



HydroTech Environmental

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March 29, 2019

Ms. Suzanne Martin, Executive Director
Steppingstone Day School
77-40 Vleigh Place

**Re: Sub-slab Vapor, Indoor and Outdoor Air Sampling Results
Steppingstone Day School - 77-40 Vleigh Place, Flushing, NY 11367 (the "Property")**

Dear Ms. Martin:

This letter summarizes the findings of the sub-slab vapor, indoor and outdoor air sampling conducted at the Property. This investigation was performed in accordance with the requirements of the New York State Department of Health (NYSDOH) in a correspondence dated February 6, 2019 to re-valuate the potential for soil vapor impact inside the property following a major increase in Tetrachloroethene (PCE) concentrations detected during December 2018 in a monitoring well located in its direct northern vicinity. *Attachment A* provides all applicable NYSDOH correspondence.

The soil vapor intrusion investigation was performed by repeating the same scope of work at the same sampling locations of a prior investigation during 2016. For the purpose of this investigation, the sampling locations are referenced with the suffix "a". Three sub-slab vapor samples designated SSB-1a to SSB-3a, seven indoor air samples designated IA-1a to IA-7a and one outdoor air sample designated OA-1a were collected from the Property. Sub-slab vapor probes SSB-1a and SSB-2a were installed in the west central portion of the school along 141st Street and were off-set from the previous locations approximately 1 to 2 feet. Specifically, SSB-1a was installed in a sub-basement utilized as a garage for strollers and SSB-2a was installed in a sprinkler room in the basement floor. Sub-slab vapor sample SSB-3a was installed in the east-central portion of the basement floor, along Vleigh Place. Indoor air samples IA-1a to IA-3a were collected in the immediate vicinity of sample locations SSB-1a to SSB-3a, respectively. The remaining four indoor air samples were collected in classrooms located on the basement floor as follows: sample IA-4a was collected in class 3DA located in the southeastern portion of the school building; sample IA-5a was collected in class 1DB located in the southern portion of the school building; sample IA-6a was collected in the vicinity of a therapy room in the central portion of the school building; and sample IA-7a was collected in a writing room located in the northeastern portion of the school building. The background outdoor air sample, (OA-1a), was collected on the northeast side of the building. A Sampling Plan is shown in Figure 1.

All samples were collected utilizing 6-liter summa canisters calibrated for a sampling duration of 8 hours. The samples were submitted to York Analytical Laboratories, Inc. in Stratford, CT for analysis for volatile organic compounds (VOCs) as per TO+15. A copy of the laboratory



report is presented as *Attachment B*. A summary of VOCs detected in the air and sub slab vapor samples is provided in *Table 1*. *Table 1* also provides a comparison of samples results with their respective data collected during 2016.

Trichloroethylene (TCE) was not detected in any of the sub-slab vapor samples. TCE was also not detected in any indoor or outdoor air samples. These results are consistent with the 2016 investigation.

Tetrachloroethene (PCE) was only detected in 1 sub-slab vapor sample, SSB-3a, at a concentration of 2.4 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). This PCE concentration represents a marginal increase from $0.29 \mu\text{g}/\text{m}^3$ detected during the 2016 investigation. PCE continues to be detected in 6 of the 7 indoor air samples. PCE was not detected in IA-2a as compared to a maximum concentration of $1.07 \mu\text{g}/\text{m}^3$ detected previously at this location. Marginal increases in PCE concentrations were noted in indoor air samples IA-4a and IA-5a and IA-7 that ranged between $1.3 \mu\text{g}/\text{m}^3$ and $9.3 \mu\text{g}/\text{m}^3$. PCE was also detected in the outdoor air sample at its concentration slightly increased to $2.2 \mu\text{g}/\text{m}^3$ from $0.92 \mu\text{g}/\text{m}^3$ detected, previously. The reported concentrations of PCE in indoor air samples are well below the NYSDOH air guideline value of $30 \mu\text{g}/\text{m}^3$.

The VOC 1,1,1-Trichloroethane (1,1,1-TCA), which occurred previously in the sub-slab vapor samples SSB-1 and SSB-2 was only detected most recently in SSB-3a at concentration of $4.7 \mu\text{g}/\text{m}^3$. The VOC 1,1,1-TCA was not detected in any of the indoor or outdoor air samples collected at the Site, consistent with the previous event.

Other organic compounds associated with petroleum chemicals, which are typically used in commercial products were also detected in the indoor air of the school at concentrations that are considered elevated. These compounds included xylenes at a maximum concentration of $219 \mu\text{g}/\text{m}^3$ and toluene at a maximum concentration of $140 \mu\text{g}/\text{m}^3$.

Based on NYSDOH guidance and on the New York State Department of Environmental Conservation (NYSDEC) and NYSDOH review of the sub-slab vapor and indoor air data collected at the Property, no further action is required at this time at this property. However, in order to reduce exposures to chemicals in commercial products, NYSDOH and NYSDEC recommend that household containers chemical-based detergent, paints and solvents are tightly closed and, if possible, stored in areas where people spend little time, such as an outdoor shed or garage. When applying these products inside the school, the space should be properly ventilated



Sincerely,
Hydro Tech Environmental Engineering and Geology, DPC

A handwritten signature in black ink that reads "Paul I. Matli".

Paul I. Matli, PhD, PG
Senior Project Manager

PIM/as

cc:

Dan McNally, NYSDEC (w/ Enc. by email)
Michael Komoroske, NYSDEC (w/ Enc. by email)
Dawn Hettrick, NYSDOH (w/ Enc. by email)
Denis Rodger, United Properties Corp. (w/ Enc. by email)
Avi Matatov, VP Capital Holdings LLC (w/ Enc. by email)
George Duke, Esq., Brown Duke & Fogel, P.C. (w/ Enc. by email)
Paul Matli (HydroTech)
HydroTech file 180120



EXCLUSIONS & DISCLAIMER

The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.

In preparing this report, **HydroTech Environmental Engineering and Geology, DPC** may have relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to **HydroTech Environmental Engineering and Geology, DPC** at the time of the subject property assessment. Although there may have been some degree of overlap in the information provided by these various sources, **HydroTech Environmental Engineering and Geology, DPC** did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this subject property assessment.

Observations were made of the subject property and of structures on the subject property as indicated within the report. Where access to portions of the subject property or to structures on the subject property was unavailable or limited, **HydroTech Environmental Engineering and Geology, DPC** renders no opinion as to the presence of non-hazardous or hazardous materials, or to the presence of indirect evidence relating to a non hazardous or hazardous materials, in that portion of the subject property or structure. In addition, **HydroTech Environmental Engineering and Geology, DPC** renders no opinion as to the presence of hazardous materials, or the presence of indirect evidence relating to hazardous materials, where direct observation of the interior walls, floors, or ceiling of a structure on a subject property was obstructed by objects or coverings on or over these surfaces.

HydroTech Environmental Engineering and Geology, DPC did not perform testing or analyses to determine the presence or concentration of asbestos at the subject property or in the environment of the subject property under the scope of the services performed.

The conclusions and recommendations contained in this report are based in part, where noted, upon the data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

Any water level reading made in test pits, borings, and/or observation wells were made at the times and under the conditions stated in the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.



Except as noted within the text of the report, no qualitative laboratory testing was performed as part of the subject property assessment. Where such analyses have been conducted by an outside laboratory, **HydroTech Environmental Engineering and Geology, DPC** has relied upon the data provided, and has not conducted an independent evaluation of the reliability of the data.

The conclusions and recommendations contained in this report are based in part, where noted, upon various types of chemical data and are contingent upon their validity. The data have been reviewed and interpretations were made in the report. As indicated within the report, some of the data may be preliminary “screening” level data, and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, the data should be reviewed, and the conclusions and recommendations presented herein modified accordingly.

Chemical analyses have been performed for specific constituents during the course of this subject property assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the subject property.

Any GPR survey described above was performed in accordance with good commercial and customary practice and generally accepted protocols within the consulting industry. **HydroTech Environmental Engineering and Geology, DPC** does not accept responsibility for survey limitations due to inherent technological limitations or site-specific conditions, however, **HydroTech Environmental Engineering and Geology, DPC** made appropriate effort to identify and notify the client of such limitations and conditions. In particular, please note that the survey described above does not represent a full utility clearance survey, and does not relieve any party of applicable legal obligations to notify a utility one-call service prior to excavating or drilling.



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DATE	DESCRIPTION	CHK

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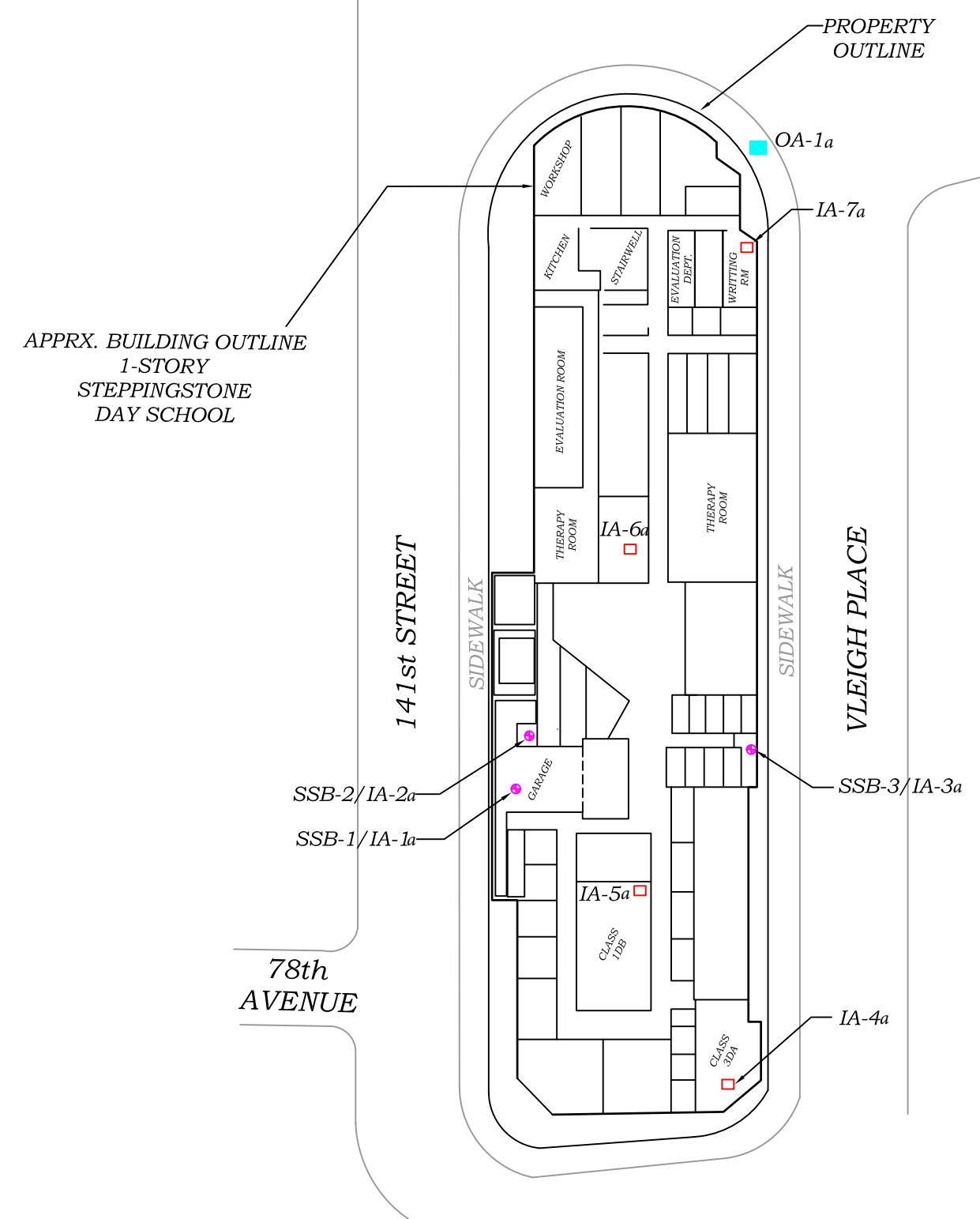
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BASE DRAWING PREPARED BY

PROJECT NAME AND ADDRESS
 77-40 VLEIGH PLACE
 FLUSHING, NY

FIGURE NAME
 FIGURE 1 - SAMPLING PLAN

PROJECT NO. 140067	DATE 02/26/2019
DRAWN BY A.D	REVIEWED BY P.M.
SCALE (11X17) NOT TO SCALE	APPROVED BY P.M.



LEGEND:

- ⊕ SUBSLAB / INDOOR AIR SAMPLING LOCATIONS (SSB/IA)
 - INDOOR AIR SAMPLING LOCATIONS (IA)
 - OUTDOOR AIR SAMPLING LOCATIONS (OA)
- ** MOST ROOMS WHICH ARE NOT LABELED ON THE PLAN ARE VARIOUS TYPES OF CLASSROOMS.

Table 1

Soil Vapor Analytical Results

77-40 Vleigh Place, Flushing, NY (Steppingstone Day School)

Sample ID	SSB-1		SSB-1a		IA-1		IA-1a		SSB-2		SSB-2a		IA-2		IA-2a		SSB-3		SSB-3a		IA-3		IA-3a														
	4/2/2016		2/22/2019		4/2/2016		2/22/2019		4/2/2016		2/22/2019		4/2/2016		2/22/2019		4/2/2016		2/22/2019		4/2/2016		2/22/2019														
	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air	Soil Vapor	Air													
Client Matrix	Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result		Result														
Compound	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q	ug/m3	Q													
Volatile Organics, EPA TO15 Full List																																					
1,1,1,2-Tetrachloroethane	<1.00	U	2.20	U	<1.00	U	0.600	U	<1.00	U	1.900	U	<1.00	U	0.610	U	<1.00	U	2.500	U	<1.00	U	0.630	U													
1,1,1-Trichloroethane	1.83	U	1.700	U	<1.00	U	0.480	U	4.19	U	1.500	U	<1.00	U	0.490	U	<1.00	U	4.7	U	<1.00	U	0.500	U													
1,1,2-Dichloroethane	<1.00	U	2.200	U	<1.00	U	0.600	U	<1.00	U	1.900	U	<1.00	U	0.610	U	<1.00	U	2.500	U	<1.00	U	0.630	U													
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	NT		2.400	U	NT		0.670	U	NT		2.100	U	NT		0.680	U	NT		2.800	U	NT		0.670	U													
1,1,2-Trichloroethane	<1.00	U	1.700	U	<1.00	U	0.350	U	<1.00	U	1.600	U	<1.00	U	0.360	U	<1.00	U	1.500	U	<1.00	U	0.500	U													
1,1-Dichloroethane	<1.00	U	1.300	U	<1.00	U	0.350	U	<1.00	U	1.100	U	<1.00	U	0.360	U	<1.00	U	1.500	U	<1.00	U	0.570	U													
1,1-Dichloroethane	<1.00	U	0.320	U	<1.00	U	0.0870	U	<1.00	U	0.270	U	<1.00	U	0.0880	U	<1.00	U	0.340	U	<1.00	U	0.0920	U													
1,2,4-Trichlorobenzene	<1.00	U	2.400	U	<1.00	U	0.650	U	<1.00	U	2	U	<1.00	U	0.660	U	<1.00	U	2.700	U	<1.00	U	0.690	U													
1,2,4-Trimethylbenzene	13.7	9.6	9.33	23	D	24.5	23	D	5.6	35	35	D	33.9	48	7.91	49	D	9.63	12	D	6.14	58	D	4.51	31	D	4.51	32	D	<1.00	U	9.3	D				
1,2-Dibromochloroethane (EDB)	<1.00	U	2.500	U	<1.00	U	0.670	U	<1.00	U	2.100	U	<1.00	U	0.680	U	<1.00	U	2.800	U	<1.00	U	0.710	U													
1,2-Dichlorobenzene	<1.00	U	1.900	U	<1.00	U	0.350	U	<1.00	U	1.600	U	<1.00	U	0.340	U	<1.00	U	2.200	U	<1.00	U	0.560	U													
1,2-Dichlorobenzene	<1.00	U	1.300	U	<1.00	U	0.350	U	<1.00	U	1.100	U	<1.00	U	0.360	U	<1.00	U	1.500	U	<1.00	U	0.570	U													
1,2-Dichloropropane	<1.00	U	1.500	U	<1.00	U	0.400	U	<1.00	U	1.300	U	<1.00	U	0.410	U	<1.00	U	1.700	U	<1.00	U	0.430	U													
1,2-Dichlorotetrafluoroethane	<1.00	U	2.200	U	<1.00	U	0.610	U	<1.00	U	1.900	U	<1.00	U	0.620	U	<1.00	U	2.500	U	<1.00	U	0.650	U													
1,3,5-Trimethylbenzene	2.76	2.2	D	3.91	5.8	D	4.28	5.6	D	1.55	8.8	D	5.65	10	D	2.05	11	D	2.69	4.1	D	2.03	14	D	1.21	6.8	D	1.23	8	D	<1.00	U	2.1	D			
1,3-Butadiene	<1.00	U	2.100	U	<1.00	U	0.580	U	<1.00	U	1.800	U	<1.00	U	0.590	U	<1.00	U	2.400	U	<1.00	U	0.610	U													
1,3-Dichlorobenzene	<1.00	U	1.900	U	<1.00	U	0.530	U	<1.00	U	1.600	U	<1.00	U	0.540	U	<1.00	U	2.200	U	<1.00	U	0.560	U													
1,3-Dichloropropane	NT		1.500	U	NT		0.400	U	NT		1.300	U	NT		0.410	U	NT		1.700	U	NT		0.430	U													
1,4-Dichlorobenzene	<1.00	U	1.900	U	<1.00	U	0.330	U	<1.00	U	1.600	U	<1.00	U	0.340	U	<1.00	U	2.200	U	<1.00	U	0.560	U													
1,4-Dioxane	<1.00	U	2.300	U	<1.00	U	0.650	U	<1.00	U	2	U	<1.00	U	0.640	U	<1.00	U	2.600	U	<1.00	U	0.670	U													
2-Butanone	1.52	17	D	1.27	17	D	1.13	26	D	2.81	13	D	2.65	48	D	7.37	18	D	3.65	25	D	3.3	29	D	2.2	28	D	2.22	21	D	<1.00	U	13	D			
2-Hexanone(MBK)	<1.00	U	2.600	U	<1.00	U	0.720	U	<1.00	U	2.200	U	<1.00	U	0.730	U	<1.00	U	2.900	U	<1.00	U	0.760	U													
3-Chloropropene	NT		5	U	NT		1.400	U	NT		4.300	U	NT		1.400	U	NT		5.600	U	NT		1.400	U													
4-Methyl-2-pentanone(MIBK)	<1.00	U	8.1	D	<1.00	U	0.360	U	<1.00	U	6.2	D	<1.00	U	0.5	D	1.02	24	D	<1.00	U	0.580	U														
Acetone	23.2	430	D	16.2	51	D	52.5	800	D	34.7	30	D	38.7	1000	D	42.5	24	D	51.5	46	D	35.8	71	D	21.8	76	D	27.1	56	D	5.75	S	44	D			
Acrylonitrile	<1.00	U	0.690	U	<1.00	U	0.190	U	<1.00	U	0.7	D	<1.00	U	0.190	U	<1.00	U	0.780	U	<1.00	U	0.200	U													
Benzene	1.57	3.500	D	1.16	5.8	D	1.08	2.9	D	2.79	5	D	2.85	6.5	D	4.21	5.7	D	5.01	8.8	D	2.31	10	D	2.27	11	D	2.61	7.8	D	<1.00	U	4.6	D			
Benzyl chloride	<1.00	U	1.700	U	<1.00	U	0.450	U	<1.00	U	1.400	U	<1.00	U	0.460	U	<1.00	U	1.900	U	<1.00	U	0.480	U													
Bromodichloromethane	<1.00	U	2.100	U	<1.00	U	0.590	U	<1.00	U	1.800	U	<1.00	U	0.600	U	<1.00	U	2.400	U	<1.00	U	0.620	U													
Bromoform	<1.00	U	3.300	U	<1.00	U	0.900	U	<1.00	U	2.800	U	<1.00	U	0.920	U	<1.00	U	3.700	U	<1.00	U	0.960	U													
Bromomethane	<1.00	U	1.200	U	<1.00	U	0.340	U	<1.00	U	1.100	U	<1.00	U	0.350	U	<1.00	U	1.400	U	<1.00	U	0.360	U													
Carbon Disulfide	21.9	3.7	D	<1.00	U	0.270	U	1.1	7.1	D	<1.00	U	0.280	U	11	18	D	<1.00	U	0.290	U	<1.00	U	0.290	U												
Carbon Tetrachloride	0.38	0.500	U	0.52	0.6	D	0.48	0.430	U	1.09	0.560	D	0.32	1.1	D	0.49	0.5	D	0.55	0.5	D	0.55	0.140	0.41	0.140	U	0.58	0.5	D	0.5	D						
Chlorobenzene	<1.00	U	1.500	U	<1.00	U	0.400	U	<1.00	U	1.300	U	<1.00	U	0.410	U	<1.00	U	1.700	U	<1.00	U	0.430	U													
Chloroethane	<1.00	U	0.840	U	<1.00	U	0.230	U	<1.00	U	0.720	U	<1.00	U	0.230	U	<1.00	U	1.6	D	<1.00	U	0.240	U													
Chloroform	3.7	1.600	U	<1.00	U	0.430	U	1.86	1.300	U	1.28	0.430	U	<1.00	U	1.800	U	<1.00	U	1.800	U	<1.00	U	0.450	U												
Chloromethane	<1.00	U	2.5	D	1.16	1.2	D	<1.00	U	0.560	U	1.42	1.3	D	<1.00	U	0.740	U	1.45	1.2	D	1.28	1.4	D	<1.00	U	1.3	D	1.28	1.1	D	1.14	1.2	D			
Cis-1,2-Dichloroethane	<1.00	U	0.330	U	<1.00	U	0.0870	U	<1.00	U	0.270	U	<1.00	U	0.0880	U	<1.00	U	0.360	U	<1.00	U	0.0920	U													
Cis-1,2-Dichloropropene	<1.00	U	1.400	U	<1.00	U	0.400	U	<1.00	U	1.200	U	<1.00	U	0.400	U	<1.00	U	1.600	U	<1.00	U	0.420	U													
Cyclohexane	7.74	13	D	<1.00	U	2.8	D	2.79	7	D	1.87	2.3	D	28.9	51	D	24.3	2.9	D	34.2	4.8	D	1.51	5.4	D	1.69	5.5	D	1.55	4	D	<1.00	U	1.9	D		
Dibromochloromethane	<1.00	U	2.700	U	<1.00	U	0.750	U	<1.00	U	2.300	U	<1.00	U	0.760	U	<1.00	U	3.100	U	<1.00	U	0.790	U													
Dichlorodifluoromethane	3.16	3.2	D	1.86	1.6	D	2.12	2.6	D	1.67	2	D	2.8	3.9	D	2.08	1.9	D	2.05	1.9	D	2.38	2	D	1.55	1.9	D	2.04	1.6	D	2.05	1.8	D				
Ethyl acetate	<1.00	U	52	D	<1.00	U	1.0	D	67	1.27	1.6	D	<1.00	U	1.30	D	1.67	1.2	D	1.95	2.4	D	<1.00	U	2.3	D	<1.00	U	2	D	1.04	1.3	D	<1.00	U	0.630	U
Ethylbenzene	7.68	7.6	D	<1.00	U	21	D	5.08	16	D	3.21	24	D	10.1	28	D	4.14	32	D	4.95	24	D	2.5	38	D	2.37	34	D	2.27	30	D	<1.00	U	17	D		
Hexachlorobutadiene	<1.00	U	3.400	U	<1.00	U	0.930																														

ATTACHMENT A
NYSDOH CORRESPONDENCE



Department of Health

ANDREW M. CUOMO
Governor

HOWARD A. ZUCKER, M.D., J.D.
Commissioner

SALLY DRESLIN, M.S., R.N.
Executive Deputy Commissioner

February 6, 2019

Mr. Daniel McNally
Remedial Bureau B
Division of Environmental Remediation
NYS Dept. of Environmental Conservation
625 Broadway, 12th Floor
Albany, NY 12233

Re: Soil Vapor Intrusion sampling at
Steppingstone Day School
57-77 Vleigh Place
Site #241168
Flushing, Queens County

Dear McNally:

At your Department's request, we have reviewed the analytical data for groundwater collected from monitoring wells around the site in December 2018. From that data, we noted that concentrations of site-related chemicals in MW-2 have increased significantly. This well is near the Steppingstone Day School.

When soil vapor intrusion was investigated at the Steppingstone Day School in 2016, our determination was that no further action was necessary. At that time, concentrations of site related contaminants in groundwater were much lower than this most recent round of sampling. Since it is unknown why contamination in groundwater has increased and how it may influence soil vapor concentrations under the Steppingstone Day School, we recommend re-evaluating soil vapor intrusion in the day school.

Please request that the participant contact the day school to arrange sampling. If the participant has difficulties obtaining access or if the day school operator has any questions about the sampling, please have them contact me. If you have any questions, please contact me at (518) 402-7860.

Sincerely,

Dawn E. Hettrick, P.E.
Bureau of Environmental Exposure Investigation

ec: J. Deming / e-File
C. Westerman – NYSDOH MARO
C. D'Andrea – NYC DOHMH
G. Burke / M. Komoroske – NYSDEC Central Office
J. O'Connell – NYSDEC Region 2

Soil Vapor/Indoor Air Matrix A

May 2017

Analytes Assigned:

Trichloroethene (TCE), *cis*-1,2-Dichloroethene (c12-DCE), 1,1-Dichloroethene (11-DCE), Carbon Tetrachloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX A

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix B

May 2017

Analytes Assigned:

Tetrachloroethene (PCE), 1,1,1-Trichloroethane (111-TCA), Methylene Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)		
	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX B

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 1 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix C

May 2017

Analytes Assigned:

Vinyl Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m ³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m ³)	
	< 0.2	0.2 and above
< 6	1. No further action	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	3. MONITOR	4. MITIGATE
60 and above	5. MITIGATE	6. MITIGATE

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

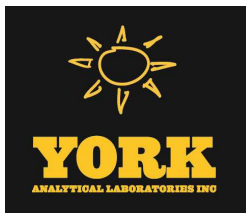
These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX C

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

ATTACHMENT B
LABORATORY REPORT



Technical Report

prepared for:

Hydro Tech Environmental (Brooklyn)

15 Ocean Avenue

Brooklyn NY, 11225

Attention: Paul Matli

Report Date: 03/06/2019

Client Project ID: 180120 77-57 Vleigh Place Flushing NY

York Project (SDG) No.: 19B0982

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
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STRATFORD, CT 06615
(203) 325-1371



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

RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Hydro Tech Environmental (Brooklyn)

15 Ocean Avenue
Brooklyn NY, 11225
Attention: Paul Matli

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 February 27, 2019 and listed below. The project was identified as your project: **180120 77-57 Vleigh Place Flushing NY**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
19B0982-01	SSB-1a_20192202	Soil Vapor	02/22/2019	02/27/2019
19B0982-02	IA-1a_20192202	Indoor Ambient Air	02/22/2019	02/27/2019
19B0982-03	SSB-2a_20192202	Soil Vapor	02/22/2019	02/27/2019
19B0982-04	IA-2a_20192202	Indoor Ambient Air	02/22/2019	02/27/2019
19B0982-05	SSB-3a_20192202	Soil Vapor	02/22/2019	02/27/2019
19B0982-06	IA-3a_20192202	Indoor Ambient Air	02/22/2019	02/27/2019
19B0982-07	IA-4a_20192202	Indoor Ambient Air	02/22/2019	02/27/2019
19B0982-08	IA-5a_20192202	Indoor Ambient Air	02/22/2019	02/27/2019
19B0982-09	IA-6a_20192202	Indoor Ambient Air	02/22/2019	02/27/2019
19B0982-10	IA-7a_20192202	Indoor Ambient Air	02/22/2019	02/27/2019
19B0982-11	OA-1a_20192202	Outdoor Ambient Ai	02/22/2019	02/27/2019

General Notes for York Project (SDG) No.: 19B0982

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

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 03/06/2019





Sample Information

Client Sample ID: SSB-1a_20192202

York Sample ID: 19B0982-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
19B0982	180120 77-57 Vleigh Place Flushing NY	Soil Vapor	February 22, 2019 3:00 pm	02/27/2019

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/m ³	2.2	3.19	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 19:36	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	1.7	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	2.2	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	2.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	1.7	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	1.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.32	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	2.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
95-63-6	1,2,4-Trimethylbenzene	9.6		ug/m ³	1.6	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	2.5	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	1.9	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	1.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	1.5	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	2.2	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
108-67-8	1,3,5-Trimethylbenzene	2.2		ug/m ³	1.6	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	2.1	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	1.9	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	1.5	3.19	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 19:36	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	1.9	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	2.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
78-93-3	2-Butanone	17		ug/m ³	0.94	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	2.6	3.19	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 19:36	AS



Sample Information

Client Sample ID: SSB-1a_20192202

York Sample ID: 19B0982-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

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/m ³	5.0	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
108-10-1	4-Methyl-2-pentanone	8.1		ug/m ³	1.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
67-64-1	Acetone	430		ug/m ³	7.6	15.95	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 15:03	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.69	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
71-43-2	Benzene	3.5		ug/m ³	1.0	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
100-44-7	Benzyl chloride	ND		ug/m ³	1.7	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	2.1	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-25-2	Bromoform	ND		ug/m ³	3.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
74-83-9	Bromomethane	ND		ug/m ³	1.2	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-15-0	Carbon disulfide	3.7		ug/m ³	0.99	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.50	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
108-90-7	Chlorobenzene	ND		ug/m ³	1.5	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-00-3	Chloroethane	ND		ug/m ³	0.84	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
67-66-3	Chloroform	ND		ug/m ³	1.6	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
74-87-3	Chloromethane	2.5		ug/m ³	0.66	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.32	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	1.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
110-82-7	Cyclohexane	13		ug/m ³	1.1	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	2.7	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-71-8	Dichlorodifluoromethane	3.2		ug/m ³	1.6	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
141-78-6	* Ethyl acetate	52		ug/m ³	2.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
100-41-4	Ethyl Benzene	7.6		ug/m ³	1.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	3.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS



Sample Information

Client Sample ID: SSB-1a_20192202

York Sample ID: 19B0982-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

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
67-63-0	Isopropanol	48		ug/m ³	1.6	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
80-62-6	Methyl Methacrylate	ND		ug/m ³	1.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	1.2	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-09-2	Methylene chloride	3.5		ug/m ³	2.2	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
142-82-5	n-Heptane	24		ug/m ³	1.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
110-54-3	n-Hexane	13		ug/m ³	1.1	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
95-47-6	o-Xylene	11		ug/m ³	1.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
179601-23-1	p- & m- Xylenes	33		ug/m ³	2.8	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
622-96-8	* p-Ethyltoluene	10		ug/m ³	1.6	3.19	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 19:36	AS
115-07-1	* Propylene	51		ug/m ³	0.55	3.19	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 19:36	AS
100-42-5	Styrene	ND		ug/m ³	1.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.54	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
109-99-9	* Tetrahydrofuran	60		ug/m ³	1.9	3.19	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 19:36	AS
108-88-3	Toluene	30		ug/m ³	1.2	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	1.3	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	1.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.43	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m ³	1.8	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
108-05-4	Vinyl acetate	ND		ug/m ³	1.1	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
593-60-2	Vinyl bromide	ND		ug/m ³	1.4	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.20	3.19	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 19:36	AS
Surrogate Recoveries		Result					Acceptance Range			
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %					70-130			



Sample Information

Client Sample ID: IA-1a_20192202

York Sample ID: 19B0982-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.60	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 16:22	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.48	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.60	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.67	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.48	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.087	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.65	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
95-63-6	1,2,4-Trimethylbenzene	23		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.67	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.61	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
108-67-8	1,3,5-Trimethylbenzene	5.8		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.58	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 16:22	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.63	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
78-93-3	2-Butanone	17		ug/m ³	0.26	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.72	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 16:22	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS



Sample Information

Client Sample ID: IA-1a_20192202

York Sample ID: 19B0982-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.36	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
67-64-1	Acetone	51		ug/m ³	0.42	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.19	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
71-43-2	Benzene	5.8		ug/m ³	0.28	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.45	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.59	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-25-2	Bromoform	ND		ug/m ³	0.90	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
74-83-9	Bromomethane	ND		ug/m ³	0.34	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.27	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
56-23-5	Carbon tetrachloride	0.55		ug/m ³	0.14	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-00-3	Chloroethane	ND		ug/m ³	0.23	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
67-66-3	Chloroform	ND		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
74-87-3	Chloromethane	1.2		ug/m ³	0.18	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.087	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
110-82-7	Cyclohexane	2.8		ug/m ³	0.30	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.75	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-71-8	Dichlorodifluoromethane	1.6		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
141-78-6	* Ethyl acetate	0.98		ug/m ³	0.63	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
100-41-4	Ethyl Benzene	21		ug/m ³	0.38	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.93	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
67-63-0	Isopropanol	73		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS



Sample Information

Client Sample ID: IA-1a_20192202

York Sample ID: 19B0982-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.36	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.32	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-09-2	Methylene chloride	2.5		ug/m ³	0.61	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
142-82-5	n-Heptane	17		ug/m ³	0.36	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
110-54-3	n-Hexane	13		ug/m ³	0.31	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
95-47-6	o-Xylene	29		ug/m ³	0.38	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
179601-23-1	p- & m- Xylenes	83		ug/m ³	0.76	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
622-96-8	* p-Ethyltoluene	24		ug/m ³	0.43	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 16:22	AS
115-07-1	* Propylene	ND		ug/m ³	0.15	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 16:22	AS
100-42-5	Styrene	ND		ug/m ³	0.37	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
127-18-4	Tetrachloroethylene	0.59		ug/m ³	0.15	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
109-99-9	* Tetrahydrofuran	37		ug/m ³	0.52	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 16:22	AS
108-88-3	Toluene	81		ug/m ³	0.33	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.12	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.49	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.31	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.38	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.056	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 16:22	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	115 %		70-130						



Sample Information

Client Sample ID: SSB-2a_20192202

York Sample ID: 19B0982-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

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/m ³	1.9	2.73	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 20:25	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	1.5	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	1.9	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	2.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	1.5	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	1.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.27	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	2.0	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
95-63-6	1,2,4-Trimethylbenzene	23		ug/m ³	1.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	2.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	1.6	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	1.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	1.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	1.9	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
108-67-8	1,3,5-Trimethylbenzene	5.6		ug/m ³	1.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	1.8	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	1.6	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	1.3	2.73	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 20:25	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	1.6	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	2.0	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
78-93-3	2-Butanone	26		ug/m ³	0.81	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	2.2	2.73	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 20:25	AS
107-05-1	3-Chloropropene	ND		ug/m ³	4.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS



Sample Information

Client Sample ID: SSB-2a_20192202

York Sample ID: 19B0982-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	6.2		ug/m ³	1.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
67-64-1	Acetone	800		ug/m ³	8.5	17.95	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 18:07	AS
107-13-1	Acrylonitrile	0.65		ug/m ³	0.59	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
71-43-2	Benzene	2.9		ug/m ³	0.87	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
100-44-7	Benzyl chloride	ND		ug/m ³	1.4	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	1.8	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-25-2	Bromoform	ND		ug/m ³	2.8	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
74-83-9	Bromomethane	ND		ug/m ³	1.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-15-0	Carbon disulfide	7.1		ug/m ³	0.85	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.43	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
108-90-7	Chlorobenzene	ND		ug/m ³	1.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-00-3	Chloroethane	ND		ug/m ³	0.72	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
67-66-3	Chloroform	ND		ug/m ³	1.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
74-87-3	Chloromethane	ND		ug/m ³	0.56	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.27	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	1.2	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
110-82-7	Cyclohexane	7.0		ug/m ³	0.94	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	2.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-71-8	Dichlorodifluoromethane	2.6		ug/m ³	1.4	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
141-78-6	* Ethyl acetate	67		ug/m ³	2.0	2.73	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 20:25	AS
100-41-4	Ethyl Benzene	16		ug/m ³	1.2	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	2.9	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
67-63-0	Isopropanol	13		ug/m ³	1.3	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS



Sample Information

Client Sample ID: SSB-2a_20192202

York Sample ID: 19B0982-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	1.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.98	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-09-2	Methylene chloride	2.2		ug/m ³	1.9	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
142-82-5	n-Heptane	21		ug/m ³	1.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
110-54-3	n-Hexane	7.6		ug/m ³	0.96	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
95-47-6	o-Xylene	24		ug/m ³	1.2	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
179601-23-1	p- & m- Xylenes	71		ug/m ³	2.4	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
622-96-8	* p-Ethyltoluene	24		ug/m ³	1.3	2.73	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 20:25	AS
115-07-1	* Propylene	3.9		ug/m ³	0.47	2.73	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 20:25	AS
100-42-5	Styrene	ND		ug/m ³	1.2	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.46	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
109-99-9	* Tetrahydrofuran	90		ug/m ³	1.6	2.73	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 20:25	AS
108-88-3	Toluene	48		ug/m ³	1.0	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	1.1	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	1.2	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.37	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m ³	1.5	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.96	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
593-60-2	Vinyl bromide	ND		ug/m ³	1.2	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.17	2.73	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 20:25	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	108 %		70-130						



Sample Information

Client Sample ID: IA-2a_20192202

York Sample ID: 19B0982-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.61	0.89	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 19:05	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.49	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.61	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.68	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.49	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.36	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.088	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.66	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
95-63-6	1,2,4-Trimethylbenzene	35		ug/m ³	0.44	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.68	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.54	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.36	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.41	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.62	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
108-67-8	1,3,5-Trimethylbenzene	8.8		ug/m ³	0.44	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.59	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.54	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.41	0.89	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 19:05	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.54	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.64	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
78-93-3	2-Butanone	13		ug/m ³	0.26	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.73	0.89	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 19:05	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS



Sample Information

Client Sample ID: IA-2a_20192202

York Sample ID: 19B0982-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	0.47		ug/m ³	0.36	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
67-64-1	Acetone	30		ug/m ³	0.42	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.19	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
71-43-2	Benzene	5.0		ug/m ³	0.28	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.46	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.60	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-25-2	Bromoform	ND		ug/m ³	0.92	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
74-83-9	Bromomethane	ND		ug/m ³	0.35	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.28	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
56-23-5	Carbon tetrachloride	0.56		ug/m ³	0.14	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.41	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-00-3	Chloroethane	ND		ug/m ³	0.23	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
67-66-3	Chloroform	ND		ug/m ³	0.43	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
74-87-3	Chloromethane	1.3		ug/m ³	0.18	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.088	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.40	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
110-82-7	Cyclohexane	2.3		ug/m ³	0.31	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.76	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-71-8	Dichlorodifluoromethane	2.0		ug/m ³	0.44	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
141-78-6	* Ethyl acetate	1.6		ug/m ³	0.64	0.89	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 19:05	AS
100-41-4	Ethyl Benzene	24		ug/m ³	0.39	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.95	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
67-63-0	Isopropanol	84		ug/m ³	0.44	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS



Sample Information

Client Sample ID: IA-2a_20192202

York Sample ID: 19B0982-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.36	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.32	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-09-2	Methylene chloride	9.4		ug/m ³	0.62	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
142-82-5	n-Heptane	15		ug/m ³	0.36	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
110-54-3	n-Hexane	11		ug/m ³	0.31	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
95-47-6	o-Xylene	38		ug/m ³	0.39	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
179601-23-1	p- & m- Xylenes	110		ug/m ³	0.77	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
622-96-8	* p-Ethyltoluene	37		ug/m ³	0.44	0.89	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 19:05	AS
115-07-1	* Propylene	ND		ug/m ³	0.15	0.89	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 19:05	AS
100-42-5	Styrene	ND		ug/m ³	0.38	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
127-18-4	Tetrachloroethylene	ND		ug/m ³	0.15	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
109-99-9	* Tetrahydrofuran	30		ug/m ³	0.52	0.89	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 19:05	AS
108-88-3	Toluene	78		ug/m ³	0.34	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.35	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.40	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.12	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.50	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.31	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.39	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.057	0.89	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:05	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %		70-130						



Sample Information

Client Sample ID: SSB-3a_20192202

York Sample ID: 19B0982-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

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/m ³	2.5	3.59	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 21:13	AS
71-55-6	1,1,1-Trichloroethane	4.7		ug/m ³	2.0	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	2.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	2.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	2.0	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	1.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.36	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	2.7	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
95-63-6	1,2,4-Trimethylbenzene	48		ug/m ³	1.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	2.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	2.2	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	1.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	1.7	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	2.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
108-67-8	1,3,5-Trimethylbenzene	10		ug/m ³	1.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	2.4	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	2.2	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	1.7	3.59	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 21:13	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	2.2	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	2.6	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
78-93-3	2-Butanone	48		ug/m ³	1.1	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	2.9	3.59	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 21:13	AS
107-05-1	3-Chloropropene	ND		ug/m ³	5.6	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS



Sample Information

Client Sample ID: SSB-3a_20192202

York Sample ID: 19B0982-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	24		ug/m ³	1.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
67-64-1	Acetone	1000		ug/m ³	8.5	17.79	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 19:50	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.78	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
71-43-2	Benzene	6.5		ug/m ³	1.1	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
100-44-7	Benzyl chloride	ND		ug/m ³	1.9	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	2.4	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-25-2	Bromoform	ND		ug/m ³	3.7	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
74-83-9	Bromomethane	ND		ug/m ³	1.4	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-15-0	Carbon disulfide	18		ug/m ³	1.1	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
56-23-5	Carbon tetrachloride	1.1		ug/m ³	0.56	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
108-90-7	Chlorobenzene	ND		ug/m ³	1.7	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-00-3	Chloroethane	1.6		ug/m ³	0.95	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
67-66-3	Chloroform	ND		ug/m ³	1.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
74-87-3	Chloromethane	ND		ug/m ³	0.74	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.36	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	1.6	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
110-82-7	Cyclohexane	51		ug/m ³	1.2	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	3.1	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-71-8	Dichlorodifluoromethane	3.9		ug/m ³	1.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
141-78-6	* Ethyl acetate	130		ug/m ³	2.6	3.59	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 21:13	AS
100-41-4	Ethyl Benzene	28		ug/m ³	1.6	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	3.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
67-63-0	Isopropanol	27		ug/m ³	1.8	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS



Sample Information

Client Sample ID: SSB-3a_20192202

York Sample ID: 19B0982-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Soil Vapor

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	1.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	1.3	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-09-2	Methylene chloride	ND		ug/m ³	2.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
142-82-5	n-Heptane	35		ug/m ³	1.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
110-54-3	n-Hexane	13		ug/m ³	1.3	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
95-47-6	o-Xylene	44		ug/m ³	1.6	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
179601-23-1	p- & m- Xylenes	130		ug/m ³	3.1	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
622-96-8	* p-Ethyltoluene	49		ug/m ³	1.8	3.59	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 21:13	AS
115-07-1	* Propylene	27		ug/m ³	0.62	3.59	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 21:13	AS
100-42-5	Styrene	ND		ug/m ³	1.5	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
127-18-4	Tetrachloroethylene	2.4		ug/m ³	0.61	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
109-99-9	* Tetrahydrofuran	120		ug/m ³	2.1	3.59	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 21:13	AS
108-88-3	Toluene	81		ug/m ³	1.4	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	1.4	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	1.6	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.48	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-69-4	Trichlorofluoromethane (Freon 11)	2.2		ug/m ³	2.0	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
108-05-4	Vinyl acetate	240		ug/m ³	1.3	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
593-60-2	Vinyl bromide	ND		ug/m ³	1.6	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.23	3.59	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 21:13	AS

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



Sample Information

Client Sample ID: IA-3a_20192202

York Sample ID: 19B0982-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.63	0.924	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 20:48	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.50	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.63	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.71	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.50	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.37	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.092	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.69	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
95-63-6	1,2,4-Trimethylbenzene	49		ug/m ³	0.45	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.71	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.56	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.37	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.43	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.65	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
108-67-8	1,3,5-Trimethylbenzene	11		ug/m ³	0.45	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.61	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.56	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.43	0.924	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 20:48	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.56	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.67	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
78-93-3	2-Butanone	18		ug/m ³	0.27	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.76	0.924	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 20:48	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS



Sample Information

Client Sample ID: IA-3a_20192202

York Sample ID: 19B0982-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.38	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
67-64-1	Acetone	24		ug/m ³	0.44	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.20	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
71-43-2	Benzene	5.7		ug/m ³	0.30	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.48	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.62	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-25-2	Bromoform	ND		ug/m ³	0.96	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
74-83-9	Bromomethane	ND		ug/m ³	0.36	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.29	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
56-23-5	Carbon tetrachloride	0.52		ug/m ³	0.15	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.43	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-00-3	Chloroethane	ND		ug/m ³	0.24	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
67-66-3	Chloroform	ND		ug/m ³	0.45	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
74-87-3	Chloromethane	1.2		ug/m ³	0.19	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.092	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.42	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
110-82-7	Cyclohexane	2.9		ug/m ³	0.32	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.79	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-71-8	Dichlorodifluoromethane	1.9		ug/m ³	0.46	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
141-78-6	* Ethyl acetate	1.2		ug/m ³	0.67	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
100-41-4	Ethyl Benzene	32		ug/m ³	0.40	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.99	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
67-63-0	Isopropanol	78		ug/m ³	0.45	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS



Sample Information

Client Sample ID: IA-3a_20192202

York Sample ID: 19B0982-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.38	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.33	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-09-2	Methylene chloride	1.6		ug/m ³	0.64	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
142-82-5	n-Heptane	19		ug/m ³	0.38	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
110-54-3	n-Hexane	13		ug/m ³	0.33	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
95-47-6	o-Xylene	50		ug/m ³	0.40	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
179601-23-1	p- & m- Xylenes	150		ug/m ³	0.80	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
622-96-8	* p-Ethyltoluene	53		ug/m ³	0.45	0.924	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 20:48	AS
115-07-1	* Propylene	ND		ug/m ³	0.16	0.924	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 20:48	AS
100-42-5	Styrene	ND		ug/m ³	0.39	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
127-18-4	Tetrachloroethylene	0.63		ug/m ³	0.16	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
109-99-9	* Tetrahydrofuran	37		ug/m ³	0.55	0.924	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 20:48	AS
108-88-3	Toluene	100		ug/m ³	0.35	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.37	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.42	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.12	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m ³	0.52	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
108-05-4	Vinyl acetate	0.94		ug/m ³	0.33	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.40	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.059	0.924	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 20:48	AS

Surrogate Recoveries	Result	Acceptance Range
460-00-4 <i>Surrogate: SURR: p-Bromofluorobenzene</i>	104 %	70-130



Sample Information

Client Sample ID: IA-4a_20192202

York Sample ID: 19B0982-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.59	0.8544	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 21:46	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.47	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.59	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.65	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.47	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.35	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.085	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.63	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
95-63-6	1,2,4-Trimethylbenzene	12		ug/m ³	0.42	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.66	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.51	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.35	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.39	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.60	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
108-67-8	1,3,5-Trimethylbenzene	4.1		ug/m ³	0.42	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.57	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.51	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.39	0.8544	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 21:46	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.51	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.62	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
78-93-3	2-Butanone	25		ug/m ³	0.25	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.70	0.8544	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 21:46	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.3	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS



Sample Information

Client Sample ID: IA-4a_20192202

York Sample ID: 19B0982-07

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	1.2		ug/m ³	0.35	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
67-64-1	Acetone	46		ug/m ³	0.41	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.19	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
71-43-2	Benzene	8.8		ug/m ³	0.27	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.44	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.57	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-25-2	Bromoform	ND		ug/m ³	0.88	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
74-83-9	Bromomethane	ND		ug/m ³	0.33	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.27	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
56-23-5	Carbon tetrachloride	0.54		ug/m ³	0.13	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.39	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-00-3	Chloroethane	ND		ug/m ³	0.23	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
67-66-3	Chloroform	0.50		ug/m ³	0.42	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
74-87-3	Chloromethane	1.2		ug/m ³	0.18	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.085	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.39	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
110-82-7	Cyclohexane	4.8		ug/m ³	0.29	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.73	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-71-8	Dichlorodifluoromethane	1.9		ug/m ³	0.42	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
141-78-6	* Ethyl acetate	2.4		ug/m ³	0.62	0.8544	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 21:46	AS
100-41-4	Ethyl Benzene	24		ug/m ³	0.37	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.91	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
67-63-0	Isopropanol	74		ug/m ³	0.42	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS



Sample Information

Client Sample ID: IA-4a_20192202

York Sample ID: 19B0982-07

York Project (SDG) No.

Client Project ID

Matrix

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19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.35	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.31	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-09-2	Methylene chloride	4.3		ug/m ³	0.59	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
142-82-5	n-Heptane	27		ug/m ³	0.35	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
110-54-3	n-Hexane	22		ug/m ³	0.30	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
95-47-6	o-Xylene	31		ug/m ³	0.37	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
179601-23-1	p- & m- Xylenes	88		ug/m ³	0.74	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
622-96-8	* p-Ethyltoluene	21		ug/m ³	0.42	0.8544	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 21:46	AS
115-07-1	* Propylene	ND		ug/m ³	0.15	0.8544	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 21:46	AS
100-42-5	Styrene	ND		ug/m ³	0.36	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
127-18-4	Tetrachloroethylene	1.3		ug/m ³	0.14	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
109-99-9	* Tetrahydrofuran	61		ug/m ³	0.50	0.8544	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 21:46	AS
108-88-3	Toluene	110		ug/m ³	0.32	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.34	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.39	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.11	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.48	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.30	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.37	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.055	0.8544	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 21:46	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	102 %		70-130						



Sample Information

Client Sample ID: IA-5a_20192202

York Sample ID: 19B0982-08

York Project (SDG) No.

Client Project ID

Matrix

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19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.63	0.913	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 22:44	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.50	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.63	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.70	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.50	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.37	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.090	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.68	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
95-63-6	1,2,4-Trimethylbenzene	58		ug/m ³	0.45	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.70	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.55	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.37	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.42	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.64	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
108-67-8	1,3,5-Trimethylbenzene	14		ug/m ³	0.45	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.61	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.55	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.42	0.913	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 22:44	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.55	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.66	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
78-93-3	2-Butanone	29		ug/m ³	0.27	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.75	0.913	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 22:44	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS



Sample Information

Client Sample ID: IA-5a_20192202

York Sample ID: 19B0982-08

York Project (SDG) No.

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180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.37	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
67-64-1	Acetone	71		ug/m ³	0.43	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.20	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
71-43-2	Benzene	10		ug/m ³	0.29	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.47	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.61	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-25-2	Bromoform	ND		ug/m ³	0.94	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
74-83-9	Bromomethane	ND		ug/m ³	0.35	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.28	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.14	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.42	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-00-3	Chloroethane	ND		ug/m ³	0.24	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
67-66-3	Chloroform	3.2		ug/m ³	0.45	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
74-87-3	Chloromethane	1.4		ug/m ³	0.19	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.090	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.41	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
110-82-7	Cyclohexane	5.4		ug/m ³	0.31	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.78	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-71-8	Dichlorodifluoromethane	2.0		ug/m ³	0.45	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
141-78-6	* Ethyl acetate	2.3		ug/m ³	0.66	0.913	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 22:44	AS
100-41-4	Ethyl Benzene	38		ug/m ³	0.40	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.97	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
67-63-0	Isopropanol	94		ug/m ³	0.45	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS



Sample Information

Client Sample ID: IA-5a_20192202

York Sample ID: 19B0982-08

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180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.37	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.33	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-09-2	Methylene chloride	ND		ug/m ³	0.63	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
142-82-5	n-Heptane	35		ug/m ³	0.37	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
110-54-3	n-Hexane	24		ug/m ³	0.32	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
95-47-6	o-Xylene	59		ug/m ³	0.40	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
179601-23-1	p- & m- Xylenes	160		ug/m ³	0.79	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
622-96-8	* p-Ethyltoluene	53		ug/m ³	0.45	0.913	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 22:44	AS
115-07-1	* Propylene	ND		ug/m ³	0.16	0.913	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 22:44	AS
100-42-5	Styrene	ND		ug/m ³	0.39	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
127-18-4	Tetrachloroethylene	9.3		ug/m ³	0.15	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
109-99-9	* Tetrahydrofuran	70		ug/m ³	0.54	0.913	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 22:44	AS
108-88-3	Toluene	140		ug/m ³	0.34	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.36	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.41	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.12	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m ³	0.51	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.32	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.40	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.058	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 22:44	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %		70-130						



Sample Information

Client Sample ID: IA-6a_20192202

York Sample ID: 19B0982-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.60	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 23:42	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.48	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.60	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.67	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.48	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.087	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.65	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
95-63-6	1,2,4-Trimethylbenzene	31		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.67	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.61	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
108-67-8	1,3,5-Trimethylbenzene	6.8		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.58	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 23:42	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.53	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.63	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
78-93-3	2-Butanone	28		ug/m ³	0.26	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.72	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 23:42	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS



Sample Information

Client Sample ID: IA-6a_20192202

York Sample ID: 19B0982-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	0.82		ug/m ³	0.36	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
67-64-1	Acetone	76		ug/m ³	0.42	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.19	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
71-43-2	Benzene	11		ug/m ³	0.28	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.45	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.59	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-25-2	Bromoform	ND		ug/m ³	0.90	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
74-83-9	Bromomethane	ND		ug/m ³	0.34	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.27	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
56-23-5	Carbon tetrachloride	ND		ug/m ³	0.14	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-00-3	Chloroethane	ND		ug/m ³	0.23	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
67-66-3	Chloroform	0.47		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
74-87-3	Chloromethane	1.3		ug/m ³	0.18	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.087	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
110-82-7	Cyclohexane	5.5		ug/m ³	0.30	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.75	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-71-8	Dichlorodifluoromethane	1.9		ug/m ³	0.43	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
141-78-6	* Ethyl acetate	2.0		ug/m ³	0.63	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 23:42	AS
100-41-4	Ethyl Benzene	34		ug/m ³	0.38	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.93	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.36	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS



Sample Information

Client Sample ID: IA-6a_20192202

York Sample ID: 19B0982-09

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.32	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-09-2	Methylene chloride	3.5		ug/m ³	0.61	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
142-82-5	n-Heptane	33		ug/m ³	0.36	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
110-54-3	n-Hexane	25		ug/m ³	0.31	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
95-47-6	o-Xylene	44		ug/m ³	0.38	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
179601-23-1	p- & m- Xylenes	130		ug/m ³	0.76	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
622-96-8	* p-Ethyltoluene	36		ug/m ³	0.43	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 23:42	AS
115-07-1	* Propylene	ND		ug/m ³	0.15	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 23:42	AS
100-42-5	Styrene	ND		ug/m ³	0.37	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
127-18-4	Tetrachloroethylene	0.89		ug/m ³	0.15	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
109-99-9	* Tetrahydrofuran	69		ug/m ³	0.52	0.875	EPA TO-15 Certifications:	03/02/2019 09:00	03/02/2019 23:42	AS
108-88-3	Toluene	140		ug/m ³	0.33	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.35	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.40	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.12	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.6		ug/m ³	0.49	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.31	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.38	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.056	0.875	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/02/2019 09:00	03/02/2019 23:42	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	104 %		70-130						



Sample Information

Client Sample ID: IA-7a_20192202

York Sample ID: 19B0982-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.64	0.936	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 22:11	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.51	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.64	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.72	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.51	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.38	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.093	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.69	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
95-63-6	1,2,4-Trimethylbenzene	32		ug/m ³	0.46	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.72	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.56	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.38	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.43	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.65	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
108-67-8	1,3,5-Trimethylbenzene	8.0		ug/m ³	0.46	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.62	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.56	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.43	0.936	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 22:11	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.56	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.67	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
78-93-3	2-Butanone	21		ug/m ³	0.28	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.77	0.936	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 22:11	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.5	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS



Sample Information

Client Sample ID: IA-7a_20192202

York Sample ID: 19B0982-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.38	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
67-64-1	Acetone	56		ug/m ³	0.44	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.20	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
71-43-2	Benzene	7.8		ug/m ³	0.30	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.48	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.63	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-25-2	Bromoform	ND		ug/m ³	0.97	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
74-83-9	Bromomethane	ND		ug/m ³	0.36	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.29	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
56-23-5	Carbon tetrachloride	0.53		ug/m ³	0.15	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.43	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-00-3	Chloroethane	ND		ug/m ³	0.25	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
67-66-3	Chloroform	ND		ug/m ³	0.46	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
74-87-3	Chloromethane	1.1		ug/m ³	0.19	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.093	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.42	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
110-82-7	Cyclohexane	4.0		ug/m ³	0.32	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.80	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-71-8	Dichlorodifluoromethane	1.6		ug/m ³	0.46	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
141-78-6	* Ethyl acetate	1.3		ug/m ³	0.67	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
100-41-4	Ethyl Benzene	30		ug/m ³	0.41	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	1.0	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
67-63-0	Isopropanol	100		ug/m ³	0.46	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS



Sample Information

Client Sample ID: IA-7a_20192202

York Sample ID: 19B0982-10

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

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19B0982

180120 77-57 Vleigh Place Flushing NY

Indoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.38	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.34	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-09-2	Methylene chloride	2.2		ug/m ³	0.65	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
142-82-5	n-Heptane	25		ug/m ³	0.38	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
110-54-3	n-Hexane	18		ug/m ³	0.33	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
95-47-6	o-Xylene	42		ug/m ³	0.41	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
179601-23-1	p- & m- Xylenes	120		ug/m ³	0.81	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
622-96-8	* p-Ethyltoluene	34		ug/m ³	0.46	0.936	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 22:11	AS
115-07-1	* Propylene	ND		ug/m ³	0.16	0.936	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 22:11	AS
100-42-5	Styrene	ND		ug/m ³	0.40	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
127-18-4	Tetrachloroethylene	2.9		ug/m ³	0.16	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
109-99-9	* Tetrahydrofuran	50		ug/m ³	0.55	0.936	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 22:11	AS
108-88-3	Toluene	110		ug/m ³	0.35	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.37	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.42	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.13	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m ³	0.53	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.33	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.41	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.060	0.936	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 22:11	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	110 %		70-130						



Sample Information

Client Sample ID: OA-1a_20192202

York Sample ID: 19B0982-11

York Project (SDG) No.

Client Project ID

Matrix

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19B0982

180120 77-57 Vleigh Place Flushing NY

Outdoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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/m ³	0.60	0.868	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 23:10	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m ³	0.47	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m ³	0.60	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m ³	0.67	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m ³	0.47	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-34-3	1,1-Dichloroethane	ND		ug/m ³	0.35	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m ³	0.086	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m ³	0.64	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
95-63-6	1,2,4-Trimethylbenzene	9.3		ug/m ³	0.43	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
106-93-4	1,2-Dibromoethane	ND		ug/m ³	0.67	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m ³	0.52	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
107-06-2	1,2-Dichloroethane	ND		ug/m ³	0.35	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
78-87-5	1,2-Dichloropropane	ND		ug/m ³	0.40	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m ³	0.61	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
108-67-8	1,3,5-Trimethylbenzene	2.1		ug/m ³	0.43	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
106-99-0	1,3-Butadiene	ND		ug/m ³	0.58	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m ³	0.52	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m ³	0.40	0.868	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 23:10	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m ³	0.52	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
123-91-1	1,4-Dioxane	ND		ug/m ³	0.63	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
78-93-3	2-Butanone	13		ug/m ³	0.26	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
591-78-6	* 2-Hexanone	ND		ug/m ³	0.71	0.868	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 23:10	AS
107-05-1	3-Chloropropene	ND		ug/m ³	1.4	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS



Sample Information

Client Sample ID: OA-1a_20192202

York Sample ID: 19B0982-11

York Project (SDG) No.

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19B0982

180120 77-57 Vleigh Place Flushing NY

Outdoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m ³	0.36	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
67-64-1	Acetone	44		ug/m ³	0.41	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
107-13-1	Acrylonitrile	ND		ug/m ³	0.19	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
71-43-2	Benzene	4.6		ug/m ³	0.28	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
100-44-7	Benzyl chloride	ND		ug/m ³	0.45	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-27-4	Bromodichloromethane	ND		ug/m ³	0.58	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-25-2	Bromoform	ND		ug/m ³	0.90	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
74-83-9	Bromomethane	ND		ug/m ³	0.34	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-15-0	Carbon disulfide	ND		ug/m ³	0.27	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
56-23-5	Carbon tetrachloride	0.49		ug/m ³	0.14	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
108-90-7	Chlorobenzene	ND		ug/m ³	0.40	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-00-3	Chloroethane	ND		ug/m ³	0.23	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
67-66-3	Chloroform	ND		ug/m ³	0.42	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
74-87-3	Chloromethane	1.2		ug/m ³	0.18	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m ³	0.086	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m ³	0.39	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
110-82-7	Cyclohexane	1.9		ug/m ³	0.30	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
124-48-1	Dibromochloromethane	ND		ug/m ³	0.74	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-71-8	Dichlorodifluoromethane	1.8		ug/m ³	0.43	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
141-78-6	* Ethyl acetate	ND		ug/m ³	0.63	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
100-41-4	Ethyl Benzene	17		ug/m ³	0.38	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
87-68-3	Hexachlorobutadiene	ND		ug/m ³	0.93	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
67-63-0	Isopropanol	3.2		ug/m ³	0.43	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS



Sample Information

Client Sample ID: OA-1a_20192202

York Sample ID: 19B0982-11

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

19B0982

180120 77-57 Vleigh Place Flushing NY

Outdoor Ambient Air

February 22, 2019 3:00 pm

02/27/2019

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
80-62-6	Methyl Methacrylate	ND		ug/m ³	0.36	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m ³	0.31	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-09-2	Methylene chloride	ND		ug/m ³	0.60	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
142-82-5	n-Heptane	11		ug/m ³	0.36	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
110-54-3	n-Hexane	9.3		ug/m ³	0.31	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
95-47-6	o-Xylene	21		ug/m ³	0.38	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
179601-23-1	p- & m- Xylenes	66		ug/m ³	0.75	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
622-96-8	* p-Ethyltoluene	14		ug/m ³	0.43	0.868	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 23:10	AS
115-07-1	* Propylene	ND		ug/m ³	0.15	0.868	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 23:10	AS
100-42-5	Styrene	ND		ug/m ³	0.37	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
127-18-4	Tetrachloroethylene	2.2		ug/m ³	0.15	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
109-99-9	* Tetrahydrofuran	26		ug/m ³	0.51	0.868	EPA TO-15 Certifications:	03/05/2019 09:00	03/05/2019 23:10	AS
108-88-3	Toluene	68		ug/m ³	0.33	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m ³	0.34	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m ³	0.39	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
79-01-6	Trichloroethylene	ND		ug/m ³	0.12	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m ³	0.49	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
108-05-4	Vinyl acetate	ND		ug/m ³	0.31	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
593-60-2	Vinyl bromide	ND		ug/m ³	0.38	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
75-01-4	Vinyl Chloride	ND		ug/m ³	0.055	0.868	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/05/2019 09:00	03/05/2019 23:10	AS
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	108 %		70-130						



Analytical Batch Summary

Batch ID: BC90203 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
19B0982-01RE1	SSB-1a_20192202	03/02/19
19B0982-02	IA-1a_20192202	03/02/19
19B0982-03RE1	SSB-2a_20192202	03/02/19
19B0982-04	IA-2a_20192202	03/02/19
19B0982-05RE1	SSB-3a_20192202	03/02/19
19B0982-06	IA-3a_20192202	03/02/19
19B0982-07	IA-4a_20192202	03/02/19
19B0982-08	IA-5a_20192202	03/02/19
19B0982-09	IA-6a_20192202	03/02/19
BC90203-BLK1	Blank	03/02/19
BC90203-BS1	LCS	03/02/19
BC90203-DUP1	Duplicate	03/02/19

Batch ID: BC90265 **Preparation Method:** EPA TO15 PREP **Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
19B0982-01	SSB-1a_20192202	03/05/19
19B0982-03	SSB-2a_20192202	03/05/19
19B0982-05	SSB-3a_20192202	03/05/19
19B0982-10	IA-7a_20192202	03/05/19
19B0982-11	OA-1a_20192202	03/05/19
BC90265-BLK1	Blank	03/05/19
BC90265-BS1	LCS	03/05/19
BC90265-DUP1	Duplicate	03/05/19



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC90203 - EPA TO15 PREP

Blank (BC90203-BLK1)

Prepared & Analyzed: 03/02/2019

1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								
n-Heptane	ND	0.41	"								



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike	Source*	%REC	%REC	Limits	Flag	RPD	Flag
		Limit			Result					Limit	

Batch BC90203 - EPA TO15 PREP

Blank (BC90203-BLK1)

Prepared & Analyzed: 03/02/2019

n-Hexane	ND	0.35	ug/m ³								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.17	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.064	"								

Surrogate: SURR: p-Bromofluorobenzene 8.98 ppbv 10.0 89.8 70-130

LCS (BC90203-BS1)

Prepared & Analyzed: 03/02/2019

1,1,1,2-Tetrachloroethane	11.5		ppbv	10.0	115	70-130					
1,1,1-Trichloroethane	11.9		"	10.0	119	70-130					
1,1,2,2-Tetrachloroethane	11.3		"	10.0	113	70-130					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.4		"	10.0	114	70-130					
1,1,2-Trichloroethane	11.1		"	10.0	111	70-130					
1,1-Dichloroethane	11.4		"	10.0	114	70-130					
1,1-Dichloroethylene	11.3		"	10.0	113	70-130					
1,2,4-Trichlorobenzene	12.0		"	10.0	120	70-130					
1,2,4-Trimethylbenzene	11.7		"	10.0	117	70-130					
1,2-Dibromoethane	11.6		"	10.0	116	70-130					
1,2-Dichlorobenzene	11.8		"	10.0	118	70-130					
1,2-Dichloroethane	11.9		"	10.0	119	70-130					
1,2-Dichloropropane	11.2		"	10.0	112	70-130					
1,2-Dichlorotetrafluoroethane	11.8		"	10.0	118	70-130					
1,3,5-Trimethylbenzene	11.1		"	10.0	111	70-130					
1,3-Butadiene	11.1		"	10.0	111	70-130					
1,3-Dichlorobenzene	12.1		"	10.0	121	70-130					
1,3-Dichloropropane	11.2		"	10.0	112	70-130					
1,4-Dichlorobenzene	12.3		"	10.0	123	70-130					
1,4-Dioxane	10.4		"	10.0	104	70-130					
2-Butanone	10.9		"	10.0	109	70-130					
2-Hexanone	10.9		"	10.0	109	70-130					
3-Chloropropene	11.1		"	10.0	111	70-130					
4-Methyl-2-pentanone	10.8		"	10.0	108	70-130					
Acetone	10.8		"	10.0	108	70-130					
Acrylonitrile	11.1		"	10.0	111	70-130					
Benzene	10.8		"	10.0	108	70-130					
Benzyl chloride	14.3		"	10.0	143	70-130	High Bias				
Bromodichloromethane	11.6		"	10.0	116	70-130					
Bromoform	12.3		"	10.0	123	70-130					
Bromomethane	10.2		"	10.0	102	70-130					
Carbon disulfide	11.6		"	10.0	116	70-130					



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike Level	Source*	%REC	%REC Limits	Flag	RPD	RPD	Flag
		Limit			Result					Limit	

Batch BC90203 - EPA TO15 PREP

LCS (BC90203-BS1)

Prepared & Analyzed: 03/02/2019

Carbon tetrachloride	11.5		ppbv	10.0		115	70-130				
Chlorobenzene	11.0		"	10.0		110	70-130				
Chloroethane	10.8		"	10.0		108	70-130				
Chloroform	11.5		"	10.0		115	70-130				
Chloromethane	10.5		"	10.0		105	70-130				
cis-1,2-Dichloroethylene	11.0		"	10.0		110	70-130				
cis-1,3-Dichloropropylene	12.0		"	10.0		120	70-130				
Cyclohexane	11.3		"	10.0		113	70-130				
Dibromochloromethane	11.8		"	10.0		118	70-130				
Dichlorodifluoromethane	12.1		"	10.0		121	70-130				
Ethyl acetate	11.9		"	10.0		119	70-130				
Ethyl Benzene	10.6		"	10.0		106	70-130				
Hexachlorobutadiene	11.1		"	10.0		111	70-130				
Isopropanol	10.9		"	10.0		109	70-130				
Methyl Methacrylate	11.2		"	10.0		112	70-130				
Methyl tert-butyl ether (MTBE)	11.6		"	10.0		116	70-130				
Methylene chloride	10.8		"	10.0		108	70-130				
n-Heptane	11.5		"	10.0		115	70-130				
n-Hexane	11.6		"	10.0		116	70-130				
o-Xylene	11.3		"	10.0		113	70-130				
p- & m- Xylenes	23.0		"	20.0		115	70-130				
p-Ethyltoluene	11.9		"	10.0		119	70-130				
Propylene	10.4		"	10.0		104	70-130				
Styrene	11.5		"	10.0		115	70-130				
Tetrachloroethylene	11.3		"	10.0		113	70-130				
Tetrahydrofuran	11.0		"	10.0		110	70-130				
Toluene	11.0		"	10.0		110	70-130				
trans-1,2-Dichloroethylene	11.7		"	10.0		117	70-130				
trans-1,3-Dichloropropylene	11.8		"	10.0		118	70-130				
Trichloroethylene	10.6		"	10.0		106	70-130				
Trichlorofluoromethane (Freon 11)	11.5		"	10.0		115	70-130				
Vinyl acetate	11.8		"	10.0		118	70-130				
Vinyl bromide	10.8		"	10.0		108	70-130				
Vinyl Chloride	10.6		"	10.0		106	70-130				
<i>Surrogate: SURR: p-Bromofluorobenzene</i>	<i>10.3</i>		<i>"</i>	<i>10.0</i>		<i>103</i>	<i>70-130</i>				



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
Batch BC90203 - EPA TO15 PREP											
Duplicate (BC90203-DUP1)		*Source sample: 19B0982-02 (IA-1a_20192202)				Prepared & Analyzed: 03/02/2019					
1,1,1,2-Tetrachloroethane	ND	0.60	ug/m ³		ND					25	
1,1,1-Trichloroethane	ND	0.48	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	0.60	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.67	"		ND					25	
1,1,2-Trichloroethane	ND	0.48	"		ND					25	
1,1-Dichloroethane	ND	0.35	"		ND					25	
1,1-Dichloroethylene	ND	0.087	"		ND					25	
1,2,4-Trichlorobenzene	ND	0.65	"		ND					25	
1,2,4-Trimethylbenzene	23	0.43	"		23				2.44	25	
1,2-Dibromoethane	ND	0.67	"		ND					25	
1,2-Dichlorobenzene	ND	0.53	"		ND					25	
1,2-Dichloroethane	ND	0.35	"		ND					25	
1,2-Dichloropropane	ND	0.40	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	0.61	"		ND					25	
1,3,5-Trimethylbenzene	5.8	0.43	"		5.8				0.00	25	
1,3-Butadiene	ND	0.58	"		ND					25	
1,3-Dichlorobenzene	ND	0.53	"		ND					25	
1,3-Dichloropropane	ND	0.40	"		ND					25	
1,4-Dichlorobenzene	ND	0.53	"		ND					25	
1,4-Dioxane	ND	0.63	"		ND					25	
2-Butanone	16	0.26	"		17				5.49	25	
2-Hexanone	ND	0.72	"		ND					25	
3-Chloropropene	ND	1.4	"		ND					25	
4-Methyl-2-pentanone	ND	0.36	"		ND					25	
Acetone	48	0.42	"		51				5.23	25	
Acrylonitrile	ND	0.19	"		ND					25	
Benzene	5.6	0.28	"		5.8				1.96	25	
Benzyl chloride	ND	0.45	"		ND					25	
Bromodichloromethane	ND	0.59	"		ND					25	
Bromoform	ND	0.90	"		ND					25	
Bromomethane	ND	0.34	"		ND					25	
Carbon disulfide	ND	0.27	"		ND					25	
Carbon tetrachloride	0.55	0.14	"		0.55				0.00	25	
Chlorobenzene	ND	0.40	"		ND					25	
Chloroethane	ND	0.23	"		ND					25	
Chloroform	ND	0.43	"		ND					25	
Chloromethane	1.1	0.18	"		1.2				7.75	25	
cis-1,2-Dichloroethylene	ND	0.087	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.40	"		ND					25	
Cyclohexane	2.7	0.30	"		2.8				4.44	25	
Dibromochloromethane	ND	0.75	"		ND					25	
Dichlorodifluoromethane	1.5	0.43	"		1.6				5.56	25	
Ethyl acetate	1.0	0.63	"		0.98				3.17	25	
Ethyl Benzene	20	0.38	"		21				2.61	25	
Hexachlorobutadiene	ND	0.93	"		ND					25	
Isopropanol	69	0.43	"		73				5.46	25	
Methyl Methacrylate	ND	0.36	"		ND					25	
Methyl tert-butyl ether (MTBE)	ND	0.32	"		ND					25	
Methylene chloride	2.4	0.61	"		2.5				2.47	25	
n-Heptane	16	0.36	"		17				4.68	25	
n-Hexane	12	0.31	"		13				3.70	25	



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike	Source*	%REC	%REC	Flag	RPD	
		Limit							Level	Result
Batch BC90203 - EPA TO15 PREP										
Duplicate (BC90203-DUP1)	*Source sample: 19B0982-02 (IA-1a_20192202)					Prepared & Analyzed: 03/02/2019				
o-Xylene	28	0.38	ug/m ³		29				1.59	25
p- & m- Xylenes	83	0.76	"		83				0.961	25
p-Ethyltoluene	24	0.43	"		24				1.24	25
Propylene	ND	0.15	"		ND					25
Styrene	ND	0.37	"		ND					25
Tetrachloroethylene	ND	0.15	"		0.59					25
Tetrahydrofuran	35	0.52	"		37				5.96	25
Toluene	67	0.33	"		81				19.6	25
trans-1,2-Dichloroethylene	ND	0.35	"		ND					25
trans-1,3-Dichloropropylene	ND	0.40	"		ND					25
Trichloroethylene	ND	0.12	"		ND					25
Trichlorofluoromethane (Freon 11)	1.4	0.49	"		1.5				6.90	25
Vinyl acetate	ND	0.31	"		ND					25
Vinyl bromide	ND	0.38	"		ND					25
Vinyl Chloride	ND	0.056	"		ND					25
<i>Surrogate: SURR: p-Bromofluorobenzene</i>										
	9.93		ppbv	10.0		99.3	70-130			

Batch BC90265 - EPA TO15 PREP

Blank (BC90265-BLK1)	Prepared & Analyzed: 03/05/2019									
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m ³							
1,1,1-Trichloroethane	ND	0.55	"							
1,1,2,2-Tetrachloroethane	ND	0.69	"							
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"							
1,1,2-Trichloroethane	ND	0.55	"							
1,1-Dichloroethane	ND	0.40	"							
1,1-Dichloroethylene	ND	0.099	"							
1,2,4-Trichlorobenzene	ND	0.74	"							
1,2,4-Trimethylbenzene	ND	0.49	"							
1,2-Dibromoethane	ND	0.77	"							
1,2-Dichlorobenzene	ND	0.60	"							
1,2-Dichloroethane	ND	0.40	"							
1,2-Dichloropropane	ND	0.46	"							
1,2-Dichlorotetrafluoroethane	ND	0.70	"							
1,3,5-Trimethylbenzene	ND	0.49	"							
1,3-Butadiene	ND	0.66	"							
1,3-Dichlorobenzene	ND	0.60	"							
1,3-Dichloropropane	ND	0.46	"							
1,4-Dichlorobenzene	ND	0.60	"							
1,4-Dioxane	ND	0.72	"							
2-Butanone	ND	0.29	"							
2-Hexanone	ND	0.82	"							
3-Chloropropene	ND	1.6	"							
4-Methyl-2-pentanone	ND	0.41	"							
Acetone	ND	0.48	"							
Acrylonitrile	ND	0.22	"							
Benzene	ND	0.32	"							
Benzyl chloride	ND	0.52	"							
Bromodichloromethane	ND	0.67	"							
Bromoform	ND	1.0	"							
Bromomethane	ND	0.39	"							



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting	Units	Spike	Source*	%REC	Flag	RPD	RPD	Limit	Flag
		Limit		Level	Result	Limits		Limit			

Batch BC90265 - EPA TO15 PREP

Blank (BC90265-BLK1)

Prepared & Analyzed: 03/05/2019

Carbon disulfide	ND	0.31	ug/m ³								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	ND	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								
n-Heptane	ND	0.41	"								
n-Hexane	ND	0.35	"								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.17	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.064	"								

<i>Surrogate: SURR: p-Bromofluorobenzene</i>	9.35		ppbv	10.0		93.5	70-130				
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Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting		Spike Level	Source*		%REC Limits	Flag	RPD	
		Limit	Units		Result	%REC			RPD	Limit
Batch BC90265 - EPA TO15 PREP										
LCS (BC90265-BS1)										
Prepared & Analyzed: 03/05/2019										
1,1,1,2-Tetrachloroethane	12.2		ppbv	10.0		122	70-130			
1,1,1-Trichloroethane	12.0		"	10.0		120	70-130			
1,1,2,2-Tetrachloroethane	12.9		"	10.0		129	70-130			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	11.2		"	10.0		112	70-130			
1,1,2-Trichloroethane	12.6		"	10.0		126	70-130			
1,1-Dichloroethane	11.9		"	10.0		119	70-130			
1,1-Dichloroethylene	11.7		"	10.0		117	70-130			
1,2,4-Trichlorobenzene	12.2		"	10.0		122	70-130			
1,2,4-Trimethylbenzene	12.5		"	10.0		125	70-130			
1,2-Dibromoethane	12.2		"	10.0		122	70-130			
1,2-Dichlorobenzene	12.4		"	10.0		124	70-130			
1,2-Dichloroethane	12.3		"	10.0		123	70-130			
1,2-Dichloropropane	12.8		"	10.0		128	70-130			
1,2-Dichlorotetrafluoroethane	12.3		"	10.0		123	70-130			
1,3,5-Trimethylbenzene	11.6		"	10.0		116	70-130			
1,3-Butadiene	11.7		"	10.0		117	70-130			
1,3-Dichlorobenzene	12.9		"	10.0		129	70-130			
1,3-Dichloropropane	12.8		"	10.0		128	70-130			
1,4-Dichlorobenzene	12.9		"	10.0		129	70-130			
1,4-Dioxane	11.7		"	10.0		117	70-130			
2-Butanone	11.5		"	10.0		115	70-130			
2-Hexanone	12.6		"	10.0		126	70-130			
3-Chloropropene	11.7		"	10.0		117	70-130			
4-Methyl-2-pentanone	12.5		"	10.0		125	70-130			
Acetone	11.5		"	10.0		115	70-130			
Acrylonitrile	11.5		"	10.0		115	70-130			
Benzene	11.1		"	10.0		111	70-130			
Benzyl chloride	14.9		"	10.0		149	70-130	High Bias		
Bromodichloromethane	13.0		"	10.0		130	70-130			
Bromoform	12.9		"	10.0		129	70-130			
Bromomethane	10.8		"	10.0		108	70-130			
Carbon disulfide	12.0		"	10.0		120	70-130			
Carbon tetrachloride	11.2		"	10.0		112	70-130			
Chlorobenzene	11.6		"	10.0		116	70-130			
Chloroethane	11.5		"	10.0		115	70-130			
Chloroform	12.0		"	10.0		120	70-130			
Chloromethane	11.1		"	10.0		111	70-130			
cis-1,2-Dichloroethylene	11.5		"	10.0		115	70-130			
cis-1,3-Dichloropropylene	13.5		"	10.0		135	70-130	High Bias		
Cyclohexane	11.9		"	10.0		119	70-130			
Dibromochloromethane	12.6		"	10.0		126	70-130			
Dichlorodifluoromethane	12.7		"	10.0		127	70-130			
Ethyl acetate	12.6		"	10.0		126	70-130			
Ethyl Benzene	12.1		"	10.0		121	70-130			
Hexachlorobutadiene	11.5		"	10.0		115	70-130			
Isopropanol	11.5		"	10.0		115	70-130			
Methyl Methacrylate	12.9		"	10.0		129	70-130			
Methyl tert-butyl ether (MTBE)	11.9		"	10.0		119	70-130			
Methylene chloride	11.4		"	10.0		114	70-130			
n-Heptane	12.1		"	10.0		121	70-130			
n-Hexane	12.0		"	10.0		120	70-130			



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

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag
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Batch BC90265 - EPA TO15 PREP

LCS (BC90265-BS1)

Prepared & Analyzed: 03/05/2019

o-Xylene	12.7		ppbv	10.0		127	70-130				
p- & m- Xylenes	25.8		"	20.0		129	70-130				
p-Ethyltoluene	12.9		"	10.0		129	70-130				
Propylene	11.1		"	10.0		111	70-130				
Styrene	12.2		"	10.0		122	70-130				
Tetrachloroethylene	11.8		"	10.0		118	70-130				
Tetrahydrofuran	11.7		"	10.0		117	70-130				
Toluene	12.5		"	10.0		125	70-130				
trans-1,2-Dichloroethylene	12.1		"	10.0		121	70-130				
trans-1,3-Dichloropropylene	13.2		"	10.0		132	70-130	High Bias			
Trichloroethylene	12.0		"	10.0		120	70-130				
Trichlorofluoromethane (Freon 11)	11.4		"	10.0		114	70-130				
Vinyl acetate	12.5		"	10.0		125	70-130				
Vinyl bromide	10.6		"	10.0		106	70-130				
Vinyl Chloride	11.4		"	10.0		114	70-130				

Surrogate: SURR: p-Bromofluorobenzene

11.2

"

10.0

112

70-130

Duplicate (BC90265-DUP1)

*Source sample: 19B0982-11 (OA-1a_20192202)

Prepared: 03/05/2019 Analyzed: 03/06/2019

1,1,1,2-Tetrachloroethane	ND	0.60	ug/m ³		ND						25
1,1,1-Trichloroethane	ND	0.47	"		ND						25
1,1,2,2-Tetrachloroethane	ND	0.60	"		ND						25
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.67	"		ND						25
1,1,2-Trichloroethane	ND	0.47	"		ND						25
1,1-Dichloroethane	ND	0.35	"		ND						25
1,1-Dichloroethylene	ND	0.086	"		ND						25
1,2,4-Trichlorobenzene	ND	0.64	"		ND						25
1,2,4-Trimethylbenzene	9.6	0.43	"		9.3				2.71		25
1,2-Dibromoethane	ND	0.67	"		ND						25
1,2-Dichlorobenzene	ND	0.52	"		ND						25
1,2-Dichloroethane	ND	0.35	"		ND						25
1,2-Dichloropropane	ND	0.40	"		ND						25
1,2-Dichlorotetrafluoroethane	ND	0.61	"		ND						25
1,3,5-Trimethylbenzene	2.5	0.43	"		2.1				18.5		25
1,3-Butadiene	ND	0.58	"		ND						25
1,3-Dichlorobenzene	ND	0.52	"		ND						25
1,3-Dichloropropane	ND	0.40	"		ND						25
1,4-Dichlorobenzene	ND	0.52	"		ND						25
1,4-Dioxane	ND	0.63	"		ND						25
2-Butanone	13	0.26	"		13				1.61		25
2-Hexanone	ND	0.71	"		ND						25
3-Chloropropene	ND	1.4	"		ND						25
4-Methyl-2-pentanone	ND	0.36	"		ND						25
Acetone	44	0.41	"		44				1.03		25
Acrylonitrile	ND	0.19	"		ND						25
Benzene	4.6	0.28	"		4.6				0.00		25
Benzyl chloride	ND	0.45	"		ND						25
Bromodichloromethane	ND	0.58	"		ND						25
Bromoform	ND	0.90	"		ND						25
Bromomethane	ND	0.34	"		ND						25
Carbon disulfide	ND	0.27	"		ND						25
Carbon tetrachloride	0.49	0.14	"		0.49				0.00		25

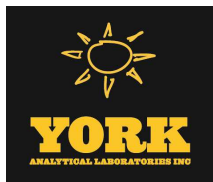


Volatile Organic Compounds in Air by GC/MS - Quality Control Data

York Analytical Laboratories, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source* Result	%REC	%REC Limits	Flag	RPD	RPD Limit	Flag	
Batch BC90265 - EPA TO15 PREP												
Duplicate (BC90265-DUP1)		*Source sample: 19B0982-11 (OA-1a_20192202)					Prepared: 03/05/2019 Analyzed: 03/06/2019					
Chlorobenzene	ND	0.40	ug/m ³		ND					25		
Chloroethane	ND	0.23	"		ND					25		
Chloroform	ND	0.42	"		ND					25		
Chloromethane	1.1	0.18	"		1.2				9.09	25		
cis-1,2-Dichloroethylene	ND	0.086	"		ND					25		
cis-1,3-Dichloropropylene	ND	0.39	"		ND					25		
Cyclohexane	1.9	0.30	"		1.9				0.00	25		
Dibromochloromethane	ND	0.74	"		ND					25		
Dichlorodifluoromethane	1.6	0.43	"		1.8				10.0	25		
Ethyl acetate	ND	0.63	"		ND					25		
Ethyl Benzene	17	0.38	"		17				1.99	25		
Hexachlorobutadiene	ND	0.93	"		ND					25		
Isopropanol	3.1	0.43	"		3.2				2.68	25		
Methyl Methacrylate	ND	0.36	"		ND					25		
Methyl tert-butyl ether (MTBE)	ND	0.31	"		ND					25		
Methylene chloride	ND	0.60	"		ND					25		
n-Heptane	11	0.36	"		11				0.957	25		
n-Hexane	9.3	0.31	"		9.3				0.329	25		
o-Xylene	21	0.38	"		21				2.36	25		
p- & m- Xylenes	68	0.75	"		66				2.64	25		
p-Ethyltoluene	14	0.43	"		14				4.22	25		
Propylene	ND	0.15	"		ND					25		
Styrene	ND	0.37	"		ND					25		
Tetrachloroethylene	2.2	0.15	"		2.2				0.00	25		
Tetrahydrofuran	26	0.51	"		26				0.0986	25		
Toluene	68	0.33	"		68				0.432	25		
trans-1,2-Dichloroethylene	ND	0.34	"		ND					25		
trans-1,3-Dichloropropylene	ND	0.39	"		ND					25		
Trichloroethylene	ND	0.12	"		ND					25		
Trichlorofluoromethane (Freon 11)	1.3	0.49	"		1.3				0.00	25		
Vinyl acetate	ND	0.31	"		ND					25		
Vinyl bromide	ND	0.38	"		ND					25		
Vinyl Chloride	ND	0.055	"		ND					25		
Surrogate: SURR: p-Bromofluorobenzene	11.1		ppbv	10.0		111	70-130					





Sample and Data Qualifiers Relating to This Work Order

TO-LCS-H The result reported for this compound may be biased high due to its behavior in the analysis batch LCS where it recovered greater than 130% of the expected value.

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.

Field Chain-of-Custody Record - AIR

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

YOUR Information

Company: HTE
Address: 77 Arkway Drive
Hempstead NY - 11788
Phone No: 631-241-7165
Contact Person: Paul Math
E-Mail Address: Paul.Math@yorklab.com

Report To:

Company: HTE
Address: 77 Arkway Drive
Hempstead NY - 11788
Phone No: 631-241-7165
Attention: Paul Math
E-Mail Address: Paul.Math@yorklab.com

Invoice To:

Company: _____
Address: _____
Phone No: _____
Attention: _____
E-Mail Address: _____

YOUR Project ID

180120
Purchase Order No. 52272
Samples from: CT NY NJ

Turn-Around Time

RUSH - Same Day
RUSH - Next Day
RUSH - Two Day
RUSH - Three Day
RUSH - Four Day
Standard(5-7 Days)

Report Type/Deliverables

Summary Report _____
Summary w/ QA Summary _____
CT RCP Package _____
NY ASP A Package _____
NY ASP B/CLP Pkg _____
NJDEP Reduced _____
Electronic Deliverables:
EED (Specify Type) _____
Standard Excel _____
Regulatory Comparison Excel _____

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
AI- INDOOR Ambient Air
AO- OUTDOOR Amb. Air
AE- Vapor Extraction Well/
Process Gas/Effluent
AS- SOIL Vapor/Sub-Slab

TO15 Volatiles and Other Gas Analyses
EPA TO-15 List
NYSDEC VI list
Tentatively Identified Compounds

Detection Limits Required
≤ 1 ug/m³
NYSDEC VI Limits
(VI report unknown)
NJDEP low level
Routine Survey
Other _____

Special Instructions
Reporting units:
ug/m3
EPA TO15 - Analysis requested

Samples Collected/Authorized By (Signature)
Anusha Agnani
Name (printed)

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Choose Analytes Needed from the Menu Above and Enter Below	Flow Controller ID	Sampling Media
S8B-1a	2/22/19	AS	-27	-6	Y80		6 Liter Summa canister ✓ Tedlar Bag
IA-1a		AI	-29	-7	22079		6 Liter Summa canister ✓ Tedlar Bag
S8B-2a		AS	-30	-10	23999		6 Liter Summa canister ✓ Tedlar Bag
IA-2a		AI	-30	-7	16974		6 Liter Summa canister ✓ Tedlar Bag
S8B-3a		AS	-30	-7	Y1127		6 Liter Summa canister ✓ Tedlar Bag
IA-3a		AI	-29	-7	23796		6 Liter Summa canister ✓ Tedlar Bag
IA-4a		AI	-26	-7	15524		6 Liter Summa canister ✓ Tedlar Bag
IA-5a		AI	-30	-7	28298		6 Liter Summa canister ✓ Tedlar Bag
IA-6a		AI	-30	-7	23155		6 Liter Summa canister ✓ Tedlar Bag
IA-7a		AI	-28	-8	28845		6 Liter Summa canister ✓ Tedlar Bag
Comments	CA-1a	AI	-30	-7	Y83		6 Liter Summa canister ✓ Tedlar Bag