



# HydroTech Environmental

## ENGINEERING AND GEOLOGY, DPC

NYC Office  
231 West 29<sup>th</sup> Street, Suite 1104  
New York, New York 10001

Long Island Office  
77 Arkay Drive, Suite K  
Hauppauge, New York 11788

Tel (631) 462-5866  
Email: Info@ hydrotechenvironmental.com  
WWW.HYDROTECHENVIRONMENTAL.COM

---

September 27, 2022

New York State Department of Environmental Conservation  
Division of Environmental Remediation  
47-40 21<sup>st</sup> Street  
Long Island City, NY 11101  
Attn.: Mr. Wendi Zheng, Project Manager

**Re: Annual Periodic Review Report (Revised) - 2021 through 2022  
152 Graham Avenue, Brooklyn, NY  
NYSBCP Site #C224208**

Dear Ms. Zheng:

This report is intended to serve as Annual Periodic Review Report (PRR) of the active Sub-Slab Depressurization (SSD) system installed at the above-referenced New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site. This Annual PRR was prepared pursuant to the Operation and Maintenance (O&M) of the SSD system, as required in the NYSDEC-approved Interim Remedial Measure Construction Completion Report (IRM CCR), dated September 10, 2021.

### Monitoring of the SSD System

In accordance with the NYSDEC-approved IRM CCR, the active SSD system has been monitored on a quarterly basis since it was last inspected at start-up on April 2, 2021. For the period covered in this report, the monitoring of SSD system was performed on July 22, 2021, October 20, 2021, February 11, 2022, and June 2, 2022. The February 2022 monitoring represented a delayed quarterly event from January 2022 as a result of delayed mobilization to perform the requested indoor air sampling during the 2021-2022 heating season. **Figure 1** and **Figure 2** provide the as-build plans of the SSD system components including riser pipes from two suction pits in the basement (SSDS-1 and SSDS-2) and a suction pit in slab on-grade (SSDS-3), the location of suction fan and vacuum gauges and the location of four sub-slab vacuum monitoring points (VP-1 through VP-4).

During each monitoring event, a HydroTech Qualified Environmental Professional inspected the system for proper functioning in accordance with the SSD system O&M Plan in the September 2021 IRM CCR. The active SSD system vacuum monitoring components include the vacuum alarm, VaporTrac telemetry system, the Dwyer Magnehelic gauge and two individual U-Tube vacuum gauges mounted on the riser pipe from SSDS-1/SSDS-2 and SSDS-3, which are all mounted on the interior eastern wall of the site, along with the Radonaway GP 501 series fan mounted on the exterior eastern wall. Visual observation of the active SSD system components indicated that all are functioning properly. The vacuum at the sub-slab monitoring points was

---

measured utilizing a TSI Almor EBT730 Manometer. In addition, organic vapors were measured at the effluent of the SSD system utilizing a Photoionization detector (PID).

The results of the SSD system quarterly monitoring events for this reporting period are summarized in **Table 1**. As **Table 1** indicates, no organic vapors were detected with the PID at the SSD effluent. The vacuum readings at the Dwyer Magnehelic gauge at the suction fan ranged between -2.4 and -1.5 inches H<sub>2</sub>O. The vacuum at the individual U-Tube gauges at the riser pipes from SSDS-1/SSDS-2 and SSDS-3 recorded a minimum of -2 inches H<sub>2</sub>O. The negative pressure was measured at the four sub-slab vacuum monitoring points VP-1 through VP-4 at minimum of -0.01 inches H<sub>2</sub>O and a maximum of -0.04 inches H<sub>2</sub>O.

Overall assessment of this data indicates an adequate radius of influence of the SSD system and continues to be adequate for mitigating potential soil vapor intrusion beneath the building. No deficiencies such as damaged SSD riser pipes or joints, alterations or cracks in building slab or, construction changes to building structure that would alter the system performance were noted during the inspection of the SSD system. **Attachment 1** provides the Quarterly SSD System Inspection checklists.

#### Indoor Air and Effluent Samples Analytical Results

As part of SSD system monitoring protocol presented in NYSDEC-approved IRM CCR, indoor air assessment was performed at the Site during the heating season 2021-2022. The purpose of this sampling was to monitor the concentrations of tetrachloroethylene (PCE) and trichloroethylene (TCE), which were detected in the previous indoor air sampling performed post-SSD system start-up in 2021. Consistent with the protocol of previous indoor air assessments performed at the Site, four indoor air samples designated IA-7 through IA-10 were collected inside each floor of the building including the basement along with one (1) outdoor air sample designated OA-2. In addition, and one (1) exhaust effluent sample designated EE-1 was also collected. **Figure 3** provides the indoor air sampling map.

The ambient air sampling was conducted in accordance with the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006). The indoor and outdoor air samples were obtained from typical breathing zone height during normal operation hours at the dry cleaners. The effluent air sample was collected by connecting the canister to the effluent from the suction fan. All samples were collected utilizing 6-liter Summa Canisters fitted with a 6-hour laboratory flow regulator and the sampling occurred for the duration of six (6) hours. Immediately after opening the Summa Canister, the initial vacuum (inches of mercury) and start time were recorded. After 6 hours of sampling, the Summa Canister was closed and the final vacuum and stop time were noted. The Summa Canisters were labeled and sent to a laboratory certified to perform air analysis in New York State. Prior to the indoor air sampling, an indoor survey was conducted and the NYSDOH Indoor Air Quality Questionnaire and Building Inventory was completed. A supporting chain of custody was prepared following the completion of all sampling activities. The laboratory did not report any irregularities with respect to their internal Quality Assurance/Quality Control.

**Table 2** provides the organic compounds detected in the indoor and outdoor air samples and the effluent sample.

As **Table 2** indicates, chlorinated VOCs including PCE and TCE and their derivative compounds continue to be detected post-SSD system start-up in the indoor air collected in the partial basement, inside the ground floor drycleaners and in the upper residential apartments on the upper second and third floors. The maximum PCE and TCE concentrations detected inside the dry cleaner have slightly increased from their respective values of 16 µg/m<sup>3</sup> and 1.7 µg/m<sup>3</sup> during April 2021 to 21 µg/m<sup>3</sup> and 10 µg/m<sup>3</sup> during February 2022. Similarly, the maximum PCE and TCE concentrations detected post-SSDS start-up in the upper floors were 3.1 µg/m<sup>3</sup> and 4.6 µg/m<sup>3</sup> during April 2021 and slightly increased to 4.4 µg/m<sup>3</sup> and 6.6 µg/m<sup>3</sup> during February 2022. The slight increase in PCE and TCE concentrations during February 2022 is likely to be associated with the sampling being performed during the on-set of the heating season. Indoor air concentrations exceeded the Matrix A for TCE and the Matrix B for PCE and methylene chloride in the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH Guidance). TCE concentrations detected in all indoor air samples exceeded its AGV of 2 µg/m<sup>3</sup>.

PCE in soil vapors released through the SSD system exhaust was detected in the effluent sample EE-1 at a concentration of 130 µg/m<sup>3</sup>, which represents an increase from its respective level of 30 µg/m<sup>3</sup> reported during April 2021.

The February 2022 indoor and outdoor air data was submitted electronically to the NYSDEC through the Environmental Information Management System using the NYSDEC standardized Electronic Data Deliverable format. In addition, a Data Usability Summary Report (DUSR) was prepared for the February 2022 indoor and outdoor air analytical results by an independent data reviewer. The results of the DUSR indicate that this data is acceptable, with minor issues in data summaries. All data was considered usable.

**Figure 4** provides post-SSD system start-up chlorinated VOCs detected in indoor air samples and the SSD system effluent sample over time. **Attachment 2** provides the laboratory reports. **Attachment 3** provides the DUSR report. **Attachment 4** provides NYSDOH questionnaire.

### Conclusions and Recommendations

The SSD system continues to operate properly by providing a satisfactory negative pressure across the building slab at the Site. Although, post-SSD system startup concentrations of TCE and PCE in ambient air samples inside the building have decreased by up to 95% from pre-SSD levels, these concentrations continue to marginally exceed NYSDOH Guidance values. As such, the SSD system function should be re-evaluated and upgraded to enhance its mitigation performance and any openings in the envelope of the partial basement (slab and foundation walls) should be properly sealed to reduce the potential for continued vapor intrusion inside the building. These tasks will be implemented as part of the Remedial Action Work Plan



(RAWP) that is being prepared to target overall on-site and off-site site remediation. An indoor air assessment shall be performed at the Site following this remedial action to verify indoor concentrations of PCE and TCE are below NYSDOH Guidance values. NYSDOH recommends concentrations of TCE concentrations in indoor air shall not exceed 1 µg/m<sup>3</sup>.

Should you have any questions, please feel free to contact our office at your convenience.

Sincerely,

**HydroTech Environmental Engineering and Geology, DPC**

Tarek Z. Khouri, P.E.  
Principal Engineer

TZK/am



cc: Jane H. O'Connell, PG (NYSDEC) (by email), w/ Enc.  
Cris-Sandra Maycock (NYSDOH) (by email) , w/ Enc.  
Reina Diaz, Top Hat Cleaners, w/ Enc.  
Paul Matli, PhD, PG (HydroTech), w/ Enc.  
HydroTech file 200052, w/ Enc.

## LIST OF ATTACHMENTS TO THIS ANNUAL PRR

### Tables

1. SSD System Monitoring After Start-Up
2. Post-SSD System Start-Up Indoor Air and Effluent Samples Analytical Results for VOCs Over Time

### Figures

1. As-Build Plan of SSD System - Plan View
2. As-Build Plan of SSD System-Section View
3. Post SSD System Start-Up Sampling Plan
4. Map of COVCs In Indoor Air and Effluent Samples

### Attachments

1. Quarterly SSD System Inspection checklists
2. Laboratory Reports
3. DUSR Report
4. NYSDOH Questionnaire

## **TABLES**

**Table 1**  
**SSD System Monitoring After Start-Up**  
**152 Graham Avenue, Brooklyn, NY**

<b>Date/Time</b>	<b>SSD System Effluent</b>		<b>Vacuum at SSDS Risers</b>		<b>Vacuum Monitoring Points</b>			
	<b>PID</b>	<b>Vacuum</b>	<b>SSDS-1 and SSDS-2</b>	<b>SSDS-3</b>	<b>VP-1</b>	<b>VP-2</b>	<b>VP-3</b>	<b>VP-4</b>
2/19/2021 9:30AM	0.1	-2	-1.8	-1.9	-0.01	-0.01	-0.01	-0.01
4/2/2021 9:30AM	0.1	-2	-1.8	-1.9	-0.01	-0.01	-0.01	-0.01
7/22/2021 9:30AM	1.5	-1.5	-2	-2	-0.01	-0.02	-0.02	-0.01
10/20/2021 8:45 AM	0.6	-1.5	-2	-2	-0.01	-0.03	-0.04	-0.01
2/11/2022 10:30AM	0.4	-1.4	-2	-2	-0.01	-0.03	-0.02	-0.01
6/2/2022 11:30AM	0.1	-2.4	-2.8	-2	-0.01	-0.04	-0.02	-0.01

PID---ppm

Vacuum---Inch Water

Flow...CFM

NM...Not measured

**Table 2**  
**Post-SSD System Start-Up Indoor Air and Effluent Samples Analytical Results for VOCs Over Time**  
**152 Graham Avenue, Brooklyn, NY**

Sample ID	IA-7				IA-8				IA-9				IA-10				OA-2				EE-1					
	Sampling Date		4/2/2021	2/22/2022	Client Matrix		Indoor Air	Indoor Air	Indoor Air		Indoor Air	Indoor Air	Indoor Air		Outdoor Air	SSDS Exhaust Air	4/2/2021		2/22/2022		4/2/2021		2/22/2022			
Compound	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	Result	
Units	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q	ug/m³	Q
1,1,1,2-Tetrachloroethane	1.30	U	0.63	U	0.88	U	0.73	U	0.78	U	0.76	U	0.73	U	0.84	U	0.70	U	1.40	U	0.73	U	14	U		
1,1,1-Trichloroethane	1	U	0.50	U	0.70	U	0.58	U	0.62	U	0.60	U	0.58	U	0.67	U	0.56	U	1.10	U	0.58	U	12	U		
1,1,2,2-Tetrachloroethane	1.30	U	0.63	U	0.88	U	0.73	U	0.78	U	0.76	U	0.73	U	0.84	U	0.70	U	1.40	U	0.73	U	14	U		
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.50	U	0.70	U	0.98	U	0.82	U	0.87	U	0.85	U	0.81	U	0.94	U	0.78	U	1.50	U	0.82	U	16	U		
1,1,2-Trichloroethane	1	U	0.50	U	0.70	U	0.58	U	0.62	U	0.60	U	0.58	U	0.67	U	0.56	U	1.10	U	0.58	U	12	U		
1,1-Dichloroethane	0.77	U	0.37	U	0.52	U	0.43	U	0.46	U	0.45	U	0.43	U	0.50	U	0.41	U	0.80	U	0.43	U	8.50	U		
1,1-Dichloroethylene	0.19	U	0.09	U	0.13	U	0.11	U	0.11	U	0.10	U	0.12	U	0.10	U	0.20	U	0.11	U	2.10	U				
1,2,4-Trichlorobenzene	1.40	U	0.68	U	0.95	U	0.79	U	0.85	U	0.82	U	0.79	U	0.91	U	0.76	U	1.50	U	0.79	U	16	U		
1,2,4-Trimethylbenzene	<b>0.93</b>	D	<b>1.20</b>	D	0.63	U	<b>0.63</b>	D	<b>0.56</b>	J	<b>0.54</b>	J	<b>0.52</b>	J	<b>0.90</b>	D	<b>0.65</b>	D	<b>0.97</b>	J	<b>25</b>	D	10	U		
1,2-Dibromoethane	1.50	U	0.70	U	0.98	U	0.82	U	0.88	U	0.85	U	0.81	U	0.94	U	0.78	U	1.50	U	0.82	U	16	U		
1,2-Dichlorobenzene	1.10	U	0.55	U	0.77	U	0.64	U	0.69	U	0.67	U	0.64	U	0.74	U	0.61	U	1.20	U	0.64	U	13	U		
1,2-Dichloroethane	0.77	U	0.37	U	0.52	U	0.43	U	0.46	U	0.45	U	0.43	U	0.50	U	0.41	U	0.80	U	0.43	U	8.50	U		
1,2-Dichloropropane	0.88	U	0.42	U	0.59	U	0.49	U	0.53	U	0.51	U	0.49	U	0.57	U	0.47	U	0.92	U	0.49	U	9.80	U		
1,2-Dichlorotetrafluoroethane	1.30	U	0.64	U	0.89	U	0.75	U	0.80	U	0.77	U	0.74	U	0.86	U	0.71	U	1.40	U	0.75	U	15	U		
1,3,5-Trimethylbenzene	0.93	U	<b>0.45</b>	J	0.63	U	0.53	U	0.56	U	<b>0.60</b>	D	0.52	U	0.60	U	0.50	U	0.97	U	<b>6.80</b>	D	10	U		
1,3-Butadiene	<b>1.60</b>	D	<b>5.60</b>	D	0.85	U	<b>0.71</b>	J	<b>0.76</b>	J	<b>0.83</b>	D	<b>0.70</b>	J	<b>0.81</b>	J	0.68	U	1.30	U	<b>3.50</b>	D	14	U		
1,3-Dichlorobenzene	1.10	U	0.55	U	0.77	U	0.64	U	0.69	U	0.67	U	0.64	U	0.74	U	0.61	U	1.20	U	0.64	U	13	U		
1,3-Dichloropropane	0.88	U	0.42	U	0.59	U	0.49	U	0.53	U	0.51	U	0.49	U	0.57	U	0.47	U	0.92	U	0.49	U	9.80	U		
1,4-Dichlorobenzene	1.10	U	<b>0.55</b>	J	0.77	U	0.64	U	0.69	U	0.67	U	0.64	U	0.74	U	0.61	U	1.20	U	0.64	U	13	U		
1,4-Dioxane	1.40	U	0.66	U	0.92	U	0.77	U	0.82	U	0.80	U	0.76	U	0.88	U	0.73	U	1.40	U	0.77	U	15	U		
2-Butanone	<b>1.10</b>	D	<b>8.60</b>	D	<b>1.20</b>	D	<b>1.60</b>	D	<b>1.10</b>	D	<b>3.40</b>	D	<b>2</b>	D	<b>1.40</b>	D	<b>1.90</b>	D	<b>1.30</b>	D	<b>2.70</b>	D	<b>8.70</b>	D		
2-Hexanone	1.60	U	0.75	U	1	U	0.88	U	0.93	U	0.91	J	0.87	U	1	U	<b>0.83</b>	J	1.60	U	0.88	U	17	U		
3-Chloropropene	3	U	1.40	U	2	U	1.70	U	1.80	U	1.70	U	1.70	U	1.90	U	1.60	U	3.10	U	1.70	U	33	U		
4-Methyl-2-pentanone	0.78	U	0.37	U	0.52	U	<b>0.440</b>	J	<b>0.70</b>	D	0.45	U	<b>2.60</b>	D	0.50	U	0.42	U	0.81	U	0.44	U	8.60	U		
Acetone	<b>10</b>	D	<b>23.00</b>	D	<b>12</b>	D	<b>14.00</b>	D	<b>9.30</b>	D	<b>100</b>	D	<b>14</b>	D	<b>16</b>	D	<b>11</b>	D	<b>10</b>	D	<b>82</b>	D	<b>1,300</b>	D		
Acrylonitrile	0.41	U	<b>0.20</b>	D	0.28	U	0.23	U	0.25	U	0.24	U	0.23	U	0.27	U	0.22	U	0.43	U	0.23	U	4.60	U		
Benzene	<b>4.10</b>	D	<b>22.00</b>	D	0.86	U	<b>1.70</b>	D	<b>1.10</b>	D	<b>4.30</b>	D	<b>1</b>	D	<b>1.40</b>	D	<b>0.46</b>	D	<b>1.50</b>	D	<b>11</b>	D	<b>14</b>	D		
Benzyl chloride	0.98	U	0.47	U	0.66	U	0.55	U	0.59	U	0.57	U	0.55	U	0.63	U	0.53	U	1	U	0.55	U	11	U		
Bromodichloromethane	1.30	U	<b>0.61</b>	J	0.85	U	0.72	U	0.76	U	0.74	U	0.71	U	0.82	U	0.68	U	1.30	U	0.72	U	14	U		
Bromoform	2	U	0.94	U	1.30	U	1.10	U	1.20	U	1.10	U	1.10	U	1.30	U	1.10	U	2	U	1.10	U	22	U		
Bromomethane	0.74	U	0.35	U	0.50	U	0.42	U	0.44	U	0.43	U														

## **FIGURES**

© HYDROTECH ENVIRONMENTAL  
ENGINEERING AND GEOLOGY, DPC  
ALL RIGHTS RESERVED. THE  
PRESENTED DRAWINGS, DESIGNS, AND  
IDEAS EMBODIED THEREIN ARE THE  
PROPERTY OF HYDROTECH  
ENVIRONMENTAL ENGINEERING AND  
GEOLOGY, DPC AND SHALL NOT BE  
COPIED, REPRODUCED, DISCLOSED TO  
OTHERS, OR USED IN CONNECTION  
WITH ANY WORK OTHER THAN THE  
SPECIFIED PROJECT FOR WHICH THEY  
HAVE BEEN PREPARED, IN WHOLE OR  
IN PART, WITHOUT THE PRIOR WRITTEN  
AUTHORIZATION OF HYDROTECH  
ENVIRONMENTAL ENGINEERING AND  
GEOLOGY, DPC.

DATE	DESCRIPTION	CHK

SEAL & SIGNATURE



HYDROTECH ENVIRONMENTAL  
ENGINEERING AND GEOLOGY,  
DPC

77 ARKAY DRIVE, SUITE K  
HAUPPAUGE, NY 11788

TEL: (631) 462-5866

FAX: (631) 462-5877

BASE DRAWING PREPARED BY

PROJECT NAME AND ADDRESS  
152 GRAHAM AVENUE  
BROOKLYN, NY 11206

PROJECT FIGURE  
FIGURE 1: SITE PLAN

PROJECT NO. DATE  
200040 6/30/2022

DRAWN BY REVIEWED BY  
V.D. P.M.

SCALE (11X17)  
NOT TO SCALE APPROVED BY  
P.M.

147 GRAHAM AVENUE  
ADJACENT 5-STORY RESIDENTIAL  
BUILDING

143 GRAHAM AVENUE  
ADJACENT PARKING

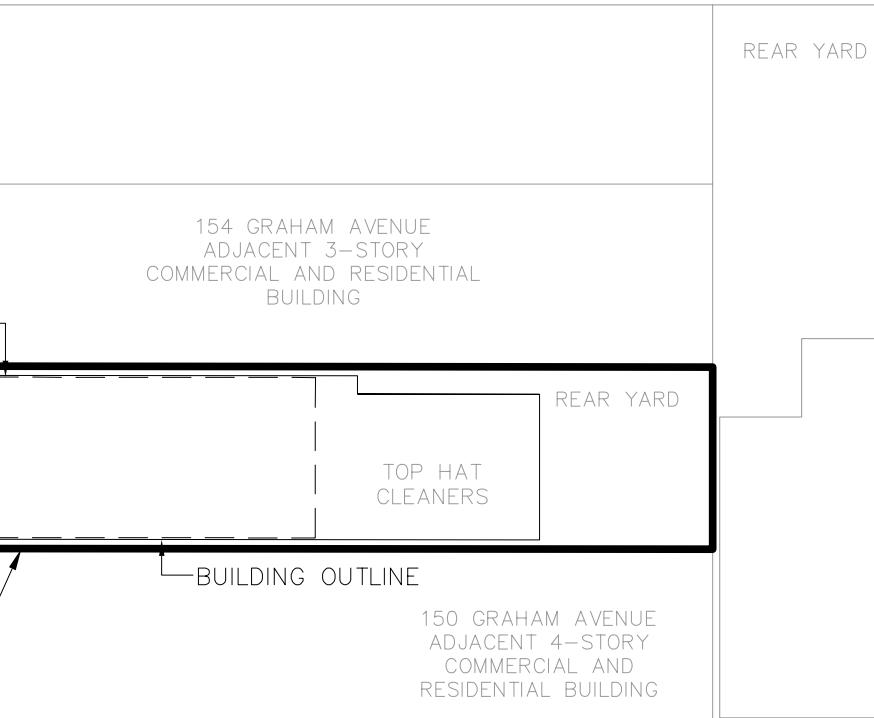
SIDEWALK

GRAHAM AVENUE

BASEMENT OUTLINE

SUBJECT PROPERTY  
BOUNDARY

JOHNSON AVENUE





147 GRAHAM AVENUE  
ADJACENT 5-STORY RESIDENTIAL  
BUILDING

143 GRAHAM AVENUE  
ADJACENT PARKING

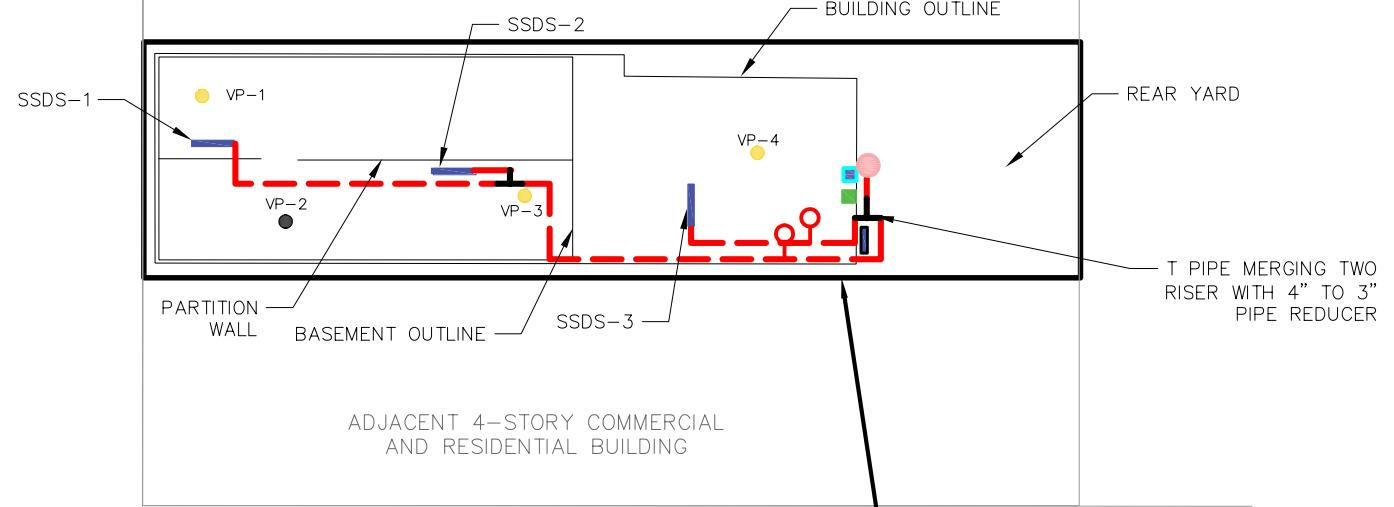
SIDEWALK

GRAHAM AVENUE

JOHNSON AVENUE

ADJACENT 3-STORY COMMERCIAL  
AND RESIDENTIAL BUILDING

ADJACENT 4-STORY  
RESIDENTIAL BUILDING



**SUBJECT PROPERTY**  
**152 GRAHAM AVENUE**  
**BROOKLYN, NY 11206**

## LEGEND

- LOCATION OF VACUUM MONITORING POINT (VP-)
- SUCTION TRENCHES
- 4" CPVC RISER PIPES
- RADONAWAY FAN MODEL GP501 MOUNTED ON EXTERIOR WALL
- ELECTRIC PANEL FOR THE SSD SYSTEM MOUNTED ON EXTERIOR WALL
- MAGNEHELIC GAUGE MOUNTED ON INTERIOR WALL AND CONNECTED TO THE SUCTION FAN INLET PIPE
- RADON ALARM MOUNTED ON INTERIOR WALL AND CONNECTED TO THE SUCTION FAN INLET PIPE
- U-TUBE VACUUM GAUGE MOUNTED ON RISER PIPE
- 4" TEE CPVC PIPE

© HYDROTECH ENVIRONMENTAL  
ENGINEERING AND GEOLOGY, DPC  
ALL RIGHTS RESERVED. THE  
PRESENTED DRAWINGS, DESIGNS, AND  
IDEAS EMBODIED THEREIN ARE THE  
PROPERTY OF HYDROTECH  
ENVIRONMENTAL ENGINEERING AND  
GEOLOGY, DPC AND SHALL NOT BE  
COPIED, REPRODUCED, DISCLOSED TO  
OTHERS, OR USED IN CONNECTION  
WITH ANY WORK OTHER THAN THE  
SPECIFIED PROJECT FOR WHICH THEY  
HAVE BEEN PREPARED, IN WHOLE OR  
IN PART, WITHOUT THE PRIOR WRITTEN  
AUTHORIZATION OF HYDROTECH  
ENVIRONMENTAL ENGINEERING AND  
GEOLOGY, DPC.

DATE	DESCRIPTION	CHK

SEAL & SIGNATURE



HYDROTECH ENVIRONMENTAL  
ENGINEERING AND GEOLOGY,  
DPC

77 ARKAY DRIVE, SUITE K  
HAUPPAUGE, NY 11788

TEL: (631) 462-5866  
FAX: (631) 462-5877

BASE DRAWING PREPARED BY

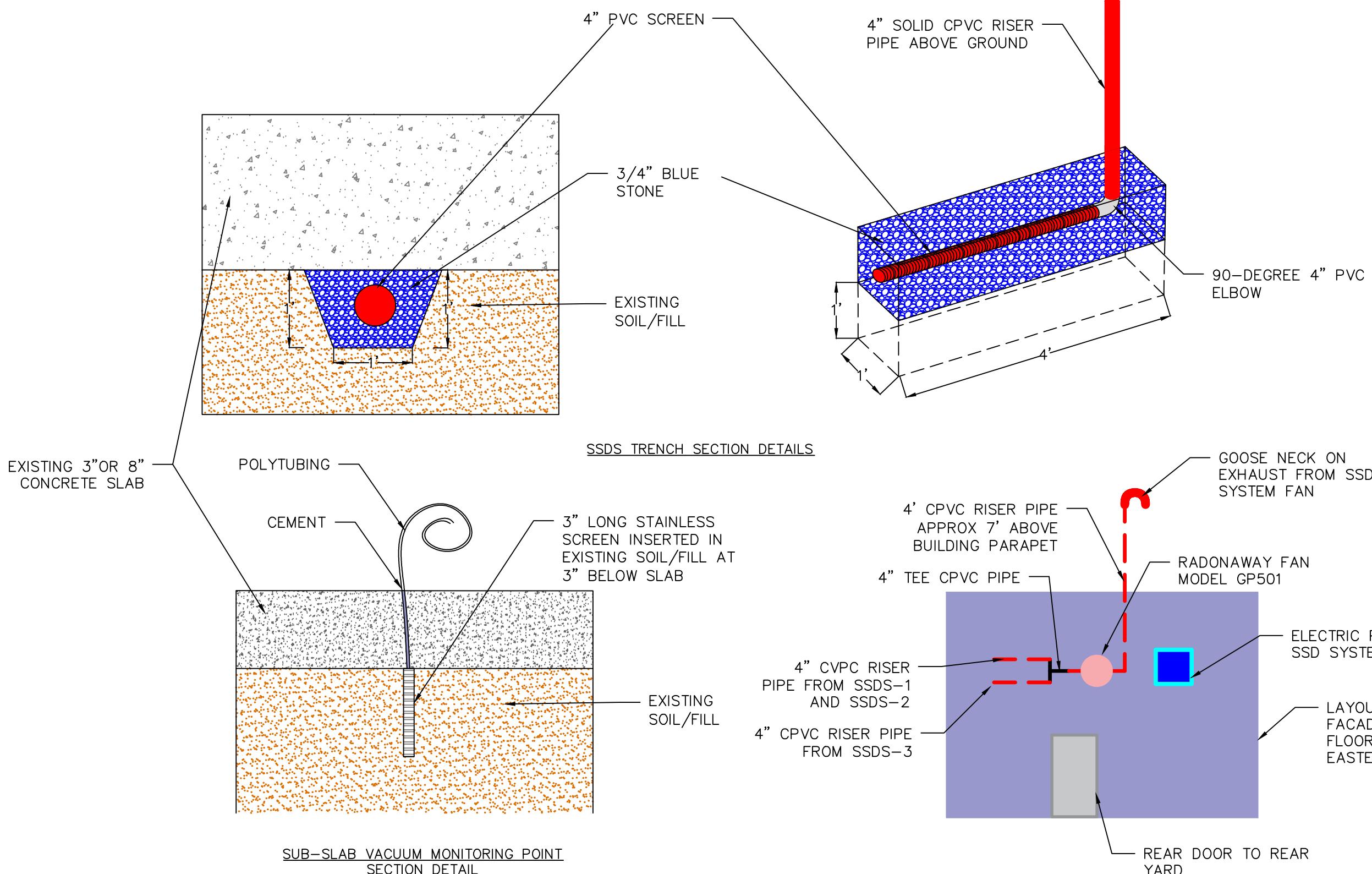
PROJECT NAME AND ADDRESS  
152 GRAHAM AVENUE  
BROOKLYN, NY 11206

PROJECT FIGURE  
FIGURE 2B: AS-BUILD PLAN OF  
SSD SYSTEM-SECTION VIEW

PROJECT NO. 200052 DATE 4/29/2021

DRAWN BY V.D. REVIEWED BY P.M.

SCALE (11X17)  
NOT TO SCALE APPROVED BY P.M.



DATE	DESCRIPTION	CHK

SEAL &amp; SIGNATURE

HYDROTECH ENVIRONMENTAL  
ENGINEERING AND GEOLOGY,  
DPC77 ARKAY DRIVE, SUITE K  
HAUPPAUGE, NY 11788TEL: (631) 462-5866  
FAX: (631) 462-5877

BASE DRAWING PREPARED BY

PROJECT NAME AND ADDRESS  
152 GRAHAM AVENUE  
BROOKLYN, NY 11206

PROJECT FIGURE

FIGURE 3: POST SSD SYSTEM  
START-UP SAMPLING PLAN

PROJECT NO. 200052 DATE 6/30/2022

DRAWN BY V.D. REVIEWED BY P.M.

SCALE (11X17)  
NOT TO SCALE APPROVED BY P.M.147 GRAHAM AVENUE  
ADJACENT 5-STORY RESIDENTIAL  
BUILDING143 GRAHAM AVENUE  
ADJACENT PARKING

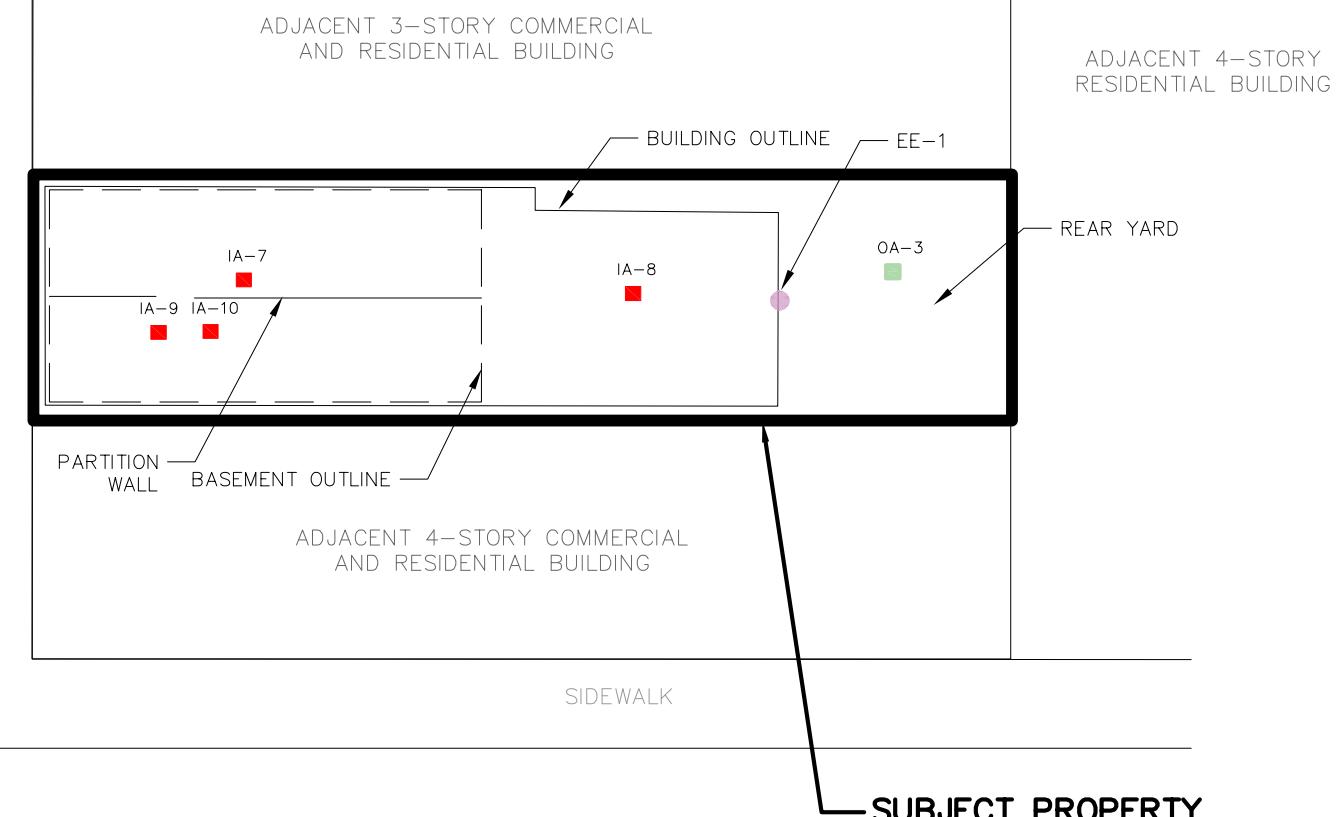
SIDEWALK

GRAHAM AVENUE

JOHNSON AVENUE

## LEGEND

- [Green square] OUTDOOR AIR SAMPLE (OA-)
- [Pink circle] SSD SYSTEM EFFLUENT SAMPLE (EE-)
- [Red square] INDOOR AIR SAMPLES (IA-)
- IA-7 CENTRAL PORTION OF THE PARTIAL BASEMENT
- IA-8 CENTRAL PORTION OF THE SLAB-ON-GRADE AREA
- IA-9 INSIDE THE TENANT SPACE ON 2ND FLOOR
- IA-10 INSIDE THE TENANT SPACE ON 3RD FLOOR



**SUBJECT PROPERTY**  
152 GRAHAM AVENUE  
BROOKLYN, NY 11206



HYDROTECH ENVIRONMENTAL  
ENGINEERING AND GEOLOGY,  
DPC77 ARKAY DRIVE, SUITE K  
HAUPPAUGE, NY 11788

TEL: (631) 462-5866

FAX: (631) 462-5877

BASE DRAWING PREPARED BY

PROJECT NAME AND ADDRESS  
152 GRAHAM AVENUE  
BROOKLYN, NY 11206

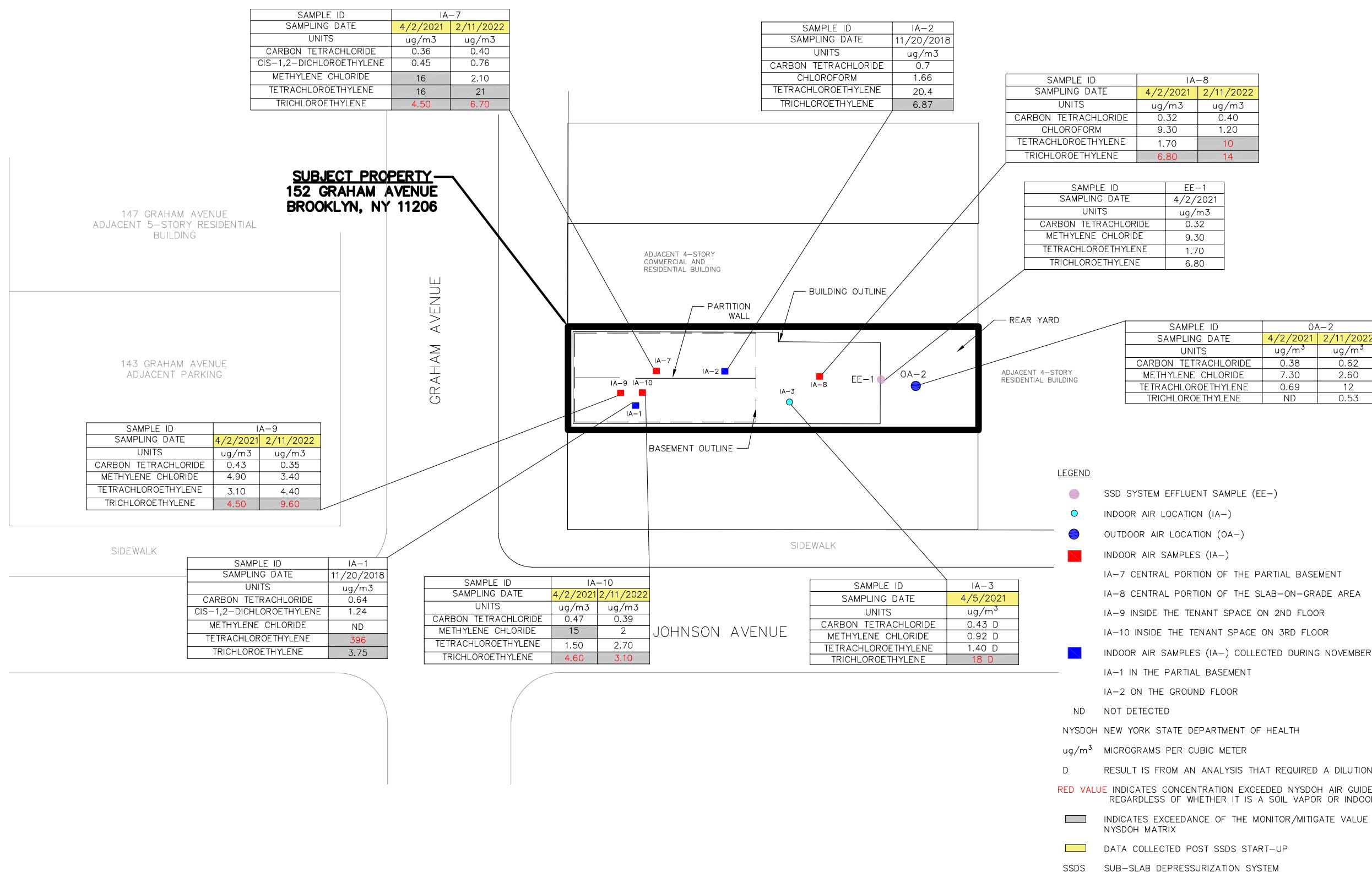
PROJECT FIGURE

FIGURE 4: MAP OF COVCs IN  
INDOOR AIR AND EFFLUENT  
SAMPLES

PROJECT NO. 200052 6/30/2022

DRAWN BY V.D. REVIEWED BY  
P.M.SCALE (11X17)  
NOT TO SCALE APPROVED BY  
P.M.

N



## **ATTACHMENTS**

**ATTACHMENT 1**  
**QUARTERLY SSD SYSTEM INSPECTION CHECKLISTS**



Inspector name and title Donovan Edwards	Site Address 152 Graham Avenue, Brooklyn, NY	Date 7/22/2021
<b>Remedy Description of Cover Systems</b>		
<b>1. Review of the current remedy</b>		
Identify the current remedy:		
x SSDS		
How many SSDS Systems are used ? One SSDS fan connected to two risers from partial basement (SSDS-1) and ground floor (SSDS-2)		
<b>2. Review of the current remedy goals</b>		
What schedule has been established for monitoring of SSDS ? Quarterly		
<b>B. Summary of Remedy Performance Assessment</b>		
<b>1. Evaluate remedy effectiveness:</b>		
Based on information collected since the last O&M review, do monitoring data indicate that the system is failing or could eventually fail to meet remedy goals?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have monitoring data exhibited trends indicative of a new or renewed release?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have changes in landuse been suggested and or implemented that have the potential to reduce the protectiveness of the SSDS remedy?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have contaminants been identified in new locations or at higher concentrations where they pose or have the potential to pose unacceptable risks to receptors?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If you answered yes to any of the above questions, did the information suggest the need for immediate action or is the condition being monitored to evaluate the need for future action? Use this space to comment. What actions, if any, have been taken and/or are planned in response to the new information?	<input type="checkbox"/> Immediate Action	
	<input type="checkbox"/> Monitor for future	
	<input checked="" type="checkbox"/> N/A	
Based on your answers to the above questions, is there reason to evaluate the need for a contingent remedy at this time? If yes, use this space to comment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>SSDS</b>		
PID at effluent	1.5 PPM	
Vacuum guage	SSDS (Dwyer Magnehelic® Gauge)	- 1.5 Inch H20
	SSDS-1 (U-Tube)	-2 Inch H20
	SSDS-2 (U-Tube)	-2 Inch H20
Vacuum Reading at vacuum monitorinbg points	VP-1	-0.01 Inch H20
	VP-2	-0.02 Inch H20
	VP-3	-0.02Inch H20
	VP-4	-0.01 Inch H20
Fan Condition	<input checked="" type="checkbox"/> Function	
	<input type="checkbox"/> Damage	

<p>Was the Subslab Depressurization System (SSDS) operating upon arrival?        If "No," explain below why the system was not running, efforts taken to restart the SSDS and if the system was operational when leaving. If successful in making the SSDS operational, complete the remainder of the checklist.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Were all sub-slab vacuum readings less than or equal to - 0.01 inches of water?        If "Yes," the SSDS is deemed still effective and the vacuum readings taken during this inspection are now the new baseline readings.        If "No," system must be adjusted/amended and the SSDS re-commissioned. Discuss adjustments and amendments below:</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>List below all pertinent observations and actions taken during this Inspection:        i.e., sagging/damaged pipes, construction changes to building that may affect the system, pipe leaks that may need smoke test, is building still vacant, has occupancy zoning changed (i.e. commercial to residential), are non-SSDS engineered systems still functioning as designed etc. Add additional pages as needed. None</p>	
<p>Did you observe breaking or cracks in the slab cover</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>If yes describe the level of alteration needed for repairs and remedies? Fine cracks are observed across entire slab in basement and in slab on grade</p>	



Inspector name and title Donovan Edwards	Site Address 152 Graham Avenue, Brooklyn, NY	Date 10/20/2021
<b>Remedy Description of Cover Systems</b>		
<b>1. Review of the current remedy</b>		
Identify the current remedy:		
x SSDS		
How many SSDS Systems are used ? One SSDS fan connected to two risers from partial basement (SSDS-1) and ground floor (SSDS-2)		
<b>2. Review of the current remedy goals</b>		
What schedule has been established for monitoring of SSDS ? Quarterly		
<b>B. Summary of Remedy Performance Assessment</b>		
<b>1. Evaluate remedy effectiveness:</b>		
Based on information collected since the last O&M review, do monitoring data indicate that the system is failing or could eventually fail to meet remedy goals?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have monitoring data exhibited trends indicative of a new or renewed release?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have changes in landuse been suggested and or implemented that have the potential to reduce the protectiveness of the SSDS remedy?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have contaminants been identified in new locations or at higher concentrations where they pose or have the potential to pose unacceptable risks to receptors?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If you answered yes to any of the above questions, did the information suggest the need for immediate action or is the condition being monitored to evaluate the need for future action? Use this space to comment. What actions, if any, have been taken and/or are planned in response to the new information?	<input type="checkbox"/> Immediate Action	
	<input type="checkbox"/> Monitor for future	
	<input checked="" type="checkbox"/> N/A	
Based on your answers to the above questions, is there reason to evaluate the need for a contingent remedy at this time? If yes, use this space to comment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>SSDS</b>		
PID at effluent	0.6 PPM	
Vacuum guage	SSDS (Dwyer Magnehelic® Gauge)	- 1.5 Inch H20
	SSDS-1 & 2 (U-Tube)	-2 Inch H20
	SSDS-3 (U-Tube)	-2 Inch H20
Vacuum Reading at vacuum monitorinbg points	VP-1	-0.01 Inch H20
	VP-2	-0.03 Inch H20
	VP-3	-0.04Inch H20
	VP-4	-0.01 Inch H20
Fan Condition	<input checked="" type="checkbox"/> Function <input type="checkbox"/> Damage	

<p>Was the Subslab Depressurization System (SSDS) operating upon arrival?        If "No," explain below why the system was not running, efforts taken to restart the SSDS and if the system was operational when leaving. If successful in making the SSDS operational, complete the remainder of the checklist.</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>Were all sub-slab vacuum readings less than or equal to - 0.01 inches of water?        If "Yes," the SSDS is deemed still effective and the vacuum readings taken during this inspection are now the new baseline readings.        If "No," system must be adjusted/amended and the SSDS re-commissioned. Discuss adjustments and amendments below:</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>List below all pertinent observations and actions taken during this Inspection:        i.e., sagging/damaged pipes, construction changes to building that may affect the system, pipe leaks that may need smoke test, is building still vacant, has occupancy zoning changed (i.e. commercial to residential), are non-SSDS engineered systems still functioning as designed etc. Add additional pages as needed. None</p>	
<p>Did you observe breaking or cracks in the slab cover</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>If yes describe the level of alteration needed for repairs and remedies? Fine cracks are observed across entire slab in basement and in slab on grade</p>	



Inspector name and title Donovan Edwards	Site Address 152 Graham Avenue, Brooklyn, NY	Date 2/11/2022
<b>Remedy Description of Cover Systems</b>		
<b>1. Review of the current remedy</b>		
Identify the current remedy:		
x SSDS		
How many SSDS Systems are used ? One SSDS fan connected to two risers from partial basement (SSDS-1) and ground floor (SSDS-2)		
<b>2. Review of the current remedy goals</b>		
What schedule has been established for monitoring of SSDS ? Quarterly		
<b>B. Summary of Remedy Performance Assessment</b>		
<b>1. Evaluate remedy effectiveness:</b>		
Based on information collected since the last O&M review, do monitoring data indicate that the system is failing or could eventually fail to meet remedy goals?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have monitoring data exhibited trends indicative of a new or renewed release?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have changes in landuse been suggested and or implemented that have the potential to reduce the protectiveness of the SSDS remedy?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Since the last O&M review, have contaminants been identified in new locations or at higher concentrations where they pose or have the potential to pose unacceptable risks to receptors?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If you answered yes to any of the above questions, did the information suggest the need for immediate action or is the condition being monitored to evaluate the need for future action? Use this space to comment. What actions, if any, have been taken and/or are planned in response to the new information?	<input type="checkbox"/> Immediate Action	
	<input type="checkbox"/> Monitor for future	
	<input checked="" type="checkbox"/> N/A	
Based on your answers to the above questions, is there reason to evaluate the need for a contingent remedy at this time? If yes, use this space to comment.	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
<b>SSDS</b>		
PID at effluent	0.4 PPM	
Vacuum guage	SSDS (Dwyer Magnehelic® Gauge)	- 1.4 Inch H20
	SSDS-1 & 2 (U-Tube)	-2 Inch H20
	SSDS-3 (U-Tube)	-2 Inch H20
Vacuum Reading at vacuum monitorinbg points	VP-1	-0.01 Inch H20
	VP-2	-0.03 Inch H20
	VP-3	-0.02Inch H20
	VP-4	-0.01 Inch H20
Fan Condition	<input checked="" type="checkbox"/> Function	
	<input type="checkbox"/> Damage	

<p>Was the Subslab Depressurization System (SSDS) operating upon arrival?        If "No," explain below why the system was not running, efforts taken to restart the SSDS and if the system was operational when leaving. If successful in making the SSDS operational, complete the remainder of the checklist.</p>	<input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No
<p>Were all sub-slab vacuum readings less than or equal to - 0.01 inches of water?        If "Yes," the SSDS is deemed still effective and the vacuum readings taken during this inspection are now the new baseline readings.        If "No," system must be adjusted/amended and the SSDS re-commissioned. Discuss adjustments and amendments below:</p>	<input checked="" type="checkbox"/> Yes  <input type="checkbox"/> No
<p>List below all pertinent observations and actions taken during this Inspection:        i.e., sagging/damaged pipes, construction changes to building that may affect the system, pipe leaks that may need smoke test, is building still vacant, has occupancy zoning changed (i.e. commercial to residential), are non-SSDS engineered systems still functioning as designed etc. Add additional pages as needed. None</p>	
<p>Did you observe breaking or cracks in the slab cover</p>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<p>If yes describe the level of alteration needed for repairs and remedies? Fine cracks are observed across entire slab in basement and in slab on grade</p>	



Graham Ave

Inspector name and title  DON	Site Address  152 Graham Avenue, Brooklyn, NY	Date  6/2/22
Remedy Description of Cover Systems		
1. Review of the current remedy		
Identify the current remedy:  <input type="checkbox"/> SSDS		
How many SSDS Systems are used? One SSDS fan connected to two risers from partial basement (SSDS-1) and ground floor (SSDS-2)		
2. Review of the current remedy goals		
What schedule has been established for monitoring of SSDS? Quarterly		
B. Summary of Remedy Performance Assessment		
1. Evaluate remedy effectiveness:		
Based on information collected since the last O&M review, do monitoring data indicate that the system is failing or could eventually fail to meet remedy goals?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Since the last O&M review, have monitoring data exhibited trends indicative of a new or renewed release?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Since the last O&M review, have changes in landuse been suggested and or implemented that have the potential to reduce the protectiveness of the SSDS remedy?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Since the last O&M review, have contaminants been identified in new locations or at higher concentrations where they pose or have the potential to pose unacceptable risks to receptors?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If you answered yes to any of the above questions, did the information suggest the need for immediate action or is the condition being monitored to evaluate the need for future action? Use this space to comment. What actions, if any, have been taken and/or are planned in response to the new information?	<input type="checkbox"/> Immediate Action <input type="checkbox"/> Monitor for future <input type="checkbox"/> N/A	
Based on your answers to the above questions, is there reason to evaluate the need for a contingent remedy at this time? If yes, use this space to comment.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
SSDS		
PID at effluent	0.1	PPM
Vacuum guage	SSDS (Dwyer Magnehelic® Gauge) SSDS-1 (U-Tube) SSDS-2 (U-Tube)	2.4 2.8 2.0
	VP-1 VP-2 VP-3 VP-4	-0.01 -0.04 -0.02 -0.01
Vacuum Reading at vacuum monitorinbg points		Inch H20 Inch H20 Inch H21 Inch H22 Inch H23 Inch H24
Fan Condition	<input type="checkbox"/> Function <input type="checkbox"/> Damage	

If "No," explain below why the system was not running, efforts taken to restart the SSDS and if the system was operational when leaving. If successful in making the SSDS operational, complete the remainder of the checklist.

Yes

No

Were all sub-slab vacuum readings less than or equal to - 0.01 inches of water?

If "Yes," the SSDS is deemed still effective and the vacuum readings taken during this inspection are now the new baseline readings.

If "No," system must be adjusted/amended and the SSDS re-commissioned. Discuss adjustments and amendments below:

Yes

No

List below all pertinent observations and actions taken during this Inspection:

i.e., sagging/damaged pipes, construction changes to building that may affect the system, pipe leaks that may need smoke test, is building still vacant, has occupancy zoning changed (i.e. commercial to residential), are non-SSDS engineered systems still functioning as designed etc. Add additional pages as needed.

Did you observe breaking or cracks in the slab cover

Yes

No

If yes describe the level of alteration needed for repairs and remedies?

Thin cracks throughout basement slab

**ATTACHMENT 2**  
**LABORATORY REPORTS**



# Technical Report

prepared for:

## Hydro Tech Environmental (Hauppauge)

77 Arkay Drive, Suite G

Hauppauge NY, 11788

**Attention: Paul Matli**

Report Date: 02/21/2022

**Client Project ID: 210011 152 Graham Ave., Brooklyn, NY**

York Project (SDG) No.: 22B0574

Revision No. 1.0

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

Report Date: 02/21/2022  
Client Project ID: 210011 152 Graham Ave., Brooklyn, NY  
York Project (SDG) No.: 22B0574

**Hydro Tech Environmental (Hauppauge)**  
77 Arkay Drive, Suite G  
Hauppauge NY, 11788  
Attention: Paul Matli

---

## Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on February 11, 2022 and listed below. The project was identified as your project: **210011 152 Graham Ave., Brooklyn, NY**.

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

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

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

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

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

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
22B0574-01	IA-7_20220211	Indoor Ambient Air	02/11/2022	02/11/2022
22B0574-02	IA-8_20220211	Indoor Ambient Air	02/11/2022	02/11/2022
22B0574-03	IA-9_20220211	Indoor Ambient Air	02/11/2022	02/11/2022
22B0574-04	IA-10_20220211	Indoor Ambient Air	02/11/2022	02/11/2022
22B0574-05	OA-2_20220211	Outdoor Ambient Air	02/11/2022	02/11/2022
22B0574-06	EE-1_20220211	Air	02/11/2022	02/11/2022

## **General Notes for York Project (SDG) No.: 22B0574**

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:** 02/21/2022

Cassie L. Mosher  
Laboratory Manager





## Sample Information

Client Sample ID: IA-7\_20220211

York Sample ID: 22B0574-01

York Project (SDG) No.

22B0574

Client Project ID

210011 152 Graham Ave., Brooklyn, NY

Matrix

Indoor Ambient Air

Collection Date/Time

February 11, 2022 3:46 pm

Date Received

02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.63	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.50	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.63	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.70	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.50	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.37	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.090	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.68	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>1.2</b>		ug/m³	0.45	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.70	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.55	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.37	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.42	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.64	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.45	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
106-99-0	<b>1,3-Butadiene</b>	<b>5.6</b>		ug/m³	0.61	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.55	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.42	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.55	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.66	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
78-93-3	<b>2-Butanone</b>	<b>8.6</b>		ug/m³	0.27	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.75	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ



## Sample Information

Client Sample ID: IA-7\_20220211

York Sample ID: 22B0574-01

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:46 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
107-05-1	3-Chloropropene	ND		ug/m³	1.4	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.37	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
67-64-1	<b>Acetone</b>	<b>23</b>		ug/m³	0.43	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
107-13-1	<b>Acrylonitrile</b>	<b>0.20</b>		ug/m³	0.20	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
71-43-2	<b>Benzene</b>	<b>22</b>		ug/m³	0.29	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.47	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.61	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
75-25-2	Bromoform	ND		ug/m³	0.94	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.35	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.28	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.40</b>		ug/m³	0.14	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.42	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.24	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
67-66-3	<b>Chloroform</b>	<b>5.5</b>		ug/m³	0.45	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.4</b>		ug/m³	0.19	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
156-59-2	<b>cis-1,2-Dichloroethylene</b>	<b>0.76</b>		ug/m³	0.090	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.41	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.31	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.78	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.3</b>		ug/m³	0.45	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.66	0.913	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 03:25	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.40	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	0.97	0.913	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 03:25	LLJ



## Sample Information

Client Sample ID: IA-7\_20220211

York Sample ID: 22B0574-01

York Project (SDG) No.

22B0574

Client Project ID

210011 152 Graham Ave., Brooklyn, NY

Matrix

Indoor Ambient Air

Collection Date/Time

February 11, 2022 3:46 pm

Date Received

02/11/2022

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-63-0	<b>Isopropanol</b>	<b>24</b>		ug/m³	0.45	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
80-62-6	<b>Methyl Methacrylate</b>	<b>1.3</b>		ug/m³	0.37	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.33	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-09-2	<b>Methylene chloride</b>	<b>2.1</b>		ug/m³	0.63	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
142-82-5	<b>n-Heptane</b>	<b>0.64</b>		ug/m³	0.37	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-54-3	<b>n-Hexane</b>	<b>0.61</b>		ug/m³	0.32	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
95-47-6	<b>o-Xylene</b>	<b>0.52</b>		ug/m³	0.40	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
179601-23-1	<b>p- &amp; m-Xylenes</b>	<b>1.4</b>		ug/m³	0.79	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
622-96-8	<b>* p-Ethyltoluene</b>	<b>0.72</b>		ug/m³	0.45	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:					
115-07-1	<b>* Propylene</b>	<b>35</b>		ug/m³	0.16	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:					
100-42-5	Styrene	ND		ug/m³	0.39	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
127-18-4	<b>Tetrachloroethylene</b>	<b>21</b>		ug/m³	0.62	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
109-99-9	<b>* Tetrahydrofuran</b>	<b>3.0</b>		ug/m³	0.54	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:					
108-88-3	<b>Toluene</b>	<b>3.3</b>		ug/m³	0.34	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.36	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.41	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
79-01-6	<b>Trichloroethylene</b>	<b>6.7</b>		ug/m³	0.12	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.3</b>		ug/m³	0.51	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.32	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.40	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	0.913	EPA TO-15	02/13/2022 08:00	02/14/2022 03:25	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			



## Sample Information

Client Sample ID: IA-8\_20220211

York Sample ID: 22B0574-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:16 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.73	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.58	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.73	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.82	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.58	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.43	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.11	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.79	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>0.63</b>		ug/m³	0.53	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.82	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.64	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.43	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.49	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.75	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.53	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	0.71	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.64	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.49	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.64	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.77	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
78-93-3	<b>2-Butanone</b>	<b>1.6</b>		ug/m³	0.32	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.88	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.7	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ



## Sample Information

Client Sample ID: IA-8\_20220211

York Sample ID: 22B0574-02

York Project (SDG) No.

22B0574

Client Project ID

210011 152 Graham Ave., Brooklyn, NY

Matrix

Indoor Ambient Air

Collection Date/Time

February 11, 2022 3:16 pm

Date Received

02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.44	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
67-64-1	<b>Acetone</b>	<b>14</b>		ug/m³	0.51	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.23	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
71-43-2	<b>Benzene</b>	<b>1.7</b>		ug/m³	0.34	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.55	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.72	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-25-2	Bromoform	ND		ug/m³	1.1	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.42	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.33	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.40</b>		ug/m³	0.17	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.49	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.28	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
67-66-3	<b>Chloroform</b>	<b>0.94</b>		ug/m³	0.52	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.4</b>		ug/m³	0.22	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.11	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.49	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.37	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.91	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.3</b>		ug/m³	0.53	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	0.77	1.07	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 04:35	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.46	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
67-63-0	<b>Isopropanol</b>	<b>35</b>		ug/m³	0.53	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ



## Sample Information

Client Sample ID: IA-8\_20220211

York Sample ID: 22B0574-02

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:16 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	0.74		ug/m³	0.44	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.39	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-09-2	Methylene chloride	1.2		ug/m³	0.74	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
142-82-5	n-Heptane	0.61		ug/m³	0.44	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.38	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.46	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
179601-23-1	p- & m- Xylenes	ND		ug/m³	0.93	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
622-96-8	* p-Ethyltoluene	0.53		ug/m³	0.53	1.07	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 04:35	LLJ
115-07-1	* Propylene	3.0		ug/m³	0.18	1.07	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 04:35	LLJ
100-42-5	Styrene	ND		ug/m³	0.46	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
127-18-4	Tetrachloroethylene	10		ug/m³	0.73	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.63	1.07	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 04:35	LLJ
108-88-3	Toluene	1.2		ug/m³	0.40	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.42	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.49	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
79-01-6	Trichloroethylene	14		ug/m³	0.14	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-69-4	Trichlorofluoromethane (Freon 11)	1.2		ug/m³	0.60	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.38	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.47	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.14	1.07	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 04:35	LLJ



## Sample Information

Client Sample ID: IA-9\_20220211

York Sample ID: 22B0574-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:50 pm	02/11/2022

### 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	0.76	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.60	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.76	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.85	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.60	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.45	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.11	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.82	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.54	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.85	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.67	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.45	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.51	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.77	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
108-67-8	<b>1,3,5-Trimethylbenzene</b>	<b>0.60</b>		ug/m³	0.54	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
106-99-0	<b>1,3-Butadiene</b>	<b>0.83</b>		ug/m³	0.73	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.67	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.51	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.67	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	0.80	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
78-93-3	<b>2-Butanone</b>	<b>3.4</b>		ug/m³	0.33	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	0.91	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	1.7	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ



## Sample Information

Client Sample ID: IA-9\_20220211

York Sample ID: 22B0574-03

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:50 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	<u>Log-in Notes:</u>	<u>Sample Notes:</u>	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.45	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
67-64-1	<b>Acetone</b>	<b>100</b>		ug/m³	0.53	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.24	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
71-43-2	<b>Benzene</b>	<b>4.3</b>		ug/m³	0.35	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.57	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.74	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
75-25-2	Bromoform	ND		ug/m³	1.1	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.43	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
75-15-0	<b>Carbon disulfide</b>	<b>0.41</b>		ug/m³	0.34	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.35</b>		ug/m³	0.17	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.51	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.29	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
67-66-3	<b>Chloroform</b>	<b>1.2</b>		ug/m³	0.54	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.3</b>		ug/m³	0.23	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.11	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.50	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
110-82-7	<b>Cyclohexane</b>	<b>0.46</b>		ug/m³	0.38	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	0.94	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>2.1</b>		ug/m³	0.55	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
141-78-6	* <b>Ethyl acetate</b>	<b>1.1</b>		ug/m³	0.80	1.107	EPA TO-15 Certifications:	02/15/2022 03:00	02/15/2022 12:09	LLJ
100-41-4	<b>Ethyl Benzene</b>	<b>1.7</b>		ug/m³	0.48	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.2	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ
67-63-0	<b>Isopropanol</b>	<b>18</b>		ug/m³	0.54	1.107	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/15/2022 03:00	02/15/2022 12:09	LLJ



## Sample Information

Client Sample ID: IA-9\_20220211

York Sample ID: 22B0574-03

York Project (SDG) No.

22B0574

Client Project ID

210011 152 Graham Ave., Brooklyn, NY

Matrix

Indoor Ambient Air

Collection Date/Time

February 11, 2022 3:50 pm

Date Received

02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	<b>Methyl Methacrylate</b>	<b>1.9</b>		ug/m³	0.45	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.40	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-09-2	<b>Methylene chloride</b>	<b>3.4</b>		ug/m³	0.77	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
142-82-5	<b>n-Heptane</b>	<b>1.4</b>		ug/m³	0.45	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
110-54-3	<b>n-Hexane</b>	<b>1.1</b>		ug/m³	0.39	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
95-47-6	<b>o-Xylene</b>	<b>4.5</b>		ug/m³	0.48	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>8.0</b>		ug/m³	0.96	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
622-96-8	<b>* p-Ethyltoluene</b>	<b>2.5</b>		ug/m³	0.54	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:					
115-07-1	<b>* Propylene</b>	<b>6.7</b>		ug/m³	0.19	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:					
100-42-5	<b>Styrene</b>	<b>0.90</b>		ug/m³	0.47	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
127-18-4	<b>Tetrachloroethylene</b>	<b>4.4</b>		ug/m³	0.75	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
109-99-9	<b>* Tetrahydrofuran</b>	ND		ug/m³	0.65	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:					
108-88-3	<b>Toluene</b>	<b>5.0</b>		ug/m³	0.42	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.44	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.50	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
79-01-6	<b>Trichloroethylene</b>	<b>9.6</b>		ug/m³	0.15	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.2</b>		ug/m³	0.62	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
108-05-4	Vinyl acetate	ND		ug/m³	0.39	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
593-60-2	Vinyl bromide	ND		ug/m³	0.48	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			
75-01-4	Vinyl Chloride	ND		ug/m³	0.14	1.107	EPA TO-15	02/15/2022 03:00	02/15/2022 12:09	LLJ
					Certifications:		NELAC-NY12058,NJDEP-Queens			



## Sample Information

Client Sample ID: IA-10\_20220211

York Sample ID: 22B0574-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:56 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	<u>Log-in Notes:</u>		<u>Sample Notes:</u>		
							Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst	
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.84	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.67	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.84	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.94	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.67	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.50	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.12	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.91	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
95-63-6	<b>1,2,4-Trimethylbenzene</b>	<b>0.90</b>		ug/m³	0.60	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.94	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.74	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.50	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.57	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.86	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.60	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
106-99-0	1,3-Butadiene	ND		ug/m³	0.81	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.74	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.57	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.74	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
123-91-1	1,4-Dioxane	ND		ug/m³	0.88	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
78-93-3	<b>2-Butanone</b>	<b>1.4</b>		ug/m³	0.36	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
591-78-6	* 2-Hexanone	ND		ug/m³	1.0	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	
107-05-1	3-Chloropropene	ND		ug/m³	1.9	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ	



## Sample Information

Client Sample ID: IA-10\_20220211

York Sample ID: 22B0574-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:56 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	<u>Log-in Notes:</u>	<u>Sample Notes:</u>	Analyst
								Date/Time Prepared	Date/Time Analyzed	
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.50	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
67-64-1	<b>Acetone</b>	<b>16</b>		ug/m³	0.58	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.27	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
71-43-2	<b>Benzene</b>	<b>1.4</b>		ug/m³	0.39	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	0.63	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	0.82	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-25-2	Bromoform	ND		ug/m³	1.3	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.48	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.38	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.39</b>		ug/m³	0.19	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.56	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.32	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
67-66-3	<b>Chloroform</b>	<b>1.4</b>		ug/m³	0.60	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
74-87-3	<b>Chloromethane</b>	<b>1.2</b>		ug/m³	0.25	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.12	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.56	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.42	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	1.0	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>1.9</b>		ug/m³	0.61	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
141-78-6	* <b>Ethyl acetate</b>	<b>1.1</b>		ug/m³	0.88	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.53	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.3	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
67-63-0	<b>Isopropanol</b>	<b>22</b>		ug/m³	0.60	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ



## Sample Information

Client Sample ID: IA-10\_20220211

York Sample ID: 22B0574-04

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Indoor Ambient Air	February 11, 2022 3:56 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	0.50	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.44	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-09-2	<b>Methylene chloride</b>	<b>2.0</b>		ug/m³	0.85	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
142-82-5	<b>n-Heptane</b>	<b>0.65</b>		ug/m³	0.50	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
110-54-3	n-Hexane	ND		ug/m³	0.43	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
95-47-6	o-Xylene	ND		ug/m³	0.53	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
179601-23-1	<b>p- &amp; m- Xylenes</b>	<b>1.1</b>		ug/m³	1.1	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
622-96-8	* p-Ethyltoluene	<b>0.60</b>		ug/m³	0.60	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ
115-07-1	* Propylene	ND		ug/m³	0.21	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ
100-42-5	Styrene	ND		ug/m³	0.52	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
127-18-4	<b>Tetrachloroethylene</b>	<b>2.7</b>		ug/m³	0.83	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.72	1.226	EPA TO-15 Certifications:	02/13/2022 08:00	02/14/2022 06:55	LLJ
108-88-3	<b>Toluene</b>	<b>1.5</b>		ug/m³	0.46	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.49	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.56	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
79-01-6	<b>Trichloroethylene</b>	<b>3.1</b>		ug/m³	0.16	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>1.1</b>		ug/m³	0.69	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
108-05-4	Vinyl acetate	ND		ug/m³	0.43	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
593-60-2	Vinyl bromide	ND		ug/m³	0.54	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ
75-01-4	Vinyl Chloride	ND		ug/m³	0.16	1.226	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 06:55	LLJ



## Sample Information

Client Sample ID: OA-2\_20220211

York Sample ID: 22B0574-05

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Outdoor Ambient Air	February 11, 2022 3:48 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	1.4	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	1.1	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.4	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.5	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	1.1	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.80	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.20	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.5	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.97	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.5	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.2	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.80	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.92	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.4	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.97	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
106-99-0	1,3-Butadiene	ND		ug/m³	1.3	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.2	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.92	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.2	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
123-91-1	1,4-Dioxane	ND		ug/m³	1.4	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
78-93-3	<b>2-Butanone</b>	<b>1.3</b>		ug/m³	0.58	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
591-78-6	* 2-Hexanone	ND		ug/m³	1.6	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
107-05-1	3-Chloropropene	ND		ug/m³	3.1	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ



## Sample Information

Client Sample ID: OA-2\_20220211

York Sample ID: 22B0574-05

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Outdoor Ambient Air	February 11, 2022 3:48 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.81	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
67-64-1	<b>Acetone</b>	<b>10</b>		ug/m³	0.94	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
107-13-1	Acrylonitrile	ND		ug/m³	0.43	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
71-43-2	<b>Benzene</b>	<b>1.5</b>		ug/m³	0.63	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
100-44-7	Benzyl chloride	ND		ug/m³	1.0	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
75-27-4	Bromodichloromethane	ND		ug/m³	1.3	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
75-25-2	Bromoform	ND		ug/m³	2.0	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
74-83-9	Bromomethane	ND		ug/m³	0.77	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
75-15-0	Carbon disulfide	ND		ug/m³	0.62	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
56-23-5	<b>Carbon tetrachloride</b>	<b>0.62</b>		ug/m³	0.31	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
108-90-7	Chlorobenzene	ND		ug/m³	0.91	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
75-00-3	Chloroethane	ND		ug/m³	0.52	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
67-66-3	Chloroform	ND		ug/m³	0.97	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
74-87-3	<b>Chloromethane</b>	<b>2.4</b>		ug/m³	0.41	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.20	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.90	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
110-82-7	Cyclohexane	ND		ug/m³	0.68	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
124-48-1	Dibromochloromethane	ND		ug/m³	1.7	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
75-71-8	<b>Dichlorodifluoromethane</b>	<b>3.9</b>		ug/m³	0.98	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
141-78-6	* Ethyl acetate	ND		ug/m³	1.4	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
100-41-4	Ethyl Benzene	ND		ug/m³	0.86	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
87-68-3	Hexachlorobutadiene	ND		ug/m³	2.1	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ
67-63-0	<b>Isopropanol</b>	<b>10</b>		ug/m³	0.97	1.983	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/13/2022 08:00	02/14/2022 08:05	LLJ



## Sample Information

Client Sample ID: OA-2\_20220211

York Sample ID: 22B0574-05

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Outdoor Ambient Air	February 11, 2022 3:48 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	<u>Log-in Notes:</u>	<u>Sample Notes:</u>	Analyst
								Date/Time Prepared	Date/Time Analyzed	
80-62-6	<b>Methyl Methacrylate</b>	<b>1.2</b>		ug/m³	0.81	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.71	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
75-09-2	<b>Methylene chloride</b>	<b>2.6</b>		ug/m³	1.4	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
142-82-5	n-Heptane	ND		ug/m³	0.81	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
110-54-3	<b>n-Hexane</b>	<b>0.70</b>		ug/m³	0.70	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
95-47-6	o-Xylene	ND		ug/m³	0.86	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
179601-23-1	p- & m- Xylenes	ND		ug/m³	1.7	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
622-96-8	* p-Ethyltoluene	ND		ug/m³	0.97	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:					
115-07-1	* Propylene	ND		ug/m³	0.34	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:					
100-42-5	Styrene	ND		ug/m³	0.84	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
127-18-4	<b>Tetrachloroethylene</b>	<b>12</b>		ug/m³	1.3	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.2	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:					
108-88-3	<b>Toluene</b>	<b>1.9</b>		ug/m³	0.75	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.79	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.90	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
79-01-6	<b>Trichloroethylene</b>	<b>0.53</b>		ug/m³	0.27	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
75-69-4	<b>Trichlorofluoromethane (Freon 11)</b>	<b>2.2</b>		ug/m³	1.1	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
108-05-4	Vinyl acetate	ND		ug/m³	0.70	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
593-60-2	Vinyl bromide	ND		ug/m³	0.87	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		
75-01-4	Vinyl Chloride	ND		ug/m³	0.25	1.983	EPA TO-15	02/13/2022 08:00	02/14/2022 08:05	LLJ
					Certifications:			NELAC-NY12058,NJDEP-Queens		



## Sample Information

Client Sample ID: EE-1\_20220211

York Sample ID: 22B0574-06

<u>York Project (SDG) No.</u>	<u>Client Project ID</u>	<u>Matrix</u>	<u>Collection Date/Time</u>	<u>Date Received</u>
22B0574	210011 152 Graham Ave., Brooklyn, NY	Air	February 11, 2022 3:49 pm	02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	14	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	12	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	14	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	16	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	12	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-34-3	1,1-Dichloroethane	ND		ug/m³	8.5	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	2.1	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	16	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	10	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
106-93-4	1,2-Dibromoethane	ND		ug/m³	16	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	13	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
107-06-2	1,2-Dichloroethane	ND		ug/m³	8.5	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
78-87-5	1,2-Dichloropropane	ND		ug/m³	9.8	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	15	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	10	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
106-99-0	1,3-Butadiene	ND		ug/m³	14	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	13	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	9.8	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	13	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
123-91-1	1,4-Dioxane	ND		ug/m³	15	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
78-93-3	<b>2-Butanone</b>	<b>8.7</b>		ug/m³	6.2	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
591-78-6	* 2-Hexanone	ND		ug/m³	17	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
107-05-1	3-Chloropropene	ND		ug/m³	33	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS



## Sample Information

Client Sample ID: EE-1\_20220211

York Sample ID: 22B0574-06

York Project (SDG) No.

22B0574

Client Project ID

210011 152 Graham Ave., Brooklyn, NY

Matrix

Air

Collection Date/Time

February 11, 2022 3:49 pm

Date Received

02/11/2022

### Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

#### Log-in Notes:

#### Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	8.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
67-64-1	Acetone	1300		ug/m³	10	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
107-13-1	Acrylonitrile	ND		ug/m³	4.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
71-43-2	Benzene	14		ug/m³	6.7	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
100-44-7	Benzyl chloride	ND		ug/m³	11	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-27-4	Bromodichloromethane	ND		ug/m³	14	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-25-2	Bromoform	ND		ug/m³	22	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
74-83-9	Bromomethane	ND		ug/m³	8.2	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-15-0	Carbon disulfide	ND		ug/m³	6.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
56-23-5	Carbon tetrachloride	ND		ug/m³	3.3	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
108-90-7	Chlorobenzene	ND		ug/m³	9.7	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-00-3	Chloroethane	ND		ug/m³	5.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
67-66-3	Chloroform	ND		ug/m³	10	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
74-87-3	Chloromethane	ND		ug/m³	4.4	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
156-59-2	cis-1,2-Dichloroethylene	15		ug/m³	2.1	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	9.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
110-82-7	Cyclohexane	ND		ug/m³	7.3	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
124-48-1	Dibromochloromethane	ND		ug/m³	18	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	10	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
141-78-6	* Ethyl acetate	ND		ug/m³	15	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
100-41-4	Ethyl Benzene	ND		ug/m³	9.2	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
87-68-3	Hexachlorobutadiene	ND		ug/m³	23	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
67-63-0	Isopropanol	23	B	ug/m³	13	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS



## Sample Information

Client Sample ID: EE-1\_20220211

York Sample ID: 22B0574-06

York Project (SDG) No.

22B0574

Client Project ID

210011 152 Graham Ave., Brooklyn, NY

Matrix

Air

Collection Date/Time

February 11, 2022 3:49 pm

Date Received

02/11/2022

### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
80-62-6	Methyl Methacrylate	ND		ug/m³	8.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	7.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-09-2	Methylene chloride	ND		ug/m³	15	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
142-82-5	n-Heptane	ND		ug/m³	8.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
110-54-3	n-Hexane	ND		ug/m³	7.4	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
95-47-6	o-Xylene	ND		ug/m³	9.2	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
179601-23-1	p- & m- Xylenes	ND		ug/m³	18	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
622-96-8	* p-Ethyltoluene	ND		ug/m³	10	21.1	EPA TO-15 Certifications:	02/17/2022 08:00	02/18/2022 01:32	AS
115-07-1	* Propylene	ND		ug/m³	3.6	21.1	EPA TO-15 Certifications:	02/17/2022 08:00	02/18/2022 01:32	AS
100-42-5	Styrene	ND		ug/m³	9.0	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
127-18-4	Tetrachloroethylene	130		ug/m³	14	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
109-99-9	* Tetrahydrofuran	ND		ug/m³	12	21.1	EPA TO-15 Certifications:	02/17/2022 08:00	02/18/2022 01:32	AS
108-88-3	Toluene	8.7		ug/m³	8.0	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	8.4	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	9.6	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
79-01-6	Trichloroethylene	7.9		ug/m³	2.8	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	12	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
108-05-4	Vinyl acetate	ND		ug/m³	7.4	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
593-60-2	Vinyl bromide	ND		ug/m³	9.2	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS
75-01-4	Vinyl Chloride	ND		ug/m³	2.7	21.1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	02/17/2022 08:00	02/18/2022 01:32	AS



## Analytical Batch Summary

**Batch ID:** BB21858

**Preparation Method:** EPA TO15 PREP

**Prepared By:** LLJ

YORK Sample ID	Client Sample ID	Preparation Date
22B0574-01	IA-7_20220211	02/13/22
22B0574-02	IA-8_20220211	02/13/22
22B0574-04	IA-10_20220211	02/13/22
22B0574-05	OA-2_20220211	02/13/22
BB21858-BLK1	Blank	02/13/22
BB21858-BS1	LCS	02/13/22
BB21858-DUP1	Duplicate	02/13/22

**Batch ID:** BB21894

**Preparation Method:** EPA TO15 PREP

**Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
22B0574-03	IA-9_20220211	02/15/22
BB21894-BLK1	Blank	02/15/22
BB21894-BS1	LCS	02/15/22
BB21894-DUP1	Duplicate	02/15/22

**Batch ID:** BB22212

**Preparation Method:** EPA TO15 PREP

**Prepared By:** AS

YORK Sample ID	Client Sample ID	Preparation Date
22B0574-06	EE-1_20220211	02/17/22
BB22212-BLK1	Blank	02/17/22
BB22212-BS1	LCS	02/17/22
BB22212-DUP1	Duplicate	02/17/22



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

### York Analytical Laboratories, Inc.

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

#### Batch BB21858 - EPA TO15 PREP

##### Blank (BB21858-BLK1)

Prepared & Analyzed: 02/13/2022

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



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

York Analytical Laboratories, Inc.

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

### Batch BB21858 - EPA TO15 PREP

#### Blank (BB21858-BLK1)

Prepared & Analyzed: 02/13/2022

n-Heptane	ND	0.41	ug/m³								
n-Hexane	ND	0.35	"								
o-Xylene	ND	0.43	"								
p- & m- Xylenes	ND	0.87	"								
p-Ethyltoluene	ND	0.49	"								
Propylene	ND	0.17	"								
Styrene	ND	0.43	"								
Tetrachloroethylene	ND	0.68	"								
Tetrahydrofuran	ND	0.59	"								
Toluene	ND	0.38	"								
trans-1,2-Dichloroethylene	ND	0.40	"								
trans-1,3-Dichloropropylene	ND	0.45	"								
Trichloroethylene	ND	0.13	"								
Trichlorofluoromethane (Freon 11)	ND	0.56	"								
Vinyl acetate	ND	0.35	"								
Vinyl bromide	ND	0.44	"								
Vinyl Chloride	ND	0.13	"								

#### LCS (BB21858-BS1)

Prepared & Analyzed: 02/13/2022

1,1,1,2-Tetrachloroethane	10.1	ppbv	10.0	101	70-130
1,1,1-Trichloroethane	9.54	"	10.0	95.4	70-130
1,1,2,2-Tetrachloroethane	10.1	"	10.0	101	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.67	"	10.0	96.7	70-130
1,1,2-Trichloroethane	10.4	"	10.0	104	70-130
1,1-Dichloroethane	9.29	"	10.0	92.9	70-130
1,1-Dichloroethylene	8.99	"	10.0	89.9	70-130
1,2,4-Trichlorobenzene	8.90	"	10.0	89.0	70-130
1,2,4-Trimethylbenzene	9.28	"	10.0	92.8	70-130
1,2-Dibromoethane	10.3	"	10.0	103	70-130
1,2-Dichlorobenzene	8.64	"	10.0	86.4	70-130
1,2-Dichloroethane	8.69	"	10.0	86.9	70-130
1,2-Dichloropropane	9.94	"	10.0	99.4	70-130
1,2-Dichlorotetrafluoroethane	9.69	"	10.0	96.9	70-130
1,3,5-Trimethylbenzene	9.26	"	10.0	92.6	70-130
1,3-Butadiene	8.95	"	10.0	89.5	70-130
1,3-Dichlorobenzene	8.92	"	10.0	89.2	70-130
1,3-Dichloropropane	10.4	"	10.0	104	70-130
1,4-Dichlorobenzene	9.02	"	10.0	90.2	70-130
1,4-Dioxane	10.0	"	10.0	100	70-130
2-Butanone	9.71	"	10.0	97.1	70-130
2-Hexanone	8.62	"	10.0	86.2	70-130
3-Chloropropene	10.3	"	10.0	103	70-130
4-Methyl-2-pentanone	9.23	"	10.0	92.3	70-130
Acetone	10.0	"	10.0	100	70-130
Acrylonitrile	8.05	"	10.0	80.5	70-130
Benzene	8.81	"	10.0	88.1	70-130
Benzyl chloride	10.6	"	10.0	106	70-130
Bromodichloromethane	10.5	"	10.0	105	70-130
Bromoform	10.2	"	10.0	102	70-130
Bromomethane	9.95	"	10.0	99.5	70-130
Carbon disulfide	9.51	"	10.0	95.1	70-130



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

York Analytical Laboratories, Inc.

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

### Batch BB21858 - EPA TO15 PREP

#### LCS (BB21858-BS1)

Prepared & Analyzed: 02/13/2022

Carbon tetrachloride	9.71	ppbv	10.0		97.1	70-130					
Chlorobenzene	8.61	"	10.0		86.1	70-130					
Chloroethane	10.6	"	10.0		106	70-130					
Chloroform	9.31	"	10.0		93.1	70-130					
Chloromethane	9.68	"	10.0		96.8	70-130					
cis-1,2-Dichloroethylene	9.71	"	10.0		97.1	70-130					
cis-1,3-Dichloropropylene	10.8	"	10.0		108	70-130					
Cyclohexane	10.2	"	10.0		102	70-130					
Dibromochloromethane	9.89	"	10.0		98.9	70-130					
Dichlorodifluoromethane	9.76	"	10.0		97.6	70-130					
Ethyl acetate	9.49	"	10.0		94.9	70-130					
Ethyl Benzene	9.00	"	10.0		90.0	70-130					
Hexachlorobutadiene	9.89	"	10.0		98.9	70-130					
Isopropanol	10.3	"	10.0		103	70-130					
Methyl Methacrylate	10.4	"	10.0		104	70-130					
Methyl tert-butyl ether (MTBE)	8.11	"	10.0		81.1	70-130					
Methylene chloride	9.46	"	10.0		94.6	70-130					
n-Heptane	10.0	"	10.0		100	70-130					
n-Hexane	10.2	"	10.0		102	70-130					
o-Xylene	8.86	"	10.0		88.6	70-130					
p- & m- Xylenes	17.8	"	20.0		89.1	70-130					
p-Ethyltoluene	9.62	"	10.0		96.2	70-130					
Propylene	10.8	"	10.0		108	70-130					
Styrene	9.00	"	10.0		90.0	70-130					
Tetrachloroethylene	9.67	"	10.0		96.7	70-130					
Tetrahydrofuran	10.1	"	10.0		101	70-130					
Toluene	9.10	"	10.0		91.0	70-130					
trans-1,2-Dichloroethylene	9.74	"	10.0		97.4	70-130					
trans-1,3-Dichloropropylene	10.8	"	10.0		108	70-130					
Trichloroethylene	8.97	"	10.0		89.7	70-130					
Trichlorofluoromethane (Freon 11)	9.75	"	10.0		97.5	70-130					
Vinyl acetate	9.00	"	10.0		90.0	70-130					
Vinyl bromide	10.1	"	10.0		101	70-130					
Vinyl Chloride	9.52	"	10.0		95.2	70-130					



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

**York Analytical Laboratories, Inc.**

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

### Batch BB21858 - EPA TO15 PREP

Duplicate (BB21858-DUP1)	*Source sample: 22B0574-02 (IA-8_20220211)					Prepared: 02/13/2022 Analyzed: 02/15/2022				
1,1,1,2-Tetrachloroethane	ND	0.73	ug/m <sup>3</sup>		ND					25
1,1,1-Trichloroethane	ND	0.58	"		ND					25
1,1,2,2-Tetrachloroethane	ND	0.73	"		ND					25
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.82	"		ND					25
1,1,2-Trichloroethane	ND	0.58	"		ND					25
1,1-Dichloroethane	ND	0.43	"		ND					25
1,1-Dichloroethylene	ND	0.11	"		ND					25
1,2,4-Trichlorobenzene	ND	0.79	"		ND					25
1,2,4-Trimethylbenzene	0.74	0.53	"		0.63				15.4	25
1,2-Dibromoethane	ND	0.82	"		ND					25
1,2-Dichlorobenzene	ND	0.64	"		ND					25
1,2-Dichloroethane	ND	0.43	"		ND					25
1,2-Dichloropropane	ND	0.49	"		ND					25
1,2-Dichlorotetrafluoroethane	ND	0.75	"		ND					25
1,3,5-Trimethylbenzene	ND	0.53	"		ND					25
1,3-Butadiene	0.26	0.71	"		0.26				0.00	25
1,3-Dichlorobenzene	ND	0.64	"		ND					25
1,3-Dichloropropane	ND	0.49	"		ND					25
1,4-Dichlorobenzene	ND	0.64	"		ND					25
1,4-Dioxane	ND	0.77	"		ND					25
2-Butanone	1.8	0.32	"		1.6				7.41	25
2-Hexanone	ND	0.88	"		ND					25
3-Chloropropene	ND	1.7	"		ND					25
4-Methyl-2-pentanone	0.39	0.44	"		0.39				0.00	25
Acetone	14	0.51	"		14				0.915	25
Acrylonitrile	ND	0.23	"		ND					25
Benzene	1.9	0.34	"		1.7				7.55	25
Benzyl chloride	ND	0.55	"		ND					25
Bromodichloromethane	ND	0.72	"		ND					25
Bromoform	ND	1.1	"		ND					25
Bromomethane	ND	0.42	"		ND					25
Carbon disulfide	ND	0.33	"		ND					25
Carbon tetrachloride	0.34	0.17	"		0.40				18.2	25
Chlorobenzene	ND	0.49	"		ND					25
Chloroethane	ND	0.28	"		ND					25
Chloroform	0.94	0.52	"		0.94				0.00	25
Chloromethane	1.2	0.22	"		1.4				12.0	25
cis-1,2-Dichloroethylene	ND	0.11	"		ND					25
cis-1,3-Dichloropropylene	ND	0.49	"		ND					25
Cyclohexane	ND	0.37	"		ND					25
Dibromochloromethane	ND	0.91	"		ND					25
Dichlorodifluoromethane	2.1	0.53	"		2.3				9.52	25
Ethyl acetate	0.69	0.77	"		0.66				5.71	25
Ethyl Benzene	ND	0.46	"		ND					25
Hexachlorobutadiene	ND	1.1	"		ND					25
Isopropanol	36	0.53	"		35				2.93	25
Methyl Methacrylate	0.66	0.44	"		0.74				12.5	25
Methyl tert-butyl ether (MTBE)	ND	0.39	"		ND					25
Methylene chloride	1.1	0.74	"		1.2				3.28	25
n-Heptane	0.75	0.44	"		0.61				19.4	25



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

**York Analytical Laboratories, Inc.**

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

### **Batch BB21858 - EPA TO15 PREP**

Duplicate (BB21858-DUP1)	*Source sample: 22B0574-02 (IA-8_20220211)				Prepared: 02/13/2022 Analyzed: 02/15/2022						
n-Hexane	0.41	0.38	ug/m <sup>3</sup>		0.34				20.0	25	
o-Xylene	0.33	0.46	"		0.28				15.4	25	
p- & m- Xylenes	0.74	0.93	"		ND					25	
p-Ethyltoluene	0.58	0.53	"		0.53				9.52	25	
Propylene	2.9	0.18	"		3.0				4.42	25	
Styrene	ND	0.46	"		ND					25	
Tetrachloroethylene	10	0.73	"		10				0.00	25	
Tetrahydrofuran	0.38	0.63	"		0.38				0.00	25	
Toluene	1.3	0.40	"		1.2				9.52	25	
trans-1,2-Dichloroethylene	ND	0.42	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.49	"		ND					25	
Trichloroethylene	14	0.14	"		14				2.87	25	
Trichlorofluoromethane (Freon 11)	1.1	0.60	"		1.2				5.13	25	
Vinyl acetate	ND	0.38	"		ND					25	
Vinyl bromide	ND	0.47	"		ND					25	
Vinyl Chloride	ND	0.14	"		ND					25	

### **Batch BB21894 - EPA TO15 PREP**

Blank (BB21894-BLK1)					Prepared & Analyzed: 02/15/2022			
1,1,1,2-Tetrachloroethane	ND	0.69	ug/m <sup>3</sup>					
1,1,1-Trichloroethane	ND	0.55	"					
1,1,2,2-Tetrachloroethane	ND	0.69	"					
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"					
1,1,2-Trichloroethane	ND	0.55	"					
1,1-Dichloroethane	ND	0.40	"					
1,1-Dichloroethylene	ND	0.099	"					
1,2,4-Trichlorobenzene	ND	0.74	"					
1,2,4-Trimethylbenzene	ND	0.49	"					
1,2-Dibromoethane	ND	0.77	"					
1,2-Dichlorobenzene	ND	0.60	"					
1,2-Dichloroethane	ND	0.40	"					
1,2-Dichloropropane	ND	0.46	"					
1,2-Dichlorotetrafluoroethane	ND	0.70	"					
1,3,5-Trimethylbenzene	ND	0.49	"					
1,3-Butadiene	ND	0.66	"					
1,3-Dichlorobenzene	ND	0.60	"					
1,3-Dichloropropane	ND	0.46	"					
1,4-Dichlorobenzene	ND	0.60	"					
1,4-Dioxane	ND	0.72	"					
2-Butanone	ND	0.29	"					
2-Hexanone	ND	0.82	"					
3-Chloropropene	ND	1.6	"					
4-Methyl-2-pentanone	ND	0.41	"					
Acetone	ND	0.48	"					
Acrylonitrile	ND	0.22	"					
Benzene	ND	0.32	"					
Benzyl chloride	ND	0.52	"					
Bromodichloromethane	ND	0.67	"					
Bromoform	ND	1.0	"					
Bromomethane	ND	0.39	"					

**Volatile Organic Compounds in Air by GC/MS - Quality Control Data****York Analytical Laboratories, Inc.**

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

**Batch BB21894 - EPA TO15 PREP****Blank (BB21894-BLK1)**

Prepared &amp; Analyzed: 02/15/2022

Carbon disulfide	ND	0.31	ug/m <sup>3</sup>
Carbon tetrachloride	ND	0.16	"
Chlorobenzene	ND	0.46	"
Chloroethane	ND	0.26	"
Chloroform	ND	0.49	"
Chloromethane	ND	0.21	"
cis-1,2-Dichloroethylene	ND	0.099	"
cis-1,3-Dichloropropylene	ND	0.45	"
Cyclohexane	ND	0.34	"
Dibromochloromethane	ND	0.85	"
Dichlorodifluoromethane	ND	0.49	"
Ethyl acetate	ND	0.72	"
Ethyl Benzene	ND	0.43	"
Hexachlorobutadiene	ND	1.1	"
Isopropanol	ND	0.49	"
Methyl Methacrylate	ND	0.41	"
Methyl tert-butyl ether (MTBE)	ND	0.36	"
Methylene chloride	ND	0.69	"
n-Heptane	ND	0.41	"
n-Hexane	ND	0.35	"
o-Xylene	ND	0.43	"
p- & m- Xylenes	ND	0.87	"
p-Ethyltoluene	ND	0.49	"
Propylene	ND	0.17	"
Styrene	ND	0.43	"
Tetrachloroethylene	ND	0.68	"
Tetrahydrofuran	ND	0.59	"
Toluene	ND	0.38	"
trans-1,2-Dichloroethylene	ND	0.40	"
trans-1,3-Dichloropropylene	ND	0.45	"
Trichloroethylene	ND	0.13	"
Trichlorofluoromethane (Freon 11)	ND	0.56	"
Vinyl acetate	ND	0.35	"
Vinyl bromide	ND	0.44	"
Vinyl Chloride	ND	0.13	"



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

**York Analytical Laboratories, Inc.**

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

### Batch BB21894 - EPA TO15 PREP

LCS (BB21894-BS1)	Prepared & Analyzed: 02/15/2022									
1,1,1,2-Tetrachloroethane	9.62		ppbv	10.0	96.2	70-130				
1,1,1-Trichloroethane	8.92		"	10.0	89.2	70-130				
1,1,2,2-Tetrachloroethane	9.94		"	10.0	99.4	70-130				
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.76		"	10.0	97.6	70-130				
1,1,2-Trichloroethane	10.1		"	10.0	101	70-130				
1,1-Dichloroethane	9.39		"	10.0	93.9	70-130				
1,1-Dichloroethylene	8.75		"	10.0	87.5	70-130				
1,2,4-Trichlorobenzene	8.16		"	10.0	81.6	70-130				
1,2,4-Trimethylbenzene	8.64		"	10.0	86.4	70-130				
1,2-Dibromoethane	10.0		"	10.0	100	70-130				
1,2-Dichlorobenzene	8.07		"	10.0	80.7	70-130				
1,2-Dichloroethane	7.98		"	10.0	79.8	70-130				
1,2-Dichloropropane	10.1		"	10.0	101	70-130				
1,2-Dichlorotetrafluoroethane	9.00		"	10.0	90.0	70-130				
1,3,5-Trimethylbenzene	8.63		"	10.0	86.3	70-130				
1,3-Butadiene	8.29		"	10.0	82.9	70-130				
1,3-Dichlorobenzene	8.39		"	10.0	83.9	70-130				
1,3-Dichloropropane	10.0		"	10.0	100	70-130				
1,4-Dichlorobenzene	8.48		"	10.0	84.8	70-130				
1,4-Dioxane	10.3		"	10.0	103	70-130				
2-Butanone	9.86		"	10.0	98.6	70-130				
2-Hexanone	8.12		"	10.0	81.2	70-130				
3-Chloropropene	10.3		"	10.0	103	70-130				
4-Methyl-2-pentanone	8.76		"	10.0	87.6	70-130				
Acetone	9.52		"	10.0	95.2	70-130				
Acrylonitrile	8.52		"	10.0	85.2	70-130				
Benzene	9.62		"	10.0	96.2	70-130				
Benzyl chloride	9.72		"	10.0	97.2	70-130				
Bromodichloromethane	9.41		"	10.0	94.1	70-130				
Bromoform	9.63		"	10.0	96.3	70-130				
Bromomethane	9.99		"	10.0	99.9	70-130				
Carbon disulfide	10.2		"	10.0	102	70-130				
Carbon tetrachloride	8.58		"	10.0	85.8	70-130				
Chlorobenzene	8.55		"	10.0	85.5	70-130				
Chloroethane	10.9		"	10.0	109	70-130				
Chloroform	9.09		"	10.0	90.9	70-130				
Chloromethane	9.06		"	10.0	90.6	70-130				
cis-1,2-Dichloroethylene	9.81		"	10.0	98.1	70-130				
cis-1,3-Dichloropropylene	10.5		"	10.0	105	70-130				
Cyclohexane	10.8		"	10.0	108	70-130				
Dibromochloromethane	9.00		"	10.0	90.0	70-130				
Dichlorodifluoromethane	8.85		"	10.0	88.5	70-130				
Ethyl acetate	9.61		"	10.0	96.1	70-130				
Ethyl Benzene	8.85		"	10.0	88.5	70-130				
Hexachlorobutadiene	8.72		"	10.0	87.2	70-130				
Isopropanol	10.2		"	10.0	102	70-130				
Methyl Methacrylate	10.6		"	10.0	106	70-130				
Methyl tert-butyl ether (MTBE)	8.22		"	10.0	82.2	70-130				
Methylene chloride	9.27		"	10.0	92.7	70-130				
n-Heptane	10.3		"	10.0	103	70-130				



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

**York Analytical Laboratories, Inc.**

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

### Batch BB21894 - EPA TO15 PREP

LCS (BB21894-BS1)						Prepared & Analyzed: 02/15/2022				
n-Hexane	10.9		ppbv	10.0		109	70-130			
o-Xylene	8.56		"	10.0		85.6	70-130			
p- & m- Xylenes	17.2		"	20.0		86.0	70-130			
p-Ethyltoluene	9.00		"	10.0		90.0	70-130			
Propylene	10.6		"	10.0		106	70-130			
Styrene	8.89		"	10.0		88.9	70-130			
Tetrachloroethylene	9.38		"	10.0		93.8	70-130			
Tetrahydrofuran	10.4		"	10.0		104	70-130			
Toluene	9.00		"	10.0		90.0	70-130			
trans-1,2-Dichloroethylene	9.67		"	10.0		96.7	70-130			
trans-1,3-Dichloropropylene	10.1		"	10.0		101	70-130			
Trichloroethylene	8.69		"	10.0		86.9	70-130			
Trichlorofluoromethane (Freon 11)	8.79		"	10.0		87.9	70-130			
Vinyl acetate	9.01		"	10.0		90.1	70-130			
Vinyl bromide	10.3		"	10.0		103	70-130			
Vinyl Chloride	8.79		"	10.0		87.9	70-130			

Duplicate (BB21894-DUP1)						Prepared & Analyzed: 02/15/2022				
1,1,1,2-Tetrachloroethane	ND	0.61	ug/m³			ND				25
1,1,1-Trichloroethane	ND	0.49	"			ND				25
1,1,2,2-Tetrachloroethane	ND	0.61	"			ND				25
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.68	"			ND				25
1,1,2-Trichloroethane	ND	0.49	"			ND				25
1,1-Dichloroethane	ND	0.36	"			ND				25
1,1-Dichloroethylene	ND	0.089	"			ND				25
1,2,4-Trichlorobenzene	ND	0.66	"			ND				25
1,2,4-Trimethylbenzene	ND	0.44	"			ND				25
1,2-Dibromoethane	ND	0.69	"			ND				25
1,2-Dichlorobenzene	ND	0.54	"			ND				25
1,2-Dichloroethane	ND	0.36	"			ND				25
1,2-Dichloropropane	ND	0.41	"			ND				25
1,2-Dichlorotetrafluoroethane	ND	0.62	"			ND				25
1,3,5-Trimethylbenzene	ND	0.44	"			ND				25
1,3-Butadiene	ND	0.59	"			ND				25
1,3-Dichlorobenzene	ND	0.54	"			ND				25
1,3-Dichloropropane	ND	0.41	"			ND				25
1,4-Dichlorobenzene	ND	0.54	"			ND				25
1,4-Dioxane	ND	0.64	"			ND				25
2-Butanone	1.1	0.26	"		0.97			7.79		25
2-Hexanone	ND	0.73	"			ND				25
3-Chloropropene	ND	1.4	"			ND				25
4-Methyl-2-pentanone	ND	0.37	"			ND				25
Acetone	4.6	0.42	"		4.5			0.930		25
Acrylonitrile	ND	0.19	"			ND				25
Benzene	1.1	0.29	"		1.2			7.23		25
Benzyl chloride	ND	0.46	"			ND				25
Bromodichloromethane	ND	0.60	"			ND				25
Bromoform	ND	0.92	"			ND				25
Bromomethane	ND	0.35	"			ND				25
Carbon disulfide	ND	0.28	"			ND				25
Carbon tetrachloride	0.34	0.14	"		0.34			0.00		25



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

York Analytical Laboratories, Inc.

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

### Batch BB21894 - EPA TO15 PREP

Duplicate (BB21894-DUP1)	*Source sample: 22B0481-05 (Duplicate)					Prepared & Analyzed: 02/15/2022					
Chlorobenzene	ND	0.41	ug/m <sup>3</sup>		ND					25	
Chloroethane	ND	0.24	"		ND					25	
Chloroform	ND	0.44	"		ND					25	
Chloromethane	1.1	0.18	"		1.1				3.33	25	
cis-1,2-Dichloroethylene	ND	0.089	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.41	"		ND					25	
Cyclohexane	0.28	0.31	"		0.28				0.00	25	
Dibromochloromethane	ND	0.76	"		ND					25	
Dichlorodifluoromethane	2.1	0.44	"		2.1				0.00	25	
Ethyl acetate	0.23	0.64	"		0.23				0.00	25	
Ethyl Benzene	ND	0.39	"		ND					25	
Hexachlorobutadiene	ND	0.95	"		ND					25	
Isopropanol	2.5	0.44	"		2.3				9.01	25	
Methyl Methacrylate	0.26	0.37	"		0.26				0.00	25	
Methyl tert-butyl ether (MTBE)	ND	0.32	"		ND					25	
Methylene chloride	1.4	0.62	"		1.4				2.20	25	
n-Heptane	0.48	0.37	"		0.44				8.00	25	
n-Hexane	0.85	0.31	"		0.85				0.00	25	
o-Xylene	0.23	0.39	"		0.23				0.00	25	
p- & m- Xylenes	0.62	0.78	"		0.66				6.06	25	
p-Ethyltoluene	ND	0.44	"		ND					25	
Propylene	ND	0.15	"		ND					25	
Styrene	ND	0.38	"		ND					25	
Tetrachloroethylene	4.8	0.61	"		4.9				1.24	25	
Tetrahydrofuran	0.24	0.53	"		0.37				43.5	25	Non-dir.
Toluene	1.4	0.34	"		1.5				2.30	25	
trans-1,2-Dichloroethylene	ND	0.35	"		ND					25	
trans-1,3-Dichloropropylene	ND	0.41	"		ND					25	
Trichloroethylene	13	0.12	"		13				3.38	25	
Trichlorofluoromethane (Freon 11)	1.2	0.50	"		1.2				4.26	25	
Vinyl acetate	ND	0.31	"		ND					25	
Vinyl bromide	ND	0.39	"		ND					25	
Vinyl Chloride	ND	0.11	"		ND					25	



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

York Analytical Laboratories, Inc.

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

### Batch BB22212 - EPA TO15 PREP

#### Blank (BB22212-BLK1)

Prepared & Analyzed: 02/17/2022

1,1,1,2-Tetrachloroethane	ND	0.69	ug/m <sup>3</sup>								
1,1,1-Trichloroethane	ND	0.55	"								
1,1,2,2-Tetrachloroethane	ND	0.69	"								
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.77	"								
1,1,2-Trichloroethane	ND	0.55	"								
1,1-Dichloroethane	ND	0.40	"								
1,1-Dichloroethylene	ND	0.099	"								
1,2,4-Trichlorobenzene	ND	0.74	"								
1,2,4-Trimethylbenzene	ND	0.49	"								
1,2-Dibromoethane	ND	0.77	"								
1,2-Dichlorobenzene	ND	0.60	"								
1,2-Dichloroethane	ND	0.40	"								
1,2-Dichloropropane	ND	0.46	"								
1,2-Dichlorotetrafluoroethane	ND	0.70	"								
1,3,5-Trimethylbenzene	ND	0.49	"								
1,3-Butadiene	ND	0.66	"								
1,3-Dichlorobenzene	ND	0.60	"								
1,3-Dichloropropane	ND	0.46	"								
1,4-Dichlorobenzene	ND	0.60	"								
1,4-Dioxane	ND	0.72	"								
2-Butanone	ND	0.29	"								
2-Hexanone	ND	0.82	"								
3-Chloropropene	ND	1.6	"								
4-Methyl-2-pentanone	ND	0.41	"								
Acetone	ND	0.48	"								
Acrylonitrile	ND	0.22	"								
Benzene	ND	0.32	"								
Benzyl chloride	ND	0.52	"								
Bromodichloromethane	ND	0.67	"								
Bromoform	ND	1.0	"								
Bromomethane	ND	0.39	"								
Carbon disulfide	ND	0.31	"								
Carbon tetrachloride	ND	0.16	"								
Chlorobenzene	ND	0.46	"								
Chloroethane	ND	0.26	"								
Chloroform	ND	0.49	"								
Chloromethane	ND	0.21	"								
cis-1,2-Dichloroethylene	ND	0.099	"								
cis-1,3-Dichloropropylene	ND	0.45	"								
Cyclohexane	ND	0.34	"								
Dibromochloromethane	ND	0.85	"								
Dichlorodifluoromethane	ND	0.49	"								
Ethyl acetate	ND	0.72	"								
Ethyl Benzene	ND	0.43	"								
Hexachlorobutadiene	ND	1.1	"								
Isopropanol	0.57	0.49	"								
Methyl Methacrylate	ND	0.41	"								
Methyl tert-butyl ether (MTBE)	ND	0.36	"								
Methylene chloride	ND	0.69	"								
n-Heptane	ND	0.41	"								



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

**York Analytical Laboratories, Inc.**

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

### Batch BB22212 - EPA TO15 PREP

#### Blank (BB22212-BLK1)

n-Hexane	ND	0.35	ug/m³							
o-Xylene	ND	0.43	"							
p- & m- Xylenes	ND	0.87	"							
p-Ethyltoluene	ND	0.49	"							
Propylene	ND	0.17	"							
Styrene	ND	0.43	"							
Tetrachloroethylene	ND	0.68	"							
Tetrahydrofuran	ND	0.59	"							
Toluene	ND	0.38	"							
trans-1,2-Dichloroethylene	ND	0.40	"							
trans-1,3-Dichloropropylene	ND	0.45	"							
Trichloroethylene	ND	0.13	"							
Trichlorofluoromethane (Freon 11)	ND	0.56	"							
Vinyl acetate	ND	0.35	"							
Vinyl bromide	ND	0.44	"							
Vinyl Chloride	ND	0.13	"							

Prepared & Analyzed: 02/17/2022

#### LCS (BB22212-BS1)

1,1,1,2-Tetrachloroethane	9.19	ppbv	10.0	91.9	70-130
1,1,1-Trichloroethane	8.73	"	10.0	87.3	70-130
1,1,2,2-Tetrachloroethane	9.53	"	10.0	95.3	70-130
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	9.39	"	10.0	93.9	70-130
1,1,2-Trichloroethane	9.83	"	10.0	98.3	70-130
1,1-Dichloroethane	9.14	"	10.0	91.4	70-130
1,1-Dichloroethylene	8.46	"	10.0	84.6	70-130
1,2,4-Trichlorobenzene	7.96	"	10.0	79.6	70-130
1,2,4-Trimethylbenzene	7.97	"	10.0	79.7	70-130
1,2-Dibromoethane	9.67	"	10.0	96.7	70-130
1,2-Dichlorobenzene	7.62	"	10.0	76.2	70-130
1,2-Dichloroethane	7.83	"	10.0	78.3	70-130
1,2-Dichloropropane	9.89	"	10.0	98.9	70-130
1,2-Dichlorotetrafluoroethane	9.42	"	10.0	94.2	70-130
1,3,5-Trimethylbenzene	7.99	"	10.0	79.9	70-130
1,3-Butadiene	8.10	"	10.0	81.0	70-130
1,3-Dichlorobenzene	7.84	"	10.0	78.4	70-130
1,3-Dichloropropane	9.87	"	10.0	98.7	70-130
1,4-Dichlorobenzene	8.00	"	10.0	80.0	70-130
1,4-Dioxane	10.0	"	10.0	100	70-130
2-Butanone	9.59	"	10.0	95.9	70-130
2-Hexanone	7.78	"	10.0	77.8	70-130
3-Chloropropene	10.1	"	10.0	101	70-130
4-Methyl-2-pentanone	8.40	"	10.0	84.0	70-130
Acetone	9.09	"	10.0	90.9	70-130
Acrylonitrile	8.34	"	10.0	83.4	70-130
Benzene	9.42	"	10.0	94.2	70-130
Benzyl chloride	9.04	"	10.0	90.4	70-130
Bromodichloromethane	8.85	"	10.0	88.5	70-130
Bromoform	9.22	"	10.0	92.2	70-130
Bromomethane	9.71	"	10.0	97.1	70-130
Carbon disulfide	9.92	"	10.0	99.2	70-130
Carbon tetrachloride	8.14	"	10.0	81.4	70-130

Prepared & Analyzed: 02/17/2022



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

York Analytical Laboratories, Inc.

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

### Batch BB22212 - EPA TO15 PREP

#### LCS (BB22212-BS1)

Prepared & Analyzed: 02/17/2022

Chlorobenzene	8.21	ppbv	10.0		82.1	70-130					
Chloroethane	10.5	"	10.0		105	70-130					
Chloroform	8.91	"	10.0		89.1	70-130					
Chloromethane	9.01	"	10.0		90.1	70-130					
cis-1,2-Dichloroethylene	9.52	"	10.0		95.2	70-130					
cis-1,3-Dichloropropylene	10.3	"	10.0		103	70-130					
Cyclohexane	10.7	"	10.0		107	70-130					
Dibromochloromethane	8.71	"	10.0		87.1	70-130					
Dichlorodifluoromethane	8.72	"	10.0		87.2	70-130					
Ethyl acetate	9.48	"	10.0		94.8	70-130					
Ethyl Benzene	8.44	"	10.0		84.4	70-130					
Hexachlorobutadiene	8.14	"	10.0		81.4	70-130					
Isopropanol	9.73	"	10.0		97.3	70-130					
Methyl Methacrylate	10.3	"	10.0		103	70-130					
Methyl tert-butyl ether (MTBE)	8.23	"	10.0		82.3	70-130					
Methylene chloride	9.03	"	10.0		90.3	70-130					
n-Heptane	10.1	"	10.0		101	70-130					
n-Hexane	10.8	"	10.0		108	70-130					
o-Xylene	8.15	"	10.0		81.5	70-130					
p- & m- Xylenes	16.2	"	20.0		81.0	70-130					
p-Ethyltoluene	8.47	"	10.0		84.7	70-130					
Propylene	10.7	"	10.0		107	70-130					
Styrene	8.47	"	10.0		84.7	70-130					
Tetrachloroethylene	9.14	"	10.0		91.4	70-130					
Tetrahydrofuran	10.2	"	10.0		102	70-130					
Toluene	8.82	"	10.0		88.2	70-130					
trans-1,2-Dichloroethylene	9.49	"	10.0		94.9	70-130					
trans-1,3-Dichloropropylene	9.67	"	10.0		96.7	70-130					
Trichloroethylene	8.39	"	10.0		83.9	70-130					
Trichlorofluoromethane (Freon 11)	8.47	"	10.0		84.7	70-130					
Vinyl acetate	8.59	"	10.0		85.9	70-130					
Vinyl bromide	10.0	"	10.0		100	70-130					
Vinyl Chloride	8.62	"	10.0		86.2	70-130					



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

**York Analytical Laboratories, Inc.**

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

### Batch BB22212 - EPA TO15 PREP

Duplicate (BB22212-DUP1)	*Source sample: 22B0484-07 (Duplicate)					Prepared: 02/17/2022 Analyzed: 02/18/2022					
1,1,1,2-Tetrachloroethane	ND	0.77	ug/m³		ND					25	
1,1,1-Trichloroethane	ND	0.61	"		ND					25	
1,1,2,2-Tetrachloroethane	ND	0.77	"		ND					25	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	0.86	"		ND					25	
1,1,2-Trichloroethane	ND	0.61	"		ND					25	
1,1-Dichloroethane	ND	0.46	"		ND					25	
1,1-Dichloroethylene	ND	0.11	"		ND					25	
1,2,4-Trichlorobenzene	ND	0.84	"		ND					25	
1,2,4-Trimethylbenzene	0.39	0.55	"		0.44				13.3	25	
1,2-Dibromoethane	ND	0.87	"		ND					25	
1,2-Dichlorobenzene	ND	0.68	"		ND					25	
1,2-Dichloroethane	ND	0.46	"		ND					25	
1,2-Dichloropropane	ND	0.52	"		ND					25	
1,2-Dichlorotetrafluoroethane	ND	0.79	"		ND					25	
1,3,5-Trimethylbenzene	ND	0.55	"		ND					25	
1,3-Butadiene	ND	0.75	"		ND					25	
1,3-Dichlorobenzene	ND	0.68	"		ND					25	
1,3-Dichloropropane	ND	0.52	"		ND					25	
1,4-Dichlorobenzene	ND	0.68	"		ND					25	
1,4-Dioxane	ND	0.81	"		ND					25	
2-Butanone	0.96	0.33	"		0.93				3.51	25	
2-Hexanone	ND	0.92	"		ND					25	
3-Chloropropene	ND	1.8	"		ND					25	
4-Methyl-2-pentanone	ND	0.46	"		ND					25	
Acetone	6.5	0.54	"		6.4				0.830	25	
Acrylonitrile	ND	0.24	"		ND					25	
Benzene	0.79	0.36	"		0.83				4.44	25	
Benzyl chloride	ND	0.58	"		ND					25	
Bromodichloromethane	ND	0.76	"		ND					25	
Bromoform	ND	1.2	"		ND					25	
Bromomethane	ND	0.44	"		ND					25	
Carbon disulfide	ND	0.35	"		ND					25	
Carbon tetrachloride	0.35	0.18	"		0.35				0.00	25	
Chlorobenzene	ND	0.52	"		ND					25	
Chloroethane	ND	0.30	"		ND					25	
Chloroform	ND	0.55	"		ND					25	
Chloromethane	1.0	0.23	"		1.2				12.5	25	
cis-1,2-Dichloroethylene	ND	0.11	"		ND					25	
cis-1,3-Dichloropropylene	ND	0.51	"		ND					25	
Cyclohexane	ND	0.39	"		ND					25	
Dibromochloromethane	ND	0.96	"		ND					25	
Dichlorodifluoromethane	2.1	0.56	"		2.1				2.67	25	
Ethyl acetate	ND	0.81	"		ND					25	
Ethyl Benzene	ND	0.49	"		ND					25	
Hexachlorobutadiene	ND	1.2	"		ND					25	
Isopropanol	1.9	0.55	"		1.9				1.46	25	
Methyl Methacrylate	0.32	0.46	"		0.28				15.4	25	
Methyl tert-butyl ether (MTBE)	ND	0.41	"		ND					25	
Methylene chloride	2.5	0.78	"		2.6				3.03	25	
n-Heptane	0.32	0.46	"		ND					25	

**Volatile Organic Compounds in Air by GC/MS - Quality Control Data****York Analytical Laboratories, Inc.**

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

**Batch BB22212 - EPA TO15 PREP**

Duplicate (BB22212-DUP1)	*Source sample: 22B0484-07 (Duplicate)					Prepared: 02/17/2022 Analyzed: 02/18/2022				
n-Hexane	0.56	0.40	ug/m <sup>3</sup>		0.56				0.00	25
o-Xylene	0.24	0.49	"		0.24				0.00	25
p- & m- Xylenes	ND	0.98	"		ND					25
p-Ethyltoluene	ND	0.55	"		ND					25
Propylene	ND	0.19	"		ND					25
Styrene	ND	0.48	"		ND					25
Tetrachloroethylene	0.38	0.76	"		0.38				0.00	25
Tetrahydrofuran	ND	0.66	"		ND					25
Toluene	0.93	0.42	"		0.93				0.00	25
trans-1,2-Dichloroethylene	ND	0.45	"		ND					25
trans-1,3-Dichloropropylene	ND	0.51	"		ND					25
Trichloroethylene	1.2	0.15	"		1.2				0.00	25
Trichlorofluoromethane (Freon 11)	1.2	0.63	"		1.1				5.41	25
Vinyl acetate	ND	0.40	"		ND					25
Vinyl bromide	ND	0.49	"		ND					25
Vinyl Chloride	ND	0.14	"		ND					25





## Sample and Data Qualifiers Relating to This Work Order

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.

B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants.

### 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.

---

Revision Description: This report has been revised to update sample ID's.



**ATTACHMENT 3**  
**DUSR REPORT**

**HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert**

Date: February 27<sup>th</sup>, 2022

Mr. Paul Matli, Project Manager  
**Hydro Tech Environmental Engineering  
And Geology, DPC**  
77 Arkay Drive Suite K  
Hauppauge, NY 11788

**Re: Data Usability Summary Reports and Quality Assurance Validation Analyses for  
York Analytical Laboratories Project (SDG) No.: 22B0574**

**Client Project ID:** 210011 152 Graham Ave, Brooklyn NY

Dear Mr. Matli,

I thank you for your confidence in our data validation services and look forward to the growth of our business relationship. I have enclosed with this letter the data usability summary reports (DUSRs) and data validation summaries for the above referenced laboratory (SDG) numbers issued by York Analytical Laboratories, Inc.

The overall evaluation of the SDG # 22B0574 displays good degree of confidence and acceptance in accordance with the guidelines in the USEPA National Functional Guidelines and the method and QC Criteria specified in NYSDEC ASP Documents except for some qualified results that are identified in the validation summaries based solely on the stated above validation guidance criteria. However, the qualified data (Bias low, Bias High, Unreliable or unusable) may be subject to the user's reconsideration or determination in the circumstances of obtaining additional information that is not contained in the data validation criteria.

If you have any questions or comments regarding any of the attached data usability summary reports and or the data validation summaries, please do not hesitate to contact me at (413) 875-5049 or via email at [hanibaltayeh@gmail.com](mailto:hanibaltayeh@gmail.com).

Sincerely,



Hanibal C. Tayeh, Ph.D.  
**Data Validation and Forensic Geochemistry Expert**

Files: DUSR-HTE-210011-152 Graham Avenue, Brooklyn NY- 22B0574

# DATA USABILITY SUMMARY REPORT (DUSR)

***Site Location:*** 152 Graham Avenue, Brooklyn NY

***York Analytical Laboratories***

***Laboratory (SDG) # 22B0574***

***Project No. 210011***

***Prepared for:***

*Mr. Paul Matli, Ph.D. Project Manager  
Hydro Tech Environmental Engineering  
And Geology, DPC  
77 Arkay Drive Suite K  
Hauppauge, NY 11788*

***Prepared by:***

***Hanibal Tayeh, Ph.D.***  
*Data Validation and Forensic Geochemistry Expert*

***On***

***February 27<sup>th</sup>, 2022***

## **CONTENTS**

1. GLOSSARY OF ACRONYMS & TERMS
  2. GLOSSARY OF DATA VALIDATION QUALIFIERS
  3. NYS DEC DATA USABILITY SUMMARY PARAMETERS
  4. DATA VALIDATION PARAMETERS
  5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)
  6. DATA VALIDATION REPORT NARRATIVE
- SUPPORT DOCUMENTATION (Refer to the electronic Data Package PDF file)

## **1. GLOSSARY OF ACRONYMS & TERMS**

The following acronyms and terms may have been used in the descriptive process of the Organic and Inorganic Data Validation.

### **Acronyms:**

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene (volatile instrument performance check)
BNA	Base/Neutral/Acid
CARD	CLP Analytical Results Database
CCB	Continuing Calibration Blank
CCCs	Calibration Check Compounds
CCS	Contract Compliance Screening
CCV	Continuing Calibration Verification
CF	Calibration Factor
CLP	Contract Laboratory Program
CN	Cyanide
COC	Chain of Custody
CRDL	Contract Required Detection Limit
CRQL	Contract Required Quantitation Limit
CSF	Complete SDG File
CV	Cold Vapor
%D	Percent Difference
DAS	Delivery of Analytical Services
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl (Pesticide/PCB/ surrogate compound)
DFTPP	Decafluorotriphenylphosphine (semivolatile instrument performance check)
DSF	Data Summary Form
DVA	Data Validation Assessment
ECD	Electron-Capture Detector
EICP	Extended Ion Current Profile
EPA	United States Environmental Protection Agency
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas Chromatography
GC/EC	Gas Chromatography/Electron Capture
GC/MS	Gas Chromatography/Mass Spectra
GPC	Gel Permeation Chromatography (Clean Up)
ICAL	Initial Calibration
ICB	Initial Calibration Blank
ICP	Inductively Coupled Plasma
ICS	Interference Check Sample
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit

## HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

IRDA	Inorganic Regional Data Assessment
IS	Internal Standard
LCS	Laboratory Control Sample
LCL	Lower Control Limit
MCL	Maximum Contamination Level
MDL	Method Detection Limit
MS/MSD	Matrix Spike/Matrix Spike Duplicate
m/z	The ratio of mass (m) to charge (z) of ions measured by GC/MS
OADS	Organic Analysis Data Sheet (Form 1)
ORDA	Organic Regional Data Assessment
PB	Preparation Blank
PCB	Poly Chlorinated Biphenyl
PEM	Performance Evaluation Mixture
PFAS	Polyfluorinated Alkyl Substances (PFAS analytes are listed below)
PRP	Potential Responsible Party
QA/QC	Quality Assurance/Quality Control
QAPjP	Quality Assurance Project Plan
QC	Quality Control
%R	Percent Recovery of spiked amount
RAS	Routine Analytical Services
RF	Response Factor
RIC	Reconstructed Ion Chromatogram
RPD	Relative Percent Difference
RRF	Relative Response Factor
RSD	Relative Standard Deviation
RT	Retention Time
RTW	Retention Time Window
SDG	Sample Delivery Group
SMC	System Monitoring Compound
SMO	Sample Management Office
SOP	Standard Operation Procedures
SOW	Statement of Work
SPCCs	System Performance Check Compounds
SSL	Samples Shipping Log
SVOA	Semivolatile Organic Analyte
TAL	Target Analyte List
TCL	Target Compound List
TCX	Tetrachloro-m-Xylene (Pesticide/PCB surrogate compound)
TIC	Tentatively Identified Compound
TPH	Total Petroleum Hydrocarbons
TR	Traffic Report
UCL	Upper Control Limit
VOA	Volatile Organic Analyte
VTSR	Validated Time of Sample Receipt

### Polyfluorinated Alkyl Substances (PFAS) Acronyms

PFBA	Perfluorobutanoic acid
PFPeA	Perfluoropentanoic acid
PFHxA	Perfluorohexanoic acid
PFHpA	Perfluoroheptanoic acid
PFOA	Perfluorooctanoic acid
PFNA	Perfluorononanoic acid
PFDA	Perfluorodecanoic acid
PFUnA	Perfluoroundecanoic acid
PFDoA	Perfluorododecanoic acid
PFTriA or PFTrDA	Perfluorotridecanoic acid
PFTeA or PFTA	Perfluorotetradecanoic acid
PFBS	Perfluorobutanesulfonic acid
PPeS	Perfluoropentanesulfonic acid
PFHxS	Perfluorohexanesulfonic acid
PFHpS	Perfluoroheptanesulfonic acid
PFOS	Perfluorooctanesulfonic acid
PFNS	Perfluorononanesulfonic acid
PFDS	Perfluorodecanesulfonic acid
FOSA	Perfluorooctane Sulfonamide
NMeFOSAA	N-methyl perfluorooctane sulfonamidoacetic acid
NEtFOSAA	N-ethyl perfluorooctane sulfonamidoacetic acid
4:2 FTS or 4:2	1H, 1H, 2H, 2H-perfluorohexanesulfonic acid
6:2 FTS or 6:2	1H, 1H, 2H, 2H-perfluorooctanesulfonic acid or 6:2 Fluorotelomersulfonate
8:2 FTS or 8:2	1H, 1H, 2H, 2H-perfluorodecanesulfonic acid or 8:2 Fluorotelomersulfonate

### Terms:

**Associated Samples:** Any sample related to a particular QC analysis.

**Case:** A finite, usually predetermined number of samples collected over a given time period for a particular site. A Case consists of one or more Sample Delivery Group(s).

**Continuing Calibration Blank (CCB):** A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

**Continuing Calibration Verification (CCV):** A deionized water sample run every ten (10) samples designed to detect any carryover contamination.

**Contract Compliance Screening (CCS):** A process in which the SMO inspects the data for contractual compliance and provides EMSL-LV laboratories and the Regions with their findings.

**Contractual Holding Time:** The time from VTSR (validated time of sample receipt) to laboratory extraction and /or analysis.

**Data Validation Qualifier (DVQ):** This refers to the column on the data summary form in which EPA Region III and other qualifiers have been placed by the data validator.

**Data Validation Result (DVR):** This refers to the column on the data summary form used to report results that have been modified by the data validator. A result in the DVR column that is qualified "U" indicates a modification of the reporting limit.

**Field Blank Field blanks** are intended to identify contaminants that may have been introduced in the field. Examples are rinsate blank (RB), field blanks (FB) and trip blank (TB).

**Field Duplicate:** A duplicate sample generated in the field; not in the laboratory.

**Initial Calibration (ICAL):** The establishment of a calibration curve with the appropriate number of standards and concentration ranges. The calibration curve plots absorbances and/or emissions versus concentration of the standards.

**Initial Calibration Blank (ICB):** First blank run after the calibration curve.

**Initial Calibration Verification (ICV):** First standard run after the calibration curve.

**Matrix Spike/Matrix Spike Duplicate (MS/MSD):** Introduction of a known concentration of a compound into a sample to provide information about the effect of sample matrix on the extraction and/or measurement methodology.

**Post Digestion Spike:** The addition of known amount of standard after digestion. (Also identified as analytical spike, or spike, for furnace analyses).

**Preparation Blank (PB):** Blank taken through the digestion process to detect internal laboratory contamination.

**Performance Evaluation Mixture:** A standard used to verify that the ICAL sequence is stable throughout the GC or GC/MS analyses.

**Sample Delivery Group (SDG):** Defined by one of the following, whichever occurs first:  
- case of sample  
- each twenty field samples in a case or  
- each 14-day calendar period during which field samples in a case are received, beginning with the receipt of the first sample in the SDG.

**Serial Dilution:** A sample run at a specific dilution to determine whether any significant chemical or physical interferences exist due to sample matrix effect, for ICP only.

**Technical Holding Time:** The time from sample collection to laboratory extraction and /or analysis.

## **2. GLOSSARY OF DATA VALIDATION QUALIFIERS**

*(Used in the QA/QC Reviews for USEPA Region II)*

The qualifiers listed below are used for data usability summary report (DUSR) purposes. However, it is important to note that the data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

- U = Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
- R = Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
- N = Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
- J = Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
- J- = Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
- J+ = Analyte is present. Reported value may be biased high and associated with a higher level of uncertainty than is normally expected with the analytical method.
- UJ = Not detected, quantitation limit may be inaccurate or imprecise.

## **3. NYS DEC DATA USABILITY SUMMARY PARAMETERS**

The parameters listed below are used for data usability summary report (DUSR) evaluation.

<i>Samples Handling and Management</i>
<i>Data Validation References</i>
<i>Laboratory Data Packages</i>
<i>Laboratory Analytical Methods</i>
<i>DATA Usability Assessment Summary</i>

#### **4. DATA VALIDATION SUMMARY PARAMETERS**

The parameters listed below are used for data validation evaluation.

	<i>Organic Data</i>	<i>Inorganic Data</i>
<i>Data Completeness</i>	X	X
<i>Holding Time</i>	X	X
<i>Chromatographic Behavior</i>	X	
<i>Compound Identification</i>	X	X
<i>GC/MS Tuning and Mass Calibration</i>	X	
<i>Initial Calibration Verification</i>	X	X
<i>Continuing Calibration</i>	X	X
<i>Method Blank Verification</i>	X	X
<i>Internal Standard Area Summary</i>	X	
<i>Surrogate Recoveries</i>	X	
<i>Matrix Spike/Matrix Spike Duplicate</i>	X	X
<i>Laboratory Control Sample (LCS)</i>	X	X
<i>Laboratory and Field Duplicates</i>	X	X
<i>ICP Interference Check Sample results</i>		X
<i>ICP Serial Dilution results</i>		X
<i>ICP CRDL Standard</i>		X
<i>Post Digestion Spike Analysis</i>		X
<i>Analyte Quantitation</i>		X

#### **5. DATA VALIDATION ACTIVE STANDARD OPERATING PROCEDURES (SOPs)**

#### **Region 2 Quality Assurance Guidance and Standard Operating Procedures**

<https://www.epa.gov/quality/region-2-quality-assurance-guidance-and-standard-operating-procedures>

#### **Inorganic Validation SOPs**

<b>SOP #</b>	<b>Description</b>	<b>Date</b>
SOP HW-3a ICP-AES Rev1 w/CRF	CLP ISM02.2 ICP-AES	September 2016
SOP HW-3b ICP-MS Rev1 w/CRF	CLP ISM02.2 ICP-MS	September 2016
SOP HW-3c Hg & CN Rev1 w/CRF	CLP ISM02.2 Mercury and Cyanide	September 2016

**Organic Validation SOPs - CLP**

<b>SOP #</b>	<b>Description</b>	<b>Date</b>
SOP HW-33A Low Medium VOA Rev 1 w/CRF	EPA CLP Method SOM02.2 for Low/Medium VOA	September 2016
SOP HW-34A Trace VOA Rev1 w/CRF	EPA CLP Method SOM02.2 for Trace VOA	September 2016
SOP HW-35A Rev1 w/CRF	EPA CLP Method SOM02.2 for Semi-Volatiles	September 2016
SOP HW-36A Rev 1 w/CRF	EPA CLP Method SOM02.2 for Pesticides	October 2016
SOP HW-37A Rev 0 w/CRF	EPA CLP Method SOM02.2 for PCBs Aroclor	June 2015

**Organic Validation SOPs – Other**

<b>SOP #</b>	<b>Description</b>	<b>Date</b>
SOP HW-11 Rev 3	SW-846 Method 8280 for Polychlorinated Dibenzodioxins/Polychlorinated Dibenzofurans	December 2010
SOP HW-16 Rev. 2.1	SW-846 Method 8330A Nitroaromatics and Nitroamines by HPLC	December 2010
SOP HW-17 Rev.3.1	SW-846 Method 8151A for Chlorinated Herbicides by GC	December 2010
SOP HW-19 Rev. 1.1	SW-846 Method 8290 for Polychlorinated dibenzodioxins (PCDDs) and Polychlorinated Dibenzofurans (PCDFs) by HRMS	December 2010
SOP HW-22 Rev. 5	SW-846 Method 8270D for Semivolatile Organic Compounds by GC/MS	December 2010
SOP HW-25 Rev. 3	EPA Method 1613, Revision B Tetra-through Octa-chlorinated Dioxins and Furans by Isotope Dilution by HRGC/HRMS	December 2010
SOP HWSS 24 Rev. 4	SW-846 Methods 8260B & 8260C for VOCs by GC/MS	October 2014
SOP HW-29 Rev. 2	EPA Method 524.2 for Purgeable Organic Compounds in Water by GC/MS	November 2010
SOP HW-31 Rev. 6	TO-15 Air Analysis for VOCs	September 2016
SOP HW-44 Rev. 1.1	SW-846 Method 8081B for Pesticide Compounds Organochlorine Pesticides by GC	December 2010
SOP HW-46 Rev. 1	EPA Method 1668 A for Chlorinated Biphenyl Congeners and EPA Non-RAS CBC01.0	September 2008

# HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

SOP HW-55 Rev. 2 w/CRF	EPA Non-RAS DLM02.0 for Tetra -through Octa-Chlorinated Dioxins and Furans by Isotope Dilution	December 2008
------------------------	--	---------------

## **6. DATA VALIDATION REPORT NARRATIVE**

<b>NYS DEC Data Usability Summary Report</b>	<b>SDG # 22B0574</b>
--	----------------------

NYS DEC Data Usability Summary Report

SDG # 22B0574

<b>Site Location</b>	210011-152 Graham Avenue, Brooklyn NY
<b>Data Validation for Analytical Methods</b>	Volatile Organic Compounds in Air by GC/MS <b>EPA TO15 Method</b>
<b>Number of Samples &amp; Matrix</b>	4 Indoor Ambient Air, 1 Outdoor Ambient Air and 1 Air Samples
<b>Sampled On</b>	02/11/2022
<b>Analytical Laboratory</b>	York Analytical Laboratories, Inc
<b>Laboratory Report Number</b>	22B0574 (01-02-03-04-05-06)
<b>Data Validation Reviewer</b>	Hanibal Tayeh, Ph.D.
<b>Data Validation Completed</b>	February 27 <sup>th</sup> , 2022

- SAMPLE HANDLING AND MANAGEMENT:** As per the chain of custody (COC) record included in this specific SDG, samples associated with this data set were collected on 02/11/2022 using the proper containers (Summa Canisters) in accordance with the Sample Integrity and Preservation section of USEPA TO15 method and received by the laboratory on 02/11/2022. The attached chain of custody (COC) displays a satisfactory record in terms of client and project information, site location, field sampling details (sampler, collection date and time), sample identification and matrix, preservation, required analysis, deliverable type and date, data management process and comparison.

Client Sample Identification	Laboratory Sample Identification
IA-7_20220211	22B0574-01
IA-8_20220211	22B0574-02
IA-9_20220211	22B0574-03
IA-10_20220211	22B0574-04
OA-2_20220211	22B0574-05
EE-1_20220211	22B0574-06

- DATA VALIDATION REFERENCES:** The volatile organic compounds in air data validation is conducted in accordance with the guidelines in the USEPA Hazardous Waste Support Section-SOP NO. HW-31, Revision 6 Analysis of Volatile Organic Compounds in Air Contained in Canisters by Method T0-15 and the method and QC Criteria specified in NYSDEC ASP Documents.
- LABORATORY DATA PACKAGES:** The laboratory data packages received from the laboratory for the stated SDG above is considered satisfactory in terms of pagination, quality control narration and completeness. Each package contained the laboratory quality assurance summary report, quality control summary data, sample nonconformance summaries, the required data package forms and tables in accordance with NYSDEC ASP documents, instrument tuning information, sample preparation and analysis batch and all associated standard, quality control and sample raw data.

## HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

- **LABORATORY ANALYTICAL METHODS:** A peer review of the quality assurance criteria listed in the laboratory data package shows with good degree of certainty the laboratory's compliance with the procedures set forth in the required USEPA analytical methods as indicated in the chain of custody. No deviations from the said methods have been noticed.
- **DATA USABILITY ASSESSMENT SUMMARY:** The overall data package assessment provided by the laboratory for the stated above sample delivery group (SDG) suggests acceptable laboratory performances of the required methods. All samples were successfully analyzed for all target compounds in accordance with the Quality Assurance/Quality Control (QA/QC) requirements for the USEPA analytical methods used for the analyses. In view of the data usability and completeness, the minor issues listed below regarding biases identified during data validation should be taken into high degree of consideration. They are as follows:

### ✓ Volatile Organic Compounds in Air by GC/MS-EPA TO15 Method

	<b>Data Assessment Judgement</b> <i>(Refer to Data Validation Assessment of a specific method for technical reasoning and argument behind such judgement)</i>	DVA Reference
1	-Detected results of 1,4-Dioxane, 2-Butanone, Acetone, cis-1,2-Dichloroethylene, Isopropanol, Tetrahydrofuran, Vinyl Chloride, in samples IA-7_20220211, IA-8_20220211, IA-9_20220211, IA-10_20220211, OA-2_20220211, EE-1_20220211, should be qualified estimated (J).	ICV
2	-Detected results of Acetone, Isopropanol, in samples IA-7_20220211, IA-8_20220211, IA-9_20220211, IA-10_20220211, OA-2_20220211, should be qualified estimated (J). -Detected results of Acetone, Hexachlorobutadiene, Isopropanol, Vinyl Chloride, in samples EE-1_20220211, and laboratory duplicate (BB22212-DUP1), should be qualified estimated (J).	CCV
3	-Detected results for Isopropanol that are less than 2X the CRQL in samples IA-7_20220211, IA-8_20220211, IA-9_20220211, IA-10_20220211, OA-2_20220211, should be reported as Not Detected (U). -Detected results for Isopropanol that are less than 2X the blank concentration (0.57 ug/m <sup>3</sup> ) in samples EE-1_20220211, and laboratory duplicate (BB22212-DUP1), should be reported as Not Detected (U).	Method Blank

Data Validation Assessment

SDG # 22B0574

<b>Data Validation for Analytical Method</b>	Volatile Organic Compounds in Air by GC/MS <b>EPA TO15 Method</b>
<b>Number of Samples &amp; Matrix</b>	4 Indoor Ambient Air, 1 Outdoor Ambient Air and 1 Air Samples
<b>Sampled On</b>	02/11/2022
<b>Analytical Laboratory</b>	York Analytical Laboratories, Inc
<b>Laboratory Report Number</b>	22B0574 (01-02-03-04-05-06)
<b>Data Validation Reviewer</b>	Hanibal Tayeh, Ph.D.
<b>Data Validation Completed</b>	February 27 <sup>th</sup> , 2022

- Data Completeness:** The data deliverable package provided by the laboratory in accordance with the ASP B deliverable standards is considered complete.
- Holding Time:** According to the laboratory quality assurance report and its associated data package, the samples set listed in this SDG number were analyzed within the method holding times as recommended by USEPA and SW846 Methods.
- Chromatographic Behavior:** This laboratory data package including but not limited to the standards, quality control samples and field sample analyses raw data (data reduction and chromatograms) display with good degree of certainty the laboratory's full compliance with the chromatographic criteria set forth in the USEPA and SW846 methods.
- Compound Identification:** Target compounds, internal standards and surrogates were thoroughly checked and found to be within the gas chromatograph/mass spectrometry (GCMS) method quantitation limits and in accordance with the USEPA and SW846 methods for mass spectra identification and quantification using both the primary and secondary ions as defined in the method.
- GC/MS Tuning and Mass Calibration:** The BFB tuning criteria were within control limits as outlined in the EPA and SW846 methods.
- Initial Calibration Verification (ICV):** As indicated in the method calibration criteria, the initial calibration standards of this data set have been evaluated for compliance with method criteria for Average Response Factor (RRFs) and Percent Relative Standard Deviation (%RSDs) and in some cases the coefficient of determination COD: (Average RRF > 0.010 for poor response volatile target compounds and > 0.050 for all other volatile target compounds. %RSD must be < 30% as the allowable maximum, and the coefficient of determination (COD) must be greater than 0.995). This evaluation displays the following:  
-The initial calibration (YA20007 on 12/27/2021) met the required criteria for the Average Response Factor (RRFs) and %RSD Compliance (RRF > 0.010 for poor response

volatile target compounds and RRF > 0.050 for all other volatile target compounds; %RSD < 30% as the allowable maximum), EXCEPT for 1,4-Dioxane, 2-Butanone, Acetone, cis-1,2-Dichloroethylene, Isopropanol, Tetrahydrofuran, Vinyl Chloride, where %RSDs were above the allowable maximums.

A second source calibration standard (Y1L2957-SCV1) was analyzed on 12/27/2021 and confirmed initial calibration full compliance with the method criteria. %Ds were below the allowable maximum (%Ds <30%).

**Quality Judgement:**

-Detected results of 1,4-Dioxane, 2-Butanone, Acetone, cis-1,2-Dichloroethylene, Isopropanol, Tetrahydrofuran, Vinyl Chloride, in samples IA-7 20220211, IA-8 20220211, IA-9 20220211, IA-10 20220211, OA-2 20220211, EE-1 20220211, should be qualified estimated (J).

- **Continuing Calibration Verification (CCV):** As indicated in the method calibration criteria, the continuing calibration standard of this data set has been evaluated for compliance with method criteria for Relative Response Factor (RRFs) and Percent Difference (%Ds) and confirmed the following:

-The continuing calibration (Y2B1447-CCV1 on 02/13/2022) met the required criteria for Response Factor (RRFs) and %Ds (RRF > 0.010 for poor response volatile target compounds and RRF > 0.050 for all other volatile target compounds; %D < 30% as the allowable maximum), EXCEPT for Acetone, Isopropanol, where %Ds were above the allowable maximums.

-The continuing calibration (Y2B1642-CCV1 on 02/15/2022) met the required criteria for Response Factor (RRFs) and %Ds (RRF > 0.010 for poor response volatile target compounds and RRF > 0.050 for all other volatile target compounds; %D < 30% as the allowable maximum), EXCEPT for Acetone, Isopropanol, where %Ds were above the allowable maximums.

-The continuing calibration (Y2B1836-CCV1 on 02/17/2022) met the required criteria for Response Factor (RRFs) and %Ds (RRF > 0.010 for poor response volatile target compounds and RRF > 0.050 for all other volatile target compounds; %D < 30% as the allowable maximum), EXCEPT for Acetone, Hexachlorobutadiene, Isopropanol, Vinyl Chloride, where %Ds were above the allowable maximums.

No action is required when less than 20% of the continuing calibration target compounds are outside the method control limits provide no Average Relative Response Factor (RRFs) is less than 0.01 for all target compounds.

**Quality Judgement:**

-Detected results of Acetone, Isopropanol, in samples IA-7 20220211, IA-8 20220211, IA-9 20220211, IA-10 20220211, OA-2 20220211, should be qualified estimated (J).  
-Detected results of Acetone, Hexachlorobutadiene, Isopropanol, Vinyl Chloride, in samples EE-1 20220211, and laboratory duplicate (BB22212-DUP1), should be qualified estimated (J).

## HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

- **Method Blank Verification:** Method blank analyses included in this data set of laboratory data package concluded no detection for the target compounds. EXCEPT:
  - In (BB21858-BLK1 on 02/13/2022), Isopropanol was qualified J (0.49 ug/m<sup>3</sup>).
  - In (BB21894-BLK1 on 02/15/2022), Isopropanol was qualified J (0.49 ug/m<sup>3</sup>).
  - In (BB22212-BLK1 on 02/17/2022), Isopropanol was detected at 0.57 ug/m<sup>3</sup>.

### Quality Judgement:

- Detected results for Isopropanol that are less than 2X the CRQL in samples IA-7\_20220211, IA-8\_20220211, IA-9\_20220211, IA-10\_20220211, OA-2\_20220211, should be reported as Not Detected (U).
- Detected results for Isopropanol that are less than 2X the blank concentration (0.57 ug/m<sup>3</sup>) in samples EE-1\_20220211, and laboratory duplicate (BB22212-DUP1), should be reported as Not Detected (U).

- **Internal Standard Area Summary (IS):** As indicated in the method internal standard criteria, the laboratory data package for the stated SDG confirmed the following:
  - The internal standard retention times were within method control limits.
  - The internal standard areas were within method control limits EXCEPT for:
    - In Cal Standard (Y1C0832-CALA), %area for IS Bromochloromethane was above the control limit.
    - Internal Standards for all samples and QCs were within method control limits.

Quality Judgement: No actions are required.

- **Surrogate Recoveries (SR):** An evaluation of the surrogate standard behavior in the SDG data set concluded that the surrogate recoveries were within method control limits (70% < SURR <130%).

Surrogate summary was not included in the data package. Below is the Surrogate table evaluation that is generated from the samples raw data:

Sample Identification	Lab Sample Identification	Surrogate Standard ID	Area Response	% Surrogate	Control Limits (%)
IA-7_20220211	22B0574-01	p-Bromofluorobenzene	1011384	100	70-130%
IA-8_20220211	22B0574-02	p-Bromofluorobenzene	987433	100	70-130%
IA-9_20220211	22B0574-03	p-Bromofluorobenzene	1197068	100	70-130%
IA-10_20220211	22B0574-04	p-Bromofluorobenzene	1261780	94	70-130%
OA-2_20220211	22B0574-05	p-Bromofluorobenzene	1299373	92	70-130%
EE-1_20220211	22B0574-06	p-Bromofluorobenzene	1050087	97	70-130%

Quality Judgement: No actions are required.

- **Laboratory Control Sample (LCS):** As required by the method quality assurance/quality control criteria, the laboratory control sample in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:
  - The percent Recoveries (%Rs) for target TO15 analysis in (BB21858-BS1, BB21894-BS1, BB22212-BS1), were within the method control limits (70-130%).

Quality Judgement: No actions are required.

## HANIBAL TAYEH, Ph.D. - Data Validation and Forensic Geochemistry Expert

- **Laboratory and Field Duplicates (DUP):** As required by the method quality assurance/quality control criteria, the laboratory duplicate sample in this data set has been evaluated for method compliance purposes. The following summarizes this evaluation:
  - No field duplicate sample was included in this data set.
  - Three (3) laboratory duplicates (BB21858-DUP1/IA-8\_20220211), (BB21894-DUP1/Duplicate), (BB22212-DUP1/Duplicate), were analyzed with this SDG set.
  - %RPDs were below the allowable maximum.

Quality Judgement: No actions are required.
- **Canister Integrity:** According to the chain of custody record for this set of samples, the canisters were received in the laboratory and displayed a residual vacuum below zero as required by EPA TO15 method.
- **Analyte Quantitation:** Target compounds were quantitated using the proper method calculation criteria in accordance with the USEPA and SW846 methods procedures and guidelines.

(All associated QC forms, tables, chromatograms and others will be attached after each Data validation Assessment summary per analytical method of the titled SDG number)

## **ATTACHMENT**

**(All Associated Quality Control Forms, Tables,  
Chromatograms, Raw Data)**

# AIR Standards Data

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Calibration: YA20007 Instrument: TO15\_AIR2  
 Calibration Date: 12/27/21 07:05

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
1,1,1,2-Tetrachloroethane	0.6961175	11.34087	18.93175	2.320679E-02			30	
1,1,1-Trichloroethane	2.530291	8.876937	12.48963	5.537402E-02			30	
1,1,2,2-Tetrachloroethane	0.7856572	9.959481	20.74675	1.968106E-02			30	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.736281	6.192395	8.240875	0.1545417			30	
1,1,2-Trichloroethane	0.3516272	6.588353	16.78075	2.785723E-02			30	
1,1-Dichloroethane	1.527275	6.049536	10.481	8.674557E-02			30	
1,1-Dichloroethylene	1.634705	17.44724	8.4637	0.1549497			30	
1,2,4-Trichlorobenzene	0.9174957	11.65278	26.95937	1.638902E-02			30	
1,2,4-Trimethylbenzene	1.861666	17.66539	22.46712	2.543618E-02			30	
1,2-Dibromoethane	0.5796995	4.358973	18.08437	2.322352E-02			30	
1,2-Dichlorobenzene	1.276015	21.24758	24.2065	2.047737E-02			30	
1,2-Dichloroethane	1.849494	16.71802	13.02825	3.344041E-02			30	
1,2-Dichloropropane	0.2784504	11.37597	14.41775	4.004774E-02			30	
1,2-Dichlorotetrafluoroethane	2.081503	8.203039	5.251125	0.3531114			30	
1,3,5-Trimethylbenzene	1.843826	19.65443	21.64213	1.687256E-02			30	
1,3-Butadiene	0.5691718	14.38694	5.811875	0.3325951			30	
1,3-Dichlorobenzene	1.266261	17.69091	23.30825	2.574045E-02			30	
1,3-Dichloropropane	0.4952109	4.444972	17.20613	2.145087E-02			30	
1,4-Dichlorobenzene	1.243437	14.1629	23.49938	2.028152E-02			30	
1,4-Dioxane	0.2318788	34.3139	14.74425	4.037904E-02			30	*
2-Butanone	2.255726	30.95489	11.09687	7.920011E-02			30	*
2-Hexanone	0.8368822	26.95479	16.789	2.764001E-02			30	
3-Chloropropene	1.010255	5.557629	9.064375	0.1096063			30	
4-Methyl-2-pentanone	0.8209751	20.73182	15.32313	0.0202588			30	
Acetone	2.444582	54.97324	8.099875	0.1617261			30	*
Acrolein	0.3643327	17.9787	7.9865	0.1988463			30	
Acrylonitrile	0.7184572	26.41102	9.306125	0.1195297			30	
Benzene	2.240419	10.80595	13.15675	4.546656E-02			30	
Benzyl chloride	1.39306	9.890115	23.65062	1.945564E-02			30	
Bromodichloromethane	0.7212105	8.522295	14.78062	4.002666E-02			30	
Bromoform	0.8319167	8.952844	20.493	0.0109502			30	
Bromomethane	0.6973916	8.841202	6.60875	0.3169968			30	

## FORM VI

## INITIAL CALIBRATION DATA (Continued)

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Calibration: YA20007 Instrument: TO15\_AIR2  
 Calibration Date: 12/27/21 07:05

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
Carbon disulfide	1.800792	4.085587	9.341375	0.1475471			30	
Carbon tetrachloride	2.611789	8.946658	12.9514	8.247844E-02			30	
Chlorobenzene	1.221476	25.21242	18.88075	0.0200471			30	
Chloroethane	0.330236	6.151184	6.78	0.2734657			30	
Chloroform	2.077095	8.624301	11.754	7.072749E-02			30	
Chloromethane	0.5641423	10.93251	5.461875	0.3711339			30	
cis-1,2-Dichloroethylene	1.48788	31.96526	11.4772	0.1222235			30	*
cis-1,3-Dichloropropylene	0.4647924	5.519931	15.6715	3.103245E-02			30	
Cyclohexane	1.192716	6.120268	12.65762	7.271308E-02			30	
Dibromochloromethane	0.8066397	7.55688	17.71062	2.727988E-02			30	
Dichlorodifluoromethane	2.73077	12.00879	4.97475	0.4127539			30	
Ethanol							30	
Ethyl acetate	2.070197	7.764685	11.4	6.126835E-02			30	
Ethyl Benzene	1.938598	23.70303	18.992	2.388813E-02			30	
Hexachlorobutadiene	1.009574	29.89273	27.23114	1.162256E-02			30	
Isopropanol	3.136335	69.05022	7.889625	0.1687218			30	*
Isopropylbenzene	2.143447	17.11945	20.5735	8.924297E-03			30	
Methyl Methacrylate	0.2604003	6.461918	14.43588	0.026088			30	
Methyl tert-butyl ether (MTBE)	2.840828	17.23528	9.62975	0.1271238			30	
Methylene chloride	1.056092	18.1476	9.213875	0.1683151			30	
Naphthalene	2.476677	19.63644	27.34875	1.241107E-02			30	
n-Butylbenzene	1.873701	14.84086	23.94962	0.0115471			30	
n-Heptane	1.509931	5.533632	13.179	4.289307E-02			30	
n-Hexane	1.098956	4.387232	10.10863	9.902204E-02			30	
n-Propylbenzene	2.460369	20.27756	21.33575	0.0193601			30	
o-Xylene	1.601927	24.32665	19.91987	1.295477E-02			30	
p- & m- Xylenes	1.572614	26.95223	19.13875	2.366471E-02			30	
p-Ethyltoluene	2.059603	13.94775	21.55737	1.745217E-02			30	
p-Isopropyltoluene	2.169026	10.20122	23.14025	2.208095E-02			30	
Propylene	0.4035767	13.00647	4.904375	0.4210836			30	
sec-Butylbenzene	2.40925	13.25364	22.87212	1.256752E-02			30	
Styrene	1.084627	16.95437	19.93663	2.131796E-02			30	

**FORM VI****INITIAL CALIBRATION DATA (Continued)****EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
Calibration: YA20007 Instrument: TO15\_AIR2  
Calibration Date: 12/27/21 07:05

Compound	Mean RF	RF RSD	Mean RT	RT RSD	Linear r	Quad COD	LIMIT	Q
tert-Butylbenzene	1.94863	11.97994	22.397	1.407817E-02			30	
Tetrachloroethylene	0.6075507	8.085819	17.51675	2.924157E-02			30	
Tetrahydrofuran	1.211618	32.51445	12.08362	0.1008175			30	*
Toluene	1.119945	17.2762	16.3255	2.471759E-02			30	
trans-1,2-Dichloroethylene	1.274601	5.669332	9.816875	8.179047E-02			30	
trans-1,3-Dichloropropylene	0.504787	4.753186	16.48587	3.707831E-02			30	
Trichloroethylene	0.4536306	22.95597	14.1889	3.805898E-02			30	
Trichlorofluoromethane (Freon 11)	2.977374	11.85606	7.358625	0.2395959			30	
Vinyl acetate	2.267537	6.129492	10.43587	9.449851E-02			30	
Vinyl bromide	0.7009948	5.816655	7.24125	0.2472566			30	
Vinyl Chloride	0.8358138	34.17132	5.7286	0.3430413			30	*

## FORM VII

## CONTINUING CALIBRATION CHECK

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218738.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1447 Injection Date: 02/13/22  
 Lab Sample ID: Y2B1447-CCV1 Injection Time: 20:10

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	10.0	10.2	0.6961175	0.7081501		1.7	30
1,1,1-Trichloroethane	A	10.0	9.80	2.530291	2.48086		-2.0	30
1,1,2,2-Tetrachloroethane	A	10.0	10.0	0.7856572	0.7885791		0.4	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	9.90	1.736281	1.718425		-1.0	30
1,1,2-Trichloroethane	A	10.0	10.3	0.3516272	0.3635348		3.4	30
1,1-Dichloroethane	A	10.0	9.85	1.527275	1.503906		-1.5	30
1,1-Dichloroethylene	A	10.0	9.39	1.634705	1.534249		-6.1	30
1,2,4-Trichlorobenzene	A	10.0	8.22	0.9174957	0.7545239		-17.8	30
1,2,4-Trimethylbenzene	A	10.0	9.27	1.861666	1.726204		-7.3	30
1,2-Dibromoethane	A	10.0	10.5	0.5796995	0.6102247		5.3	30
1,2-Dichlorobenzene	A	10.0	8.54	1.276015	1.090159		-14.6	30
1,2-Dichloroethane	A	10.0	9.26	1.849494	1.711714		-7.4	30
1,2-Dichloropropane	A	10.0	9.92	0.2784504	0.27615		-0.8	30
1,2-Dichlorotetrafluoroethane	A	10.0	9.91	2.081503	2.062142		-0.9	30
1,3,5-Trimethylbenzene	A	10.0	9.26	1.843826	1.706692		-7.4	30
1,3-Butadiene	A	10.0	8.99	0.5691718	0.5118963		-10.1	30
1,3-Dichlorobenzene	A	10.0	8.72	1.266261	1.103608		-12.8	30
1,3-Dichloropropane	A	10.0	10.6	0.4952109	0.5230478		5.6	30
1,4-Dichlorobenzene	A	10.0	8.82	1.243437	1.097029		-11.8	30
1,4-Dioxane	A	10.0	10.2	0.2318788	0.1771782		-23.6	30
2-Butanone	A	10.0	10.2	2.255726	1.813109		-19.6	30
2-Hexanone	A	10.0	8.81	0.8368822	0.7375152		-11.9	30
3-Chloropropene	A	10.0	10.3	1.010255	1.044184		3.4	30
4-Methyl-2-pentanone	A	10.0	9.43	0.8209751	0.7745724		-5.7	30
Acetone	A	10.0	10.7	2.444582	1.603837		-34.4	30 *
Acrylonitrile	A	10.0	8.31	0.7184572	0.5971139		-16.9	30
Benzene	A	10.0	8.95	2.240419	2.004545		-10.5	30
Benzyl chloride	A	10.0	10.4	1.39306	1.453148		4.3	30
Bromodichloromethane	A	10.0	10.6	0.7212105	0.7625766		5.7	30

## FORM VII

## CONTINUING CALIBRATION CHECK

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218738.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1447 Injection Date: 02/13/22  
 Lab Sample ID: Y2B1447-CCV1 Injection Time: 20:10

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Bromoform	A	10.0	10.2	0.8319167	0.8441828		1.5	30
Bromomethane	A	10.0	9.86	0.6973916	0.687828		-1.4	30
Carbon disulfide	A	10.0	9.83	1.800792	1.770211		-1.7	30
Carbon tetrachloride	A	10.0	9.83	2.611789	2.568448		-1.7	30
Chlorobenzene	A	10.0	8.67	1.221476	1.059204		-13.3	30
Chloroethane	A	10.0	10.4	0.330236	0.3440316		4.2	30
Chloroform	A	10.0	9.66	2.077095	2.006062		-3.4	30
Chloromethane	A	10.0	9.78	0.5641423	0.551867		-2.2	30
cis-1,2-Dichloroethylene	A	10.0	9.96	1.48788	1.222369		-17.8	30
cis-1,3-Dichloropropylene	A	10.0	10.9	0.4647924	0.5054482		8.7	30
Cyclohexane	A	10.0	10.2	1.192716	1.213252		1.7	30
Dibromochloromethane	A	10.0	10.0	0.8066397	0.810295		0.5	30
Dichlorodifluoromethane	A	10.0	10.0	2.73077	2.733851		0.1	30
Ethyl acetate	A	10.0	9.88	2.070197	2.045722		-1.2	30
Ethyl Benzene	A	10.0	9.07	1.938598	1.757916		-9.3	30
Hexachlorobutadiene	A	10.0	9.87	1.009574	0.7742131		-23.3	30
Isopropanol	A	10.0	11.2	3.136335	1.904436		-39.3	30 *
Methyl Methacrylate	A	10.0	10.8	0.2604003	0.2803035		7.6	30
Methyl tert-butyl ether (MTBE)	A	10.0	8.32	2.840828	2.363113		-16.8	30
Methylene chloride	A	10.0	9.58	1.056092	1.011643		-4.2	30
n-Heptane	A	10.0	10.2	1.509931	1.54783		2.5	30
n-Hexane	A	10.0	10.4	1.098956	1.140483		3.8	30
o-Xylene	A	10.0	9.00	1.601927	1.441278		-10.0	30
p- & m- Xylenes	A	20.0	17.9	1.572614	1.410893		-10.3	30
p-Ethyltoluene	A	10.0	9.53	2.059603	1.963011		-4.7	30
Propylene	A	10.0	10.8	0.4035767	0.4348862		7.8	30
Styrene	A	10.0	8.94	1.084627	0.9701712		-10.6	30
Tetrachloroethylene	A	10.0	9.90	0.6075507	0.6015779		-1.0	30
Tetrahydrofuran	A	10.0	10.5	1.211618	0.9657121		-20.3	30

**FORM VII****CONTINUING CALIBRATION CHECK****EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218738.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1447 Injection Date: 02/13/22  
 Lab Sample ID: Y2B1447-CCV1 Injection Time: 20:10

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toluene	A	10.0	9.36	1.119945	1.047981		-6.4	30
trans-1,2-Dichloroethylene	A	10.0	9.98	1.274601	1.271906		-0.2	30
trans-1,3-Dichloropropylene	A	10.0	10.7	0.504787	0.5418301		7.3	30
Trichloroethylene	A	10.0	9.03	0.4536306	0.4094868		-9.7	30
Trichlorofluoromethane (Freon 11)	A	10.0	10.1	2.977374	3.018458		1.4	30
Vinyl acetate	A	10.0	9.95	2.267537	2.256835		-0.5	30
Vinyl bromide	A	10.0	9.73	0.7009948	0.6822938		-2.7	30
Vinyl Chloride	A	10.0	9.68	0.8358138	0.6614406		-20.9	30

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218738.D  
 Acq On : 13 Feb 2022 8:10 pm  
 Operator : LLJ  
 Sample : SEQ-CCV1  
 Misc : QBTO2021322A CCV  
 ALS Vial : 94 Sample Multiplier: 1  
 InstName : TO15\_AIR2

Quant Time: Feb 13 21:49:35 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.966	49	612374	10.00	ppbv	-0.01
37) 1,4-Difluorobenzene	13.551	114	1692765	10.00	ppbv	0.00
53) d5-Chlorobenzene	18.808	117	1519973	10.00	ppbv	# 0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.975	95	1171833	10.46	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	104.60%
<b>Target Compounds</b>						
					Qvalue	
2) Propylene	4.867	42	266313	10.78	ppbv	93
3) Dichlorodifluoromethane	4.944	85	1674139	10.01	ppbv	99
4) 1,2-Dichlorotetrafluor...	5.217	85	1262802	9.91	ppbv	92
5) Chloromethane	5.426	50	337949	9.78	ppbv	98
6) Vinyl Chloride	5.693	62	405049	9.68	ppbv	99
7) 1,3-Butadiene	5.776	54	313472	8.99	ppbv	96
8) Bromomethane	6.571	94	421208	9.86	ppbv	99
9) Chloroethane	6.751	64	210676	10.42	ppbv	# 79
10) Vinyl Bromide	7.210	106	417819	9.73	ppbv	100
11) Trichlorofluoromethane	7.333	101	1848425	10.14	ppbv	100
12) Isopropanol	7.857	45	1166227	11.15	ppbv	100
13) Acrolein	7.947	56	194935	8.74	ppbv	# 57
14) Acetone	8.069	43	982148	10.73	ppbv	81
15) Freon-113	8.214	101	1052319	9.90	ppbv	# 81
16) 1,1-Dichloroethylene	8.435	61	939534	9.39	ppbv	86
17) 3-Chloropropene	9.037	41	639431	10.34	ppbv	90
18) Methylene Chloride	9.194	49	619504	9.58	ppbv	82
19) Acrylonitrile	9.284	53	365657	8.31	ppbv	# 92
20) Carbon disulfide	9.316	76	1084031	9.83	ppbv	# 76
21) Methyl-tert-Butyl Ethe...	9.599	73	1447109	8.32	ppbv	93
22) trans-1,2-Dichloroethy...	9.799	61	778882	9.98	ppbv	91
23) Hexane	10.091	57	698402	10.38	ppbv	91
24) Vinyl Acetate	10.416	43	1382027	9.95	ppbv	# 100
25) 1,1-Dichloroethane	10.461	63	920953	9.85	ppbv	96
26) 2-Butanone	11.078	43	1110301	10.19	ppbv	89
27) Ethyl Acetate	11.381	43	1252747	9.88	ppbv	# 40
28) cis-1,2-Dichloroethylene	11.461	61	748547	9.96	ppbv	98
29) Chloroform	11.744	83	1228460	9.66	ppbv	96
30) Tetrahydrofuran	12.062	42	591377	10.47	ppbv	85
31) 1,1,1-Trichlorethane	12.480	97	1519214	9.80	ppbv	# 98
32) Cyclohexane	12.644	56	742964	10.17	ppbv	# 89
33) Carbon Tetrachloride	12.937	117	1572851	9.83	ppbv	100
34) 1,2-Dichloroethane	13.017	62	1048209	9.26	ppbv	# 98
35) Benzene	13.146	78	1227531	8.95	ppbv	# 83
36) n-Heptane	13.168	43	947851	10.25	ppbv	# 94
38) Trichloroethylene	14.181	95	693165	9.03	ppbv	97
39) 1,2-Dichloropropane	14.410	63	467457	9.92	ppbv	# 91
40) Methyl Methacrylate	14.426	69	474488	10.76	ppbv	# 40
41) 1,4-Dioxane	14.734	88	299921	10.20	ppbv	# 100
42) Bromodichloromethane	14.776	83	1290863	10.57	ppbv	97
43) Methyl Isobutyl Ketone	15.313	43	1311169	9.43	ppbv	94
44) cis-1,3-Dichloropropene	15.664	75	855605	10.87	ppbv	# 96
45) Toluene	16.323	91	1773986	9.36	ppbv	98
46) trans-1,3-Dichloropropene	16.480	75	917191	10.73	ppbv	95
47) 1,1,2-Trichlorethane	16.773	97	615379	10.34	ppbv	# 86
48) 2-Hexanone	16.779	43	1248440	8.81	ppbv	96
49) 1,3-Dichloropropane	17.200	76	885397	10.56	ppbv	90

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218738.D  
 Acq On : 13 Feb 2022 8:10 pm  
 Operator : LLJ  
 Sample : SEQ-CCV1  
 Misc : QBTO2021322A CCV  
 ALS Vial : 94 Sample Multiplier: 1  
 InstName : TO15\_AIR2

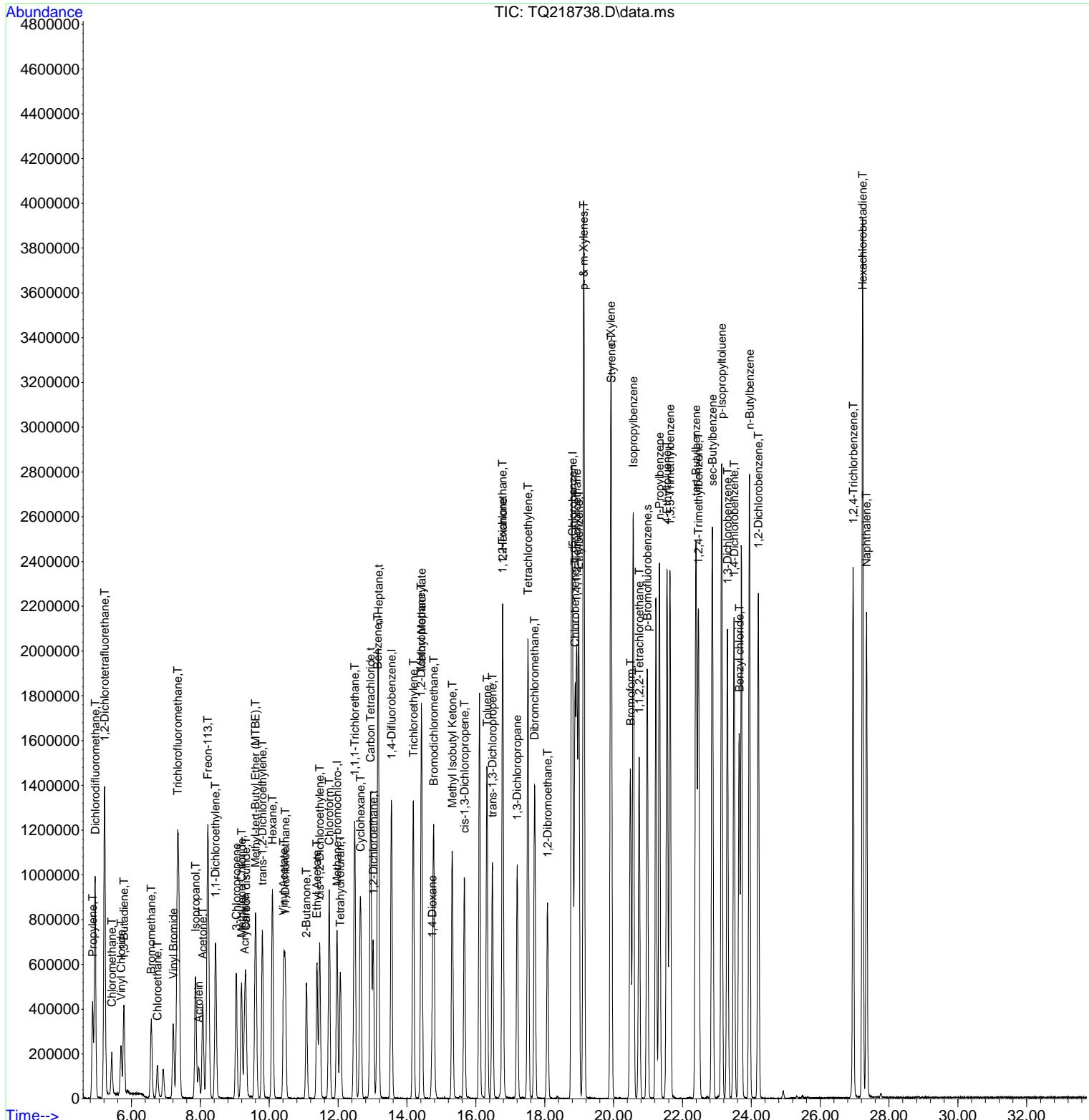
Quant Time: Feb 13 21:49:35 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) Tetrachloroethylene	17.512	166	1018330	9.90	ppbv	95
51) Dibromochloromethane	17.705	129	1371639	10.05	ppbv	99
52) 1,2-Dibromoethane	18.081	107	1032967	10.53	ppbv	100
54) Chlorobenzene	18.879	112	1609962	8.67	ppbv #	100
55) 1,1,1,2-Tetrachloroethane	18.930	131	1076369	10.17	ppbv #	83
56) Ethylbenzene	18.985	91	2671985	9.07	ppbv	95
57) p- & m-Xylenes	19.130	91	4289039	17.94	ppbv	94
58) o-Xylene	19.917	91	2190704	9.00	ppbv	97
59) Styrene	19.933	104	1474634	8.94	ppbv #	100
60) Bromoform	20.490	173	1283135	10.15	ppbv	99
61) n-Propylbenzene	21.332	91	3498513	9.36	ppbv	99
62) Isopropylbenzene	20.570	105	3115652	9.56	ppbv	98
63) 1,1,2,2-Tetrachloroeth...	20.740	83	1198619	10.04	ppbv #	93
65) 4-Ethyltoluene	21.551	105	2983724	9.53	ppbv	97
66) 1,3,5-Trimethylbenzene	21.638	105	2594126	9.26	ppbv	98
67) tert-Butylbenzene	22.393	119	2880017	9.72	ppbv #	78
68) 1,2,4-Trimethylbenzene	22.461	105	2623783	9.27	ppbv #	93
69) sec-Butylbenzene	22.872	105	3543278	9.68	ppbv	97
70) p-Isopropyltoluene	23.139	119	3225721	9.78	ppbv #	88
71) 1,3-Dichlorobenzene	23.306	146	1677454	8.72	ppbv	98
72) 1,4-Dichlorobenzene	23.499	146	1667455	8.82	ppbv	98
73) Benzyl chloride	23.650	91	2208746	10.43	ppbv	98
74) n-Butylbenzene	23.949	91	2743976	9.63	ppbv #	76
75) 1,2-Dichlorobenzene	24.203	146	1657012	8.54	ppbv	99
76) 1,2,4-Trichlorobenzene	26.959	180	1146856	8.22	ppbv	97
77) Hexachlorobutadiene	27.232	225	1176783	9.87	ppbv	95
78) Naphthalene	27.348	128	2847638	7.56	ppbv	99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021322\  
Data File : TQ218738.D  
Acq On : 13 Feb 2022 8:10 pm  
Operator : LLJ  
Sample : SEQ-CCV1  
Misc : QBTO2021322A CCV  
ALS Vial : 94 Sample Multiplier: 1  
InstName : TO15\_AIR2

Quant Time: Feb 13 21:49:35 2022  
Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
Quant Title : TO15 VOC Analysis  
QLast Update : Mon Dec 27 19:43:41 2021  
Response via : Initial Calibration



## FORM VII

## CONTINUING CALIBRATION CHECK

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218759.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1642 Injection Date: 02/15/22  
 Lab Sample ID: Y2B1642-CCV1 Injection Time: 04:50

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	10.0	9.86	0.6961175	0.6866768		-1.4	30
1,1,1-Trichloroethane	A	10.0	9.06	2.530291	2.292825		-9.4	30
1,1,2,2-Tetrachloroethane	A	10.0	10.2	0.7856572	0.8022557		2.1	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	9.98	1.736281	1.733584		-0.2	30
1,1,2-Trichloroethane	A	10.0	10.2	0.3516272	0.3583262		1.9	30
1,1-Dichloroethane	A	10.0	9.98	1.527275	1.524746		-0.2	30
1,1-Dichloroethylene	A	10.0	9.14	1.634705	1.494717		-8.6	30
1,2,4-Trichlorobenzene	A	10.0	8.24	0.9174957	0.7557654		-17.6	30
1,2,4-Trimethylbenzene	A	10.0	8.94	1.861666	1.664749		-10.6	30
1,2-Dibromoethane	A	10.0	10.3	0.5796995	0.5952452		2.7	30
1,2-Dichlorobenzene	A	10.0	8.37	1.276015	1.067822		-16.3	30
1,2-Dichloroethane	A	10.0	8.27	1.849494	1.529679		-17.3	30
1,2-Dichloropropane	A	10.0	10.2	0.2784504	0.2849579		2.3	30
1,2-Dichlorotetrafluoroethane	A	10.0	9.37	2.081503	1.949699		-6.3	30
1,3,5-Trimethylbenzene	A	10.0	8.93	1.843826	1.647163		-10.7	30
1,3-Butadiene	A	10.0	8.54	0.5691718	0.4860467		-14.6	30
1,3-Dichlorobenzene	A	10.0	8.58	1.266261	1.0868		-14.2	30
1,3-Dichloropropane	A	10.0	10.4	0.4952109	0.5175955		4.5	30
1,4-Dichlorobenzene	A	10.0	8.70	1.243437	1.081872		-13.0	30
1,4-Dioxane	A	10.0	10.9	0.2318788	0.1894233		-18.3	30
2-Butanone	A	10.0	10.4	2.255726	1.847913		-18.1	30
2-Hexanone	A	10.0	8.44	0.8368822	0.7062758		-15.6	30
3-Chloropropene	A	10.0	10.7	1.010255	1.080565		7.0	30
4-Methyl-2-pentanone	A	10.0	9.12	0.8209751	0.7486146		-8.8	30
Acetone	A	10.0	10.2	2.444582	1.524334		-37.6	30 *
Acrylonitrile	A	10.0	8.94	0.7184572	0.6419688		-10.6	30
Benzene	A	10.0	9.74	2.240419	2.18188		-2.6	30
Benzyl chloride	A	10.0	10.2	1.39306	1.427298		2.5	30
Bromodichloromethane	A	10.0	9.82	0.7212105	0.7081364		-1.8	30

## FORM VII

## CONTINUING CALIBRATION CHECK

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218759.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1642 Injection Date: 02/15/22  
 Lab Sample ID: Y2B1642-CCV1 Injection Time: 04:50

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Bromoform	A	10.0	9.88	0.8319167	0.8215845		-1.2	30
Bromomethane	A	10.0	10.4	0.6973916	0.7232094		3.7	30
Carbon disulfide	A	10.0	10.6	1.800792	1.911391		6.1	30
Carbon tetrachloride	A	10.0	9.12	2.611789	2.381634		-8.8	30
Chlorobenzene	A	10.0	8.88	1.221476	1.084694		-11.2	30
Chloroethane	A	10.0	11.5	0.330236	0.3793552		14.9	30
Chloroform	A	10.0	9.30	2.077095	1.932536		-7.0	30
Chloromethane	A	10.0	9.14	0.5641423	0.515715		-8.6	30
cis-1,2-Dichloroethylene	A	10.0	10.1	1.48788	1.23863		-16.8	30
cis-1,3-Dichloropropylene	A	10.0	10.7	0.4647924	0.4974039		7.0	30
Cyclohexane	A	10.0	11.1	1.192716	1.320254		10.7	30
Dibromochloromethane	A	10.0	9.56	0.8066397	0.7708545		-4.4	30
Dichlorodifluoromethane	A	10.0	9.24	2.73077	2.523793		-7.6	30
Ethyl acetate	A	10.0	9.96	2.070197	2.06182		-0.4	30
Ethyl Benzene	A	10.0	9.15	1.938598	1.77304		-8.5	30
Hexachlorobutadiene	A	10.0	9.24	1.009574	0.726353		-28.1	30
Isopropanol	A	10.0	11.3	3.136335	1.926033		-38.6	30 *
Methyl Methacrylate	A	10.0	11.1	0.2604003	0.2898687		11.3	30
Methyl tert-butyl ether (MTBE)	A	10.0	8.40	2.840828	2.385521		-16.0	30
Methylene chloride	A	10.0	9.67	1.056092	1.020867		-3.3	30
n-Heptane	A	10.0	10.5	1.509931	1.586744		5.1	30
n-Hexane	A	10.0	11.3	1.098956	1.244205		13.2	30
o-Xylene	A	10.0	8.78	1.601927	1.406714		-12.2	30
p- & m- Xylenes	A	20.0	17.7	1.572614	1.391774		-11.5	30
p-Ethyltoluene	A	10.0	9.41	2.059603	1.938871		-5.9	30
Propylene	A	10.0	10.9	0.4035767	0.4401651		9.1	30
Styrene	A	10.0	9.06	1.084627	0.9828793		-9.4	30
Tetrachloroethylene	A	10.0	9.73	0.6075507	0.5914479		-2.7	30
Tetrahydrofuran	A	10.0	10.8	1.211618	1.00074		-17.4	30

**FORM VII****CONTINUING CALIBRATION CHECK****EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218759.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1642 Injection Date: 02/15/22  
 Lab Sample ID: Y2B1642-CCV1 Injection Time: 04:50

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toluene	A	10.0	9.46	1.119945	1.059461		-5.4	30
trans-1,2-Dichloroethylene	A	10.0	10.1	1.274601	1.287428		1.0	30
trans-1,3-Dichloropropylene	A	10.0	10.2	0.504787	0.5140771		1.8	30
Trichloroethylene	A	10.0	8.95	0.4536306	0.4059732		-10.5	30
Trichlorofluoromethane (Freon 11)	A	10.0	9.11	2.977374	2.711662		-8.9	30
Vinyl acetate	A	10.0	10.0	2.267537	2.278639		0.5	30
Vinyl bromide	A	10.0	10.4	0.7009948	0.7281		3.9	30
Vinyl Chloride	A	10.0	9.16	0.8358138	0.6265012		-25.0	30

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021522\  
 Data File : TQ218759.D  
 Acq On : 15 Feb 2022 4:50 am  
 Operator : LLJ  
 Sample : SEQ-CCV1  
 Misc : QBTO2021522A CCV  
 ALS Vial : 94 Sample Multiplier: 1  
 InstName : TO15\_AIR2

Quant Time: Feb 15 10:47:26 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.976	49	717499	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	13.554	114	2061747	10.00	ppbv	0.00
53) d5-Chlorobenzene	18.808	117	1780714	10.00	ppbv	0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.978	95	1297555	9.89	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	98.90%
<b>Target Compounds</b>						
					Qvalue	
2) Propylene	4.892	42	315818	10.91	ppbv	94
3) Dichlorodifluoromethane	4.966	85	1810819	9.24	ppbv	99
4) 1,2-Dichlorotetrafluor...	5.239	85	1398907	9.37	ppbv	92
5) Chloromethane	5.448	50	370025	9.14	ppbv	97
6) Vinyl Chloride	5.715	62	449514	9.16	ppbv	99
7) 1,3-Butadiene	5.805	54	348738	8.54	ppbv	96
8) Bromomethane	6.593	94	518902	10.37	ppbv	99
9) Chloroethane	6.776	64	272187	11.49	ppbv	# 92
10) Vinyl Bromide	7.230	106	522411	10.39	ppbv	100
11) Trichlorofluoromethane	7.355	101	1945615	9.11	ppbv	99
12) Isopropanol	7.870	45	1381927	11.28	ppbv	100
13) Acrolein	7.966	56	250736	9.59	ppbv	# 57
14) Acetone	8.082	43	1093708	10.18	ppbv	86
15) Freon-113	8.236	101	1243845	9.98	ppbv	93
16) 1,1-Dichloroethylene	8.458	61	1072458	9.14	ppbv	90
17) 3-Chloropropene	9.059	41	775304	10.70	ppbv	94
18) Methylene Chloride	9.207	49	732471	9.67	ppbv	86
19) Acrylonitrile	9.294	53	460612	8.94	ppbv	# 59
20) Carbon disulfide	9.333	76	1371421	10.61	ppbv	# 85
21) Methyl-tert-Butyl Ethe...	9.612	73	1711609	8.40	ppbv	95
22) trans-1,2-Dichloroethy...	9.812	61	923728	10.10	ppbv	93
23) Hexane	10.104	57	892716	11.32	ppbv	95
24) Vinyl Acetate	10.426	43	1634921	10.05	ppbv	100
25) 1,1-Dichloroethane	10.474	63	1094004	9.98	ppbv	97
26) 2-Butanone	11.088	43	1325876	10.39	ppbv	91
27) Ethyl Acetate	11.390	43	1479354	9.96	ppbv	# 41
28) cis-1,2-Dichloroethylene	11.477	61	888716	10.10	ppbv	94
29) Chloroform	11.747	83	1386593	9.30	ppbv	97
30) Tetrahydrofuran	12.072	42	718030	10.85	ppbv	89
31) 1,1,1-Trichlorethane	12.484	97	1645100	9.06	ppbv	99
32) Cyclohexane	12.654	56	947281	11.07	ppbv	93
33) Carbon Tetrachloride	12.947	117	1708820	9.12	ppbv	100
34) 1,2-Dichloroethane	13.024	62	1097543	8.27	ppbv	# 86
35) Benzene	13.156	78	1565497	9.74	ppbv	# 87
36) n-Heptane	13.175	43	1138487	10.51	ppbv	# 95
38) Trichloroethylene	14.188	95	837014	8.95	ppbv	95
39) 1,2-Dichloropropane	14.413	63	587511	10.23	ppbv	# 91
40) Methyl Methacrylate	14.435	69	597636	11.13	ppbv	# 34
41) 1,4-Dioxane	14.734	88	390543	10.91	ppbv	# 100
42) Bromodichloromethane	14.776	83	1459998	9.82	ppbv	98
43) Methyl Isobutyl Ketone	15.313	43	1543454	9.12	ppbv	95
44) cis-1,3-Dichloropropene	15.670	75	1025521	10.70	ppbv	97
45) Toluene	16.319	91	2184341	9.46	ppbv	99
46) trans-1,3-Dichloropropene	16.483	75	1059897	10.18	ppbv	97
47) 1,1,2-Trichlorethane	16.773	97	738778	10.19	ppbv	90
48) 2-Hexanone	16.779	43	1456162	8.44	ppbv	97
49) 1,3-Dichloropropane	17.200	76	1067151	10.45	ppbv	93

Data Path : C:\msdchem\1\data\021522\  
 Data File : TQ218759.D  
 Acq On : 15 Feb 2022 4:50 am  
 Operator : LLJ  
 Sample : SEQ-CCV1  
 Misc : QBTO2021522A CCV  
 ALS Vial : 94 Sample Multiplier: 1  
 InstName : TO15\_AIR2

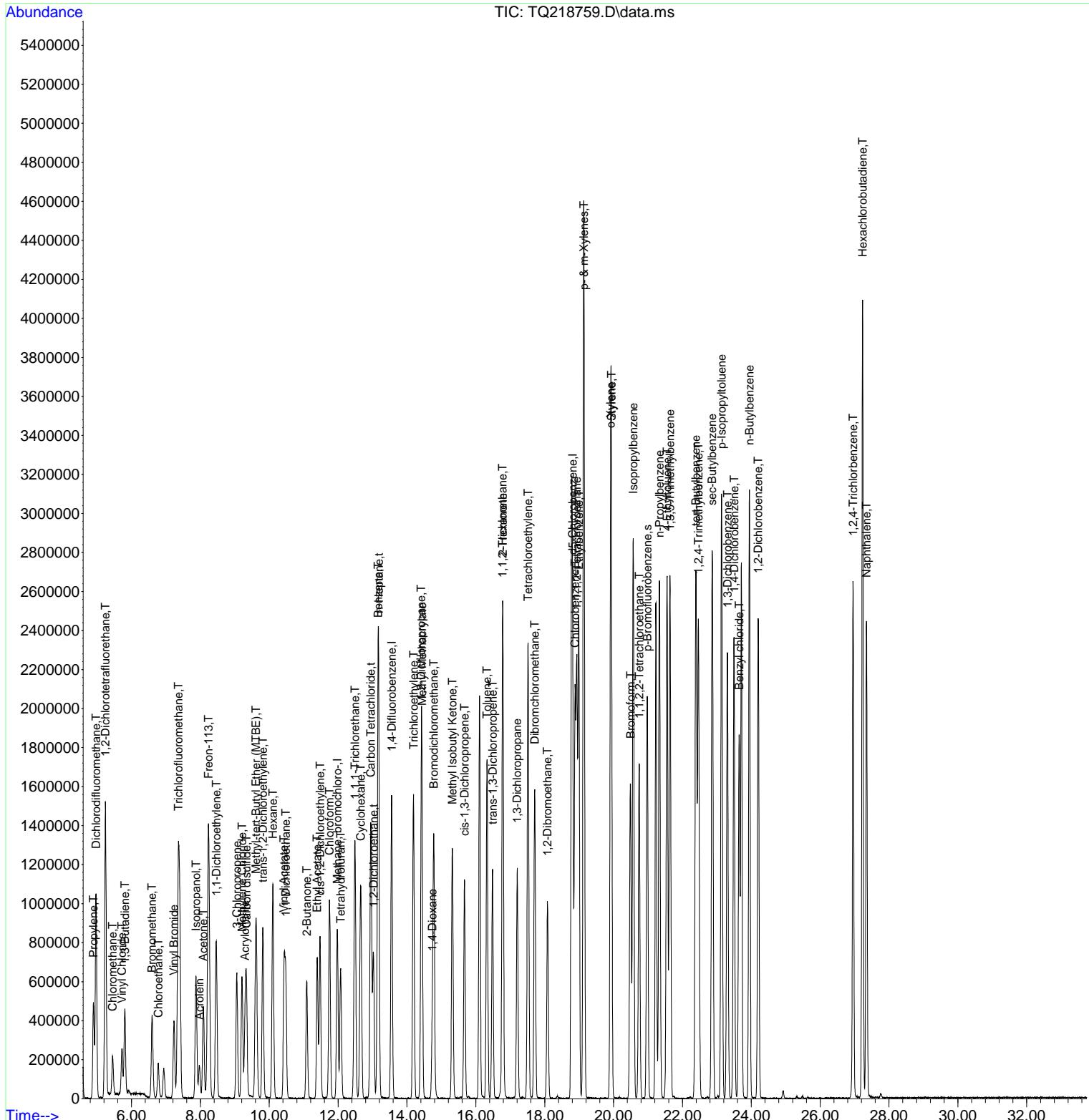
Quant Time: Feb 15 10:47:26 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) Tetrachloroethylene	17.512	166	1219416	9.73	ppbv	97
51) Dibromochloromethane	17.708	129	1589307	9.56	ppbv	99
52) 1,2-Dibromoethane	18.078	107	1227245	10.27	ppbv	99
54) Chlorobenzene	18.879	112	1931530	8.88	ppbv #	100
55) 1,1,1,2-Tetrachloroethane	18.930	131	1222775	9.86	ppbv #	85
56) Ethylbenzene	18.985	91	3157277	9.15	ppbv	97
57) p- & m-Xylenes	19.133	91	4956704	17.70	ppbv	95
58) o-Xylene	19.911	91	2504955	8.78	ppbv	98
59) Styrene	19.937	104	1750227	9.06	ppbv #	100
60) Bromoform	20.490	173	1463007	9.88	ppbv	100
61) n-Propylbenzene	21.329	91	4023971	9.18	ppbv	99
62) Isopropylbenzene	20.570	105	3561979	9.33	ppbv	98
63) 1,1,2,2-Tetrachloroeth...	20.744	83	1428588	10.21	ppbv #	95
65) 4-Ethyltoluene	21.554	105	3452574	9.41	ppbv	99
66) 1,3,5-Trimethylbenzene	21.638	105	2933127	8.93	ppbv	99
67) tert-Butylbenzene	22.390	119	3274124	9.44	ppbv #	78
68) 1,2,4-Trimethylbenzene	22.464	105	2964442	8.94	ppbv #	93
69) sec-Butylbenzene	22.863	105	4046718	9.43	ppbv	98
70) p-Isopropyltoluene	23.136	119	3659964	9.48	ppbv	97
71) 1,3-Dichlorobenzene	23.306	146	1935280	8.58	ppbv	99
72) 1,4-Dichlorobenzene	23.496	146	1926504	8.70	ppbv	99
73) Benzyl chloride	23.647	91	2541609	10.25	ppbv	99
74) n-Butylbenzene	23.943	91	3092703	9.27	ppbv #	76
75) 1,2-Dichlorobenzene	24.200	146	1901485	8.37	ppbv	99
76) 1,2,4-Trichlorobenzene	26.956	180	1345802	8.24	ppbv	98
77) Hexachlorobutadiene	27.232	225	1293427	9.24	ppbv	97
78) Naphthalene	27.348	128	3367857	7.64	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021522\  
 Data File : TQ218759.D  
 Acq On : 15 Feb 2022 4:50 am  
 Operator : LLJ  
 Sample : SEQ-CCV1  
 Misc : QBTO2021522A CCV  
 ALS Vial : 94 Sample Multiplier: 1  
 InstName : TO15\_AIR2

Quant Time: Feb 15 10:47:26 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration



## FORM VII

## CONTINUING CALIBRATION CHECK

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218798.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1836 Injection Date: 02/17/22  
 Lab Sample ID: Y2B1836-CCV1 Injection Time: 15:46

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
1,1,1,2-Tetrachloroethane	A	10.0	8.96	0.6961175	0.6234297		-10.4	30
1,1,1-Trichloroethane	A	10.0	8.47	2.530291	2.142726		-15.3	30
1,1,2,2-Tetrachloroethane	A	10.0	9.28	0.7856572	0.7288251		-7.2	30
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	A	10.0	9.21	1.736281	1.598704		-7.9	30
1,1,2-Trichloroethane	A	10.0	9.32	0.3516272	0.3276668		-6.8	30
1,1-Dichloroethane	A	10.0	9.27	1.527275	1.415326		-7.3	30
1,1-Dichloroethylene	A	10.0	8.45	1.634705	1.380678		-15.5	30
1,2,4-Trichlorobenzene	A	10.0	7.53	0.9174957	0.6904686		-24.7	30
1,2,4-Trimethylbenzene	A	10.0	7.99	1.861666	1.487733		-20.1	30
1,2-Dibromoethane	A	10.0	9.44	0.5796995	0.5475013		-5.6	30
1,2-Dichlorobenzene	A	10.0	7.53	1.276015	0.9604306		-24.7	30
1,2-Dichloroethane	A	10.0	7.75	1.849494	1.43332		-22.5	30
1,2-Dichloropropane	A	10.0	9.55	0.2784504	0.2660575		-4.5	30
1,2-Dichlorotetrafluoroethane	A	10.0	8.96	2.081503	1.865552		-10.4	30
1,3,5-Trimethylbenzene	A	10.0	7.95	1.843826	1.465872		-20.5	30
1,3-Butadiene	A	10.0	7.89	0.5691718	0.4491288		-21.1	30
1,3-Dichlorobenzene	A	10.0	7.69	1.266261	0.9741606		-23.1	30
1,3-Dichloropropane	A	10.0	9.71	0.4952109	0.4806854		-2.9	30
1,4-Dichlorobenzene	A	10.0	7.85	1.243437	0.9766091		-21.5	30
1,4-Dioxane	A	10.0	10.1	0.2318788	0.175057		-24.5	30
2-Butanone	A	10.0	9.62	2.255726	1.713743		-24.0	30
2-Hexanone	A	10.0	7.71	0.8368822	0.6448681		-22.9	30
3-Chloropropene	A	10.0	9.70	1.010255	0.9798574		-3.0	30
4-Methyl-2-pentanone	A	10.0	8.40	0.8209751	0.689947		-16.0	30
Acetone	A	10.0	9.19	2.444582	1.378995		-43.6	30 *
Acrylonitrile	A	10.0	8.28	0.7184572	0.5949587		-17.2	30
Benzene	A	10.0	9.20	2.240419	2.060447		-8.0	30
Benzyl chloride	A	10.0	9.01	1.39306	1.255467		-9.9	30
Bromodichloromethane	A	10.0	8.64	0.7212105	0.6229198		-13.6	30

## FORM VII

## CONTINUING CALIBRATION CHECK

## EPA TO-15

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218798.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1836 Injection Date: 02/17/22  
 Lab Sample ID: Y2B1836-CCV1 Injection Time: 15:46

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Bromoform	A	10.0	8.89	0.8319167	0.7398143		-11.1	30
Bromomethane	A	10.0	9.41	0.6973916	0.6561019		-5.9	30
Carbon disulfide	A	10.0	9.86	1.800792	1.776417		-1.4	30
Carbon tetrachloride	A	10.0	7.93	2.611789	2.072296		-20.7	30
Chlorobenzene	A	10.0	8.07	1.221476	0.9851336		-19.3	30
Chloroethane	A	10.0	10.2	0.330236	0.335582		1.6	30
Chloroform	A	10.0	8.74	2.077095	1.814841		-12.6	30
Chloromethane	A	10.0	8.83	0.5641423	0.4979816		-11.7	30
cis-1,2-Dichloroethylene	A	10.0	9.32	1.48788	1.145142		-23.0	30
cis-1,3-Dichloropropylene	A	10.0	9.90	0.4647924	0.4602307		-1.0	30
Cyclohexane	A	10.0	10.3	1.192716	1.231656		3.3	30
Dibromochloromethane	A	10.0	8.67	0.8066397	0.6990701		-13.3	30
Dichlorodifluoromethane	A	10.0	8.54	2.73077	2.332151		-14.6	30
Ethyl acetate	A	10.0	9.31	2.070197	1.927475		-6.9	30
Ethyl Benzene	A	10.0	8.30	1.938598	1.609118		-17.0	30
Hexachlorobutadiene	A	10.0	8.15	1.009574	0.6419959		-36.4	30 *
Isopropanol	A	10.0	10.2	3.136335	1.742431		-44.4	30 *
Methyl Methacrylate	A	10.0	10.2	0.2604003	0.2665423		2.4	30
Methyl tert-butyl ether (MTBE)	A	10.0	8.05	2.840828	2.286932		-19.5	30
Methylene chloride	A	10.0	8.83	1.056092	0.9322451		-11.7	30
n-Heptane	A	10.0	9.83	1.509931	1.484935		-1.7	30
n-Hexane	A	10.0	10.5	1.098956	1.154783		5.1	30
o-Xylene	A	10.0	8.03	1.601927	1.28707		-19.7	30
p- & m- Xylenes	A	20.0	16.0	1.572614	1.260593		-19.8	30
p-Ethyltoluene	A	10.0	8.50	2.059603	1.751147		-15.0	30
Propylene	A	10.0	10.1	0.4035767	0.4071652		0.9	30
Styrene	A	10.0	8.25	1.084627	0.8952249		-17.5	30
Tetrachloroethylene	A	10.0	8.96	0.6075507	0.5444188		-10.4	30
Tetrahydrofuran	A	10.0	10.2	1.211618	0.9365856		-22.7	30

**FORM VII****CONTINUING CALIBRATION CHECK****EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Instrument ID: TO15\_AIR2 Calibration: YA20007  
 Lab File ID: TQ218798.D Calibration Date: 12/27/21 07:05  
 Sequence: Y2B1836 Injection Date: 02/17/22  
 Lab Sample ID: Y2B1836-CCV1 Injection Time: 15:46

COMPOUND	TYPE	CONC. (ppbv)		RESPONSE FACTOR			% DIFF / DRIFT	
		STD	CCV	ICAL	CCV	MIN (#)	CCV	LIMIT (#)
Toluene	A	10.0	8.69	1.119945	0.9732189		-13.1	30
trans-1,2-Dichloroethylene	A	10.0	9.43	1.274601	1.201916		-5.7	30
trans-1,3-Dichloropropylene	A	10.0	9.33	0.504787	0.4710802		-6.7	30
Trichloroethylene	A	10.0	8.27	0.4536306	0.3750581		-17.3	30
Trichlorofluoromethane (Freon 11)	A	10.0	8.30	2.977374	2.471657		-17.0	30
Vinyl acetate	A	10.0	9.28	2.267537	2.103387		-7.2	30
Vinyl bromide	A	10.0	9.43	0.7009948	0.6612998		-5.7	30
Vinyl Chloride	A	10.0	8.34	0.8358138	0.5717514		-31.6	30 *

# Column to be used to flag Response Factor and %Diff/Drift values with an asterisk

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021722\  
 Data File : TQ218798.D  
 Acq On : 17 Feb 2022 3:46 pm  
 Operator : AS  
 Sample : SEQ-CCV1  
 Misc : QBTO2021722A CCV  
 ALS Vial : 93 Sample Multiplier: 1  
 InstName : TO15\_AIR2

Quant Time: Feb 17 19:21:43 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.982	49	767428	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	13.561	114	2263052	10.00	ppbv	0.00
53) d5-Chlorobenzene	18.818	117	1974659	10.00	ppbv	0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.978	95	1446014	9.94	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	99.40%
<b>Target Compounds</b>						
					Qvalue	
2) Propylene	4.895	42	312470	10.09	ppbv	94
3) Dichlorodifluoromethane	4.969	85	1789758	8.54	ppbv	99
4) 1,2-Dichlorotetrafluor...	5.249	85	1431677	8.96	ppbv	92
5) Chloromethane	5.461	50	382165	8.83	ppbv	98
6) Vinyl Chloride	5.728	62	438778	8.34	ppbv	100
7) 1,3-Butadiene	5.815	54	344674	7.89	ppbv	95
8) Bromomethane	6.609	94	503511	9.41	ppbv	99
9) Chloroethane	6.783	64	257535	10.16	ppbv	# 78
10) Vinyl Bromide	7.246	106	507500	9.43	ppbv	100
11) Trichlorofluoromethane	7.368	101	1896819	8.30	ppbv	# 98
12) Isopropanol	7.886	45	1337190	10.18	ppbv	100
13) Acrolein	7.985	56	242579	8.68	ppbv	# 86
14) Acetone	8.095	43	1058279	9.19	ppbv	87
15) Freon-113	8.246	101	1226890	9.21	ppbv	93
16) 1,1-Dichloroethylene	8.468	61	1059571	8.45	ppbv	# 85
17) 3-Chloropropene	9.066	41	751970	9.70	ppbv	95
18) Methylene Chloride	9.220	49	715431	8.83	ppbv	87
19) Acrylonitrile	9.310	53	456588	8.28	ppbv	# 93
20) Carbon disulfide	9.342	76	1363272	9.86	ppbv	# 86
21) Methyl-tert-Butyl Ethe...	9.622	73	1755056	8.05	ppbv	96
22) trans-1,2-Dichloroethy...	9.818	61	922384	9.43	ppbv	93
23) Hexane	10.111	57	886213	10.51	ppbv	96
24) Vinyl Acetate	10.439	43	1614198	9.28	ppbv	100
25) 1,1-Dichloroethane	10.484	63	1086161	9.27	ppbv	97
26) 2-Butanone	11.095	43	1315174	9.62	ppbv	91
27) Ethyl Acetate	11.400	43	1479198	9.31	ppbv	# 41
28) cis-1,2-Dichloroethylene	11.480	61	878814	9.32	ppbv	93
29) Chloroform	11.760	83	1392760	8.74	ppbv	97
30) Tetrahydrofuran	12.082	42	718762	10.15	ppbv	90
31) 1,1,1-Trichlorethane	12.490	97	1644388	8.47	ppbv	99
32) Cyclohexane	12.660	56	945207	10.33	ppbv	94
33) Carbon Tetrachloride	12.956	117	1590338	7.93	ppbv	100
34) 1,2-Dichloroethane	13.030	62	1099970	7.75	ppbv	# 100
35) Benzene	13.159	78	1581245	9.20	ppbv	88
36) n-Heptane	13.178	43	1139581	9.83	ppbv	98
38) Trichloroethylene	14.197	95	848776	8.27	ppbv	95
39) 1,2-Dichloropropane	14.419	63	602102	9.55	ppbv	# 92
40) Methyl Methacrylate	14.435	69	603199	10.24	ppbv	# 40
41) 1,4-Dioxane	14.738	88	396163	10.08	ppbv	# 100
42) Bromodichloromethane	14.786	83	1409700	8.64	ppbv	98
43) Methyl Isobutyl Ketone	15.323	43	1561386	8.40	ppbv	95
44) cis-1,3-Dichloropropene	15.673	75	1041526	9.90	ppbv	97
45) Toluene	16.326	91	2202445	8.69	ppbv	100
46) trans-1,3-Dichloropropene	16.487	75	1066079	9.33	ppbv	97
47) 1,1,2-Trichlorethane	16.779	97	741527	9.32	ppbv	89
48) 2-Hexanone	16.786	43	1459370	7.71	ppbv	97
49) 1,3-Dichloropropane	17.204	76	1087816	9.71	ppbv	94

Data Path : C:\msdchem\1\data\021722\  
 Data File : TQ218798.D  
 Acq On : 17 Feb 2022 3:46 pm  
 Operator : AS  
 Sample : SEQ-CCV1  
 Misc : QBTO2021722A CCV  
 ALS Vial : 93 Sample Multiplier: 1  
 InstName : TO15\_AIR2

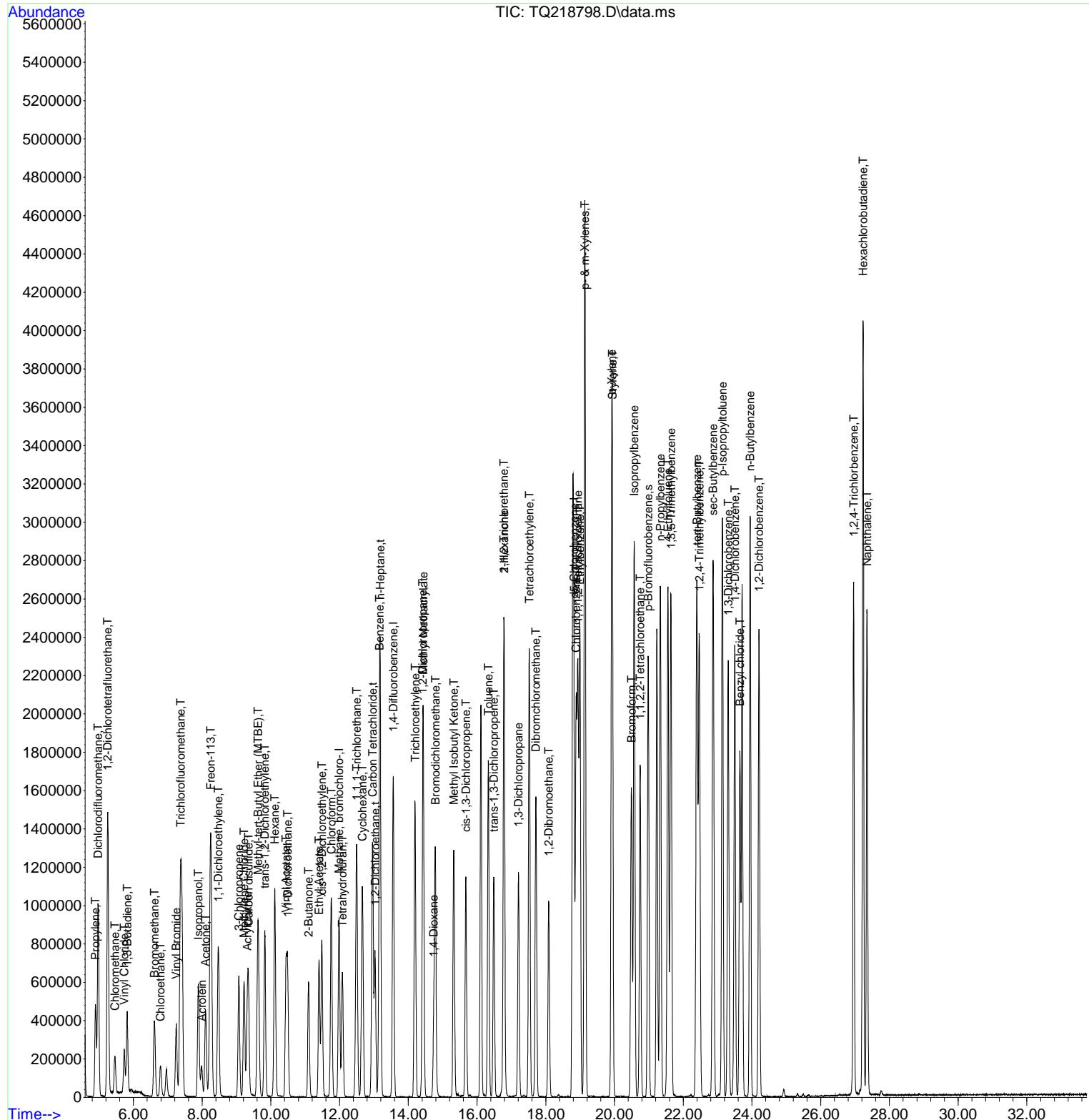
Quant Time: Feb 17 19:21:43 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
50) Tetrachloroethylene	17.519	166	1232048	8.96	ppbv	98
51) Dibromochloromethane	17.712	129	1582032	8.67	ppbv	99
52) 1,2-Dibromoethane	18.085	107	1239024	9.44	ppbv	99
54) Chlorobenzene	18.882	112	1945303	8.07	ppbv #	86
55) 1,1,1,2-Tetrachloroethane	18.937	131	1231061	8.96	ppbv #	85
56) Ethylbenzene	18.991	91	3177460	8.30	ppbv	97
57) p- & m-Xylenes	19.136	91	4978483	16.03	ppbv	96
58) o-Xylene	19.917	91	2541525	8.03	ppbv	98
59) Styrene	19.937	104	1767764	8.25	ppbv #	100
60) Bromoform	20.490	173	1460881	8.89	ppbv	100
61) n-Propylbenzene	21.332	91	4037661	8.31	ppbv	99
62) Isopropylbenzene	20.573	105	3606516	8.52	ppbv	98
63) 1,1,2,2-Tetrachloroeth...	20.744	83	1439181	9.28	ppbv #	95
65) 4-Ethyltoluene	21.554	105	3457919	8.50	ppbv	98
66) 1,3,5-Trimethylbenzene	21.641	105	2894597	7.95	ppbv	100
67) tert-Butylbenzene	22.400	119	3264614	8.48	ppbv	91
68) 1,2,4-Trimethylbenzene	22.467	105	2937766	7.99	ppbv #	94
69) sec-Butylbenzene	22.869	105	4013840	8.44	ppbv	98
70) p-Isopropyltoluene	23.142	119	3587515	8.38	ppbv #	88
71) 1,3-Dichlorobenzene	23.306	146	1923635	7.69	ppbv	99
72) 1,4-Dichlorobenzene	23.496	146	1928470	7.85	ppbv	99
73) Benzyl chloride	23.647	91	2479119	9.01	ppbv	99
74) n-Butylbenzene	23.946	91	3022264	8.17	ppbv	99
75) 1,2-Dichlorobenzene	24.207	146	1896523	7.53	ppbv	99
76) 1,2,4-Trichlorobenzene	26.959	180	1363440	7.53	ppbv	98
77) Hexachlorobutadiene	27.232	225	1267723	8.15	ppbv	97
78) Naphthalene	27.351	128	3508292	7.17	ppbv	100

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021722\  
 Data File : TQ218798.D  
 Acq On : 17 Feb 2022 3:46 pm  
 Operator : AS  
 Sample : SEQ-CCV1  
 Misc : QBTO2021722A CCV  
 ALS Vial : 93 Sample Multiplier: 1  
 InstName : TO15\_AIR2

Quant Time: Feb 17 19:21:43 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration



**FORM I****METHOD BLANK DATA SHEET****EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Air Laboratory ID: BB21858-BLK1 File ID: TQ218741.D  
 Prepared: 02/13/22 08:00 Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Analyzed: 02/13/22 23:15 Instrument: TO15 AIR2  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.69	U
71-55-6	1,1,1-Trichloroethane	0.55	U
79-34-5	1,1,2,2-Tetrachloroethane	0.69	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.77	U
79-00-5	1,1,2-Trichloroethane	0.55	U
75-34-3	1,1-Dichloroethane	0.40	U
75-35-4	1,1-Dichloroethylene	0.099	U
120-82-1	1,2,4-Trichlorobenzene	0.74	U
95-63-6	1,2,4-Trimethylbenzene	0.49	U
106-93-4	1,2-Dibromoethane	0.77	U
95-50-1	1,2-Dichlorobenzene	0.60	U
107-06-2	1,2-Dichloroethane	0.40	U
78-87-5	1,2-Dichloropropane	0.46	U
76-14-2	1,2-Dichlorotetrafluoroethane	0.70	U
108-67-8	1,3,5-Trimethylbenzene	0.49	U
106-99-0	1,3-Butadiene	0.66	U
541-73-1	1,3-Dichlorobenzene	0.60	U
142-28-9	1,3-Dichloropropane	0.46	U
106-46-7	1,4-Dichlorobenzene	0.60	U
123-91-1	1,4-Dioxane	0.72	U
78-93-3	2-Butanone	0.29	U
591-78-6	2-Hexanone	0.82	U
107-05-1	3-Chloropropene	1.6	U
108-10-1	4-Methyl-2-pentanone	0.41	U
67-64-1	Acetone	0.48	U
107-13-1	Acrylonitrile	0.22	U
71-43-2	Benzene	0.32	U
100-44-7	Benzyl chloride	0.52	U
75-27-4	Bromodichloromethane	0.67	U
75-25-2	Bromoform	1.0	U

## FORM I

**METHOD BLANK DATA SHEET**  
**EPA TO-15**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>22B0574</u>
Client:	<u>Hydro Tech Environmental (Hauppauge)</u>	Project:	<u>210011 152 Graham Ave., Brooklyn, NY</u>
Matrix:	<u>Air</u>	Laboratory ID:	<u>BB21858-BLK1</u>
Prepared:	<u>02/13/22 08:00</u>	Preparation:	<u>EPA TO15 PREP</u>
Analyzed:	<u>02/13/22 23:15</u>	Instrument:	<u>TO15_AIR2</u>
Batch:	<u>BB21858</u>	Sequence:	<u>Y2B1447</u>
			Calibration: <u>YA20007</u>

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
74-83-9	Bromomethane	0.39	U
75-15-0	Carbon disulfide	0.31	U
56-23-5	Carbon tetrachloride	0.16	U
108-90-7	Chlorobenzene	0.46	U
75-00-3	Chloroethane	0.26	U
67-66-3	Chloroform	0.49	U
74-87-3	Chloromethane	0.21	U
156-59-2	cis-1,2-Dichloroethylene	0.099	U
10061-01-5	cis-1,3-Dichloropropylene	0.45	U
110-82-7	Cyclohexane	0.34	U
124-48-1	Dibromochloromethane	0.85	U
75-71-8	Dichlorodifluoromethane	0.49	U
141-78-6	Ethyl acetate	0.72	U
100-41-4	Ethyl Benzene	0.43	U
87-68-3	Hexachlorobutadiene	1.1	U
67-63-0	Isopropanol	0.49	J
80-62-6	Methyl Methacrylate	0.41	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.36	U
75-09-2	Methylene chloride	0.69	U
142-82-5	n-Heptane	0.41	U
110-54-3	n-Hexane	0.35	U
95-47-6	o-Xylene	0.43	U
179601-23-1	p- & m- Xylenes	0.87	U
622-96-8	p-Ethyltoluene	0.49	U
115-07-1	Propylene	0.17	U
100-42-5	Styrene	0.43	U
127-18-4	Tetrachloroethylene	0.68	U
109-99-9	Tetrahydrofuran	0.59	U
108-88-3	Toluene	0.38	U
156-60-5	trans-1,2-Dichloroethylene	0.40	U

**FORM I****METHOD BLANK DATA SHEET  
EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
Matrix: Air Laboratory ID: BB21858-BLK1 File ID: TQ218741.D  
Prepared: 02/13/22 08:00 Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
Analyzed: 02/13/22 23:15 Instrument: TO15\_AIR2  
Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
10061-02-6	trans-1,3-Dichloropropylene	0.45	U
79-01-6	Trichloroethylene	0.13	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.56	U
108-05-4	Vinyl acetate	0.35	U
593-60-2	Vinyl bromide	0.44	U
75-01-4	Vinyl Chloride	0.13	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	630869	11.969	612374	11.966	
ISTD: 1,4-Difluorobenzene	1809655	13.545	1692765	13.551	
ISTD: d5-Chlorobenzene	1360642	18.811	1519973	18.808	

**FORM I****METHOD BLANK DATA SHEET****EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Air Laboratory ID: BB21894-BLK1 File ID: TQ218762.D  
 Prepared: 02/15/22 03:00 Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Analyzed: 02/15/22 07:55 Instrument: TO15 AIR2  
 Batch: BB21894 Sequence: Y2B1642 Calibration: YA20007

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.69	U
71-55-6	1,1,1-Trichloroethane	0.55	U
79-34-5	1,1,2,2-Tetrachloroethane	0.69	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.77	U
79-00-5	1,1,2-Trichloroethane	0.55	U
75-34-3	1,1-Dichloroethane	0.40	U
75-35-4	1,1-Dichloroethylene	0.099	U
120-82-1	1,2,4-Trichlorobenzene	0.74	U
95-63-6	1,2,4-Trimethylbenzene	0.49	U
106-93-4	1,2-Dibromoethane	0.77	U
95-50-1	1,2-Dichlorobenzene	0.60	U
107-06-2	1,2-Dichloroethane	0.40	U
78-87-5	1,2-Dichloropropane	0.46	U
76-14-2	1,2-Dichlorotetrafluoroethane	0.70	U
108-67-8	1,3,5-Trimethylbenzene	0.49	U
106-99-0	1,3-Butadiene	0.66	U
541-73-1	1,3-Dichlorobenzene	0.60	U
142-28-9	1,3-Dichloropropane	0.46	U
106-46-7	1,4-Dichlorobenzene	0.60	U
123-91-1	1,4-Dioxane	0.72	U
78-93-3	2-Butanone	0.29	U
591-78-6	2-Hexanone	0.82	U
107-05-1	3-Chloropropene	1.6	U
108-10-1	4-Methyl-2-pentanone	0.41	U
67-64-1	Acetone	0.48	U
107-13-1	Acrylonitrile	0.22	U
71-43-2	Benzene	0.32	U
100-44-7	Benzyl chloride	0.52	U
75-27-4	Bromodichloromethane	0.67	U
75-25-2	Bromoform	1.0	U

## FORM I

**METHOD BLANK DATA SHEET**  
**EPA TO-15**

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>22B0574</u>
Client:	<u>Hydro Tech Environmental (Hauppauge)</u>	Project:	<u>210011 152 Graham Ave., Brooklyn, NY</u>
Matrix:	<u>Air</u>	Laboratory ID:	<u>BB21894-BLK1</u>
Prepared:	<u>02/15/22 03:00</u>	Preparation:	<u>EPA TO15 PREP</u>
Analyzed:	<u>02/15/22 07:55</u>	Instrument:	<u>TO15_AIR2</u>
Batch:	<u>BB21894</u>	Sequence:	<u>Y2B1642</u>
		Calibration:	<u>YA20007</u>

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
74-83-9	Bromomethane	0.39	U
75-15-0	Carbon disulfide	0.31	U
56-23-5	Carbon tetrachloride	0.16	U
108-90-7	Chlorobenzene	0.46	U
75-00-3	Chloroethane	0.26	U
67-66-3	Chloroform	0.49	U
74-87-3	Chloromethane	0.21	U
156-59-2	cis-1,2-Dichloroethylene	0.099	U
10061-01-5	cis-1,3-Dichloropropylene	0.45	U
110-82-7	Cyclohexane	0.34	U
124-48-1	Dibromochloromethane	0.85	U
75-71-8	Dichlorodifluoromethane	0.49	U
141-78-6	Ethyl acetate	0.72	U
100-41-4	Ethyl Benzene	0.43	U
87-68-3	Hexachlorobutadiene	1.1	U
67-63-0	Isopropanol	0.49	J
80-62-6	Methyl Methacrylate	0.41	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.36	U
75-09-2	Methylene chloride	0.69	U
142-82-5	n-Heptane	0.41	U
110-54-3	n-Hexane	0.35	U
95-47-6	o-Xylene	0.43	U
179601-23-1	p- & m- Xylenes	0.87	U
622-96-8	p-Ethyltoluene	0.49	U
115-07-1	Propylene	0.17	U
100-42-5	Styrene	0.43	U
127-18-4	Tetrachloroethylene	0.68	U
109-99-9	Tetrahydrofuran	0.59	U
108-88-3	Toluene	0.38	U
156-60-5	trans-1,2-Dichloroethylene	0.40	U

**FORM I****METHOD BLANK DATA SHEET  
EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
Matrix: Air Laboratory ID: BB21894-BLK1 File ID: TQ218762.D  
Prepared: 02/15/22 03:00 Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
Analyzed: 02/15/22 07:55 Instrument: TO15\_AIR2  
Batch: BB21894 Sequence: Y2B1642 Calibration: YA20007

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
10061-02-6	trans-1,3-Dichloropropylene	0.45	U
79-01-6	Trichloroethylene	0.13	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.56	U
108-05-4	Vinyl acetate	0.35	U
593-60-2	Vinyl bromide	0.44	U
75-01-4	Vinyl Chloride	0.13	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	694307	11.982	717499	11.976	
ISTD: 1,4-Difluorobenzene	2085369	13.551	2061747	13.554	
ISTD: d5-Chlorobenzene	1586365	18.815	1780714	18.808	

**FORM I****METHOD BLANK DATA SHEET  
EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
Matrix: Air Laboratory ID: BB22212-BLK1 File ID: TQ218802.D  
Prepared: 02/17/22 09:53 Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
Analyzed: 02/17/22 20:03 Instrument: TO15 AIR2  
Batch: BB22212 Sequence: Y2B1836 Calibration: YA20007

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.69	U
71-55-6	1,1,1-Trichloroethane	0.55	U
79-34-5	1,1,2,2-Tetrachloroethane	0.69	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.77	U
79-00-5	1,1,2-Trichloroethane	0.55	U
75-34-3	1,1-Dichloroethane	0.40	U
75-35-4	1,1-Dichloroethylene	0.099	U
120-82-1	1,2,4-Trichlorobenzene	0.74	U
95-63-6	1,2,4-Trimethylbenzene	0.49	U
106-93-4	1,2-Dibromoethane	0.77	U
95-50-1	1,2-Dichlorobenzene	0.60	U
107-06-2	1,2-Dichloroethane	0.40	U
78-87-5	1,2-Dichloropropane	0.46	U
76-14-2	1,2-Dichlorotetrafluoroethane	0.70	U
108-67-8	1,3,5-Trimethylbenzene	0.49	U
106-99-0	1,3-Butadiene	0.66	U
541-73-1	1,3-Dichlorobenzene	0.60	U
142-28-9	1,3-Dichloropropane	0.46	U
106-46-7	1,4-Dichlorobenzene	0.60	U
123-91-1	1,4-Dioxane	0.72	U
78-93-3	2-Butanone	0.29	U
591-78-6	2-Hexanone	0.82	U
107-05-1	3-Chloropropene	1.6	U
108-10-1	4-Methyl-2-pentanone	0.41	U
67-64-1	Acetone	0.48	U
107-13-1	Acrylonitrile	0.22	U
71-43-2	Benzene	0.32	U
100-44-7	Benzyl chloride	0.52	U
75-27-4	Bromodichloromethane	0.67	U
75-25-2	Bromoform	1.0	U

**FORM I****METHOD BLANK DATA SHEET  
EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Air Laboratory ID: BB22212-BLK1 File ID: TQ218802.D  
 Prepared: 02/17/22 09:53 Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Analyzed: 02/17/22 20:03 Instrument: TO15\_AIR2  
 Batch: BB22212 Sequence: Y2B1836 Calibration: YA20007

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
74-83-9	Bromomethane	0.39	U
75-15-0	Carbon disulfide	0.31	U
56-23-5	Carbon tetrachloride	0.16	U
108-90-7	Chlorobenzene	0.46	U
75-00-3	Chloroethane	0.26	U
67-66-3	Chloroform	0.49	U
74-87-3	Chloromethane	0.21	U
156-59-2	cis-1,2-Dichloroethylene	0.099	U
10061-01-5	cis-1,3-Dichloropropylene	0.45	U
110-82-7	Cyclohexane	0.34	U
124-48-1	Dibromochloromethane	0.85	U
75-71-8	Dichlorodifluoromethane	0.49	U
141-78-6	Ethyl acetate	0.72	U
100-41-4	Ethyl Benzene	0.43	U
87-68-3	Hexachlorobutadiene	1.1	U
67-63-0	Isopropanol	0.57	
80-62-6	Methyl Methacrylate	0.41	U
1634-04-4	Methyl tert-butyl ether (MTBE)	0.36	U
75-09-2	Methylene chloride	0.69	U
142-82-5	n-Heptane	0.41	U
110-54-3	n-Hexane	0.35	U
95-47-6	o-Xylene	0.43	U
179601-23-1	p- & m- Xylenes	0.87	U
622-96-8	p-Ethyltoluene	0.49	U
115-07-1	Propylene	0.17	U
100-42-5	Styrene	0.43	U
127-18-4	Tetrachloroethylene	0.68	U
109-99-9	Tetrahydrofuran	0.59	U
108-88-3	Toluene	0.38	U
156-60-5	trans-1,2-Dichloroethylene	0.40	U

**FORM I****METHOD BLANK DATA SHEET  
EPA TO-15**

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
Matrix: Air Laboratory ID: BB22212-BLK1 File ID: TQ218802.D  
Prepared: 02/17/22 09:53 Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
Analyzed: 02/17/22 20:03 Instrument: TO15\_AIR2  
Batch: BB22212 Sequence: Y2B1836 Calibration: YA20007

CAS NO.	COMPOUND	CONC. (ug/m <sup>3</sup> )	Q
10061-02-6	trans-1,3-Dichloropropylene	0.45	U
79-01-6	Trichloroethylene	0.13	U
75-69-4	Trichlorofluoromethane (Freon 11)	0.56	U
108-05-4	Vinyl acetate	0.35	U
593-60-2	Vinyl bromide	0.44	U
75-01-4	Vinyl Chloride	0.13	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	622041	11.972	767428	11.982	
ISTD: 1,4-Difluorobenzene	1844894	13.548	2263052	13.561	
ISTD: d5-Chlorobenzene	1449620	18.811	1974659	18.818	

# AIR Sample Data

## FORM I

ORGANIC ANALYSIS DATA SHEET  
EPA TO-15

IA-7\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Indoor Ambient Air Laboratory ID: 22B0574-01 File ID: TQ218745.D  
 Sampled: 02/11/22 15:46 Prepared: 02/13/22 08:00 Analyzed: 02/14/22 03:25  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	0.913	0.63	U
71-55-6	1,1,1-Trichloroethane	0.913	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.913	0.63	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.913	0.70	U
79-00-5	1,1,2-Trichloroethane	0.913	0.50	U
75-34-3	1,1-Dichloroethane	0.913	0.37	U
75-35-4	1,1-Dichloroethylene	0.913	0.090	U
120-82-1	1,2,4-Trichlorobenzene	0.913	0.68	U
95-63-6	1,2,4-Trimethylbenzene	0.913	1.2	D
106-93-4	1,2-Dibromoethane	0.913	0.70	U
95-50-1	1,2-Dichlorobenzene	0.913	0.55	U
107-06-2	1,2-Dichloroethane	0.913	0.37	U
78-87-5	1,2-Dichloropropane	0.913	0.42	U
76-14-2	1,2-Dichlorotetrafluoroethane	0.913	0.64	U
108-67-8	1,3,5-Trimethylbenzene	0.913	0.45	U
106-99-0	1,3-Butadiene	0.913	5.6	D
541-73-1	1,3-Dichlorobenzene	0.913	0.55	U
142-28-9	1,3-Dichloropropane	0.913	0.42	U
106-46-7	1,4-Dichlorobenzene	0.913	0.55	U
123-91-1	1,4-Dioxane	0.913	0.66	U
78-93-3	2-Butanone	0.913	8.6	D
591-78-6	2-Hexanone	0.913	0.75	U
107-05-1	3-Chloropropene	0.913	1.4	U
108-10-1	4-Methyl-2-pentanone	0.913	0.37	U
67-64-1	Acetone	0.913	23	D
107-13-1	Acrylonitrile	0.913	0.20	D
71-43-2	Benzene	0.913	22	D
100-44-7	Benzyl chloride	0.913	0.47	U
75-27-4	Bromodichloromethane	0.913	0.61	U
75-25-2	Bromoform	0.913	0.94	U
74-83-9	Bromomethane	0.913	0.35	U
75-15-0	Carbon disulfide	0.913	0.28	U
56-23-5	Carbon tetrachloride	0.913	0.40	D
108-90-7	Chlorobenzene	0.913	0.42	U
75-00-3	Chloroethane	0.913	0.24	U
67-66-3	Chloroform	0.913	5.5	D
74-87-3	Chloromethane	0.913	1.4	D
156-59-2	cis-1,2-Dichloroethylene	0.913	0.76	D
10061-01-5	cis-1,3-Dichloropropylene	0.913	0.41	U
110-82-7	Cyclohexane	0.913	0.31	U

## FORM I

**ORGANIC ANALYSIS DATA SHEET  
EPA TO-15**

IA-7\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Indoor Ambient Air Laboratory ID: 22B0574-01 File ID: TQ218745.D  
 Sampled: 02/11/22 15:46 Prepared: 02/13/22 08:00 Analyzed: 02/14/22 03:25  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
124-48-1	Dibromochloromethane	0.913	0.78	U
75-71-8	Dichlorodifluoromethane	0.913	2.3	D
141-78-6	Ethyl acetate	0.913	0.66	U
100-41-4	Ethyl Benzene	0.913	0.40	U
87-68-3	Hexachlorobutadiene	0.913	0.97	U
67-63-0	Isopropanol	0.913	24	D
80-62-6	Methyl Methacrylate	0.913	1.3	D
1634-04-4	Methyl tert-butyl ether (MTBE)	0.913	0.33	U
75-09-2	Methylene chloride	0.913	2.1	D
142-82-5	n-Heptane	0.913	0.64	D
110-54-3	n-Hexane	0.913	0.61	D
95-47-6	o-Xylene	0.913	0.52	D
179601-23-1	p- & m- Xylenes	0.913	1.4	D
622-96-8	p-Ethyltoluene	0.913	0.72	D
115-07-1	Propylene	0.913	35	D
100-42-5	Styrene	0.913	0.39	U
127-18-4	Tetrachloroethylene	0.913	21	D
109-99-9	Tetrahydrofuran	0.913	3.0	D
108-88-3	Toluene	0.913	3.3	D
156-60-5	trans-1,2-Dichloroethylene	0.913	0.36	U
10061-02-6	trans-1,3-Dichloropropylene	0.913	0.41	U
79-01-6	Trichloroethylene	0.913	6.7	D
75-69-4	Trichlorofluoromethane (Freon 11)	0.913	1.3	D
108-05-4	Vinyl acetate	0.913	0.32	U
593-60-2	Vinyl bromide	0.913	0.40	U
75-01-4	Vinyl Chloride	0.913	0.12	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	592339	11.966	612374	11.966	
ISTD: 1,4-Difluorobenzene	1617850	13.548	1692765	13.551	
ISTD: d5-Chlorobenzene	1367874	18.811	1519973	18.808	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218745.D  
 Acq On : 14 Feb 2022 3:25 am  
 Operator : LLJ  
 Sample : 22B0574-01  
 Misc : QBTO2021322A 0.533X/750ML  
 ALS Vial : 14 Sample Multiplier: 0.913  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:49:18 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

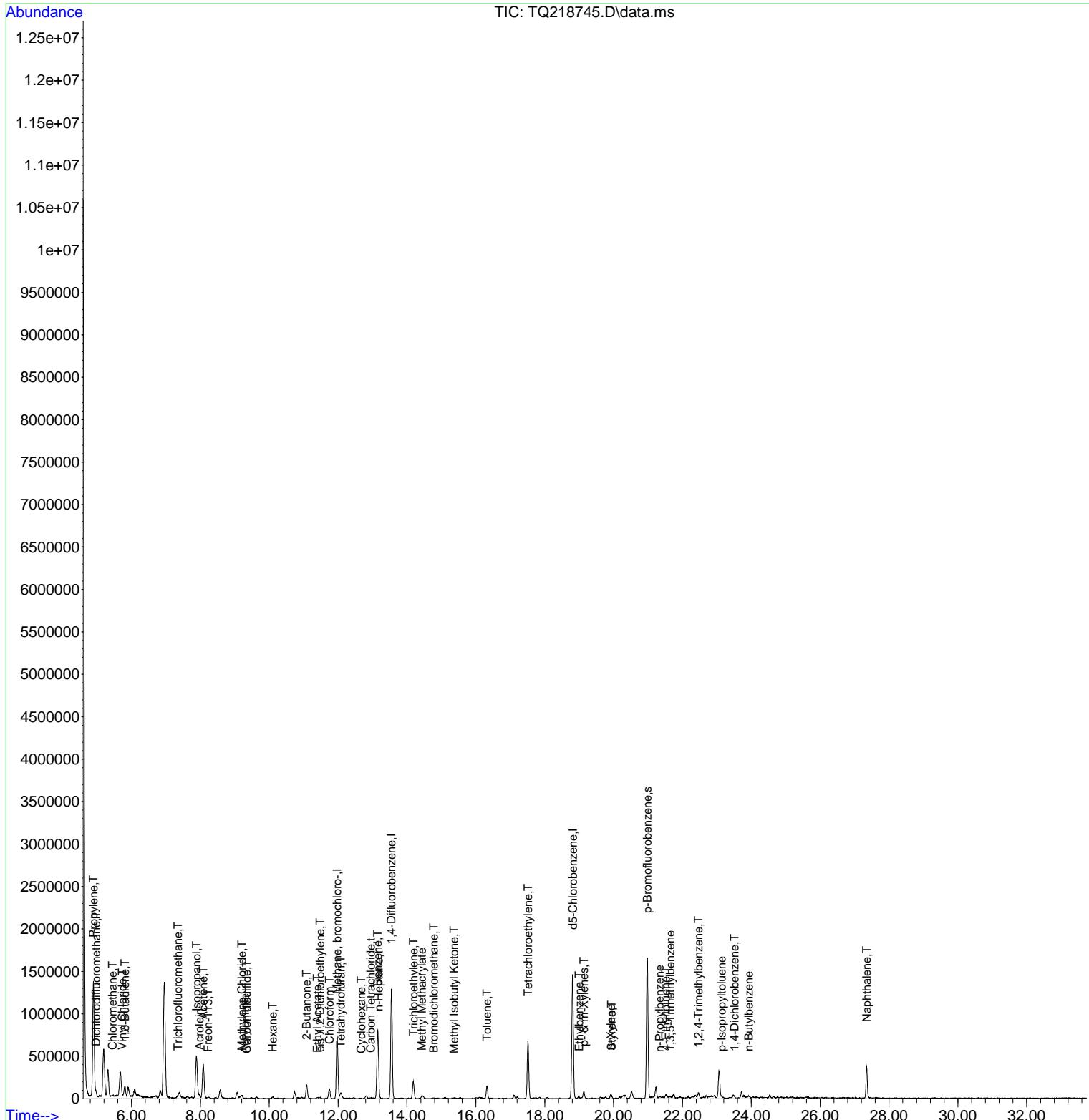
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.966	49	592339	10.00	ppbv	-0.01
37) 1,4-Difluorobenzene	13.548	114	1617850	10.00	ppbv	-0.01
53) d5-Chlorobenzene	18.811	117	1367874	10.00	ppbv	# 0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.978	95	1011384	10.03	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	100.30%

Target Compounds					Qvalue
2) Propylene	4.895	42	526395	22.02	ppbv # 60
3) Dichlorodifluoromethane	4.969	85	84111	0.52	ppbv # 96
5) Chloromethane	5.445	50	25479m	0.76	ppbv
6) Vinyl Chloride	5.731	62	1687m	0.04	ppbv
7) 1,3-Butadiene	5.802	54	93586	2.78	ppbv # 75
11) Trichlorofluoromethane	7.342	101	44465m	0.25	ppbv
12) Isopropanol	7.886	45	1087301	10.74	ppbv 100
13) Acrolein	7.969	56	22104	1.02	ppbv # 1
14) Acetone	8.079	43	931109	10.51	ppbv 84
15) Freon-113	8.223	101	8531m	0.08	ppbv
18) Methylene Chloride	9.201	49	40730m	0.65	ppbv
19) Acrylonitrile	9.294	53	4046m	0.10	ppbv
20) Carbon disulfide	9.339	76	3899m	0.04	ppbv
23) Hexane	10.098	57	12302m	0.19	ppbv
26) 2-Butanone	11.082	43	341801	3.21	ppbv 89
27) Ethyl Acetate	11.394	43	15327m	0.12	ppbv
28) cis-1,2-Dichloroethylene	11.474	61	15443	0.21	ppbv # 42
29) Chloroform	11.750	83	152599	1.24	ppbv # 95
30) Tetrahydrofuran	12.072	42	60453	1.10	ppbv # 66
32) Cyclohexane	12.667	56	4081m	0.06	ppbv
33) Carbon Tetrachloride	12.947	117	10325	0.07	ppbv # 51
35) Benzene	13.146	78	1010611	7.62	ppbv # 35
36) n-Heptane	13.172	43	14922m	0.17	ppbv
38) Trichloroethylene	14.181	95	99828	1.36	ppbv 97
40) Methyl Methacrylate	14.432	69	14730m	0.35	ppbv
42) Bromodichloromethane	14.776	83	9172m	0.08	ppbv
43) Methyl Isobutyl Ketone	15.358	43	6851m	0.05	ppbv
45) Toluene	16.316	91	172164	0.95	ppbv 97
50) Tetrachloroethylene	17.512	166	332241	3.38	ppbv 95
56) Ethylbenzene	18.991	91	24659m	0.09	ppbv
57) p- & m-Xylenes	19.136	91	77640	0.36	ppbv # 90
58) o-Xylene	19.917	91	29353	0.13	ppbv # 77
59) Styrene	19.940	104	9635	0.06	ppbv # 100
61) n-Propylbenzene	21.329	91	13022	0.04	ppbv 97
65) 4-Ethyltoluene	21.512	105	43756m	0.16	ppbv
66) 1,3,5-Trimethylbenzene	21.644	105	17490m	0.07	ppbv
68) 1,2,4-Trimethylbenzene	22.464	105	65949	0.26	ppbv # 92
70) p-Isopropyltoluene	23.133	119	22249	0.07	ppbv # 80
72) 1,4-Dichlorobenzene	23.502	146	15025m	0.09	ppbv
74) n-Butylbenzene	23.927	91	7473m	0.03	ppbv
78) Naphthalene	27.351	128	494763	1.46	ppbv 99

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218745.D  
 Acq On : 14 Feb 2022 3:25 am  
 Operator : LLJ  
 Sample : 22B0574-01  
 Misc : QBTO2021322A 0.533X/750ML  
 ALS Vial : 14 Sample Multiplier: 0.913  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:49:18 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration



## FORM I

ORGANIC ANALYSIS DATA SHEET  
EPA TO-15

IA-8\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Indoor Ambient Air Laboratory ID: 22B0574-02 File ID: TQ218746.D  
 Sampled: 02/11/22 15:16 Prepared: 02/13/22 08:00 Analyzed: 02/14/22 04:35  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	1.07	0.73	U
71-55-6	1,1,1-Trichloroethane	1.07	0.58	U
79-34-5	1,1,2,2-Tetrachloroethane	1.07	0.73	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.07	0.82	U
79-00-5	1,1,2-Trichloroethane	1.07	0.58	U
75-34-3	1,1-Dichloroethane	1.07	0.43	U
75-35-4	1,1-Dichloroethylene	1.07	0.11	U
120-82-1	1,2,4-Trichlorobenzene	1.07	0.79	U
95-63-6	1,2,4-Trimethylbenzene	1.07	0.63	D
106-93-4	1,2-Dibromoethane	1.07	0.82	U
95-50-1	1,2-Dichlorobenzene	1.07	0.64	U
107-06-2	1,2-Dichloroethane	1.07	0.43	U
78-87-5	1,2-Dichloropropane	1.07	0.49	U
76-14-2	1,2-Dichlorotetrafluoroethane	1.07	0.75	U
108-67-8	1,3,5-Trimethylbenzene	1.07	0.53	U
106-99-0	1,3-Butadiene	1.07	0.71	U
541-73-1	1,3-Dichlorobenzene	1.07	0.64	U
142-28-9	1,3-Dichloropropane	1.07	0.49	U
106-46-7	1,4-Dichlorobenzene	1.07	0.64	U
123-91-1	1,4-Dioxane	1.07	0.77	U
78-93-3	2-Butanone	1.07	1.6	D
591-78-6	2-Hexanone	1.07	0.88	U
107-05-1	3-Chloropropene	1.07	1.7	U
108-10-1	4-Methyl-2-pentanone	1.07	0.44	U
67-64-1	Acetone	1.07	14	D
107-13-1	Acrylonitrile	1.07	0.23	U
71-43-2	Benzene	1.07	1.7	D
100-44-7	Benzyl chloride	1.07	0.55	U
75-27-4	Bromodichloromethane	1.07	0.72	U
75-25-2	Bromoform	1.07	1.1	U
74-83-9	Bromomethane	1.07	0.42	U
75-15-0	Carbon disulfide	1.07	0.33	U
56-23-5	Carbon tetrachloride	1.07	0.40	D
108-90-7	Chlorobenzene	1.07	0.49	U
75-00-3	Chloroethane	1.07	0.28	U
67-66-3	Chloroform	1.07	0.94	D
74-87-3	Chloromethane	1.07	1.4	D
156-59-2	cis-1,2-Dichloroethylene	1.07	0.11	U
10061-01-5	cis-1,3-Dichloropropylene	1.07	0.49	U
110-82-7	Cyclohexane	1.07	0.37	U

## FORM I

ORGANIC ANALYSIS DATA SHEET  
EPA TO-15

IA-8\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Indoor Ambient Air Laboratory ID: 22B0574-02 File ID: TQ218746.D  
 Sampled: 02/11/22 15:16 Prepared: 02/13/22 08:00 Analyzed: 02/14/22 04:35  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
124-48-1	Dibromochloromethane	1.07	0.91	U
75-71-8	Dichlorodifluoromethane	1.07	2.3	D
141-78-6	Ethyl acetate	1.07	0.77	U
100-41-4	Ethyl Benzene	1.07	0.46	U
87-68-3	Hexachlorobutadiene	1.07	1.1	U
67-63-0	Isopropanol	1.07	35	D
80-62-6	Methyl Methacrylate	1.07	0.74	D
1634-04-4	Methyl tert-butyl ether (MTBE)	1.07	0.39	U
75-09-2	Methylene chloride	1.07	1.2	D
142-82-5	n-Heptane	1.07	0.61	D
110-54-3	n-Hexane	1.07	0.38	U
95-47-6	o-Xylene	1.07	0.46	U
179601-23-1	p- & m- Xylenes	1.07	0.93	U
622-96-8	p-Ethyltoluene	1.07	0.53	D
115-07-1	Propylene	1.07	3.0	D
100-42-5	Styrene	1.07	0.46	U
127-18-4	Tetrachloroethylene	1.07	10	D
109-99-9	Tetrahydrofuran	1.07	0.63	U
108-88-3	Toluene	1.07	1.2	D
156-60-5	trans-1,2-Dichloroethylene	1.07	0.42	U
10061-02-6	trans-1,3-Dichloropropylene	1.07	0.49	U
79-01-6	Trichloroethylene	1.07	14	D
75-69-4	Trichlorofluoromethane (Freon 11)	1.07	1.2	D
108-05-4	Vinyl acetate	1.07	0.38	U
593-60-2	Vinyl bromide	1.07	0.47	U
75-01-4	Vinyl Chloride	1.07	0.14	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	609521	11.969	612374	11.966	
ISTD: 1,4-Difluorobenzene	1606747	13.551	1692765	13.551	
ISTD: d5-Chlorobenzene	1342481	18.811	1519973	18.808	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218746.D  
 Acq On : 14 Feb 2022 4:35 am  
 Operator : LLJ  
 Sample : 22B0574-02  
 Misc : QBTO2021322A 0.533X/750ML  
 ALS Vial : 1 Sample Multiplier: 1.07  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:53:07 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

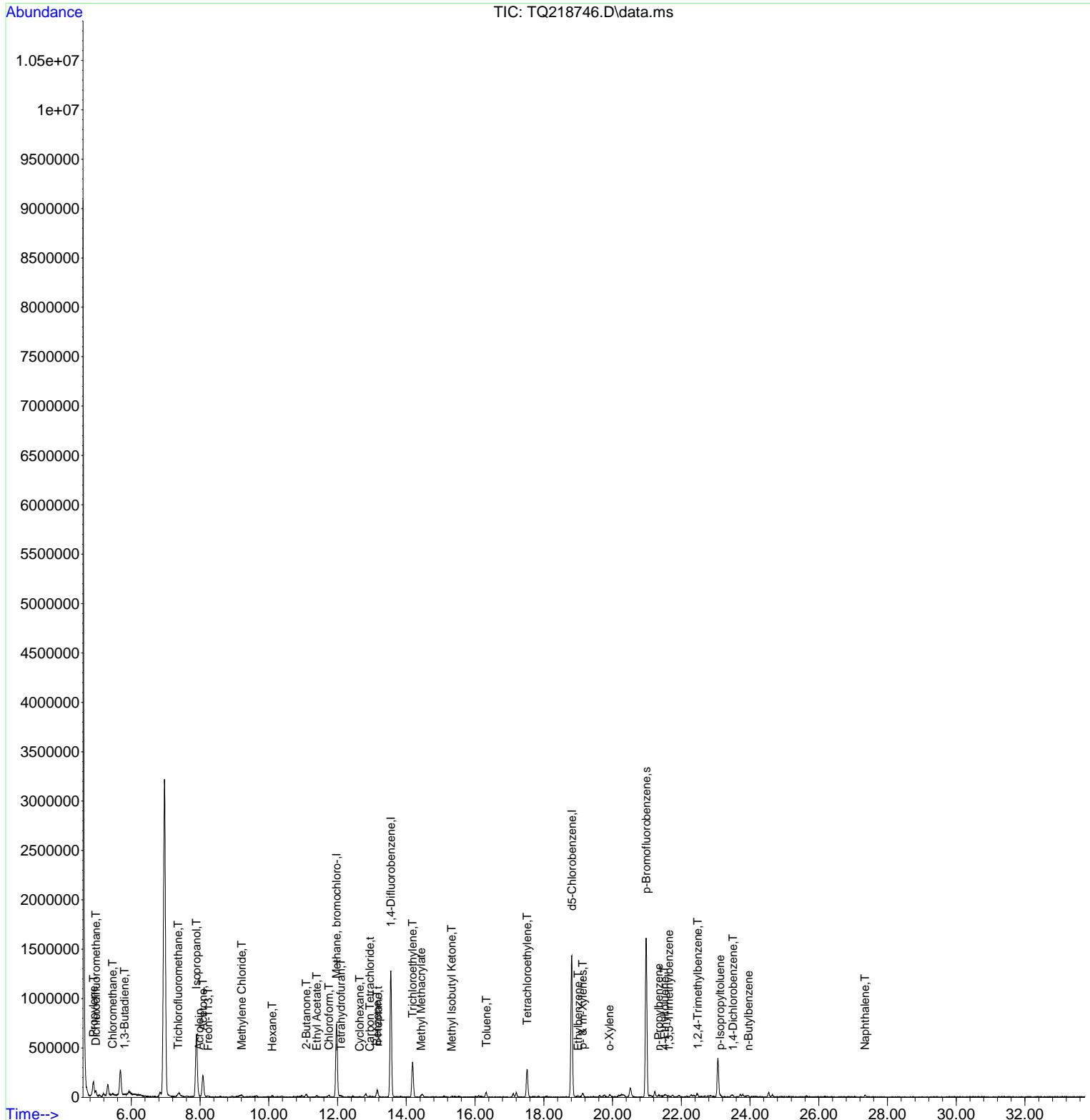
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.969	49	609521	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	13.551	114	1606747	10.00	ppbv	0.00
53) d5-Chlorobenzene	18.811	117	1342481	10.00	ppbv	# 0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.978	95	987433	9.98	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	99.80%

Target Compounds					Value
2) Propylene	4.902	42	39858m	1.62	ppbv
3) Dichlorodifluoromethane	4.966	85	73570	0.44	ppbv # 73
5) Chloromethane	5.452	50	21284m	0.62	ppbv
7) 1,3-Butadiene	5.799	54	3815m	0.11	ppbv
11) Trichlorofluoromethane	7.352	101	36253m	0.20	ppbv
12) Isopropanol	7.895	45	1396986	13.47	ppbv 100
13) Acrolein	7.976	56	4228m	0.19	ppbv
14) Acetone	8.082	43	507200	5.49	ppbv 84
15) Freon-113	8.233	101	7556m	0.07	ppbv
18) Methylene Chloride	9.214	49	19783m	0.31	ppbv
23) Hexane	10.095	57	5993m	0.09	ppbv
26) 2-Butanone	11.091	43	57813	0.52	ppbv # 63
27) Ethyl Acetate	11.394	43	21477	0.17	ppbv # 28
29) Chloroform	11.747	83	23222m	0.18	ppbv
30) Tetrahydrofuran	12.091	42	6702m	0.12	ppbv
32) Cyclohexane	12.641	56	3462m	0.05	ppbv
33) Carbon Tetrachloride	12.937	117	9117m	0.06	ppbv
35) Benzene	13.143	78	69051	0.51	ppbv # 40
36) n-Heptane	13.172	43	13083m	0.14	ppbv
38) Trichloroethylene	14.178	95	180381	2.47	ppbv 97
40) Methyl Methacrylate	14.429	69	6927m	0.17	ppbv
43) Methyl Isobutyl Ketone	15.313	43	12517m	0.09	ppbv
45) Toluene	16.323	91	53804	0.30	ppbv # 96
50) Tetrachloroethylene	17.512	166	138518	1.42	ppbv 95
56) Ethylbenzene	18.995	91	12201m	0.05	ppbv
57) p- & m-Xylenes	19.130	91	29859	0.14	ppbv # 71
58) o-Xylene	19.908	91	12426m	0.06	ppbv
61) n-Propylbenzene	21.335	91	8639	0.03	ppbv # 93
65) 4-Ethyltoluene	21.512	105	26674m	0.10	ppbv
66) 1,3,5-Trimethylbenzene	21.638	105	8001	0.03	ppbv # 54
68) 1,2,4-Trimethylbenzene	22.474	105	31039m	0.12	ppbv
70) p-Isopropyltoluene	23.130	119	17796m	0.06	ppbv
72) 1,4-Dichlorobenzene	23.499	146	9423m	0.06	ppbv
74) n-Butylbenzene	23.949	91	6263m	0.02	ppbv
78) Naphthalene	27.342	128	24372m	0.07	ppbv

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218746.D  
 Acq On : 14 Feb 2022 4:35 am  
 Operator : LLJ  
 Sample : 22B0574-02  
 Misc : QBTO2021322A 0.533X/750ML  
 ALS Vial : 1 Sample Multiplier: 1.07  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:53:07 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration



## FORM I

ORGANIC ANALYSIS DATA SHEET  
EPA TO-15

IA-9\_20220211

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>22B0574</u>	
Client:	<u>Hydro Tech Environmental (Hauppauge)</u>	Project:	<u>210011 152 Graham Ave., Brooklyn, NY</u>	
Matrix:	<u>Indoor Ambient Air</u>	Laboratory ID:	<u>22B0574-03</u>	
Sampled:	<u>02/11/22 15:50</u>	Prepared:	<u>02/15/22 03:00</u>	
Solids:		Preparation:	<u>EPA TO15 PREP</u>	
Batch:	<u>BB21894</u>	Sequence:	<u>Y2B1642</u>	
		Calibration:	<u>YA20007</u>	
			Instrument: <u>TO15_AIR2</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	1.11	0.76	U
71-55-6	1,1,1-Trichloroethane	1.11	0.60	U
79-34-5	1,1,2,2-Tetrachloroethane	1.11	0.76	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.11	0.85	U
79-00-5	1,1,2-Trichloroethane	1.11	0.60	U
75-34-3	1,1-Dichloroethane	1.11	0.45	U
75-35-4	1,1-Dichloroethylene	1.11	0.11	U
120-82-1	1,2,4-Trichlorobenzene	1.11	0.82	U
95-63-6	1,2,4-Trimethylbenzene	1.11	0.54	U
106-93-4	1,2-Dibromoethane	1.11	0.85	U
95-50-1	1,2-Dichlorobenzene	1.11	0.67	U
107-06-2	1,2-Dichloroethane	1.11	0.45	U
78-87-5	1,2-Dichloropropane	1.11	0.51	U
76-14-2	1,2-Dichlorotetrafluoroethane	1.11	0.77	U
108-67-8	1,3,5-Trimethylbenzene	1.11	0.60	D
106-99-0	1,3-Butadiene	1.11	0.83	D
541-73-1	1,3-Dichlorobenzene	1.11	0.67	U
142-28-9	1,3-Dichloropropane	1.11	0.51	U
106-46-7	1,4-Dichlorobenzene	1.11	0.67	U
123-91-1	1,4-Dioxane	1.11	0.80	U
78-93-3	2-Butanone	1.11	3.4	D
591-78-6	2-Hexanone	1.11	0.91	U
107-05-1	3-Chloropropene	1.11	1.7	U
108-10-1	4-Methyl-2-pentanone	1.11	0.45	U
67-64-1	Acetone	1.11	100	D
107-13-1	Acrylonitrile	1.11	0.24	U
71-43-2	Benzene	1.11	4.3	D
100-44-7	Benzyl chloride	1.11	0.57	U
75-27-4	Bromodichloromethane	1.11	0.74	U
75-25-2	Bromoform	1.11	1.1	U
74-83-9	Bromomethane	1.11	0.43	U
75-15-0	Carbon disulfide	1.11	0.41	D
56-23-5	Carbon tetrachloride	1.11	0.35	D
108-90-7	Chlorobenzene	1.11	0.51	U
75-00-3	Chloroethane	1.11	0.29	U
67-66-3	Chloroform	1.11	1.2	D
74-87-3	Chloromethane	1.11	1.3	D
156-59-2	cis-1,2-Dichloroethylene	1.11	0.11	U
10061-01-5	cis-1,3-Dichloropropylene	1.11	0.50	U
110-82-7	Cyclohexane	1.11	0.46	D

## FORM I

**ORGANIC ANALYSIS DATA SHEET  
EPA TO-15**

IA-9\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Indoor Ambient Air Laboratory ID: 22B0574-03 File ID: TQ218764.D  
 Sampled: 02/11/22 15:50 Prepared: 02/15/22 03:00 Analyzed: 02/15/22 12:09  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21894 Sequence: Y2B1642 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
124-48-1	Dibromochloromethane	1.11	0.94	U
75-71-8	Dichlorodifluoromethane	1.11	2.1	D
141-78-6	Ethyl acetate	1.11	1.1	D
100-41-4	Ethyl Benzene	1.11	1.7	D
87-68-3	Hexachlorobutadiene	1.11	1.2	U
67-63-0	Isopropanol	1.11	18	D
80-62-6	Methyl Methacrylate	1.11	1.9	D
1634-04-4	Methyl tert-butyl ether (MTBE)	1.11	0.40	U
75-09-2	Methylene chloride	1.11	3.4	D
142-82-5	n-Heptane	1.11	1.4	D
110-54-3	n-Hexane	1.11	1.1	D
95-47-6	o-Xylene	1.11	4.5	D
179601-23-1	p- & m- Xylenes	1.11	8.0	D
622-96-8	p-Ethyltoluene	1.11	2.5	D
115-07-1	Propylene	1.11	6.7	D
100-42-5	Styrene	1.11	0.90	D
127-18-4	Tetrachloroethylene	1.11	4.4	D
109-99-9	Tetrahydrofuran	1.11	0.65	U
108-88-3	Toluene	1.11	5.0	D
156-60-5	trans-1,2-Dichloroethylene	1.11	0.44	U
10061-02-6	trans-1,3-Dichloropropylene	1.11	0.50	U
79-01-6	Trichloroethylene	1.11	9.6	D
75-69-4	Trichlorofluoromethane (Freon 11)	1.11	1.2	D
108-05-4	Vinyl acetate	1.11	0.39	U
593-60-2	Vinyl bromide	1.11	0.48	U
75-01-4	Vinyl Chloride	1.11	0.14	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	649231	11.975	717499	11.976	
ISTD: 1,4-Difluorobenzene	1869357	13.545	2061747	13.554	
ISTD: d5-Chlorobenzene	1625075	18.808	1780714	18.808	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021522\  
 Data File : TQ218764.D  
 Acq On : 15 Feb 2022 12:09 pm  
 Operator : LLJ  
 Sample : 22B0574-03  
 Misc : QBTO2021522A 0.533X/750ML  
 ALS Vial : 3 Sample Multiplier: 1.107  
 InstName : TO15\_AIR2

Quant Time: Feb 16 13:12:08 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

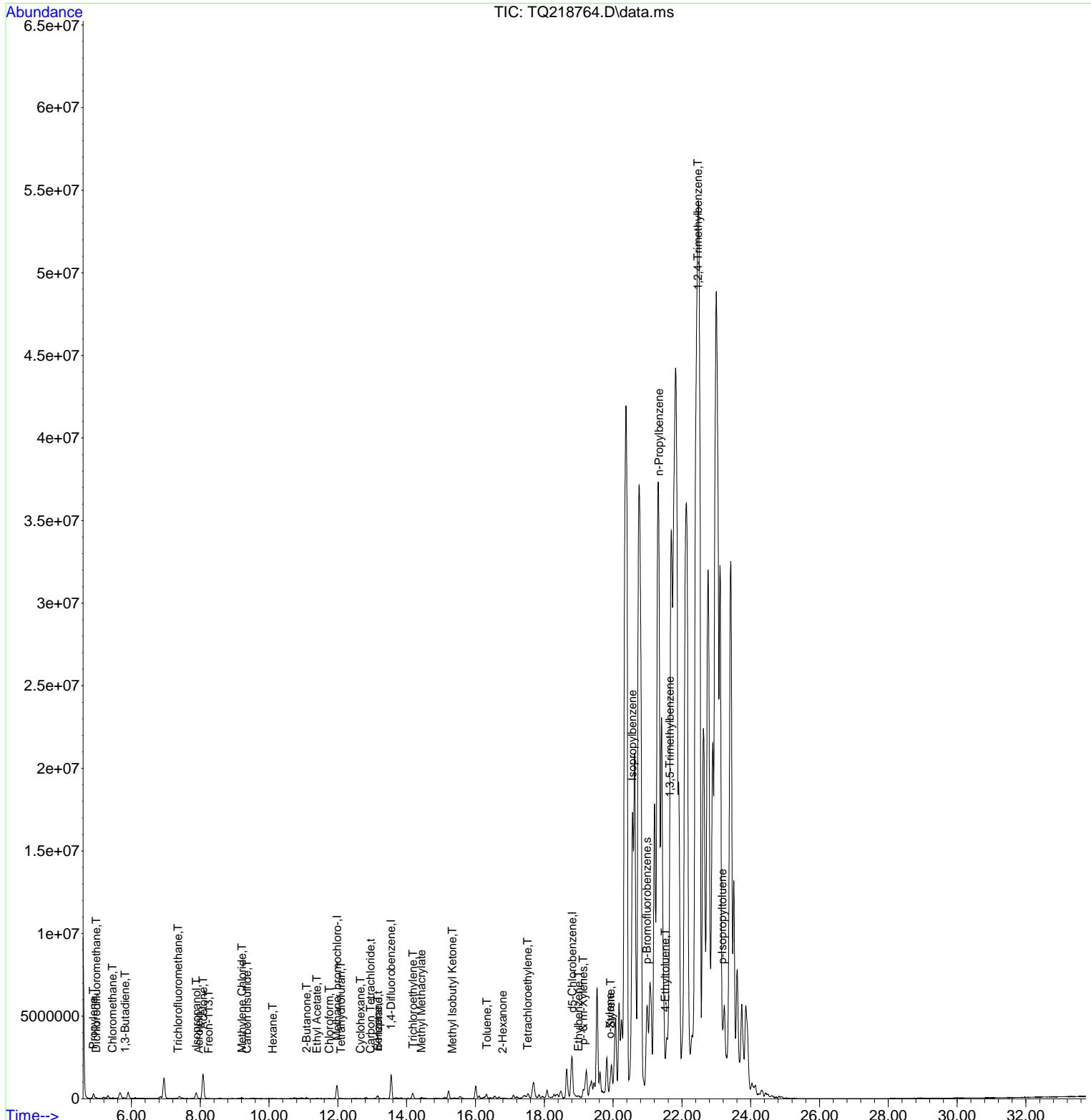
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.975	49	649231	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	13.545	114	1869357	10.00	ppbv	-0.02
53) d5-Chlorobenzene	18.808	117	1625075	10.00	ppbv	# 0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.978	95	1197068	9.99	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	99.90%

Target Compounds					Qvalue
2) Propylene	4.892	42	92361	3.53	ppbv # 56
3) Dichlorodifluoromethane	4.973	85	68924	0.39	ppbv # 54
5) Chloromethane	5.448	50	21346	0.58	ppbv 68
7) 1,3-Butadiene	5.812	54	12538	0.34	ppbv # 63
11) Trichlorofluoromethane	7.349	101	37078m	0.19	ppbv
12) Isopropanol	7.886	45	759599	6.79	ppbv 100
13) Acrolein	7.956	56	12620m	0.53	ppbv
14) Acetone	8.082	43	3534756	39.60	ppbv 86
15) Freon-113	8.239	101	7507m	0.07	ppbv
18) Methylene Chloride	9.207	49	60704	0.89	ppbv 85
20) Carbon disulfide	9.349	76	14516m	0.12	ppbv
23) Hexane	10.101	57	20446	0.29	ppbv # 58
26) 2-Butanone	11.091	43	122375	1.04	ppbv # 87
27) Ethyl Acetate	11.387	43	36492	0.27	ppbv # 29
29) Chloroform	11.747	83	31125	0.23	ppbv # 94
30) Tetrahydrofuran	12.085	42	6978	0.12	ppbv # 43
32) Cyclohexane	12.654	56	9297m	0.12	ppbv
33) Carbon Tetrachloride	12.946	117	8699m	0.05	ppbv
35) Benzene	13.155	78	176952m	1.22	ppbv
36) n-Heptane	13.162	43	29501	0.30	ppbv # 82
38) Trichloroethylene	14.175	95	136735	1.61	ppbv 96
40) Methyl Methacrylate	14.426	69	19938m	0.41	ppbv
43) Methyl Isobutyl Ketone	15.323	43	11921	0.08	ppbv # 81
45) Toluene	16.323	91	253402	1.21	ppbv 98
48) 2-Hexanone	16.786	43	21300m	0.14	ppbv
50) Tetrachloroethylene	17.509	166	65925	0.58	ppbv 96
56) Ethylbenzene	18.988	91	112726	0.36	ppbv 98
57) p- & m-Xylenes	19.130	91	423488	1.66	ppbv 95
58) o-Xylene	19.904	91	241341	0.93	ppbv 97
59) Styrene	19.927	104	32661m	0.19	ppbv
61) n-Propylbenzene	21.329	91	43012	0.11	ppbv 97
62) Isopropylbenzene	20.557	105	15168m	0.04	ppbv
65) 4-Ethyltoluene	21.512	105	154409	0.46	ppbv # 89
66) 1,3,5-Trimethylbenzene	21.644	105	31913	0.11	ppbv # 27
68) 1,2,4-Trimethylbenzene	22.461	105	25378	0.08	ppbv # 88
70) p-Isopropyltoluene	23.165	119	40848	0.12	ppbv # 86

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021522\  
 Data File : TQ218764.D  
 Acq On : 15 Feb 2022 12:09 pm  
 Operator : LLJ  
 Sample : 22B0574-03  
 Misc : QBTO2021522A 0.533X/750ML  
 ALS Vial : 3 Sample Multiplier: 1.107  
 InstName : TO15\_AIR2

Quant Time: Feb 16 13:12:08 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration



## FORM I

## ORGANIC ANALYSIS DATA SHEET

## EPA TO-15

IA-10\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Indoor Ambient Air Laboratory ID: 22B0574-04 File ID: TQ218748.D  
 Sampled: 02/11/22 15:56 Prepared: 02/13/22 08:00 Analyzed: 02/14/22 06:55  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	1.23	0.84	U
71-55-6	1,1,1-Trichloroethane	1.23	0.67	U
79-34-5	1,1,2,2-Tetrachloroethane	1.23	0.84	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.23	0.94	U
79-00-5	1,1,2-Trichloroethane	1.23	0.67	U
75-34-3	1,1-Dichloroethane	1.23	0.50	U
75-35-4	1,1-Dichloroethylene	1.23	0.12	U
120-82-1	1,2,4-Trichlorobenzene	1.23	0.91	U
95-63-6	1,2,4-Trimethylbenzene	1.23	0.90	D
106-93-4	1,2-Dibromoethane	1.23	0.94	U
95-50-1	1,2-Dichlorobenzene	1.23	0.74	U
107-06-2	1,2-Dichloroethane	1.23	0.50	U
78-87-5	1,2-Dichloropropane	1.23	0.57	U
76-14-2	1,2-Dichlorotetrafluoroethane	1.23	0.86	U
108-67-8	1,3,5-Trimethylbenzene	1.23	0.60	U
106-99-0	1,3-Butadiene	1.23	0.81	U
541-73-1	1,3-Dichlorobenzene	1.23	0.74	U
142-28-9	1,3-Dichloropropane	1.23	0.57	U
106-46-7	1,4-Dichlorobenzene	1.23	0.74	U
123-91-1	1,4-Dioxane	1.23	0.88	U
78-93-3	2-Butanone	1.23	1.4	D
591-78-6	2-Hexanone	1.23	1.0	U
107-05-1	3-Chloropropene	1.23	1.9	U
108-10-1	4-Methyl-2-pentanone	1.23	0.50	U
67-64-1	Acetone	1.23	16	D
107-13-1	Acrylonitrile	1.23	0.27	U
71-43-2	Benzene	1.23	1.4	D
100-44-7	Benzyl chloride	1.23	0.63	U
75-27-4	Bromodichloromethane	1.23	0.82	U
75-25-2	Bromoform	1.23	1.3	U
74-83-9	Bromomethane	1.23	0.48	U
75-15-0	Carbon disulfide	1.23	0.38	U
56-23-5	Carbon tetrachloride	1.23	0.39	D
108-90-7	Chlorobenzene	1.23	0.56	U
75-00-3	Chloroethane	1.23	0.32	U
67-66-3	Chloroform	1.23	1.4	D
74-87-3	Chloromethane	1.23	1.2	D
156-59-2	cis-1,2-Dichloroethylene	1.23	0.12	U
10061-01-5	cis-1,3-Dichloropropylene	1.23	0.56	U
110-82-7	Cyclohexane	1.23	0.42	U

## FORM I

**ORGANIC ANALYSIS DATA SHEET  
EPA TO-15**

IA-10\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Indoor Ambient Air Laboratory ID: 22B0574-04 File ID: TQ218748.D  
 Sampled: 02/11/22 15:56 Prepared: 02/13/22 08:00 Analyzed: 02/14/22 06:55  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
124-48-1	Dibromochloromethane	1.23	1.0	U
75-71-8	Dichlorodifluoromethane	1.23	1.9	D
141-78-6	Ethyl acetate	1.23	1.1	D
100-41-4	Ethyl Benzene	1.23	0.53	U
87-68-3	Hexachlorobutadiene	1.23	1.3	U
67-63-0	Isopropanol	1.23	22	D
80-62-6	Methyl Methacrylate	1.23	0.50	U
1634-04-4	Methyl tert-butyl ether (MTBE)	1.23	0.44	U
75-09-2	Methylene chloride	1.23	2.0	D
142-82-5	n-Heptane	1.23	0.65	D
110-54-3	n-Hexane	1.23	0.43	U
95-47-6	o-Xylene	1.23	0.53	U
179601-23-1	p- & m- Xylenes	1.23	1.1	D
622-96-8	p-Ethyltoluene	1.23	0.60	D
115-07-1	Propylene	1.23	0.21	U
100-42-5	Styrene	1.23	0.52	U
127-18-4	Tetrachloroethylene	1.23	2.7	D
109-99-9	Tetrahydrofuran	1.23	0.72	U
108-88-3	Toluene	1.23	1.5	D
156-60-5	trans-1,2-Dichloroethylene	1.23	0.49	U
10061-02-6	trans-1,3-Dichloropropylene	1.23	0.56	U
79-01-6	Trichloroethylene	1.23	3.1	D
75-69-4	Trichlorofluoromethane (Freon 11)	1.23	1.1	D
108-05-4	Vinyl acetate	1.23	0.43	U
593-60-2	Vinyl bromide	1.23	0.54	U
75-01-4	Vinyl Chloride	1.23	0.16	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	716484	11.972	612374	11.966	
ISTD: 1,4-Difluorobenzene	2146271	13.548	1692765	13.551	
ISTD: d5-Chlorobenzene	1826500	18.808	1519973	18.808	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218748.D  
 Acq On : 14 Feb 2022 6:55 am  
 Operator : LLJ  
 Sample : 22B0574-04  
 Misc : QBTO2021322A 0.533X/750ML  
 ALS Vial : 6 Sample Multiplier: 1.226  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:56:31 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

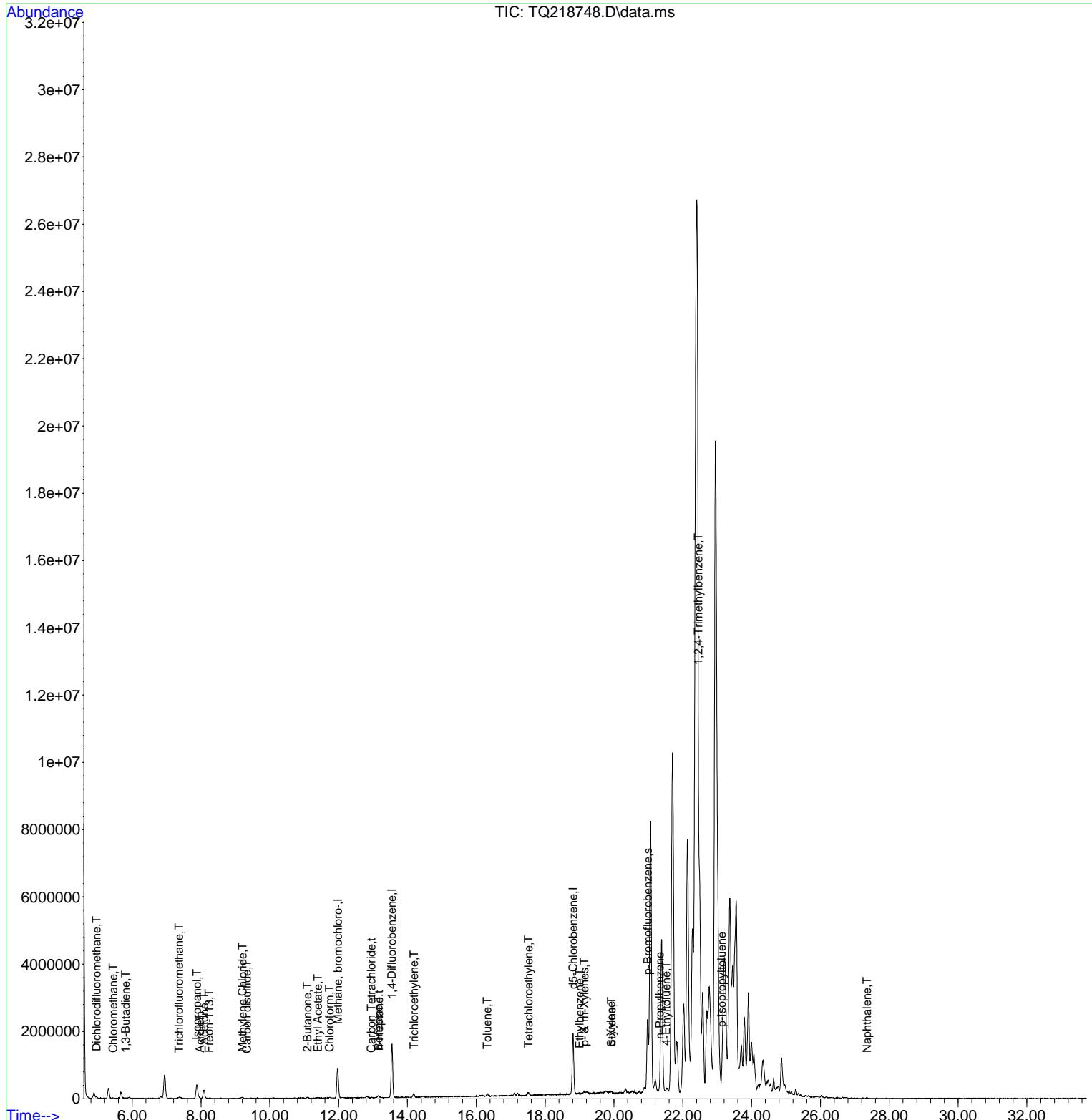
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.972	49	716484	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	13.548	114	2146271	10.00	ppbv	-0.01
53) d5-Chlorobenzene	18.808	117	1826500	10.00	ppbv	0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.975	95	1261780	9.37	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	93.70%

Target Compounds					Qvalue
3) Dichlorodifluoromethane	4.960	85	62641	0.32	ppbv # 76
5) Chloromethane	5.445	50	19819	0.49	ppbv # 69
7) 1,3-Butadiene	5.802	54	2049	0.05	ppbv # 29
11) Trichlorofluoromethane	7.358	101	34717	0.16	ppbv # 63
12) Isopropanol	7.876	45	895781	7.27	ppbv 100
13) Acrolein	7.969	56	4041m	0.15	ppbv
14) Acetone	8.085	43	581453	5.35	ppbv # 67
15) Freon-113	8.233	101	7430m	0.06	ppbv
18) Methylene Chloride	9.201	49	36682	0.48	ppbv # 54
20) Carbon disulfide	9.323	76	8878m	0.07	ppbv
26) 2-Butanone	11.088	43	52340	0.40	ppbv
27) Ethyl Acetate	11.394	43	37958	0.26	ppbv # 29
29) Chloroform	11.738	83	33899m	0.23	ppbv
33) Carbon Tetrachloride	12.943	117	8813m	0.05	ppbv
35) Benzene	13.149	78	58781	0.37	ppbv # 51
36) n-Heptane	13.165	43	13821m	0.13	ppbv
38) Trichloroethylene	14.181	95	45796	0.47	ppbv # 79
45) Toluene	16.313	91	79400m	0.33	ppbv
50) Tetrachloroethylene	17.512	166	42119	0.32	ppbv # 71
56) Ethylbenzene	18.995	91	23399	0.07	ppbv # 53
57) p- & m-Xylenes	19.133	91	58908	0.21	ppbv # 74
58) o-Xylene	19.914	91	22759m	0.08	ppbv
59) Styrene	19.927	104	13903	0.07	ppbv # 100
61) n-Propylbenzene	21.322	91	12627m	0.03	ppbv
65) 4-Ethyltoluene	21.509	105	36155m	0.10	ppbv
68) 1,2,4-Trimethylbenzene	22.451	105	50759m	0.15	ppbv
70) p-Isopropyltoluene	23.129	119	23271m	0.06	ppbv
78) Naphthalene	27.351	128	30493	0.07	ppbv # 89

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021322\  
Data File : TQ218748.D  
Acq On : 14 Feb 2022 6:55 am  
Operator : LLJ  
Sample : 22B0574-04  
Misc : QBTO2021322A 0.533X/750ML  
ALS Vial : 6 Sample Multiplier: 1.226  
InstName : TO15\_AIR2

Quant Time: Feb 18 16:56:31 2022  
Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
Quant Title : TO15 VOC Analysis  
QLast Update : Mon Dec 27 19:43:41 2021  
Response via : Initial Calibration



## FORM I

**ORGANIC ANALYSIS DATA SHEET  
EPA TO-15**

OA-2\_20220211

Laboratory:	<u>York Analytical Laboratories, Inc.</u>	SDG:	<u>22B0574</u>	
Client:	<u>Hydro Tech Environmental (Hauppauge)</u>	Project:	<u>210011 152 Graham Ave., Brooklyn, NY</u>	
Matrix:	<u>Outdoor Ambient Air</u>	Laboratory ID:	<u>22B0574-05</u>	
Sampled:	<u>02/11/22 15:48</u>	Prepared:	<u>02/13/22 08:00</u>	
Solids:		Preparation:	<u>EPA TO15 PREP</u>	
Batch:	<u>BB21858</u>	Sequence:	<u>Y2B1447</u>	
		Calibration:	<u>YA20007</u>	
		Instrument:	<u>TO15_AIR2</u>	
CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	1.98	1.4	U
71-55-6	1,1,1-Trichloroethane	1.98	1.1	U
79-34-5	1,1,2,2-Tetrachloroethane	1.98	1.4	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.98	1.5	U
79-00-5	1,1,2-Trichloroethane	1.98	1.1	U
75-34-3	1,1-Dichloroethane	1.98	0.80	U
75-35-4	1,1-Dichloroethylene	1.98	0.20	U
120-82-1	1,2,4-Trichlorobenzene	1.98	1.5	U
95-63-6	1,2,4-Trimethylbenzene	1.98	0.97	U
106-93-4	1,2-Dibromoethane	1.98	1.5	U
95-50-1	1,2-Dichlorobenzene	1.98	1.2	U
107-06-2	1,2-Dichloroethane	1.98	0.80	U
78-87-5	1,2-Dichloropropane	1.98	0.92	U
76-14-2	1,2-Dichlorotetrafluoroethane	1.98	1.4	U
108-67-8	1,3,5-Trimethylbenzene	1.98	0.97	U
106-99-0	1,3-Butadiene	1.98	1.3	U
541-73-1	1,3-Dichlorobenzene	1.98	1.2	U
142-28-9	1,3-Dichloropropane	1.98	0.92	U
106-46-7	1,4-Dichlorobenzene	1.98	1.2	U
123-91-1	1,4-Dioxane	1.98	1.4	U
78-93-3	2-Butanone	1.98	1.3	D
591-78-6	2-Hexanone	1.98	1.6	U
107-05-1	3-Chloropropene	1.98	3.1	U
108-10-1	4-Methyl-2-pentanone	1.98	0.81	U
67-64-1	Acetone	1.98	10	D
107-13-1	Acrylonitrile	1.98	0.43	U
71-43-2	Benzene	1.98	1.5	D
100-44-7	Benzyl chloride	1.98	1.0	U
75-27-4	Bromodichloromethane	1.98	1.3	U
75-25-2	Bromoform	1.98	2.0	U
74-83-9	Bromomethane	1.98	0.77	U
75-15-0	Carbon disulfide	1.98	0.62	U
56-23-5	Carbon tetrachloride	1.98	0.62	D
108-90-7	Chlorobenzene	1.98	0.91	U
75-00-3	Chloroethane	1.98	0.52	U
67-66-3	Chloroform	1.98	0.97	U
74-87-3	Chloromethane	1.98	2.4	D
156-59-2	cis-1,2-Dichloroethylene	1.98	0.20	U
10061-01-5	cis-1,3-Dichloropropylene	1.98	0.90	U
110-82-7	Cyclohexane	1.98	0.68	U

## FORM I

**ORGANIC ANALYSIS DATA SHEET  
EPA TO-15**

OA-2\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Outdoor Ambient Air Laboratory ID: 22B0574-05 File ID: TQ218749.D  
 Sampled: 02/11/22 15:48 Prepared: 02/13/22 08:00 Analyzed: 02/14/22 08:05  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB21858 Sequence: Y2B1447 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
124-48-1	Dibromochloromethane	1.98	1.7	U
75-71-8	Dichlorodifluoromethane	1.98	3.9	D
141-78-6	Ethyl acetate	1.98	1.4	U
100-41-4	Ethyl Benzene	1.98	0.86	U
87-68-3	Hexachlorobutadiene	1.98	2.1	U
67-63-0	Isopropanol	1.98	10	D
80-62-6	Methyl Methacrylate	1.98	1.2	D
1634-04-4	Methyl tert-butyl ether (MTBE)	1.98	0.71	U
75-09-2	Methylene chloride	1.98	2.6	D
142-82-5	n-Heptane	1.98	0.81	U
110-54-3	n-Hexane	1.98	0.70	D
95-47-6	o-Xylene	1.98	0.86	U
179601-23-1	p- & m- Xylenes	1.98	1.7	U
622-96-8	p-Ethyltoluene	1.98	0.97	U
115-07-1	Propylene	1.98	0.34	U
100-42-5	Styrene	1.98	0.84	U
127-18-4	Tetrachloroethylene	1.98	12	D
109-99-9	Tetrahydrofuran	1.98	1.2	U
108-88-3	Toluene	1.98	1.9	D
156-60-5	trans-1,2-Dichloroethylene	1.98	0.79	U
10061-02-6	trans-1,3-Dichloropropylene	1.98	0.90	U
79-01-6	Trichloroethylene	1.98	0.53	D
75-69-4	Trichlorofluoromethane (Freon 11)	1.98	2.2	D
108-05-4	Vinyl acetate	1.98	0.70	U
593-60-2	Vinyl bromide	1.98	0.87	U
75-01-4	Vinyl Chloride	1.98	0.25	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	767750	11.972	612374	11.966	
ISTD: 1,4-Difluorobenzene	2321275	13.548	1692765	13.551	
ISTD: d5-Chlorobenzene	1909637	18.808	1519973	18.808	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218749.D  
 Acq On : 14 Feb 2022 8:05 am  
 Operator : LLJ  
 Sample : 22B0574-05  
 Misc : QBTO2021322A 0.533X/750ML  
 ALS Vial : 12 Sample Multiplier: 1.983  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:59:11 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

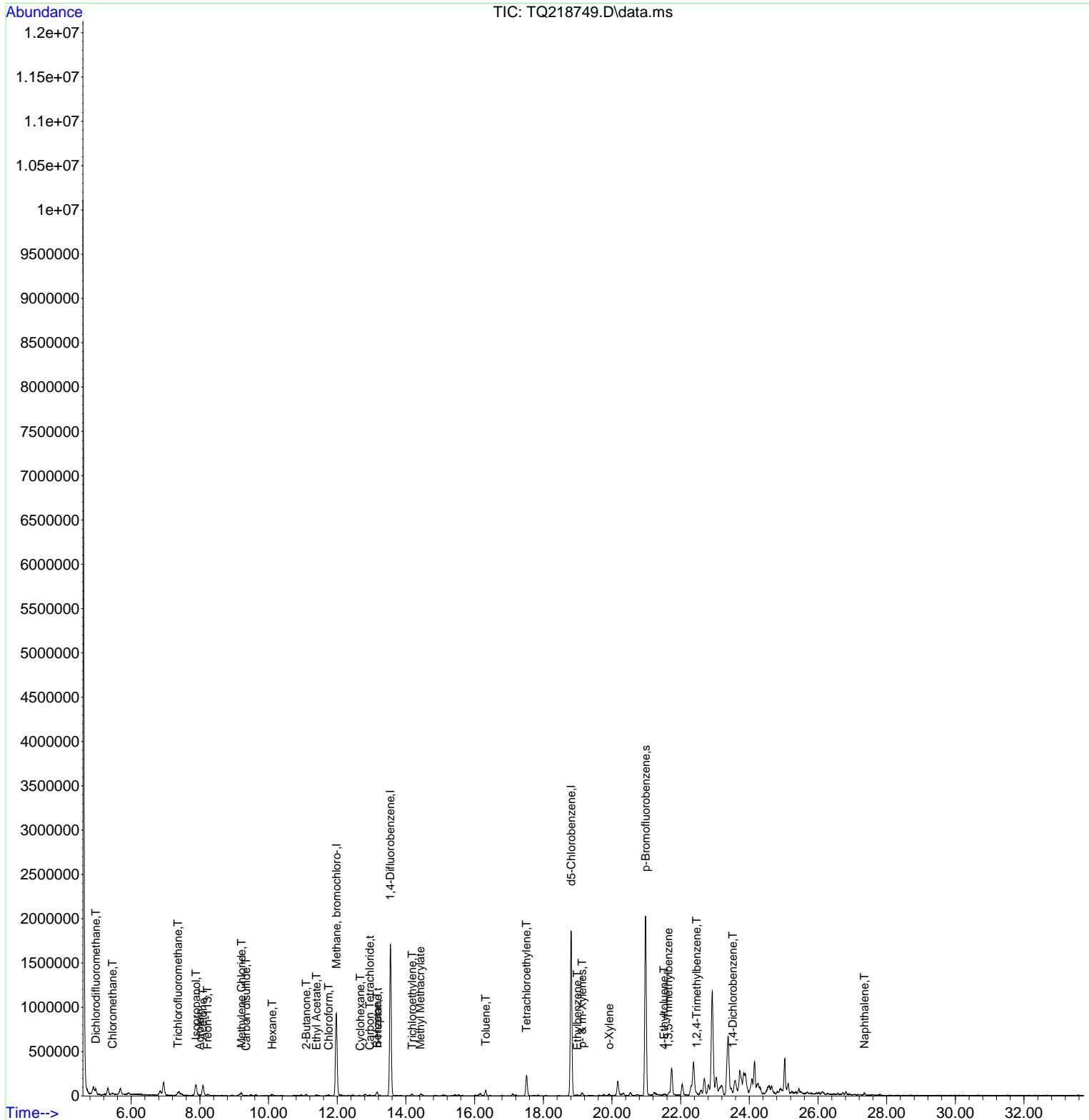
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.972	49	767750	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	13.548	114	2321275	10.00	ppbv	-0.01
53) d5-Chlorobenzene	18.808	117	1909637	10.00	ppbv	0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.975	95	1299373	9.23	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	92.30%

Target Compounds					Qvalue
3) Dichlorodifluoromethane	4.969	85	83420	0.40	ppbv # 95
5) Chloromethane	5.455	50	25076m	0.58	ppbv
11) Trichlorofluoromethane	7.352	101	46291m	0.20	ppbv
12) Isopropanol	7.886	45	277455	2.08	ppbv
13) Acrolein	7.989	56	2759m	0.10	ppbv
14) Acetone	8.088	43	252193	2.15	ppbv
15) Freon-113	8.223	101	9676m	0.07	ppbv
18) Methylene Chloride	9.214	49	30880	0.38	ppbv # 50
20) Carbon disulfide	9.336	76	9098m	0.07	ppbv
23) Hexane	10.101	57	8550m	0.10	ppbv
26) 2-Butanone	11.095	43	30851	0.22	ppbv # 65
27) Ethyl Acetate	11.394	43	12707	0.08	ppbv # 28
29) Chloroform	11.747	83	14174m	0.09	ppbv
32) Cyclohexane	12.664	56	2762m	0.03	ppbv
33) Carbon Tetrachloride	12.947	117	10826m	0.05	ppbv
35) Benzene	13.159	78	39840m	0.23	ppbv
36) n-Heptane	13.172	43	8103	0.07	ppbv # 82
38) Trichloroethylene	14.178	95	5549m	0.05	ppbv
40) Methyl Methacrylate	14.419	69	9166m	0.15	ppbv
45) Toluene	16.316	91	66173	0.25	ppbv
50) Tetrachloroethylene	17.506	166	125373	0.89	ppbv
56) Ethylbenzene	18.988	91	12398m	0.03	ppbv
57) p- & m-Xylenes	19.130	91	31492	0.10	ppbv # 66
58) o-Xylene	19.917	91	12052	0.04	ppbv # 77
65) 4-Ethyltoluene	21.512	105	21988m	0.06	ppbv
66) 1,3,5-Trimethylbenzene	21.634	105	7182m	0.02	ppbv
68) 1,2,4-Trimethylbenzene	22.464	105	28175	0.08	ppbv # 90
72) 1,4-Dichlorobenzene	23.512	146	7207m	0.03	ppbv
78) Naphthalene	27.354	128	27689	0.06	ppbv # 73

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021322\  
 Data File : TQ218749.D  
 Acq On : 14 Feb 2022 8:05 am  
 Operator : LLJ  
 Sample : 22B0574-05  
 Misc : QBTO2021322A 0.533X/750ML  
 ALS Vial : 12 Sample Multiplier: 1.983  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:59:11 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration



## FORM I

**ORGANIC ANALYSIS DATA SHEET  
EPA TO-15**

EE-1\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Air Laboratory ID: 22B0574-06 File ID: TQ218807.D  
 Sampled: 02/11/22 15:49 Prepared: 02/17/22 08:00 Analyzed: 02/18/22 01:32  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB22212 Sequence: Y2B1836 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
630-20-6	1,1,1,2-Tetrachloroethane	21.1	14	U
71-55-6	1,1,1-Trichloroethane	21.1	12	U
79-34-5	1,1,2,2-Tetrachloroethane	21.1	14	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	21.1	16	U
79-00-5	1,1,2-Trichloroethane	21.1	12	U
75-34-3	1,1-Dichloroethane	21.1	8.5	U
75-35-4	1,1-Dichloroethylene	21.1	2.1	U
120-82-1	1,2,4-Trichlorobenzene	21.1	16	U
95-63-6	1,2,4-Trimethylbenzene	21.1	10	U
106-93-4	1,2-Dibromoethane	21.1	16	U
95-50-1	1,2-Dichlorobenzene	21.1	13	U
107-06-2	1,2-Dichloroethane	21.1	8.5	U
78-87-5	1,2-Dichloropropane	21.1	9.8	U
76-14-2	1,2-Dichlorotetrafluoroethane	21.1	15	U
108-67-8	1,3,5-Trimethylbenzene	21.1	10	U
106-99-0	1,3-Butadiene	21.1	14	U
541-73-1	1,3-Dichlorobenzene	21.1	13	U
142-28-9	1,3-Dichloropropane	21.1	9.8	U
106-46-7	1,4-Dichlorobenzene	21.1	13	U
123-91-1	1,4-Dioxane	21.1	15	U
78-93-3	2-Butanone	21.1	8.7	D
591-78-6	2-Hexanone	21.1	17	U
107-05-1	3-Chloropropene	21.1	33	U
108-10-1	4-Methyl-2-pentanone	21.1	8.6	U
67-64-1	Acetone	21.1	1300	D
107-13-1	Acrylonitrile	21.1	4.6	U
71-43-2	Benzene	21.1	14	D
100-44-7	Benzyl chloride	21.1	11	U
75-27-4	Bromodichloromethane	21.1	14	U
75-25-2	Bromoform	21.1	22	U
74-83-9	Bromomethane	21.1	8.2	U
75-15-0	Carbon disulfide	21.1	6.6	U
56-23-5	Carbon tetrachloride	21.1	3.3	U
108-90-7	Chlorobenzene	21.1	9.7	U
75-00-3	Chloroethane	21.1	5.6	U
67-66-3	Chloroform	21.1	10	U
74-87-3	Chloromethane	21.1	4.4	U
156-59-2	cis-1,2-Dichloroethylene	21.1	15	D
10061-01-5	cis-1,3-Dichloropropylene	21.1	9.6	U
110-82-7	Cyclohexane	21.1	7.3	U

## FORM I

**ORGANIC ANALYSIS DATA SHEET  
EPA TO-15**

EE-1\_20220211

Laboratory: York Analytical Laboratories, Inc. SDG: 22B0574  
 Client: Hydro Tech Environmental (Hauppauge) Project: 210011 152 Graham Ave., Brooklyn, NY  
 Matrix: Air Laboratory ID: 22B0574-06 File ID: TQ218807.D  
 Sampled: 02/11/22 15:49 Prepared: 02/17/22 08:00 Analyzed: 02/18/22 01:32  
 Solids: Preparation: EPA TO15 PREP Initial/Final: 400 mL / 400 mL  
 Batch: BB22212 Sequence: Y2B1836 Calibration: YA20007 Instrument: TO15\_AIR2

CAS NO.	COMPOUND	DILUTION	CONC. (ug/m <sup>3</sup> )	Q
124-48-1	Dibromochloromethane	21.1	18	U
75-71-8	Dichlorodifluoromethane	21.1	10	U
141-78-6	Ethyl acetate	21.1	15	U
100-41-4	Ethyl Benzene	21.1	9.2	U
87-68-3	Hexachlorobutadiene	21.1	23	U
67-63-0	Isopropanol	21.1	23	BD
80-62-6	Methyl Methacrylate	21.1	8.6	U
1634-04-4	Methyl tert-butyl ether (MTBE)	21.1	7.6	U
75-09-2	Methylene chloride	21.1	15	U
142-82-5	n-Heptane	21.1	8.6	U
110-54-3	n-Hexane	21.1	7.4	U
95-47-6	o-Xylene	21.1	9.2	U
179601-23-1	p- & m- Xylenes	21.1	18	U
622-96-8	p-Ethyltoluene	21.1	10	U
115-07-1	Propylene	21.1	3.6	U
100-42-5	Styrene	21.1	9.0	U
127-18-4	Tetrachloroethylene	21.1	130	D
109-99-9	Tetrahydrofuran	21.1	12	U
108-88-3	Toluene	21.1	8.7	D
156-60-5	trans-1,2-Dichloroethylene	21.1	8.4	U
10061-02-6	trans-1,3-Dichloropropylene	21.1	9.6	U
79-01-6	Trichloroethylene	21.1	7.9	D
75-69-4	Trichlorofluoromethane (Freon 11)	21.1	12	U
108-05-4	Vinyl acetate	21.1	7.4	U
593-60-2	Vinyl bromide	21.1	9.2	U
75-01-4	Vinyl Chloride	21.1	2.7	U

INTERNAL STANDARD	AREA	RT	REF AREA	REF RT	Q
Bromochloromethane	613997	11.972	767428	11.982	
ISTD: 1,4-Difluorobenzene	1748129	13.551	2263052	13.561	
ISTD: d5-Chlorobenzene	1471522	18.811	1974659	18.818	

\* Values outside of QC limits

Data Path : C:\msdchem\1\data\021722\  
 Data File : TQ218807.D  
 Acq On : 18 Feb 2022 1:32 am  
 Operator : AS  
 Sample : 22B0574-06  
 Misc : QBTO2021722A 10X/40ML re  
 ALS Vial : 3 Sample Multiplier: 21.1  
 InstName : TO15\_AIR2

Quant Time: Feb 18 16:38:28 2022  
 Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
 Quant Title : TO15 VOC Analysis  
 QLast Update : Mon Dec 27 19:43:41 2021  
 Response via : Initial Calibration

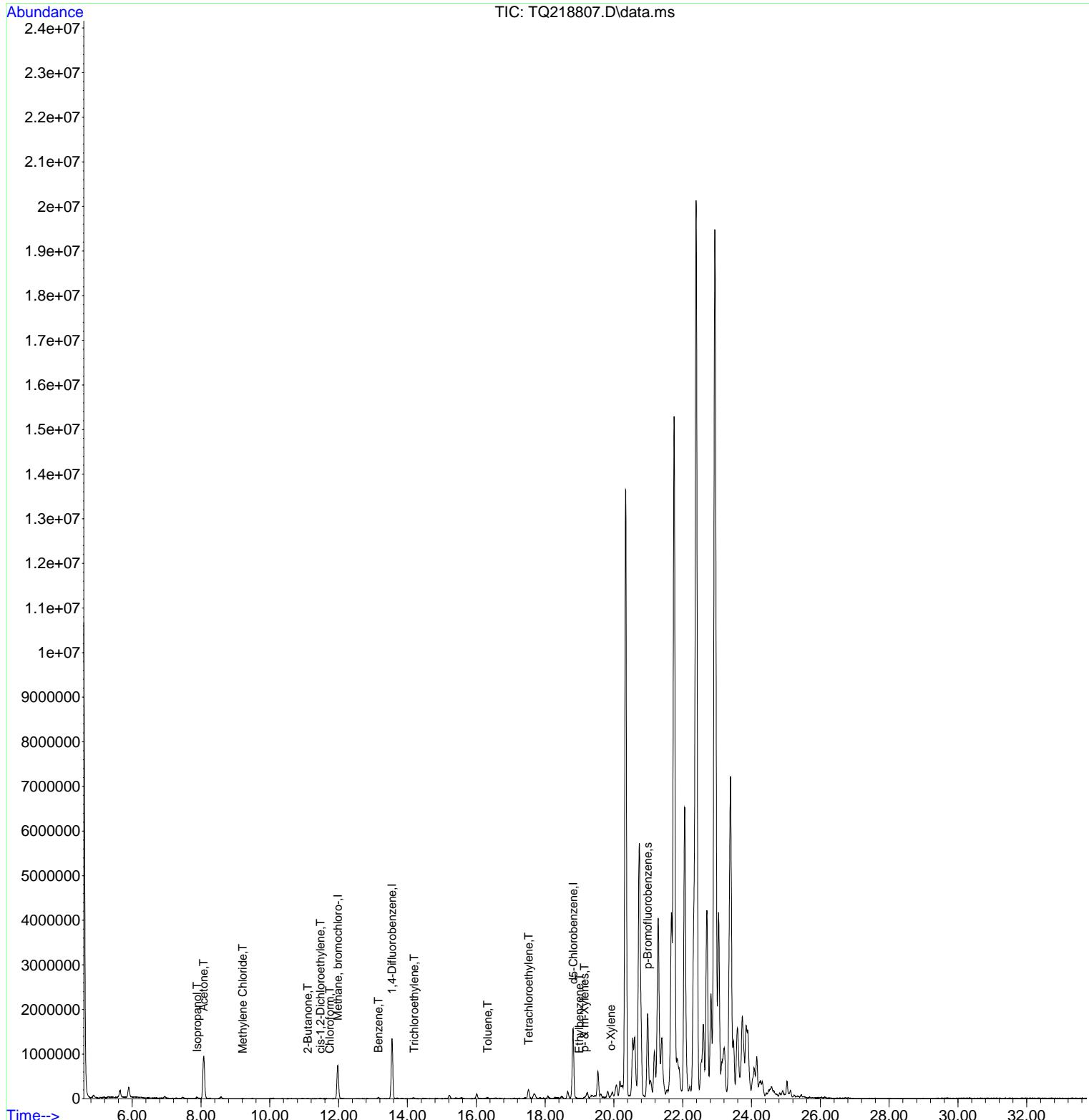
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) Methane, bromochloro-	11.972	49	613997	10.00	ppbv	0.00
37) 1,4-Difluorobenzene	13.551	114	1748129	10.00	ppbv	0.00
53) d5-Chlorobenzene	18.811	117	1471522	10.00	ppbv	0.00
<b>System Monitoring Compounds</b>						
64) p-Bromofluorobenzene	20.978	95	1050087	9.68	ppbv	0.00
Spiked Amount	10.000	Range	70 - 130	Recovery	=	96.80%

Target Compounds	Qvalue
12) Isopropanol	7.889
14) Acetone	8.075
18) Methylene Chloride	9.210
26) 2-Butanone	11.101
28) cis-1,2-Dichloroethylene	11.468
29) Chloroform	11.744
35) Benzene	13.149
38) Trichloroethylene	14.191
45) Toluene	16.323
50) Tetrachloroethylene	17.516
56) Ethylbenzene	18.988
57) p- & m-Xylenes	19.139
58) o-Xylene	19.914

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\data\021722\  
Data File : TQ218807.D  
Acq On : 18 Feb 2022 1:32 am  
Operator : AS  
Sample : 22B0574-06  
Misc : QBTO2021722A 10X/40ML re  
ALS Vial : 3 Sample Multiplier: 21.1  
InstName : TO15\_AIR2

Quant Time: Feb 18 16:38:28 2022  
Quant Method : C:\msdchem\1\methods\AIR-2-0055.M  
Quant Title : TO15 VOC Analysis  
QLast Update : Mon Dec 27 19:43:41 2021  
Response via : Initial Calibration



**ATTACHMENT 4**  
**NYSDOH QUESTIONNAIRE**

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

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

Preparer's Name Dongvan Edwards Date/Time Prepared 2/11/22  
Preparer's Affiliation Consultant (HTE) Phone No. \_\_\_\_\_

Purpose of Investigation SSDS Monitoring

**1. OCCUPANT:**

Interviewed:  Y  N

Last Name: Grey First Name: Emily

Address: 152 Graham Ave, 3rd Floor

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

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

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

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

Interviewed:  Y  N

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

Address: 152 Graham Ave, Top Hat Cleaners

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

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

**3. BUILDING CHARACTERISTICS**

Type of Building: (Circle appropriate response)

Residential  
 Industrial

School  
Church

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

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

- |              |                 |                                |
|--------------|-----------------|--------------------------------|
| Ranch        | 2-Family        | 3-Family                       |
| Raised Ranch | Split Level     | Colonial                       |
| Cape Cod     | Contemporary    | Mobile Home                    |
| Duplex       | Apartment House | Townhouses/Condos              |
| Modular      | Log Home        | Other: <u>Walkup apartment</u> |

If multiple units, how many? 3

If the property is commercial, type?

Business Type(s) Dry Cleaner (Top Hat Cleaners)

Does it include residences (i.e., multi-use)?  Y  N      If yes, how many? 3

Other characteristics:

Number of floors 3

Building age 80+

Is the building insulated?  Y  N

How air tight? Tight /  Average  Not Tight

#### 4. AIRFLOW

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

Airflow between floors

Staircase

Airflow near source

Staircase

Outdoor air infiltration

Dear & Front windows to Residential units on 2nd-3rd floors / Storefront doors to first floor  
Bilco door to basement

Infiltration into air ducts

N/A

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

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

Basement/Lowest level depth below grade: 7 (feet)

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

Fine cracks in basement slab in poor condition,  
basement masonry walls.

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

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

- |                     |                  |  |
|---------------------|------------------|--|
| Hot air circulation | Heat pump        | <input checked="" type="checkbox"/> Hot water baseboard                  |
| Space Heaters       | Stream radiation | <input checked="" type="checkbox"/> Radiant floor                        |
| Electric baseboard  | Wood stove       | <input checked="" type="checkbox"/> Outdoor wood boiler      Other _____ |

The primary type of fuel used is:

- |   |          |          |
|---|----------|----------|
| <input checked="" type="checkbox"/> Natural Gas | Fuel Oil | Kerosene |
| <input checked="" type="checkbox"/> Electric    | Propane  | Solar    |
| <input checked="" type="checkbox"/> Wood        | Coal     |          |

Domestic hot water tank fueled by: Natural GasBoiler/furnace located in:  Basement      Outdoors      Main Floor      Other \_\_\_\_\_Air conditioning: Central Air       Window units       Open Windows      None

Are there air distribution ducts present? Y  N

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

N/A

---



---



---



---

## 7. OCCUPANCY

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

<u>Level</u>	<u>General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)</u>
--------------	--

Basement	<u>partial boiler room &amp; utility meters</u>
1 <sup>st</sup> Floor	<u>Dry Cleaners &amp; rear extension with slab on grade</u>
2 <sup>nd</sup> Floor	<u>2 Residential units</u>
3 <sup>rd</sup> Floor	<u>1 Residential unit</u>
4 <sup>th</sup> Floor	_____

## 8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

- a. Is there an attached garage? Y  N
- b. Does the garage have a separate heating unit? Y  N  NA
- c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car)? Y  N  NA  Please specify \_\_\_\_\_
- d. Has the building ever had a fire? Y  N  When? \_\_\_\_\_
- e. Is a kerosene or unvented gas space heater present? Y  N  Where? \_\_\_\_\_
- f. Is there a workshop or hobby/craft area? Y  N  Where & Type? \_\_\_\_\_
- g. Is there smoking in the building? Y  N  How frequently? Daily
- h. Have cleaning products been used recently? Y  N  When & Type? Daily
- i. Have cosmetic products been used recently? Y  N  When & Type? Daily

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

**Are there odors in the building?**  Y /  N  
If yes, please describe: \_\_\_\_\_

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

If yes, what types of solvents are used? Detagent in all floors & Bleach & ammonia in dry cleaners.  
If yes, are their clothes washed at work?  Y /  N

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

- Yes, use dry-cleaning regularly (weekly)      No  
 Yes, use dry-cleaning infrequently (monthly or less)      Unknown  
 Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure?  Y /  N Date of Installation: Jan 2021  
Is the system active or passive?  Active /  Passive

## 9. WATER AND SEWAGE

- Water Supply:  Public Water  Drilled Well  Driven Well  Dug Well  Other: \_\_\_\_\_
- Sewage Disposal:  Public Sewer  Septic Tank  Leach Field  Dry Well  Other: \_\_\_\_\_

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

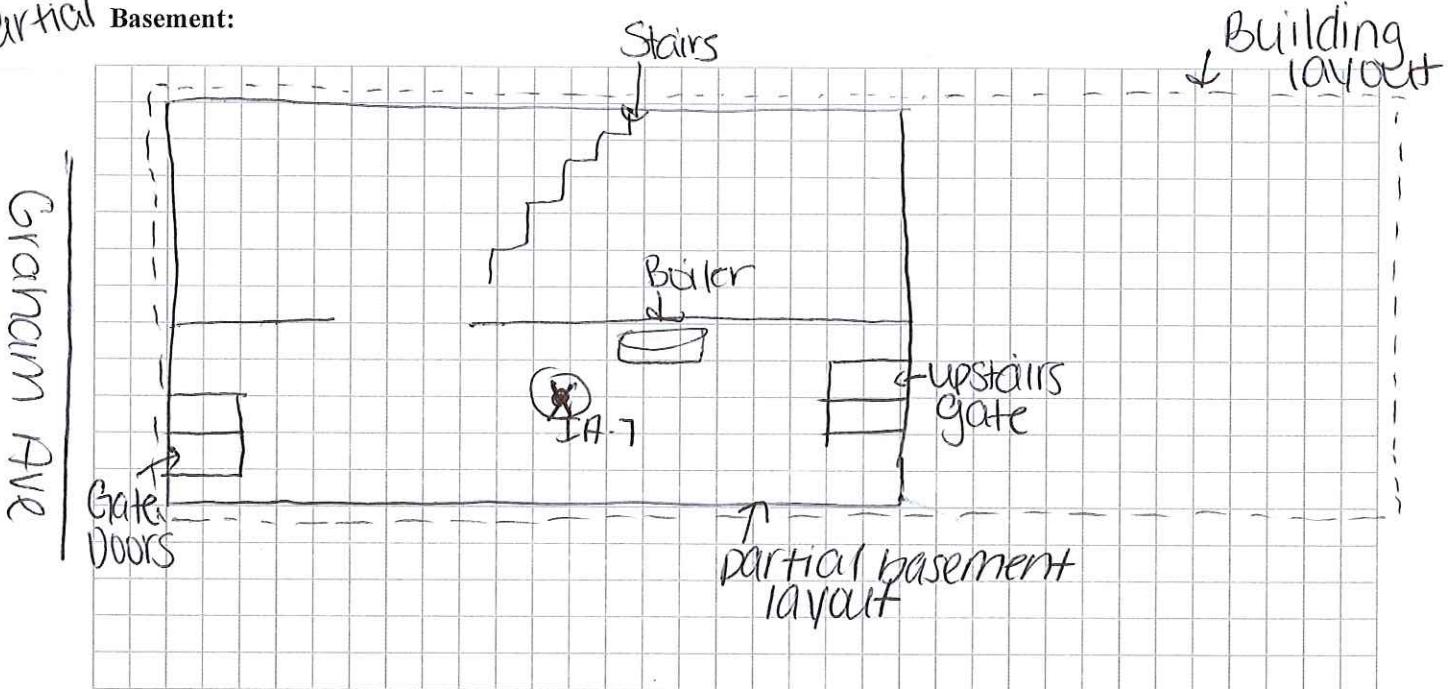
- a. Provide reasons why relocation is recommended: N/A
- b. Residents choose to: remain in home      relocate to friends/family      relocate to hotel/motel
- c. Responsibility for costs associated with reimbursement explained?  Y /  N
- d. Relocation package provided and explained to residents?  Y /  N

## 11. FLOOR PLANS

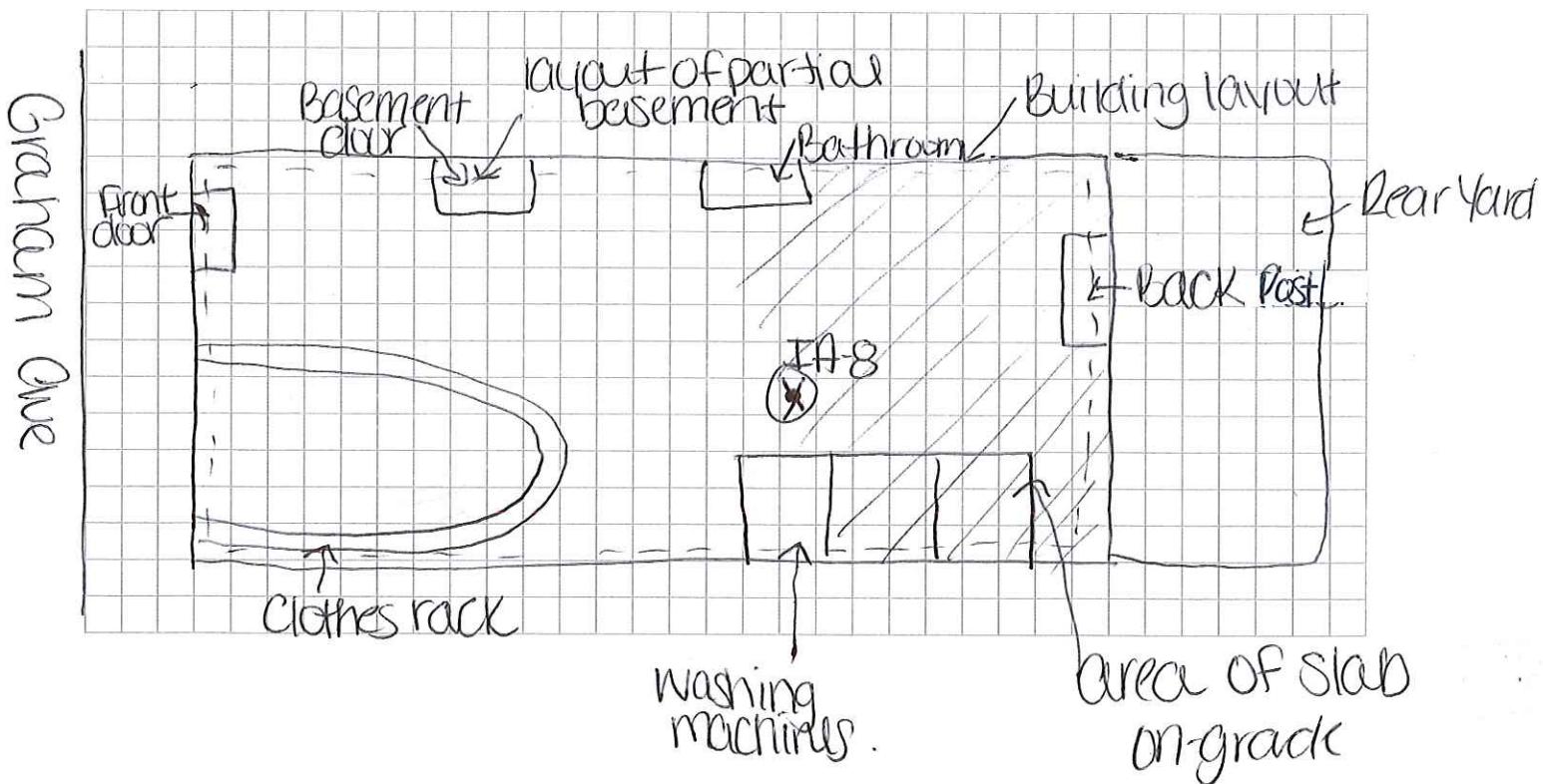
Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

partial

**Basement:**

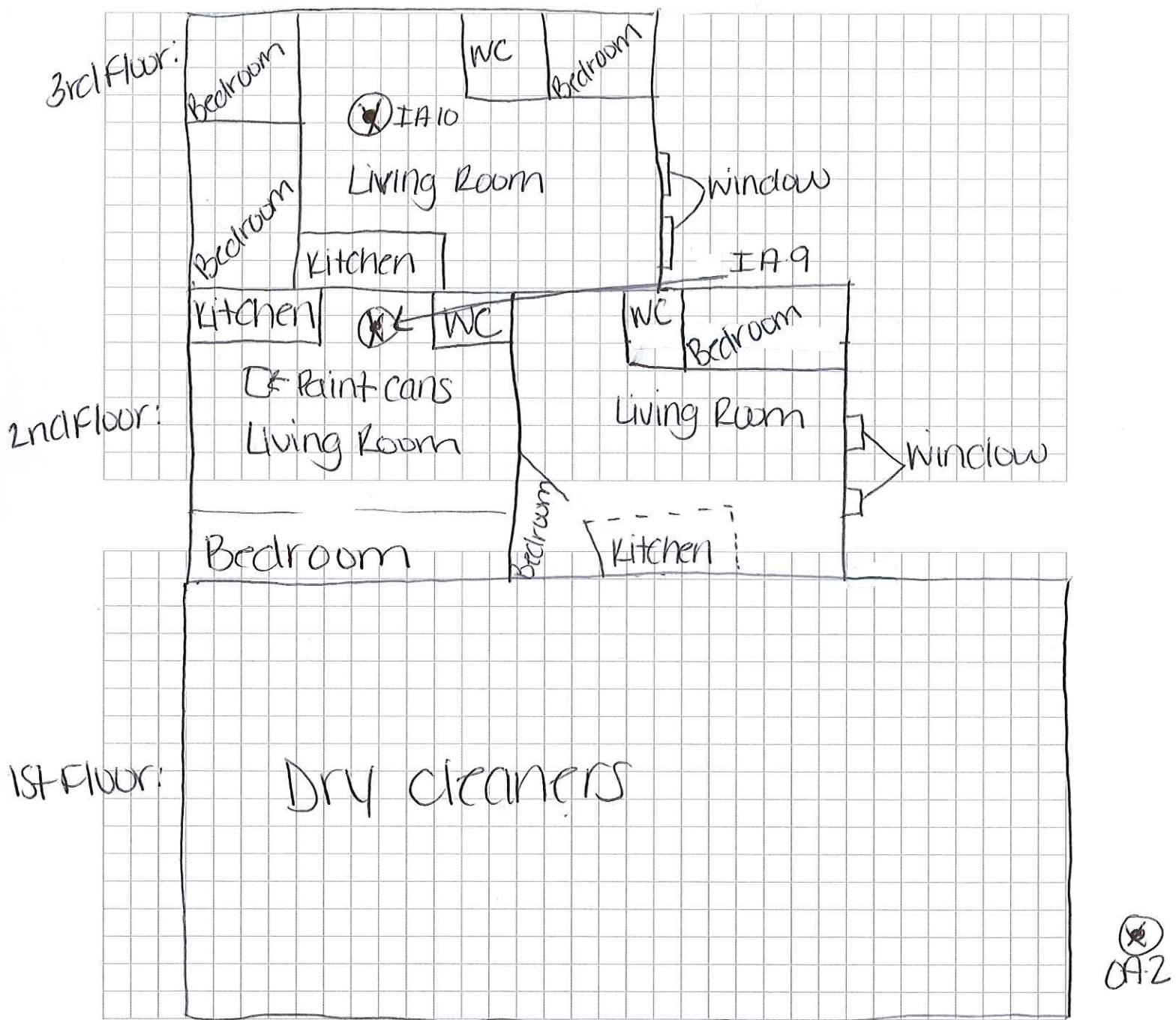


**First Floor:**



## **11. FLOOR PLANS**

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



Graham Ave

## Rear Yard

**12. OUTDOOR PLOT**

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

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

See Sampling Plan

### **13. PRODUCT INVENTORY FORM**

Make & Model of field instrument used: minirae 3000

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

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

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