.

- One (1) outdoor (ambient) air sample was collected.
 - One (1) air sample was collected from outside the east side of the school building adjacent to Classroom Number 107.

Section No. 4.0: Laboratory Analytical Summary

The air samples were collected into laboratory supplied, clean-certified, 6-liter SUMMA® canisters, and assigned individual identification numbers. Chain of custody documents were prepared and the samples were then delivered to an independent New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory for analysis.

York Analytical Laboratories, Inc. (York) provided laboratory analytical services. Copies of York's NYSDOH certifications are available upon request.

Air samples submitted for laboratory analysis were analyzed for Volatile Organic Compounds (VOCs) utilizing the Environmental Protection Agency Toxic Organics 15 (EPA TO-15) list.

The laboratory analysis results for the air samples collected were reviewed and compared to the 90th percentile as listed in Table C1 NYSDOH 2003 Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes of the NYSDOH's "Final NYSDOH CEH BEEI Soil Vapor Intrusion Guidance" dated October 2006.

The following table summarizes the Air Sample Analytical Results of Detected Compounds:

**Table No. 1:
Air Sampling Analytical Results via EPA Method TO-15**

Client Sample ID	Background Values	Ambient	SS-1 ¹	FF-1	FF-2	FF-3	FF-4	FF-5	SS-2 ¹	FF-6
TO-15 List	µg/m ³	Outside Classroom 107	Sub-Slab Elevator Mechanical Room	First Floor Elevator Mechanical Room	First Floor Classroom K-C	First Floor Classroom 103	First Floor Music Office	Second Floor Classroom 207	Sub-Slab Boiler Room	First Floor Boiler Room
Sampling Date	----	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13
1,1,1-Trichloroethane	3.1	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	9.5	ND	100	0.85	0.60	ND	0.70	0.55	56	0.60
1,3,5-Trimethylbenzene	3.6	ND	28	ND	ND	ND	ND	ND	19	ND
1,4-Dichlorobenzene	1.3	ND	ND	0.67	ND	ND	ND	ND	ND	ND
Acetone	110	7.0	2,000	13	6.2	9.2	7.3	8.8	2,700	6.4
Benzene	15	1.3	88	1.7	1.4	1.3	1.8	1.7	96	1.4
2-Butanone	16	2.0	1,700	3.7	1.1	1.6	1.9	1.5	1,800	1.8
Carbon Tetrachloride	0.8	ND	ND	0.64	ND	ND	ND	0.58	ND	ND
Chloromethane	3.3	1.2	ND	1.4	1.2	1.3	1.4	1.3	ND	1.8
Cyclohexane	8.1	ND	99	0.46	ND	0.42	0.60	0.49	130	ND

Table No. 1:
Air Sampling Analytical Results via EPA Method TO-15

Client Sample ID	Background Values	Ambient	SS-1 ¹	FF-1	FF-2	FF-3	FF-4	FF-5	SS-2 ¹	FF-6
TO-15 List	µg/m ³	Outside Classroom 107	Sub-Slab Elevator Mechanical Room	First Floor Elevator Mechanical Room	First Floor Classroom K-C	First Floor Classroom 103	First Floor Music Office	Second Floor Classroom 207	Sub-Slab Boiler Room	First Floor Boiler Room
Sampling Date	----	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13	12-26-13
Ethylbenzene	7.3	ND	89	0.66	0.49	0.44	0.79	0.62	74	0.53
Hexachlorobutadiene	4.6	ND	ND	ND	ND	ND	1.1	1.4	140	0.58
Methylene Chloride	1.6	3.0	ND	23	3.9	7.3	5.8	5.2	12	5.1
n-Butylbenzene	2.1	ND	ND	ND	0.53	ND	ND	ND	ND	ND
o-Xylene	7.6	ND	100	0.75	ND	0.44	0.79	0.62	87	0.62
p&m-Xylenes	12	ND	290	2.0	1.4	1.1	ND	ND	64	ND
Tetrachloroethene (PCE)	2.9	ND	ND	0.83	ND	1.2	ND	ND	ND	9.1
Tetrahydrofuran	3.3	ND	5,400	1.6	ND	ND	ND	ND	5,700	ND
Toluene	5.9	1.8	470	4.1	2.4	2.4	4.1	3.9	380	2.2
Trichloroethene (TCE)	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane (Freon 11)	17	1.3	ND	4.3	1.3	1.4	1.4	0.55	ND	1.3

Notes:

µg/m³ = parts per billion

ND=Not Detected above the laboratory minimum detection limit

Background Values = NYSDOH 2003 Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 90th Percentile

¹ The State of New York does not have any standards, criteria, or guidance values for concentrations of volatile chemicals in subsurface vapors

BOLD Indicates Result Above Background Value

Compounds in Gray are used in Decision Matrices 1 & 2. - See Table No. 2 for additional information.

Section No. 5.0: Decision Matrices

Decision matrices are risk management tools developed by the NYSDOH to provide guidance on a cases-by-case basis about actions that should be taken to address current and potential exposures related to soil vapor intrusion. The matrices are intended to be used when evaluating the results from buildings with full slab foundations.

The NYSDOH has currently developed two (2) matrices to use as tools in making decisions when soil vapor may be entering buildings. JCB implemented the matrices and the following table summarizes the results:

Table No. 2: Volatile Chemicals Utilized in NYSDOH Decision Matrices		
Compound	Soil Vapor/Indoor Air Decision Matrix	Result
1,1,1-Trichloroethane (TCA)	Matrix 2	No Further Action
Carbon Tetrachloride	Matrix 1	Take Reasonable Action
Tetrachloroethene (PCE)	Matrix 2	Take Reasonable Action
Trichloroethene (TCE)	Matrix 1	No Further Action

Notes:
Only four (4) chemicals have been assigned to decision matrices by the NYSDOH to date.

The results of the matrices indicate that “No Further Action” is required for 1,1,1-Trichlorethane and Trichloroethene. However, the results of the matrices also recommend to “Take reasonable and practical actions to identify sources and reduce exposures” for Tetrachloroethene in the boiler room and Carbon Tetrachloride in the elevator mechanical room and the second floor classroom 207.

The concentrations detected in the indoor air samples are likely due to the daily operations within the building or outdoor sources rather than soil vapor intrusion given the concentrations detected in the subsurface vapor sample.

Section No. 6.0: Quality Assurance and Quality Control (QA/QC) Procedures

- In order to prevent cross-contamination between sampling locations, all re-usable sampling equipment which came into contact with sample materials was decontaminated prior to each use. Equipment used for sample collection was wiped clean, washed in a solution of Alconox and thoroughly rinsed with potable water. New and dedicated polyethylene tubing was used for collection of each subsurface sample. All sampling personnel wore disposable latex, nylon, or nitrile gloves during sampling events. At a minimum, gloves were changed between locations and before each laboratory sample were collected.
- The field sampling team maintained sampling log sheets summarizing the following:
 - Sample identification;
 - Canister ID Number;
 - Regulator ID Number;
 - Date and time of sample collection;
 - Sampling height;
 - Sampling methods and devices;
 - The volume of air sampled;
 - The vacuum of canisters before and after sample collection;
 - Chain of custody protocols and records used to track samples from sampling point to analysis.
- Subsequent to sample collection, the Summa® canister was labeled with the sampling location, time, and samplers initials.

Section No. 7.0: Findings

Based upon the review of the VVI laboratory analysis results all detectable concentrations observed were reported well below published occupational health guidelines. In addition, with the exception of a single parameter (methylene chloride), all detectable concentrations observed in the occupied spaces of the school building were below their background values as reported in the NYSDOH 2003 Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes 90th Percentile. An investigation revealed that the presence of methylene chloride at its reported concentration is most likely associated with a laboratory analysis cleaning agent and not attributable to VVI.

Based upon these findings, no hazardous condition or immediate health concern was identified associated with VVI.

Section No. 8.0: Recommendations

It is recommended that periodic VVI sampling be performed to monitor site conditions.

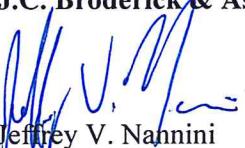
It is also recommended that an investigation be performed to identify any possible sources of Tetrachloride and Carbon Tetrachloride associated with building operations. Steps should taken to reduce the presence of these parameters such as, keeping containers tightly capped or storing VOC containing products in ventilated areas.

Section No. 9.0: Certification

I certify that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", Final Version, October 2006 and that all activities were performed in full accordance with the work plan.

Sincerely,

J.C. Broderick & Associates, Inc.



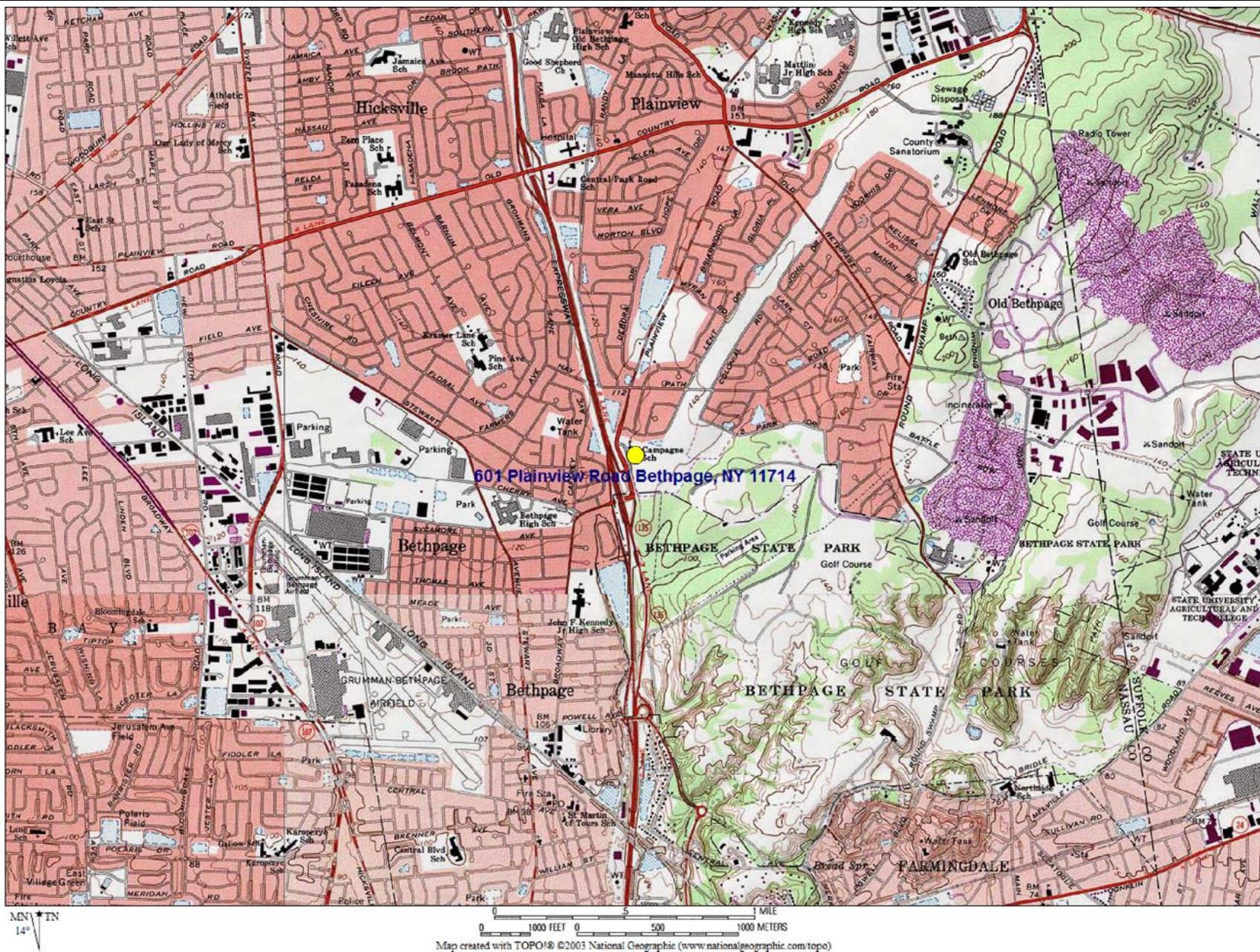
Jeffrey V. Nannini
Environmental Scientist



Steven Muller, CEC
Project Manager

Appendix A

Figures





FF-2
First Floor
Classroom K-C

FF-1
First Floor
Sub-Slab
Elevator
Mechanical Room

Ambient
Gazebo

FF-5
Second Floor
Classroom 207

SS-2
Sub-Slab First Floor
Boiler Room
FF-6
Sub-Slab First Floor
Boiler Room
FF-4
First Floor
Music Office

Grass

Sidewalk
Driveway

Grass

Grass

Sidewalk

Driveway

Plainview Road

Grass

Grass

Sidewalk

Asphalt
Basketball Court

JCB LEGEND

- AMBIENT SAMPLING LOCATION
- SUBSURFACE SAMPLING LOCATION
- FIRST FLOOR SAMPLING LOCATION
- SECOND FLOOR SAMPLING LOCATION

JCB

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Notes:

Charles Campagne
Elementary School
601 Plainview Road
Bethpage, NY 11714

Drawing Title

Figure No. 2

Sub-Slab,
1st Floor
and
2nd Floor
Sampling
Locations

Scale Project No. Date
N.T.S. 13-27964 12-26-13

Drawn By Checked By Page No.
J.V.N. S.W.M. 2 of 2

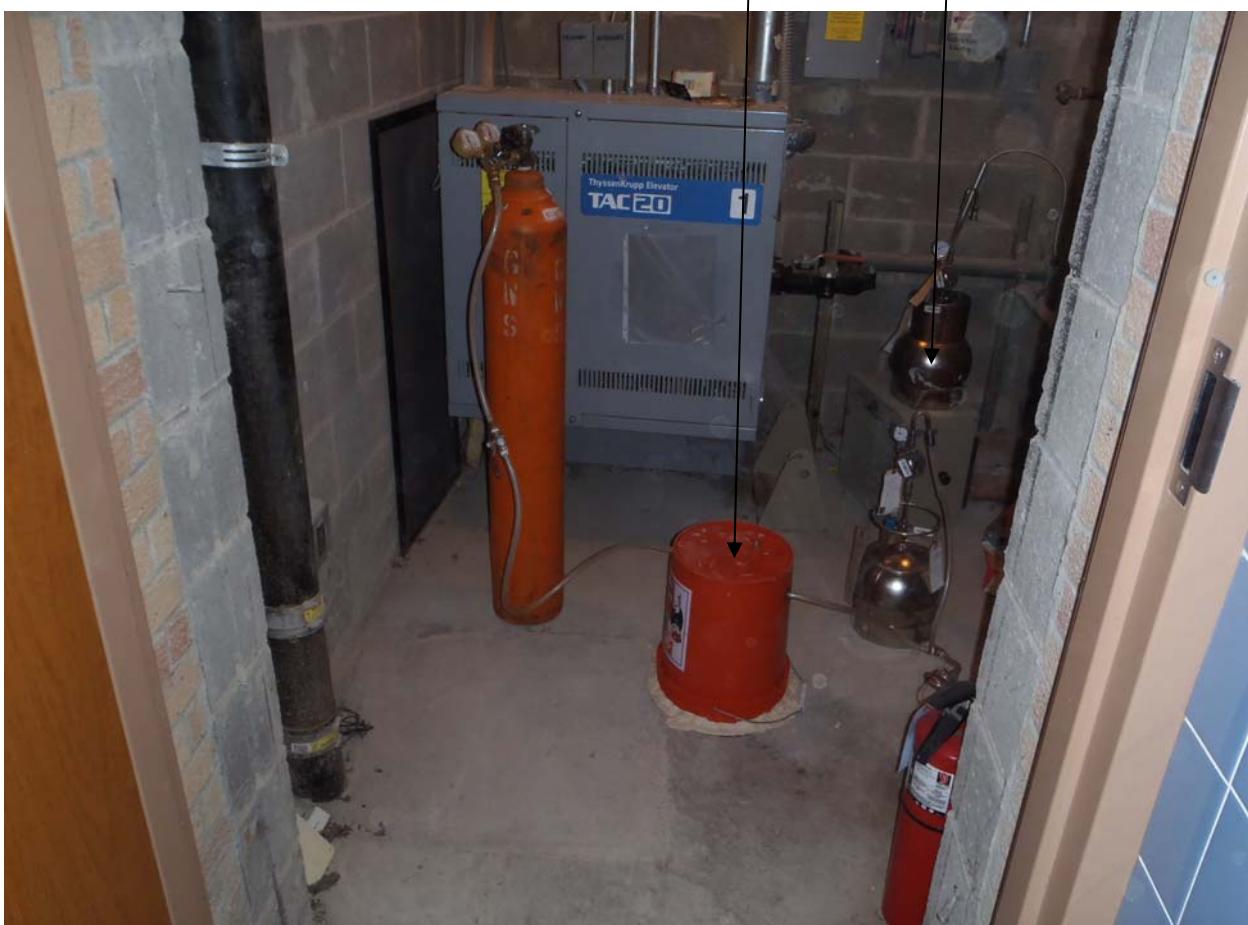
Drawing No.

2

Appendix B

Field Photograph Logs

**Elevator Mechanical Room Sub-Slab (Left) and First Floor (Right)
Sampling Locations**



Field Photograph Log

Indoor Air Sampling Report

**Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714**



Photo No. 01

JCB#: 13-27694

**Classroom K-C First Floor
Sampling Location**



Field Photograph Log

Indoor Air Sampling Report

**Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714**



Photo No. 02

JCB#: 13-27694

**Classroom 103 First Floor
Sampling Location**



Field Photograph Log

Indoor Air Sampling Report

**Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714**



Photo No. 03

JCB#: 13-27694

**Music Office First Floor
Sampling Location**



Field Photograph Log

Indoor Air Sampling Report

**Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714**



Photo No. 04

JCB#: 13-27694

**Classroom 207 Second Floor
Sampling Location**



Field Photograph Log

Indoor Air Sampling Report

**Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714**



Photo No. 05

JCB#: 13-27694

**Boiler Room Sub-Slab (Left) and First Floor (Right)
Sampling Locations**



Field Photograph Log

Indoor Air Sampling Report

**Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714**



Photo No. 06

JCB#: 13-27694

Typical Starting PSI Reading



Field Photograph Log

Indoor Air Sampling Report

Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714



Photo No. 07

JCB#: 13-27694

Typical Ending PSI Reading



Field Photograph Log

Indoor Air Sampling Report

Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714



Photo No. 08

JCB#: 13-27694

Typical Sub-Slab Location Subsequent to Backfill and Concrete



Field Photograph Log

Indoor Air Sampling Report

**Charles Campagne Elementary School
601 Plainview Road
Bethpage, New York 11714**

Photo No. 09

JCB#: 13-27694

Appendix C

Laboratory Analysis Report



Technical Report

prepared for:

J.C. Broderick
1775 North Express Drive
Hauppauge NY, 11788
Attention: Jeff Nannini

Report Date: 01/07/2014
Client Project ID: 13-27694
York Project (SDG) No.: 13L0927

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

Report Date: 01/07/2014
Client Project ID: 13-27694
York Project (SDG) No.: 13L0927

J.C. Broderick
1775 North Express Drive
Hauppauge NY, 11788
Attention: Jeff Nannini

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 December 30, 2013 and listed below. The project was identified as your project: **13-27694**.

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 Notes 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 attachment to 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.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
13L0927-01	Ambient	Outdoor Ambient Air	12/26/2013	12/30/2013
13L0927-02	SS-1	Soil Vapor	12/26/2013	12/30/2013
13L0927-03	FF-1	Indoor Ambient Air	12/26/2013	12/30/2013
13L0927-04	FF-2	Indoor Ambient Air	12/26/2013	12/30/2013
13L0927-05	FF-3	Indoor Ambient Air	12/26/2013	12/30/2013
13L0927-06	FF-4	Indoor Ambient Air	12/26/2013	12/30/2013
13L0927-07	FF-5	Indoor Ambient Air	12/26/2013	12/30/2013
13L0927-08	SS-2	Soil Vapor	12/26/2013	12/30/2013
13L0927-09	FF-6	Indoor Ambient Air	12/26/2013	12/30/2013

General Notes for York Project (SDG) No.: 13L0927

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 samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By:



Date: 01/07/2014

Benjamin Gulizia
Laboratory Director





Sample Information

Client Sample ID: Ambient

York Sample ID: 13L0927-01

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Outdoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.26	0.26	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
108-05-4	Vinyl acetate	ND		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
79-01-6	Trichloroethylene	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
108-88-3	Toluene	1.8		ug/m³	0.38	0.38	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
109-99-9	Tetrahydrofuran	ND		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
127-18-4	Tetrachloroethylene	ND		ug/m³	0.69	0.69	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
100-42-5	Styrene	ND		ug/m³	0.43	0.43	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
115-07-1	Propylene	ND		ug/m³	0.18	0.18	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
622-96-8	p-Ethyltoluene	ND		ug/m³	2.5	2.5	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.88	0.88	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
95-47-6	o-Xylene	ND		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
110-54-3	n-Hexane	1.1		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
142-82-5	n-Heptane	0.50		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-09-2	Methylene chloride	3.0	B	ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
67-63-0	Isopropanol	ND		ug/m³	0.25	0.25	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
100-41-4	Ethyl Benzene	ND		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
141-78-6	Ethyl acetate	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
110-82-7	Cyclohexane	ND		ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
74-87-3	Chloromethane	1.2		ug/m³	0.21	0.21	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
67-66-3	Chloroform	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-00-3	Chloroethane	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
56-23-5	Carbon tetrachloride	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-15-0	Carbon disulfide	0.35		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
74-83-9	Bromomethane	ND		ug/m³	0.39	0.39	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB



Sample Information

<u>Client Sample ID:</u> Ambient		<u>York Sample ID:</u> 13L0927-01
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694	<u>Matrix</u> Outdoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-25-2	Bromoform	ND		ug/m ³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-27-4	Bromodichloromethane	ND		ug/m ³	0.63	0.63	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
100-44-7	Benzyl chloride	ND		ug/m ³	0.53	0.53	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
71-43-2	Benzene	1.3		ug/m ³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
67-64-1	Acetone	7.0		ug/m ³	0.24	0.24	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
591-78-6	2-Hexanone	ND		ug/m ³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
78-93-3	2-Butanone	2.0		ug/m ³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
123-91-1	1,4-Dioxane	ND		ug/m ³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
106-99-0	1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.71	0.71	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.75	0.75	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m ³	0.57	0.57	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	ND		ug/m ³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.70	0.70	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
75-71-8	Dichlorodifluoromethane	2.5		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
124-48-1	Dibromochloromethane	ND		ug/m ³	0.82	0.82	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
108-90-7	Chlorobenzene	ND		ug/m ³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 18:30	RB
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	99.0 %	70-130								



Sample Information

Client Sample ID: Ambient

York Sample ID: 13L0927-01

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Outdoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Sample Information

Client Sample ID: SS-1

York Sample ID: 13L0927-02

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Soil Vapor

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	5.0	5.0	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
108-05-4	Vinyl acetate	ND		ug/m³	6.9	6.9	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
79-01-6	Trichloroethylene	ND		ug/m³	5.3	5.3	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	8.9	8.9	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	7.8	7.8	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
108-88-3	Toluene	470		ug/m³	7.4	7.4	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
109-99-9	Tetrahydrofuran	5400		ug/m³	58	58	193.8	EPA TO-15	01/02/2014 10:05	01/06/2014 08:06	RB
127-18-4	Tetrachloroethylene	ND		ug/m³	13	13	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
100-42-5	Styrene	ND		ug/m³	8.4	8.4	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
115-07-1	Propylene	ND		ug/m³	3.4	3.4	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
622-96-8	p-Ethyltoluene	100		ug/m³	48	48	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
179601-23-1	p- & m- Xylenes	290		ug/m³	17	17	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
95-47-6	o-Xylene	110		ug/m³	8.6	8.6	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
110-54-3	n-Hexane	200		ug/m³	6.9	6.9	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
142-82-5	n-Heptane	140		ug/m³	8.1	8.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-09-2	Methylene chloride	ND		ug/m³	6.8	6.8	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	7.1	7.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	8.1	8.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
67-63-0	Isopropanol	ND		ug/m³	4.8	4.8	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	21	21	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
100-41-4	Ethyl Benzene	89		ug/m³	8.6	8.6	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
141-78-6	Ethyl acetate	ND		ug/m³	7.1	7.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
110-82-7	Cyclohexane	99		ug/m³	6.8	6.8	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	8.9	8.9	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	7.8	7.8	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
74-87-3	Chloromethane	ND		ug/m³	4.1	4.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB



Sample Information

<u>Client Sample ID:</u> SS-1	<u>York Sample ID:</u> 13L0927-02
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694

Matrix
Soil Vapor

Collection Date/Time
December 26, 2013 3:00 pm

Date Received
12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-66-3	Chloroform	ND		ug/m³	9.6	9.6	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-00-3	Chloroethane	ND		ug/m³	5.2	5.2	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
56-23-5	Carbon tetrachloride	ND		ug/m³	6.2	6.2	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-15-0	Carbon disulfide	ND		ug/m³	6.1	6.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
74-83-9	Bromomethane	ND		ug/m³	7.7	7.7	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-25-2	Bromoform	ND		ug/m³	20	20	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-27-4	Bromodichloromethane	ND		ug/m³	12	12	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
100-44-7	Benzyl chloride	ND		ug/m³	10	10	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
71-43-2	Benzene	88		ug/m³	6.3	6.3	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
67-64-1	Acetone	2000		ug/m³	47	47	193.8	EPA TO-15	01/02/2014 10:05	01/06/2014 08:06	RB
591-78-6	2-Hexanone	ND		ug/m³	8.1	8.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
78-93-3	2-Butanone	1700		ug/m³	58	58	193.8	EPA TO-15	01/02/2014 10:05	01/06/2014 08:06	RB
123-91-1	1,4-Dioxane	ND		ug/m³	7.1	7.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	12	12	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	12	12	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
106-99-0	1,3-Butadiene	ND		ug/m³	8.5	8.5	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
108-67-8	1,3,5-Trimethylbenzene	28		ug/m³	9.7	9.7	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	14	14	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
78-87-5	1,2-Dichloropropane	ND		ug/m³	9.1	9.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
107-06-2	1,2-Dichloroethane	ND		ug/m³	8.0	8.0	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	12	12	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
95-63-6	1,2,4-Trimethylbenzene	100		ug/m³	9.7	9.7	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	15	15	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m³	7.8	7.8	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-34-3	1,1-Dichloroethane	ND		ug/m³	8.0	8.0	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	11	11	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	11	11	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	15	15	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	14	14	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	11	11	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
75-71-8	Dichlorodifluoromethane	ND		ug/m³	9.7	9.7	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
106-93-4	1,2-Dibromoethane	ND		ug/m³	15	15	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB



Sample Information

Client Sample ID: SS-1

York Sample ID: 13L0927-02

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Soil Vapor

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
124-48-1	Dibromochloromethane	ND		ug/m³	16	16	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
80-62-6	Methyl Methacrylate	ND		ug/m³	8.1	8.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
108-90-7	Chlorobenzene	ND		ug/m³	9.1	9.1	19.38	EPA TO-15	01/02/2014 10:05	01/03/2014 23:45	RB
Surrogate Recoveries											
460-00-4	Surrogate: p-Bromofluorobenzene	100 %			70-130						

Helium

Sample Prepared by Method: PREP for GASES by GC

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-59-7	Helium	10		%	0.50	0.50	1	GC/TCD	01/07/2014 08:55	01/07/2014 10:48	AMC

Sample Information

Client Sample ID: FF-1

York Sample ID: 13L0927-03

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.26	0.26	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
108-05-4	Vinyl acetate	ND		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
79-01-6	Trichloroethylene	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
108-88-3	Toluene	4.1		ug/m³	0.38	0.38	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
109-99-9	Tetrahydrofuran	1.6		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
127-18-4	Tetrachloroethylene	0.83		ug/m³	0.69	0.69	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
100-42-5	Styrene	ND		ug/m³	0.43	0.43	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
115-07-1	Propylene	ND		ug/m³	0.18	0.18	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
622-96-8	p-Ethyltoluene	ND		ug/m³	2.5	2.5	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
179601-23-1	p- & m- Xylenes	2.0		ug/m³	0.88	0.88	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB



Sample Information

<u>Client Sample ID:</u> FF-1	<u>York Sample ID:</u> 13L0927-03
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694
	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-47-6	o-Xylene	0.75		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
110-54-3	n-Hexane	4.3		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
142-82-5	n-Heptane	1.1		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-09-2	Methylene chloride	23	B	ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
67-63-0	Isopropanol	3.2		ug/m³	0.25	0.25	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
100-41-4	Ethyl Benzene	0.66		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
141-78-6	Ethyl acetate	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
110-82-7	Cyclohexane	0.46		ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
74-87-3	Chloromethane	1.4		ug/m³	0.21	0.21	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
67-66-3	Chloroform	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-00-3	Chloroethane	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
56-23-5	Carbon tetrachloride	0.64		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-15-0	Carbon disulfide	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
74-83-9	Bromomethane	ND		ug/m³	0.39	0.39	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-25-2	Bromoform	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.63	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
100-44-7	Benzyl chloride	ND		ug/m³	0.53	0.53	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
71-43-2	Benzene	1.7		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
67-64-1	Acetone	13		ug/m³	0.24	0.24	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
591-78-6	2-Hexanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
78-93-3	2-Butanone	3.7		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
123-91-1	1,4-Dioxane	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
106-46-7	1,4-Dichlorobenzene	0.67		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
106-99-0	1,3-Butadiene	ND		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.71	0.71	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB



Sample Information

<u>Client Sample ID:</u> FF-1		<u>York Sample ID:</u> 13L0927-03
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
95-63-6	1,2,4-Trimethylbenzene	0.85		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.75	0.75	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-69-4	Trichlorofluoromethane (Freon 11)	4.3		ug/m³	0.57	0.57	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
76-13-1	1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	0.94		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.70	0.70	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
75-71-8	Dichlorodifluoromethane	3.7		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
124-48-1	Dibromochloromethane	ND		ug/m³	0.82	0.82	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
80-62-6	Methyl Methacrylate	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
108-90-7	Chlorobenzene	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 19:17	RB
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	93.7 %	70-130								

Sample Information

<u>Client Sample ID:</u> FF-2		<u>York Sample ID:</u> 13L0927-04
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.26	0.26	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
108-05-4	Vinyl acetate	ND		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
79-01-6	Trichloroethylene	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB



Sample Information

<u>Client Sample ID:</u> FF-2	<u>York Sample ID:</u> 13L0927-04
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	2.4		ug/m³	0.38	0.38	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
109-99-9	Tetrahydrofuran	ND		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
127-18-4	Tetrachloroethylene	ND		ug/m³	0.69	0.69	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
100-42-5	Styrene	ND		ug/m³	0.43	0.43	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
115-07-1	Propylene	ND		ug/m³	0.18	0.18	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
622-96-8	p-Ethyltoluene	ND		ug/m³	2.5	2.5	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
179601-23-1	p- & m- Xylenes	1.4		ug/m³	0.88	0.88	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
95-47-6	o-Xylene	0.53		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
110-54-3	n-Hexane	1.6		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
142-82-5	n-Heptane	0.83		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-09-2	Methylene chloride	3.9	B	ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
67-63-0	Isopropanol	ND		ug/m³	0.25	0.25	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
100-41-4	Ethyl Benzene	0.49		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
141-78-6	Ethyl acetate	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
110-82-7	Cyclohexane	ND		ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
74-87-3	Chloromethane	1.2		ug/m³	0.21	0.21	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
67-66-3	Chloroform	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-00-3	Chloroethane	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
56-23-5	Carbon tetrachloride	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-15-0	Carbon disulfide	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
74-83-9	Bromomethane	ND		ug/m³	0.39	0.39	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-25-2	Bromoform	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.63	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
100-44-7	Benzyl chloride	ND		ug/m³	0.53	0.53	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
71-43-2	Benzene	1.4		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
67-64-1	Acetone	6.2		ug/m³	0.24	0.24	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
591-78-6	2-Hexanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB



Sample Information

<u>Client Sample ID:</u> FF-2		<u>York Sample ID:</u> 13L0927-04
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	1.1		ug/m ³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
123-91-1	1,4-Dioxane	ND		ug/m ³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
106-99-0	1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.71	0.71	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
95-63-6	1,2,4-Trimethylbenzene	0.60		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.75	0.75	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m ³	0.57	0.57	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 112)	ND		ug/m ³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.70	0.70	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
75-71-8	Dichlorodifluoromethane	2.4		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
124-48-1	Dibromochloromethane	ND		ug/m ³	0.82	0.82	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
108-90-7	Chlorobenzene	ND		ug/m ³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:03	RB
	Surrogate Recoveries	Result			Acceptance Range						
460-00-4	Surrogate: p-Bromofluorobenzene	96.0 %			70-130						

Sample Information

<u>Client Sample ID:</u> FF-3		<u>York Sample ID:</u> 13L0927-05
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013



Sample Information

Client Sample ID: FF-3

York Sample ID: 13L0927-05

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.26	0.26	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
108-05-4	Vinyl acetate	ND		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
79-01-6	Trichloroethylene	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
108-88-3	Toluene	2.4		ug/m³	0.38	0.38	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
109-99-9	Tetrahydrofuran	ND		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
127-18-4	Tetrachloroethylene	1.2		ug/m³	0.69	0.69	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
100-42-5	Styrene	ND		ug/m³	0.43	0.43	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
115-07-1	Propylene	ND		ug/m³	0.18	0.18	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
622-96-8	p-Ethytoluene	ND		ug/m³	2.5	2.5	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
179601-23-1	p- & m- Xylenes	1.1		ug/m³	0.88	0.88	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
95-47-6	o-Xylene	0.44		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
110-54-3	n-Hexane	2.5		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
142-82-5	n-Heptane	1.6		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-09-2	Methylene chloride	7.3	B	ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
108-10-1	4-Methyl-2-pentanone	0.62		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
67-63-0	Isopropanol	1.4		ug/m³	0.25	0.25	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
100-41-4	Ethyl Benzene	0.44		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
141-78-6	Ethyl acetate	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
110-82-7	Cyclohexane	0.42		ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
74-87-3	Chloromethane	1.3		ug/m³	0.21	0.21	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
67-66-3	Chloroform	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-00-3	Chloroethane	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
56-23-5	Carbon tetrachloride	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-15-0	Carbon disulfide	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
74-83-9	Bromomethane	ND		ug/m³	0.39	0.39	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-25-2	Bromoform	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.63	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB



Sample Information

Client Sample ID: FF-3

York Sample ID: 13L0927-05

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-44-7	Benzyl chloride	ND		ug/m ³	0.53	0.53	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
71-43-2	Benzene	1.3		ug/m ³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
67-64-1	Acetone	9.2		ug/m ³	0.24	0.24	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
591-78-6	2-Hexanone	ND		ug/m ³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
78-93-3	2-Butanone	1.6		ug/m ³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
123-91-1	1,4-Dioxane	ND		ug/m ³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
106-99-0	1,3-Butadiene	ND		ug/m ³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.71	0.71	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.75	0.75	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m ³	0.57	0.57	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 112)	ND		ug/m ³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.70	0.70	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
75-71-8	Dichlorodifluoromethane	2.5		ug/m ³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
124-48-1	Dibromochloromethane	ND		ug/m ³	0.82	0.82	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
108-90-7	Chlorobenzene	ND		ug/m ³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 20:48	RB
	Surrogate Recoveries	Result			Acceptance Range						
460-00-4	Surrogate: p-Bromofluorobenzene	91.8 %			70-130						



Sample Information

<u>Client Sample ID:</u> FF-4	<u>York Sample ID:</u> 13L0927-06
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694
	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.26	0.26	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
108-05-4	Vinyl acetate	ND		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
79-01-6	Trichloroethylene	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
108-88-3	Toluene	4.1		ug/m³	0.38	0.38	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
109-99-9	Tetrahydrofuran	ND		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
127-18-4	Tetrachloroethylene	ND		ug/m³	0.69	0.69	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
100-42-5	Styrene	ND		ug/m³	0.43	0.43	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
115-07-1	Propylene	ND		ug/m³	0.18	0.18	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
622-96-8	p-Ethyltoluene	ND		ug/m³	2.5	2.5	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
179601-23-1	p- & m- Xylenes	2.3		ug/m³	0.88	0.88	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
95-47-6	o-Xylene	0.79		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
110-54-3	n-Hexane	2.5		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
142-82-5	n-Heptane	1.1		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
75-09-2	Methylene chloride	5.8	B	ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
67-63-0	Isopropanol	ND		ug/m³	0.25	0.25	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
100-41-4	Ethyl Benzene	0.79		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
141-78-6	Ethyl acetate	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
110-82-7	Cyclohexane	0.60		ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
74-87-3	Chloromethane	1.4		ug/m³	0.21	0.21	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
67-66-3	Chloroform	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
75-00-3	Chloroethane	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
56-23-5	Carbon tetrachloride	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
75-15-0	Carbon disulfide	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
74-83-9	Bromomethane	ND		ug/m³	0.39	0.39	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB
75-25-2	Bromoform	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB



Sample Information

Client Sample ID: FF-4

York Sample ID: 13L0927-06

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.63	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
100-44-7	Benzyl chloride	ND		ug/m³	0.53	0.53	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
71-43-2	Benzene	1.8		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
67-64-1	Acetone	7.3		ug/m³	0.24	0.24	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
591-78-6	2-Hexanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
78-93-3	2-Butanone	1.9		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
123-91-1	1,4-Dioxane	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
106-99-0	1,3-Butadiene	ND		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.71	0.71	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
95-63-6	1,2,4-Trimethylbenzene	0.70		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.75	0.75	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m³	0.57	0.57	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.70	0.70	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
75-71-8	Dichlorodifluoromethane	2.8		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
124-48-1	Dibromochloromethane	ND		ug/m³	0.82	0.82	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
80-62-6	Methyl Methacrylate	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
108-90-7	Chlorobenzene	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 21:34	RB	
Surrogate Recoveries		Result	Acceptance Range									
460-00-4	Surrogate: p-Bromofluorobenzene		96.1 %	70-130								



Sample Information

<u>Client Sample ID:</u> FF-5	<u>York Sample ID:</u> 13L0927-07
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.26	0.26	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
108-05-4	Vinyl acetate	ND		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
79-01-6	Trichloroethylene	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
108-88-3	Toluene	3.9		ug/m³	0.38	0.38	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
109-99-9	Tetrahydrofuran	ND		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
127-18-4	Tetrachloroethylene	ND		ug/m³	0.69	0.69	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
100-42-5	Styrene	ND		ug/m³	0.43	0.43	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
115-07-1	Propylene	ND		ug/m³	0.18	0.18	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
622-96-8	p-Ethyltoluene	ND		ug/m³	2.5	2.5	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
179601-23-1	p- & m- Xylenes	1.8		ug/m³	0.88	0.88	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
95-47-6	o-Xylene	0.62		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
110-54-3	n-Hexane	2.2		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
142-82-5	n-Heptane	1.4		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-09-2	Methylene chloride	5.2	B	ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
67-63-0	Isopropanol	1.4		ug/m³	0.25	0.25	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
100-41-4	Ethyl Benzene	0.62		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
141-78-6	Ethyl acetate	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
110-82-7	Cyclohexane	0.49		ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
74-87-3	Chloromethane	1.3		ug/m³	0.21	0.21	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
67-66-3	Chloroform	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-00-3	Chloroethane	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
56-23-5	Carbon tetrachloride	0.58		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-15-0	Carbon disulfide	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
74-83-9	Bromomethane	ND		ug/m³	0.39	0.39	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-25-2	Bromoform	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB



Sample Information

Client Sample ID: FF-5

York Sample ID: 13L0927-07

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.63	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
100-44-7	Benzyl chloride	ND		ug/m³	0.53	0.53	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
71-43-2	Benzene	1.7		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
67-64-1	Acetone	8.8		ug/m³	0.24	0.24	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
591-78-6	2-Hexanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
78-93-3	2-Butanone	1.5		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
123-91-1	1,4-Dioxane	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
106-99-0	1,3-Butadiene	ND		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.71	0.71	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
95-63-6	1,2,4-Trimethylbenzene	0.55		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.75	0.75	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m³	0.57	0.57	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.70	0.70	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
75-71-8	Dichlorodifluoromethane	2.7		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
124-48-1	Dibromochloromethane	ND		ug/m³	0.82	0.82	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
80-62-6	Methyl Methacrylate	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
108-90-7	Chlorobenzene	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 22:19	RB
	Surrogate Recoveries	Result			Acceptance Range						
460-00-4	Surrogate: p-Bromofluorobenzene	93.4 %			70-130						



Sample Information

<u>Client Sample ID:</u> SS-2	<u>York Sample ID:</u> 13L0927-08
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694

Matrix
Soil Vapor

Collection Date/Time
December 26, 2013 3:00 pm

Date Received
12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	5.7	5.7	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
108-05-4	Vinyl acetate	ND		ug/m³	7.8	7.8	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
79-01-6	Trichloroethylene	ND		ug/m³	6.0	6.0	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	10	10	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	8.8	8.8	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
108-88-3	Toluene	380		ug/m³	8.4	8.4	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
109-99-9	Tetrahydrofuran	5700		ug/m³	66	66	219.1	EPA TO-15	01/02/2014 10:05	01/06/2014 08:47	RB
127-18-4	Tetrachloroethylene	ND		ug/m³	15	15	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
100-42-5	Styrene	ND		ug/m³	9.5	9.5	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
115-07-1	Propylene	ND		ug/m³	3.8	3.8	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
622-96-8	p-Ethyltoluene	64		ug/m³	55	55	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
179601-23-1	p- & m- Xylenes	220		ug/m³	19	19	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
95-47-6	o-Xylene	87		ug/m³	9.7	9.7	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
110-54-3	n-Hexane	300		ug/m³	7.9	7.9	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
142-82-5	n-Heptane	140		ug/m³	9.1	9.1	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-09-2	Methylene chloride	12	B	ug/m³	7.7	7.7	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	8.0	8.0	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	9.1	9.1	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
67-63-0	Isopropanol	18		ug/m³	5.5	5.5	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	24	24	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
100-41-4	Ethyl Benzene	74		ug/m³	9.7	9.7	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
141-78-6	Ethyl acetate	ND		ug/m³	8.0	8.0	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
110-82-7	Cyclohexane	130		ug/m³	7.7	7.7	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	10	10	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	8.8	8.8	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
74-87-3	Chloromethane	ND		ug/m³	4.6	4.6	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
67-66-3	Chloroform	ND		ug/m³	11	11	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-00-3	Chloroethane	ND		ug/m³	5.9	5.9	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
56-23-5	Carbon tetrachloride	ND		ug/m³	7.0	7.0	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-15-0	Carbon disulfide	ND		ug/m³	6.9	6.9	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
74-83-9	Bromomethane	ND		ug/m³	8.7	8.7	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-25-2	Bromoform	ND		ug/m³	23	23	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB



Sample Information

<u>Client Sample ID:</u> SS-2		<u>York Sample ID:</u> 13L0927-08
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-27-4	Bromodichloromethane	ND		ug/m³	14	14	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
100-44-7	Benzyl chloride	ND		ug/m³	12	12	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
71-43-2	Benzene	96		ug/m³	7.1	7.1	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
67-64-1	Acetone	2700		ug/m³	53	53	219.1	EPA TO-15	01/02/2014 10:05	01/06/2014 08:47	RB
591-78-6	2-Hexanone	ND		ug/m³	9.1	9.1	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
78-93-3	2-Butanone	1800		ug/m³	66	66	219.1	EPA TO-15	01/02/2014 10:05	01/06/2014 08:47	RB
123-91-1	1,4-Dioxane	ND		ug/m³	8.0	8.0	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	13	13	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	13	13	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
106-99-0	1,3-Butadiene	ND		ug/m³	9.7	9.7	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
108-67-8	1,3,5-Trimethylbenzene	19		ug/m³	11	11	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	16	16	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
78-87-5	1,2-Dichloropropane	ND		ug/m³	10	10	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
107-06-2	1,2-Dichloroethane	ND		ug/m³	9.0	9.0	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	13	13	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
95-63-6	1,2,4-Trimethylbenzene	56		ug/m³	11	11	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	17	17	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m³	8.8	8.8	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-34-3	1,1-Dichloroethane	ND		ug/m³	9.0	9.0	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	13	13	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	12	12	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	ND		ug/m³	17	17	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	15	15	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	12	12	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
75-71-8	Dichlorodifluoromethane	ND		ug/m³	11	11	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
106-93-4	1,2-Dibromoethane	ND		ug/m³	17	17	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
124-48-1	Dibromochloromethane	ND		ug/m³	18	18	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
80-62-6	Methyl Methacrylate	ND		ug/m³	9.1	9.1	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
108-90-7	Chlorobenzene	ND		ug/m³	10	10	21.91	EPA TO-15	01/02/2014 10:05	01/04/2014 00:25	RB
	Surrogate Recoveries	Result			Acceptance Range						
460-00-4	Surrogate: p-Bromofluorobenzene	96.9 %			70-130						



Sample Information

Client Sample ID: SS-2

York Sample ID: 13L0927-08

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Soil Vapor

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Helium

Log-in Notes:

Sample Notes:

Sample Prepared by Method: PREP for GASES by GC

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-59-7	Helium	6.9		%	0.50	0.50	1	GC/TCD	01/07/2014 08:55	01/07/2014 10:48	AMC

Sample Information

Client Sample ID: FF-6

York Sample ID: 13L0927-09

York Project (SDG) No.

13L0927

Client Project ID

13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.26	0.26	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
108-05-4	Vinyl acetate	ND		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
79-01-6	Trichloroethylene	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
108-88-3	Toluene	2.2		ug/m³	0.38	0.38	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
109-99-9	Tetrahydrofuran	ND		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
127-18-4	Tetrachloroethylene	9.1		ug/m³	0.69	0.69	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
100-42-5	Styrene	ND		ug/m³	0.43	0.43	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
115-07-1	Propylene	ND		ug/m³	0.18	0.18	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
622-96-8	p-Ethyltoluene	ND		ug/m³	2.5	2.5	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
179601-23-1	p- & m- Xylenes	1.6		ug/m³	0.88	0.88	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
95-47-6	o-Xylene	0.62		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
110-54-3	n-Hexane	1.3		ug/m³	0.36	0.36	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
142-82-5	n-Heptane	0.58		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-09-2	Methylene chloride	5.1	B	ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
67-63-0	Isopropanol	ND		ug/m³	0.25	0.25	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB



Sample Information

<u>Client Sample ID:</u> FF-6	<u>York Sample ID:</u> 13L0927-09
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694

Matrix

Indoor Ambient Air

Collection Date/Time

December 26, 2013 3:00 pm

Date Received

12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	0.53		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
141-78-6	Ethyl acetate	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
110-82-7	Cyclohexane	ND		ug/m³	0.35	0.35	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.46	0.46	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
74-87-3	Chloromethane	1.8		ug/m³	0.21	0.21	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
67-66-3	Chloroform	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-00-3	Chloroethane	ND		ug/m³	0.27	0.27	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
56-23-5	Carbon tetrachloride	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-15-0	Carbon disulfide	ND		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
74-83-9	Bromomethane	ND		ug/m³	0.39	0.39	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-25-2	Bromoform	ND		ug/m³	1.1	1.1	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.63	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
100-44-7	Benzyl chloride	ND		ug/m³	0.53	0.53	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
71-43-2	Benzene	1.4		ug/m³	0.32	0.32	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
67-64-1	Acetone	6.4		ug/m³	0.24	0.24	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
591-78-6	2-Hexanone	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
78-93-3	2-Butanone	1.8		ug/m³	0.30	0.30	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
123-91-1	1,4-Dioxane	ND		ug/m³	0.37	0.37	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
106-99-0	1,3-Butadiene	ND		ug/m³	0.44	0.44	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.71	0.71	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.61	0.61	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
95-63-6	1,2,4-Trimethylbenzene	0.60		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.75	0.75	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.40	0.40	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.41	0.41	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m³	0.57	0.57	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB



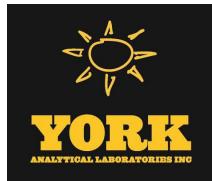
Sample Information

<u>Client Sample ID:</u> FF-6	<u>York Sample ID:</u> 13L0927-09
<u>York Project (SDG) No.</u> 13L0927	<u>Client Project ID</u> 13-27694
	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> December 26, 2013 3:00 pm <u>Date Received</u> 12/30/2013

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
76-13-1	,1,2-Trichloro-1,2,2-trifluoroethane (Freon 11)	ND		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.70	0.70	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.55	0.55	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
75-71-8	Dichlorodifluoromethane	2.5		ug/m³	0.50	0.50	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.78	0.78	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
124-48-1	Dibromochloromethane	ND		ug/m³	0.82	0.82	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
80-62-6	Methyl Methacrylate	ND		ug/m³	0.42	0.42	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
108-90-7	Chlorobenzene	ND		ug/m³	0.47	0.47	1	EPA TO-15	01/02/2014 10:05	01/03/2014 23:05	RB
Surrogate Recoveries		Result	Acceptance Range								
460-00-4	Surrogate: p-Bromofluorobenzene	95.1 %	70-130								



Notes and Definitions

B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.

ND Analyte NOT DETECTED at the stated Reporting Limit (RL) or above.

RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.

MDL METHOD DETECTION LIMIT - the minimum concentration that can be measured and reported with a 99% confidence that the concentration is greater than zero. If requested or required, a value reported below the RL and above the MDL is considered estimated and is noted with a "J" flag.

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 MDL, with values between the MDL and the RL being "J" flagged as estimated results.

Field Chain-of-Custody Record - AIR

Page 1 of 1

NOTE: York's Std. Terms & Conditions are listed on the back side of this document.
This document serves as your written authorization to York to proceed with the analyses requested and your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 1320927

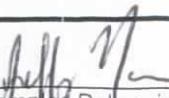
<u>YOUR</u> Information		Report To:	Invoice To:	<u>YOUR</u> Project ID	Turn-Around Time	Report Type/Deliverables
Company <u>JC Braderick</u>	Company <u>Same</u>	Company <u>Same</u>		<u>13-27694</u>	RUSH - Same Day <input type="checkbox"/>	Summary Report <input checked="" type="checkbox"/>
Address <u>1775 Empire Dr. N.</u>	Address: _____	Address: _____			RUSH - Next Day <input type="checkbox"/>	Summary w/ QA Summary <input type="checkbox"/>
<u>Hempstead, NY 11788</u>					RUSH - Two Day <input type="checkbox"/>	CT RCP Package <input type="checkbox"/>
Phone No. <u>631-584-5492</u>	Phone No. _____	Phone No. _____			RUSH - Three Day <input type="checkbox"/>	NY ASP A Package <input type="checkbox"/>
Contact Person <u>Jeffrey Nannan</u>	Attention: _____	Attention: _____			RUSH - Four Day <input type="checkbox"/>	NY ASP B/CLP Pkg <input type="checkbox"/>
E-Mail Address <u>JNannan@2Brookdale</u>	E-Mail Address: _____	E-Mail Address: _____	Samples from: CT <u>NY</u> NJ <u>X</u>	Standard(5-7 Days) <input checked="" type="checkbox"/>		NJDEP Reduced <input type="checkbox"/>

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.


Samples Collected/Authorized By (Signature)
Jeffrey Nannan
Name (printed)

Air Matrix Codes		TO15 Volatiles and Other Gas Analyses		Detection Limits Required	
AI	INDOOR Ambient Air	EPA TO-15 List	EPA TO-14A List	≤ 1 ug/m ³	<input checked="" type="checkbox"/>
AO	OUTDOOR Amb. Air	NYSDEC VI list	Tentatively Identified Compounds	NYSDEC VI Limits	<input type="checkbox"/>
AE	Vapor Extraction Well/ Process Gas/Effluent	NYSDEC STARS List	Air VPH	(VI = vapor intrusion) NJDEP low level	<input type="checkbox"/>
AS	SOIL Vapor/Sub-Slab	Project Specific List by TO-15	Helium	Routine Survey	<input type="checkbox"/>
		NJDEP Target List	Methane	Other	<input type="checkbox"/>
		CTDEP RCP Target List	OTHER		

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Choose Analyses Needed from the Menu Above and Enter Below	Sampling Media
Ambient	12-26-13	AO	29.5	4	EPA TO-15 List	6 Liter Summa canister <input checked="" type="checkbox"/>
SS-1	12-26-13	AS	30+	9	+ Helium	Tedlar Bag <input checked="" type="checkbox"/>
FF-1	12-26-13	AI	30+	11		6 Liter Summa canister <input type="checkbox"/>
FF-2	12-26-13	AI	30	10		Tedlar Bag <input checked="" type="checkbox"/>
FF-3	12-26-13	AI	30	6		6 Liter Summa canister <input type="checkbox"/>
FF-4	12-26-13	AI	30+	10		Tedlar Bag <input checked="" type="checkbox"/>
FF-5	12-26-13	AI	30+	12		6 Liter Summa canister <input checked="" type="checkbox"/>
SS-2	12-26-13	AS	26	10	+ Helium	6 Liter Summa canister <input type="checkbox"/>
SS-6	12-26-13	AE	30	9		Tedlar Bag <input checked="" type="checkbox"/>

Comments	Samples Relinquished By	Date/Time	Samples Received By	Date/Time
Charles Campagne E.S. 601 Plainview Road Bethpage, NY 11714		12-27-13	HBark	12/30/13 1225 pm
	Samples Relinquished By	Date/Time	Samples Received in LAB by	Date/Time