

# **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 #: 20-46055  
APRIL 2020**

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

**1775 Expressway Drive North  
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### **Section No. 1.0: Introduction**

J.C. Broderick and Associates, Inc. (JCB) was retained by the Bethpage Union Free School District (Bethpage) to investigate the potential for volatile vapor intrusion (VVI) at the Charles Campagne Elementary School campus. 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 and all available updates.

### **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: Volatile Vapor Intrusion (VVI) Evaluation**

The design scope outlined in the Volatile Vapor Intrusion (VVI) Investigation Work Plan (IWP) dated July 2012 prepared for the Bethpage High School was followed during the volatile vapor intrusion evaluations. The following sections describe the procedures taken.

#### **Section No. 3.1: Pre-Work Field Preparations**

Prior to setup, 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, 1<sup>st</sup> Floor, 2<sup>nd</sup> Floor and Ambient Sampling Locations for additional details.

- For the collection of the sub-slab 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 an eight (8) 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 the start of 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.
- On April 7, 2020, a total of two (2) sub-slab vapor samples were collected.
  - One (1) sub-slab sample was collected from beneath the elevator mechanical room floor located at the north end of the school building.
  - One (1) sub-slab sample was collected from beneath the boiler room floor 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) and were consistent with the hours of operation of the school building. 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 equipped with a flow controller pre-set for an eight (8) 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: 1<sup>st</sup> Floor Air Sample Collection**

Please refer to Figure No. 2 - Sub-Slab, 1<sup>st</sup> Floor, 2<sup>nd</sup> Floor and Ambient Sampling Locations for additional details.

- On April 7, 2020, 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: 2<sup>nd</sup> Floor Air Sample Collection**

Please refer to Figure No. 2 - Sub-Slab, 1<sup>st</sup> Floor, 2<sup>nd</sup> Floor and Ambient Sampling Locations for additional details.

- On April 7, 2020, one (1) 2<sup>nd</sup> 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 equipped with a flow controller pre-set for an eight (8) hour sample duration. As per the guidance requirements, the sample was collected at a height approximately three (3) feet above the ground. Please refer to Figure No. 2 - Sub-Slab, 1<sup>st</sup> Floor, 2<sup>nd</sup> Floor and Ambient Sampling Locations for additional details.

- On April 7, 2020, 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. 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 90<sup>th</sup> percentile as listed in Table C2 EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA canister method found in NYSDOH's "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 and all available updates.

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

**Table No. 1:  
Volatile Vapor Intrusion Analytical Results of Detected Compounds via EPA Method TO-15**

Client Sample ID	Background Values	Ambient	SS-1 <sup>1</sup> Mech Rm	FF-1 Mech Rm	FF-2 Rm KC	FF-3 Rm 103	FF-4 Music	FF-5 Rm 207	SS-2 <sup>1</sup> Boiler	FF-6 Boiler
TO-15 List	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
1,1,1-Trichloroethane (TCA)	20.6	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	9.5	ND	5.2	0.53	1.20	0.57	0.78	2.20	ND	1.10
1,3,5-Trimethylbenzene	3.7	ND	ND	ND	ND	ND	ND	0.49	ND	ND
2-Butanone	12	2.10	6.50	0.74	2.50	1.50	0.96	1.20	18.0	1.00
2-Hexanone	NA	1.00	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	6	ND	1.90	ND	0.48	ND	ND	1.00	ND	ND
Acetone	98.9	9.50	180	7.20	20.0	8.70	9.20	21.0	470	8.80
Benzene	9.4	0.42	4.00	0.37	0.52	0.41	0.65	0.63	6.30	1.00
Carbon Disulfide	4.2	ND	1.50	ND	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	1.3	0.39	ND	0.47	0.68	0.51	0.47	0.51	ND	0.49
Chloromethane	3.7	0.97	ND	0.95	1.60	1.10	1.10	1.20	ND	1.10
cis 1,2-Dichloroethene	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NA	ND	1.40	ND	ND	ND	ND	ND	ND	0.53
Dichlorodifluoromethane (Freon 12)	16.5	1.50	3.00	1.90	2.40	1.80	1.90	1.80	ND	2.10
Ethyl Acetate	5.4	0.64	ND	ND	2.30	ND	ND	0.94	ND	ND
Ethylbenzene	5.7	ND	5.60	ND	1.10	ND	0.48	0.63	31.0	0.71
Isopropanol	250	ND	9.90	6.60	150	75.0	180	120	45.0	26.0
Methyl Methacrylate	NA	5.40	ND	ND	80.0	0.72	3.80	5.60	ND	6.20
Methylene Chloride	10	1.30	ND	ND	3.30	1.50	5.00	1.30	ND	2.10
n-Heptane	NA	ND	5.20	1.10	1.90	2.00	0.57	6.20	ND	1.20
n-Hexane	10.2	ND	11.0	0.32	1.00	ND	0.88	0.70	18.0	1.90
o-Xylene	7.9	ND	5.10	ND	1.10	ND	0.56	0.74	10.0	0.86

**Table No. 1:**  
**Volatile Vapor Intrusion Analytical Results of Detected Compounds via EPA Method TO-15**

Client Sample ID	Background Values	Ambient	SS-1 <sup>1</sup> Mech Rm	FF-1 Mech Rm	FF-2 Rm KC	FF-3 Rm 103	FF-4 Music	FF-5 Rm 207	SS-2 <sup>1</sup> Boiler	FF-6 Boiler
TO-15 List	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
p- & m- Xylene	22.2	ND	15.0	ND	4.10	ND	1.60	2.40	34.0	2.50
p-Ethyltoluene	3.6	ND	4.70	ND	1.10	ND	0.64	1.20	ND	0.93
Styrene	1.9	ND	1.80	ND	0.76	ND	ND	0.65	ND	ND
Tetrachloroethene (PCE)	15.9	ND	ND	ND	2.70	1.60	ND	2.00	ND	ND
Toluene	43	0.46	260	0.85	3.30	1.10	1.90	4.60	2,100	3.30
Trichloroethene (TCE)	4.2	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane (Freon 11)	18.1	1.10	5.80	1.50	1.80	1.30	1.40	1.60	ND	1.40
1,2,2-Trifluoroethane (Freon 113)	3.5	ND	ND	ND	0.76	ND	ND	ND	ND	ND
Vinyl Chloride	<1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND
Helium	10%	----	ND	----	----	----	----	----	ND	----

**Notes:**

µg/m<sup>3</sup> = parts per billion

NA = Background Value Not Established

ND=Not Detected above the laboratory minimum detection limit

Background Values = Table C2 EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA canister method - 90<sup>th</sup> percentile

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

Compounds in gray are used in Decision Matrices A, B, & C. - See Table No. 2 for additional information.

Helium was used as a tracer gas at the subsurface sample locations, a detection of over 10% would indicate a breakthrough in the subsurface probe seal.

## Section No. 5.0: Decision Matrices

Decision matrices are risk management tools developed by the NYSDOH to provide guidance on a case-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 eight (8) 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 B	No Further Action
Carbon Tetrachloride	Matrix A	No Further Action
cis 1,2-Dichloroethene	Matrix A	No Further Action
1,1-Dichloroethene	Matrix A	No Further Action
Methylene Chloride	Matrix B	No Further Action
Tetrachloroethene (PCE)	Matrix B	No Further Action
Trichloroethene (TCE)	Matrix A	No Further Action
Vinyl Chloride	Matrix C	No Further Action

**Notes:**

A total of eight (8) chemicals have been assigned to decision matrices by the NYSDOH, May 2017.

The results of the matrices indicate that “No Further Action” is required for all eight (8) volatile organic chemicals utilized in the NYSDOH Decision Matrices.

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 sub-slab vapor samples.

### **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, all detectable concentrations observed in the occupied spaces of the school buildings were below their background values as reported in EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA canister method 90<sup>th</sup> Percentile found in NYSDOH’s “Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York” dated October 2006. 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 when compared against the concentrations detected in the subsurface soil vapor samples.

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

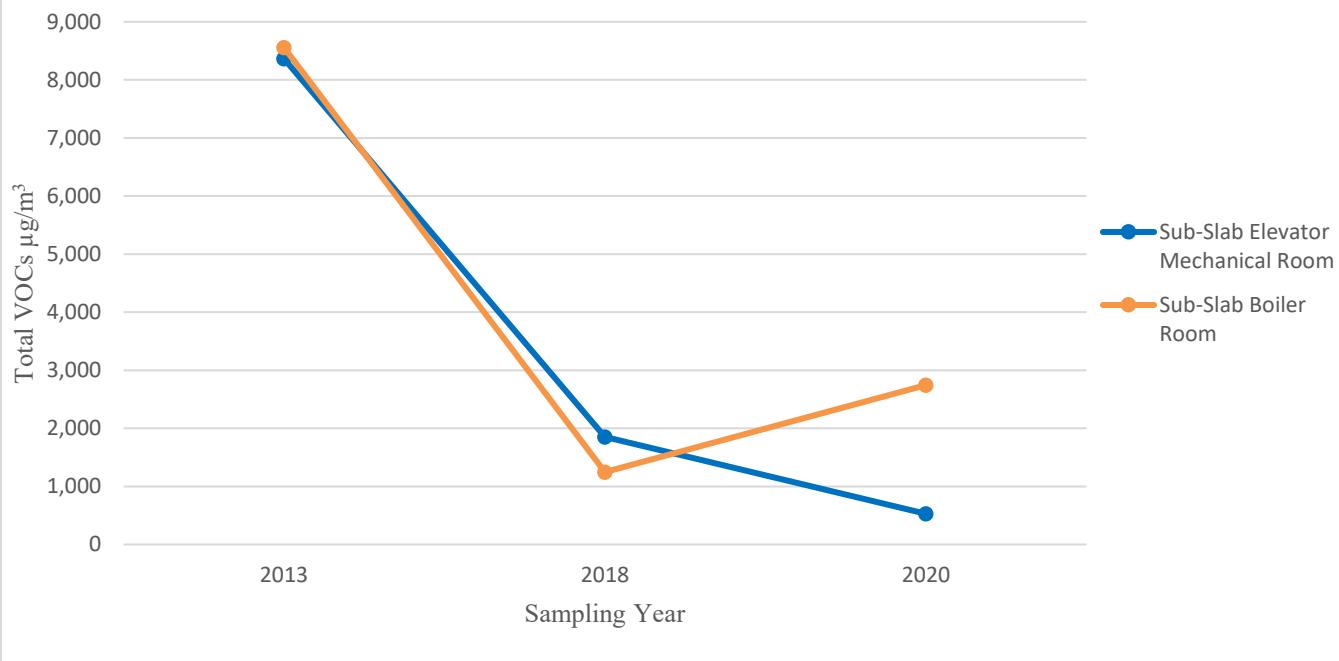
### Section No. 7.1: Previous Analytical Results Trend Analysis

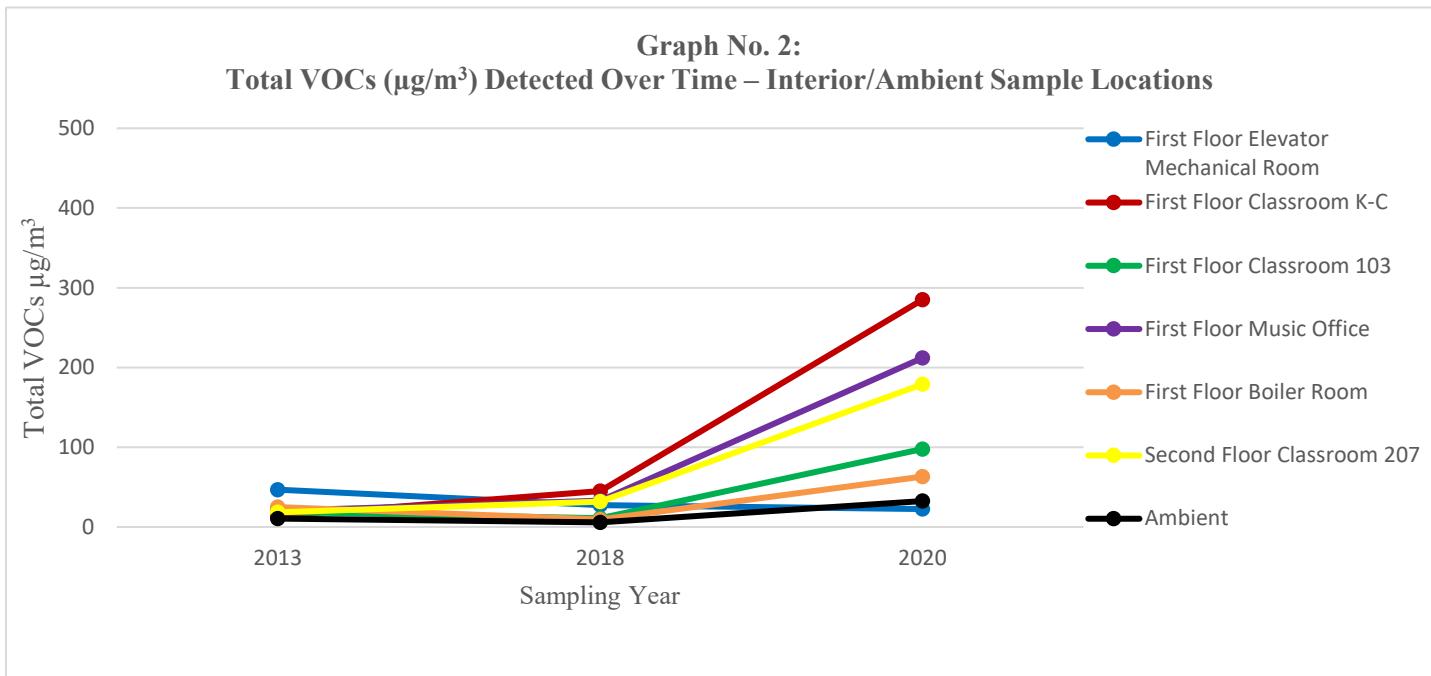
JCB performed the same volatile vapor intrusion sampling in 2013 and 2018. The 2020 analytical results for total VOCs were compared to the previous sampling results and are presented in Table No. 3.

Table No. 3: Total VOCs ( $\mu\text{g}/\text{m}^3$ ) Detected Over Time				
Sample Number	Location	Year		
		2013	2018	2020
SS-1	Sub-Slab Elevator Mechanical Room	8,364	1,854	528
FF-1	First Floor Elevator Mechanical Room	46.8	27.5	22.5
FF-2	First Floor Classroom K-C	14	45	285
FF-3	First Floor Classroom 103	18.9	11	97.8
FF-4	First Floor Music Office	20.4	33.2	212
FF-5	Second Floor Classroom 207	18.4	31.6	179
SS-2	Sub-Slab Boiler Room	8,558	1,247	2,745
FF-6	First Floor Boiler Room	25	9.4	63.2
Ambient	Ambient	10.6	5.8	32.5

In general, the concentration of total VOCs in the sub-slab samples have exhibited an overall decrease from 2013, with only a slight increase from 2018 in the Sub-Slab Boiler Room sample, as indicated in Graph No. 1 below. The interior spaces did indicate an upward trend in total detected VOC concentration since 2018 at all but one (1) sampling location as shown in Graph No. 2.

**Graph No. 1:**  
**Total VOCs ( $\mu\text{g}/\text{m}^3$ ) Detected Over Time – Subsurface Sample Locations**





### **Section No. 8.0: Conclusions**

A careful evaluation of the indoor air sampling results compared to the sub-slab and ambient results did reveal the presence of a discernible pattern suggesting that the building could be impacted with VVI. However, it appears that the building concrete slab continues to be effective in preventing the subsurface volatile vapors from migrating into the occupied portions of the school building.

The increase in total organic volatile vapors observed within the interior spaces during this sampling event is likely attributed to both the increased frequency of cleaning and disinfecting of the spaces and the lack of general air circulation throughout the building due to the closings of schools from the COVID-19 pandemic.

### **Section No. 9.0: Recommendations**

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

### **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.**

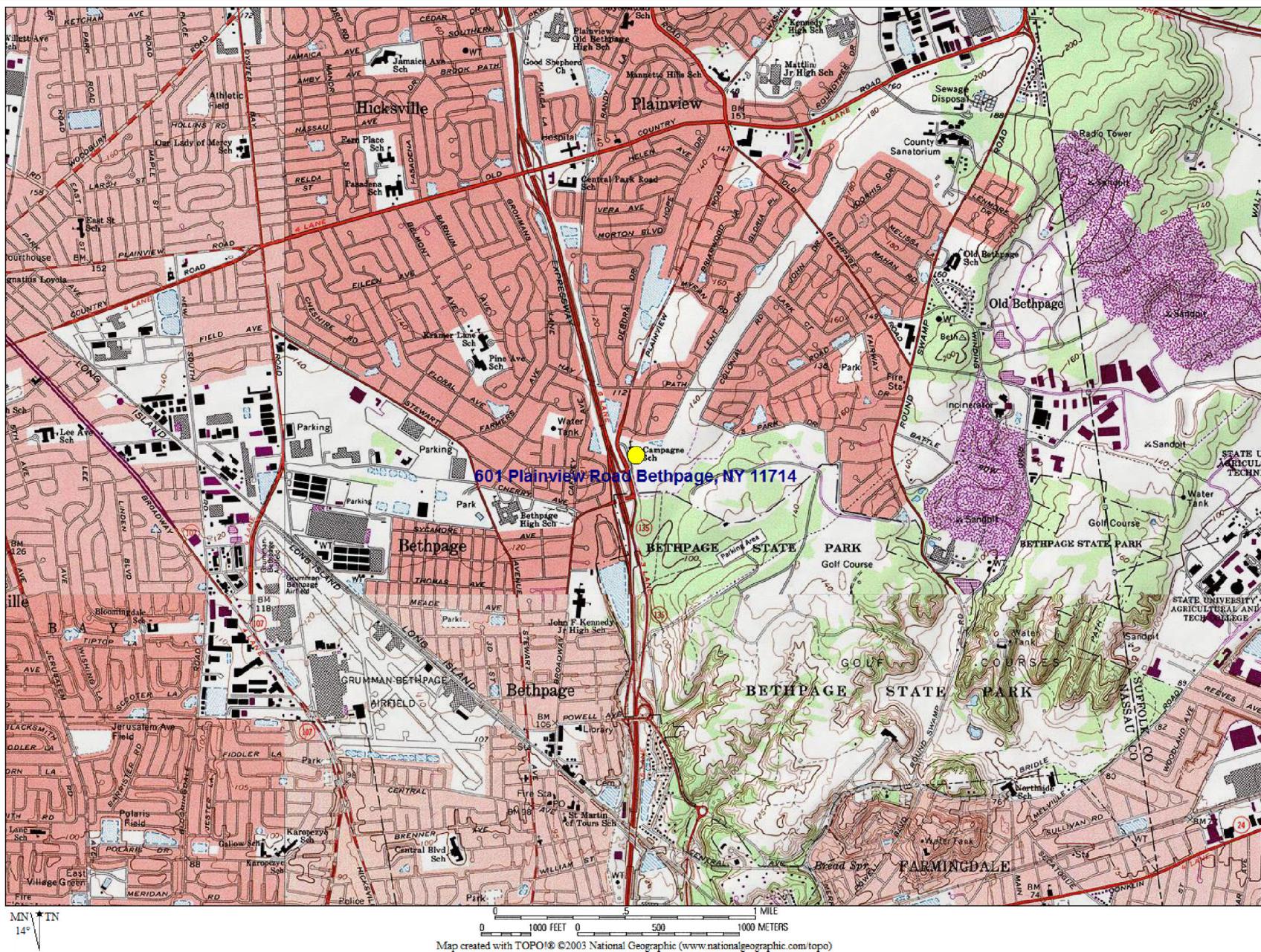
Jeffrey V. Nannini  
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Project Manager

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## **Appendix A**

## **Figures**



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Drawing Title

Figure No. 1

Site Location Map

Scale	Project No.	Date
As Noted	20-46055	04-07-2020

Drawn By	Checked By	Page No.
J.V.N.	S.W.M.	1 of 2

Drawing No.



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**Notes:**

**Notes:**

Charles Campagne  
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Drawing Title

Figure No. 2

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

**Scale**      **Project No.**      **Date**  
N.T.S.      20-46055      04-07-2020

Drawn By      Checked By      Page No.  
IVN      SWM      2 of 2

Drawing No.

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## **Appendix B**

### **Field Photograph Logs**

**Sampling Locations**  
**FF-1 Mechanical Room & SS-1 Mechanical Room Sub-Slab**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

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



**Photo No. 01**

**JCB#: 20-46055**

**Sampling Locations**  
**SS-2 Boiler Room Sub-Slab & FF-6 Boiler Room**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

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



**Photo No. 02**

**JCB#: 20-46055**

**Sampling Location  
FF-2 Classroom K-C**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

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

**Photo No. 03**

**JCB#: 20-46055**

**Sampling Location  
FF-3 Classroom 103**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

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



**Photo No. 04**

**JCB#: 20-6055**

## **Sampling Location FF-4 Music Office**



## **Field Photograph Log**

### **Volatile Vapor Intrusion Report**

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



**Photo No. 05**

**JCB#: 20-46055**

**Sampling Location  
FF-5 Classroom 207**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

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

**Photo No. 06**

**JCB#: 20-46055**

## Ambient Sample Location



## Field Photograph Log

Volatile Vapor Intrusion Report

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

Photo No. 07

JCB#: 20-46055

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## **Appendix C**

# **Laboratory Analysis Report**



# Technical Report

prepared for:

**J.C. Broderick**  
1775 North Express Drive  
Hauppauge NY, 11788  
**Attention: Steven Muller**

Report Date: 04/14/2020  
**Client Project ID: 20-46055**  
York Project (SDG) No.: 20D0258

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 04/14/2020  
Client Project ID: 20-46055  
York Project (SDG) No.: 20D0258

**J.C. Broderick**  
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Attention: Steven Muller

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 09, 2020 with a temperature of C. The project was identified as your project: **20-46055**.

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

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

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

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

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

<b>York Sample ID</b>	<b>Client Sample ID</b>	<b>Matrix</b>	<b>Date Collected</b>	<b>Date Received</b>
20D0258-01	Ambient	Outdoor Ambient Air	04/07/2020	04/09/2020
20D0258-02	SS-1	Soil Vapor	04/07/2020	04/09/2020
20D0258-03	SS-2	Soil Vapor	04/07/2020	04/09/2020
20D0258-04	FF-1	Indoor Ambient Air	04/07/2020	04/09/2020
20D0258-05	FF-2	Indoor Ambient Air	04/07/2020	04/09/2020
20D0258-06	FF-3	Indoor Ambient Air	04/07/2020	04/09/2020
20D0258-07	FF-4	Indoor Ambient Air	04/07/2020	04/09/2020
20D0258-08	FF-5	Indoor Ambient Air	04/07/2020	04/09/2020
20D0258-09	FF-6	Indoor Ambient Air	04/07/2020	04/09/2020

## **General Notes for York Project (SDG) No.: 20D0258**

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

**Approved By:**



**Date:** 04/14/2020

Benjamin Gulizia  
Laboratory Director





## Sample Information

Client Sample ID: Ambient

York Sample ID: 20D0258-01

York Project (SDG) No.  
20D0258

Client Project ID  
20-46055

Matrix  
Outdoor Ambient Air

Collection Date/Time  
April 7, 2020 12:00 am

Date Received  
04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.53	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.42	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.53	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.59	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.42	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.31	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.076	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.57	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.38	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.59	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.46	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.31	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.36	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.54	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.38	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.51	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.46	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.36	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.46	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.56	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
78-93-3	<b>2-Butanone</b>	<b>2.1</b>		ug/m³	0.23	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
NELAC-NY12058,NJDEP-Queens										



## Sample Information

Client Sample ID: Ambient

York Sample ID: 20D0258-01

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Outdoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	1.0		ug/m³	0.63	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.2	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.32	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
67-64-1	Acetone	9.5		ug/m³	0.37	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.17	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
71-43-2	Benzene	0.42		ug/m³	0.25	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.40	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.52	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-25-2	Bromoform	ND		ug/m³	0.80	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.30	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.24	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
56-23-5	Carbon tetrachloride	0.39		ug/m³	0.12	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.35	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.20	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
67-66-3	Chloroform	ND		ug/m³	0.38	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
74-87-3	Chloromethane	0.97		ug/m³	0.16	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.076	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.35	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.27	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.66	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-71-8	Dichlorodifluoromethane	1.5		ug/m³	0.38	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
141-78-6	* Ethyl acetate	0.64		ug/m³	0.56	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ



## Sample Information

Client Sample ID: Ambient

York Sample ID: 20D0258-01

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Outdoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/m³	0.33	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.82	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
67-63-0	<b>Isopropanol</b>	<b>7.7</b>		ug/m³	0.38	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>5.4</b>		ug/m³	0.32	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.28	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-09-2	<b>Methylene chloride</b>	<b>1.3</b>		ug/m³	0.54	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
142-82-5	n-Heptane	ND		ug/m³	0.32	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.27	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.33	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.67	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.38	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
115-07-1	* Propylene	ND		ug/m³	0.13	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
100-42-5	Styrene	ND		ug/m³	0.33	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.52	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.45	0.771	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 00:08	LLJ
108-88-3	<b>Toluene</b>	<b>0.46</b>		ug/m³	0.29	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.31	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.35	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.10	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.1</b>		ug/m³	0.43	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.27	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.34	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ



## Sample Information

Client Sample ID: Ambient

York Sample ID: 20D0258-01

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Outdoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.049	0.771	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 00:08	LLJ
<b>Surrogate Recoveries</b>										
Surrogate: SURR: <i>p</i> -Bromofluorobenzene										
<b>Acceptance Range</b>										
100 % 70-130										

## Sample Information

Client Sample ID: SS-1

York Sample ID: 20D0258-02

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Soil Vapor

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	2.6	3.808	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 12:22	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	2.1	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	2.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	2.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	2.1	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	1.5	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.38	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	2.8	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>5.2</b>		ug/m³	1.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	2.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	2.3	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	1.5	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ



## Sample Information

Client Sample ID: SS-1

York Sample ID: 20D0258-02

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Soil Vapor

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-87-5	1,2-Dichloropropane	ND		ug/m³	1.8	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
76-14-2	1,2-Dichlortetrafluoroethane	ND		ug/m³	2.7	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	1.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	2.5	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	2.3	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	1.8	3.808	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 12:22	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	2.3	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	2.7	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
78-93-3	<b>2-Butanone</b>	<b>6.5</b>		ug/m³	1.1	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	3.1	3.808	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 12:22	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	6.0	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>1.9</b>		ug/m³	1.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
67-64-1	<b>Acetone</b>	<b>180</b>		ug/m³	1.8	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.83	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
71-43-2	<b>Benzene</b>	<b>4.0</b>		ug/m³	1.2	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	2.0	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	2.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-25-2	Bromoform	ND		ug/m³	3.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
74-83-9	Bromomethane	ND		ug/m³	1.5	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-15-0	<b>Carbon disulfide</b>	<b>1.5</b>		ug/m³	1.2	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
56-23-5	Carbon tetrachloride	ND		ug/m³	0.60	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	1.8	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ



## Sample Information

Client Sample ID: SS-1

York Sample ID: 20D0258-02

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Soil Vapor

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-00-3	Chloroethane	ND		ug/m³	1.0	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
67-66-3	Chloroform	ND		ug/m³	1.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
74-87-3	Chloromethane	ND		ug/m³	0.79	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.38	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	1.7	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
110-82-7	<b>Cyclohexane</b>	<b>1.4</b>		ug/m³	1.3	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	3.2	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>3.0</b>		ug/m³	1.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	2.7	3.808	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 12:22	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>5.6</b>		ug/m³	1.7	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	4.1	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
67-63-0	<b>Isopropanol</b>	<b>9.9</b>		ug/m³	1.9	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	1.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	1.4	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-09-2	Methylene chloride	ND		ug/m³	2.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
142-82-5	<b>n-Heptane</b>	<b>5.2</b>		ug/m³	1.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
110-54-3	<b>n-Hexane</b>	<b>11</b>		ug/m³	1.3	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
95-47-6	<b>o-Xylene</b>	<b>5.1</b>		ug/m³	1.7	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>15</b>		ug/m³	3.3	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
622-96-8	* p-Ethyltoluene	4.7		ug/m³	1.9	3.808	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 12:22	LLJ
115-07-1	* Propylene	ND		ug/m³	0.66	3.808	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 12:22	LLJ
100-42-5	<b>Styrene</b>	<b>1.8</b>		ug/m³	1.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ



## Sample Information

<u>Client Sample ID:</u> SS-1		<u>York Sample ID:</u> 20D0258-02
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/m³	2.6	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	2.2	3.808	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 12:22	LLJ
108-88-3	<b>Toluene</b>	<b>260</b>		ug/m³	1.4	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	1.5	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	1.7	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.51	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>5.8</b>		ug/m³	2.1	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	1.3	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	1.7	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.24	3.808	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 12:22	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURR: <i>p</i> -Bromofluorobenzene	102 %			70-130					

### Helium

Sample Prepared by Method: PREP for GASES by GC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-59-7	* Helium	ND		%	0.95	1.9	GC/TCD Certifications:	04/14/2020 14:33	04/14/2020 16:09	KT

## Sample Information

<u>Client Sample ID:</u> SS-2		<u>York Sample ID:</u> 20D0258-03
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020



## Sample Information

<u>Client Sample ID:</u> SS-2		<u>York Sample ID:</u> 20D0258-03
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	10	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	8.3	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	10	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	12	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	8.3	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	6.2	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	1.5	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	11	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	7.5	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	12	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	9.2	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	6.2	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	7.1	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
76-14-2	1,2-Dichlortetrafluoroethane	ND		ug/m³	11	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	7.5	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	10	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	9.2	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	7.1	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	9.2	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	11	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
78-93-3	<b>2-Butanone</b>	<b>18</b>		ug/m³	4.5	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ



## Sample Information

<u>Client Sample ID:</u> SS-2		<u>York Sample ID:</u> 20D0258-03
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	ND		ug/m³	13	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	24	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	6.3	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
67-64-1	<b>Acetone</b>	<b>470</b>		ug/m³	7.3	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	3.3	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
71-43-2	<b>Benzene</b>	<b>6.3</b>		ug/m³	4.9	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	7.9	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	10	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-25-2	Bromoform	ND		ug/m³	16	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
74-83-9	Bromomethane	ND		ug/m³	5.9	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	4.8	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
56-23-5	Carbon tetrachloride	ND		ug/m³	2.4	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	7.0	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-00-3	Chloroethane	ND		ug/m³	4.0	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
67-66-3	Chloroform	ND		ug/m³	7.5	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
74-87-3	Chloromethane	ND		ug/m³	3.2	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	1.5	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	6.9	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
110-82-7	Cyclohexane	ND		ug/m³	5.3	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	13	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/m³	7.6	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	11	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ



## Sample Information

<u>Client Sample ID:</u> SS-2	<u>York Sample ID:</u> 20D0258-03			
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 7, 2020 12:00 am	<u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	31		ug/m³	6.6	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	16	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
67-63-0	Isopropanol	45		ug/m³	7.5	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	6.3	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	5.5	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-09-2	Methylene chloride	ND		ug/m³	11	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
142-82-5	n-Heptane	ND		ug/m³	6.3	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
110-54-3	n-Hexane	18		ug/m³	5.4	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
95-47-6	o-Xylene	10		ug/m³	6.6	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
179601-23-1	p- & m- Xylenes	34		ug/m³	13	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	7.5	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
115-07-1	* Propylene	ND		ug/m³	2.6	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
100-42-5	Styrene	ND		ug/m³	6.5	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	10	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	9.0	15.28	EPA TO-15 Certifications:	04/10/2020 20:20	04/11/2020 02:27	LLJ
108-88-3	Toluene	2100		ug/m³	5.8	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	6.1	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	6.9	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	2.1	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	8.6	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	5.4	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	6.7	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ



## Sample Information

Client Sample ID: SS-2

York Sample ID: 20D0258-03

York Project (SDG) No.  
20D0258

Client Project ID  
20-46055

Matrix  
Soil Vapor

Collection Date/Time  
April 7, 2020 12:00 am

Date Received  
04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.98	15.28	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/10/2020 20:20	04/11/2020 02:27	LLJ
<b>Surrogate Recoveries</b>										
460-00-4 <i>Surrogate: SURR: p-Bromofluorobenzene</i>										
<b>Acceptance Range</b>										
460-00-4 <i>Surrogate: SURR: p-Bromofluorobenzene</i>										
100 %      70-130										

### Helium

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: PREP for GASES by GC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-59-7	* Helium	ND		%	0.76	1.53	GC/TCD Certifications:	04/14/2020 14:33	04/14/2020 16:17	KT

## Sample Information

Client Sample ID: FF-1

York Sample ID: 20D0258-04

York Project (SDG) No.  
20D0258

Client Project ID  
20-46055

Matrix  
Indoor Ambient Air

Collection Date/Time  
April 7, 2020 12:00 am

Date Received  
04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.57	0.834	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 05:09	LLJ
<b>Surrogate Recoveries</b>										
71-55-6      1,1,1-Trichloroethane										
ND      ug/m³      0.46      0.834      EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens										
79-34-5      1,1,2,2-Tetrachloroethane										
ND      ug/m³      0.57      0.834      EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens										
76-13-1      1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)										
ND      ug/m³      0.64      0.834      EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens										
79-00-5      1,1,2-Trichloroethane										
ND      ug/m³      0.46      0.834      EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens										
75-34-3      1,1-Dichloroethane										
ND      ug/m³      0.34      0.834      EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens										
75-35-4      1,1-Dichloroethylene										
ND      ug/m³      0.083      0.834      EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens										
120-82-1      1,2,4-Trichlorobenzene										
ND      ug/m³      0.62      0.834      EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens										



## Sample Information

<u>Client Sample ID:</u> FF-1	<u>York Sample ID:</u> 20D0258-04
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055
	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-63-6	1,2,4-Trimethylbenzene	0.53		ug/m³	0.41	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.64	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.50	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.34	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.39	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.58	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.41	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.55	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.50	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.39	0.834	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 05:09	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.50	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.60	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
78-93-3	2-Butanone	0.74		ug/m³	0.25	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.68	0.834	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 05:09	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.34	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
67-64-1	Acetone	7.2		ug/m³	0.40	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.18	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
71-43-2	Benzene	0.37		ug/m³	0.27	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.43	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.56	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-25-2	Bromoform	ND		ug/m³	0.86	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ



## Sample Information

Client Sample ID: FF-1

York Sample ID: 20D0258-04

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-83-9	Bromomethane	ND		ug/m³	0.32	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.26	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.47</b>		ug/m³	0.13	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.38	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.22	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
67-66-3	Chloroform	ND		ug/m³	0.41	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
74-87-3	<b>Chloromethane</b>	<b>0.95</b>		ug/m³	0.17	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.083	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.38	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.29	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.71	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.9</b>		ug/m³	0.41	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.60	0.834	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 05:09	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.36	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.89	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
67-63-0	<b>Isopropanol</b>	<b>6.6</b>		ug/m³	0.41	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	0.34	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.30	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-09-2	Methylene chloride	ND		ug/m³	0.58	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
142-82-5	<b>n-Heptane</b>	<b>1.1</b>		ug/m³	0.34	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
110-54-3	<b>n-Hexane</b>	<b>0.32</b>		ug/m³	0.29	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.36	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ



## Sample Information

Client Sample ID: FF-1

York Sample ID: 20D0258-04

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.72	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.41	0.834	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 05:09	LLJ
115-07-1	* Propylene	ND		ug/m³	0.14	0.834	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 05:09	LLJ
100-42-5	Styrene	ND		ug/m³	0.36	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.57	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.49	0.834	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 05:09	LLJ
108-88-3	<b>Toluene</b>	<b>0.85</b>		ug/m³	0.31	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.33	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.38	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.5</b>		ug/m³	0.47	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.29	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.36	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.053	0.834	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 05:09	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURN: <i>p</i> -Bromofluorobenzene	98.8 %			70-130					

## Sample Information

Client Sample ID: FF-2

York Sample ID: 20D0258-05

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020



## Sample Information

Client Sample ID: FF-2

York Sample ID: 20D0258-05

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.62	0.896	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 06:09	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.49	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.62	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
76-13-1	<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	<b>0.76</b>		ug/m³	0.69	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.49	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.089	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.66	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>1.2</b>		ug/m³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.69	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.63	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.59	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.41	0.896	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 06:09	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.65	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
78-93-3	<b>2-Butanone</b>	<b>2.5</b>		ug/m³	0.26	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.73	0.896	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 06:09	LLJ



## Sample Information

<u>Client Sample ID:</u> FF-2		<u>York Sample ID:</u> 20D0258-05
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>0.48</b>		ug/m³	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
67-64-1	<b>Acetone</b>	<b>20</b>		ug/m³	0.43	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.19	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
71-43-2	<b>Benzene</b>	<b>0.52</b>		ug/m³	0.29	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.46	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.60	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-25-2	Bromoform	ND		ug/m³	0.93	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.35	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.28	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.68</b>		ug/m³	0.14	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.24	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
67-66-3	Chloroform	ND		ug/m³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.6</b>		ug/m³	0.19	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.089	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.31	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.76	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.4</b>		ug/m³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
141-78-6	* Ethyl acetate	<b>2.3</b>		ug/m³	0.65	0.896	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 06:09	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>1.1</b>		ug/m³	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ



## Sample Information

<u>Client Sample ID:</u> FF-2		<u>York Sample ID:</u> 20D0258-05
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.96	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
67-63-0	<b>Isopropanol</b>	<b>150</b>	, E	TO-IPA ug/m³	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>80</b>		ug/m³	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-09-2	<b>Methylene chloride</b>	<b>3.3</b>		ug/m³	0.62	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
142-82-5	<b>n-Heptane</b>	<b>1.9</b>		ug/m³	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
110-54-3	<b>n-Hexane</b>	<b>1.0</b>		ug/m³	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
95-47-6	<b>o-Xylene</b>	<b>1.1</b>		ug/m³	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>4.1</b>		ug/m³	0.78	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
622-96-8	* <b>p-Ethyltoluene</b>	<b>1.1</b>		ug/m³	0.44	0.896	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 06:09	LLJ
115-07-1	* Propylene	ND		ug/m³	0.15	0.896	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 06:09	LLJ
100-42-5	<b>Styrene</b>	<b>0.76</b>		ug/m³	0.38	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
127-18-4	<b>Tetrachloroethylene</b>	<b>2.7</b>		ug/m³	0.61	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.53	0.896	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 06:09	LLJ
108-88-3	<b>Toluene</b>	<b>3.3</b>		ug/m³	0.34	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.8</b>		ug/m³	0.50	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.057	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 06:09	LLJ

### Surrogate Recoveries

### Result

### Acceptance Range



## Sample Information

<u>Client Sample ID:</u> FF-2	<u>York Sample ID:</u> 20D0258-05			
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air	<u>Collection Date/Time</u> April 7, 2020 12:00 am	<u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: SURR: <i>p</i> -Bromofluorobenzene	106 %			70-130					

## Sample Information

<u>Client Sample ID:</u> FF-3	<u>York Sample ID:</u> 20D0258-06			
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air	<u>Collection Date/Time</u> April 7, 2020 12:00 am	<u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.80	1.166	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 07:07	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.64	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.80	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.89	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.64	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.47	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.12	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.87	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>0.57</b>		ug/m³	0.57	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.90	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.70	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.47	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.54	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.82	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ



## Sample Information

Client Sample ID: FF-3

York Sample ID: 20D0258-06

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.57	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.77	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.70	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.54	1.166	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 07:07	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.70	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.84	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
78-93-3	<b>2-Butanone</b>	<b>1.5</b>		ug/m³	0.34	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.96	1.166	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 07:07	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.8	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.48	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
67-64-1	<b>Acetone</b>	<b>8.7</b>		ug/m³	0.55	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.25	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
71-43-2	<b>Benzene</b>	<b>0.41</b>		ug/m³	0.37	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.60	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.78	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-25-2	Bromoform	ND		ug/m³	1.2	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.45	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.36	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.51</b>		ug/m³	0.18	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.54	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.31	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
67-66-3	Chloroform	ND		ug/m³	0.57	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ



## Sample Information

<u>Client Sample ID:</u> FF-3	<u>York Sample ID:</u> 20D0258-06			
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air	<u>Collection Date/Time</u> April 7, 2020 12:00 am	<u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.24	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.12	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.53	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.40	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.99	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.8</b>		ug/m³	0.58	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.84	1.166	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 07:07	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.51	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.2	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
67-63-0	<b>Isopropanol</b>	<b>75</b>		ug/m³	0.57	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>0.72</b>		ug/m³	0.48	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.42	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-09-2	<b>Methylene chloride</b>	<b>1.5</b>		ug/m³	0.81	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
142-82-5	<b>n-Heptane</b>	<b>2.0</b>		ug/m³	0.48	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.41	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.51	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.0	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.57	1.166	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 07:07	LLJ
115-07-1	* Propylene	ND		ug/m³	0.20	1.166	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 07:07	LLJ
100-42-5	Styrene	ND		ug/m³	0.50	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
127-18-4	<b>Tetrachloroethylene</b>	<b>1.6</b>		ug/m³	0.79	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.69	1.166	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 07:07	LLJ



## Sample Information

Client Sample ID: FF-3

York Sample ID: 20D0258-06

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	1.1		ug/m³	0.44	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.46	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.53	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.16	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m³	0.66	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.41	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.51	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.075	1.166	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 07:07	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: Surr: <i>p</i> -Bromofluorobenzene	99.0 %			70-130					

## Sample Information

Client Sample ID: FF-4

York Sample ID: 20D0258-07

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.64	0.928	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 08:05	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.51	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.64	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.71	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.51	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ



## Sample Information

Client Sample ID: FF-4

York Sample ID: 20D0258-07

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.38	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.092	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.69	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>0.78</b>		ug/m³	0.46	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.71	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.56	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.38	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.43	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
76-14-2	1,2-Dichlortetrafluoroethane	ND		ug/m³	0.65	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.46	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.62	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.56	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.43	0.928	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 08:05	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.56	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.67	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.96</b>		ug/m³	0.27	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.76	0.928	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 08:05	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.5	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.38	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
67-64-1	<b>Acetone</b>	<b>9.2</b>		ug/m³	0.44	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.20	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
71-43-2	<b>Benzene</b>	<b>0.65</b>		ug/m³	0.30	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ



## Sample Information

<u>Client Sample ID:</u> FF-4		<u>York Sample ID:</u> 20D0258-07
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-44-7	Benzyl chloride	ND		ug/m³	0.48	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.62	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-25-2	Bromoform	ND		ug/m³	0.96	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.36	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.29	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.47</b>		ug/m³	0.15	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.43	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.24	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
67-66-3	Chloroform	ND		ug/m³	0.45	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.19	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.092	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.42	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.32	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.79	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.9</b>		ug/m³	0.46	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.67	0.928	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 08:05	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>0.48</b>		ug/m³	0.40	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.99	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
67-63-0	<b>Isopropanol</b>	<b>180</b>	TO-IPA , E	ug/m³	0.46	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>3.8</b>		ug/m³	0.38	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.33	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-09-2	<b>Methylene chloride</b>	<b>5.0</b>		ug/m³	0.64	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ



## Sample Information

Client Sample ID: FF-4

York Sample ID: 20D0258-07

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
142-82-5	n-Heptane	0.57		ug/m³	0.38	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
110-54-3	n-Hexane	0.88		ug/m³	0.33	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
95-47-6	o-Xylene	0.56		ug/m³	0.40	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
179601-23-1	p- & m- Xylenes	1.6		ug/m³	0.81	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
622-96-8	* p-Ethyltoluene	0.64		ug/m³	0.46	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
115-07-1	* Propylene	ND		ug/m³	0.16	0.928	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 08:05	LLJ
100-42-5	Styrene	ND		ug/m³	0.40	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.63	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.55	0.928	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 08:05	LLJ
108-88-3	Toluene	1.9		ug/m³	0.35	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.37	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.42	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m³	0.52	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.33	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.41	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.059	0.928	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 08:05	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.5 %			70-130					



## Sample Information

Client Sample ID: FF-5

York Sample ID: 20D0258-08

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.62	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.49	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.62	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.69	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.49	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.36	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.089	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.67	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>2.2</b>		ug/m³	0.44	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.69	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.54	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.36	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.42	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.63	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.49</b>		ug/m³	0.44	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.60	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.54	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.42	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.54	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.65	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
78-93-3	<b>2-Butanone</b>	<b>1.2</b>		ug/m³	0.27	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.74	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ



## Sample Information

Client Sample ID: FF-5

York Sample ID: 20D0258-08

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>1.0</b>		ug/m³	0.37	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
67-64-1	<b>Acetone</b>	<b>21</b>		ug/m³	0.43	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.20	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
71-43-2	<b>Benzene</b>	<b>0.63</b>		ug/m³	0.29	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.47	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.60	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-25-2	Bromoform	ND		ug/m³	0.93	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.35	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.28	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.51</b>		ug/m³	0.14	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.41	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.24	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
67-66-3	Chloroform	ND		ug/m³	0.44	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.2</b>		ug/m³	0.19	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.089	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.41	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.31	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.77	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.8</b>		ug/m³	0.45	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
141-78-6	* Ethyl acetate	<b>0.94</b>		ug/m³	0.65	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>0.63</b>		ug/m³	0.39	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ



## Sample Information

<u>Client Sample ID:</u> FF-5		<u>York Sample ID:</u> 20D0258-08
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.96	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
67-63-0	<b>Isopropanol</b>	<b>120</b>	, E	TO-IPA ug/m³	0.44	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>5.6</b>		ug/m³	0.37	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.32	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-09-2	<b>Methylene chloride</b>	<b>1.3</b>		ug/m³	0.63	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
142-82-5	<b>n-Heptane</b>	<b>6.2</b>		ug/m³	0.37	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
110-54-3	<b>n-Hexane</b>	<b>0.70</b>		ug/m³	0.32	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
95-47-6	<b>o-Xylene</b>	<b>0.74</b>		ug/m³	0.39	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>2.4</b>		ug/m³	0.78	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
622-96-8	* <b>p-Ethyltoluene</b>	<b>1.2</b>		ug/m³	0.44	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
115-07-1	* Propylene	ND		ug/m³	0.15	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
100-42-5	<b>Styrene</b>	<b>0.65</b>		ug/m³	0.38	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
127-18-4	<b>Tetrachloroethylene</b>	<b>2.0</b>		ug/m³	0.61	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.53	0.9	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 09:05	LLJ
108-88-3	<b>Toluene</b>	<b>4.6</b>		ug/m³	0.34	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.36	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.41	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.6</b>		ug/m³	0.51	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.32	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.39	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.058	0.9	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 09:05	LLJ

### Surrogate Recoveries      Result      Acceptance Range



## Sample Information

Client Sample ID: FF-5

York Sample ID: 20D0258-08

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: SURR: <i>p</i> -Bromofluorobenzene	105 %			70-130					

## Sample Information

Client Sample ID: FF-6

York Sample ID: 20D0258-09

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.59	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.47	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.59	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.66	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.47	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.35	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.085	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.64	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>1.1</b>		ug/m³	0.42	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.66	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.52	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.35	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.40	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.60	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ



## Sample Information

<u>Client Sample ID:</u> FF-6		<u>York Sample ID:</u> 20D0258-09
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.42	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.57	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.52	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.40	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.52	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.62	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
78-93-3	<b>2-Butanone</b>	<b>1.0</b>		ug/m³	0.25	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.71	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.35	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
67-64-1	<b>Acetone</b>	<b>8.8</b>		ug/m³	0.41	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.19	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
71-43-2	<b>Benzene</b>	<b>1.0</b>		ug/m³	0.28	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.45	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.58	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-25-2	Bromoform	ND		ug/m³	0.89	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.33	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.27	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.49</b>		ug/m³	0.14	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.40	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.23	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
67-66-3	Chloroform	ND		ug/m³	0.42	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ



## Sample Information

Client Sample ID: FF-6

York Sample ID: 20D0258-09

York Project (SDG) No.

20D0258

Client Project ID

20-46055

Matrix

Indoor Ambient Air

Collection Date/Time

April 7, 2020 12:00 am

Date Received

04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.18	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.085	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.39	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
110-82-7	<b>Cyclohexane</b>	<b>0.53</b>		ug/m³	0.30	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.73	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.1</b>		ug/m³	0.43	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.62	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>0.71</b>		ug/m³	0.37	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.92	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
67-63-0	<b>Isopropanol</b>	<b>26</b>		ug/m³	0.42	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>6.2</b>		ug/m³	0.35	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.31	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-09-2	<b>Methylene chloride</b>	<b>2.1</b>		ug/m³	0.60	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
142-82-5	<b>n-Heptane</b>	<b>1.2</b>		ug/m³	0.35	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
110-54-3	<b>n-Hexane</b>	<b>1.9</b>		ug/m³	0.30	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
95-47-6	<b>o-Xylene</b>	<b>0.86</b>		ug/m³	0.37	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>2.5</b>		ug/m³	0.75	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
622-96-8	* p-Ethyltoluene	<b>0.93</b>		ug/m³	0.42	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
115-07-1	* Propylene	ND		ug/m³	0.15	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ
100-42-5	Styrene	ND		ug/m³	0.37	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.58	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.51	0.862	EPA TO-15 Certifications:	04/09/2020 12:00	04/10/2020 10:03	LLJ



## Sample Information

<u>Client Sample ID:</u> FF-6		<u>York Sample ID:</u> 20D0258-09
<u>York Project (SDG) No.</u> 20D0258	<u>Client Project ID</u> 20-46055	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 7, 2020 12:00 am <u>Date Received</u> 04/09/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	3.3		ug/m³	0.32	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.34	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.39	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m³	0.48	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.30	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.38	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.055	0.862	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/09/2020 12:00	04/10/2020 10:03	LLJ
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURL: <i>p</i> -Bromofluorobenzene	99.6 %			70-130					





## Sample and Data Qualifiers Relating to This Work Order

TO-IPA The value for isopropanol is estimated. Dilutions are not conducted for this species as not to preclude actionable analytes by dilution.

E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.

### Definitions and Other Explanations

\* Analyte is not certified or the state of the samples origination does not offer certification for the Analyte.

ND NOT DETECTED - the analyte is not detected at the Reported to level (LOQ/RL or LOD/MDL)

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

LOQ LIMIT OF QUANTITATION - the minimum concentration of a target analyte that can be reported within a specified degree of confidence . This is the lowest point in an analyte calibration curve that has been subjected to all steps of the processing/analysis and verified to meet defined criteria. This is based upon NELAC 2009 Standards and applies to all analyses.

LOD LIMIT OF DETECTION - a verified estimate of the minimum concentration of a substance in a given matrix that an analytical process can reliably detect. This is based upon NELAC 2009 Standards and applies to all analyses conducted under the auspices of EPA SW-846.

MDL METHOD DETECTION LIMIT - a statistically derived estimate of the minimum amount of a substance an analytical system can reliably detect with a 99% confidence that the concentration of the substance is greater than zero. This is based upon 40 CFR Part 136 Appendix B and applies only to EPA 600 and 200 series methods.

Reported to This indicates that the data for a particular analysis is reported to either the LOD/MDL, or the LOQ/RL. In cases where the "Reported to" is located above the LOD/MDL, any value between this and the LOQ represents an estimated value which is "J" flagged accordingly. This applies to volatile and semi-volatile target compounds only.

NR Not reported

RPD Relative Percent Difference

Wet The data has been reported on an as-received (wet weight) basis

Low Bias Low Bias flag indicates that the recovery of the flagged analyte is below the laboratory or regulatory lower control limit. The data user should take note that this analyte may be biased low but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

High Bias High Bias flag indicates that the recovery of the flagged analyte is above the laboratory or regulatory upper control limit. The data user should take note that this analyte may be biased high but should evaluate multiple lines of evidence including the LCS and site-specific MS/MSD data to draw bias conclusions. In cases where no site-specific MS/MSD was requested, only the LCS data can be used to evaluate such bias.

Non-Dir. Non-dir. flag (Non-Directional Bias ) indicates that the Relative Percent Difference (RPD) (a measure of precision) among the MS and MSD data is outside the laboratory or regulatory control limit. This alerts the data user where the MS and MSD are from site-specific samples that the RPD is high due to either non-homogeneous distribution of target analyte between the MS/MSD or indicates poor reproducibility for other reasons.

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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



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

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ANALYTICAL LABORATORIES INC.

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# Field Chain-of-Custody Record - AIR

YORK Project No.

20D0258

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

Your Page 1 of 1

YOUR Information		Report To:	Invoice To:	YOUR Project Number  20-46055	Turn-Around Time		
Company: JCB Building Associates	Address: 1775 Express Dr. N Hawthorne, NJ 11788	Company: JCB	Address:				
Phone: 671-584-5492	Phone:	Phone:					
Contact: Steven Miller	Contact:	Contact:					
E-mail: smiller@jcb-build.com	E-mail:	E-mail:	YOUR Project Name  Campagne E.S.				
Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.							
Samples Collected by: (print your name above and sign below)		Air Matrix Codes	Samples From	Report / EDD Type (circle selections)			
<i>Jeffrey Narain</i>		AI - Indoor Ambient Air AO - Outdoor Amb. Air AE - Vapor Extraction Well/ Process Gas/Effluent AS - Soil Vapor/Sub-Slab	New York New Jersey Connecticut Pennsylvania Other	Summary Report QA Report NY ASP A Package NY ASP B Package Other:	CT RCP CT RCP DQA/DUE NJDEP Reduced Deliv. NJKQP Other:		
				Standard Excel EDD EQuiS (Standard) NYSDEC EQuiS NJDEP SRP HazSite	Compared to the following Regulation(s): (please fill in)		
Certified Canisters: Batch _____ Individual _____		Please enter the following REQUIRED Field Data				Reporting Units: ug/m <sup>3</sup> <input checked="" type="checkbox"/> ppbv <input type="checkbox"/> ppmv <input type="checkbox"/>	
Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
Ambient	4-7-2020	AO	27.5	7	16955	6863	T0-15
SS-1	4-7-2020	AS	27.5	8	20944	5609	T0-15 + He
SS-2	4-7-2020	AS	30	5	23997	7363	+T0-15 + He
FF-1	4-7-2020	AE	30	4	24109	6873	T0-15
FF-2	4-7-2020	AE	70	7	17350	6877	T0-15
FF-3	4-7-2020	AE	30	11	19321	4-44	T0-15
FF-4	4-7-2020	AE	30	7	16694	4-10	T0-15
FF-5	4-7-2020	AC	27	5	16953	5704	T0-15
FF-6	4-7-2020	AI	30	7	23801	7607	T0-15

Comments: Charles Campagne E.S., 601 Plainview Rd Brentwood, NY 11714		Detection Limits Required		Sampling Media	
		≤ 1 ug/m <sup>3</sup> <input checked="" type="checkbox"/> Routine Survey <input type="checkbox"/>	NYSDEC V1 Limits <input type="checkbox"/> Other <input type="checkbox"/>	6 Liter Canister <input type="checkbox"/> Tedlar Bag <input type="checkbox"/>	
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
<i>Jeffrey Narain / JCB</i>	4-7-2020 320pm	<i>J. Sushil York</i>	4/8/20 320pm	<i>K. Bobrowicz</i>	4/8/20 1655
Samples Relinquished by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
<i>J. Hale / YORK</i>	4-8-20 1655	<i>J. Hale / YORK</i>	4-8-20 1811	<i>L. S. York</i>	4/8/20
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
		<i>Lab Secure</i>		<i>X</i>	4/9/20 @ 1000