VOLATILE VAPOR INTRUSION (VVI) REPORT

KRAMER LANE ELEMENTARY SCHOOL
1 KRAMER LANE
PLAINVIEW, NEW YORK 11803

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

JCB PROJECT #: 20-46054
APRIL 2020

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

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

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Section No. 1.0: Introduction

J.C. Broderick and Associates, Inc. (JCB) was retained by the Bethpage Union Free School District (Bethpage) to investigate the potential for volatile vapor intrusion (VVI) at the Kramer Lane Elementary School campus. The sampling protocol was performed essentially in accordance with the requirements of the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", Final Version, October 2006 and all available updates.

Section No. 2.0: Site Description and Location

The Subject Site is located at 1 Kramer Lane, Plainview, New York 11803. The Subject Site is located at the western terminus of Kramer Lane. According to the United States Geological Survey (USGS) *Huntington, New York, 1979* 7.5 Minute Series Topographical Map, the Subject Site is situated at an approximate elevation of 140 feet (ft) above mean sea level. The location of the Subject Site is shown on the Site Location Map, Appendix-A Figure-1.

Section No. 3.0: Volatile Vapor Intrusion (VVI) Evaluation

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

Section No. 3.1: Pre-Work Field Preparations

On April 8, 2020, a pre-sampling inspection was performed to evaluate the physical layout and conditions of the school building, to specifically determine the location of each sample, identify conditions that may affect or interfere with the proposed sampling and to prepare the building for sampling.

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

Section No. 3.2: Subsurface Vapor Sample Collection

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

- For the collection of the subsurface vapor samples, a probe was fabricated from ½-inch diameter, threaded brass pipe with a barbed tubing connection. The two (2) layers of 6-mil polyethylene sheeting were penetrated and a one (1) inch diameter hole was drilled, utilizing a hammer drill, into the sand floor of the crawlspace extending approximately two (2) inches below the top of the sand. The pipe was lowered into the hole, but not flush to the bottom and set into place utilizing hydrated bentonite powder, which contains no Volatile Organic Compounds (VOCs). A five (5) gallon plastic container was placed on top of the plastic sheeting and above the vapor point. The container was sealed to the plastic sheeting utilizing modeling clay and duct tape. A Teflon-lined, ¼-inch I.D. disposable polyethylene tubing was then utilized to connect the barbed connection of the vapor point to a clean-certified, 6-liter SUMMA® canister, provided by York Analytical Labs, Inc. (York) through a flow controller pre-set for an eight (8) hour long sample duration. The tubing included a tee connection and valve to a purging vacuum pump calibrated for a flow rate of less than 0.2 liters per minute. The tubing, probe and subsurface soil was purged of at least one (1) liter of vapor prior to sample collection. Upon completion of the sampling, the polyethylene sheeting was replaced on the floor and secured in place with duct tape.

- Helium (He) was introduced into the atmosphere under the pail, as a tracer gas, to assure the viability of the vapor point seals with the atmosphere. The tracer gas was monitored in the purge air before sampling and outside of all seals before, during and after sampling, utilizing a Myron Helium Detector. In addition, Helium (He) was analyzed for in the SUMMA® canister and if detected at more than ten (10) percent, the sample would be considered invalid and retaken.

- On April 8, 2020, a total of two (2) subsurface vapor samples were collected.

    - One (1) subsurface sample was collected from beneath Classroom 102 located at the north end of the school building.

    - One (1) subsurface sample was collected from beneath Classroom 112 located at the south end of the school building.

Section No. 3.3: Indoor Air Sample Collection

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

- Sample flow rates conformed to the specifications in the sample collection method (less than 0.2 liters per minute) and were consistent with the hours of operation of the school building. Samples were taken from areas where personnel and occupants would not interfere with the sampling. The samples were collected, utilizing conventional sampling methods, in laboratory clean-certified, 6-liter SUMMA® canisters, provided by York through a flow controller pre-set for an eight (8) hour long sample duration. As per the guidance requirements, the samples were collected at a height approximately three (3) feet above the floor to represent a height at which occupants are normally seated.

Section No. 3.3.1: Crawlspace Air Sample Collection

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

- On April 8, 2020, a total of two (2) crawlspace air samples were collected.
  - One (1) air sample was collected from beneath Classroom 102 located at the north end of the school building.
  - One (1) air sample was collected from beneath Classroom 112 located at the south end of the school building.

Section No. 3.3.2: 1st Floor Air Sample Collection

Please refer to Figure No. 2 – Subsurface, Crawlspace, 1st Floor, and Ambient Sampling Locations for additional details.

- On April 8, 2020, a total of two (2) first floor air samples were collected.
  - One (1) air sample was collected from within Classroom 102 located at the north end of the school building.
  - One (1) air sample was collected from within Classroom 112 located at the south end of the school building.

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

An outdoor (ambient) air sample was collected simultaneously with subsurface and indoor samples to evaluate the potential influence, if any, of outdoor air on indoor air quality. To obtain a representative sample which meets the data quality objectives, the outdoor air sample was collected in a manner consistent with that for indoor air samples. The sample was collected, utilizing conventional sampling methods, in a laboratory clean-certified, 6-liter SUMMA® canister, provided by York equipped with a flow controller pre-set for an eight (8) hour sample duration. As per the guidance requirements, the sample was collected at a height approximately three (3) feet above the floor. Please refer to Figure No. 2 – Subsurface Crawlspace 1st Floor and Ambient Sampling Locations for additional details.

- On April 8, 2020, one (1) outdoor (ambient) air sample was collected.
  - One (1) air sample was collected from outside the west side of the school building adjacent to the west exit doors.

Section No. 4.0: Laboratory Analytical Summary

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

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

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

The laboratory analysis results for the air samples collected were reviewed and compared to the 90th percentile as listed in Table C2 EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA canister method found in NYSDOH's "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006 and all available updates.

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

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

Client Sample ID	Background Values	North Subsurface[1]	North Crawlspace	Classroom 102	South Subsurface[1]	South Crawlspace	Classroom 112	Ambient
TO-15 List	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	3.5	ND	ND	0.83	ND	ND	ND	0.93
1,1,1-Trichloroethane (TCA)	20.6	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	9.5	1.50	0.46	1.60	ND	0.39	ND	0.60
1,3,5-Trimethylbenzene	3.7	ND	ND	0.57	ND	ND	ND	0.43
2-Butanone	12	ND	2.30	ND	25.0	ND	ND	ND
2-Hexanone	NA	ND	0.77	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	6	ND	1.30	2.40	ND	ND	ND	ND
Acetone	98.9	200	14.0	62.0	310	12.0	11.0	6.00
Benzene	9.4	9.40	0.51	1.60	6.80	0.68	**69.0**	3.40
Bromoform	NA	ND	ND	ND	ND	ND	ND	0.90
Carbon disulfide	4.2	1.40	ND	ND	ND	ND	ND	ND
Carbon Tetrachloride	1.3	0.58	0.47	0.73	ND	0.50	ND	0.82
Chloromethane	3.7	1.00	0.95	1.80	4.00	1.10	ND	1.40
cis 1,2-Dichloroethene	1.9	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	1.4	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NA	150	2.60	32.0	36.0	12.0	940	38.0
Dichlorodifluoromethane	16.5	2.70	1.70	2.30	10.0	1.90	4.10	1.80
Ethyl acetate	5.4	ND	0.68	4.80	12.0	0.57	ND	0.63
Ethylbenzene	5.7	3.2	0.41	2.70	21.0	0.34	**15.0**	1.20
Isopropanol	250	11.0	36.0	**480**	1,200	23.0	18.0	4.0
Methyl Methacrylate	NA	ND	0.73	100	370	2.50	ND	ND
Methylene Chloride	10	ND	ND	ND	ND	ND	ND	ND
n-Heptane	NA	37.0	5.00	20.0	6.70	4.00	120	6.80
n-Hexane	10.2	100	4.00	**52.0**	28.0	**14.0**	**340**	**20.0**
o-Xylene	7.9	1.3	0.41	2.20	8.50	0.34	3.60	0.49
p&m-Xylenes	22.2	2.70	ND	8.10	30.0	0.69	7.90	1.40
p-Ethyltoluene	3.6	ND	ND	1.60	8.00	ND	ND	0.60
Styrene	1.9	ND	ND	**4.60**	7.00	ND	ND	0.37
Tetrachloroethene (PCE)	15.9	2.10	0.64	3.50	ND	3.00	5.60	ND
Tetrahydrofuran	NA	ND	0.56	ND	9.60	ND	ND	ND
Toluene	43	380	1.20	19.0	1,200	1.30	4.40	1.10

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

Client Sample ID	Background Values	North Subsurface[1]	North Crawlspace	Classroom 102	South Subsurface[1]	South Crawlspace	Classroom 112	Ambient
TO-15 List	**µg/m³**	**µg/m³**	**µg/m³**	**µg/m³**	**µg/m³**	**µg/m³**	**µg/m³**	**µg/m³**
Trichloroethene (TCE)	4.2	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane (Freon 11)	18.1	1.90	1.40	2.70	ND	2.00	ND	1.80
Vinyl Acetate	NA	ND	ND	ND	ND	ND	ND	6.10
Vinyl Chloride	<1.9	ND	ND	ND	ND	ND	ND	ND
Helium	10%	ND	----	----	ND	----	----	----

Notes:
µg/m³ = parts per billion
NA = Background Value Not Established
ND=Not Detected above the laboratory minimum detection limit
Background Values = Table C2 EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA canister method - 90th percentile
[1] The State of New York does not have any standards, criteria, or guidance values for concentrations of volatile chemicals in subsurface vapors
Compounds in Gray are used in Decision Matrices A, B, & C. - See Section 5.0 and Table No. 2 for additional information.
Helium was used as a tracer gas at the subsurface sample locations, a detection of over 10% would indicate a breakthrough in the subsurface probe seal.

Section No. 5.0: Decision Matrices

Decision matrices are risk management tools developed by the NYSDOH to provide guidance on a cases-by-case basis about actions that should be taken to address current and potential exposures related to soil vapor intrusion. The matrices are intended to be used when evaluating the results from buildings with full slab foundations. Due to the presence of polyethylene sheeting covering the crawlspace sand, the structure was deemed to contain a full slab for the purpose of this investigation.

The NYSDOH has currently developed eight (8) matrices to use as tools in making decisions when soil vapor may be entering buildings. JCB implemented the matrices and the following table summarizes the results.

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

Compound	Soil Vapor/Indoor Air Decision Matrix	Result
1,1,1-Trichloroethane (TCA)	Matrix B	No Further Action
Carbon Tetrachloride	Matrix A	No Further Action
cis 1,2-Dichloroethene	Matrix A	No Further Action
1,1-Dichloroethene	Matrix A	No Further Action
Methylene Chloride	Matrix B	No Further Action
Tetrachloroethene (PCE)	Matrix B	No Further Action
Trichloroethene (TCE)	Matrix A	No Further Action
Vinyl Chloride	Matrix C	No Further Action

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

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

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

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

In order to prevent cross-contamination between sampling locations, all re-usable sampling equipment which came into contact with sample materials was decontaminated prior to each use. Equipment used for sample collection was wiped clean, washed in a solution of Alconox and thoroughly rinsed with potable water. New and dedicated polyethylene tubing was used for collection of each subsurface sample. All sampling personnel wore disposable latex, nylon, or nitrile gloves during sampling events. At a minimum, gloves were changed between locations and before each laboratory sample were collected.

- The field sampling team maintained sampling log sheets summarizing the following:
  - Sample identification;
  - Canister ID Number;
  - Regulator ID Number;
  - Date and time of sample collection;
  - Sampling height;
  - Sampling methods and devices;
  - The volume of air sampled;
  - The vacuum of canisters before and after sample collection;
  - Chain of custody protocols and records used to track samples from sampling point to analysis.

- Subsequent to sample collection, the Summa® canister was labeled with the sampling location, time, and samplers initials.

Section No. 7.0: Findings

Based upon the review of the VVI laboratory analysis results all detectable concentrations observed were reported well below published occupational health guidelines. In addition, with the exception of three (3) parameters in Classroom 102 and three (3) parameters in Classroom 112, all remaining detectable concentrations observed in the occupied spaces of the school building were below their background values as reported in the EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA canister method 90th Percentile found in NYSDOH's "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006. The concentrations detected in the indoor air samples are likely due to the daily operations within the building or outdoor sources rather than soil vapor intrusion when compared against the concentrations detected in the subsurface soil vapor samples.

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

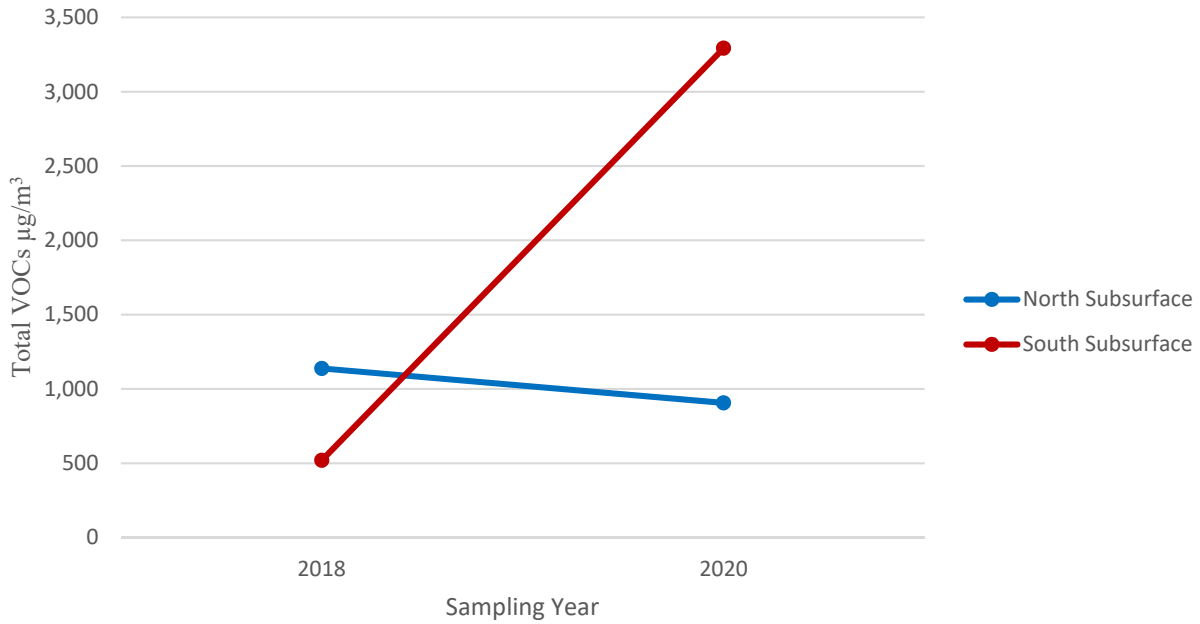
Section No. 7.1: Previous Analytical Results Trend Analysis

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

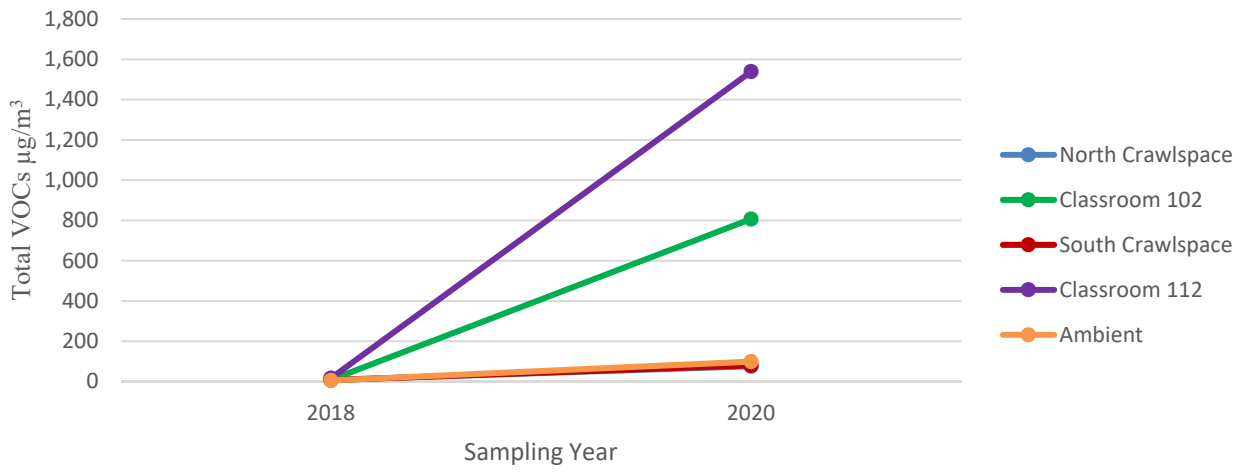
Table No. 3: Total VOCs (µg/m³) Detected Over Time		
Location	**Year**	
	2018	**2020**
North Subsurface	1,138	906
North Crawlspace	8.83	76.1
Classroom 102	8.99	807
South Subsurface	520	3,293
South Crawlspace	7.31	80.3
Classroom 112	17.1	1,539
Ambient	5.70	99.0

In general, the concentration of total VOCs has decreased in the North Subsurface sample and increased in the South Subsurface sample as indicated in Graph No. 1 below. The interior spaces did indicate an upward trend in total detected VOC concentration since 2018 at all locations, including the Ambient location as shown in Graph No. 2.

Graph No. 1:
Total VOCs (µg/m³) Detected Over Time – Subsurface Sample Locations



Graph No. 2:
Total VOCs (µg/m³) Detected Over Time – Interior/Ambient Sampling Locations



Section No. 8.0: Conclusions

A careful evaluation of the indoor air sampling results compared to the subsurface and ambient results did reveal the presence of a discernible pattern suggesting that the building could be impacted with VVI. Coincidently, it appears that the plastic barrier installed in the crawlspace of the building, although not its intended purpose has been relatively effectively in preventing the subsurface volatile vapors from migrating into the crawlspace and occupied portions of the school building.

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

Section No. 9.0: Recommendations

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

Section No. 10.0: Certification

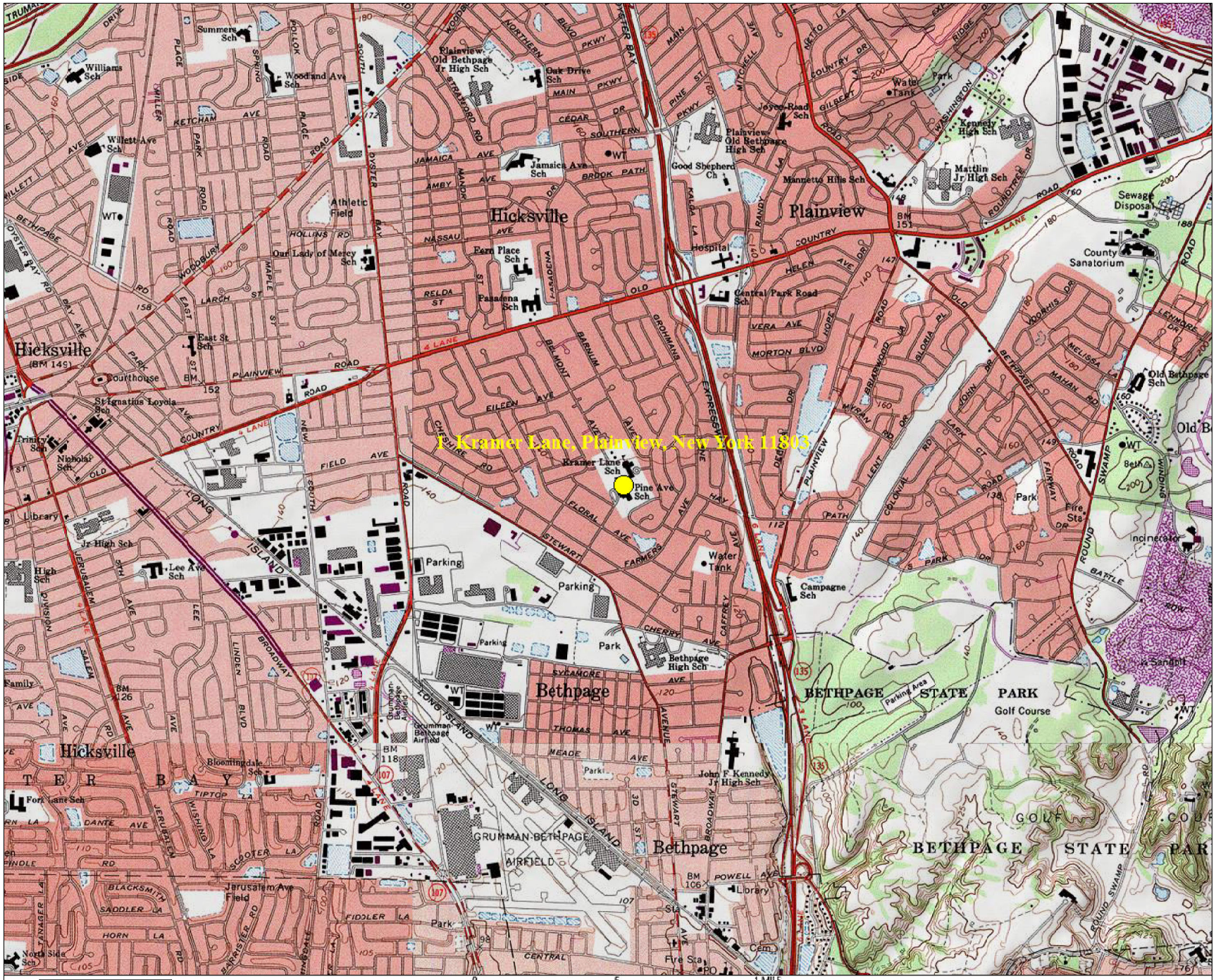
I certify that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the New York State Department of Health (NYSDOH) "Guidance for Evaluating Soil Vapor Intrusion in the State of New York", Final Version, October 2006 and that all activities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

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

Jeffrey V. Nannini
Environmental Scientist

Steven Muller, P.G.
Project Manager

Appendix A
Figures



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

Notes:

Kramer Lane
Elementary School
1 Kramer Lane
Plainview, NY 11803

Drawing Title

Figure No. 1

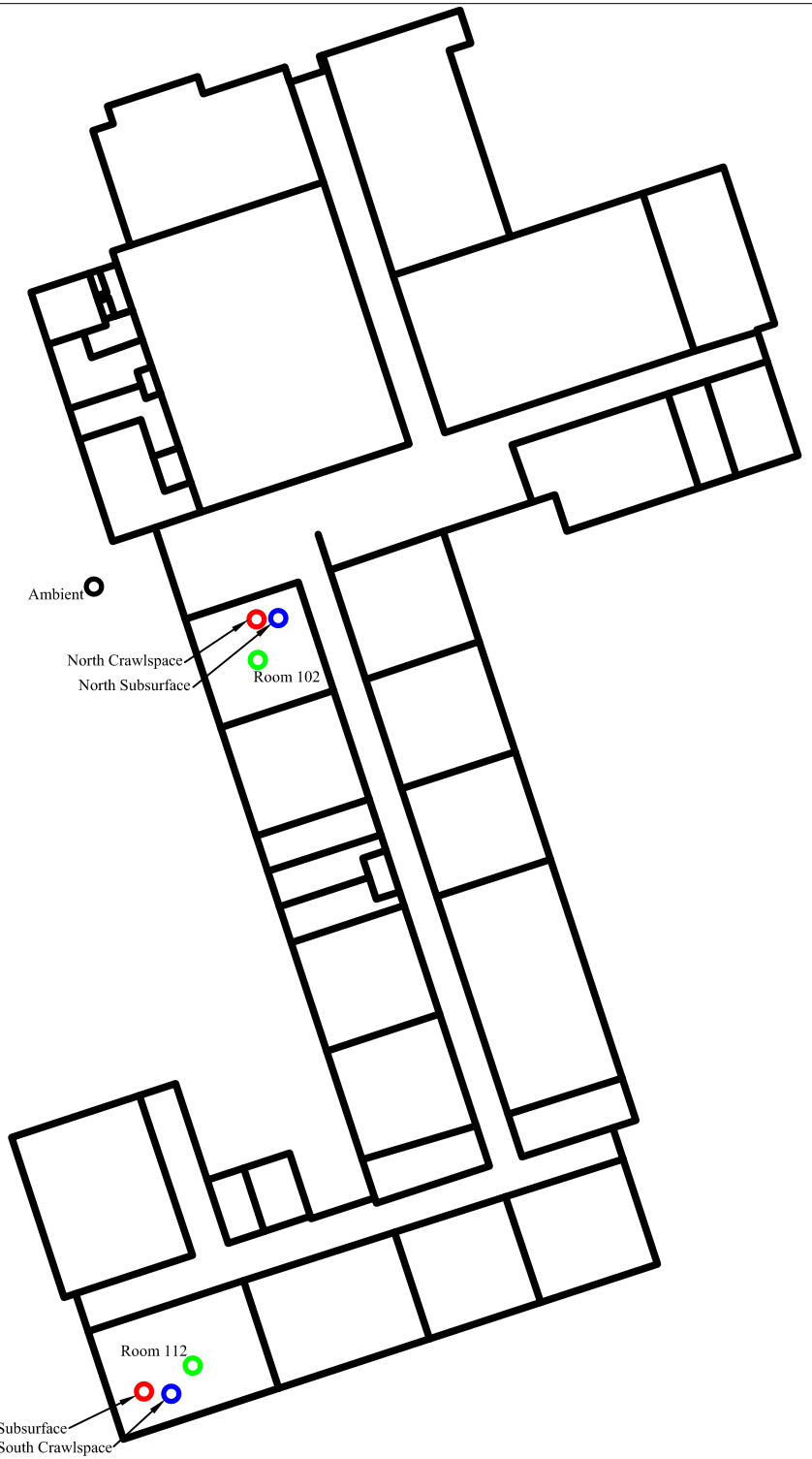
Site Location Map

Scale	Project No.	Date
As Noted	20-46054	04-08-2020

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

Drawing No.

1



PROJECT NORTH

JCB LEGEND

- AMBIENT SAMPLING LOCATION
- CRAWLSPACE SAMPLING LOCATION
- FIRST FLOOR SAMPLING LOCATION
- SUBSURFACE SAMPLING LOCATION

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

Notes:

Kramer Lane
Elementary School
1 Kramer Lane
Plainview, NY 11803

Drawing Title

Figure No. 2

Subsurface, Crawlspace, 1st Floor and Ambient Sampling Locations

Scale	Project No.	Date
N.T.S.	18-39197	02-23-18

Drawn By	Checked By	Page No.
M.C	S.W.M.	2 of 2

Drawing No.

2

Appendix B
Field Photograph Logs

Sampling Locations
North Subsurface (Left) & North Crawlspace (Right)

Field Photograph Log

Volatile Vapor Intrusion Report

Kramer Lane Elementary School
1 Kramer Lane
Plainview, New York 11803

Photo No. 01

JCB#: 20-46054

Sampling Locations
South Crawlspace (Left) & South Subsurface (Right)

Field Photograph Log

Volatile Vapor Intrusion Report

Kramer Lane Elementary School
1 Kramer Lane
Plainview, New York 11803

Photo No. 02

JCB#: 20-46054

Room 102
Sampling Location

Field Photograph Log

Volatile Vapor Intrusion Report

Kramer Lane Elementary School
1 Kramer Lane
Plainview, New York 11803

Photo No. 03

JCB#: 20-46054

Room 112
Sampling Location

Field Photograph Log

Volatile Vapor Intrusion Report

Kramer Lane Elementary School
1 Kramer Lane
Plainview, New York 11803

Photo No. 04

JCB#: 20-46054

Appendix C
Laboratory Analysis Report

Technical Report

prepared for:

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

Report Date: 04/21/2020
Client Project ID: 20-46054 Kramer ES
York Project (SDG) No.: 20D0326

Report Date: 04/21/2020
Client Project ID: 20-46054 Kramer ES
York Project (SDG) No.: 20D0326

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

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 10, 2020 with a temperature of C. The project was identified as your project: **20-46054 Kramer ES**.

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.

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
20D0326-01	North Subsurface	Soil Vapor	04/08/2020	04/10/2020
20D0326-02	North Crawlspace	Indoor Ambient Air	04/08/2020	04/10/2020
20D0326-03	Room 102	Indoor Ambient Air	04/08/2020	04/10/2020
20D0326-04	South Subsurface	Soil Vapor	04/08/2020	04/10/2020
20D0326-05	South Crawlspace	Indoor Ambient Air	04/08/2020	04/10/2020
20D0326-06	Room 112	Indoor Ambient Air	04/08/2020	04/10/2020
20D0326-07	Ambient	Outdoor Ambient Ai	04/08/2020	04/10/2020

General Notes for York Project (SDG) No.: 20D0326

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

Approved By: 

Date: 04/21/2020

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: **North Subsurface** **York Sample ID:** **20D0326-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	2.1	3.072	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 10:21	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.7	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	2.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	2.4	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.7	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	1.2	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.30	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	2.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	1.5	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	2.4	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.8	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	1.2	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	1.4	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	2.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	1.5	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	2.0	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.8	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	1.4	3.072	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 10:21	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.8	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	2.2	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ

Sample Information

Client Sample ID: North Subsurface

York Sample ID: 20D0326-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

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
78-93-3	2-Butanone	ND		ug/m³	0.91	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	2.5	3.072	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 10:21	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	4.8	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	1.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
67-64-1	**Acetone**	**200**		ug/m³	1.5	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.67	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
71-43-2	**Benzene**	**9.4**		ug/m³	0.98	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	1.6	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	2.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-25-2	Bromoform	ND		ug/m³	3.2	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
74-83-9	Bromomethane	ND		ug/m³	1.2	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-15-0	**Carbon disulfide**	**1.4**		ug/m³	0.96	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
56-23-5	**Carbon tetrachloride**	**0.58**		ug/m³	0.48	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	1.4	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.81	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
67-66-3	Chloroform	ND		ug/m³	1.5	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
74-87-3	**Chloromethane**	**1.0**		ug/m³	0.63	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.30	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	1.4	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
110-82-7	**Cyclohexane**	**150**		ug/m³	1.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	2.6	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-71-8	**Dichlorodifluoromethane**	**2.7**		ug/m³	1.5	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ

Sample Information

Client Sample ID: **North Subsurface** **York Sample ID:** **20D0326-01**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

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
141-78-6	* Ethyl acetate	ND		ug/m³	2.2	3.072	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 10:21	LLJ
100-41-4	**Ethyl Benzene**	**3.2**		ug/m³	1.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	3.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
67-63-0	**Isopropanol**	**11**		ug/m³	1.5	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
80-62-6	Methyl Methacrylate	ND		ug/m³	1.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	1.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-09-2	Methylene chloride	ND		ug/m³	2.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
142-82-5	**n-Heptane**	**37**		ug/m³	1.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
110-54-3	**n-Hexane**	**100**		ug/m³	1.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
95-47-6	o-Xylene	ND		ug/m³	1.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	2.7	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	1.5	3.072	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 10:21	LLJ
115-07-1	* Propylene	ND		ug/m³	0.53	3.072	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 10:21	LLJ
100-42-5	Styrene	ND		ug/m³	1.3	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	2.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.8	3.072	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 10:21	LLJ
108-88-3	**Toluene**	**380**		ug/m³	1.2	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	1.2	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	1.4	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	0.41	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.9**		ug/m³	1.7	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	1.1	3.072	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 10:21	LLJ

Sample Information

Client Sample ID: North Subsurface **York Sample ID:** 20D0326-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

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
593-60-2	Vinyl bromide	ND		ug/m³	1.3	3.072	EPA TO-15	04/17/2020 08:00	04/18/2020 10:21	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.39	3.072	EPA TO-15	04/17/2020 08:00	04/18/2020 10:21	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*70-130*

Helium

Log-in Notes:

Sample Notes:

Sample Prepared by Method: PREP for GASES by GC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-59-7	* Helium	ND		%	0.77	1.54	GC/TCD	04/14/2020 14:33	04/14/2020 16:25	KT
							Certifications:			

Sample Information

Client Sample ID: North Crawlspace **York Sample ID:** 20D0326-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.65	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.51	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.65	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.72	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.51	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.38	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.093	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **North Crawlspace** **York Sample ID:** **20D0326-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

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/m³	0.70	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.46	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.72	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.57	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.38	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.44	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.66	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.46	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
106-99-0	1,3-Butadiene	ND		ug/m³	0.63	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.57	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.44	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.57	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
123-91-1	1,4-Dioxane	ND		ug/m³	0.68	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
78-93-3	**2-Butanone**	**2.3**		ug/m³	0.28	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
591-78-6	* 2-Hexanone	ND		ug/m³	0.77	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	1.5	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	**4-Methyl-2-pentanone**	**1.3**		ug/m³	0.39	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**14**		ug/m³	0.45	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.20	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**0.51**		ug/m³	0.30	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	0.49	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	0.63	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: North Crawlspace **York Sample ID:** 20D0326-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

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/m³	0.97	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	0.37	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	0.29	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	**Carbon tetrachloride**	**0.47**		ug/m³	0.15	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	0.43	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	0.25	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-66-3	Chloroform	ND		ug/m³	0.46	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	**Chloromethane**	**0.95**		ug/m³	0.19	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.093	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.43	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**2.6**		ug/m³	0.32	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	0.80	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	**Dichlorodifluoromethane**	**1.7**		ug/m³	0.47	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	ND		ug/m³	0.68	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	0.41	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.0	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**36**		ug/m³	0.46	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	**Methyl Methacrylate**	**0.73**		ug/m³	0.39	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.34	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	ND		ug/m³	0.66	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**5.0**		ug/m³	0.39	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**4.0**		ug/m³	0.33	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **North Crawlspace** **York Sample ID:** **20D0326-02**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
95-47-6	o-Xylene	ND		ug/m³	0.41	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.82	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.46	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.16	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.40	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	Tetrachloroethylene	ND		ug/m³	0.64	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.56	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications:			
108-88-3	**Toluene**	**1.2**		ug/m³	0.36	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.37	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.43	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	ND		ug/m³	0.13	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.4**		ug/m³	0.53	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.33	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.41	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	0.943	EPA TO-15	04/17/2020 08:00	04/18/2020 11:19	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*102 %*	*70-130*

Sample Information

Client Sample ID: **Room 102** **York Sample ID:** **20D0326-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Sample Information

Client Sample ID: **Room 102** **York Sample ID:** **20D0326-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.53	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.42	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.53	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.83**		ug/m³	0.59	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.42	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.31	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.077	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.58	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	**1,2,4-Trimethylbenzene**	**1.6**		ug/m³	0.38	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.60	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.47	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.31	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.36	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.54	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	**1,3,5-Trimethylbenzene**	**0.57**		ug/m³	0.38	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.51	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.47	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.36	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.47	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.56	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	2-Butanone	ND		ug/m³	0.23	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.63	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:			

Sample Information

Client Sample ID: **Room 102** **York Sample ID:** **20D0326-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.2	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	**4-Methyl-2-pentanone**	**2.4**		ug/m³	0.32	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**62**		ug/m³	0.37	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.17	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**1.6**		ug/m³	0.25	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.40	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.52	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.80	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.30	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.24	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.73**		ug/m³	0.12	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.36	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.20	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.38	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.8**		ug/m³	0.16	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.077	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.35	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	**Cyclohexane**	**32**		ug/m³	0.27	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.66	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**2.3**		ug/m³	0.38	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	*** Ethyl acetate**	**4.8**		ug/m³	0.56	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:			
100-41-4	**Ethyl Benzene**	**2.7**		ug/m³	0.34	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **Room 102** **York Sample ID:** **20D0326-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes: TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.83	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**480**	TO-IPA, E	ug/m³	0.38	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	**Methyl Methacrylate**	**100**		ug/m³	0.32	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.28	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	ND		ug/m³	0.54	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**20**		ug/m³	0.32	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**52**		ug/m³	0.27	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	**o-Xylene**	**2.2**		ug/m³	0.34	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**8.1**		ug/m³	0.67	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	*** p-Ethyltoluene**	**1.6**		ug/m³	0.38	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.13	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:			
100-42-5	**Styrene**	**4.6**		ug/m³	0.33	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	**Tetrachloroethylene**	**3.5**		ug/m³	0.53	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.46	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications:			
108-88-3	**Toluene**	**19**		ug/m³	0.29	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.31	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.35	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	ND		ug/m³	0.10	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	**Trichlorofluoromethane (Freon 11)**	**2.7**		ug/m³	0.44	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.27	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.34	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.099	0.775	EPA TO-15	04/20/2020 09:00	04/21/2020 15:05	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Surrogate Recoveries	Result	Acceptance Range

Sample Information

Client Sample ID: **Room 102** **York Sample ID:** **20D0326-03**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:** TO-VAC

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*112 %*			*70-130*					

Sample Information

Client Sample ID: **South Subsurface** **York Sample ID:** **20D0326-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List **Log-in Notes:** **Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	11	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	8.9	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	11	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	13	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	8.9	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	6.6	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	1.6	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	12	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	8.0	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	13	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	9.8	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	6.6	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	7.5	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	11	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **South Subsurface** **York Sample ID:** **20D0326-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	8.0	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	11	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	9.8	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	7.5	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	9.8	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	12	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	**2-Butanone**	**25**		ug/m³	4.8	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	13	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	26	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	6.7	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**310**		ug/m³	7.8	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	3.5	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**6.8**		ug/m³	5.2	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	8.4	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	11	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	17	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	6.3	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	5.1	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	Carbon tetrachloride	ND		ug/m³	2.6	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	7.5	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	4.3	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	8.0	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **South Subsurface** **York Sample ID:** **20D0326-04**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

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**	**4.0**		ug/m³	3.4	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	1.6	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	7.4	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
110-82-7	**Cyclohexane**	**36**		ug/m³	5.6	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	14	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
75-71-8	**Dichlorodifluoromethane**	**10**		ug/m³	8.1	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	12	16.32	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 21:29	LLJ
100-41-4	**Ethyl Benzene**	**21**		ug/m³	7.1	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	17	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
67-63-0	**Isopropanol**	**1200**		ug/m³	8.0	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
80-62-6	**Methyl Methacrylate**	**370**		ug/m³	6.7	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	5.9	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
75-09-2	Methylene chloride	ND		ug/m³	11	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
142-82-5	**n-Heptane**	**6.7**		ug/m³	6.7	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
110-54-3	**n-Hexane**	**28**		ug/m³	5.8	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
95-47-6	**o-Xylene**	**8.5**		ug/m³	7.1	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
179601-23-1	**p- & m- Xylenes**	**30**		ug/m³	14	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
622-96-8	* p-Ethyltoluene	ND		ug/m³	8.0	16.32	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 21:29	LLJ
115-07-1	* Propylene	ND		ug/m³	2.8	16.32	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 21:29	LLJ
100-42-5	**Styrene**	**7.0**		ug/m³	7.0	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
127-18-4	Tetrachloroethylene	ND		ug/m³	11	16.32	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 21:29	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	9.6	16.32	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 21:29	LLJ

Sample Information

Client Sample ID: South Subsurface **York Sample ID:** 20D0326-04

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Soil Vapor	April 8, 2020 12:00 am	04/10/2020

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**	**1200**		ug/m³	6.2	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	6.5	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	7.4	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
79-01-6	Trichloroethylene	ND		ug/m³	2.2	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	9.2	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	5.7	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	7.1	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	2.1	16.32	EPA TO-15	04/17/2020 08:00	04/18/2020 21:29	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*116 %*	*70-130*

Helium

Log-in Notes:

Sample Notes:

Sample Prepared by Method: PREP for GASES by GC

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
7440-59-7	* Helium	ND		%	0.83	1.66	GC/TCD	04/14/2020 14:33	04/14/2020 16:34	KT
							Certifications:			

Sample Information

Client Sample ID: South Crawlspace **York Sample ID:** 20D0326-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.54	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:			

Sample Information

Client Sample ID: **South Crawlspace** **York Sample ID:** **20D0326-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

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
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.43	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.54	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.61	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.43	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.32	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.078	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.59	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.39	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.61	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.47	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.32	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.37	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.55	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.39	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
106-99-0	1,3-Butadiene	ND		ug/m³	0.52	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.47	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.37	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.47	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
123-91-1	1,4-Dioxane	ND		ug/m³	0.57	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
78-93-3	2-Butanone	ND		ug/m³	0.23	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
591-78-6	* 2-Hexanone	ND		ug/m³	0.65	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:			

Sample Information

Client Sample ID: **South Crawlspace** **York Sample ID:** **20D0326-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.2	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.32	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-64-1	**Acetone**	**12**		ug/m³	0.38	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
107-13-1	Acrylonitrile	ND		ug/m³	0.17	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
71-43-2	**Benzene**	**0.68**		ug/m³	0.25	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.41	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.53	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.82	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.31	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.25	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.50**		ug/m³	0.12	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.36	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.21	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.39	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.1**		ug/m³	0.16	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.078	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.36	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	**Cyclohexane**	**12**		ug/m³	0.27	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.67	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**1.9**		ug/m³	0.39	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	0.57	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:			
100-41-4	Ethyl Benzene	ND		ug/m³	0.34	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: South Crawlspace

York Sample ID: 20D0326-05

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.84	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**23**		ug/m³	0.39	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	**Methyl Methacrylate**	**2.5**		ug/m³	0.32	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.28	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-09-2	Methylene chloride	ND		ug/m³	0.55	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
142-82-5	**n-Heptane**	**4.0**		ug/m³	0.32	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-54-3	**n-Hexane**	**14**		ug/m³	0.28	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	0.34	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
179601-23-1	**p- & m- Xylenes**	**0.69**		ug/m³	0.69	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.39	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	0.14	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:			
100-42-5	Styrene	ND		ug/m³	0.34	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
127-18-4	**Tetrachloroethylene**	**3.0**		ug/m³	0.54	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.47	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:			
108-88-3	**Toluene**	**1.3**		ug/m³	0.30	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.31	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.36	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
79-01-6	Trichloroethylene	ND		ug/m³	0.11	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-69-4	**Trichlorofluoromethane (Freon 11)**	**2.0**		ug/m³	0.44	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.28	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.35	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	0.79	EPA TO-15	04/20/2020 09:00	04/21/2020 14:06	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **South Crawlspace** **York Sample ID:** **20D0326-05**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

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
	Surrogate Recoveries	**Result**		**Acceptance Range**						
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*103 %*		*70-130*						

Sample Information

Client Sample ID: **Room 112** **York Sample ID:** **20D0326-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	5.7	8.315	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 14:49	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	4.5	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	5.7	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	6.4	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	4.5	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	3.4	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.82	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	6.2	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	4.1	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	6.4	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	5.0	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	3.4	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	3.8	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ

Sample Information

Client Sample ID: **Room 112** **York Sample ID:** **20D0326-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	5.8	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	4.1	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
106-99-0	1,3-Butadiene	ND		ug/m³	5.5	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	5.0	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	3.8	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	5.0	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
123-91-1	1,4-Dioxane	ND		ug/m³	6.0	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
78-93-3	2-Butanone	ND		ug/m³	2.5	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
591-78-6	* 2-Hexanone	ND		ug/m³	6.8	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	13	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	3.4	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**11**		ug/m³	4.0	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	1.8	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
71-43-2	**Benzene**	**69**		ug/m³	2.7	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
100-44-7	Benzyl chloride	ND		ug/m³	4.3	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-27-4	Bromodichloromethane	ND		ug/m³	5.6	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-25-2	Bromoform	ND		ug/m³	8.6	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-83-9	Bromomethane	ND		ug/m³	3.2	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-15-0	Carbon disulfide	ND		ug/m³	2.6	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
56-23-5	Carbon tetrachloride	ND		ug/m³	1.3	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-90-7	Chlorobenzene	ND		ug/m³	3.8	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-00-3	Chloroethane	ND		ug/m³	2.2	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **Room 112** **York Sample ID:** **20D0326-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-66-3	Chloroform	ND		ug/m³	4.1	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
74-87-3	Chloromethane	ND		ug/m³	1.7	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.82	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	3.8	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-82-7	**Cyclohexane**	**940**		ug/m³	2.9	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
124-48-1	Dibromochloromethane	ND		ug/m³	7.1	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-71-8	Dichlorodifluoromethane	ND		ug/m³	4.1	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
141-78-6	* Ethyl acetate	ND		ug/m³	6.0	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications:			
100-41-4	**Ethyl Benzene**	**15**		ug/m³	3.6	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
87-68-3	Hexachlorobutadiene	ND		ug/m³	8.9	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-63-0	**Isopropanol**	**18**		ug/m³	4.1	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
80-62-6	Methyl Methacrylate	ND		ug/m³	3.4	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	3.0	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-09-2	Methylene chloride	ND		ug/m³	5.8	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-82-5	**n-Heptane**	**120**		ug/m³	3.4	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
110-54-3	**n-Hexane**	**340**		ug/m³	2.9	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-47-6	o-Xylene	ND		ug/m³	3.6	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
179601-23-1	**p- & m- Xylenes**	**7.9**		ug/m³	7.2	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
622-96-8	* p-Ethyltoluene	ND		ug/m³	4.1	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications:			
115-07-1	* Propylene	ND		ug/m³	1.4	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications:			
100-42-5	Styrene	ND		ug/m³	3.5	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			
127-18-4	Tetrachloroethylene	ND		ug/m³	5.6	8.315	EPA TO-15	04/17/2020 08:00	04/18/2020 14:49	LLJ
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **Room 112** **York Sample ID:** **20D0326-06**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Indoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

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
109-99-9	* Tetrahydrofuran	ND		ug/m³	4.9	8.315	EPA TO-15 Certifications:	04/17/2020 08:00	04/18/2020 14:49	LLJ
108-88-3	**Toluene**	**4.4**		ug/m³	3.1	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	3.3	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	3.8	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
79-01-6	Trichloroethylene	ND		ug/m³	1.1	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	4.7	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	2.9	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	3.6	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	1.1	8.315	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/17/2020 08:00	04/18/2020 14:49	LLJ

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*106 %*	*70-130*

Sample Information

Client Sample ID: **Ambient** **York Sample ID:** **20D0326-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Outdoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.60	0.871	EPA TO-15 Certifications:	04/20/2020 09:00	04/21/2020 13:07	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.48	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.60	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
76-13-1	**1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)**	**0.93**		ug/m³	0.67	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS

Sample Information

Client Sample ID: **Ambient** **York Sample ID:** **20D0326-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Outdoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

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/m³	0.48	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.35	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
75-35-4	**1,1-Dichloroethylene**	**0.24**		ug/m³	0.086	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.65	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-63-6	**1,2,4-Trimethylbenzene**	**0.60**		ug/m³	0.43	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.67	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.52	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.35	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.40	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.61	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.43	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
106-99-0	1,3-Butadiene	ND		ug/m³	0.58	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.52	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.40	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.52	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
123-91-1	1,4-Dioxane	ND		ug/m³	0.63	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
78-93-3	2-Butanone	ND		ug/m³	0.26	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
591-78-6	* 2-Hexanone	ND		ug/m³	0.71	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.36	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
67-64-1	**Acetone**	**6.0**		ug/m³	0.41	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			
107-13-1	Acrylonitrile	ND		ug/m³	0.19	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications: NELAC-NY12058,NJDEP-Queens			

Sample Information

Client Sample ID: **Ambient** **York Sample ID:** **20D0326-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Outdoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	**Benzene**	**3.4**		ug/m³	0.28	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
100-44-7	Benzyl chloride	ND		ug/m³	0.45	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-27-4	Bromodichloromethane	ND		ug/m³	0.58	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-25-2	Bromoform	ND		ug/m³	0.90	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-83-9	Bromomethane	ND		ug/m³	0.34	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-15-0	Carbon disulfide	ND		ug/m³	0.27	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
56-23-5	**Carbon tetrachloride**	**0.82**		ug/m³	0.14	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
108-90-7	Chlorobenzene	ND		ug/m³	0.40	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-00-3	Chloroethane	ND		ug/m³	0.23	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-66-3	Chloroform	ND		ug/m³	0.43	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
74-87-3	**Chloromethane**	**1.4**		ug/m³	0.18	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.086	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.40	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
110-82-7	**Cyclohexane**	**38**		ug/m³	0.30	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
124-48-1	Dibromochloromethane	ND		ug/m³	0.74	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
75-71-8	**Dichlorodifluoromethane**	**1.8**		ug/m³	0.43	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
141-78-6	* Ethyl acetate	ND		ug/m³	0.63	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:			
100-41-4	**Ethyl Benzene**	**1.2**		ug/m³	0.38	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.93	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
67-63-0	**Isopropanol**	**4.0**		ug/m³	0.43	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
80-62-6	Methyl Methacrylate	ND		ug/m³	0.36	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.31	0.871	EPA TO-15	04/20/2020 09:00	04/21/2020 13:07	AS
							Certifications:	NELAC-NY12058,NJDEP-Queens		

Sample Information

Client Sample ID: **Ambient** **York Sample ID:** **20D0326-07**

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
20D0326	20-46054 Kramer ES	Outdoor Ambient Air	April 8, 2020 12:00 am	04/10/2020

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	ND		ug/m³	0.61	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
142-82-5	**n-Heptane**	**6.8**		ug/m³	0.36	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
110-54-3	**n-Hexane**	**20**		ug/m³	0.31	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
95-47-6	**o-Xylene**	**0.49**		ug/m³	0.38	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
179601-23-1	**p- & m- Xylenes**	**1.4**		ug/m³	0.76	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
622-96-8	*** p-Ethyltoluene**	**0.60**		ug/m³	0.43	0.871	EPA TO-15 Certifications:	04/20/2020 09:00	04/21/2020 13:07	AS
115-07-1	* Propylene	ND		ug/m³	0.15	0.871	EPA TO-15 Certifications:	04/20/2020 09:00	04/21/2020 13:07	AS
100-42-5	Styrene	ND		ug/m³	0.37	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
127-18-4	Tetrachloroethylene	ND		ug/m³	0.59	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.51	0.871	EPA TO-15 Certifications:	04/20/2020 09:00	04/21/2020 13:07	AS
108-88-3	**Toluene**	**1.1**		ug/m³	0.33	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.35	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.40	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
79-01-6	Trichloroethylene	ND		ug/m³	0.12	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
75-69-4	**Trichlorofluoromethane (Freon 11)**	**1.8**		ug/m³	0.49	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
108-05-4	**Vinyl acetate**	**6.1**		ug/m³	0.31	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
593-60-2	Vinyl bromide	ND		ug/m³	0.38	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	0.871	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	04/20/2020 09:00	04/21/2020 13:07	AS

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: SURR: p-Bromofluorobenzene*	*107 %*	*70-130*

Sample and Data Qualifiers Relating to This Work Order

TO-VAC	The final vacuum in the canister was less than -2 inches Hg vacuum. The time integrated sampling may be affected and not reflect proper sampling over the time period. The data user should take note.
TO-IPA	The value for isopropanol is estimated. Dilutions are not conducted for this species as not to preclude actionable analytes by dilution.
TO-CCV	The value reported is ESTIMATED for this compound due to its behavior during continuing calibration verification (>30% Difference from initial calibration).
QR-01	Analyses are not controlled on RPD values from sample concentrations less than 10 times the reporting limit. QC batch accepted based on LCS and/or LCSD QC results.
E	The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.

Definitions and Other Explanations

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

Field Chain-of-Custody Record - AIR

York Analytical Laboratories, Inc.
120 Research Drive, Stratford, CT 06615 | 132-02 89th Ave Queens, NY 11418
clientservices@yorklab.com
www.yorklab.com

YORK ANALYTICAL LABORATORIES INC

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

YORK Project No. 20D0326

YOUR Information	Report To:	Invoice To:
Company: JCBRODERICK & ASSOC	Company: JCB	Company: JCB
Address: 1775 EXPRESSWAY DR-N HAUPPAUGE, NY 11788	Address:	Address:
Phone: 631-584-5492	Phone.:	Phone.:
Contact: SMULLER	Contact:	Contact:
E-mail: SMULLER@JCBRODERICK.COM	E-mail:	E-mail:

YOUR Project Number: 20-46054

YOUR Project Name: KRAMER ES

YOUR PO#:

Turn-Around Time

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

Please print clearly and legibly. All information must be complete. Samples will not be logged in and the turn-around-time clock will not begin until any questions by YORK are resolved.

STEVEN MULLER

Samples Collected by: (print your name above and sign below)

Air Matrix Codes

AI - Indoor Ambient Air
AO - Outdoor Amb. Air
AE - Vapor Extraction Well/ Process Gas/Effluent
AS - Soil Vapor/Sub-Slab

Samples From

New York	X
New Jersey	
Connecticut	
Pennsylvania	
Other	

Report / EDD Type (circle selections)

Summary Report	CT RCP	Standard Excel EDD
QA Report	CT RCP DQA/DUE	EQuIS (Standard)
NY ASP A Package	NJDEP Reduced Deliv.	NYSDEC EQuIS
NY ASP B Package	NJDKQP	NJDEP SRP HazSite
Other:		

YORK Reg. Comp.

Compared to the following Regulation(s): (please fill in)

Certified Canisters: Batch ___ Individual ___

Please enter the following REQUIRED Field Data

Reporting Units: ug/m³ ✓ ppbv ___ ppmv ___

Sample Identification	Date/Time Sampled	Air Matrix	Canister Vacuum Before Sampling (in Hg)	Canister Vacuum After Sampling (in Hg)	Canister ID	Flow Cont. ID	Analysis Requested
NORTH SUBSURFACE	4/8/20	AS	30	2.5	28849	5625	TO-15 + He
NORTH CRAWLSPACE	4/8/20	AI	30	7	28837	6874	TO-15
ROOM 102	4/8/20	AI	>30	1	24112	5414	TO-15
SOUTH SUBSURFACE	4/8/20	AS	30	8	17347	Y-46	TO-15 + He
SOUTH CRAWLSPACE	4/8/20	AI	30	2	23800	12182	TO-15
ROOM 112	4/8/20	AI	30	4.5	23998	7004	TO-15
AMBIENT	4/8/20	AO	28	4	18309	12185	TO-15

Comments:

Detection Limits Required

≤ 1 ug/m³ ___ NYSDEC V1 Limits ✓
Routine Survey ___ Other ___

Sampling Media

6 Liter Canister ✓
Tedlar Bag

Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time
JCB	4/10/20 1105		4/10/20 1105AM		1641
Samples Received by / Company	Date/Time	Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time
YORK	4-10-20/1641	YORK	4-10-20/1822		4/10/20
Samples Relinquished by / Company	Date/Time	Samples Received by / Company	Date/Time	Samples Received in LAB by	Date/Time
		Lab Secure		4/13/20 @	0900