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May 12, 2021

Mr. Jared Donaldson  
New York State Department  
of Environmental Conservation Division  
of Environmental Remediation 625  
Broadway  
Albany, New York 12233-7015

**Re: Revised Soil Vapor Intrusion Report  
Former Elka Chemical Corporation Property/  
Downgradient Commercial Property  
Lindenhurst, Suffolk County, New York  
NYSDEC Project No. 152239**

Dear Mr. Donaldson:

As per your request, Eastern Environmental Solutions, Inc./Dermoddy Consulting is providing this revised report of our investigation sampling procedures, laboratory analysis results, and findings and conclusions.

The purpose of the investigation was to determine if soil or groundwater contamination from past discharges at the former Elka Chemical property (Elka) is creating soil vapor and impacting the indoor air at the Elka site building or the downgradient commercial building that is located 550 feet south-southeast of the Elka property at 175 S. 11<sup>th</sup> St., Lindenhurst. The investigation was performed in accordance with the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (2006) as amended (the Guidance).

Figure 1 shows the sample locations at the two properties.

***Elka Building SVI Sampling***

The SVI sampling at the Elka building was performed on March 21, 2020 and included SS-1/IA-1 (sub-slab sample with co-located indoor air sample) and SS-2/IA-2. An outdoor sample (OA-1) was obtained adjacent to the northeast corner of the building. There was no discernable wind direction at the time of sampling.

A rotary hammer drill was used to create a half-inch-diameter drillhole in the concrete floor at each of the two sub-slab sample locations. The drilling was performed to a depth of approximately two inches below the base of the concrete and into the underlying soil. A length of food grade polyethylene tubing was placed to the base of the hole and Morie No.

1 sized gravel was placed in the drillhole around the tubing to two inches below grade. The drillhole was sealed at the surface with hydrated bentonite. The tubing was connected to Summa Canisters and the samples were obtained over an eight-hour period using flow restrictors. The sampling period coincided with standard business hours.

Prior to obtaining the sub-slab soil vapor samples, a helium tracer test was performed at each of sub-slab sample locations. The purpose of the testing was to assure that there is an adequate seal segregating the sub-slab area from excessive atmospheric infiltration. An inverted one gallon plastic container was placed over each sub-slab sample location and sealed at its base with hydrated bentonite and the sample tubing was passed through the top of the container through a drilled hole and connected to a 6-liter Summa Canister. The sample tubing contained a purging port valve. A canister of helium was used to introduce helium using a length of tubing attached to the helium canister at one end, and into the container (through a drilled hole) at the other end. In addition, a hole was created on the opposite side of the container to discharge excess helium to prevent the creation of excess pressure in the container. 120 cubic centimeters of air (approximately 1.5 tubing volumes) was then slowly purged with a graduated Teflon syringe from the tubing through the purging port. After the purging, a helium meter was attached to the purging port to obtain helium readings. The helium reading at SS-1 was 4,750 ppm (parts per million) and the reading at SS-2 was 3.5 percent. These readings demonstrated an adequate seal since the helium concentrations were both below 10 percent.

In addition, indoor air samples were co-located with each of the sub-slab soil vapor sample locations. One outdoor air sample was obtained. The samples were obtained with Summa Canisters with eight-hour flow controllers. The intakes of each Summa Canister were set at a height of approximately 3 to 4 feet above grade. The initial and final pressure of the Summa Canisters were recorded and are provided in the chain of custody. The five sample canisters were delivered to a New York State ELAP-approved laboratory for the analysis of VOCs by Method TO-15. After the sampling was complete, the sub-slab drillholes were sealed with concrete.

A Building Questionnaire and Product Inventory Form was completed for the Elka building (see Attachment A). The building is occupied by generally 10 to 12 persons on Sunday and on Thursday evenings. The building is otherwise infrequently occupied. Numerous, typical cleaning and maintenance chemicals are stored within the building.

Table 1 contains a summary of the sampling results and the laboratory report and chain of custody report is provided in Attachment B. In addition, Attachment C contains the Data Usability Summary Report (DUSR) for the laboratory analyses. The DUSR shows that the laboratory analysis data are adequate for their intended use.

The objective of collecting sub-slab soil vapor samples and co-located indoor air samples was to evaluate the potential for soil vapor intrusion to impact the indoor air in the building.

The indoor air sample results (IA-1 and IA-2) were compared to the NYSDOH Guidance Table C1 "Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes" 95<sup>th</sup> percentile values (the "95<sup>th</sup> Percentile Values") to determine typical concentrations of chemicals in the indoor air.

The results showed that none of the chemicals in the indoor air were detected at concentrations above the NYSDOH 95<sup>th</sup> percentile values or the NYSDOH Air Guidelines [including tetrachloroethylene (which has an indoor air Guideline value of 30 mcg/m<sup>3</sup>) and trichloroethylene (which has an indoor air Guideline value of 2 mcg/m<sup>3</sup>)].

For the sub-slab soil vapor samples (SS-1 and SS-2), the results showed detections of various VOCs. There are no standards or guidelines for sub-slab vapor VOCs, however, the Guidance requires the evaluation of indoor and sub-slab VOC concentrations using the NYSDOH Guidance matrices for some of the VOCs. Based on the Matrix Table A evaluation, carbon tetrachloride (which was detected in the sub-slab at a maximum concentration of 0.54 mcg/m<sup>3</sup>) requires no further action, and trichloroethylene (which was detected in the sub-slab at a maximum concentration of 490 mcg/m<sup>3</sup>) indicated that mitigation is required. However, in this case, mitigation is required due to sub-slab vapor concentrations of trichloroethylene. The indoor air concentrations are below the NYSDOH Air Guideline levels.

For Matrix Tables B and C, the detected VOCs require no further action for methylene chloride (which was detected in the sub-slab at a maximum concentration of 8.5 mcg/m<sup>3</sup>) and 1,1,1- trichloroethane (which was detected in the sub-slab at a maximum concentration of 320 mcg/m<sup>3</sup>). Tetrachloroethylene (which was detected in the sub-slab at a maximum concentration of 860 mcg/m<sup>3</sup>) requires further monitoring, however, the indoor air concentration was below the NYSDOH Air Guidance level.

Based on a review of the data and the comparison of sub-slab soil vapor data and co-located indoor air data to Matrix Table A, mitigation is recommended to address the potential for soil vapor intrusion to impact the indoor air quality in the Elka building.

It should be noted that previous sampling by the Suffolk County Department of Health Services in 2011 showed that a shallow groundwater sample on Akron Ave. (directly north of the Elka site contained tetrachloroethylene at 140 parts per billion (ppb) and 100 ppb of trichloroethylene (see Figure 1 for the sample location). The area directly upgradient of the Elka property contains an extensive industrial area and it appears that there are upgradient sources of tetrachloroethylene and trichloroethylene that are likely be the source of the sub-slab vapors at the Elka site.

### ***Downgradient Commercial Building SVI and Groundwater Sampling***

The SVI sampling at the downgradient commercial building was performed on March 29, 2020 and included sub-slab soil vapor samples SS-A, SS-B, and SS-C as well as co-located indoor air samples IA-A, IA-B, and IA-C. An outdoor air sample was also obtained, however, the canister had leaked due to either a faulty flow restrictor or the canister was not fully closed following sampling. Therefore, the outdoor air sample could not be analyzed.

The purpose of collecting the sub-slab soil vapor and co-located indoor air samples was to evaluate the potential for soil vapor intrusion to impact the indoor air in the downgradient commercial building.

The samples were obtained using the procedures described for the Elka building sampling. The sub-slab sample seal integrity was tested with helium tracing at the three locations; SS-A (1,550 ppm), SS-B (3,425 ppm), and SS-C (4,500 ppm). The tracer tests all showed results below 10 percent helium and the sampling commenced.

Table 2 contains a summary of the sampling results and the sample laboratory report and chain of custody form are provided in Attachment A. The indoor air sample results (IA-A, IA-B, and IA-C) were compared to the 95<sup>th</sup> Percentile Values to determine typical concentrations of chemicals in the indoor air. In instances where the NYSDOH provides Air Guideline Values, those values were used.

The indoor air results showed that 1,3,5-trimethylbenzene, 1,2,4-trimethylbenzene, and methyl methacrylate were detected at concentrations exceeding the 95<sup>th</sup> Percentile Values. The concentrations of these chemicals were higher in the indoor air than in the sub-slab area. Therefore, the trimethylbenzenes and methyl methacrylate may have a source within the downgradient commercial building. There are no health-based standards or guidelines established for the trimethylbenzenes or methyl methacrylate in indoor air.

For the sub-slab soil vapor samples, the results showed detections of various VOCs. There are no standards or guidelines for sub-slab vapor VOCs, however, the Guidance requires the evaluation of indoor and sub-slab VOC concentrations using the Guidance Matrices for some of the VOCs. For the Matrix Table A evaluation, carbon tetrachloride (which was detected in the sub-slab at a maximum concentration of 0.47 mcg/m<sup>3</sup>) requires no further action, cis-1,2-dichloroethylene (which was detected in the sub-slab at a maximum concentration of 100 mcg/m<sup>3</sup>) requires resampling or mitigation, and for trichloroethylene (which was detected in the sub-slab at a maximum concentration of 310 mcg/m<sup>3</sup>), mitigation is recommended. The mitigation is recommended due to sub-slab vapor concentrations of trichloroethylene. The indoor air concentrations for methylene chloride, tetrachloroethylene, and trichloroethylene are below the NYSDOH Air Guideline levels.

For Matrices B and C, the detected VOCs require no further action for methylene chloride, tetrachloroethylene, or 1,1,1-trichloroethane.

As an additional component of the downgradient commercial building soil vapor intrusion investigation, two shallow groundwater samples (SPG-1 and SPG-2) were obtained in the parking lot adjacent to, and 53 feet north (upgradient) of, the downgradient commercial building. The samples were obtained with a Geoprobe on April 13, 2020. Upon boring to approximately 8 to 10 feet below grade and placing dedicated, temporary, five-foot sections of slotted PVC with five-foot PVC riser pipes into the borehole, it was found that the geology at and below the water table consisted of light brown silty sand with low permeability. After approximately 10 minutes, groundwater entered the well to a depth of approximately 5 feet below grade. Based on the low hydraulic conductivity of the wells, the screens were placed at 5 to 8 feet below grade and, therefore, the samples were obtained from the upper three feet of the aquifer. A peristaltic pump was used to pump groundwater into two 40 milliliter vials with Teflon septa and zero headspace for each well. The samples were labeled and placed in a cooler with ice for transfer to the laboratory.

The groundwater sample analysis results are provided in Table 3 and the laboratory analysis report is provided in Attachment B. The results show no exceedances of the NYSDEC Class GA groundwater standards. The detections included trace concentrations of petroleum constituents and low concentrations of cis-1,2-dichloroethylene (0.26 mcg/l at SPG-1) and tetrachloroethylene (2.3 mcg/l at SPG-2). Also, trichloroethylene was not detected in the shallow groundwater upgradient of the building.



Therefore, there is no evidence that the trichloroethylene present beneath the downgradient commercial building in the soil vapor was the result of contaminated groundwater from an upgradient source. It appears that there may be a source of VOC contamination beneath the downgradient commercial building due to numerous VOCs detected in the sub-slab area and indoor air, yet only trace and low detections of seven VOCs in the groundwater adjacent and upgradient of the building. It was also noted that a 55-gallon chemical drum, a gasoline container, and automobile engines were observed along the exterior of the north-south portion of the building that contains that unit. The unit also shares a common wall with the downgradient commercial building and, therefore, may be a source of indoor air and sub-slab vapors present at and beneath the downgradient commercial building.

***Conclusions Related to the Elka Building***

Based on a review of the data and a comparison of sub-slab soil vapor data, and co-located indoor air data in Matrix Table A, mitigation is recommended to address the potential for soil vapor intrusion to impact the indoor air quality of the downgradient commercial building.

***Conclusions Related to the Downgradient Commercial Building***

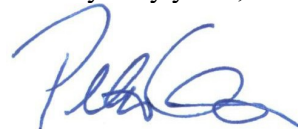
Based on a review of the data and a comparison of sub-slab soil vapor data, and co-located indoor air data in Matrix Table A, mitigation is recommended to address the potential for soil vapor intrusion to impact the indoor air quality of the downgradient commercial building.

The soil vapor intrusion sampling at the downgradient commercial building showed the detection of numerous VOCs present in the sub-slab vapors and indoor air although the upgradient shallow groundwater results showed only seven VOC minor detections. For the VOCs from an upgradient source to create soil vapor, they must be present at the water table where they will be available for off-gassing, and there are only trace and low concentrations of seven VOCs present within three feet of the water table. Therefore, the groundwater data does not support the premise that an upgradient source of contamination is responsible for the soil vapor present beneath the downgradient commercial building.

Since the downgradient commercial building appears to have been used for industrial purposes for many decades, and contains what appears to be an industrial business in the adjacent unit, it appears that there may have been past chemical disposal that is creating soil vapors.

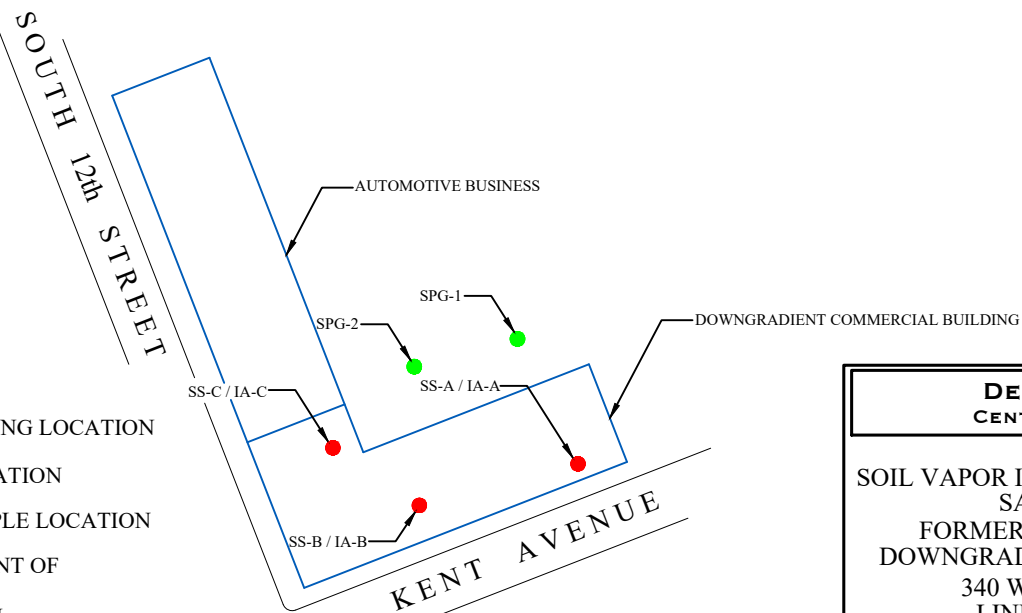
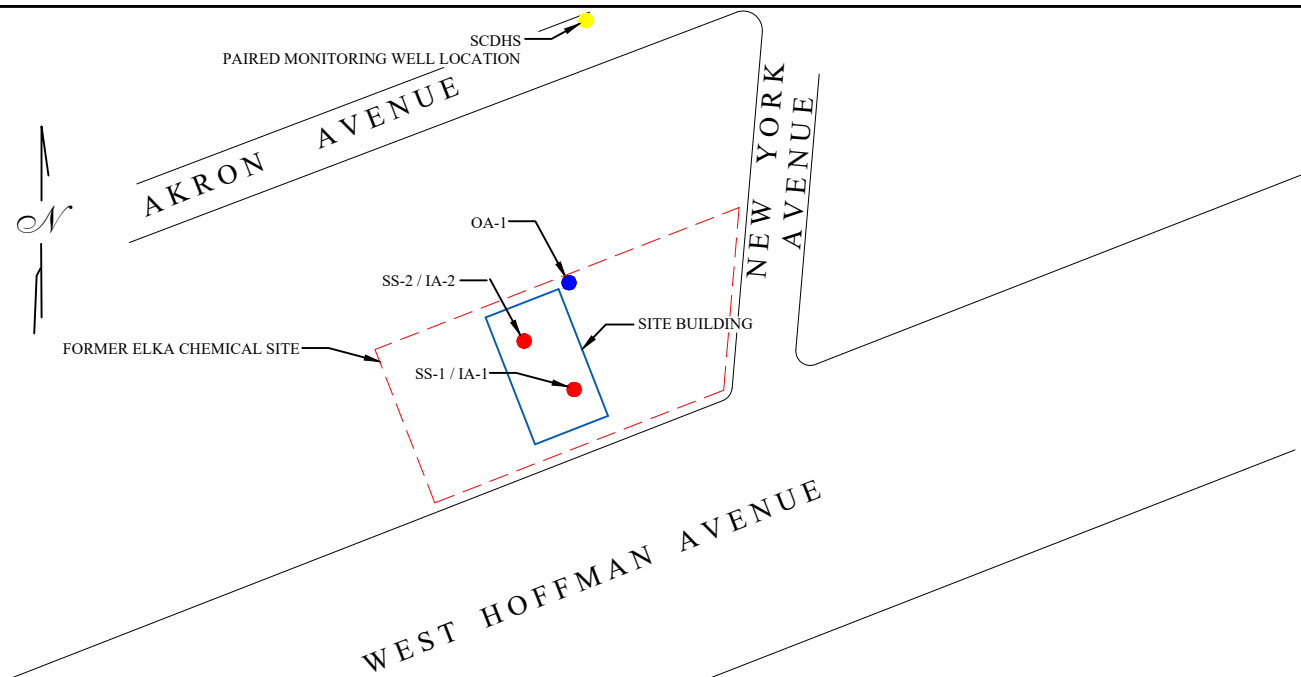
Should you have any questions, please feel free to contact me.

Very truly yours,



Peter Dermody, C.P.G.  
Principal Hydrogeologist

cc: James Mulvey  
Barry Cohen, Esq.  
Robert Corcoran  
Renata Ockerby, NYSDOH  
Charlotte Bethoney, NYSDOH



#### LEGEND

- SS-1 / IA-1 SUB-SLAB SOIL VAPOR SAMPLING LOCATION
- OA-1 OUTDOOR AIR SAMPLING LOCATION
- SPG-1 SPARGE GROUNDWATER SAMPLE LOCATION
- SCDHS SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES PAIRED MONITORING WELL LOCATION

SCALE: 1" = 116'

**DERMODY CONSULTING**  
CENTER MORICHES, NEW YORK

FIGURE 1  
SOIL VAPOR INTRUSION AND GROUNDWATER  
SAMPLING LOCATIONS  
FORMER ELKA CHEMICAL SITE AND  
DOWNGRADIANT COMMERCIAL BUILDING  
340 WEST HOFFMAN AVENUE  
LINDENHURST, NEW YORK

**Table 1**  
**Soil Vapor Intrusion Chemical Analytical Results**  
**Former Elka Chemical Site**  
**340 W. Hoffman Avenue, Lindenhurst, New York**

Sample ID	IA-1	IA-2	SS-1	SS-2	OA-1	NYSDOH Table C-1 95 <sup>th</sup> Percentile Values
<b>Volatile Organic Compounds (ug/m<sup>3</sup>)</b>						
<b>Sample Date</b>	<b>03-21-2020</b>	<b>03-21-2020</b>	<b>03-21-2020</b>	<b>03-21-2020</b>	<b>03-21-2020</b>	
<b>1,1,1-Trichloroethane</b>	ND (0.49)	ND (0.45)	320	99	ND (0.47)	6.9
<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	ND (0.69)	0.63	ND (7.0)	ND (6.6)	ND (0.66)	3.4
<b>1,2,4-Trimethylbenzene</b>	4.1	3.9	4.5	4.3	ND (0.42)	18
<b>1,3,5-Trimethylbenzene</b>	1.5	1.5	ND (4.5)	ND (4.3)	ND (0.42)	6.5
<b>2-Butanone</b>	2.0	2.2	8.1	9.2	0.68	-
<b>4-Methyl-2-pentanone</b>	4.4	4.9	5.2	5.3	ND (0.35)	-
<b>Acetone</b>	10	10	18	130	3.4	140
<b>Benzene</b>	2.3	2.8	4.1	ND (2.8)	0.41	29
<b>Carbon Disulfide</b>	0.31	0.41	ND (2.8)	ND (2.7)	ND (0.27)	-
<b>Carbon tetrachloride</b>	0.45	0.52	ND (1.4)	ND (1.4)	0.54	1.1
<b>Chloroform</b>	ND (0.44)	ND (0.40)	38	4.2	ND (0.42)	4.6
<b>Chloromethane</b>	1.1	1.1	ND (1.9)	ND (2.3)	1.2	5.2
<b>cis-1,2-Dichloroethylene</b>	ND (0.089)	ND (0.081)	12	2.1	ND (0.085)	1.2
<b>Cyclohexane</b>	2.5	2.9	ND (3.1)	5.4	ND (0.30)	19
<b>Dichlorodifluoromethane</b>	1.9	2.0	ND (4.5)	ND (4.3)	2.0	26
<b>Ethyl acetate</b>	ND (0.65)	ND (0.59)	13	14	ND (0.62)	-
<b>Ethyl Benzene</b>	2.3	2.6	4.4	24	ND (0.37)	13
<b>Isopropanol</b>	5.2	5.1	6.5	19	0.67	-
<b>Methyl Methacrylate</b>	ND (0.37)	ND (0.34)	ND (3.7)	ND (3.5)	0.35	1.1
<b>Methylene chloride</b>	2.0	2.0	8.5	6.0	2.3	60*
<b>n-Heptane</b>	4.9	5.5	ND (3.7)	29	ND (0.35)	33
<b>n-Hexane</b>	8.9	11	8.3	7.6	ND (0.30)	35
<b>o-Xylene</b>	3.2	3.6	5.5	20	ND (0.37)	13

**Table 1**  
**Soil Vapor Intrusion Chemical Analytical Results**  
**Former Elka Chemical Site 340 W. Hoffman Ave.**  
**Lindenhurst, New York**

Sample ID	IA-1	IA-2	SS-1	SS-2	OA-1	NYSDOH Table C-1 95 <sup>th</sup> Percentile Values
<b>Volatile Organic Compounds (ug/m<sup>3</sup>)</b>						
Sample Date	03-21-2020	03-21-2020	03-21-2020	03-21-2020	03-21-2020	
p- & m-Xylenes	8.1	9.0	14	59	ND (0.75)	21
p-Ethyltoluene	3.1	3.3	ND (4.5)	5.1	ND (0.42)	-
Tetrachloroethylene	4.3	5.2	810	860	ND (0.58)	30*
Toluene	11	13	24	44	0.65	110
Trichloroethylene	0.48	0.57	490	210	ND (0.12)	2*
Trichlorofluoromethane (Freon 11)	23	27	6.1	ND (4.9)	1.3	30

Notes:

- No concentration established

ND- not detected

NYSDOH Guidance Table C1. "Study of Volatile Organic Chemicals in Air of Fuel Oil Heated Homes" 95<sup>th</sup> Percentile values for indoor air of fuel oil heated homes were compared to the sample results.

\*The NYSDOH Indoor Air Guidance Value was applied.

( 0.58) Values in parentheses are the Limit Of Quantitation value. Representing 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 analysis.

**Bold** values for indoor air indicate an exceedance of the 95<sup>th</sup> percentile values from NYSDOH Air Guideline Values.

\*NYSDOH 95<sup>th</sup> Percentile values for indoor air of fuel oil heated homes.

**Table 2**  
**Soil Vapor Intrusion Analytical Results**  
**Downgradient Commercial Building**

Sample ID	IA-A	IA-B	IA-C	SS-A	SS-B	SS-C	NYSDOH 95 <sup>th</sup> Percentile Values *
<b>Volatile Organic Compounds (ug/m<sup>3</sup>)</b>							
Sample Date	03-29-2020	03-29-2020	03-29-2020	03-29-2020	03-29-2020	03-29-2020	
1,1,1-Trichloroethane	ND (0.51)	ND (0.53)	ND (0.58)	ND (0.64)	22	18	6.9
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.78	ND (0.75)	ND (0.81)	ND (0.89)	ND (0.64)	ND (0.72)	3.4
1,1-Dichloroethane	ND (0.38)	ND (0.40)	ND (0.43)	ND (0.47)	1.1	0.60	0.25
1,2,4-Trimethylbenzene	1.8	2.8	41	3.8	2.7	3.0	18
1,3,5-Trimethylbenzene	0.50	0.82	11	0.97	0.78	0.78	6.5
1,3-Butadiene	ND (0.62)	ND ((0.65)	ND (0.70)	5.6	ND (0.55)	3.3	-
2-Butanone	3.6	2.3	2.7	15	9.3	5.1	-
4-Methyl-2-pentanone	1.4	1.4	1.9	0.86	0.96	0.76	-
Acetone	54	61	71	130	260	66	140
Acrylonitrile	ND (0.20)	ND (0.21)	ND (0.23)	ND (0.25)	0.36	ND (0.20)	-
Benzene	1.2	1.6	2.5	3.3	2.5	3.2	29
Carbon Disulfide	ND(0.29)	ND (0.31)	ND (0.33)	0.91	0.73	0.73	-
Carbon tetrachloride	0.76	0.55	0.53	0.37	0.47	0.35	1.1
Chloroform	ND (0.45)	ND (0.48)	ND (0.52)	2.7	1.6	0.50	4.6
Chloromethane	1.8	1.3	1.3	0.53	0.81	0.67	5.2
cis-1,2-Dichloroethylene	ND (0.092)	ND (0.097)	ND (0.11)	100	0.30	0.26	1.2
Cyclohexane	0.90	1.6	2.5	0.68	0.89	1.3	19
Dichlorodifluoromethane	2.6	2.0	2.0	1.3	1.9	1.9	26
Ethyl acetate	3.3	ND (0.71)	ND (0.76)	ND (0.84)	0.72	0.84	-
Ethyl Benzene	2.1	2.1	2.9	2.1	2.0	2.2	13
Isopropanol	110	100	74	37	31	54	-
Methyl Methacrylate	46	2.5	ND (0.43)	2.9	0.51	ND (0.38)	1.1
Methyl tert-butyl ether (MTBE)	ND (0.34)	0.46	0.80	ND (0.42)	ND (0.30)	0.40	71
Methylene chloride	2.8	3.7	6.5	3.0	2.3	3.2	60*
n-Heptane	4.0	5.0	5.5	6.4	4.8	3.5	33

**Table 2**  
**Soil Vapor Intrusion Analytical Results**  
**Downgradient Commerical Building**

Sample ID	IA-A	IA-B	IA-C	SS-A	SS-B	SS-C	NYSDOH 95 <sup>th</sup> Percentile Values *
<b>Volatile Organic Compounds (ug/m<sup>3</sup>)</b>							
<b>Sample Date</b>	<b>03-29-2020</b>	<b>03-29-2020</b>	<b>03-29-2020</b>	<b>03-29-2020</b>	<b>03-29-2020</b>	<b>03-29-2020</b>	
<b>n-Hexane</b>	5.0	4.8	8.4	6.0	4.1	4.7	35
<b>o-Xylene</b>	2.2	2.5	5.5	2.5	1.8	2.1	13
<b>p- &amp; m-Xylenes</b>	7.8	7.7	15	7.3	6.3	7.5	21
<b>p-Ethyltoluene</b>	1.6	2.1	20	3.8	3.0	3.4	-
<b>Propylene</b>	ND (0.16)	ND (0.17)	ND (0.18)	77	ND (0.14)	13	-
<b>Styrene</b>	2.1	0.79	0.81	ND (0.50)	ND (0.36)	ND (0.40)	2.3
<b>Tetrachloroethylene</b>	3.7	ND (0.66)	1.4	3.3	12	3.5	30*
<b>Tetrahydrofuran</b>	ND (0.55)	ND (0.58)	ND (0.63)	2.5	1.6	1.9	9.4
<b>Toluene</b>	11	13	20	12	9.8	13	110
<b>trans-1,2-Dichloroethylene</b>	ND (0.37)	ND (0.39)	ND (0.42)	29	ND (0.33)	ND (0.37)	-
<b>Trichloroethylene</b>	0.30	ND (0.13)	0.34	310	10	1.4	2*
<b>Trichlorofluoromethane (Freon 11)</b>	1.9	1.7	1.5	2.2	1.6	1.7	30

Notes:

- No concentration established

ND- not detected

( 0.58) Values in parentheses are the Limit Of Quantitation value. Representing 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 analysis.

**Bold** values for indoor air indicate an exceedance of the 95<sup>th</sup> percentile values from NYSDOH Air Guideline Values.

\*NYSDOH 95<sup>th</sup> Percentile values for indoor air of fuel oil heated homes.

**Table 3**  
**Groundwater Analytical Results**  
**Downgradient Commercial Building**  
**Lindenhurst, New York**

Sample ID	SPG-1	SPG-2	NYS Class GA Standards
<b>Volatile Organic Compounds (ug/l)</b>			
<b>Sample Date</b>	<b>04-13-2020</b>	<b>04-13-2020</b>	
<b>2-Butanone</b>	ND	0.71	50**
<b>Acetone</b>	8.0	7.2	50**
<b>Carbon Disulfide</b>	0.65	ND	60
<b>Chloromethane</b>	ND	0.43 CCV-E, J	5
<b>cis-1,2-Dichloroethylene</b>	0.26 J	ND	5
<b>Isopropylbenzene</b>	0.98	ND	5*
<b>Tetrachloroethylene</b>	ND	2.3	5*

J - Detected below the Reporting Limit but greater than or equal to the Method Detection Limit (MDL/LOD) or in the case of a TIC, the result is an estimated concentration.

CCV-E - The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).

ND - Not Detected.

\* The principal organic contaminant standard for groundwater of 5 ug/L applies to this substance.

\*\* TOGS 1.1.1 standard applies.

## **Attachment A**



**NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH**

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Pete Dermody Date/Time Prepared 3/23/20, 10:35 AM  
Preparer's Affiliation Dermody Consulting Phone No. 631 905-4868  
Purpose of Investigation Soil Vapor Intrusion Investigation

**1. OCCUPANT:**

Interviewed: ☒ Y / ☐ N

Last Name: Douglas First Name: Pastor Margaret

Address: 340 W. Hoffman Ave., Lindenhurst

County: Suffolk

Home Phone: \_\_\_\_\_ Office Phone: 631 842-9720

Number of Occupants/persons at this location \_\_\_\_\_ Age of Occupants \_\_\_\_\_

*Church services are Sunday and Thursday evenings. Attendance generally consists of 10 to 12 adults.*

**2. OWNER OR LANDLORD:** (Check if same as occupant ☐)

Interviewed: Y / ☒ N

Last Name: Simione First Name: Al

Address: 640 W. Hoffman Ave., Lindenhurst NY

County: Suffolk

Home Phone: ~~631~~ \_\_\_\_\_ Office Phone: 631 226-0580

**3. BUILDING CHARACTERISTICS**

Type of Building: (Circle appropriate response)

Residential  
Industrial

School  
☒ Church

Commercial/Multi-use  
Other: \_\_\_\_\_

If the property is residential, type? (Circle appropriate response)

Ranch  
Raised Ranch  
Cape Cod  
Duplex  
Modular

2-Family  
Split Level  
Contemporary  
Apartment House  
Log Home

3-Family  
Colonial  
Mobile Home  
Townhouses/Condos  
Other: \_\_\_\_\_

If multiple units, how many? \_\_\_\_\_

If the property is commercial, type?

Business Type(s) \_\_\_\_\_

Does it include residences (i.e., multi-use)? Y / N

If yes, how many? \_\_\_\_\_

Other characteristics:

Number of floors 1

Building age 40+

Is the building insulated? Y / N

How air tight? Tight / Average / Not Tight

#### 4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

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Airflow near source

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Outdoor air infiltration

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Infiltration into air ducts

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5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply) *No Basement*

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: full crawlspace slab other NA
- c. Basement floor: concrete dirt stone other NA
- d. Basement floor: uncovered covered covered with NA
- e. Concrete floor: unsealed sealed sealed with \_\_\_\_\_
- f. Foundation walls: poured block stone other unk.
- g. Foundation walls: unsealed sealed sealed with unk
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: NA (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

Concrete floor.

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation	Heat pump	Hot water baseboard
Space Heaters	Stream radiation	Radiant floor
Electric baseboard	Wood stove	Outdoor wood boiler
		Other _____

The primary type of fuel used is:

<u>Natural Gas</u>	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: Gas

Boiler/furnace located in: Basement Outdoors Main Floor Other \_\_\_\_\_

Air conditioning: Central Air Window units Open Windows None

Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

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## 7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement	<u>None</u>
1 <sup>st</sup> Floor	<u>Church</u>
2 <sup>nd</sup> Floor	
3 <sup>rd</sup> Floor	
4 <sup>th</sup> Floor	

## 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage?

Y / N

b. Does the garage have a separate heating unit?

Y / N / NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)

Y / N / NA

Please specify \_\_\_\_\_

d. Has the building ever had a fire?

Y / N When? \_\_\_\_\_

e. Is a kerosene or unvented gas space heater present?

Y / N Where? \_\_\_\_\_

f. Is there a workshop or hobby/craft area?

Y / N Where & Type? \_\_\_\_\_

g. Is there smoking in the building?

Y / N How frequently? \_\_\_\_\_

h. Have cleaning products been used recently?

Y / N When & Type? \_\_\_\_\_

i. Have cosmetic products been used recently?

Y / N When & Type? \_\_\_\_\_



- j. Has painting/staining been done in the last 6 months? Y / N Where & When? \_\_\_\_\_
- k. Is there new carpet, drapes or other textiles? Y / N Where & When? \_\_\_\_\_
- l. Have air fresheners been used recently? Y / N When & Type? \_\_\_\_\_
- m. Is there a kitchen exhaust fan? Y / N If yes, where vented? \_\_\_\_\_
- n. Is there a bathroom exhaust fan? Y / N If yes, where vented? \_\_\_\_\_
- o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? Y / N When & Type? \_\_\_\_\_

Are there odors in the building? Y / N

If yes, please describe: \_\_\_\_\_

Do any of the building occupants use solvents at work? Y / N

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? \_\_\_\_\_

If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

- Yes, use dry-cleaning regularly (weekly)  
 Yes, use dry-cleaning infrequently (monthly or less)  
 Yes, work at a dry-cleaning service

No  
Unknown

Is there a radon mitigation system for the building/structure? Y / N Date of Installation: \_\_\_\_\_  
 Is the system active or passive? Active/Passive

## 9. WATER AND SEWAGE

Water Supply: Public Water Drilled Well Driven Well Dug Well Other: \_\_\_\_\_

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: \_\_\_\_\_

## 10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: \_\_\_\_\_

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

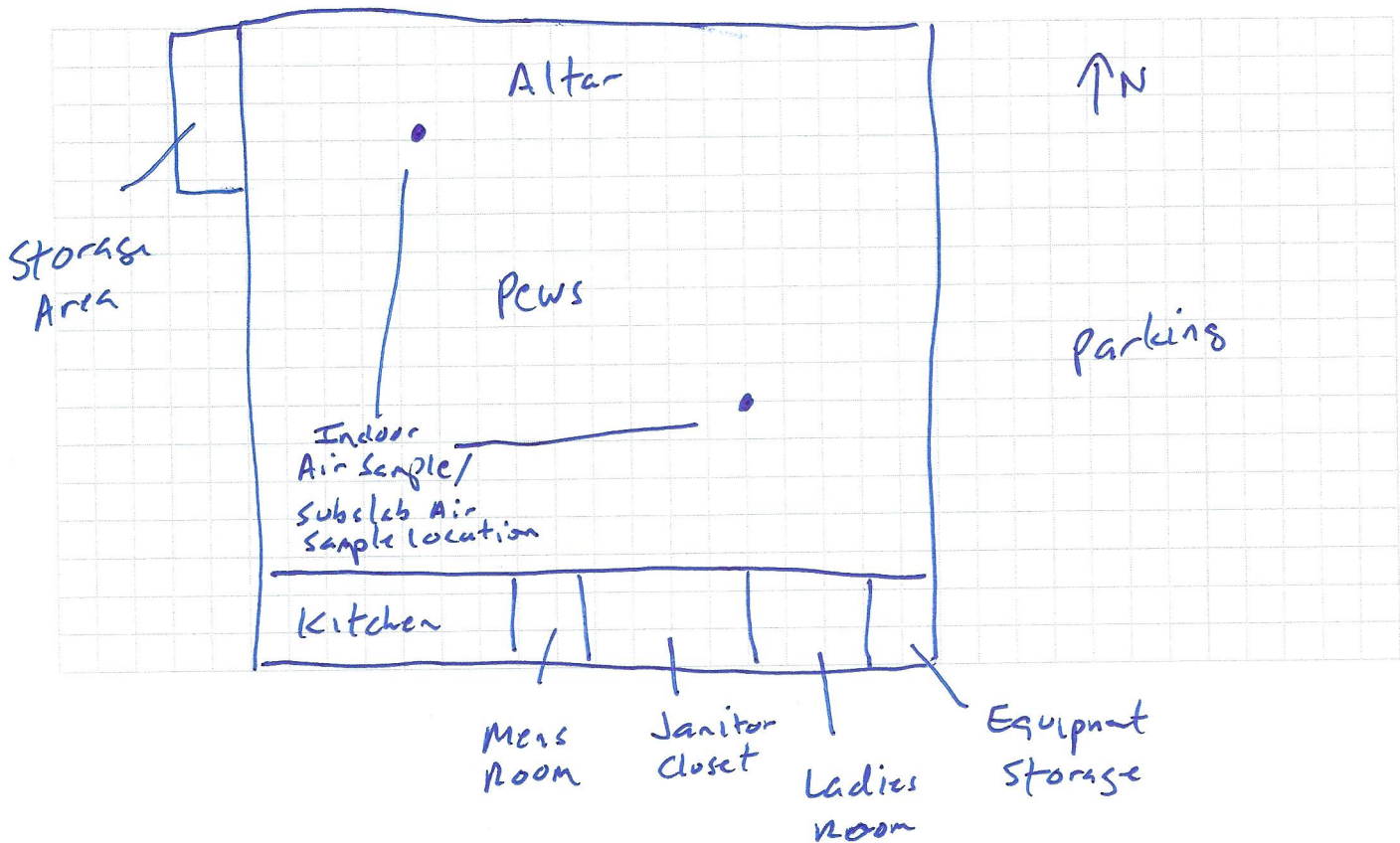
## 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



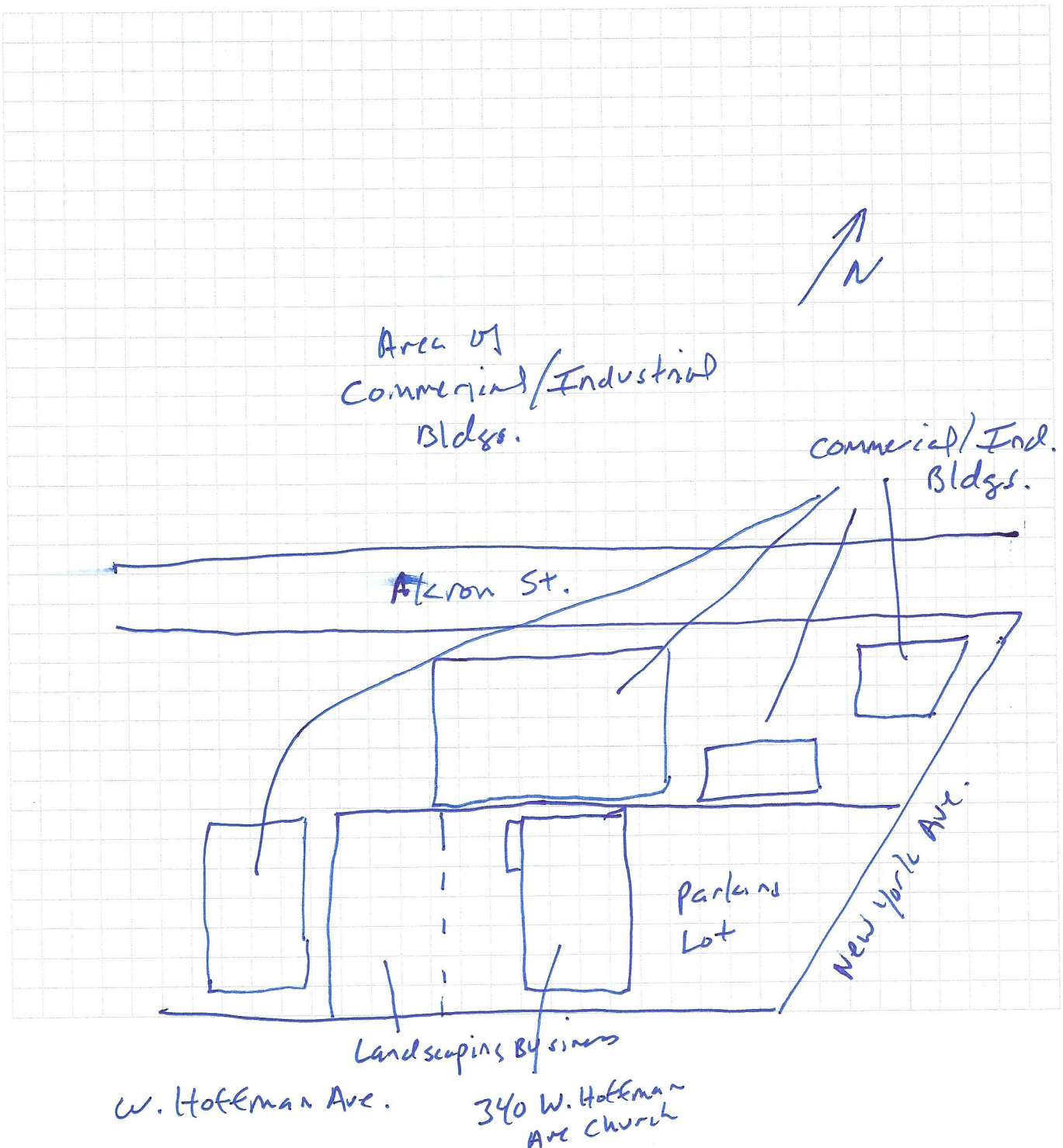
First Floor:



## 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.





## 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: Mini Rae Pro

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition *	Chemical Ingredients	Field Instrument Reading (units)	Photo ** <u>Y/N</u>
Equip Room.	Motor oil	qt	good		0	
	ice melt	1 bag	good			
Ladies Rm.	Jergens Hand Lotion	9oz less	good		0.1	
	Renewal Body Lotion	"				
	Moisturizer	"	"			
	Hand soap	"	"			
	Hydrogen Peroxide	"	"			
	Fabuloso Multi-Cleaner	"	"	Sodium dodecyl benzene sulfonate		
Janitor Closet	4 x 1 gallon latex paint	1 gal	good		0.1	
	bleach	1/2 gal	good			
	latex paint	5 gal	good			
	Ajax Powder	9oz less	"			
	Goo Off	"	good	ethylbenzene, xylene, acetone		
	Mistolin Cleaner	1 gal.	"	Surfactant, benzalkonium chloride		
	Geo Orange Citrus Cleaner	3 gal.	"	Citric Acid, Decyl Glucoside		
	LA's Totally Awesome Multi-Cleaner	1/2 gal	"	Surfactants		
	Bissell PUS Cleaner	1 qt	"	detergent		

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

\*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.



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### 13. PRODUCT INVENTORY FORM (cont.)

Make & Model of field instrument used: \_\_\_\_\_

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition *	Chemical Ingredients	Field Instrument Reading (units)	Photo ** Y/N
Janitor Closet (cont.)	Cinch Glass Cleaner	1 qt or less	good	ammonia		
	Tile Plus Cleaner	"	good	VINEGAR		
	Pine Glo Disinfectant	"	"			
	Unidentified Liquid (2)	1 gal	"			
	Oxy-extra dish liq.	1 qt.	"	Surfactants		
Men's Room	Liquid Soap	1 qt or less	good			
	Cocoa butter-skin lotion	"	"			
	SM Hand Soap	"	"			
	Sure Scent Air Freshener	"	"			
	Ajax comet powder	"	"			
	Hydrogen peroxide	"	"			
	Food Club Supreme Clean	1/2 gal	"	Ammonium Hydroxide		
Kitchen	Fancy Heat Sponges			ethanol, methanol		
Storage Area	No chemicals					
Altars/Peris	No chemicals					

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

\*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

**NEW YORK STATE DEPARTMENT OF HEALTH  
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY  
CENTER FOR ENVIRONMENTAL HEALTH**

This form must be completed for each residence involved in indoor air testing.

Preparer's Name Pete Dermody Date/Time Prepared 3/29/20, 445P

Preparer's Affiliation Dermady Consulting Phone No. 631 905-4868

Purpose of Investigation Soil Vapor Intrusion Investigation

**1. OCCUPANT:**

Interviewed: Y/N

Last Name: Chasen First Name: Marianne

Address: 175 S. 11th St. Lindenhurst, NY 11757

County: Suffolk

Home Phone: 631-226-3066 Office Phone: 631-226-3066

Number of Occupants/persons at this location 1 Age of Occupants 50

During school (when in session): 100-110 2 to 11 years old, plus adult staff of \$20

OWNER OR LANDLORD: (Check if same as occupant ☐)

**2. OWNER OR LANDLORD:** (Check if same as occupant ☐ )

Interviewed: Y / N

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_

Address: \_\_\_\_\_

County: \_\_\_\_\_

Home Phone: \_\_\_\_\_ Office Phone: \_\_\_\_\_

### 3. BUILDING CHARACTERISTICS

**Type of Building:** (Circle appropriate response)

Residential  
Industrial

School  
Church

Commercial/Multi-use  
Other:

former commercial/industrial bldg.

If the property is residential, type? (Circle appropriate response)

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses/Condos
Modular	Log Home	Other: _____

If multiple units, how many? \_\_\_\_\_

If the property is commercial, type?

Business Type(s) Elementary School

Does it include residences (i.e., multi-use)? Y / (N) If yes, how many? \_\_\_\_\_

Other characteristics:

Number of floors 1

Building age apprx. 50 years

Is the building insulated? Y / (N)

How air tight? Tight / Average / Not Tight Not known

#### 4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

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Airflow near source

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Outdoor air infiltration

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Infiltration into air ducts

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Are there air distribution ducts present? Y / N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

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## 7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)

Basement No basement

1<sup>st</sup> Floor Currently unoccupied due to coronavirus, otherwise occupied by school children during school hours.

~~2<sup>nd</sup> Floor~~

3<sup>rd</sup> Floor

4<sup>th</sup> Floor

## 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

- a. Is there an attached garage? Y (N) Attached labels that appears to be involved w/ auto repair.
- b. Does the garage have a separate heating unit? Y / N / NA
- c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y / N / (NA) Please specify \_\_\_\_\_
- d. Has the building ever had a fire? Y / N When? Not known
- e. Is a kerosene or unvented gas space heater present? Y / (N) Where? ?
- f. Is there a workshop or hobby/craft area? Y / (N) Where & Type? \_\_\_\_\_
- g. Is there smoking in the building? Y (N) How frequently? \_\_\_\_\_
- h. Have cleaning products been used recently? (Y) / N When & Type? Periodically
- i. Have cosmetic products been used recently? Y / (N) When & Type? \_\_\_\_\_



# 5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

- a. Above grade construction: wood frame concrete stone brick
- b. Basement type: none full crawlspace slab other \_\_\_\_\_
- c. Basement floor: concrete dirt stone other \_\_\_\_\_
- d. Basement floor: uncovered covered covered with \_\_\_\_\_
- e. Concrete floor: unsealed sealed sealed with \_\_\_\_\_
- f. Foundation walls: poured block stone other \_\_\_\_\_
- g. Foundation walls: unsealed sealed sealed with \_\_\_\_\_
- h. The basement is: wet damp dry moldy
- i. The basement is: finished unfinished partially finished
- j. Sump present? Y / N
- k. Water in sump? Y / N / not applicable

Basement/Lowest level depth below grade: \_\_\_\_\_ (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

None noted.

# 6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

Hot air circulation  
Space Heaters  
Electric baseboard

Heat pump  
Stream radiation  
Wood stove

Hot water baseboard  
Radiant floor  
Outdoor wood boiler

Other Roof HVAC system

The primary type of fuel used is:

Natural Gas  
Electric  
Wood

Fuel Oil  
Propane  
Coal

Kerosene  
Solar

Domestic hot water tank fueled by: Gas

Boiler/furnace located in: Basement Outdoors Main Floor Other \_\_\_\_\_

Air conditioning: Central Air Window units Open Windows None

- j. Has painting/staining been done in the last 6 months? Y / ☒ N Where & When? \_\_\_\_\_
- k. Is there new carpet, drapes or other textiles? Y / ☒ N Where & When? \_\_\_\_\_
- l. Have air fresheners been used recently? Y / ☒ N When & Type? \_\_\_\_\_
- m. Is there a kitchen exhaust fan? Y / ☒ N If yes, where vented? \_\_\_\_\_
- n. Is there a bathroom exhaust fan? Y / N If yes, where vented? \_\_\_\_\_
- o. Is there a clothes dryer? Y / ☒ N If yes, is it vented outside? Y / N
- p. Has there been a pesticide application? Y / ☒ N When & Type? \_\_\_\_\_

Are there odors in the building? Y / ☒ N

If yes, please describe: \_\_\_\_\_

Do any of the building occupants use solvents at work? Y / N  
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? There is a can of WD-40 in cleaning closet.

If yes, are their clothes washed at work? Y / ☒ N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly)

Yes, use dry-cleaning infrequently (monthly or less)

Yes, work at a dry-cleaning service

☒ No

Unknown

Is there a radon mitigation system for the building/structure? Y / ☒ N Date of Installation: \_\_\_\_\_

Is the system active or passive? Active/Passive

## 9. WATER AND SEWAGE

Water Supply: ☒ Public Water Drilled Well Driven Well Dug Well Other: \_\_\_\_\_

Sewage Disposal: Public Sewer Septic Tank Leach Field Dry Well Other: unk.

## 10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: N/A

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

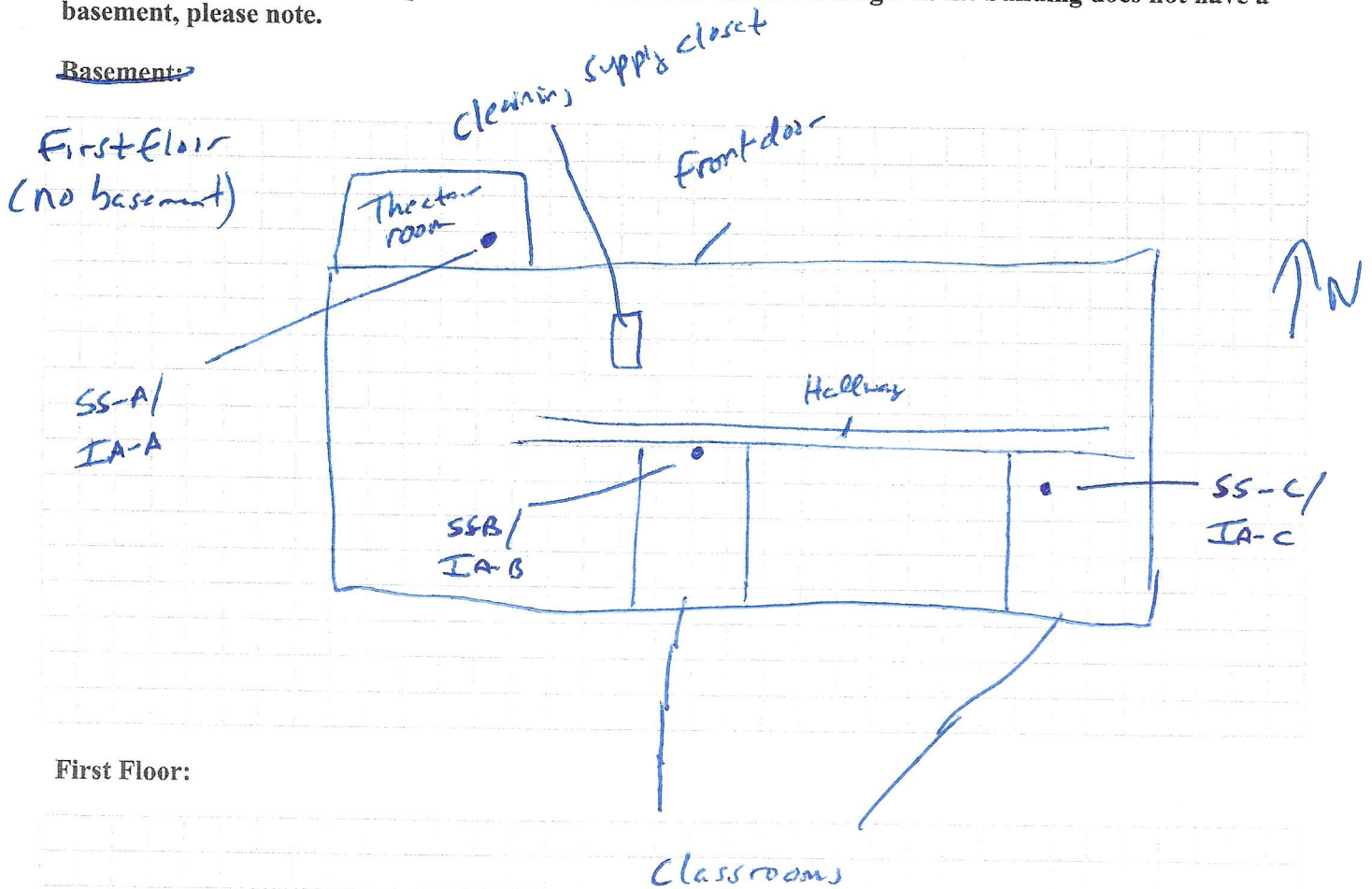
c. Responsibility for costs associated with reimbursement explained? Y / N

d. Relocation package provided and explained to residents? Y / N

## 11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:



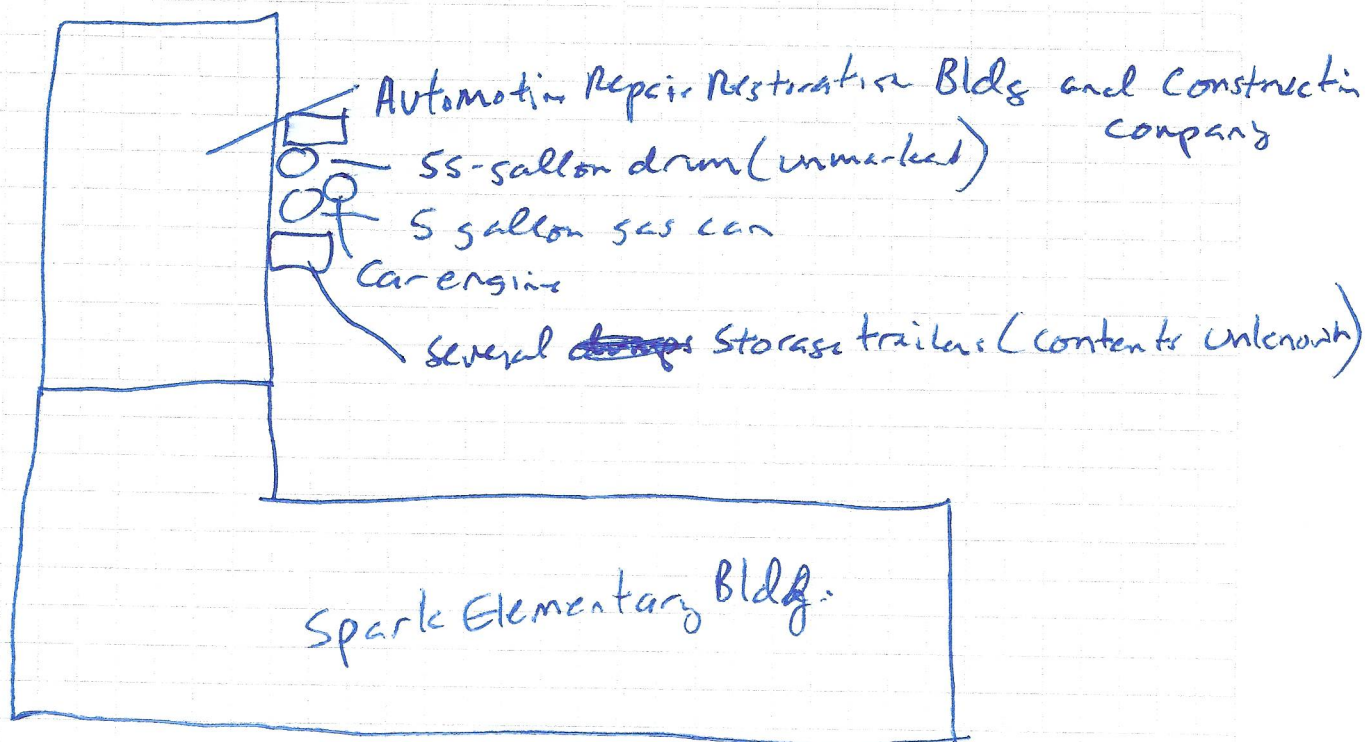
First Floor:



## 12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.





## 13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: MiniRae P10

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
<del>Cleaning</del> Product Closet Room	Conect w/ bleach	9.4 to 1/2 gal	good	bleach	0.2 in	
	Expo Whiteboard	"	"		room,	
	Scrub-on Carpet cleaner-soap	"	"	detergent	0.1	
	Lysol	"	"		outside of room.	
	Isopropyl alcohol	"	"		readings by P10	
	Method antibacterial cleaner	"	"		and results in ppm.	
	Clorox bleach	"	"	bleach		
	Kaboom Oxy Clean					
	Totally Ammonia Clean w/ bleach	"	"	detergent / bleach		
	Sure Scented Air Freshener	"	"			
<del>Paint Room</del>	1 gallon latex paint	1 gal	"	latex paint		
	Nature's Plus Toilet bowl cleaner	9.4 to 1/2 gal	"			
	Nature's Plus dish liquid	"	"			
	Glass Cleaner spray	"	"	ammonia		
	Rubbing alcohol	"	"			
	Folex carpet spot cleaner	"	"			
	Enlist Carpet cleaner					
	Emerel Surface Creme Cleaner					

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**\*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

## 13. PRODUCT INVENTORY FORM

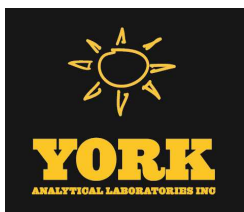
Make & Model of field instrument used: Mini Rae Pro

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** <u>Y/N</u>
cleaning closet room (cont.)	Zep Spot Remover	Print to vinyl	Good	ethylene glycol monobutyl ether, propane, isobutane		
	Rotrooter Drain Cleaner	"	"	sodium hypochlorite, sodium hydroxide.		
	Rustolun Spray	"	"	ethylene glycol, monobutyl ether.		
	WD-40	"	rusty	May contain TCE. kerosene		
	Behold Polish	"	good			
	Goo Gone	"	"	kerosene, methyl ether		
Theater Room (southeast corner)	Ever Spring cleaning wipes	1 c	"			
	Method Hand Gel Wash	"	"			
	Tempra Paints	"	"			
	Elmers Glue	"	"			
	Crystal Clear peroxide	1 gal	"	Hydrogen Peroxide		
	Hand Sanitizers					
	5-gal latex paint buckets	5 gal	"	latex paint		
	5-gal specialty buckets	5 gal	"	"		
	12 1-gallon latex paint cans	1 gal	"	"		

\* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**\*\* Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

## **Attachment B**



# Technical Report

prepared for:

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
**Attention: Peter Dermody**

Report Date: 04/03/2020  
**Client Project ID: Elka**  
York Project (SDG) No.: 20C0979

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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

STRATFORD, CT 06615  
(203) 325-1371

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

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

Report Date: 04/03/2020  
Client Project ID: Elka  
York Project (SDG) No.: 20C0979

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
Attention: Peter Dermody

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 23, 2020 with a temperature of C. The project was identified as your project: **Elka**.

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>
20C0979-01	SS-1	Soil Vapor	03/21/2020	03/23/2020
20C0979-02	SS-2	Soil Vapor	03/21/2020	03/23/2020
20C0979-03	IA-1	Indoor Ambient Air	03/21/2020	03/23/2020
20C0979-04	IA-2	Indoor Ambient Air	03/21/2020	03/23/2020
20C0979-05	OA-1	Outdoor Ambient Ai	03/21/2020	03/23/2020

## **General Notes for York Project (SDG) No.: 20C0979**

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:**

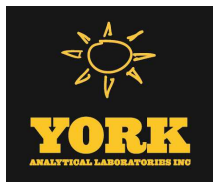


**Benjamin Gulizia**  
Laboratory Director

**Date:** 04/03/2020







## Sample Information

**Client Sample ID:** SS-1

**York Sample ID:** 20C0979-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

20C0979

Elka

Soil Vapor

March 21, 2020 12:00 am

03/23/2020

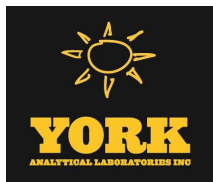
### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	6.3	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>320</b>		ug/m <sup>3</sup>	5.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	6.3	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	7.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	5.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	3.7	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.90	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	6.8	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>4.5</b>		ug/m <sup>3</sup>	4.5	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	7.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	5.5	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	3.7	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	4.2	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	6.4	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	4.5	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	6.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	5.5	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	4.2	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	5.5	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	6.6	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
78-93-3	<b>2-Butanone</b>	<b>8.1</b>		ug/m <sup>3</sup>	2.7	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ



## Sample Information

**Client Sample ID:** SS-1

**York Sample ID:** 20C0979-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C0979

Elka

Soil Vapor

March 21, 2020 12:00 am

03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	7.5	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	14	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>5.2</b>		ug/m <sup>3</sup>	3.7	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
67-64-1	<b>Acetone</b>	<b>18</b>		ug/m <sup>3</sup>	4.3	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	2.0	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
71-43-2	<b>Benzene</b>	<b>4.1</b>		ug/m <sup>3</sup>	2.9	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	4.7	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	6.1	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	9.4	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	3.5	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	2.8	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	1.4	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	4.2	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	2.4	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
67-66-3	<b>Chloroform</b>	<b>38</b>		ug/m <sup>3</sup>	4.4	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
74-87-3	Chloromethane	ND		ug/m <sup>3</sup>	1.9	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>12</b>		ug/m <sup>3</sup>	0.90	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	4.1	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
110-82-7	Cyclohexane	ND		ug/m <sup>3</sup>	3.1	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	7.8	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/m <sup>3</sup>	4.5	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
141-78-6	* <b>Ethyl acetate</b>	<b>13</b>		ug/m <sup>3</sup>	6.6	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ





## Sample Information

**Client Sample ID:** SS-1

**York Sample ID:** 20C0979-01

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Soil Vapor

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	4.4		ug/m <sup>3</sup>	4.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	9.7	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
67-63-0	Isopropanol	6.5		ug/m <sup>3</sup>	4.5	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	3.7	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	3.3	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-09-2	Methylene chloride	8.5		ug/m <sup>3</sup>	6.3	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
142-82-5	n-Heptane	ND		ug/m <sup>3</sup>	3.7	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
110-54-3	n-Hexane	8.3		ug/m <sup>3</sup>	3.2	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
95-47-6	o-Xylene	5.5		ug/m <sup>3</sup>	4.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
179601-23-1	p- & m- Xylenes	14		ug/m <sup>3</sup>	7.9	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m <sup>3</sup>	4.5	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	1.6	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	3.9	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
127-18-4	Tetrachloroethylene	810		ug/m <sup>3</sup>	6.2	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	5.4	9.11	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 17:56	LLJ
108-88-3	Toluene	24		ug/m <sup>3</sup>	3.4	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	3.6	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	4.1	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
79-01-6	Trichloroethylene	490		ug/m <sup>3</sup>	1.2	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	6.1		ug/m <sup>3</sup>	5.1	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	3.2	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	4.0	9.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 17:56	LLJ



## Sample Information

**Client Sample ID:** SS-1

**York Sample ID:** 20C0979-01

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Soil Vapor

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	0.58	9.11	EPA TO-15	03/26/2020 23:00	03/27/2020 17:56	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
	Surrogate Recoveries	Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	97.9 %		70-130						

## Sample Information

**Client Sample ID:** SS-2

**York Sample ID:** 20C0979-02

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Soil Vapor

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	6.0	8.67	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 18:43	LLJ
71-55-6	1,1,1-Trichloroethane	99		ug/m <sup>3</sup>	4.7	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	6.0	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	6.6	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	4.7	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	3.5	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.86	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	6.4	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
95-63-6	1,2,4-Trimethylbenzene	4.3		ug/m <sup>3</sup>	4.3	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	6.7	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	5.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	3.5	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ



## Sample Information

**Client Sample ID:** SS-2

**York Sample ID:** 20C0979-02

York Project (SDG) No.  
20C0979

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March 21, 2020 12:00 am

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### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	4.0	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	6.1	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	4.3	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	5.8	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	5.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	4.0	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	5.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	6.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
78-93-3	<b>2-Butanone</b>	<b>9.2</b>		ug/m <sup>3</sup>	2.6	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	7.1	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	14	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>5.3</b>		ug/m <sup>3</sup>	3.6	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
67-64-1	<b>Acetone</b>	<b>130</b>		ug/m <sup>3</sup>	4.1	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	1.9	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
71-43-2	Benzene	ND		ug/m <sup>3</sup>	2.8	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	4.5	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	5.8	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	9.0	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	3.4	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	2.7	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	1.4	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	4.0	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ



## Sample Information

**Client Sample ID:** SS-2

**York Sample ID:** 20C0979-02

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Soil Vapor

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	2.3	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
67-66-3	<b>Chloroform</b>	<b>4.2</b>		ug/m <sup>3</sup>	4.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
74-87-3	Chloromethane	ND		ug/m <sup>3</sup>	1.8	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>2.1</b>		ug/m <sup>3</sup>	0.86	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	3.9	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
110-82-7	<b>Cyclohexane</b>	<b>5.4</b>		ug/m <sup>3</sup>	3.0	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	7.4	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-71-8	Dichlorodifluoromethane	ND		ug/m <sup>3</sup>	4.3	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
141-78-6	<b>* Ethyl acetate</b>	<b>14</b>		ug/m <sup>3</sup>	6.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>24</b>		ug/m <sup>3</sup>	3.8	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	9.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
67-63-0	<b>Isopropanol</b>	<b>19</b>		ug/m <sup>3</sup>	4.3	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	3.5	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	3.1	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-09-2	<b>Methylene chloride</b>	<b>6.0</b>		ug/m <sup>3</sup>	6.0	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
142-82-5	<b>n-Heptane</b>	<b>29</b>		ug/m <sup>3</sup>	3.6	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
110-54-3	<b>n-Hexane</b>	<b>7.6</b>		ug/m <sup>3</sup>	3.1	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
95-47-6	<b>o-Xylene</b>	<b>20</b>		ug/m <sup>3</sup>	3.8	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>59</b>		ug/m <sup>3</sup>	7.5	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
622-96-8	<b>* p-Ethyltoluene</b>	<b>5.1</b>		ug/m <sup>3</sup>	4.3	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
115-07-1	<b>* Propylene</b>	ND		ug/m <sup>3</sup>	1.5	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	3.7	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ



## Sample Information

**Client Sample ID:** SS-2

**York Sample ID:** 20C0979-02

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Soil Vapor

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	860		ug/m <sup>3</sup>	5.9	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	5.1	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
108-88-3	Toluene	44		ug/m <sup>3</sup>	3.3	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	3.4	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	3.9	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
79-01-6	Trichloroethylene	210		ug/m <sup>3</sup>	1.2	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m <sup>3</sup>	4.9	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	3.1	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	3.8	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.55	8.67	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 18:43	LLJ
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	97.9 %	70-130							

## Sample Information

**Client Sample ID:** IA-1

**York Sample ID:** 20C0979-03

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.62	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.49	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.62	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.69	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ



## Sample Information

**Client Sample ID:** IA-1

**York Sample ID:** 20C0979-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C0979

Elka

Indoor Ambient Air

March 21, 2020 12:00 am

03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.49	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.089	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.66	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>4.1</b>		ug/m <sup>3</sup>	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.69	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.63	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>1.5</b>		ug/m <sup>3</sup>	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.59	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.54	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.65	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
78-93-3	<b>2-Butanone</b>	<b>2.0</b>		ug/m <sup>3</sup>	0.26	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.73	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.4	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>4.4</b>		ug/m <sup>3</sup>	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
67-64-1	<b>Acetone</b>	<b>10</b>		ug/m <sup>3</sup>	0.43	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.19	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ



## Sample Information

**Client Sample ID:** IA-1

**York Sample ID:** 20C0979-03

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	<b>Benzene</b>	<b>2.3</b>		ug/m <sup>3</sup>	0.29	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.46	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.60	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	0.93	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.35	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-15-0	<b>Carbon disulfide</b>	<b>0.31</b>		ug/m <sup>3</sup>	0.28	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.45</b>		ug/m <sup>3</sup>	0.14	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.24	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.1</b>		ug/m <sup>3</sup>	0.19	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.089	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
110-82-7	<b>Cyclohexane</b>	<b>2.5</b>		ug/m <sup>3</sup>	0.31	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.76	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.9</b>		ug/m <sup>3</sup>	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
141-78-6	* Ethyl acetate	ND		ug/m <sup>3</sup>	0.65	0.896	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 19:41	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>2.3</b>		ug/m <sup>3</sup>	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	0.96	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
67-63-0	<b>Isopropanol</b>	<b>5.2</b>		ug/m <sup>3</sup>	0.44	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ





## Sample Information

**Client Sample ID:** IA-1

**York Sample ID:** 20C0979-03

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	2.0		ug/m <sup>3</sup>	0.62	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
142-82-5	n-Heptane	4.9		ug/m <sup>3</sup>	0.37	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
110-54-3	n-Hexane	8.9		ug/m <sup>3</sup>	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
95-47-6	o-Xylene	3.2		ug/m <sup>3</sup>	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
179601-23-1	p- & m- Xylenes	8.1		ug/m <sup>3</sup>	0.78	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
622-96-8	* p-Ethyltoluene	3.1		ug/m <sup>3</sup>	0.44	0.896	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 19:41	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	0.15	0.896	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 19:41	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.38	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
127-18-4	Tetrachloroethylene	4.3		ug/m <sup>3</sup>	0.61	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	0.53	0.896	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 19:41	LLJ
108-88-3	Toluene	11		ug/m <sup>3</sup>	0.34	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.36	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.41	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
79-01-6	Trichloroethylene	0.48		ug/m <sup>3</sup>	0.12	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	23		ug/m <sup>3</sup>	0.50	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.32	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.39	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.057	0.896	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 19:41	LLJ
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	98.9 %	70-130							





## Sample Information

**Client Sample ID:** IA-2

**York Sample ID:** 20C0979-04

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C0979

Elka

Indoor Ambient Air

March 21, 2020 12:00 am

03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.56	0.822	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 20:39	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.45	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.56	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
76-13-1	<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	<b>0.63</b>		ug/m <sup>3</sup>	0.63	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.45	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.33	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.081	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>3.9</b>		ug/m <sup>3</sup>	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.63	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.49	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.33	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.38	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.57	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>1.5</b>		ug/m <sup>3</sup>	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.55	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.49	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.38	0.822	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 20:39	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.49	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.59	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
78-93-3	<b>2-Butanone</b>	<b>2.2</b>		ug/m <sup>3</sup>	0.24	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.67	0.822	EPA TO-15 Certifications:	03/26/2020 23:00	03/27/2020 20:39	LLJ



## Sample Information

**Client Sample ID:** IA-2

**York Sample ID:** 20C0979-04

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.3	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
108-10-1	4-Methyl-2-pentanone	4.9		ug/m <sup>3</sup>	0.34	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
67-64-1	Acetone	10		ug/m <sup>3</sup>	0.39	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.18	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
71-43-2	Benzene	2.8		ug/m <sup>3</sup>	0.26	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.43	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.55	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	0.85	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.32	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-15-0	Carbon disulfide	0.41		ug/m <sup>3</sup>	0.26	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
56-23-5	Carbon tetrachloride	0.52		ug/m <sup>3</sup>	0.13	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.38	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.22	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
74-87-3	Chloromethane	1.1		ug/m <sup>3</sup>	0.17	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.081	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.37	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
110-82-7	Cyclohexane	2.9		ug/m <sup>3</sup>	0.28	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.70	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-71-8	Dichlorodifluoromethane	2.0		ug/m <sup>3</sup>	0.41	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
141-78-6	* Ethyl acetate	ND		ug/m <sup>3</sup>	0.59	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
100-41-4	Ethyl Benzene	2.6		ug/m <sup>3</sup>	0.36	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ



## Sample Information

**Client Sample ID:** IA-2

**York Sample ID:** 20C0979-04

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	0.88	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
67-63-0	Isopropanol	5.1		ug/m <sup>3</sup>	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	0.34	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.30	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-09-2	Methylene chloride	2.0		ug/m <sup>3</sup>	0.57	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
142-82-5	n-Heptane	5.5		ug/m <sup>3</sup>	0.34	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
110-54-3	n-Hexane	11		ug/m <sup>3</sup>	0.29	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
95-47-6	o-Xylene	3.6		ug/m <sup>3</sup>	0.36	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
179601-23-1	p- & m- Xylenes	9.0		ug/m <sup>3</sup>	0.71	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
622-96-8	* p-Ethyltoluene	3.3		ug/m <sup>3</sup>	0.40	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	0.14	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.35	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
127-18-4	Tetrachloroethylene	5.2		ug/m <sup>3</sup>	0.56	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	0.48	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
108-88-3	Toluene	13		ug/m <sup>3</sup>	0.31	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.33	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.37	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
79-01-6	Trichloroethylene	0.57		ug/m <sup>3</sup>	0.11	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	27		ug/m <sup>3</sup>	0.46	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.29	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.36	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.053	0.822	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/26/2020 23:00	03/27/2020 20:39	LLJ
Surrogate Recoveries		Result	Acceptance Range							



## Sample Information

**Client Sample ID:** IA-2

**York Sample ID:** 20C0979-04

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

20C0979

Elka

Indoor Ambient Air

March 21, 2020 12:00 am

03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

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

## Sample Information

**Client Sample ID:** OA-1

**York Sample ID:** 20C0979-05

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

20C0979

Elka

Outdoor Ambient Air

March 21, 2020 12:00 am

03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.59	0.858	EPA TO-15 Certifications:	03/28/2020 09:00	03/28/2020 18:06	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.47	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.59	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.66	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.47	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.35	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.085	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.64	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m <sup>3</sup>	0.42	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.66	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.52	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.35	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.40	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.60	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ



## Sample Information

**Client Sample ID:** OA-1

**York Sample ID:** 20C0979-05

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	0.42	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.57	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.52	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.40	0.858	EPA TO-15 Certifications:	03/28/2020 09:00	03/28/2020 18:06	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.52	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.62	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
78-93-3	<b>2-Butanone</b>	<b>0.68</b>		ug/m <sup>3</sup>	0.25	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.70	0.858	EPA TO-15 Certifications:	03/28/2020 09:00	03/28/2020 18:06	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.3	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m <sup>3</sup>	0.35	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
67-64-1	<b>Acetone</b>	<b>3.4</b>		ug/m <sup>3</sup>	0.41	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.19	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
71-43-2	<b>Benzene</b>	<b>0.41</b>		ug/m <sup>3</sup>	0.27	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.44	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.57	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	0.89	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.33	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	0.27	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.54</b>		ug/m <sup>3</sup>	0.13	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.39	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.23	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.42	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ



## Sample Information

**Client Sample ID:** OA-1

**York Sample ID:** 20C0979-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C0979

Elka

Outdoor Ambient Air

March 21, 2020 12:00 am

03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	1.2		ug/m <sup>3</sup>	0.18	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.085	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.39	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
110-82-7	Cyclohexane	ND		ug/m <sup>3</sup>	0.30	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.73	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-71-8	Dichlorodifluoromethane	2.0		ug/m <sup>3</sup>	0.42	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
141-78-6	* Ethyl acetate	ND		ug/m <sup>3</sup>	0.62	0.858	EPA TO-15 Certifications:	03/28/2020 09:00	03/28/2020 18:06	LLJ
100-41-4	Ethyl Benzene	ND		ug/m <sup>3</sup>	0.37	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	0.92	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
67-63-0	Isopropanol	0.67		ug/m <sup>3</sup>	0.42	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
80-62-6	Methyl Methacrylate	0.35		ug/m <sup>3</sup>	0.35	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.31	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-09-2	Methylene chloride	2.3		ug/m <sup>3</sup>	0.60	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
142-82-5	n-Heptane	ND		ug/m <sup>3</sup>	0.35	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
110-54-3	n-Hexane	ND		ug/m <sup>3</sup>	0.30	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
95-47-6	o-Xylene	ND		ug/m <sup>3</sup>	0.37	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m <sup>3</sup>	0.75	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m <sup>3</sup>	0.42	0.858	EPA TO-15 Certifications:	03/28/2020 09:00	03/28/2020 18:06	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	0.15	0.858	EPA TO-15 Certifications:	03/28/2020 09:00	03/28/2020 18:06	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.37	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m <sup>3</sup>	0.58	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	0.51	0.858	EPA TO-15 Certifications:	03/28/2020 09:00	03/28/2020 18:06	LLJ



## Sample Information

**Client Sample ID:** OA-1

**York Sample ID:** 20C0979-05

York Project (SDG) No.  
20C0979

Client Project ID  
Elka

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 21, 2020 12:00 am

Date Received  
03/23/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	0.65		ug/m <sup>3</sup>	0.32	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.34	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.39	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
79-01-6	Trichloroethylene	ND		ug/m <sup>3</sup>	0.12	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.3		ug/m <sup>3</sup>	0.48	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.30	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.38	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.055	0.858	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	03/28/2020 09:00	03/28/2020 18:06	LLJ
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	99.1 %	70-130							



## Sample and Data Qualifiers Relating to This Work Order

### Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

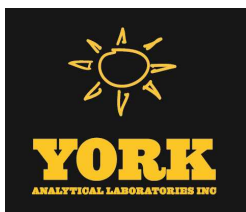




**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document. This document serves as your written authorization to York to proceed with the analyses requested. Your signature binds you to York's Std. Terms & Conditions unless superseded by written contract.

York Project No. 20C0979

[illegible]



# Technical Report

prepared for:

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
**Attention: Peter Dermody**

Report Date: 04/08/2020  
**Client Project ID: Spark**  
York Project (SDG) No.: 20C1257

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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

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

Report Date: 04/08/2020  
Client Project ID: Spark  
York Project (SDG) No.: 20C1257

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
Attention: Peter Dermody

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on March 31, 2020 with a temperature of C. The project was identified as your project: **Spark**.

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>
20C1257-02	IA-A	Indoor Ambient Air	03/29/2020	03/31/2020
20C1257-03	IA-B	Indoor Ambient Air	03/29/2020	03/31/2020
20C1257-04	IA-C	Indoor Ambient Air	03/29/2020	03/31/2020
20C1257-05	SS-A	Outdoor Ambient Ai	03/29/2020	03/31/2020
20C1257-06	SS-B	Outdoor Ambient Ai	03/29/2020	03/31/2020
20C1257-07	SS-C	Outdoor Ambient Ai	03/29/2020	03/31/2020

## **General Notes for York Project (SDG) No.: 20C1257**

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:** 04/08/2020





## Sample Information

**Client Sample ID:** IA-A

**York Sample ID:** 20C1257-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

20C1257

Spark

Indoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.64	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.51	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.64	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
76-13-1	<b>1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)</b>	<b>0.78</b>		ug/m <sup>3</sup>	0.71	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.51	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.38	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.092	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.69	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>1.8</b>		ug/m <sup>3</sup>	0.46	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.71	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.56	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.38	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.43	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.65	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.50</b>		ug/m <sup>3</sup>	0.46	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.62	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.56	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.43	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.56	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.67	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
78-93-3	<b>2-Butanone</b>	<b>3.6</b>		ug/m <sup>3</sup>	0.27	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ



## Sample Information

**Client Sample ID:** IA-A

**York Sample ID:** 20C1257-02

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

20C1257

Spark

Indoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.76	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.5	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>1.4</b>		ug/m <sup>3</sup>	0.38	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
67-64-1	<b>Acetone</b>	<b>54</b>		ug/m <sup>3</sup>	0.44	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.20	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
71-43-2	<b>Benzene</b>	<b>1.2</b>		ug/m <sup>3</sup>	0.30	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.48	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.62	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	0.96	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.36	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	0.29	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.76</b>		ug/m <sup>3</sup>	0.15	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.43	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.25	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.45	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.8</b>		ug/m <sup>3</sup>	0.19	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.092	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.42	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
110-82-7	<b>Cyclohexane</b>	<b>0.90</b>		ug/m <sup>3</sup>	0.32	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.79	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.6</b>		ug/m <sup>3</sup>	0.46	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ
141-78-6	* Ethyl acetate	<b>3.3</b>		ug/m <sup>3</sup>	0.67	0.93	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 09:04	LLJ





## Sample Information

**Client Sample ID:** IA-A

**York Sample ID:** 20C1257-02

**York Project (SDG) No.**

20C1257

**Client Project ID**

Spark

**Matrix**

Indoor Ambient Air

**Collection Date/Time**

March 29, 2020 12:00 am

**Date Received**

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	2.1		ug/m <sup>3</sup>	0.40	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	0.99	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
67-63-0	Isopropanol	110		ug/m <sup>3</sup>	0.86	1.744	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 18:53	LLJ
80-62-6	Methyl Methacrylate	46		ug/m <sup>3</sup>	0.38	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.34	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-09-2	Methylene chloride	2.8		ug/m <sup>3</sup>	0.65	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
142-82-5	n-Heptane	4.0		ug/m <sup>3</sup>	0.38	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
110-54-3	n-Hexane	5.0		ug/m <sup>3</sup>	0.33	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
95-47-6	o-Xylene	2.2		ug/m <sup>3</sup>	0.40	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
179601-23-1	p- & m- Xylenes	7.8		ug/m <sup>3</sup>	0.81	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
622-96-8	* p-Ethyltoluene	1.6		ug/m <sup>3</sup>	0.46	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	0.16	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
100-42-5	Styrene	2.1		ug/m <sup>3</sup>	0.40	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
127-18-4	Tetrachloroethylene	3.7		ug/m <sup>3</sup>	0.63	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	0.55	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
108-88-3	Toluene	11		ug/m <sup>3</sup>	0.35	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.37	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.42	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
79-01-6	Trichloroethylene	0.30		ug/m <sup>3</sup>	0.12	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.9		ug/m <sup>3</sup>	0.52	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.33	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.41	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ



## Sample Information

**Client Sample ID:** IA-A

**York Sample ID:** 20C1257-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C1257

Spark

Indoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.059	0.93	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 09:04	LLJ
Surrogate Recoveries		Result		Acceptance Range						
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	107 %		70-130						

## Sample Information

**Client Sample ID:** IA-B

**York Sample ID:** 20C1257-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C1257

Spark

Indoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.67	0.98	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 10:04	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.53	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.67	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.75	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.53	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.40	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.097	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.73	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
95-63-6	1,2,4-Trimethylbenzene	2.8		ug/m <sup>3</sup>	0.48	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.75	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.59	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.40	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ



## Sample Information

**Client Sample ID:** IA-B

**York Sample ID:** 20C1257-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C1257

Spark

Indoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.45	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.69	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.82</b>		ug/m <sup>3</sup>	0.48	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.65	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.59	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.45	0.98	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 10:04	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.59	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.71	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
78-93-3	<b>2-Butanone</b>	<b>2.3</b>		ug/m <sup>3</sup>	0.29	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.80	0.98	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 10:04	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.5	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>1.4</b>		ug/m <sup>3</sup>	0.40	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
67-64-1	<b>Acetone</b>	<b>61</b>		ug/m <sup>3</sup>	0.47	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.21	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
71-43-2	<b>Benzene</b>	<b>1.6</b>		ug/m <sup>3</sup>	0.31	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.51	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.66	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	1.0	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.38	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	0.31	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.55</b>		ug/m <sup>3</sup>	0.15	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.45	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ



## Sample Information

**Client Sample ID:** IA-B

**York Sample ID:** 20C1257-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C1257

Spark

Indoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.26	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.48	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.3</b>		ug/m <sup>3</sup>	0.20	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.097	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.44	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
110-82-7	<b>Cyclohexane</b>	<b>1.6</b>		ug/m <sup>3</sup>	0.34	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.83	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.0</b>		ug/m <sup>3</sup>	0.48	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
141-78-6	* Ethyl acetate	ND		ug/m <sup>3</sup>	0.71	0.98	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 10:04	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>2.1</b>		ug/m <sup>3</sup>	0.43	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	1.0	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
67-63-0	<b>Isopropanol</b>	<b>100</b>		ug/m <sup>3</sup>	0.48	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
80-62-6	<b>Methyl Methacrylate</b>	<b>2.5</b>		ug/m <sup>3</sup>	0.40	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>0.46</b>		ug/m <sup>3</sup>	0.35	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-09-2	<b>Methylene chloride</b>	<b>3.7</b>		ug/m <sup>3</sup>	0.68	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
142-82-5	<b>n-Heptane</b>	<b>5.0</b>		ug/m <sup>3</sup>	0.40	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
110-54-3	<b>n-Hexane</b>	<b>4.8</b>		ug/m <sup>3</sup>	0.35	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
95-47-6	<b>o-Xylene</b>	<b>2.5</b>		ug/m <sup>3</sup>	0.43	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>7.7</b>		ug/m <sup>3</sup>	0.85	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
622-96-8	* <b>p-Ethyltoluene</b>	<b>2.1</b>		ug/m <sup>3</sup>	0.48	0.98	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 10:04	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	0.17	0.98	EPA TO-15 Certifications:	04/01/2020 09:00	04/02/2020 10:04	LLJ
100-42-5	<b>Styrene</b>	<b>0.79</b>		ug/m <sup>3</sup>	0.42	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ



## Sample Information

**Client Sample ID:** IA-B

**York Sample ID:** 20C1257-03

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
127-18-4	Tetrachloroethylene	ND		ug/m <sup>3</sup>	0.66	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	0.58	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
108-88-3	<b>Toluene</b>	<b>13</b>		ug/m <sup>3</sup>	0.37	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.39	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.44	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
79-01-6	Trichloroethylene	ND		ug/m <sup>3</sup>	0.13	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.7</b>		ug/m <sup>3</sup>	0.55	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.35	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.43	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.063	0.98	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/01/2020 09:00	04/02/2020 10:04	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	105 %	70-130							

## Sample Information

**Client Sample ID:** IA-C

**York Sample ID:** 20C1257-04

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.73	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.58	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.73	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ



## Sample Information

**Client Sample ID:** IA-C

**York Sample ID:** 20C1257-04

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.81	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.58	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.43	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.11	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.79	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>41</b>		ug/m <sup>3</sup>	0.52	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.81	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.64	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.43	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.49	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.74	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>11</b>		ug/m <sup>3</sup>	0.52	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.70	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.64	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.49	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.64	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.76	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
78-93-3	<b>2-Butanone</b>	<b>2.7</b>		ug/m <sup>3</sup>	0.31	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.87	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.7	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>1.9</b>		ug/m <sup>3</sup>	0.43	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
67-64-1	<b>Acetone</b>	<b>71</b>		ug/m <sup>3</sup>	0.50	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ





## Sample Information

**Client Sample ID:** IA-C

**York Sample ID:** 20C1257-04

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.23	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
71-43-2	<b>Benzene</b>	<b>2.5</b>		ug/m <sup>3</sup>	0.34	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.55	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.71	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	1.1	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.41	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	0.33	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.53</b>		ug/m <sup>3</sup>	0.17	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.49	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.28	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.52	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.3</b>		ug/m <sup>3</sup>	0.22	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.11	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.48	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
110-82-7	<b>Cyclohexane</b>	<b>2.5</b>		ug/m <sup>3</sup>	0.36	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.90	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.0</b>		ug/m <sup>3</sup>	0.52	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
141-78-6	* Ethyl acetate	ND		ug/m <sup>3</sup>	0.76	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>2.9</b>		ug/m <sup>3</sup>	0.46	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	1.1	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
67-63-0	<b>Isopropanol</b>	<b>74</b>		ug/m <sup>3</sup>	0.52	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	0.43	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ



## Sample Information

**Client Sample ID:** IA-C

**York Sample ID:** 20C1257-04

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Indoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
1634-04-4	Methyl tert-butyl ether (MTBE)	0.80		ug/m <sup>3</sup>	0.38	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-09-2	Methylene chloride	6.5		ug/m <sup>3</sup>	0.74	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
142-82-5	n-Heptane	5.5		ug/m <sup>3</sup>	0.43	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
110-54-3	n-Hexane	8.4		ug/m <sup>3</sup>	0.37	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
95-47-6	o-Xylene	5.5		ug/m <sup>3</sup>	0.46	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
179601-23-1	p- & m- Xylenes	15		ug/m <sup>3</sup>	0.92	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
622-96-8	* p-Ethyltoluene	20		ug/m <sup>3</sup>	0.52	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	0.18	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
100-42-5	Styrene	0.81		ug/m <sup>3</sup>	0.45	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
127-18-4	Tetrachloroethylene	1.4		ug/m <sup>3</sup>	0.72	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m <sup>3</sup>	0.63	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
108-88-3	Toluene	20		ug/m <sup>3</sup>	0.40	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.42	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.48	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
79-01-6	Trichloroethylene	0.34		ug/m <sup>3</sup>	0.14	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.5		ug/m <sup>3</sup>	0.60	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.37	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.46	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.068	1.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 14:51	LLJ
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	101 %	70-130							



## Sample Information

**Client Sample ID:** SS-A

**York Sample ID:** 20C1257-05

**York Project (SDG) No.**  
20C1257

**Client Project ID**  
Spark

**Matrix**  
Outdoor Ambient Air

**Collection Date/Time**  
March 29, 2020 12:00 am

**Date Received**  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.80	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.64	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.80	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.89	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.64	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.47	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.12	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.86	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>3.8</b>		ug/m <sup>3</sup>	0.57	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.90	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.70	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.47	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.54	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.81	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.97</b>		ug/m <sup>3</sup>	0.57	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
106-99-0	<b>1,3-Butadiene</b>	<b>5.6</b>		ug/m <sup>3</sup>	0.77	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.70	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.54	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.70	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.84	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
78-93-3	<b>2-Butanone</b>	<b>15</b>		ug/m <sup>3</sup>	0.34	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.95	1.165	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 15:50	LLJ



## Sample Information

**Client Sample ID:** SS-A

**York Sample ID:** 20C1257-05

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.8	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
108-10-1	4-Methyl-2-pentanone	0.86		ug/m <sup>3</sup>	0.48	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
67-64-1	Acetone	130		ug/m <sup>3</sup>	0.55	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.25	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
71-43-2	Benzene	3.3		ug/m <sup>3</sup>	0.37	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.60	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.78	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	1.2	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.45	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-15-0	Carbon disulfide	0.91		ug/m <sup>3</sup>	0.36	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
56-23-5	Carbon tetrachloride	0.37		ug/m <sup>3</sup>	0.18	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.54	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.31	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
67-66-3	Chloroform	2.7		ug/m <sup>3</sup>	0.57	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
74-87-3	Chloromethane	0.53		ug/m <sup>3</sup>	0.24	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
156-59-2	cis-1,2-Dichloroethylene	100		ug/m <sup>3</sup>	0.12	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.53	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
110-82-7	Cyclohexane	0.68		ug/m <sup>3</sup>	0.40	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.99	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-71-8	Dichlorodifluoromethane	1.3		ug/m <sup>3</sup>	0.58	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
141-78-6	* Ethyl acetate	ND		ug/m <sup>3</sup>	0.84	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
100-41-4	Ethyl Benzene	2.1		ug/m <sup>3</sup>	0.51	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ



## Sample Information

**Client Sample ID:** SS-A

**York Sample ID:** 20C1257-05

**York Project (SDG) No.**  
20C1257

**Client Project ID**  
Spark

**Matrix**  
Outdoor Ambient Air

**Collection Date/Time**  
March 29, 2020 12:00 am

**Date Received**  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	1.2	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
67-63-0	Isopropanol	37		ug/m <sup>3</sup>	0.57	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
80-62-6	Methyl Methacrylate	2.9		ug/m <sup>3</sup>	0.48	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.42	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-09-2	Methylene chloride	3.0		ug/m <sup>3</sup>	0.81	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
142-82-5	n-Heptane	6.4		ug/m <sup>3</sup>	0.48	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
110-54-3	n-Hexane	6.0		ug/m <sup>3</sup>	0.41	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
95-47-6	o-Xylene	2.5		ug/m <sup>3</sup>	0.51	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
179601-23-1	p- & m- Xylenes	7.3		ug/m <sup>3</sup>	1.0	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
622-96-8	* p-Ethyltoluene	3.8		ug/m <sup>3</sup>	0.57	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
115-07-1	* Propylene	77		ug/m <sup>3</sup>	0.20	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.50	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
127-18-4	Tetrachloroethylene	3.3		ug/m <sup>3</sup>	0.79	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
109-99-9	* Tetrahydrofuran	2.5		ug/m <sup>3</sup>	0.69	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
108-88-3	Toluene	12		ug/m <sup>3</sup>	0.44	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
156-60-5	trans-1,2-Dichloroethylene	29		ug/m <sup>3</sup>	0.46	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.53	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
79-01-6	Trichloroethylene	310		ug/m <sup>3</sup>	0.16	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	2.2		ug/m <sup>3</sup>	0.65	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.41	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.51	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.074	1.165	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 15:50	LLJ
Surrogate Recoveries		Result	Acceptance Range							



## Sample Information

**Client Sample ID:** SS-A

**York Sample ID:** 20C1257-05

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C1257

Spark

Outdoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	100 %			70-130					

## Sample Information

**Client Sample ID:** SS-B

**York Sample ID:** 20C1257-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C1257

Spark

Outdoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.57	0.835	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 16:48	LLJ
71-55-6	1,1,1-Trichloroethane	22		ug/m <sup>3</sup>	0.46	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.57	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.64	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.46	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-34-3	1,1-Dichloroethane	1.1		ug/m <sup>3</sup>	0.34	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.083	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.62	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
95-63-6	1,2,4-Trimethylbenzene	2.7		ug/m <sup>3</sup>	0.41	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.64	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.50	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.34	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.39	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.58	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ





## Sample Information

**Client Sample ID:** SS-B

**York Sample ID:** 20C1257-06

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.78</b>		ug/m <sup>3</sup>	0.41	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.55	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.50	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.39	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.50	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.60	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
78-93-3	<b>2-Butanone</b>	<b>9.3</b>		ug/m <sup>3</sup>	0.25	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.68	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.3	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>0.96</b>		ug/m <sup>3</sup>	0.34	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
67-64-1	<b>Acetone</b>	<b>260</b>		ug/m <sup>3</sup>	1.5	3.132	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/03/2020 12:00	04/04/2020 09:39	LLJ
107-13-1	<b>Acrylonitrile</b>	<b>0.36</b>		ug/m <sup>3</sup>	0.18	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
71-43-2	<b>Benzene</b>	<b>2.5</b>		ug/m <sup>3</sup>	0.27	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.43	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.56	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	0.86	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.32	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-15-0	<b>Carbon disulfide</b>	<b>0.73</b>		ug/m <sup>3</sup>	0.26	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.47</b>		ug/m <sup>3</sup>	0.13	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.38	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.22	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
67-66-3	<b>Chloroform</b>	<b>1.6</b>		ug/m <sup>3</sup>	0.41	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ



## Sample Information

**Client Sample ID:** SS-B

**York Sample ID:** 20C1257-06

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20C1257

Spark

Outdoor Ambient Air

March 29, 2020 12:00 am

03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	0.81		ug/m <sup>3</sup>	0.17	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
156-59-2	cis-1,2-Dichloroethylene	0.30		ug/m <sup>3</sup>	0.083	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.38	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
110-82-7	Cyclohexane	0.89		ug/m <sup>3</sup>	0.29	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.71	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-71-8	Dichlorodifluoromethane	1.9		ug/m <sup>3</sup>	0.41	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
141-78-6	* Ethyl acetate	0.72		ug/m <sup>3</sup>	0.60	0.835	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 16:48	LLJ
100-41-4	Ethyl Benzene	2.0		ug/m <sup>3</sup>	0.36	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	0.89	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
67-63-0	Isopropanol	31		ug/m <sup>3</sup>	0.41	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
80-62-6	Methyl Methacrylate	0.51		ug/m <sup>3</sup>	0.34	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.30	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-09-2	Methylene chloride	2.3		ug/m <sup>3</sup>	0.58	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
142-82-5	n-Heptane	4.8		ug/m <sup>3</sup>	0.34	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
110-54-3	n-Hexane	4.1		ug/m <sup>3</sup>	0.29	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
95-47-6	o-Xylene	1.8		ug/m <sup>3</sup>	0.36	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
179601-23-1	p- & m- Xylenes	6.3		ug/m <sup>3</sup>	0.73	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
622-96-8	* p-Ethyltoluene	3.0		ug/m <sup>3</sup>	0.41	0.835	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 16:48	LLJ
115-07-1	* Propylene	ND		ug/m <sup>3</sup>	0.14	0.835	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 16:48	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.36	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
127-18-4	Tetrachloroethylene	12		ug/m <sup>3</sup>	0.57	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
109-99-9	* Tetrahydrofuran	1.6		ug/m <sup>3</sup>	0.49	0.835	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 16:48	LLJ
108-88-3	Toluene	9.8		ug/m <sup>3</sup>	0.31	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ



## Sample Information

**Client Sample ID:** SS-B

**York Sample ID:** 20C1257-06

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.33	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.38	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
79-01-6	<b>Trichloroethylene</b>	<b>10</b>		ug/m <sup>3</sup>	0.11	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.6</b>		ug/m <sup>3</sup>	0.47	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.29	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.37	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.053	0.835	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 16:48	LLJ
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %	70-130							

## Sample Information

**Client Sample ID:** SS-C

**York Sample ID:** 20C1257-07

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.64	0.933	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 17:46	LLJ
71-55-6	<b>1,1,1-Trichloroethane</b>	<b>18</b>		ug/m <sup>3</sup>	0.51	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.64	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.72	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.51	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-34-3	<b>1,1-Dichloroethane</b>	<b>0.60</b>		ug/m <sup>3</sup>	0.38	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.092	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ



## Sample Information

**Client Sample ID:** SS-C

**York Sample ID:** 20C1257-07

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.69	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>3.0</b>		ug/m <sup>3</sup>	0.46	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.72	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.56	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.38	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.43	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.65	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.78</b>		ug/m <sup>3</sup>	0.46	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
106-99-0	<b>1,3-Butadiene</b>	<b>3.3</b>		ug/m <sup>3</sup>	0.62	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.56	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m <sup>3</sup>	0.43	0.933	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 17:46	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.56	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.67	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
78-93-3	<b>2-Butanone</b>	<b>5.1</b>		ug/m <sup>3</sup>	0.28	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
591-78-6	* 2-Hexanone	ND		ug/m <sup>3</sup>	0.76	0.933	EPA TO-15 Certifications:	04/02/2020 19:00	04/03/2020 17:46	LLJ
107-05-1	3-Chloropropene	ND		ug/m <sup>3</sup>	1.5	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
108-10-1	<b>4-Methyl-2-pentanone</b>	<b>0.76</b>		ug/m <sup>3</sup>	0.38	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
67-64-1	<b>Acetone</b>	<b>66</b>		ug/m <sup>3</sup>	0.44	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
107-13-1	Acrylonitrile	ND		ug/m <sup>3</sup>	0.20	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
71-43-2	<b>Benzene</b>	<b>3.2</b>		ug/m <sup>3</sup>	0.30	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.48	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.63	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ



## Sample Information

**Client Sample ID:** SS-C

**York Sample ID:** 20C1257-07

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	0.96	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.36	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-15-0	<b>Carbon disulfide</b>	<b>0.73</b>		ug/m <sup>3</sup>	0.29	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.35</b>		ug/m <sup>3</sup>	0.15	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.43	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.25	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
67-66-3	<b>Chloroform</b>	<b>0.50</b>		ug/m <sup>3</sup>	0.46	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
74-87-3	<b>Chloromethane</b>	<b>0.67</b>		ug/m <sup>3</sup>	0.19	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>0.26</b>		ug/m <sup>3</sup>	0.092	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.42	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
110-82-7	<b>Cyclohexane</b>	<b>1.3</b>		ug/m <sup>3</sup>	0.32	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.79	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.9</b>		ug/m <sup>3</sup>	0.46	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
141-78-6	<b>* Ethyl acetate</b>	<b>0.84</b>		ug/m <sup>3</sup>	0.67	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>2.2</b>		ug/m <sup>3</sup>	0.41	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	1.0	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
67-63-0	<b>Isopropanol</b>	<b>54</b>		ug/m <sup>3</sup>	0.46	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	0.38	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
1634-04-4	<b>Methyl tert-butyl ether (MTBE)</b>	<b>0.40</b>		ug/m <sup>3</sup>	0.34	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-09-2	<b>Methylene chloride</b>	<b>3.2</b>		ug/m <sup>3</sup>	0.65	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
142-82-5	<b>n-Heptane</b>	<b>3.5</b>		ug/m <sup>3</sup>	0.38	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
110-54-3	<b>n-Hexane</b>	<b>4.7</b>		ug/m <sup>3</sup>	0.33	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
95-47-6	<b>o-Xylene</b>	<b>2.1</b>		ug/m <sup>3</sup>	0.41	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ



## Sample Information

**Client Sample ID:** SS-C

**York Sample ID:** 20C1257-07

York Project (SDG) No.  
20C1257

Client Project ID  
Spark

Matrix  
Outdoor Ambient Air

Collection Date/Time  
March 29, 2020 12:00 am

Date Received  
03/31/2020

### Volatile Organics, EPA TO15 Full List

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
179601-23-1	p- & m- Xylenes	7.5		ug/m <sup>3</sup>	0.81	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
622-96-8	* p-Ethyltoluene	3.4		ug/m <sup>3</sup>	0.46	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
115-07-1	* Propylene	13		ug/m <sup>3</sup>	0.16	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.40	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
127-18-4	Tetrachloroethylene	3.5		ug/m <sup>3</sup>	0.63	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
109-99-9	* Tetrahydrofuran	1.9		ug/m <sup>3</sup>	0.55	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
108-88-3	Toluene	13		ug/m <sup>3</sup>	0.35	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.37	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.42	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
79-01-6	Trichloroethylene	1.4		ug/m <sup>3</sup>	0.13	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.7		ug/m <sup>3</sup>	0.52	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.33	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
593-60-2	Vinyl bromide	ND		ug/m <sup>3</sup>	0.41	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.060	0.933	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/02/2020 19:00	04/03/2020 17:46	LLJ
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	101 %	70-130							





## Sample and Data Qualifiers Relating to This Work Order

### Definitions and Other Explanations

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

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

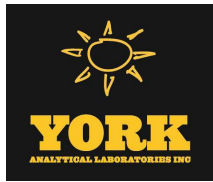
If Total PCBs are detected and the target aroclors reported are "Not detected", the Total PCB value is reported due to the presence of either or both Aroclors 1262 and 1268 which are non-target aroclors for some regulatory lists.

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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



Corrective Action: The summa canister for the Outdoor Ambient sample OA-A was received with the valve open and the sample analysis was subsequently cancelled.



# Field Chain-of-Custody Record - AIR

**NOTE:** York's Std. Terms & Conditions are listed on the back side of this document.

York Project No. 20C/257

<b>YOUR Information</b> Company: <u>DERMODY CONSULTING</u> Address: _____ Phone No. _____ Contact Person: _____ E-Mail Address: _____		<b>Report To:</b> Company: <u>Peter</u> Address: <u>DERMODY</u> Phone No. _____ Attention: _____ E-Mail Address: _____		<b>Invoice To:</b> Company: <u>SAME</u> Address: _____ Phone No. _____ Attention: _____ E-Mail Address: _____		<b>YOUR Project ID</b> <u>Spark</u>  <b>Purchase Order No.</b>  Samples from: CT <u>NY</u> NJ		<b>Turn-Around Time</b> RUSH - Same Day <input type="checkbox"/> RUSH - Next Day <input type="checkbox"/> RUSH - Two Day <input type="checkbox"/> RUSH - Three Day <input type="checkbox"/> RUSH - Four Day <input type="checkbox"/> <b>Standard(5-7 Days)</b> <input checked="" type="checkbox"/>		<b>Report Type/Deliverables</b> Summary Report <input checked="" type="checkbox"/> Summary w/ QA Summary <input type="checkbox"/> CT RCP Package <input type="checkbox"/> NY ASPA Package <input type="checkbox"/> NY ASP B/CLP Pkg <input type="checkbox"/> NJDEP Reduced <input type="checkbox"/> <u>Electronic Deliverables:</u> EDD (Specify Type) <input type="checkbox"/> Standard Excel <input type="checkbox"/> Regulatory Comparison Excel <input type="checkbox"/>			
<b>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.</b>													
<b>YOUR Information</b>		<b>Report To:</b>		<b>Invoice To:</b>		<b>YOUR Project ID</b>		<b>Turn-Around Time</b>		<b>Report Type/Deliverables</b>			
Company: <u>DERMODY CONSULTING</u>		Company: <u>Peter</u>		Company: <u>SAME</u>		<u>Spark</u>		RUSH - Same Day <input type="checkbox"/>		Summary Report <input checked="" type="checkbox"/>			
Address: _____		Address: <u>DERMODY</u>		Address: _____		Purchase Order No. _____		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary <input type="checkbox"/>			
Phone No. _____		Phone No. _____		Phone No. _____		Samples from: CT <u>NY</u> NJ		RUSH - Two Day <input type="checkbox"/>		CT RCP Package <input type="checkbox"/>			
Contact Person: _____		Attention: _____		Attention: _____		Standard(5-7 Days) <input checked="" type="checkbox"/>		RUSH - Three Day <input type="checkbox"/>		NY ASPA Package <input type="checkbox"/>			
E-Mail Address: _____		E-Mail Address: _____		E-Mail Address: _____		Additional Notes: <u>Please provide NYSDC Equiis format.</u>		RUSH - Four Day <input type="checkbox"/>		NY ASP B/CLP Pkg <input type="checkbox"/>			
								<b>Detection Limits Required</b>		<b>Special Instructions</b>			
								<input type="checkbox"/> ≤ 1 ug/m <sup>3</sup>					
								<input type="checkbox"/> NYSDC VI Limits					
								<input type="checkbox"/> (VI - vapor instruction)					
								<input type="checkbox"/> NJDEP low level					
								<input type="checkbox"/> Routine Survey					
								<input type="checkbox"/> Other					
<b>Please enter the following Field Data</b>										<b>ANALYSES REQUESTED</b>		<b>Sampling Media</b>	
Name (printed)		Date Sampled		AIR Matrix		Canister Vacuum Before Sampling (in. Hg)		Canister Vacuum After Sampling (in. Hg)		Canister ID		Flow Cont.ID	
OA - A		3/29/20		AO		30		9				6 Liter canister <input checked="" type="checkbox"/>	
IA - A		3/29/20		AI		29		7				Tedlar Bag <input checked="" type="checkbox"/>	
IA - B				AI		29		8				6 Liter canister <input checked="" type="checkbox"/>	
IA - C				AI		30		8				Tedlar Bag <input checked="" type="checkbox"/>	
SS - A				AO		27		7				6 Liter canister <input checked="" type="checkbox"/>	
SS - B				AO		30		6				Tedlar Bag <input checked="" type="checkbox"/>	
SS - C				AO		30		9				6 Liter canister <input checked="" type="checkbox"/>	
												6 Liter canister <input checked="" type="checkbox"/>	
												Tedlar Bag <input checked="" type="checkbox"/>	
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												Tedlar Bag <input checked="" type="checkbox"/>	
												6 Liter canister <input checked="" type="checkbox"/>	

Page	Comments	Samples Relinquished By	Date/Time	Samples Received By	Date/Time
26	Relinquished; J. Hale 3/31/20 - 1632	Relinquished; J. Hale 3/31/20 - 1632	3/31/20 <sup>00</sup> pm	Relinquished; J. Hale 3/31/20 - 1741	3/31/20 <sup>00</sup> pm
27	Relinquished; J. Hale 3/31/20 - 1741	Relinquished; J. Hale 3/31/20 - 1741	3/31/20 <sup>00</sup> pm	Relinquished; J. Hale 3/31/20 - 1741	3/31/20 <sup>00</sup> pm
28	Relinquished; J. Hale 3/31/20 - 1741	Relinquished; J. Hale 3/31/20 - 1741	3/31/20 <sup>00</sup> pm	Relinquished; J. Hale 3/31/20 - 1741	3/31/20 <sup>00</sup> pm



# Technical Report

prepared for:

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
**Attention: Peter Dermody**

Report Date: 04/20/2020  
**Client Project ID: Elka/Spark**  
York Project (SDG) No.: 20D0375

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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132-02 89th AVENUE  
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RICHMOND HILL, NY 11418  
[ClientServices@yorklab.com](mailto:ClientServices@yorklab.com)

Report Date: 04/20/2020  
Client Project ID: Elka/Spark  
York Project (SDG) No.: 20D0375

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
Attention: Peter Dermody

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## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 14, 2020 with a temperature of 3.3 C. The project was identified as your project: **Elka/Spark**.

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>
20D0375-01	SPG-1	Water	04/13/2020	04/14/2020
20D0375-02	SPG-2	Water	04/13/2020	04/14/2020

## **General Notes for York Project (SDG) No.: 20D0375**

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:** 04/20/2020







## Sample Information

**Client Sample ID:** SPG-1

**York Sample ID:** 20D0375-01

**York Project (SDG) No.**

**Client Project ID**

**Matrix**

**Collection Date/Time**

**Date Received**

20D0375

Elka/Spark

Water

April 13, 2020 12:00 am

04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP



## Sample Information

**Client Sample ID:** SPG-1

**York Sample ID:** 20D0375-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20D0375

Elka/Spark

Water

April 13, 2020 12:00 am

04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
78-93-3	2-Butanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
67-64-1	Acetone	8.0		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-15-0	Carbon disulfide	0.65		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
74-87-3	Chloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
156-59-2	cis-1,2-Dichloroethylene	0.26	J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP



## Sample Information

**Client Sample ID:** SPG-1

**York Sample ID:** 20D0375-01

York Project (SDG) No.  
20D0375

Client Project ID  
Elka/Spark

Matrix  
Water

Collection Date/Time  
April 13, 2020 12:00 am

Date Received  
04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
98-82-8	<b>Isopropylbenzene</b>	<b>0.98</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	04/13/2020 07:26	04/17/2020 16:49	TMP
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	04/13/2020 07:26	04/17/2020 16:49	TMP
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 16:49	TMP
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
127-18-4	Tetrachloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP



## Sample Information

**Client Sample ID:** SPG-1

**York Sample ID:** 20D0375-01

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20D0375

Elka/Spark

Water

April 13, 2020 12:00 am

04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 16:49	TMP
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: SURRE: 1,2-Dichloroethane-d4	107 %	69-130								
2037-26-5	Surrogate: SURRE: Toluene-d8	102 %	81-117								
460-00-4	Surrogate: SURRE: p-Bromofluorobenzene	102 %	79-122								

## Sample Information

**Client Sample ID:** SPG-2

**York Sample ID:** 20D0375-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

20D0375

Elka/Spark

Water

April 13, 2020 12:00 am

04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	1,1,1,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
71-55-6	1,1,1-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
79-00-5	1,1,2-Trichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
75-34-3	1,1-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
75-35-4	1,1-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP



## Sample Information

**Client Sample ID:** SPG-2

**York Sample ID:** 20D0375-02

York Project (SDG) No.  
20D0375

Client Project ID  
Elka/Spark

Matrix  
Water

Collection Date/Time  
April 13, 2020 12:00 am

Date Received  
04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-61-6	1,2,3-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
96-18-4	1,2,3-Trichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
120-82-1	1,2,4-Trichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
95-63-6	1,2,4-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
96-12-8	1,2-Dibromo-3-chloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
106-93-4	1,2-Dibromoethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
95-50-1	1,2-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
107-06-2	1,2-Dichloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
78-87-5	1,2-Dichloropropane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
108-67-8	1,3,5-Trimethylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
541-73-1	1,3-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
106-46-7	1,4-Dichlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
123-91-1	1,4-Dioxane	ND		ug/L	40	40	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
78-93-3	<b>2-Butanone</b>	<b>0.71</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
591-78-6	2-Hexanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
108-10-1	4-Methyl-2-pentanone	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
67-64-1	<b>Acetone</b>	<b>7.2</b>		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
107-02-8	Acrolein	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
107-13-1	Acrylonitrile	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
71-43-2	Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
74-97-5	Bromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
75-27-4	Bromodichloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP



## Sample Information

**Client Sample ID:** SPG-2

**York Sample ID:** 20D0375-02

York Project (SDG) No.  
20D0375

Client Project ID  
Elka/Spark

Matrix  
Water

Collection Date/Time  
April 13, 2020 12:00 am

Date Received  
04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-25-2	Bromoform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
74-83-9	Bromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
75-15-0	Carbon disulfide	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
56-23-5	Carbon tetrachloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
108-90-7	Chlorobenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
75-00-3	Chloroethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
67-66-3	Chloroform	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
74-87-3	<b>Chloromethane</b>	<b>0.43</b>	CCV-E , J	ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
156-59-2	cis-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
110-82-7	Cyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
124-48-1	Dibromochloromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
74-95-3	Dibromomethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
75-71-8	Dichlorodifluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
100-41-4	Ethyl Benzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
87-68-3	Hexachlorobutadiene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
98-82-8	Isopropylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
79-20-9	Methyl acetate	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
108-87-2	Methylcyclohexane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
75-09-2	Methylene chloride	ND		ug/L	1.0	2.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP



## Sample Information

**Client Sample ID:** SPG-2

**York Sample ID:** 20D0375-02

York Project (SDG) No.  
20D0375

Client Project ID  
Elka/Spark

Matrix  
Water

Collection Date/Time  
April 13, 2020 12:00 am

Date Received  
04/14/2020

### Volatile Organics, 8260 - Comprehensive

### Log-in Notes:

### Sample Notes:

Sample Prepared by Method: EPA 5030B

CAS No.	Parameter	Result	Flag	Units	Reported to LOD/MDL	LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
104-51-8	n-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
103-65-1	n-Propylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
95-47-6	o-Xylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	04/13/2020 07:26	04/17/2020 17:15	TMP
179601-23-1	p- & m- Xylenes	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,PA	04/13/2020 07:26	04/17/2020 17:15	TMP
99-87-6	p-Isopropyltoluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
135-98-8	sec-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
100-42-5	Styrene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
75-65-0	tert-Butyl alcohol (TBA)	ND		ug/L	0.50	1.0	1	EPA 8260C Certifications: NELAC-NY10854,NELAC-NY12058,NJDEP,PAI	04/13/2020 07:26	04/17/2020 17:15	TMP
98-06-6	tert-Butylbenzene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
127-18-4	<b>Tetrachloroethylene</b>	<b>2.3</b>		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
108-88-3	Toluene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
156-60-5	trans-1,2-Dichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
110-57-6	trans-1,4-dichloro-2-butene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
79-01-6	Trichloroethylene	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
75-69-4	Trichlorofluoromethane	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
75-01-4	Vinyl Chloride	ND		ug/L	0.20	0.50	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
1330-20-7	Xylenes, Total	ND		ug/L	0.60	1.5	1	EPA 8260C Certifications: CTDOH,NELAC-NY10854,NELAC-NY12058,NJ	04/13/2020 07:26	04/17/2020 17:15	TMP
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
17060-07-0	Surrogate: SURR: 1,2-Dichloroethane-d4	108 %	69-130								
2037-26-5	Surrogate: SURR: Toluene-d8	104 %	81-117								
460-00-4	Surrogate: SURR: p-Bromofluorobenzene	94.3 %	79-122								





### Volatile Analysis Sample Containers

Lab ID	Client Sample ID	Volatile Sample Container
20D0375-01	SPG-1	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C
20D0375-02	SPG-2	40mL Clear Vial (pre-pres.) HCl; Cool to 4° C



## Sample and Data Qualifiers Relating to This Work Order

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

## Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.



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

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

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## **Attachment C**

**FORMER ELKA CHEMICAL COMPANY SITE, NYSDEC #152239**  
**340 WEST HOFFMAN AVENUE, LINDENHURST, NY**  
**DATA USABILITY SUMMARY REPORT**  
**March 21, 2020 SVI Sampling (SDG 5)**  
**Lab Report #20C0979**

This data usability summary report (DUSR) was prepared in accordance with Appendix 2B of New York State Department of Environmental Conservation (NYSDEC) DER-10 using the entire original laboratory report. The sampling event included five primary environmental soil vapor and air samples collected on March 21, 2020. The sample locations are identified as IA-1, IA-2, SS-1, SS-2, and OA-1 and are reported to be associated with New Born Church.

The samples were transmitted to the lab in one shipment and were assigned one lab report number, although the samples were analyzed in two batches. Laboratory batch quality assurance/quality control (QA/QC) samples were assigned to each batch as noted on the analytical batch summary sheet.

### **Sample Collection and Receipt**

The samples were collected in labeled laboratory-provided sample containers. No issues with sample containers, labeling, or preservation were reported by the laboratory.

Sampling procedures were reported to have been in accordance with the procedures in the Quality Assurance Project Plan (QAPP) for this project, which was reported to have been approved by the NYSDEC. Any exceptions are noted below. All sample collection was conducted under Chain of Custody (COC) procedures.

### **Sample Analyses**

The samples were transmitted to and analyzed by York Analytical Laboratories, Inc. at their Stratford, Connecticut facility, which is New York State Department of Health-certified for the analyses performed. The samples were prepared and analyzed for NYSDOH volatile organic compounds (VOCs) using the TO-15 Method. The analytical method and analytes are appropriate for the intended use of the data and the sample holding times were met.

Several samples required dilution prior to analysis. The reporting limits have been adjusted accordingly.

### **QA/QC Results**

Surrogate recoveries in each of the samples were within acceptance limits, indicating that the data are anticipated to be accurate.

Method blank (MB) samples were analyzed by the laboratory to evaluate the potential for cross-contamination associated with the sample preparation and analysis. The MB results did not show concentrations of VOCs above their reporting limits. Cross-contamination associated with sample preparation and analysis does not appear to present a significant concern.

Laboratory Control Samples (LCSs) were used by the laboratory to verify the accuracy of the analyses. The LCS percent recoveries (%Rs) were all within established guidelines, and,

therefore, the data do not appear to have been significantly affected by laboratory-related accuracy issues.

### **Questions and Responses as per DER-10**

1. Is the data package complete as defined under the current requirements for the NYSDEC ASP Category B or USEPA CLP deliverables?

The data package, which was requested as a summary report only, is complete. The chain of custody form is present and complete. The case narrative and sample analysis summaries are present and complete. The analytical QA/QC summary information, including surrogate recoveries, LCS data, and MB data are all present and complete.

2. Have all holding times been met?

All samples were received and analyzed within the EPA-recommended holding times for the analyses performed.

3. Do all the QC data: blanks, instrument tunings, calibration standards, calibration verifications, surrogate recoveries, spike recoveries, replicate analyses, laboratory controls and sample data, fall within the protocol-required limits and specifications?

All of the provided QC data were found to fall within the protocol-required limits and specifications.

4. Have all of the data been generated using established and agreed-upon analytical protocols?

Yes - all of the data were generated using the TO-15 Method, which is appropriate for SVI testing.

5. Does an evaluation of the raw data confirm the results provided in the data summary sheets and quality control verification forms?

Yes – the data summary sheets were compared with the reported quality control data results to confirm that the reported analytical results (identification, quantification, and qualification) are substantiated.

6. Have the correct data qualifiers been used?

Yes - results analyzed for but not detected have been qualified with the laboratory-specific qualifier of ND where appropriate.

7. Have any quality control (QC) exceedances been specifically noted in the DUSR and have the corresponding QC summary sheets from the data package been attached to the DUSR?

No – No QC exceedances were noted in the DUSR.



## Conclusions

The soil vapor and air samples were reported to have been collected in accordance with the NYSDEC-approved QAPP for this project. No field or laboratory conditions occurred that would result in non-valid analytical data. The data appear to be adequate for their intended purpose.

## Attachments

S:\Easternenvironmentalservices\Elkchemicalsite\Lab Reports And Dusr\SDG 5\DUSR-SDG5.Docx



# Technical Report

prepared for:

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
**Attention: Peter Dermody**

Report Date: 04/02/2020  
**Client Project ID: Elka**  
York Project (SDG) No.: 20C0979

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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

STRATFORD, CT 06615  
(203) 325-1371

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

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

Report Date: 04/02/2020  
Client Project ID: Elka  
York Project (SDG) No.: 20C0979

**Dermody Consulting, Inc.**  
32 Chichester Ave., 2nd Floor  
Center Moriches NY, 11934  
Attention: Peter Dermody

---

## 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 March 23, 2020 and listed below. The project was identified as your project: **Elka**.

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>
20C0979-01	SS-1	Soil Vapor	03/21/2020	03/23/2020
20C0979-02	SS-2	Soil Vapor	03/21/2020	03/23/2020
20C0979-03	IA-1	Indoor Ambient Air	03/21/2020	03/23/2020
20C0979-04	IA-2	Indoor Ambient Air	03/21/2020	03/23/2020
20C0979-05	OA-1	Outdoor Ambient Air	03/21/2020	03/23/2020

## **General Notes for York Project (SDG) No.: 20C0979**

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:** 04/02/2020





## Analytical Batch Summary

**Batch ID:** BC01207

**Preparation Method:** EPA TO15 PREP

**Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
20C0979-01	SS-1	03/26/20
20C0979-02	SS-2	03/26/20
20C0979-03	IA-1	03/26/20
20C0979-04	IA-2	03/26/20
BC01207-BLK1	Blank	03/26/20
BC01207-BS1	LCS	03/26/20

**Batch ID:** BC01619

**Preparation Method:** EPA TO15 PREP

**Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
20C0979-05	OA-1	03/28/20
BC01619-BLK1	Blank	03/28/20
BC01619-BS1	LCS	03/28/20



## Sample and Data Qualifiers Relating to This Work Order

### Definitions and Other Explanations

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

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

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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

Page 1 of 1

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

York Project No. 20C0979

<b>YOUR Information</b>		<b>Report To:</b>		<b>Invoice To:</b>		<b>YOUR Project ID</b>		<b>Turn-Around Time</b>		<b>Report Type/Deliverables</b>	
Company: <u>DERMODY CONSULTING</u>		Company: <u>PETER DERMODY</u>		Company: <u>SAME</u>		<u>ELK9</u>		RUSH - Same Day <input type="checkbox"/>		Summary Report <input checked="" type="checkbox"/>	
Address: _____		Address: _____		Address: _____		_____		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary _____	
Phone No. _____		Phone No. _____		Phone No. _____		_____		RUSH - Two Day <input type="checkbox"/>		CT RCP Package _____	
Contact Person: _____		Attention: _____		Attention: _____		_____		RUSH - Three Day <input type="checkbox"/>		NY ASP A Package _____	
E-Mail Address: _____		E-Mail Address: _____		E-Mail Address: _____		Purchase Order No. _____		RUSH - Four Day <input type="checkbox"/>		NY ASP B/CLP Pkg _____	
						Samples from: CT <u>NY</u> NJ _____		Standard(5-7 Days) <input checked="" type="checkbox"/>		NJDEP Reduced _____	

**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.**

Additional Notes:

NYSDEC Equiis Format Results

Detection Limits Required

≤ 1 ug/m<sup>3</sup>

NYSDEC VI Limits ☒

(VI = vapor intrusion)

NJDEP low level \_\_\_\_\_

Routine Survey \_\_\_\_\_

Other \_\_\_\_\_

**Special Instructions**

**Air Matrix Codes**

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

**Please enter the following Field Data**

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Canister ID	Flow Cont.ID	ANALYSES REQUESTED	Sampling Media
SS-1	3/21/20	AS	30	9		444	VOCs TO-15	6 Liter canister <input checked="" type="checkbox"/> Tedlar Bag
SS-2	↓	AS	28	5.5		5116	↓	6 Liter canister <input checked="" type="checkbox"/> Tedlar Bag
IA-1		IA	30	7		6873		6 Liter canister <input checked="" type="checkbox"/> Tedlar Bag
IA-2		IA	30	6.5		5705		6 Liter canister <input checked="" type="checkbox"/> Tedlar Bag
OA-1		AO	30	5.5		7363		6 Liter canister <input checked="" type="checkbox"/> Tedlar Bag
								6 Liter canister _____ Tedlar Bag
								6 Liter canister _____ Tedlar Bag
								6 Liter canister _____ Tedlar Bag
								6 Liter canister _____ Tedlar Bag
								6 Liter canister _____ Tedlar Bag
								6 Liter canister _____ Tedlar Bag
								6 Liter canister _____ Tedlar Bag
								6 Liter canister _____ Tedlar Bag

Comments  
Rec'd id. date 3/23/20 - 1700  
Relinquished id. date 3/23/20 - 1818  
Lab Secure, RCD 3/24/20 @ 0900

Peter Dermody 3/23/20 1255  
Samples Relinquished By Date/Time  
Khabrie 3/23/20 1700  
Samples Relinquished By Date/Time

Khabrie 3/23/20 1255 PM  
Samples Received By Date/Time  
Ernie Sklar 3/22/20 420  
Samples Received in LAB by Date/Time