

# **VOLATILE VAPOR INTRUSION (VVI) REPORT**

**BETHPAGE HIGH SCHOOL  
10 CHERRY AVENUE  
BETHPAGE, NEW YORK 11714**

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

**JCB PROJECT #: 20-46053  
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**J.C. BRODERICK & ASSOCIATES, INC.  
Environmental Consulting & Testing**

**1775 Expressway Drive North  
Hauppauge, New York 11788  
631-584-5492 Fax: 631-584-3395**



## Table of Contents

<b>Section No. 1.0: Introduction.....</b>	<b>1</b>
<b>Section No. 2.0: Site Description and Location.....</b>	<b>1</b>
<b>Section No. 3.0: Volatile Vapor Intrusion (VVI) Evaluation.....</b>	<b>1</b>
<b>Section No. 3.1: Pre-Work Field Preparations.....</b>	<b>1</b>
<b>Section No. 3.2: Subsurface Vapor Sample Collection .....</b>	<b>2</b>
<b>Section No. 3.3: Indoor Air Sample Collection .....</b>	<b>2</b>
<b>Section No. 3.3.1: Crawl Space/Basement Air Sample Collection .....</b>	<b>3</b>
<b>Section No. 3.3.2: 1<sup>st</sup> Floor Air Sample Collection.....</b>	<b>3</b>
<b>Section No. 3.4: Outdoor (Ambient) Air Sample Collection .....</b>	<b>3</b>
<b>Section No. 4.0: Laboratory Analytical Summary .....</b>	<b>3</b>
<b>Section No. 5.0: Decision Matrices .....</b>	<b>5</b>
<b>Section No. 6.0: Selective Location Resampling .....</b>	<b>5</b>
<b>Section No. 6.1: Resampling Laboratory Analytical Summary.....</b>	<b>6</b>
<b>Section No. 7.0: Quality Assurance and Quality Control (QA/QC) Procedures .....</b>	<b>7</b>
<b>Section No. 8.0: Findings.....</b>	<b>7</b>
<b>Section No. 8.1: Previous Analytical Results Trend Analysis .....</b>	<b>7</b>
<b>Section No. 9.0: Conclusions.....</b>	<b>9</b>
<b>Section No. 10.0: Recommendations.....</b>	<b>9</b>
<b>Section No. 11.0: Certification.....</b>	<b>10</b>

### **List of Tables**

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

Table No. 2 – Volatile Chemicals Utilized in NYSDOH Decision Matrices

Table No. 3 – Resample Volatile Vapor Intrusion Analytical Results of Detected Compounds via EPA Method TO-15

Table No. 4 – Total VOCs ( $\mu\text{g}/\text{m}^3$ ) Detected Over Time

### **List of Graphs**

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

Graph No. 2 – Total VOCs ( $\mu\text{g}/\text{m}^3$ ) Detected Over Time – Interior/Ambient Sample Locations

### **List of Figures**

Figure 1 - Site Location Map

Figure 2 - Subsurface, Crawlspace and Basement Sampling Locations

Figure 3 - 1<sup>st</sup> Floor and Ambient Sampling Locations

Figure 4 - Subsurface, Crawlspace, Basement, First Floor and Ambient Sampling Locations

### **Appendices**

Appendix A - Figures

Appendix B - Field Photograph Logs

Appendix C - Laboratory Analytical Report

## **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) as a result of the contamination emanating from the nearby Bethpage Community Park site. JCB performed VVI air sampling within the Bethpage High School. The sampling protocol was performed essentially in accordance with the requirements of the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", Final Version, October 2006.

## **Section No. 2.0: Site Description and Location**

The Subject Site is located at 10 Cherry Avenue Bethpage, New York 11714. The Subject Site is located on the southeast corner of the intersection formed by Stewart and Cherry Avenues. According to the United States Geological Survey (USGS) *Huntington, New York, 1992 7.5 Minute Series Topographical Map*, the Subject Site is situated at an approximate elevation of 121 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 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 - Subsurface, Crawl Space and Basement Sample Locations for additional details.

- For the collection of the subsurface vapor samples, a probe was fabricated from  $\frac{1}{2}$ -inch diameter, threaded brass pipe with a barbed tubing connection. The two (2) layers of 6-mil polyethylene sheeting were penetrated and a one (1) inch diameter hole was drilled, utilizing a hammer drill, into the sand floor of the crawl space extending approximately two (2) inches below the top of the sand. 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 plastic sheeting and above the vapor point. The container was sealed to the plastic sheeting utilizing modeling clay and duct tape. A Teflon-lined,  $\frac{1}{4}$ -inch I.D. disposable polyethylene tubing was then utilized to connect the barbed connection of the vapor point to a clean-certified, 6-liter SUMMA® canister, provided by York Analytical Labs, 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 sample collection. Upon completion of the sampling, the polyethylene sheeting was replaced on the floor and secured in place with duct tape.
- 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 6, 2020, a total of two (2) subsurface vapor samples were collected.
  - One (1) subsurface sample was collected from beneath the north end of the west crawl space under the west side school entrance.
  - One (1) subsurface sample was collected from beneath the south end of the west crawl space under the southwest cafeteria “A”.

### **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: Crawl Space/Basement Air Sample Collection**

Please refer to Figure No. 2 - Subsurface, Crawl space and Basement Sample Locations for additional details

- On April 6, 2020, a total of two (2) crawl space and one (1) basement air samples were collected.
  - One (1) air sample was collected from the north end of the west crawl space under the west side school entrance.
  - One (1) air sample was collected from the south end of the west crawl space under the southwest cafeteria “A”.
  - One (1) air sample was collected from the intersection of the two (2) hallways in the basement of the administration building.

### **Section No. 3.3.2: 1<sup>st</sup> Floor Air Sample Collection**

Please refer to Figure No. 3 - 1<sup>st</sup> Floor and Ambient Sample Locations for additional details.

- On April 6, 2020, one (1) first floor air sample was collected.
  - One (1) air sample was collected from within Cafeteria “A” located in the southwest corner of the high 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. 3 - 1<sup>st</sup> Floor and Ambient Sample Locations for additional details.

- On April 6, 2020, one (1) outdoor (ambient) air sample was collected.
  - One (1) air sample was collected from outside the west side of the high school building adjacent to Classroom Number 117.

### **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 Labs, 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. Subsurface soil vapor samples were also analyzed for Helium.

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 Sampling Analytical Results of Detected Compounds.

Table No. 1: Volatile Vapor Intrusion Analytical Results of Detected Compounds via EPA Method TO-15															
Sample ID York ID Sampling Date Client Matrix	EPA 2001 BASE 90th percentile	South Subsurface		South Crawl Space		South First Floor		North Subsurface		North Crawl Space		Admin Wing Basement		Ambient	
		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Helium	~	%		NT		NT		%		NT		NT		NT	
Dilution Factor		1.73						1.45							
Volatile Organics, EPA TO15 Full List	ug/m3	ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3		ug/m3	
Dilution Factor		17.32		0.949		0.974		14.47		0.902		0.735		0.82	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	3.5	13.0	U	0.730	U	0.750	U	2.20	U	0.690	U	0.560	D	0.630	D
1,2,4-Trimethylbenzene	9.5	8.50	U	17.0	D	19.0	D	5.50	D	12.0	D	0.430	D	1.70	D
1,3,5-Trimethylbenzene	3.7	8.50	U	6.00	D	6.60	D	2.00	D	4.30	D	0.360	U	0.520	D
2-Butanone	12	21.0	D	3.20	D	2.10	D	10.0	D	3.10	D	1.10	D	0.850	D
4-Methyl-2-pentanone	6	7.10	U	0.390	U	0.400	U	3.80	D	0.370	U	0.300	U	0.340	U
Acetone	98.9	410	D	18.0	D	7.80	D	330	D	23.0	D	10.0	D	5.90	D
Benzene	9.4	6.10	D	0.490	D	0.530	D	3.10	D	0.580	D	0.450	D	1.30	D
Carbon disulfide	4.2	5.40	U	0.300	U	0.300	U	2.30	D	0.280	U	0.230	U	0.260	U
Carbon tetrachloride	1.3	2.70	U	0.480	D	0.490	D	0.550	D	0.570	D	0.510	D	0.570	D
Chloromethane	3.7	3.60	U	1.10	D	1.10	D	0.900	D	1.30	D	1.10	D	1.30	D
Cyclohexane	~	6.00	U	0.560	D	0.340	U	1.30	D	0.560	D	0.250	U	1.10	D
Dichlorodifluoromethane	16.5	8.60	U	2.10	D	2.10	D	2.60	D	2.90	D	2.10	D	2.00	D
Ethyl acetate	5.4	12.0	U	0.680	U	0.700	U	2.40	D	0.980	D	0.530	U	0.590	U
Ethyl Benzene	5.7	25.0	D	2.90	D	2.70	D	3.50	D	2.40	D	1.90	D	1.10	D
Isopropanol	250	17.0	D	3.70	D	1.70	D	14.0	D	34.0	D	6.80	D	4.40	D
Methyl Methacrylate	~	7.10	U	0.390	U	0.400	U	1.20	U	6.80	D	0.300	U	3.40	D
Methylene chloride	10	12.0	U	1.50	D	0.680	U	2.00	U	1.90	D	0.970	D	0.570	U
n-Heptane	~	7.10	U	2.50	D	0.680	D	14.0	D	1.20	D	2.10	D	1.80	D
n-Hexane	10.2	24.0	D	6.40	D	1.10	D	18.0	D	5.40	D	0.310	D	3.30	D
o-Xylene	7.9	8.30	D	6.40	D	6.10	D	3.10	D	5.00	D	1.30	D	1.40	D
p- & m- Xylenes	22.2	27.0	D	14.0	D	13.0	D	8.80	D	11.0	D	7.50	D	3.90	D
p-Ethyltoluene	3.6	8.50	U	17.0	D	18.0	D	6.10	D	13.0	D	0.360	U	1.50	D
Styrene	1.9	7.40	U	0.400	U	0.410	U	1.20	U	0.580	D	0.970	D	0.660	D
Tetrachloroethylene	15.9	12.0	U	0.640	U	0.660	U	2.00	U	34.0	D	4.10	D	0.560	U
Tetrahydrofuran	~	10.0	U	0.560	U	0.570	U	4.90	D	0.530	D	0.430	U	0.480	U
Toluene	43	2,000	D	13.0	D	2.30	D	500	D	12.0	D	2.20	D	5.60	D
Trichloroethylene	4.2	2.30	U	0.130	U	0.130	U	0.390	U	0.730	D	0.120	D	0.110	U
Trichlorofluoromethane (Freon 11)	18.1	9.70	U	1.70	D	1.70	D	1.60	D	9.50	D	1.80	D	1.70	D

**NOTES:**  
Any Regulatory Exceedences are color coded by Regulation  
**Q is the Qualifier Column with definitions as follows:**  
D=result is from an analysis that required a dilution  
U=analyte not detected at or above the level indicated  
NT=this indicates the analyte was not a target for this sample  
~=this indicates that no regulatory limit has been established for this analyte

The laboratory analysis results for the air samples collected were also reviewed and compared to the Air Guidance Values Derived by the NYSDOH as listed in Table 3.1 in NYSDOH's "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 and all available updates.

The results of the air sampling from the North Crawl Space indicated the detection of Tetrachloroethene (PCE) at a concentration of 34.0 µg/m<sup>3</sup> above the NYSDOH guidance value of 30 µg/m<sup>3</sup>. It should be noted that the crawl space is not considered an occupied space.

### **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. Due to the presence of polyethylene sheeting covering the crawl space sand, the structure was deemed to contain a full slab for the purpose of this investigation.

The NYSDOH has currently developed three (3) 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	Identify Source(s) and Resample or Mitigate
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 7 of 8 volatile organic chemicals utilized in the NYSDOH Decision Matrices. However, the results of the matrices also recommend to “identify source(s) and resample or mitigate for tetrachloroethene in the north crawl space. It should be noted that the crawl space is not considered an occupied space.

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

### **Section No. 6.0: Selective Location Resampling**

As a result of the elevated detection of Tetrachloroethene in the North Crawl Space sample, the NYSDOH decision matrix recommended “Identify Source(s) and Resample or Mitigate”. JCB took reasonable and practical actions to identify a source of Tetrachloroethene in the crawl space; however, since no sources were identified, JCB recommended collecting an additional set of conformation samples. The additional testing was performed using the same procedures as described in Section 3.2 and included retesting the North Subsurface, North Crawl Space, and Admin Basement. Additional sampling included a First Floor Hallway and a new Ambient location. The resampling locations are indicated on Figure 2 in Appendix A.

- On May 5, 2020, one (1) subsurface vapor sample was collected from beneath the north end of the west crawl space under the west side school entrance.

On May 5, 2020, one (1) crawl space air sample was collected from the north end of the west crawl space under the west side school entrance.

On May 5, 2020, one (1) air sample was collected from the intersection of the two (2) hallways in the basement of the administration building.

On May 5, 2020, one (1) first floor air sample was collected from the intersection of the two (2) hallways at the west side school entrance.

On May 5, 2020, one (1) ambient air sample was collected from outside the west side of the high school building.

### **Section No. 6.1: Resampling Laboratory Analytical Summary**

The air samples were collected and analyzed using the same methods and procedures as described in Section 4.0.

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 Resampled Air Sampling Analytical Results of Detected Compounds.

Table No. 3: Resampling - Volatile Vapor Intrusion Analytical Results of Detected Compounds via EPA Method TO-15											
Sample ID		EPA 2001 BASE 90th percentile	NORTH SUB SURFACE		NORTH CRAWL SPACE		ADMIN BASEMENT		FIRST FLOOR HALLWAY		AMBIENT
York ID	Sampling Date		20E0130-01 5/5/2020 Soil Vapor		20E0130-02 5/5/2020 Indoor Ambient Air		20E0130-03 5/5/2020 Indoor Ambient Air		20E0130-04 5/5/2020 Indoor Ambient Air		20E0130-05 5/5/2020 Outdoor Ambient Air
Client Matrix	Compound		Result	Q	Result	Q	Result	Q	Result	Q	Result
Helium			ND		NT		NT		NT		NT
Dilution Factor			1.68								
Volatile Organics, EPA TO15 Full List		ug/m3	ug/m3		ug/m3		ug/m3		ug/m3		ug/m3
Dilution Factor			1.68		0.856		0.881		0.822		0.845
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	3.5	1.30	U	0.660	U	0.680	U	0.690	D	0.650
1,2,4-Trimethylbenzene	95-63-6	9.5	0.830	U	0.420	U	0.430	J	0.400	J	0.420
2-Butanone	78-93-3	12	0.550	D	0.500	D	0.490	D	0.580	D	0.550
2-Hexanone	591-78-6	~	1.40	U	0.700	U	0.720	U	0.670	J	0.690
4-Methyl-2-pentanone	108-10-1	6	0.690	U	0.350	U	0.360	U	0.340	J	0.350
Acetone	67-64-1	98.9	6.50	D	6.50	D	8.20	D	7.30	D	5.50
Benzene	71-43-2	9.4	0.540	U	0.270	U	0.280	U	0.290	D	0.270
Carbon tetrachloride	56-23-5	1.3	0.530	D	0.540	D	0.550	D	0.620	D	0.530
Chloromethane	74-87-3	3.7	1.10	D	1.10	D	1.30	D	1.20	D	1.20
Dichlorodifluoromethane	75-71-8	16.5	2.20	D	1.90	D	1.90	D	2.10	D	1.80
Ethyl acetate	141-78-6	5.4	1.20	U	0.620	U	0.630	U	0.590	J	0.610
Ethyl Benzene	100-41-4	5.7	0.730	U	0.370	U	0.380	J	0.360	J	0.370
Isopropanol	67-63-0	250	6.20	D	3.30	D	9.90	D	11.0	D	11.0
Methyl Methacrylate	80-62-6	~	1.70	D	0.880	D	2.40	D	3.60	D	3.50
Methylene chloride	75-09-2	10	1.20	U	1.70	D	1.70	D	1.50	D	1.40
n-Heptane	142-82-5	~	0.690	J	0.350	J	0.690	D	0.540	D	0.350
n-Hexane	110-54-3	10.2	0.590	U	0.300	U	0.310	U	0.380	D	0.300
o-Xylene	95-47-6	7.9	0.730	J	0.370	J	0.380	J	0.360	J	0.370
p- & m- Xylenes	179601-23-1	22.2	1.50	U	0.740	U	0.800	D	0.750	D	0.730
Styrene	100-42-5	1.9	0.720	U	0.360	U	0.380	U	0.350	J	0.360
Toluene	108-88-3	43	1.40	D	1.20	D	2.20	D	1.30	D	0.760
Trichlorofluoromethane (Freon 11)	75-69-4	18.1	1.70	D	1.60	D	1.80	D	2.00	D	1.60
<b>NOTES:</b>											
Any Regulatory Exceedences are color coded by Regulation											
<b>Q is the Qualifier Column with definitions as follows:</b>											
D=result is from an analysis that required a dilution											
J=analyte detected at or above the MDL (method detection limit) but below the RL (Reporting Limit) - data is estimated											
U=analyte not detected at or above the level indicated											
~=this indicates that no regulatory limit has been established for this analyte											

The laboratory analysis results of the resample indicated no detection above the referenced guidance values.

### **Section No. 7.0: 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 was 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. 8.0: Findings**

Based upon the review of the VVI laboratory analysis results all detectable concentrations observed were reported well below published occupational health guidelines. In addition, with the exception of three (3) parameters in South First Floor “Cafeteria A”, all remaining detectable concentrations observed in the occupied spaces of the school building were below their background values as reported in the 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. 8.1: Previous Analytical Results Trend Analysis**

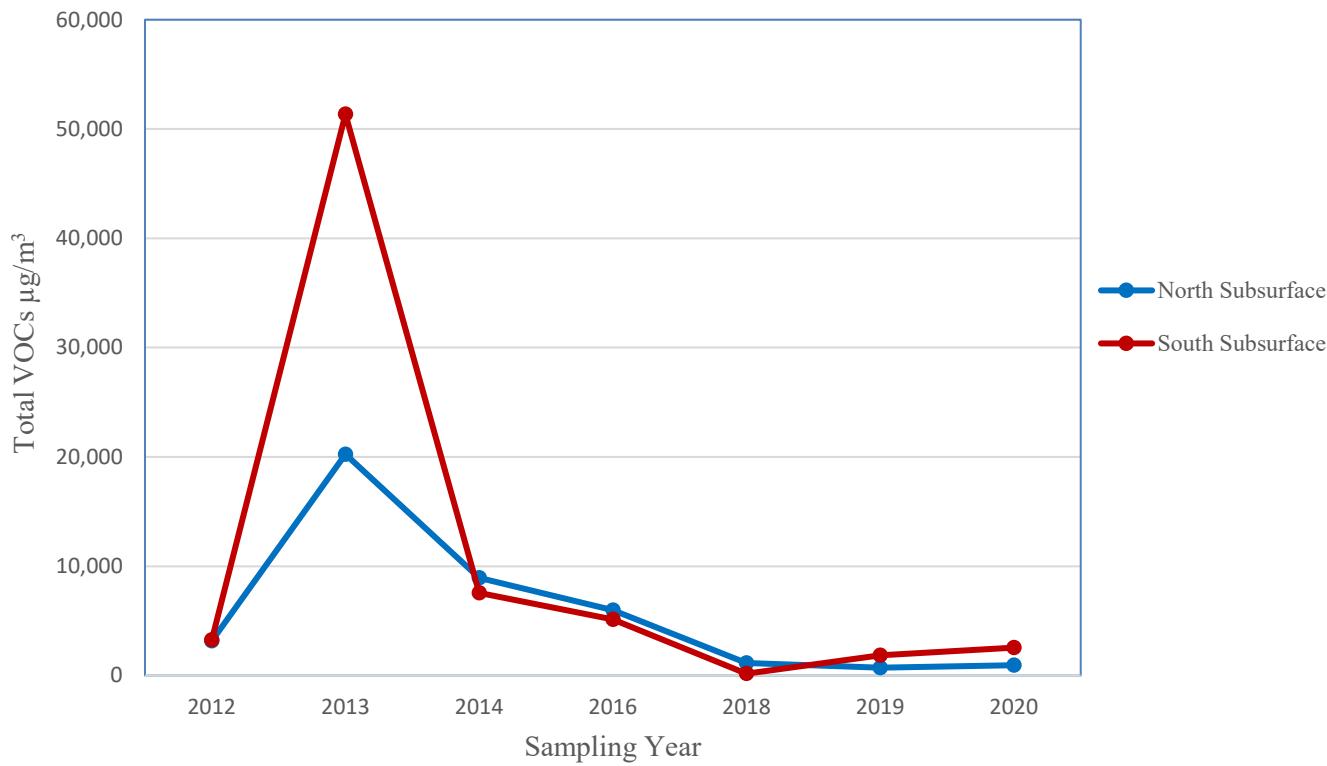
JCB has been performing the same volatile vapor intrusion sampling since 2012. The 2020 analytical results for total VOCs were compared to previous year's results and are presented below.

**Table No. 4:**  
**Total VOCs ( $\mu\text{g}/\text{m}^3$ ) Detected Over Time**

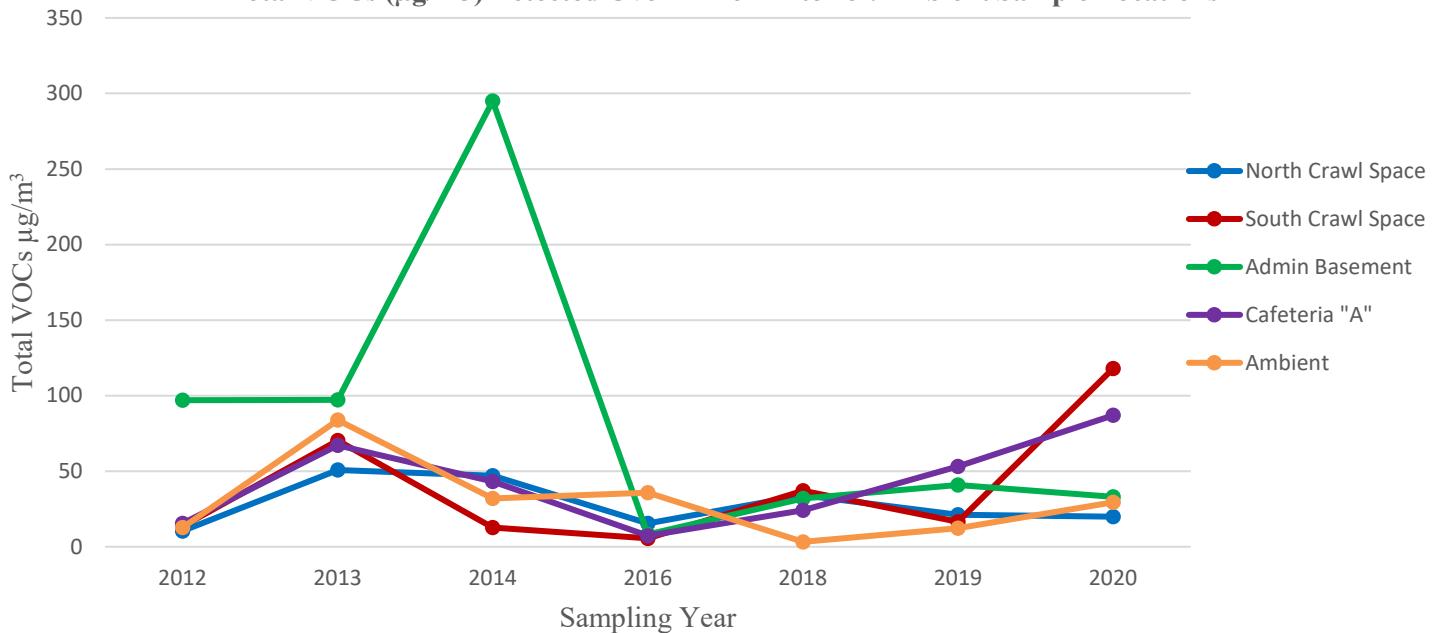
Location	Year						
	2012	2013	2014	2016	2018	2019	2020
North Subsurface	3,153	20,243	8,944	5,991	1,144	718	23.3
North Crawl Space	10.5	50.8	47.1	15.5	34.1	21.18	19.94
South Subsurface	3,269	51,353	7,558	5,121	169	1,860.6	2,538
South Crawl Space	13.6	70.4	12.7	5.6	37.1	16.57	118
Admin Basement	97.1	97.3	295	8.19	32	40.85	33.1
Cafeteria "A"	15.4	67.1	43.2	7.31	24.1	53.15	87
Ambient	12.7	83.8	31.93	35.9	3.28	12.25	29.5

In general, the concentration of total VOCs has decreased in the subsurface samples, below the plastic barrier since 2012 as indicated in Graph No. 1 below. The interior spaces did indicate an upward trend in total detected VOC concentration since 2018 in three (3) of the five (5) sampling locations as shown in Graph No. 2.

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



**Graph No. 2:**  
**Total VOCs ( $\mu\text{g}/\text{m}^3$ ) Detected Over Time – Interior/Ambient Sample Locations**



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

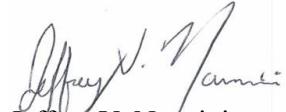
#### **Section No. 10.0: Recommendations**

It is recommended that periodic VVI sampling be performed to monitor site conditions. It is also recommended that periodic inspection of the plastic barrier be performed and that any rips or tears to the barrier be repaired.

**Section No. 11.0: 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 all updates, and that all activities were performed in full accordance with the work plan.

Sincerely,  
**J.C. Broderick & Associates, Inc.**



Jeffrey V. Nannini  
Environmental Scientist

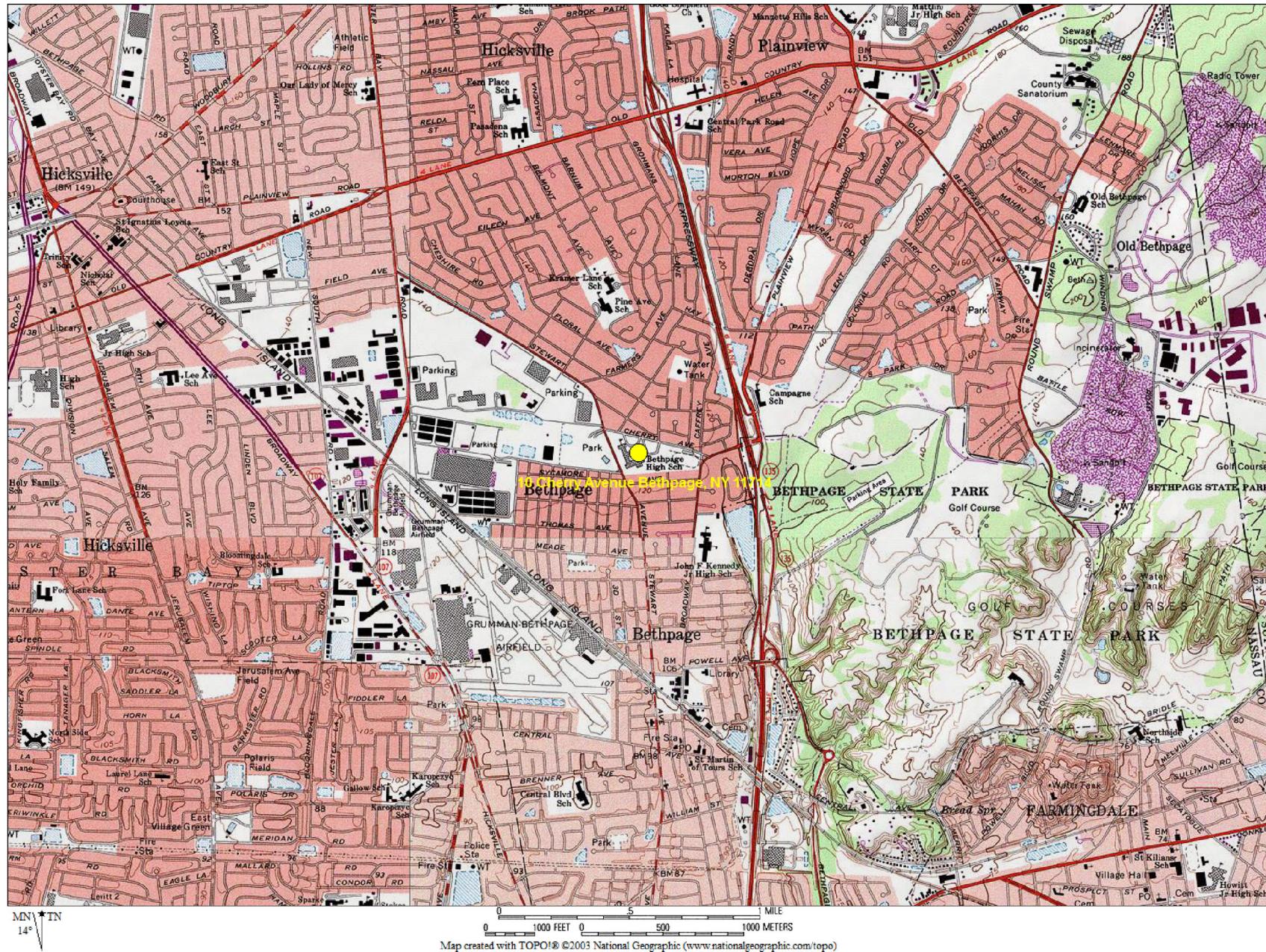


Steven Muller, P.G.  
Project Manager

---

## **Appendix A**

## **Figures**



**JCB LEGEND**  
SUBJECT SITE



**J.C. BRODERICK**  
& Associates  
Environmental Consulting and  
Testing  
1775 Express Drive North  
Hauppauge, NY 11788  
Phone: (631) 584.5492  
Fax: (631) 584.3395

Notes:

Bethpage High School  
10 Cherry Avenue  
Bethpage, NY 11712

Drawing Title

Figure No. 1

Site Location Map

Scale Project No. Date  
As Noted 20-46053 04-06-2020

Drawn By Checked By Page No.  
J.V.N. S.W.M. 1 of 4

Drawing No.



J.C. BRODERICK

& Associates

Environmental Consulting and  
Testing

1775 Express Drive North

Hauppauge, New York 11788

Phone: (631) 584.5492

Fax: (631) 584.3395

Notes:

Bethpage High School  
10 Cherry Avenue  
Bethpage, NY 11714

Drawing Title  
Figure No. 2

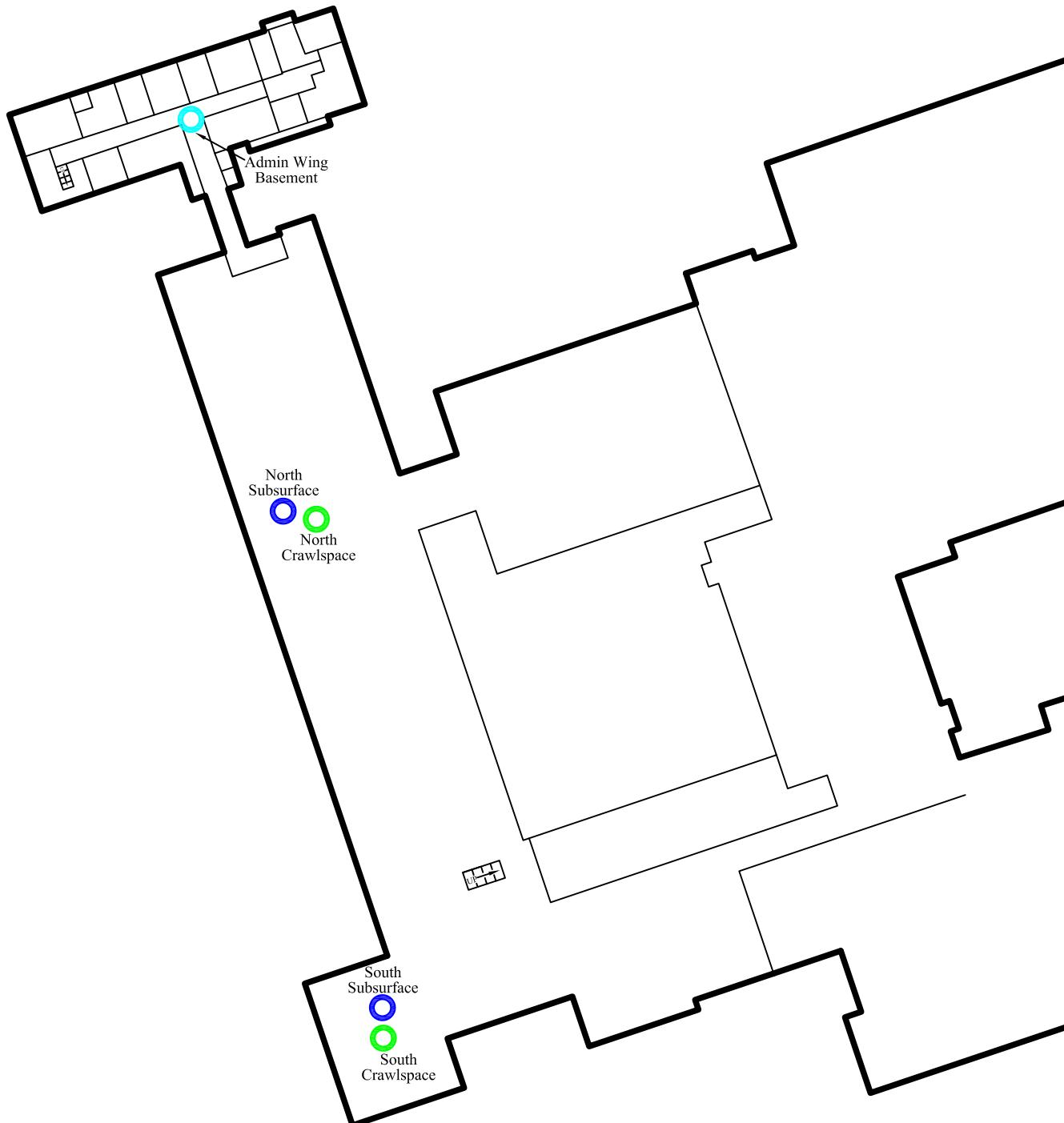
Subsurface,  
Crawlspace  
and  
Basement  
Sampling  
Locations

Scale Project No. Date  
N.T.S. 20-46053 04-06-2020

Drawn By Checked By Page No.  
J.V.N. S.W.M. 2 of 4

Drawing No.

2



JCB LEGEND

- SUBSURFACE SAMPLING LOCATION
- CRAWLSPACE SAMPLING LOCATION
- BASEMENT SAMPLING LOCATION



J.C. BRODERICK

& Associates

Environmental Consulting and  
Testing

1775 Express Drive North

Hauppauge, New York 11788

Phone: (631) 584.5492

Fax: (631) 584.3395

Notes:

Bethpage High School  
10 Cherry Avenue  
Bethpage, NY 11714

Drawing Title  
**Figure No. 3**

1st Floor  
and  
Ambient  
Sampling  
Locations

Scale Project No. Date  
N.T.S. 20-46053 04-06-2020

Drawn By Checked By Page No.  
J.V.N. S.W.M. 3 of 4

Drawing No.

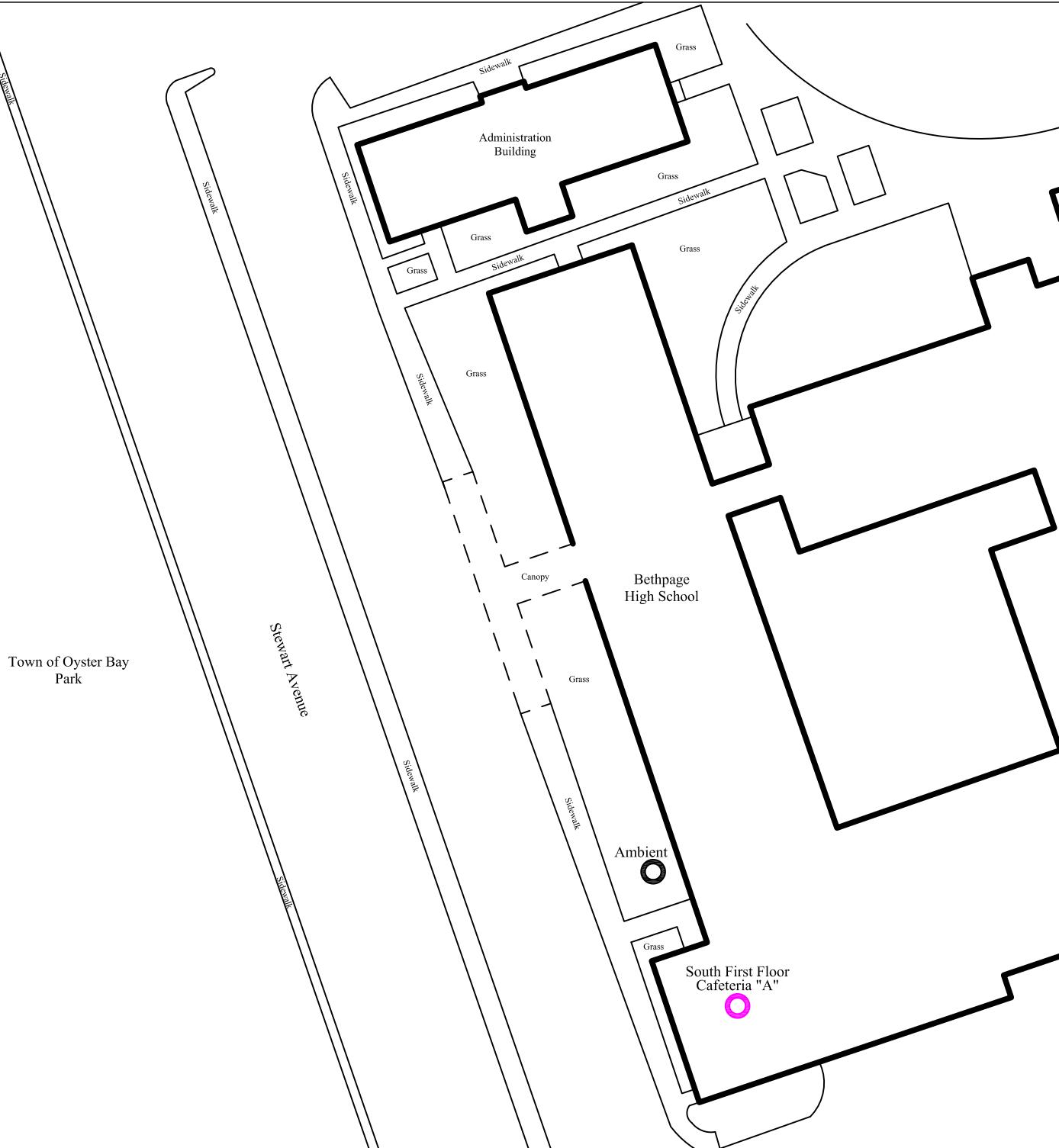
3

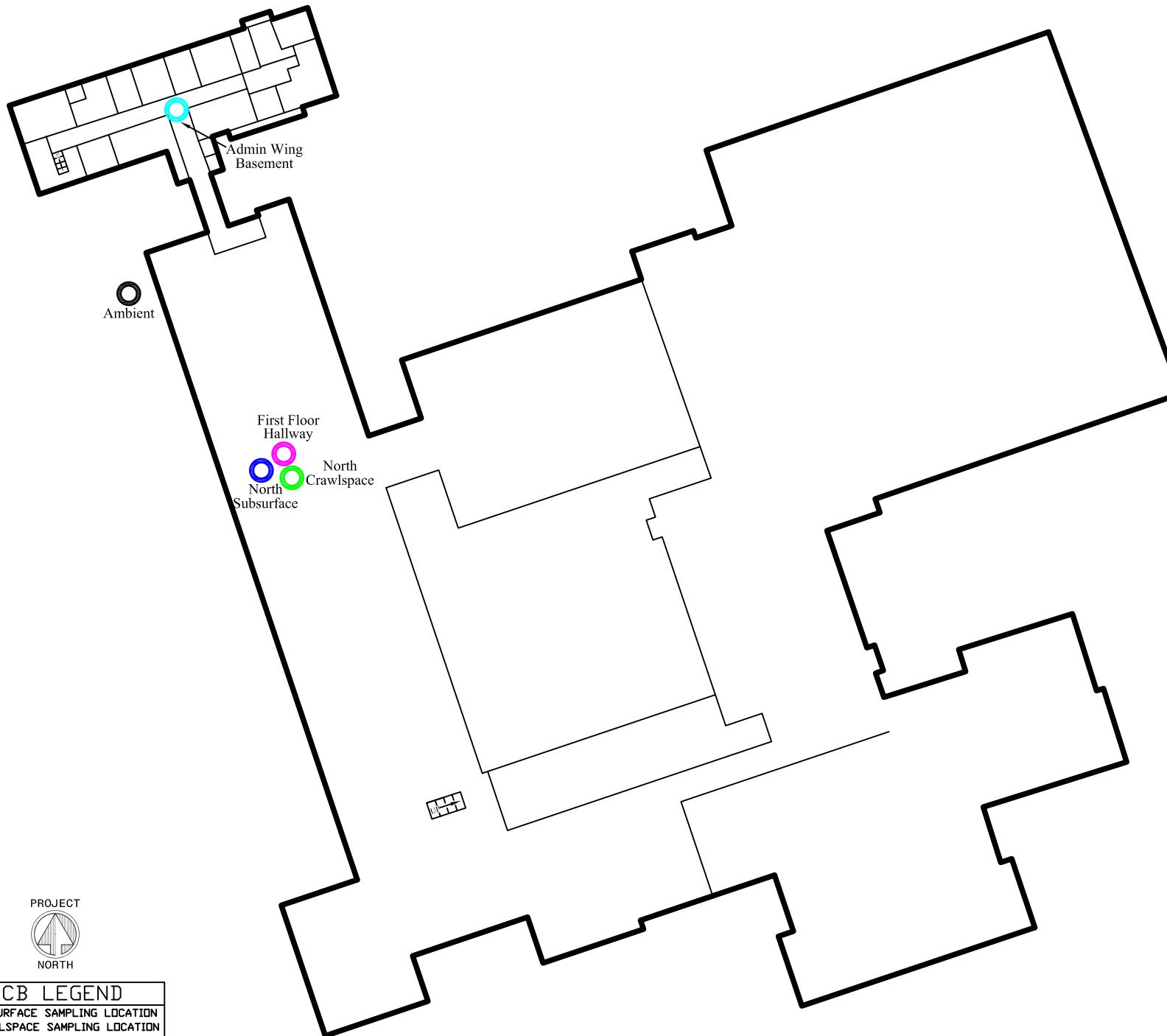


**JCB LEGEND**

● AMBIENT SAMPLING LOCATION

● 1ST FLOOR SAMPLING LOCATION





**J.C. BRODERICK**

& Associates

Environmental Consulting and  
Testing

1775 Express Drive North

Hauppauge, New York 11788

Phone: (631) 584.5492

Fax: (631) 584.3395

**Notes:**

Bethpage High School  
10 Cherry Avenue  
Bethpage, NY 11714

**Drawing Title**

Figure No. 4

Subsurface,  
Crawlspace, Basement,  
First Floor and Ambient  
Additional  
Sampling  
Locations

Scale	Project No.	Date
N.T.S.	20-46053	05-05-2020

Drawn By	Checked By	Page No.
J.V.N.	S.W.M.	4 of 4

**Drawing No.**

---

## **Appendix B**

### **Field Photograph Logs**

**Sampling Location  
South Crawlspace and South Subsurface**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

**Bethpage High School  
10 Cherry Avenue  
Bethpage, New York 11714**

**Photo No. 01**

**JCB#: 20-46053**

**Sampling Location  
North Crawlspace and North Subsurface**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

**Bethpage High School  
10 Cherry Avenue  
Bethpage, New York 11714**



**Photo No. 02**

**JCB#: 20-46053**

**Sampling Location  
Administration Wing Basement**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

**Bethpage High School  
10 Cherry Avenue  
Bethpage, New York 11714**



**Photo No. 03**

**JCB#: 20-46053**

**Sampling Location  
South First Floor Cafeteria "A"**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

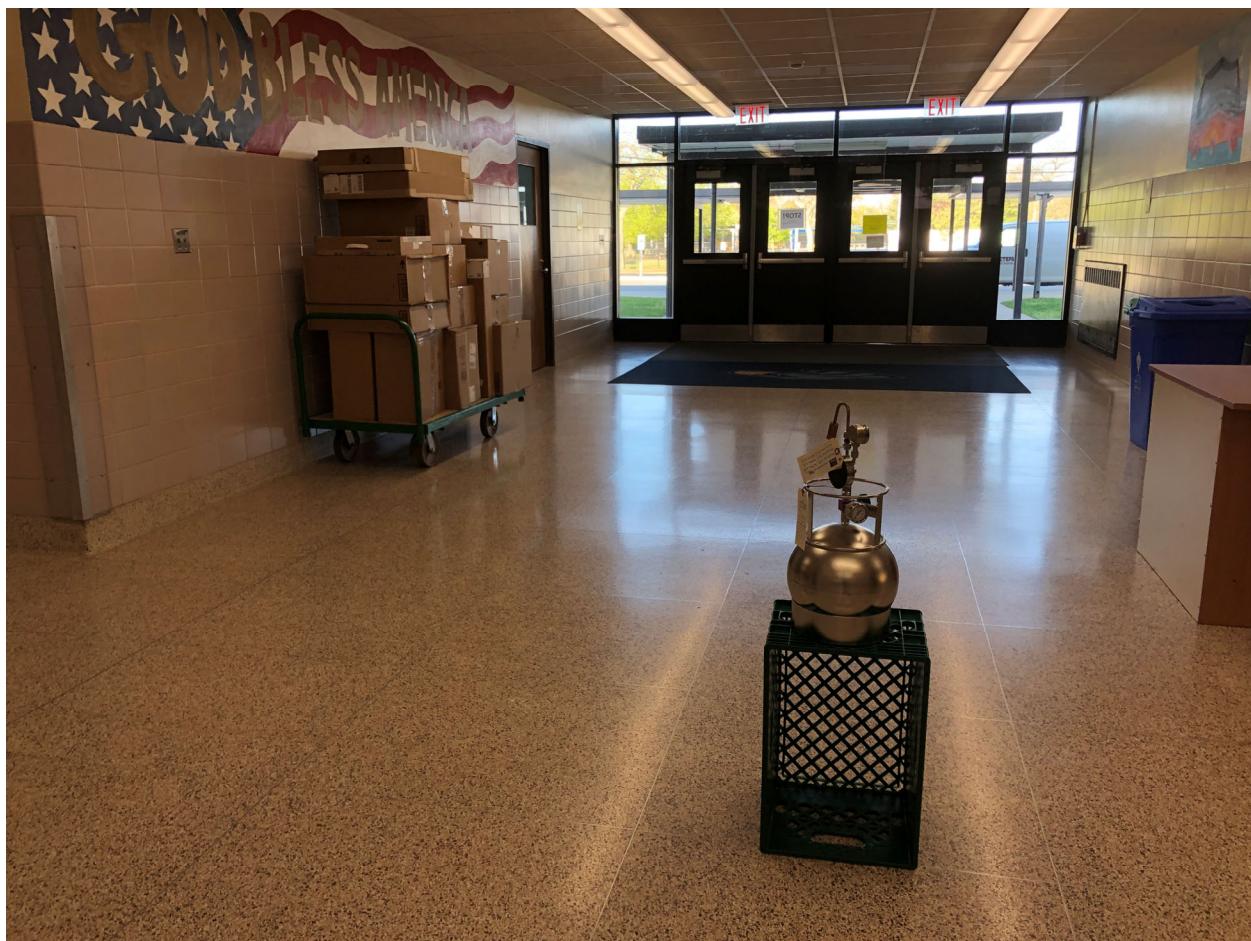
**Bethpage High School  
10 Cherry Avenue  
Bethpage, New York 11714**



**Photo No. 04**

**JCB#: 20-46053**

**Sampling Location  
First Floor Hallway**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

**Bethpage High School  
10 Cherry Avenue  
Bethpage, New York 11714**



**Photo No. 05**

**JCB#: 20-46053**

**Sampling Location  
Ambient (Outdoor)**



**Field Photograph Log**

**Volatile Vapor Intrusion Report**

**Bethpage High School  
10 Cherry Avenue  
Bethpage, New York 11714**



**Photo No. 06**

**JCB#: 20-46053**

---

## **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: 20-46053 Bethpage HS**  
**York Project (SDG) No.: 20D0184**

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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

STRATFORD, CT 06615  
(203) 325-1371



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

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

Report Date: 04/14/2020  
Client Project ID: 20-46053 Bethpage HS  
York Project (SDG) No.: 20D0184

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

---

## 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 07, 2020 with a temperature of C. The project was identified as your project: **20-46053 Bethpage HS**.

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>
20D0184-01	South Subsurface	Soil Vapor	04/06/2020	04/07/2020
20D0184-02	South Crawl Space	Indoor Ambient Air	04/06/2020	04/07/2020
20D0184-03	South First Floor	Indoor Ambient Air	04/06/2020	04/07/2020
20D0184-04	North Subsurface	Soil Vapor	04/06/2020	04/07/2020
20D0184-05	North Crawl Space	Indoor Ambient Air	04/06/2020	04/07/2020
20D0184-06	Admin Wing Basement	Indoor Ambient Air	04/06/2020	04/07/2020
20D0184-07	Ambient	Outdoor Ambient Ai	04/06/2020	04/07/2020

## **General Notes for York Project (SDG) No.: 20D0184**

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: South Subsurface

York Sample ID: 20D0184-01

York Project (SDG) No.  
20D0184

Client Project ID  
20-46053 Bethpage HS

Matrix  
Soil Vapor

Collection Date/Time  
April 6, 2020 12:00 am

Date Received  
04/07/2020

### 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
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	12	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	9.5	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	12	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	13	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	9.5	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	7.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	1.7	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	13	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	8.5	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	13	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	10	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	7.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	8.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	12	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	8.5	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	11	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	10	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	8.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	10	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	12	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
78-93-3	<b>2-Butanone</b>	<b>21</b>		ug/m³	5.1	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ



## Sample Information

**Client Sample ID:** South Subsurface

**York Sample ID:** 20D0184-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0184	20-46053 Bethpage HS	Soil Vapor	April 6, 2020 12:00 am	04/07/2020

### 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	ND		ug/m³	14	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	27	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	7.1	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
67-64-1	<b>Acetone</b>	<b>410</b>		ug/m³	8.2	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	3.8	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
71-43-2	<b>Benzene</b>	<b>6.1</b>		ug/m³	5.5	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	9.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	12	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-25-2	Bromoform	ND		ug/m³	18	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
74-83-9	Bromomethane	ND		ug/m³	6.7	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	5.4	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
56-23-5	Carbon tetrachloride	ND		ug/m³	2.7	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	8.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-00-3	Chloroethane	ND		ug/m³	4.6	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
67-66-3	Chloroform	ND		ug/m³	8.5	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
74-87-3	Chloromethane	ND		ug/m³	3.6	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	1.7	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	7.9	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
110-82-7	Cyclohexane	ND		ug/m³	6.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	15	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/m³	8.6	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	12	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ



## Sample Information

**Client Sample ID:** South Subsurface

**York Sample ID:** 20D0184-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0184	20-46053 Bethpage HS	Soil Vapor	April 6, 2020 12:00 am	04/07/2020

### 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	25		ug/m³	7.5	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	18	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
67-63-0	Isopropanol	17		ug/m³	8.5	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	7.1	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	6.2	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-09-2	Methylene chloride	ND		ug/m³	12	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
142-82-5	n-Heptane	ND		ug/m³	7.1	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
110-54-3	n-Hexane	24		ug/m³	6.1	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
95-47-6	o-Xylene	8.3		ug/m³	7.5	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
179601-23-1	p- & m- Xylenes	27		ug/m³	15	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	8.5	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
115-07-1	* Propylene	ND		ug/m³	3.0	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
100-42-5	Styrene	ND		ug/m³	7.4	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	12	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	10	17.32	EPA TO-15 Certifications:	04/07/2020 12:00	04/07/2020 23:29	LLJ
108-88-3	Toluene	2000		ug/m³	6.5	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	6.9	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	7.9	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	2.3	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	9.7	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	6.1	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	7.6	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ



## Sample Information

**Client Sample ID:** South Subsurface

**York Sample ID:** 20D0184-01

York Project (SDG) No.  
20D0184

Client Project ID  
20-46053 Bethpage HS

Matrix  
Soil Vapor

Collection Date/Time  
April 6, 2020 12:00 am

Date Received  
04/07/2020

### 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	1.1	17.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/07/2020 23:29	LLJ
<b>Surrogate Recoveries</b>										
Surrogate: SURR: <i>p</i> -Bromofluorobenzene										
<b>Acceptance Range</b>										
99.2 % 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		%	0.86	1.73	GC/TCD Certifications:	04/14/2020 14:33	04/14/2020 15:40	KT

## Sample Information

**Client Sample ID:** South Crawl Space

**York Sample ID:** 20D0184-02

York Project (SDG) No.  
20D0184

Client Project ID  
20-46053 Bethpage HS

Matrix  
Indoor Ambient Air

Collection Date/Time  
April 6, 2020 12:00 am

Date Received  
04/07/2020

### 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	0.65	0.949	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 00:27	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.52	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.65	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.73	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.52	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.38	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.094	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.70	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ



## Sample Information

Client Sample ID: South Crawl Space

York Sample ID: 20D0184-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0184	20-46053 Bethpage HS	Indoor Ambient Air	April 6, 2020 12:00 am	04/07/2020

### 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	<b>1,2,4-Trimethylbenzene</b>	<b>17</b>		ug/m³	0.47	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.73	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.57	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.38	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.44	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.66	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>6.0</b>		ug/m³	0.47	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.63	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.57	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.44	0.949	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 00:27	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.57	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.68	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
78-93-3	<b>2-Butanone</b>	<b>3.2</b>		ug/m³	0.28	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.78	0.949	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 00:27	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.5	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.39	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
67-64-1	<b>Acetone</b>	<b>18</b>		ug/m³	0.45	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.21	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
71-43-2	<b>Benzene</b>	<b>0.49</b>		ug/m³	0.30	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.49	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.64	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-25-2	Bromoform	ND		ug/m³	0.98	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ



## Sample Information

<b>Client Sample ID:</b> South Crawl Space		<b>York Sample ID:</b>	<b>20D0184-02</b>
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Indoor Ambient Air	<u>Collection Date/Time</u> April 6, 2020 12:00 am
			<u>Date Received</u> 04/07/2020

### 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	0.37	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.30	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.48</b>		ug/m³	0.15	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.44	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.25	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
67-66-3	Chloroform	ND		ug/m³	0.46	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.20	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.094	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.43	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
110-82-7	<b>Cyclohexane</b>	<b>0.56</b>		ug/m³	0.33	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.81	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.1</b>		ug/m³	0.47	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.68	0.949	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 00:27	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>2.9</b>		ug/m³	0.41	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.0	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
67-63-0	<b>Isopropanol</b>	<b>3.7</b>		ug/m³	0.47	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	0.39	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.34	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-09-2	<b>Methylene chloride</b>	<b>1.5</b>		ug/m³	0.66	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
142-82-5	<b>n-Heptane</b>	<b>2.5</b>		ug/m³	0.39	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
110-54-3	<b>n-Hexane</b>	<b>6.4</b>		ug/m³	0.33	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
95-47-6	<b>o-Xylene</b>	<b>6.4</b>		ug/m³	0.41	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ



## Sample Information

**Client Sample ID:** South Crawl Space

**York Sample ID:** 20D0184-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0184	20-46053 Bethpage HS	Indoor Ambient Air	April 6, 2020 12:00 am	04/07/2020

### 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	14		ug/m³	0.82	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
622-96-8	* p-Ethyltoluene	17		ug/m³	0.47	0.949	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 00:27	LLJ
115-07-1	* Propylene	ND		ug/m³	0.16	0.949	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 00:27	LLJ
100-42-5	Styrene	ND		ug/m³	0.40	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.64	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.56	0.949	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 00:27	LLJ
108-88-3	Toluene	13		ug/m³	0.36	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.38	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.43	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.13	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.7		ug/m³	0.53	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.33	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.42	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.061	0.949	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 00:27	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	108 %			70-130					

## Sample Information

**Client Sample ID:** South First Floor

**York Sample ID:** 20D0184-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0184	20-46053 Bethpage HS	Indoor Ambient Air	April 6, 2020 12:00 am	04/07/2020

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



## Sample Information

<b>Client Sample ID:</b> South First Floor	<b>York Sample ID:</b> 20D0184-03			
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Indoor Ambient Air	<u>Collection Date/Time</u> April 6, 2020 12:00 am	<u>Date Received</u> 04/07/2020

### 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	0.67	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.53	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.67	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.75	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.53	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.39	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.097	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.72	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>19</b>		ug/m³	0.48	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.75	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.59	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.39	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.45	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.68	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>6.6</b>		ug/m³	0.48	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.65	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.59	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.45	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.59	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.70	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
78-93-3	<b>2-Butanone</b>	<b>2.1</b>		ug/m³	0.29	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.80	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ



## Sample Information

Client Sample ID: South First Floor

York Sample ID: 20D0184-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20D0184	20-46053 Bethpage HS	Indoor Ambient Air	April 6, 2020 12:00 am	04/07/2020

### 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
107-05-1	3-Chloropropene	ND		ug/m³	1.5	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.40	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
67-64-1	<b>Acetone</b>	<b>7.8</b>		ug/m³	0.46	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.21	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
71-43-2	<b>Benzene</b>	<b>0.53</b>		ug/m³	0.31	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.50	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.65	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-25-2	Bromoform	ND		ug/m³	1.0	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.38	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.30	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.49</b>		ug/m³	0.15	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.45	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.26	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
67-66-3	Chloroform	ND		ug/m³	0.48	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.20	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.097	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.44	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.34	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.83	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.1</b>		ug/m³	0.48	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.70	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>2.7</b>		ug/m³	0.42	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ



## Sample Information

**Client Sample ID:** South First Floor

**York Sample ID:** 20D0184-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0184	20-46053 Bethpage HS	Indoor Ambient Air	April 6, 2020 12:00 am	04/07/2020

### 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
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.0	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
67-63-0	<b>Isopropanol</b>	<b>1.7</b>		ug/m³	0.48	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	0.40	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.35	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-09-2	Methylene chloride	ND		ug/m³	0.68	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
142-82-5	<b>n-Heptane</b>	<b>0.68</b>		ug/m³	0.40	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
110-54-3	<b>n-Hexane</b>	<b>1.1</b>		ug/m³	0.34	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
95-47-6	<b>o-Xylene</b>	<b>6.1</b>		ug/m³	0.42	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>13</b>		ug/m³	0.85	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
622-96-8	* <b>p-Ethyltoluene</b>	<b>18</b>		ug/m³	0.48	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
115-07-1	* Propylene	ND		ug/m³	0.17	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
100-42-5	Styrene	ND		ug/m³	0.41	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.66	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.57	0.974	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 01:26	LLJ
108-88-3	<b>Toluene</b>	<b>2.3</b>		ug/m³	0.37	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.39	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.44	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.13	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.7</b>		ug/m³	0.55	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.34	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.43	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.062	0.974	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 01:26	LLJ



## Sample Information

Client Sample ID: **South First Floor**

York Sample ID: **20D0184-03**

York Project (SDG) No.

20D0184

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

April 6, 2020 12:00 am

Date Received

04/07/2020

### 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
	<b>Surrogate Recoveries</b>	<b>Result</b>		<b>Acceptance Range</b>						
460-00-4	<i>Surrogate: SURR: p-Bromofluorobenzene</i>	109 %			70-130					

## Sample Information

Client Sample ID: **North Subsurface**

York Sample ID: **20D0184-04**

York Project (SDG) No.

20D0184

Client Project ID

20-46053 Bethpage HS

Matrix

Soil Vapor

Collection Date/Time

April 6, 2020 12:00 am

Date Received

04/07/2020

### 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	2.0	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.6	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	2.0	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	2.2	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.6	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	1.2	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.29	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	2.1	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>5.5</b>		ug/m³	1.4	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	2.2	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.7	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	1.2	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	1.3	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ



## Sample Information

Client Sample ID: North Subsurface

York Sample ID:

20D0184-04

York Project (SDG) No.

20D0184

Client Project ID

20-46053 Bethpage HS

Matrix

Soil Vapor

Collection Date/Time

April 6, 2020 12:00 am

Date Received

04/07/2020

### 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
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	2.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>2.0</b>		ug/m³	1.4	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	1.9	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.7	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	1.3	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.7	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	2.1	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
78-93-3	<b>2-Butanone</b>	<b>10</b>		ug/m³	0.85	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	2.4	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	4.5	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>3.8</b>		ug/m³	1.2	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
67-64-1	<b>Acetone</b>	<b>330</b>		ug/m³	6.9	14.47	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 12:37	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.63	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
71-43-2	<b>Benzene</b>	<b>3.1</b>		ug/m³	0.92	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	1.5	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	1.9	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-25-2	Bromoform	ND		ug/m³	3.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
74-83-9	Bromomethane	ND		ug/m³	1.1	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-15-0	<b>Carbon disulfide</b>	<b>2.3</b>		ug/m³	0.90	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.55</b>		ug/m³	0.46	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	1.3	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.76	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ



## Sample Information

Client Sample ID: North Subsurface

York Sample ID:

20D0184-04

York Project (SDG) No.

20D0184

Client Project ID

20-46053 Bethpage HS

Matrix

Soil Vapor

Collection Date/Time

April 6, 2020 12:00 am

Date Received

04/07/2020

### 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
67-66-3	Chloroform	ND		ug/m³	1.4	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
74-87-3	<b>Chloromethane</b>	<b>0.90</b>		ug/m³	0.60	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.29	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	1.3	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
110-82-7	<b>Cyclohexane</b>	<b>1.3</b>		ug/m³	1.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	2.5	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.6</b>		ug/m³	1.4	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
141-78-6	* Ethyl acetate	2.4		ug/m³	2.1	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>3.5</b>		ug/m³	1.3	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	3.1	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
67-63-0	<b>Isopropanol</b>	<b>14</b>		ug/m³	1.4	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	1.2	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	1.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
75-09-2	Methylene chloride	ND		ug/m³	2.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
142-82-5	<b>n-Heptane</b>	<b>14</b>		ug/m³	1.2	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
110-54-3	<b>n-Hexane</b>	<b>18</b>		ug/m³	1.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
95-47-6	<b>o-Xylene</b>	<b>3.1</b>		ug/m³	1.3	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>8.8</b>		ug/m³	2.5	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
622-96-8	* p-Ethyltoluene	6.1		ug/m³	1.4	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
115-07-1	* Propylene	ND		ug/m³	0.50	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ
100-42-5	Styrene	ND		ug/m³	1.2	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	2.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ



## Sample Information

<u>Client Sample ID:</u> North Subsurface	<u>York Sample ID:</u>	20D0184-04
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> April 6, 2020 12:00 am <u>Date Received</u> 04/07/2020

### 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		
109-99-9	* Tetrahydrofuran	4.9		ug/m³	1.7	2.894	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 15:26	LLJ		
108-88-3	Toluene	500		ug/m³	5.5	14.47	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 12:37	LLJ		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	1.1	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	1.3	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ		
79-01-6	Trichloroethylene	ND		ug/m³	0.39	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ		
75-69-4	Trichlorofluoromethane (Freon 11)	1.6		ug/m³	1.6	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ		
108-05-4	Vinyl acetate	ND		ug/m³	1.0	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ		
593-60-2	Vinyl bromide	ND		ug/m³	1.3	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	LLJ		
75-01-4	Vinyl Chloride	ND		ug/m³	0.18	2.894	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 15:26	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		%	0.72	1.45	GC/TCD Certifications:	04/14/2020 14:33	04/14/2020 15:57	KT

## Sample Information

<u>Client Sample ID:</u> North Crawl Space	<u>York Sample ID:</u>	20D0184-05
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 6, 2020 12:00 am <u>Date Received</u> 04/07/2020

### 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
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## Sample Information

<b>Client Sample ID:</b> North Crawl Space	<b>York Sample ID:</b> 20D0184-05			
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Indoor Ambient Air	<u>Collection Date/Time</u> April 6, 2020 12:00 am	<u>Date Received</u> 04/07/2020

### 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	0.62	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.49	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.62	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.69	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.49	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.37	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.089	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.67	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>12</b>		ug/m³	0.44	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.69	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.54	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.37	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.42	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
76-14-2	1,2-Dichlortetrafluoroethane	ND		ug/m³	0.63	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>4.3</b>		ug/m³	0.44	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.60	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.54	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.42	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.54	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.65	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
78-93-3	<b>2-Butanone</b>	<b>3.1</b>		ug/m³	0.27	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ



## Sample Information

<b>Client Sample ID:</b> North Crawl Space	<b>York Sample ID:</b> 20D0184-05
York Project (SDG) No. 20D0184	Client Project ID 20-46053 Bethpage HS

### 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
591-78-6	* 2-Hexanone	ND		ug/m³	0.74	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.37	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
67-64-1	<b>Acetone</b>	<b>23</b>		ug/m³	0.43	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.20	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
71-43-2	<b>Benzene</b>	<b>0.58</b>		ug/m³	0.29	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.47	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.60	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-25-2	Bromoform	ND		ug/m³	0.93	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.35	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.28	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.57</b>		ug/m³	0.14	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.42	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.24	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
67-66-3	Chloroform	ND		ug/m³	0.44	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.3</b>		ug/m³	0.19	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.089	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.41	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
110-82-7	<b>Cyclohexane</b>	<b>0.56</b>		ug/m³	0.31	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.77	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.9</b>		ug/m³	0.45	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
141-78-6	* <b>Ethyl acetate</b>	<b>0.98</b>		ug/m³	0.65	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ



## Sample Information

**Client Sample ID:** North Crawl Space

**York Sample ID:** 20D0184-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0184	20-46053 Bethpage HS	Indoor Ambient Air	April 6, 2020 12:00 am	04/07/2020

### 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	2.4		ug/m³	0.39	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.96	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
67-63-0	Isopropanol	34		ug/m³	0.44	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
80-62-6	Methyl Methacrylate	6.8		ug/m³	0.37	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.33	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-09-2	Methylene chloride	1.9		ug/m³	0.63	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
142-82-5	n-Heptane	1.2		ug/m³	0.37	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
110-54-3	n-Hexane	5.4		ug/m³	0.32	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
95-47-6	o-Xylene	5.0		ug/m³	0.39	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
179601-23-1	p- & m- Xylenes	11		ug/m³	0.78	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
622-96-8	* p-Ethyltoluene	13		ug/m³	0.44	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
115-07-1	* Propylene	ND		ug/m³	0.16	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
100-42-5	Styrene	0.58		ug/m³	0.38	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
127-18-4	Tetrachloroethylene	34		ug/m³	0.61	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
109-99-9	* Tetrahydrofuran	0.53		ug/m³	0.53	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
108-88-3	Toluene	12		ug/m³	0.34	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.36	0.902	EPA TO-15 Certifications:	04/07/2020 12:00	04/08/2020 13:37	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.41	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
79-01-6	Trichloroethylene	0.73		ug/m³	0.12	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	9.5		ug/m³	0.51	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.32	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.39	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.058	0.902	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/07/2020 12:00	04/08/2020 13:37	LLJ



## Sample Information

<u>Client Sample ID:</u> North Crawl Space		<u>York Sample ID:</u> <b>20D0184-05</b>
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 6, 2020 12:00 am <u>Date Received</u> 04/07/2020

### 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
<b>Surrogate Recoveries</b>										
Surrogate: SURR: <i>p-Bromofluorobenzene</i>										
460-00-4		113 %			70-130					

## Sample Information

Client Sample ID: Admin Wing Basement

York Sample ID: **20D0184-06**

<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Indoor Ambient Air	<u>Collection Date/Time</u> April 6, 2020 12:00 am	<u>Date Received</u> 04/07/2020
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### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes: TO-VAC

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	0.50	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.40	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.50	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
76-13-1	<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	<b>0.56</b>		ug/m³	0.56	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.40	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.30	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.073	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.55	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>0.43</b>		ug/m³	0.36	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.56	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.44	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.30	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.34	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ



## Sample Information

<b>Client Sample ID:</b> Admin Wing Basement	<b>York Sample ID:</b> 20D0184-06
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS
	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 6, 2020 12:00 am <u>Date Received</u> 04/07/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes: TO-VAC

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
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.51	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.36	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.49	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.44	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.34	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.44	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.53	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
78-93-3	<b>2-Butanone</b>	<b>1.1</b>		ug/m³	0.22	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.60	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.2	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.30	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
67-64-1	<b>Acetone</b>	<b>10</b>		ug/m³	0.35	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.16	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
71-43-2	<b>Benzene</b>	<b>0.45</b>		ug/m³	0.23	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.38	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.49	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-25-2	Bromoform	ND		ug/m³	0.76	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.29	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.23	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.51</b>		ug/m³	0.12	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.34	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.19	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ



## Sample Information

<b>Client Sample ID:</b> Admin Wing Basement	<b>York Sample ID:</b> 20D0184-06
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS
	<u>Matrix</u> Indoor Ambient Air <u>Collection Date/Time</u> April 6, 2020 12:00 am <u>Date Received</u> 04/07/2020

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes: TO-VAC

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
67-66-3	Chloroform	ND		ug/m³	0.36	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.15	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.073	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.33	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.25	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.63	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.1</b>		ug/m³	0.36	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.53	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>1.9</b>		ug/m³	0.32	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.78	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
67-63-0	<b>Isopropanol</b>	<b>6.8</b>		ug/m³	0.36	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	0.30	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.26	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
75-09-2	<b>Methylene chloride</b>	<b>0.97</b>		ug/m³	0.51	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
142-82-5	<b>n-Heptane</b>	<b>2.1</b>		ug/m³	0.30	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
110-54-3	<b>n-Hexane</b>	<b>0.31</b>		ug/m³	0.26	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
95-47-6	<b>o-Xylene</b>	<b>1.3</b>		ug/m³	0.32	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>7.5</b>		ug/m³	0.64	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.36	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
115-07-1	* Propylene	ND		ug/m³	0.13	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ
100-42-5	<b>Styrene</b>	<b>0.97</b>		ug/m³	0.31	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ
127-18-4	<b>Tetrachloroethylene</b>	<b>4.1</b>		ug/m³	0.50	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ



## Sample Information

**Client Sample ID:** Admin Wing Basement

**York Sample ID:** 20D0184-06

York Project (SDG) No.

20D0184

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

April 6, 2020 12:00 am

Date Received

04/07/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes: TO-VAC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.43	0.735	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 22:31	LLJ		
108-88-3	<b>Toluene</b>	<b>2.2</b>		ug/m³	0.28	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.29	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.33	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
79-01-6	<b>Trichloroethylene</b>	<b>0.12</b>		ug/m³	0.099	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.8</b>		ug/m³	0.41	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
108-05-4	Vinyl acetate	ND		ug/m³	0.26	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
593-60-2	Vinyl bromide	ND		ug/m³	0.32	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
75-01-4	Vinyl Chloride	ND		ug/m³	0.047	0.735	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 22:31	LLJ		
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>									
460-00-4	Surrogate: SURR: <i>p</i> -Bromofluorobenzene	99.9 %			70-130							

## Sample Information

**Client Sample ID:** Ambient

**York Sample ID:** 20D0184-07

York Project (SDG) No.

20D0184

Client Project ID

20-46053 Bethpage HS

Matrix

Outdoor Ambient Air

Collection Date/Time

April 6, 2020 12:00 am

Date Received

04/07/2020

### 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
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.56	0.82	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 20:29	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.45	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.56	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
76-13-1	<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	<b>0.63</b>		ug/m³	0.63	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.45	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ



## Sample Information

<u>Client Sample ID:</u> Ambient		<u>York Sample ID:</u> <b>20D0184-07</b>
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Outdoor Ambient Air <u>Collection Date/Time</u> April 6, 2020 12:00 am <u>Date Received</u> 04/07/2020

### 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	0.33	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.081	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.61	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>1.7</b>		ug/m³	0.40	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.63	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.49	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.33	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.38	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
76-14-2	1,2-Dichlortetrafluoroethane	ND		ug/m³	0.57	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.52</b>		ug/m³	0.40	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.54	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.49	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.38	0.82	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 20:29	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.49	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.59	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.85</b>		ug/m³	0.24	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.67	0.82	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 20:29	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.34	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
67-64-1	<b>Acetone</b>	<b>5.9</b>		ug/m³	0.39	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.18	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
71-43-2	<b>Benzene</b>	<b>1.3</b>		ug/m³	0.26	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ



## Sample Information

Client Sample ID: Ambient

York Sample ID: 20D0184-07

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0184	20-46053 Bethpage HS	Outdoor Ambient Air	April 6, 2020 12:00 am	04/07/2020

### 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
100-44-7	Benzyl chloride	ND		ug/m³	0.42	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.55	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-25-2	Bromoform	ND		ug/m³	0.85	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.32	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.26	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.57</b>		ug/m³	0.13	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.38	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.22	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
67-66-3	Chloroform	ND		ug/m³	0.40	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.3</b>		ug/m³	0.17	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.081	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.37	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
110-82-7	<b>Cyclohexane</b>	<b>1.1</b>		ug/m³	0.28	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.70	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.0</b>		ug/m³	0.41	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.59	0.82	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 20:29	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>1.1</b>		ug/m³	0.36	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.87	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
67-63-0	<b>Isopropanol</b>	<b>4.4</b>		ug/m³	0.40	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>3.4</b>		ug/m³	0.34	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.30	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-09-2	Methylene chloride	ND		ug/m³	0.57	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ



## Sample Information

<b>Client Sample ID:</b> Ambient		<b>York Sample ID:</b> 20D0184-07
<u>York Project (SDG) No.</u> 20D0184	<u>Client Project ID</u> 20-46053 Bethpage HS	<u>Matrix</u> Outdoor Ambient Air <u>Collection Date/Time</u> April 6, 2020 12:00 am <u>Date Received</u> 04/07/2020

### 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	<b>n-Heptane</b>	<b>1.8</b>		ug/m³	0.34	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
110-54-3	<b>n-Hexane</b>	<b>3.3</b>		ug/m³	0.29	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
95-47-6	<b>o-Xylene</b>	<b>1.4</b>		ug/m³	0.36	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>3.9</b>		ug/m³	0.71	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
622-96-8	<b>* p-Ethyltoluene</b>	<b>1.5</b>		ug/m³	0.40	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
115-07-1	* Propylene	ND		ug/m³	0.14	0.82	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 20:29	LLJ
100-42-5	<b>Styrene</b>	<b>0.66</b>		ug/m³	0.35	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.56	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.48	0.82	EPA TO-15 Certifications:	04/08/2020 12:00	04/08/2020 20:29	LLJ
108-88-3	<b>Toluene</b>	<b>5.6</b>		ug/m³	0.31	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.33	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.37	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.7</b>		ug/m³	0.46	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.29	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.36	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.052	0.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/08/2020 12:00	04/08/2020 20:29	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURL: <i>p</i> -Bromofluorobenzene	104 %			70-130					





## Sample and Data Qualifiers Relating to This Work Order

- TO-VAC      The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
- QR-02      The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.

### 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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York Analytical Laboratories, Inc.  
120 Research Drive 132-02 89th Ave Queens,  
Stratford, CT 06615 NY 11418

**YORK**  
ANALYTICAL LABORATORIES INC.

clientservices@yorklab.com  
www.yorklab.com

# Field Chain-of-Custody Record - AIR

YORK Project No.

20D0184

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	Turn-Around Time	
Company: <b>JCBRENNICK &amp; ASSOCIATES</b>	Address: <b>1115 EXPRESS DR. N.</b> <b>Hauppauge, NY 11788</b>	Company: <b>JCB</b>	Address:	20-46053	RUSH - Next Day	
Phone: <b>631-584-5492</b>	Contact: <b>SHILLON</b>	Phone.: <b></b>	Contact: <b></b>		RUSH - Two Day	
E-mail: <b>Shillone@jcbrennick.com</b>	E-mail: <b></b>	E-mail: <b></b>	E-mail: <b></b>	YOUR Project Name <b>BETHPAGE HS</b>	RUSH - Three Day	
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.		Air Matrix Codes	Samples From	Report / EDD Type (circle selections)	YORK Reg. Comp.	
<b>STEVEN Muller</b>		AI - Indoor Ambient Air	New York	<input checked="" type="checkbox"/> Summary Report	Compared to the following Regulation(s); (please fill in)	
<b>Shillone</b>		AO - Outdoor Amb. Air	New Jersey	<input type="checkbox"/> QA Report	CT RCP DQA/DUE	EQULS (Standard)
		AE - Vapor Extraction Well/ Process Gas/Effluent	Connecticut	<input type="checkbox"/> NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQULS
		AS - Soil Vapor/Sub-Slab	Pennsylvania	<input type="checkbox"/> NY ASP B Package	NJDKQP	NJDEP SRP HazSite
			Other	<input type="checkbox"/> Other:		

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 _____
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
SOUTH SUBSPACE	4/6/20	AS	>30	5	28310	6867	TO-15 + He
SOUTH CRAWL SPACE	4/6/20	AI	29	5	24111	5609	TO-15
SOUTH FIRST FLOOR	4/6/20	AI	>30	6	17346	7077	TO-15
NORTH SUBSPACE	4/6/20	AS	27	6	16975	7269	TO-15 + He
NORTH CRAWL SPACE	4/6/20	AI	29	7	24128	Y-28	TO-15
ADMIN WING BASEMENT	4/6/20	AI	>30	3	16956	7083	TO-15
AMBIENT	4/6/20	AO	>30	5	Y-65	7088	TO-15

Comments:	Detection Limits Required		Sampling Media
	≤ 1 ug/m <sup>3</sup>	NYSDEC V1 Limits	6 Liter Canister
	Routine Survey		Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
<b>Shillone / JCB</b>	4/7/20 1125 AM	<b>KBally, LLC</b>	4/7/20 1125 AM	<b>M. Bally</b>	4/7/20 1726
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
<b>J. Yale / YORK</b>	4-7-20 / 1726	<b>J. Yale / YORK</b>	4-7-20 / 1917	<b>Lab Secure</b>	Date/Time
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
				<b>2020-4/8/20 @ 0930</b>	



# Technical Report

prepared for:

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

Report Date: 05/12/2020

**Client Project ID: 20-46053 Bethpage HS**  
York Project (SDG) No.: 20E0130

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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

STRATFORD, CT 06615  
(203) 325-1371



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

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

Report Date: 05/12/2020  
Client Project ID: 20-46053 Bethpage HS  
York Project (SDG) No.: 20E0130

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

---

## 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 May 06, 2020 with a temperature of C. The project was identified as your project: **20-46053 Bethpage HS**.

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>
20E0130-01	NORTH SUB SURFACE	Soil Vapor	05/05/2020	05/06/2020
20E0130-02	NORTH CRAWL SPACE	Indoor Ambient Air	05/05/2020	05/06/2020
20E0130-03	ADMIN BASEMENT	Indoor Ambient Air	05/05/2020	05/06/2020
20E0130-04	FIRST FLOOR HALLWAY	Indoor Ambient Air	05/05/2020	05/06/2020
20E0130-05	AMBIENT	Outdoor Ambient Ai	05/05/2020	05/06/2020

## **General Notes for York Project (SDG) No.: 20E0130**

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:** 05/12/2020

Benjamin Gulizia  
Laboratory Director





## Sample Information

Client Sample ID: NORTH SUB SURFACE

York Sample ID: 20E0130-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0130	20-46053 Bethpage HS	Soil Vapor	May 5, 2020 12:00 am	05/06/2020

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

<u>CAS No.</u>	<u>Parameter</u>	<u>Result</u>	<u>Flag</u>	<u>Units</u>	<u>Reported to LOQ</u>	<u>Dilution</u>	<u>Reference Method</u>	<u>Date/Time Prepared</u>	<u>Date/Time Analyzed</u>	<u>Analyst</u>
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.2	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.92	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.92	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.68	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.17	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.83	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.0	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.68	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.78	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.2	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.83	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.0	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.78	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.0	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.55</b>		ug/m³	0.50	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
NELAC-NY12058,NJDEP-Queens										



## Sample Information

**Client Sample ID:** NORTH SUB SURFACE

**York Sample ID:** 20E0130-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0130	20-46053 Bethpage HS	Soil Vapor	May 5, 2020 12:00 am	05/06/2020

### 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	ND		ug/m³	1.4	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	2.6	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.69	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
67-64-1	<b>Acetone</b>	<b>6.5</b>		ug/m³	0.80	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.37	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
71-43-2	Benzene	ND		ug/m³	0.54	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.87	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-25-2	Bromoform	ND		ug/m³	1.7	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.65	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.52	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.53</b>		ug/m³	0.26	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.78	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.44	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
67-66-3	Chloroform	ND		ug/m³	0.82	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.35	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.17	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.76	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.58	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.2</b>		ug/m³	0.83	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ



## Sample Information

**Client Sample ID:** NORTH SUB SURFACE

**York Sample ID:** 20E0130-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0130	20-46053 Bethpage HS	Soil Vapor	May 5, 2020 12:00 am	05/06/2020

### 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	0.73	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.8	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
67-63-0	<b>Isopropanol</b>	<b>6.2</b>		ug/m³	0.83	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>1.7</b>		ug/m³	0.69	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.61	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-09-2	Methylene chloride	ND		ug/m³	1.2	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
142-82-5	n-Heptane	ND		ug/m³	0.69	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.59	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.73	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.5	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.83	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
115-07-1	* Propylene	ND		ug/m³	0.29	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
100-42-5	Styrene	ND		ug/m³	0.72	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	1.1	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.99	1.684	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 03:25	LLJ
108-88-3	<b>Toluene</b>	<b>1.4</b>		ug/m³	0.63	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.67	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.76	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.23	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.7</b>		ug/m³	0.95	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.59	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.74	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ



## Sample Information

**Client Sample ID:** NORTH SUB SURFACE

**York Sample ID:** 20E0130-01

York Project (SDG) No.  
20E0130

Client Project ID  
20-46053 Bethpage HS

Matrix  
Soil Vapor

Collection Date/Time  
May 5, 2020 12:00 am

Date Received  
05/06/2020

### 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	0.22	1.684	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 03:25	LLJ
<b>Surrogate Recoveries</b>										
460-00-4 <i>Surrogate: SURR: p-Bromofluorobenzene</i>										
<b>Acceptance Range</b>										
108 %      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		%	0.84	1.68	GC/TCD Certifications:	05/12/2020 11:38	05/12/2020 12:47	KT

## Sample Information

**Client Sample ID:** NORTH CRAWL SPACE

**York Sample ID:** 20E0130-02

York Project (SDG) No.  
20E0130

Client Project ID  
20-46053 Bethpage HS

Matrix  
Indoor Ambient Air

Collection Date/Time  
May 5, 2020 12:00 am

Date Received  
05/06/2020

### 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	0.856	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 01:34	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.47	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.59	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.66	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.47	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.35	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.085	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.64	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ



## Sample Information

Client Sample ID: NORTH CRAWL SPACE

York Sample ID: 20E0130-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0130	20-46053 Bethpage HS	Indoor Ambient Air	May 5, 2020 12:00 am	05/06/2020

### 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	ND		ug/m³	0.42	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.66	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.51	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.35	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.40	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.60	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.42	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.57	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.51	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.40	0.856	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 01:34	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.51	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.62	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.50</b>		ug/m³	0.25	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.70	0.856	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 01:34	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.35	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
67-64-1	<b>Acetone</b>	<b>6.5</b>		ug/m³	0.41	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.19	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
71-43-2	Benzene	ND		ug/m³	0.27	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.44	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.57	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-25-2	Bromoform	ND		ug/m³	0.88	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ



## Sample Information

Client Sample ID: NORTH CRAWL SPACE

York Sample ID:

20E0130-02

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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	0.33	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.27	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.54</b>		ug/m³	0.13	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.39	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.23	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
67-66-3	Chloroform	ND		ug/m³	0.42	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m³	0.18	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.085	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.39	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.29	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.73	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.9</b>		ug/m³	0.42	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.62	0.856	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 01:34	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.37	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.91	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
67-63-0	<b>Isopropanol</b>	<b>3.3</b>		ug/m³	0.42	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>0.88</b>		ug/m³	0.35	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.31	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-09-2	<b>Methylene chloride</b>	<b>1.7</b>		ug/m³	0.59	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
142-82-5	n-Heptane	ND		ug/m³	0.35	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.30	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.37	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ



## Sample Information

**Client Sample ID:** NORTH CRAWL SPACE

**York Sample ID:** 20E0130-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0130	20-46053 Bethpage HS	Indoor Ambient Air	May 5, 2020 12:00 am	05/06/2020

### 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
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.74	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.42	0.856	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 01:34	LLJ
115-07-1	* Propylene	ND		ug/m³	0.15	0.856	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 01:34	LLJ
100-42-5	Styrene	ND		ug/m³	0.36	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.58	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.50	0.856	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 01:34	LLJ
108-88-3	<b>Toluene</b>	<b>1.2</b>		ug/m³	0.32	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.34	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.39	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.6</b>		ug/m³	0.48	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.30	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.37	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.856	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 01:34	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURN: <i>p</i> -Bromofluorobenzene	107 %			70-130					

## Sample Information

**Client Sample ID:** ADMIN BASEMENT

**York Sample ID:** 20E0130-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0130	20-46053 Bethpage HS	Indoor Ambient Air	May 5, 2020 12:00 am	05/06/2020



## Sample Information

**Client Sample ID:** ADMIN BASEMENT

**York Sample ID:** 20E0130-03

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0130	20-46053 Bethpage HS	Indoor Ambient Air	May 5, 2020 12:00 am	05/06/2020

### 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	0.60	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.48	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.60	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.68	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.48	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.36	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.087	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.65	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.43	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.68	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.53	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.36	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.41	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.62	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.43	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.58	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.53	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.41	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.53	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.63	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.49</b>		ug/m³	0.26	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.72	0.881	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 00:36	LLJ



## Sample Information

Client Sample ID: ADMIN BASEMENT

York Sample ID: 20E0130-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
20E0130	20-46053 Bethpage HS	Indoor Ambient Air	May 5, 2020 12:00 am	05/06/2020

### 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
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.36	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-64-1	<b>Acetone</b>	<b>8.2</b>		ug/m³	0.42	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.19	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
71-43-2	Benzene	ND		ug/m³	0.28	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.46	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.59	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	0.91	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.34	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.27	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
56-23-5	<b>Carbon tetrachloride</b>	<b>0.55</b>		ug/m³	0.14	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.41	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.23	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.43	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
74-87-3	<b>Chloromethane</b>	<b>1.3</b>		ug/m³	0.18	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.087	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.40	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-82-7	Cyclohexane	ND		ug/m³	0.30	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.75	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.9</b>		ug/m³	0.44	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	ND		ug/m³	0.63	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:					
100-41-4	Ethyl Benzene	ND		ug/m³	0.38	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			



## Sample Information

Client Sample ID: ADMIN BASEMENT

York Sample ID: 20E0130-03

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.94	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
67-63-0	<b>Isopropanol</b>	<b>9.9</b>		ug/m³	0.43	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
80-62-6	<b>Methyl Methacrylate</b>	<b>2.4</b>		ug/m³	0.36	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.32	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-09-2	<b>Methylene chloride</b>	<b>1.7</b>		ug/m³	0.61	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
142-82-5	<b>n-Heptane</b>	<b>0.69</b>		ug/m³	0.36	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-54-3	n-Hexane	ND		ug/m³	0.31	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	0.38	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>0.80</b>		ug/m³	0.77	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.43	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:					
115-07-1	* Propylene	ND		ug/m³	0.15	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:					
100-42-5	Styrene	ND		ug/m³	0.38	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
127-18-4	Tetrachloroethylene	ND		ug/m³	0.60	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.52	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:					
108-88-3	<b>Toluene</b>	<b>2.2</b>		ug/m³	0.33	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.35	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.40	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.8</b>		ug/m³	0.50	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.31	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.39	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.881	EPA TO-15	05/06/2020 09:00	05/07/2020 00:36	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			



## Sample Information

**Client Sample ID:** ADMIN BASEMENT

**York Sample ID:** **20E0130-03**

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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
	<b>Surrogate Recoveries</b>	<b>Result</b>		<b>Acceptance Range</b>						
460-00-4	Surrogate: SURR: <i>p-Bromofluorobenzene</i>	107 %			70-130					

## Sample Information

**Client Sample ID:** FIRST FLOOR HALLWAY

**York Sample ID:** **20E0130-04**

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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	0.56	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.45	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.56	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
76-13-1	<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	<b>0.69</b>		ug/m³	0.63	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.45	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.33	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.081	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.61	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.40	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.63	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.49	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.33	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.38	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ



## Sample Information

Client Sample ID: FIRST FLOOR HALLWAY

York Sample ID:

20E0130-04

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.57	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.55	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.49	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.38	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.49	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.59	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.58</b>		ug/m³	0.24	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.67	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.34	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
67-64-1	<b>Acetone</b>	<b>7.3</b>		ug/m³	0.39	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.18	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
71-43-2	<b>Benzene</b>	<b>0.29</b>		ug/m³	0.26	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.43	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.55	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-25-2	Bromoform	ND		ug/m³	0.85	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.32	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.26	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.62</b>		ug/m³	0.13	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.38	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.22	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ



## Sample Information

Client Sample ID: FIRST FLOOR HALLWAY

York Sample ID: 20E0130-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0130	20-46053 Bethpage HS	Indoor Ambient Air	May 5, 2020 12:00 am	05/06/2020

### 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
67-66-3	Chloroform	ND		ug/m³	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.2</b>		ug/m³	0.17	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.081	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.37	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.28	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.70	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.1</b>		ug/m³	0.41	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.59	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.36	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.88	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
67-63-0	<b>Isopropanol</b>	<b>11</b>		ug/m³	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>3.6</b>		ug/m³	0.34	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.30	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-09-2	<b>Methylene chloride</b>	<b>1.5</b>		ug/m³	0.57	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
142-82-5	<b>n-Heptane</b>	<b>0.54</b>		ug/m³	0.34	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
110-54-3	<b>n-Hexane</b>	<b>0.38</b>		ug/m³	0.29	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.36	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>0.75</b>		ug/m³	0.71	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.40	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
115-07-1	* Propylene	ND		ug/m³	0.14	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
100-42-5	Styrene	ND		ug/m³	0.35	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.56	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ



## Sample Information

Client Sample ID: FIRST FLOOR HALLWAY

York Sample ID: 20E0130-04

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Indoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.48	0.822	EPA TO-15 Certifications:	05/06/2020 09:00	05/06/2020 23:37	LLJ
108-88-3	Toluene	1.3		ug/m³	0.31	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.33	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.37	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	2.0		ug/m³	0.46	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.29	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.36	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/06/2020 23:37	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURR: <i>p</i> -Bromofluorobenzene	109 %			70-130					

## Sample Information

Client Sample ID: AMBIENT

York Sample ID: 20E0130-05

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Outdoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.58	0.845	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 02:33	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.46	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.58	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.65	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ



## Sample Information

**Client Sample ID:** AMBIENT

**York Sample ID:** 20E0130-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0130	20-46053 Bethpage HS	Outdoor Ambient Air	May 5, 2020 12:00 am	05/06/2020

### 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
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.46	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.34	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.084	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.63	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.42	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.65	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.51	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.34	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.39	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
76-14-2	1,2-Dichlortetrafluoroethane	ND		ug/m³	0.59	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.42	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.56	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.51	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.39	0.845	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 02:33	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.51	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.61	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.55</b>		ug/m³	0.25	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.69	0.845	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 02:33	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.3	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.35	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
67-64-1	<b>Acetone</b>	<b>5.5</b>		ug/m³	0.40	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.18	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ



## Sample Information

Client Sample ID: AMBIENT

York Sample ID: 20E0130-05

York Project (SDG) No.

20E0130

Client Project ID

20-46053 Bethpage HS

Matrix

Outdoor Ambient Air

Collection Date/Time

May 5, 2020 12:00 am

Date Received

05/06/2020

### 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
71-43-2	Benzene	ND		ug/m³	0.27	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.44	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.57	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-25-2	Bromoform	ND		ug/m³	0.87	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.33	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.26	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.53</b>		ug/m³	0.13	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.39	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.22	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
67-66-3	Chloroform	ND		ug/m³	0.41	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.2</b>		ug/m³	0.17	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.084	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.38	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.29	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.72	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.8</b>		ug/m³	0.42	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.61	0.845	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 02:33	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.37	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.90	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
67-63-0	<b>Isopropanol</b>	<b>11</b>		ug/m³	0.42	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>3.5</b>		ug/m³	0.35	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.30	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ



## Sample Information

**Client Sample ID:** AMBIENT

**York Sample ID:** 20E0130-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20E0130	20-46053 Bethpage HS	Outdoor Ambient Air	May 5, 2020 12:00 am	05/06/2020

### 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
75-09-2	Methylene chloride	1.4		ug/m³	0.59	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
142-82-5	n-Heptane	ND		ug/m³	0.35	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.30	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.37	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.73	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.42	0.845	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 02:33	LLJ
115-07-1	* Propylene	ND		ug/m³	0.15	0.845	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 02:33	LLJ
100-42-5	Styrene	ND		ug/m³	0.36	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	0.57	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.50	0.845	EPA TO-15 Certifications:	05/06/2020 09:00	05/07/2020 02:33	LLJ
108-88-3	Toluene	0.76		ug/m³	0.32	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.34	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.38	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.6		ug/m³	0.47	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.30	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.37	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.845	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/06/2020 09:00	05/07/2020 02:33	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURL: <i>p</i> -Bromofluorobenzene	113 %			70-130					



## Sample and Data Qualifiers Relating to This Work Order

### 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.



**York Analytical Laboratories, Inc.**  
120 Research Drive      132-02 89th Ave Queens  
Stratford, CT 06615      NY 11418

# **YORK**

[clientservices@yorklab.com](mailto:clientservices@yorklab.com)  
[www.yorklab.com](http://www.yorklab.com)

## ***Field Chain-of-Custody Record - AIR***

YORK Project No

ZoEda3D

**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		Turn-Around Time
Company: <b>JCBRODICK'S ASPC INC</b>	Address: <b>775 EXPRESSWAY DR. N HAUPPAUGE, NY 11788</b>	Company: <b>JCB</b>	Address: <b></b>	Company: <b>JCB</b>	Address: <b></b>	<b>20-46053</b>	RUSH - Next Day
Phone: <b>631-584-5492</b>	Phone: <b></b>	Phone: <b></b>	Phone: <b></b>		YOUR Project Name		RUSH - Two Day
Contact: <b>S Mullen</b>	Contact: <b></b>	Contact: <b></b>	Contact: <b></b>		<b>BETHPAGE HS</b>		RUSH - Three Day
Email: <b>S.Mullen@JCBRODICK.com</b>	E-mail: <b></b>	E-mail: <b></b>	E-mail: <b></b>		YOUR PO#:		RUSH - Four Day
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.		Air Matrix Codes	Samples From	Report / EDD Type (circle selections)			YORK Reg. Comp.
<p><i>Steven Mullen</i></p> <p>Samples Collected by: (print your name above and sign below) <i>Steven Mullen</i></p>		AI - Indoor Ambient Air	New York	<input checked="" type="checkbox"/> Summary Report	CT RCP	Standard Excel EDD	Compared to the following Regulation(s): (please fill in)
		AO - Outdoor Amb. Air	New Jersey	<input type="checkbox"/> QA Report	CT RCP DQA/DUE	EQULS (Standard)	
		AE - Vapor Extraction Well/ Process Gas/Effluent	Connecticut	<input type="checkbox"/> NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQULS	
		AS - Soil Vapor/Sub-Slab	Pennsylvania	<input type="checkbox"/> NY ASP B Package	NJDKQP	NJDEP SRP HazSite	
			Other	<input type="checkbox"/> Other:			
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 _____	
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
North Subsurface	5/5/20	AS	29	6	18312	5610	TO-15 + He
North Crawl Space	5/5/20	AI	>30	6	18297	Y-34	TO-15
Admin Basement	5/5/20	AI	>30	6.5	23393	Y-15	TO-15
First Floor Hallway	5/5/20	AI	30	4.5	24112	7084	TO-15
Ambient	5/5/20	AO	26	4	22082	5604	TO-15
Comments:					Detection Limits Required		Sampling Media
				<input type="checkbox"/> ≤ 1 ug/m <sup>3</sup> <input type="checkbox"/> NYSDEC V1 Limits <input checked="" type="checkbox"/> <input type="checkbox"/> Routine Survey <input type="checkbox"/> Other _____		6 Liter Canister <input checked="" type="checkbox"/> Tedlar Bag	
Samples Relinquished by / Company	Date/Time	Samples Received by / Company		Date/Time	Samples Relinquished by / Company		Date/Time
<i>Steven Mullen / JCB</i>	5/6/20 1250 PM	<i>ReBulkyork</i>		5/6/20 1250 AM	<i>W.Mullen</i>		5/6/20 1634
Samples Received by / Company	Date/Time	Samples Relinquished by / Company		Date/Time	Samples Received by / Company		Date/Time
<i>T.C.Fahlin / YORK</i>	5/6/20 1634	<i>T.C.Fahlin / YORK</i>		5/6/20 1755	<i></i>		
Samples Relinquished by / Company	Date/Time	Samples Received by / Company		Date/Time	Samples Received in LAB by		Date/Time
					<i>K.L. 3620 01755</i>		