

APPENDIX E

Soil Vapor Survey

Advanced Cleanup Technologies, Inc.

ENVIRONMENTAL CONSULTANTS

May 30, 2018

Su Hak Lee
Great Dry Cleaners
840 East 233rd Street
Bronx, NY 10466

Re: Soil Vapor Survey
 840 East 233rd Street, Bronx, NY 10466

Dear Mr. Lee,

Advanced Cleanup Technologies, Inc. (ACT) performed a soil vapor survey at the above referenced property (the site) on April 27th, April 30th and May 3rd, 2018. The purpose for the soil vapor survey was to identify trends in soil vapor quality beneath the site, which could indicate potential hot spots of soil vapor contamination requiring further investigation.

Previous Environmental Investigations

On June 2, 2016 JCS Environmental Consulting issued a Phase II Investigation Report for the site ("JCS Report"). The JCS Report identified the following about the site:

- The site consists of a one-story commercial building with a partial basement occupied by a dry cleaner;
- Current and historical dry cleaning operations, a suspect sump pit and floor drain, a fuel oil underground storage tank (UST), and a filling station at the adjacent property to the west were recognized environmental conditions, which constituted areas of concern at the site;
- Dry cleaning machinery currently occupies the basement of the building and has historically occupied the first floor of the building;
- A ground penetrating radar (GPR) survey and the collection of eight soil samples and three groundwater samples in the areas of concern was performed;
- The GPR survey produced reflections indicative of an underground storage tank in the vicinity of a fill port located on the northeast side of the building. The GPR survey also produced reflections indicative of the floor drain being connected to the sewer cleanout;
- No volatile organic compounds were detected in soil samples collected in the vicinity of the suspect floor drain or sump pit;
- Trivalent chromium and Hexavalent chromium were detected above Unrestricted Use Soil Cleanup Objects (UUSCOs) in soil samples collected in the vicinity of the UST. Iron,

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Manganese, and Sodium were detected above their respective standards in groundwater collected in the vicinity of the UST;

- Ethylbenzene, m,p-xylenes, and o-xylenes were detected above their UUSCOs in soil samples collected on the western property boundary;
- Tetrachloroethene was detected above its UUSCO in soil samples collected along the eastern exterior wall of the building. Several VOCs, SVOCs, and metals were detected above NYSDEC TOGS standards in groundwater collected along the eastern exterior wall of the building;

On August 3, 2016, Clean Globe Environment issued a Confirmatory Sampling report for the site ("CBE Report"). The CBE Report identified the following additional information about the site:

- Soil and groundwater samples were collected in the vicinity of the UST and along the western site boundary;
- Soil in the vicinity of the UST contained Xylene above its CP-51 Cleanup Level, however below the Restricted Residential Soil Cleanup Objectives (RRSCO);
- Groundwater in the vicinity of the UST contained Ethylbenzene, Flourene, 2-Methylnaphthalene, Naphthalene, and Phenanthrene above their respective groundwater standards;
- Soil collected along the western property contained four chlorinated VOCs above their respective RRSCOs;
- Groundwater collected along the western property contained four chlorinated VOCs above their respective groundwater standards.

Soil Vapor Sampling

Twelve soil vapor samples (SV-1 to SV-12) were collected at the locations indicated in Figure 1. Samples SV-1, SV-2, SV-7, and SV-8 were collected from the partial basement in the eastern portion of the building. Samples SV-3, SV-4, SV-9, and SV-10 were collected from the first floor in the western portion of the building. Samples SV-5, SV-6, SV-11, and SV-12 were collected from the exterior parking lot in the western portion of the property. Sampling was performed in general conformity with the "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (NYSDOH Guidance).

The soil vapor samples were collected approximately six inches below the concrete slab of the building and the asphalt cap of the parking lot utilizing a power drill, a 1-foot long drill bit, dedicated Teflon tubing and volatile organic compound (VOC) free putty for sealant. Soil vapor sample SV-12 was collected approximately 3 feet below ground surface utilizing a slide hammer, a 4-foot hollow steel drive rod and a retractable soil vapor implant. SV-5, SV-6 and SV-11 were also intended to be installed to 3 feet below ground surface. However, refusal was encountered at a shallow depth in the southern portion of the parking lot, which is consistent with bedrock outcropping along the southern property boundary.



A 6-Liter stainless steel Summa canister with a flow regulator set to a flow rate of approximately 0.025 liters per minute was connected to the Teflon tubing exiting each soil vapor probe. Once the canisters were in place, the flow regulators were opened and sampling continued until the canisters were full. The soil vapor samples were completed approximately 4 hours after sampling commenced.

During the soil vapor survey, water was encountered in sub-slab soil vapor samples SV-2 and SV-8 within 12 inches of the partial cellar's concrete slab. According to the JCS Report, groundwater was encountered between 7 and 12 feet below ground surface. Water encountered in SV-2 and SV-8 may be the static water table or drainage from onsite equipment.

The twelve soil vapor samples were transmitted under chain of custody to York Analytical Laboratories, Inc. (NYSDOH #10854). All samples were analyzed for VOCs in accordance with USEPA Method TO-15. Copies of the laboratory reports are also enclosed.

Soil Vapor Analysis

Table 1 summarizes the concentrations of chlorinated VOCs (CVOCs) in soil vapor compared with soil vapor screening levels contained in Matrix A, B, and C of the NYSDOH Guidance. Tetrachloroethene (PCE) was detected in all twelve soil vapor samples at a maximum concentration of 3,000 $\mu\text{g}/\text{m}^3$ in soil vapor sample SV-10. All soil vapor samples except SV-2, SV-6, and SV-8 contained PCE above its NYSDOH soil vapor screening level of 100 $\mu\text{g}/\text{m}^3$.

It be seen from Table 1 that Trichloroethene (TCE) was also detected in all twelve soil vapor samples at a maximum concentration of 9,000 $\mu\text{g}/\text{m}^3$ in soil vapor sample SV-2. All soil vapor samples except for SV-6 and SV-12 contained TCE above its NYSDOH soil vapor screening level of 6 $\mu\text{g}/\text{m}^3$.

Figure 2, *CVOCs In Soil Vapor* illustrates the horizontal distribution of CVOCs in soil vapor beneath the building and western parking lot. Two locations of elevated CVOCs were identified beneath the site, as indicated in Figure 2. One location beneath the southern portion of the basement contained 9,015 $\mu\text{g}/\text{m}^3$ total CVOCs, the highest concentration in soil vapor beneath the site. The other location beneath the north portion of the first floor contained 3,073.4 $\mu\text{g}/\text{m}^3$ total CVOCs.

Figures 3 and 4 depict the horizontal distribution of PCE and TCE, respectively, in soil vapor beneath the site. It can be seen from Figure 3 that the highest concentrations of PCE were centered around SV-10 in the north-central portion of the first floor of the building and the eastern portion of the parking lot. In contrast, the highest concentrations of TCE were centered around SV-2 in the southern portion of the basement, as indicated in Figure 4.

TCE had historically been used as a solvent for washing delicate fabrics by dry cleaning facilities until it was replaced by PCE due to the latter's lower toxicity. PCE has since been banned by New York City effective 2020.

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Vinyl Chloride, 1,1-Dichloroethene, and cis-1,2-Dichloroethylene were also detected in the soil vapor samples many of the soil vapor samples. These compounds are degradation products of PCE and TCE and indicate that natural biodegradation of CVOCs is taking place beneath the site.

Low levels of Benzene, Toluene, Ethyl Benzene, and Xylenes were also detected in all twelve soil vapor samples. The soil vapor samples contained several other VOCs. However, none were detected above background concentrations in the metropolitan area. Copies of the laboratory reports including the detection limits for all TO-15 VOCs are also enclosed.

Conclusions and Recommendations

The results of the Soil Vapor Survey are contained in this report. Based upon this investigation, ACT makes the following conclusions and recommendations concerning the environmental quality of the subject property:

- Soil vapor quality is impacted by chlorinated VOCs above the NYSDOH soil vapor screening levels. Therefore, a vapor encroachment condition exists at the subject property;
- Two potential sources of soil vapor contamination were identified beneath the site. These and other areas of the site should be fully investigated through a comprehensive Remedial Investigation conducted in accordance with NYSDEC DER-10.
- The property owner should enter the site into the NYSDEC Brownfield Cleanup Program to ensure that it is investigated and remediated in a safe and cost effective manner.

Please feel free to contact the undersigned should you have any questions or comments concerning the above.

Very truly yours,

A handwritten signature in black ink, appearing to read "P.P. Stewart".

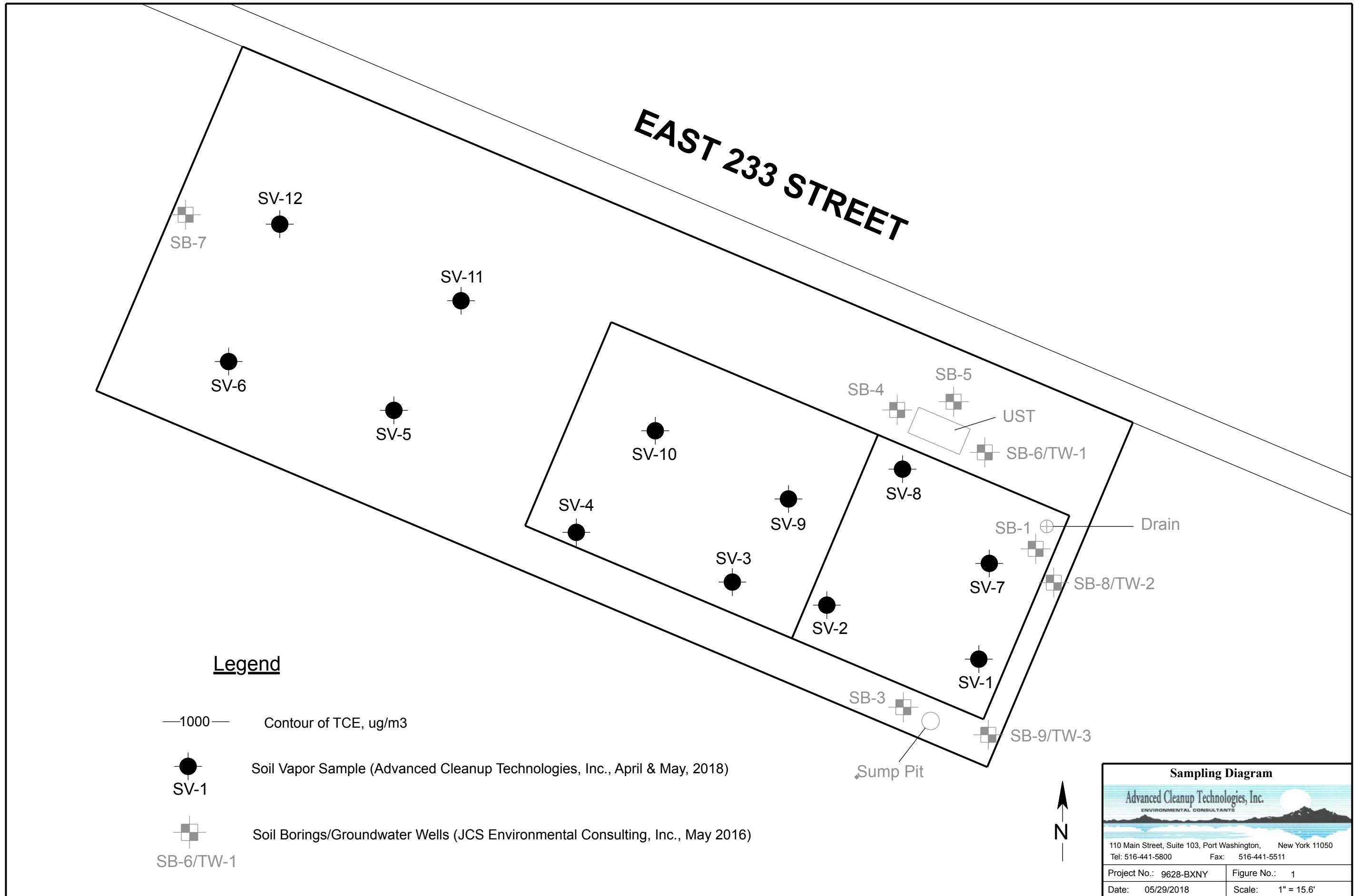
Paul P. Stewart, MS, QEP
President
ASTM-Certified Vapor Encroachment



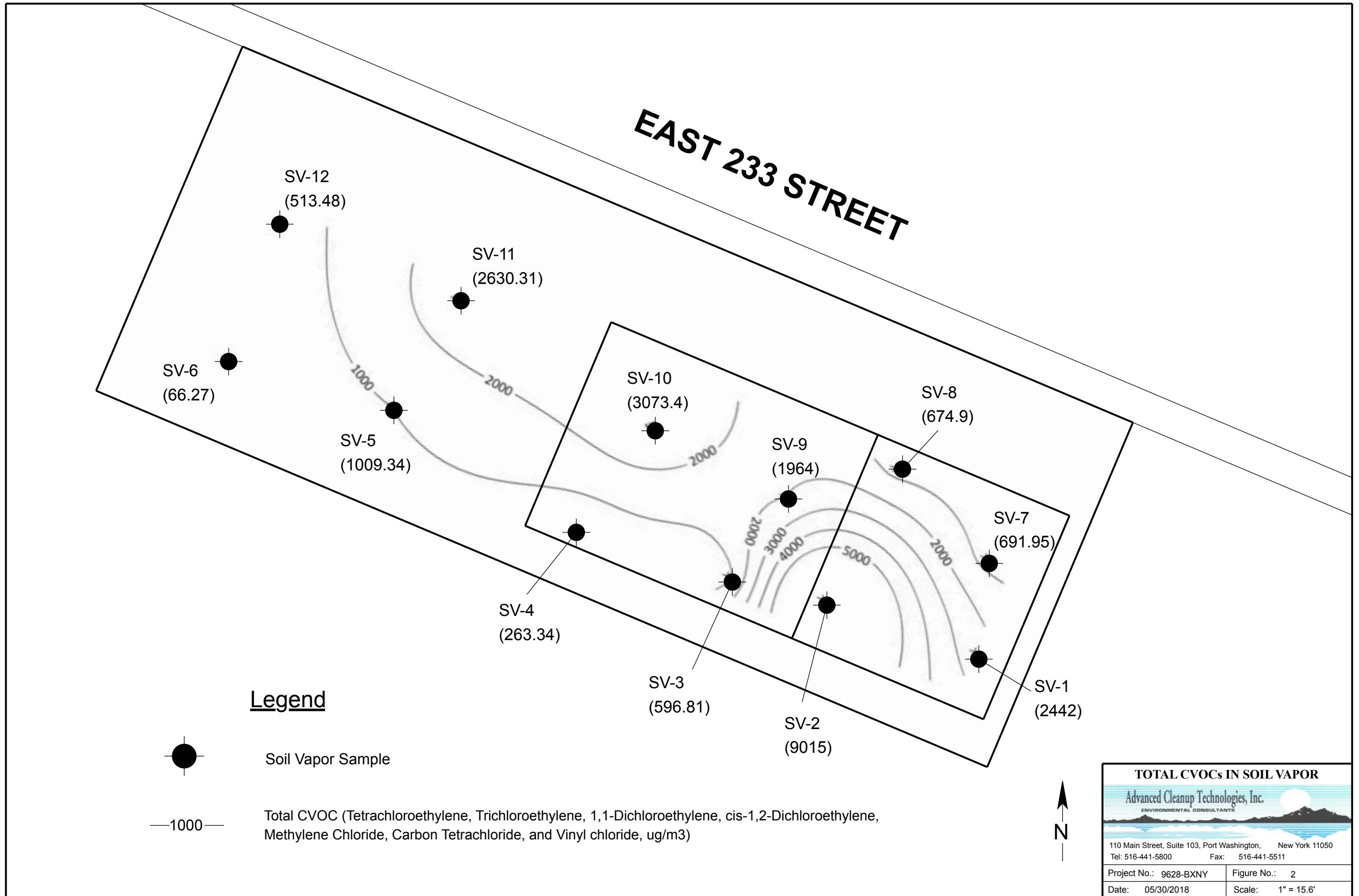
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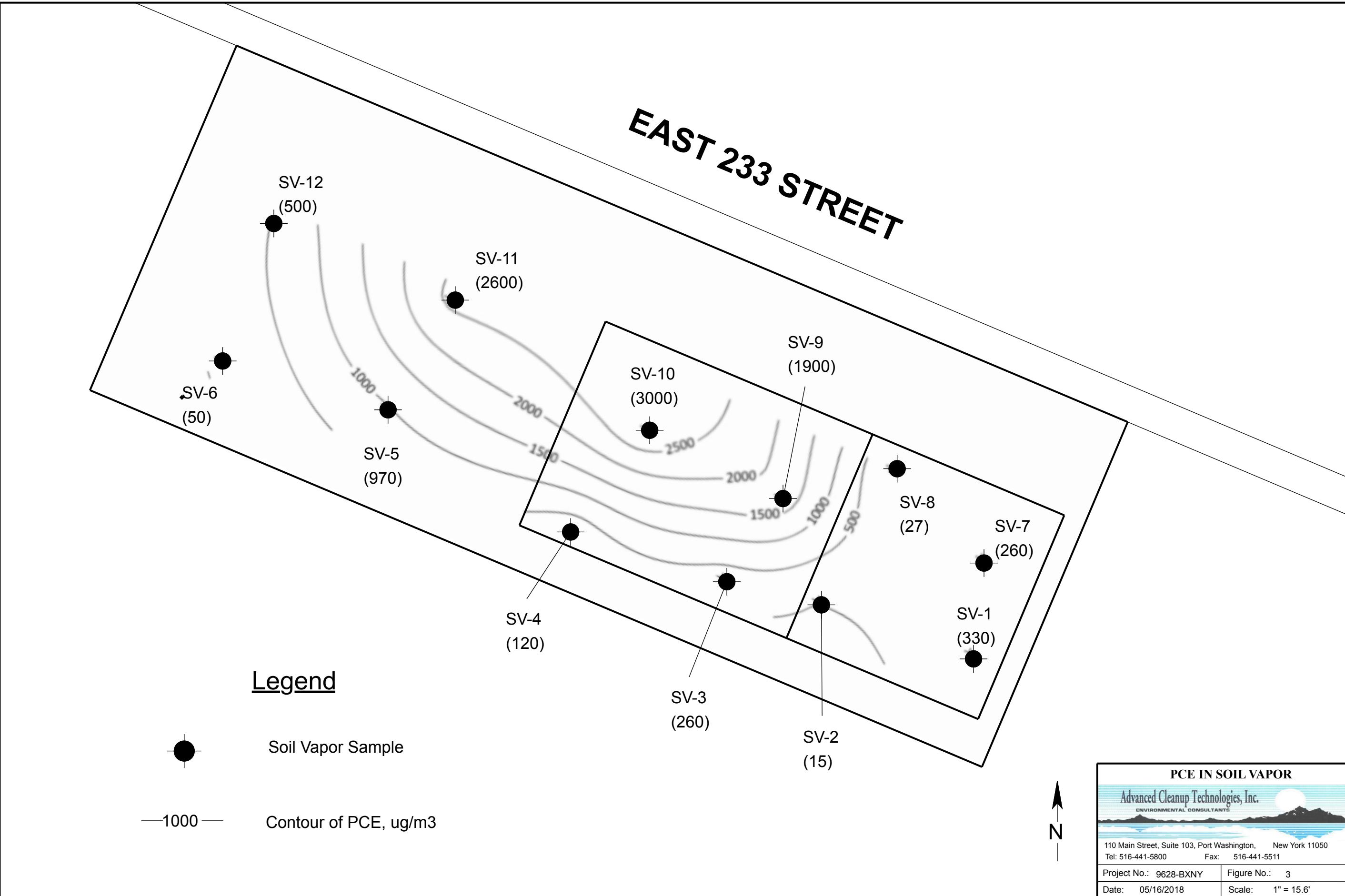
The purpose of this investigation was to assess the potential environmental liabilities at the subject site with respect to data, which Advanced Cleanup Technologies, Inc. has accumulated during the soil vapor survey. The conclusions presented in this report are based solely on the observations of the site at the time of the investigation. Data provided, including information provided by others, was utilized in assessing the site conditions. The accuracy of this report is subject to the accuracy of the information provided. Advanced Cleanup Technologies, Inc. is not responsible for areas not seen or information not collected. This report is given without a warranty or guarantee of any kind, expressed or implied. Advanced Cleanup Technologies, Inc. assumes no responsibility for losses associated with the use of this report.

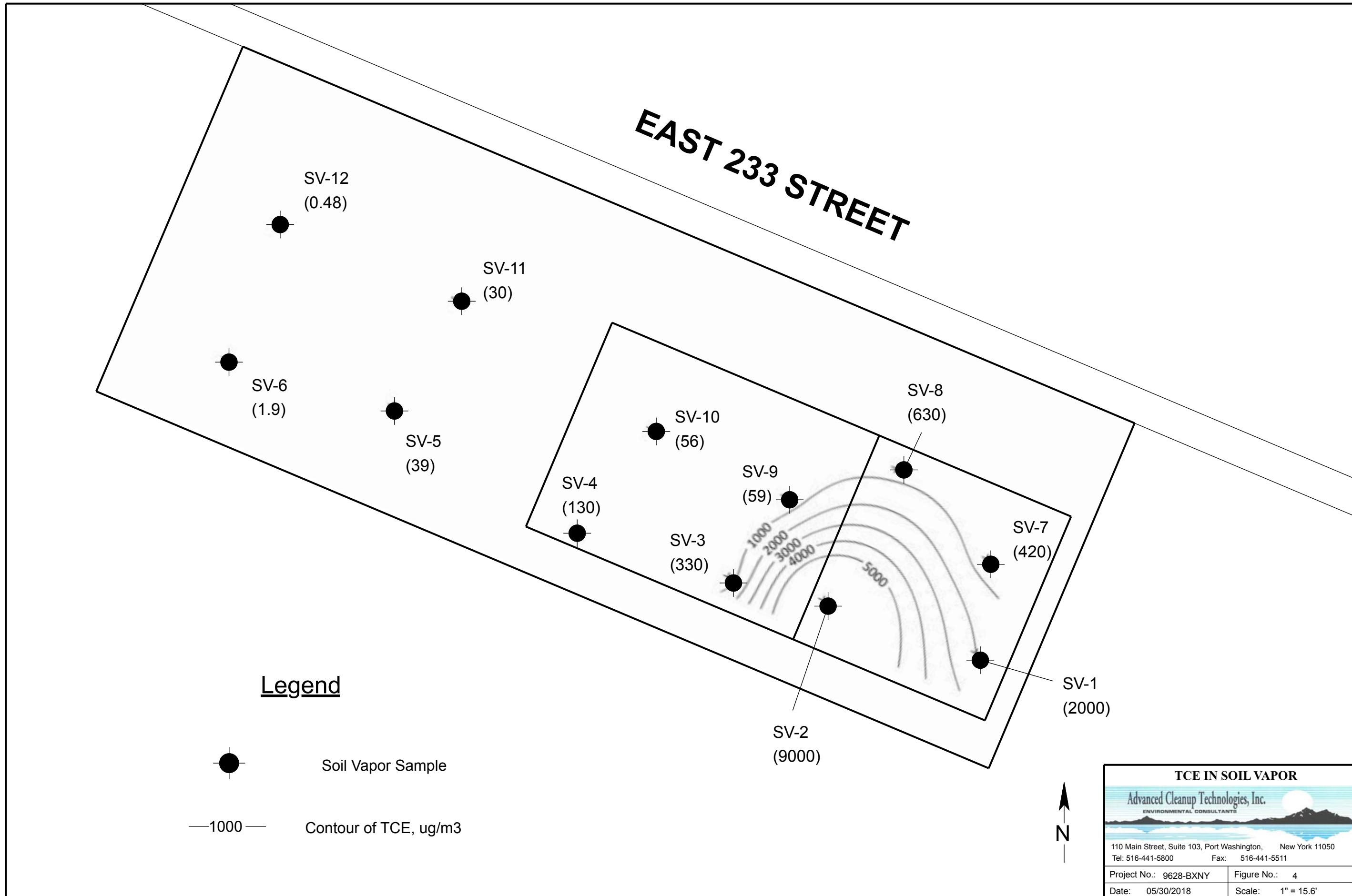
FIGURES



Sampling Diagram	
 Advanced Cleanup Technologies, Inc. ENVIRONMENTAL CONSULTANTS	
110 Main Street, Suite 103, Port Washington, New York 11050	
Tel: 516-441-5800	Fax: 516-441-5511
Project No.: 9628-BXNY	Figure No.: 1
Date: 05/29/2018	Scale: 1" = 15.6'







TABLES

Table 1

Volatile Organic Compounds Soil Vapor (ug/m³)
EPA Method TO-15
840 East 233rd Street
Bronx, NY 10466

ACT Project No. 9628-BXNY

Sample ID York ID Sampling Date Client Matrix	NYSDOH Soil Vapor Screening Levels	SV-1 18D1217-01 4/27/18 Soil Vapor		SV-2 18D1217-02 4/27/18 Soil Vapor		SV-3 18D1217-03 4/27/18 Soil Vapor		SV-4 18D1217-04 4/27/18 Soil Vapor		SV-5 18D1217-05 4/27/18 Soil Vapor		SV-6 18D1217-06 4/27/18 Soil Vapor		
		Result	Q											
Volatile Organics, EPA TO15 Full List				ug/m ³										
Dilution Factor				37.58		36.06		1.628		1.391		18.11		
1,1,1,2-Tetrachloroethane	630-20-6	~	26	U	1.200	U	1.100	U	0.950	U	1.200	U	1	U
1,1,1-Trichloroethane	71-55-6	100	21	U	0.980	U	0.890	U	0.760	U	0.990	U	0.810	U
1,1,2,2-Tetrachloroethane	79-34-5	~	26	U	1.200	U	1.100	U	0.950	U	1.200	U	1	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	~	29	U	1.400	U	1.200	U	1.100	U	1.400	U	1.100	U
1,1,2-Trichloroethane	79-00-5	~	21	U	0.980	U	0.890	U	0.760	U	0.990	U	0.810	U
1,1-Dichloroethane	75-34-3	6	15	U	0.730	U	0.660	U	0.560	U	0.730	U	0.600	U
1,1-Dichloroethylene	75-35-4	~	3.700	U	0.180	U	0.160	U	0.140	U	0.180	U	0.150	U
1,2,4-Trichlorobenzene	120-82-1	~	28	U	1.300	U	1.200	U	1	U	1.300	U	1.100	U
1,2,4-Trimethylbenzene	95-63-6	~	100	D	11	D	3.800	D	7.900	D	14	D	7.800	D
1,2-Dibromoethane	106-93-4	~	29	U	1.400	U	1.300	U	1.100	U	1.400	U	1.100	U
1,2-Dichlorobenzene	95-50-1	~	23	U	1.100	U	0.980	U	0.840	U	1.100	U	0.890	U
1,2-Dichloroethane	107-06-2	~	15	U	0.730	U	0.660	U	0.560	U	0.730	U	0.600	U
1,2-Dichloropropane	78-87-5	~	17	U	0.830	U	0.750	U	0.640	U	0.840	U	0.680	U
1,2-Dichlortetrafluoroethane	76-14-2	~	26	U	1.300	U	1.100	U	0.970	U	1.300	U	1	U
1,3,5-Trimethylbenzene	108-67-8	~	41	D	4.300	D	0.800	U	2.200	D	4.900	D	2.200	D
1,3-Butadiene	106-99-0	~	25	U	1.200	U	1.100	U	0.920	U	27	D	0.980	U
1,3-Dichlorobenzene	541-73-1	~	23	U	1.100	U	0.980	U	0.840	U	1.100	U	0.890	U
1,3-Dichloropropane	142-28-9	~	17	U	0.830	U	0.750	U	0.640	U	0.840	U	0.680	U
1,4-Dichlorobenzene	106-46-7	~	23	U	1.100	U	4.700	D	1.200	D	1.100	U	0.890	U
1,4-Dioxane	123-91-1	~	27	U	1.300	U	1.200	U	1	U	1.300	U	1.100	U
2-Butanone	78-93-3	~	70	D	1.800	D	3.800	D	4.600	D	120	D	5.100	D
2-Hexanone	591-78-6	~	240	D	1.500	U	1.300	U	1.100	U	4.900	D	1.200	U
3-Chloropropene	107-05-1	~	59	U	2.800	U	2.500	U	2.200	U	2.800	U	2.300	U
4-Methyl-2-pentanone	108-10-1	~	15	U	20	D	1.900	D	3.900	D	0.740	U	2.700	D
Acetone	67-64-1	~	250	D	9.500	D	18	D	12	D	430	D	13	D
Acrylonitrile	107-13-1	~	8.200	U	0.390	U	0.350	U	0.300	U	0.390	U	0.320	U
Benzene	71-43-2	~	12	U	1	D	2	D	5.200	D	18	D	5.600	D
Benzyl chloride	100-44-7	~	19	U	0.930	U	0.840	U	0.720	U	0.940	U	0.770	U
Bromodichloromethane	75-27-4	~	25	U	1.200	U	1.100	U	0.930	U	1.200	U	0.990	U
Bromoform	75-25-2	~	39	U	1.900	U	1.700	U	1.400	U	1.900	U	1.500	U
Bromomethane	74-83-9	~	15	U	0.700	U	0.630	U	0.540	U	0.700	U	0.570	U
Carbon disulfide	75-15-0	~	12	U	0.560	U	1.300	D	2.500	D	13	D	6.200	D
Carbon tetrachloride	56-23-5	6	5.900	U	0.280	U	0.410	D	0.350	D	0.340	D	0.370	D
Chlorobenzene	108-90-7	~	17	U	0.830	U	0.750	U	0.640	U	0.830	U	0.680	U
Chloroethane	75-00-3	~	9.900	U	0.480	U	0.430	U	0.370	U	0.480	U	0.390	U
Chloroform	67-66-3	~	18	U	0.880	U	0.790	U	0.680	U	15	D	0.720	U
Chloromethane	74-87-3	~	7.800	U	1	D	0.370	D	0.720	D	1.500	D	0.310	U
cis-1,2-Dichloroethylene	156-59-2	6	92	D	0.180	U	0.160	U	0.990	D	0.180	U	0.150	U
cis-1,3-Dichloropropylene	10061-01-5	~	17	U	0.820	U	0.740	U	0.630	U	0.820	U	0.670	U
Cyclohexane	110-82-7	~	27	D	0.620	U	0.560	U	3	D	3.600	D	3	D
Dibromochloromethane	124-48-1	~	32	U	1.500	U	1.400	U	1.200	U	1.500	U	1.300	U
Dichlorodifluoromethane	75-71-8	~	19	U	1.400	D	2	D	2.500	D	1.300	D	1.800	D
Ethyl acetate	141-78-6	~	27	U	8	D	1.300	D	3	D	1.300	U	2	D
Ethyl Benzene	100-41-4	~	20	D	1.500	D	1.800	D	5.900	D	8.400	D	5.400	D
Hexachlorobutadiene	87-68-3	~	40	U	1.900	U	1.700	U	1.500	U	1.900	U	1.600	U
Isopropanol	67-63-0	~	18	U	6.700	D	2	D	1.500	D	0.890	U	0.730	U
Methyl Methacrylate	80-62-6	~	15	U	0.740	U	1.800	D	5.800	D	0.740	U	0.610	U
Methyl tert-butyl ether (MTBE)	1634-04-4	~	14	U	0.650	U	0.590	U	0.500	U	0.650	U	0.530	U
Methylene chloride	75-09-2	100	26	U	1.300	U	6.400	D	12	D	1.300	U	14	D
n-Heptane	142-82-5	~	120	D	0.740	U	3.500	D	8.400	D	45	D	12	D
n-Hexane	110-54-3	~	46	D	1.500	D	2.600	D	13</					

Table 1 (continued)

Volatile Organic Compounds Soil Vapor (ug/m³)
EPA Method TO-15
840 East 233rd Street
Bronx, NY 10466

ACT Project No. 9628-BXNY

Sample ID York ID Sampling Date Client Matrix	NYSDOH Soil Vapor Screening Levels	SV-7 18E0061-01 4/30/18 Soil Vapor		SV-8 18E0217-01 5/3/18 Soil Vapor		SV-9 18E0061-02 4/30/18 Soil Vapor		SV-10 18E0061-03 4/30/18 Soil Vapor		SV-11 18E0061-04 4/30/18 Soil Vapor		SV-12 18E0061-05 4/30/18 Soil Vapor		
		Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	
		ug/m ³		ug/m ³		ug/m ³		ug/m ³		ug/m ³		ug/m ³		
Volatile Organics, EPA TO15 Full List														
Dilution Factor														
1,1,1,2-Tetrachloroethane	630-20-6	~	32.96		1.100	U	0.690	U	1	U	1.100	U	1.100	U
1,1,1-Trichloroethane	71-55-6	100	0.900	U	0.550	U	0.820	U	0.860	U	0.900	U	0.810	U
1,1,2,2-Tetrachloroethane	79-34-5	~	1.100	U	0.690	U	1	U	1.100	U	1.100	U	1	U
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	76-13-1	~	1.300	U	0.770	U	1.200	U	1.200	U	1.300	U	1.100	U
1,1,2-Trichloroethane	79-00-5	~	0.900	U	0.550	U	0.820	U	0.860	U	0.900	U	0.810	U
1,1-Dichloroethane	75-34-3	6	0.670	U	0.400	U	0.610	U	0.640	U	0.670	U	0.600	U
1,1-Dichloroethylene	75-35-4	~	0.330	D	0.0990	U	0.150	U	0.160	U	0.160	U	0.150	U
1,2,4-Trichlorobenzene	120-82-1	~	1.200	U	0.740	U	1.100	U	1.200	U	1.200	U	1.100	U
1,2,4-Trimethylbenzene	95-63-6	~	0.810	U	30	D	1.400	D	3.300	D	6.500	D	1.500	D
1,2-Dibromoethane	106-93-4	~	1.300	U	0.770	U	1.200	U	1.200	U	1.300	U	1.100	U
1,2-Dichlorobenzene	95-50-1	~	0.990	U	0.600	U	0.910	U	0.950	U	0.990	U	0.890	U
1,2-Dichloroethane	107-06-2	~	0.670	U	0.400	U	0.610	U	0.640	U	0.670	U	0.600	U
1,2-Dichloropropane	78-87-5	~	0.760	U	0.460	U	0.700	U	0.730	U	0.760	U	0.690	U
1,2-Dichlorotetrafluoroethane	76-14-2	~	1.200	U	0.700	U	1.100	U	1.100	U	1.200	U	1	U
1,3,5-Trimethylbenzene	108-67-8	~	7.900	D	10	D	0.740	U	1.400	D	3.100	D	0.730	U
1,3-Butadiene	106-99-0	~	1.100	U	0.660	U	1	U	1.100	U	5.300	D	0.980	U
1,3-Dichlorobenzene	541-73-1	~	0.990	U	0.600	U	0.910	U	0.950	U	0.990	U	0.890	U
1,3-Dichloropropane	142-28-9	~	0.760	U	0.460	U	0.700	U	0.730	U	0.760	U	0.690	U
1,4-Dichlorobenzene	106-46-7	~	0.990	U	0.600	U	0.910	U	0.950	U	0.990	U	0.890	U
1,4-Dioxane	123-91-1	~	1.200	U	0.720	U	1.100	U	1.100	U	1.200	U	1.100	U
2-Butanone	78-93-3	~	73	D	35	D	5.100	D	5.600	D	26	D	14	D
2-Hexanone	591-78-6	~	1.400	U	0.820	U	1.200	U	1.300	U	1.400	U	1.600	D
3-Chloropropene	107-05-1	~	2.600	U	1.600	U	2.400	U	2.500	U	2.600	U	2.300	U
4-Methyl-2-pentanone	108-10-1	~	300	D	0.410	U	0.620	U	2.100	D	2.300	D	1.100	D
Acetone	67-64-1	~	150	D	280	D	36	D	20	D	100	D	48	D
Acrylonitrile	107-13-1	~	0.360	U	0.220	U	0.330	U	0.340	U	0.360	U	0.320	U
Benzene	71-43-2	~	68	D	5.300	D	4.500	D	5.800	D	19	D	1.600	D
Benzyl chloride	100-44-7	~	0.850	U	0.520	U	0.780	U	0.820	U	0.860	U	0.770	U
Bromodichloromethane	75-27-4	~	1.100	U	0.670	U	1	U	1.100	U	3	D	0.990	U
Bromoform	75-25-2	~	1.700	U	1	U	1.600	U	1.600	U	1.700	U	1.500	U
Bromomethane	74-83-9	~	0.640	U	0.390	U	0.590	U	0.610	U	0.640	U	0.580	U
Carbon disulfide	75-15-0	~	9.300	D	24	D	4.300	D	4.800	D	14	D	1.400	D
Carbon tetrachloride	56-23-5	6	0.620	D	0.160	U	0.240	U	0.400	D	0.310	D	0.230	U
Chlorobenzene	108-90-7	~	0.760	U	0.460	U	0.700	U	0.730	U	0.760	U	0.680	U
Chloroethane	75-00-3	~	62	D	0.260	U	0.400	U	0.420	U	0.440	U	0.390	U
Chloroform	67-66-3	~	2.500	D	9.100	D	0.740	U	2.200	D	1.500	D	0.720	U
Chloromethane	74-87-3	~	2.900	D	0.210	U	0.310	U	0.750	D	0.990	D	0.310	U
cis-1,2-Dichloroethylene	156-59-2	6	67	D	0.0990	U	0.150	U	1.800	D	1.200	D	0.150	U
cis-1,3-Dichloropropylene	10061-01-5	~	0.750	U	0.450	U	0.690	U	0.720	U	0.750	U	0.670	U
Cyclohexane	110-82-7	~	80	D	140	D	2	D	2.700	D	3	D	0.510	U
Dibromochloromethane	124-48-1	~	1.400	U	0.850	U	1.300	U	1.300	U	1.400	U	1.300	U
Dichlorodifluoromethane	75-71-8	~	2.500	D	0.490	U	3.100	D	3.400	D	2.400	D	2	D
Ethyl acetate	141-78-6	~	1.200	U	0.720	U	1.100	U	1.100	U	1.200	U	1.100	U
Ethyl Benzene	100-41-4	~	17	D	9.600	D	1.800	D	3.400	D	3.700	D	0.640	D
Hexachlorobutadiene	87-68-3	~	1.800	U	1.100	U	1.600	U	1.700	U	1.800	U	1.600	U
Isopropanol	67-63-0	~	130	D	12	D	2.700	D	3.200	D				

APPENDIX A

FIELD NOTES

9628 BXNY

7/27/18

840 E 233rd St. Bronx

6 soil vapor:

2 slide hammer (parking lot)

4 sub slabs

- 2 basement

- 2 First Floor

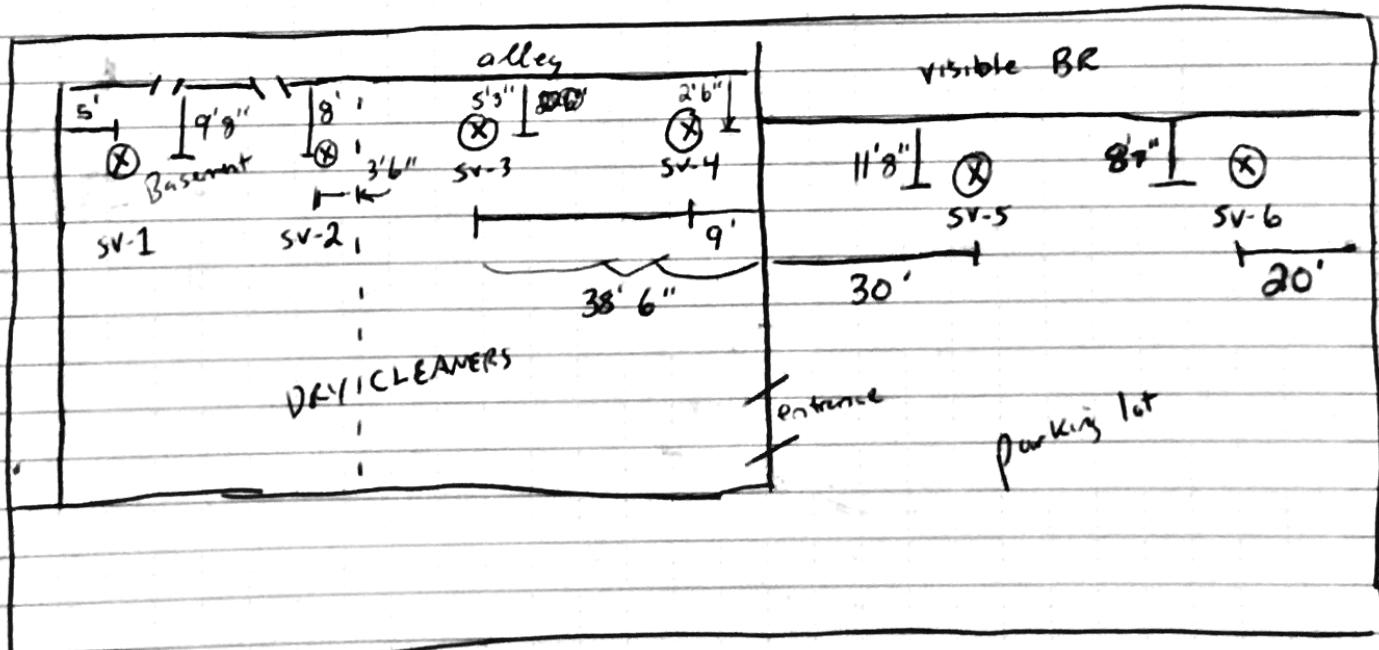
* Basement atmospheric indoor air PID's are high! (BE CAREFUL)
 ~3800 - 5000 ppb up to 14-16 ppm!!

* 2 outdoor slide hammer points converted to sub slab

- makita drill encountered "refusal"

no penetration
no sediments coming up
bedrock (?)

* BR visible coming up through parking spot
 in parking lot (see pic) - closest to
 SV-6 sample location



not to scale T'

- (for measurement purposes)

- (offsets)

$\leftarrow \approx 233^{\circ} \rightarrow$

960 S. Broadway Hicksville, NY

Date: 4/27/18

SAMPLE INFORMATION RECORD

PROJECT NO.: 9628-B-NY

Sampling Personnel: TY

Job Locations: Great Dry Cleaners 840 E 233rd St. Bronx

Field Sample Designation: SV-1

Time: 9 AM

Weather: cloudy rainy

Temperature: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR: sub slab

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: ppb Rae

FIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance (μ mhos/cm): _____

Other: PID: 161 ppm

Helium Detector: _____ ppm

Canister #: 20949

Initial Pressure: -27

Start Time: 0940

Flow Regulator #: Y30

Final Pressure: -10

End Time: 1300

SAMPLE ANALYSIS:

TO-15

REMARKS:

basement → boiler - HW heater room closest to SB-9/TW-3

sub slab

* closed canister

Water observed in line!

* High PID background in basement atmosphere
Up to 14-16ppm spikes!

960 S. Broadway Hicksville, NY

Date: 4/27/18SAMPLE INFORMATION RECORDPROJECT NO.: 9628-BXNYSampling Personnel: TYJob Locations: Great Dry Cleaners840 E 233rd St. BronxField Sample Designation: SV-2

Time: _____

Weather: cloudy rainy

Temperature: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR: Sub slab

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: ppbRaeFIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance (μ mhos/cm): _____Other: PID: 28 ppb ppm

Helium Detector: _____ ppm

Canister #: 28857Initial Pressure: -30Start Time: 0935Flow Regulator #: 5625Final Pressure: -9End Time: 1305SAMPLE ANALYSIS:T0-15

REMARKS:basement - through wood floor along "west" wallin main area. Water in tubing!* High PID background in basement atmosphere!
up to 14-16 ppm spikes

960 S. Broadway Hicksville, NY

Date: 4/27/18SAMPLE INFORMATION RECORDPROJECT NO.: 9628-BXNYSampling Personnel: TYJob Locations: Great Dry Cleaners 840 E 233rd St. BronxField Sample Designation: SV-7 3

Time: _____

Weather: _____

Temperature: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR: Sub slab

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: ppbRaeFIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance ($\mu\text{mhos/cm}$): _____Other: PID: 6600 ppb ppm

Helium Detector: _____ ppm

Canister #: 23200Initial Pressure: -28Start Time: 0950Flow Regulator #: 5708Final Pressure: -8End Time: 1340SAMPLE ANALYSIS:T0-15REMARKS:Sub slab → 1st floor - just north of basement wall
under clothing racks along west wall

(0-5000 ppb atmosphere)
1st floor

960 S. Broadway Hicksville, NY

Date: 4/27/18SAMPLE INFORMATION RECORDPROJECT NO.: 9628-BXNY Sampling Personnel: TYJob Locations: Great Dry Cleaners 840 E 233rd St. BronxField Sample Designation: SV-4 Time: _____Weather: Cloudy rainy Temperature: _____SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR: sub slab

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: ppbRaeFIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance (μ mhos/cm): _____Other: PID: 1080 ppb ppm

Helium Detector: _____ ppm

Canister #: 24113Initial Pressure: -24Start Time: 1005Flow Regulator #: 7076Final Pressure: -4End Time: 1230

(ran a bit fast)

SAMPLE ANALYSIS:T0-15

REMARKS:

1st floor - sub slab - West of main entrance behind fitting room - under sewing table -

(~400 ppb atmosphere in
sewing table corner)

960 S. Broadway Hicksville, NY

Date: 4/27/18SAMPLE INFORMATION RECORDPROJECT NO.: 9628-BxnySampling Personnel: JYJob Locations: Great Ry Cleaners 870 E 233rd St. BronxField Sample Designation: SV-65

Time: _____

Weather: Cloudy raining

Temperature: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR: Sub slab (was supposed to
be slide hammer
-met refusal -)

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: ppbRaeFIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance (μ mhos/cm): _____Other: PID: 550 ppb ppm

Helium Detector: _____ ppm

Canister #: Y79Initial Pressure: -30Start Time: 1033Flow Regulator #: 5121Final Pressure: -8End Time: 1345SAMPLE ANALYSIS:T0-15

REMARKS:originally intended to be 3'ft slide hammer - makita drillhit solid refusal around 1'ft - no penetration of sedimentscoming up → switched to sub slab style.parking lot - parking space #3 from cleaners entrance

960 S. Broadway Hicksville, NY

Date: 4/27/18SAMPLE INFORMATION RECORDPROJECT NO.: 9628-BXNYSampling Personnel: TYJob Locations: Grect Dry Cleaners840 E 233rd St. BronxField Sample Designation: SV-6

Time: _____

Weather: _____

Temperature: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

AIR: sub slab (owns supposed to
he slide hammer
-met refusal-)

SOIL: _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: ppbRaeFIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

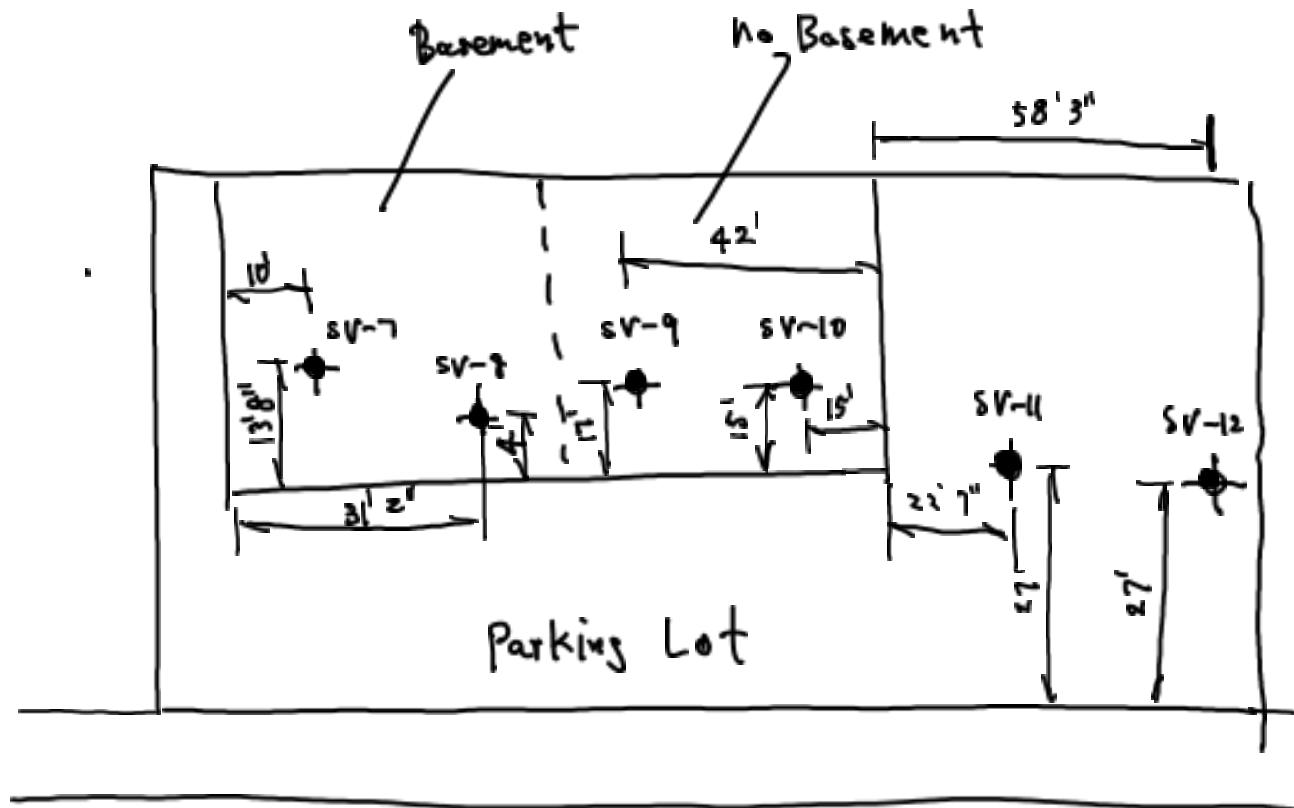
Temperature (°F/°C): _____

Specific Conductance (μ mhos/cm): _____Other: PID: 1340 ppb ppm

Helium Detector: _____ ppm

Canister #: 18317Initial Pressure: -26Start Time: 1038Flow Regulator #: 7081Final Pressure: -6End Time: 1320SAMPLE ANALYSIS:TD-15REMARKS:Parking lot - originally intended to be 3' ft slide hammer
-met refusal - point closest to Shell station -

04/30/2018



E 238 street

- 6 Soil Vapor Sampling Canisters were installed.
- No sample collected from SV-8 due to groundwater take into sampling tubing
- Hit rocks at SV-11 at depth about 5" below asphalt on the ground. There was about 3-5" soil between asphalt and rock. sub-slab soil vapor was collected from SV-11.
- SV-12: 3ft down from the asphalt parking lot.

110 Main Street, Port Washington, NY

Date: _____

SAMPLE INFORMATION RECORD

PROJECT NO.: _____

Sampling Personnel: _____

Job Locations: _____

Field Sample Designation: _____

Time: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR (specify): _____ (soil Vapor, Indoor air, Outdoor air)

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: _____

FIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance ($\mu\text{mhos}/\text{cm}$): _____

Other: PID: _____ ppm

Helium Detector: _____ ppm

Canister #: _____

Initial Pressure: _____

Start Time: _____

Flow Regulator #: _____

Final Pressure: _____

End Time: _____

SAMPLE ANALYSIS:

REMARKS:

110 Main Street, Port Washington, NY

Date: _____

SAMPLE INFORMATION RECORD

PROJECT NO.: _____

Sampling Personnel: _____

Job Locations: _____

Field Sample Designation: _____

Time: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR (specify): _____ (soil Vapor, Indoor air, Outdoor air)

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: _____

FIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance ($\mu\text{mhos}/\text{cm}$): _____

Other: PID: _____ ppm

Helium Detector: _____ ppm

Canister #: _____

Initial Pressure: _____

Start Time: _____

Flow Regulator #: _____

Final Pressure: _____

End Time: _____

SAMPLE ANALYSIS:

REMARKS:

110 Main Street, Port Washington, NY

Date: _____

SAMPLE INFORMATION RECORD

PROJECT NO.: _____

Sampling Personnel: _____

Job Locations: _____

Field Sample Designation: _____

Time: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR (specify): _____ (soil Vapor, Indoor air, Outdoor air)

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: _____

FIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance ($\mu\text{mhos}/\text{cm}$): _____

Other: PID: _____ ppm

Helium Detector: _____ ppm

Canister #: _____

Initial Pressure: _____

Start Time: _____

Flow Regulator #: _____

Final Pressure: _____

End Time: _____

SAMPLE ANALYSIS:

REMARKS:

110 Main Street, Port Washington, NY

Date: _____

SAMPLE INFORMATION RECORD

PROJECT NO.: _____

Sampling Personnel: _____

Job Locations: _____

Field Sample Designation: _____

Time: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR (specify): _____ (soil Vapor, Indoor air, Outdoor air)

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: _____

FIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance ($\mu\text{mhos}/\text{cm}$): _____

Other: PID: _____ ppm

Helium Detector: _____ ppm

Canister #: _____

Initial Pressure: _____

Start Time: _____

Flow Regulator #: _____

Final Pressure: _____

End Time: _____

SAMPLE ANALYSIS:

REMARKS:

110 Main Street, Port Washington, NY

Date: _____

SAMPLE INFORMATION RECORD

PROJECT NO.: _____

Sampling Personnel: _____

Job Locations: _____

Field Sample Designation: _____

Time: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR (specify): _____ (soil Vapor, Indoor air, Outdoor air)

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: _____

FIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance ($\mu\text{mhos}/\text{cm}$): _____

Other: PID: _____ ppm

Helium Detector: _____ ppm

Canister #: _____

Initial Pressure: _____

Start Time: _____

Flow Regulator #: _____

Final Pressure: _____

End Time: _____

SAMPLE ANALYSIS:

REMARKS:

110 Main Street, Port Washington, NY

Date: _____

SAMPLE INFORMATION RECORD

PROJECT NO.: _____

Sampling Personnel: _____

Job Locations: _____

Field Sample Designation: _____

Time: _____

SAMPLE TYPE:

GROUNDWATER: _____

SEDIMENT: _____

SURFACE WATER: _____

SOIL: _____

AIR (specify): _____ (soil Vapor, Indoor air, Outdoor air)

OTHER (describe): _____

GROUNDWATER INFORMATION:

Depth to Groundwater: _____

Measurement Method: _____

Depth of well or Sampling Point: _____

Measurement Method: _____

Volume of Groundwater Purged: _____

Purge Method: _____

FIELD TEST RESULTS:

Color: _____

pH: _____

Odor: _____

Temperature (°F/°C): _____

Specific Conductance ($\mu\text{mhos}/\text{cm}$): _____

Other: PID: _____ ppm

Helium Detector: _____ ppm

Canister #: _____

Initial Pressure: _____

Start Time: _____

Flow Regulator #: _____

Final Pressure: _____

End Time: _____

SAMPLE ANALYSIS:

REMARKS:

APPENDIX B

LABORATORY REPORTS



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Paul Stewart

Report Date: 05/07/2018

Client Project ID: 9628-BXNY

York Project (SDG) No.: 18D1217

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: 05/07/2018
Client Project ID: 9628-BXNY
York Project (SDG) No.: 18D1217

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Paul Stewart

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on April 30, 2018 and listed below. The project was identified as your project: **9628-BXNY**.

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

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

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

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

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

York Sample ID	Client Sample ID	Matrix	Date Collected	Date Received
18D1217-01	SV-1	Soil Vapor	04/27/2018	04/30/2018
18D1217-02	SV-2	Soil Vapor	04/27/2018	04/30/2018
18D1217-03	SV-3	Soil Vapor	04/27/2018	04/30/2018
18D1217-04	SV-4	Soil Vapor	04/27/2018	04/30/2018
18D1217-05	SV-5	Soil Vapor	04/27/2018	04/30/2018
18D1217-06	SV-6	Soil Vapor	04/27/2018	04/30/2018

General Notes for York Project (SDG) No.: 18D1217

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

Approved By:



Benjamin Gulizia
Laboratory Director

Date: 05/07/2018





Sample Information

Client Sample ID: **SV-1**

York Sample ID: **18D1217-01**

York Project (SDG) No.
18D1217

Client Project ID
9628-BXNY

Matrix
Soil Vapor

Collection Date/Time
April 27, 2018 3:00 pm

Date Received
04/30/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND	IS-LO	ug/m³	26	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	21	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND	IS-LO	ug/m³	26	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	29	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	21	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	15	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	3.7	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
120-82-1	1,2,4-Trichlorobenzene	ND	IS-LO	ug/m³	28	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
95-63-6	1,2,4-Trimethylbenzene	100	IS-LO	ug/m³	18	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	29	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
95-50-1	1,2-Dichlorobenzene	ND	IS-LO	ug/m³	23	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	15	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	17	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	26	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
108-67-8	1,3,5-Trimethylbenzene	41	IS-LO	ug/m³	18	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	25	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
541-73-1	1,3-Dichlorobenzene	ND	IS-LO	ug/m³	23	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	17	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
106-46-7	1,4-Dichlorobenzene	ND	IS-LO	ug/m³	23	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	27	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
78-93-3	2-Butanone	70		ug/m³	11	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS



Sample Information

Client Sample ID: SV-1

York Sample ID: 18D1217-01

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	240		ug/m³	31	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
107-05-1	3-Chloropropene	ND		ug/m³	59	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	15	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
67-64-1	Acetone	250		ug/m³	18	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
107-13-1	Acrylonitrile	ND		ug/m³	8.2	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
71-43-2	Benzene	ND		ug/m³	12	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
100-44-7	Benzyl chloride	ND	IS-LO	ug/m³	19	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	25	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
75-25-2	Bromoform	ND	IS-LO	ug/m³	39	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
74-83-9	Bromomethane	ND		ug/m³	15	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
75-15-0	Carbon disulfide	ND		ug/m³	12	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	5.9	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
108-90-7	Chlorobenzene	ND	IS-LO	ug/m³	17	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
75-00-3	Chloroethane	ND		ug/m³	9.9	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
67-66-3	Chloroform	ND		ug/m³	18	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
74-87-3	Chloromethane	ND		ug/m³	7.8	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
156-59-2	cis-1,2-Dichloroethylene	92		ug/m³	3.7	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	17	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
110-82-7	Cyclohexane	27		ug/m³	13	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	32	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	19	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	27	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS



Sample Information

<u>Client Sample ID:</u> SV-1	<u>York Sample ID:</u> 18D1217-01			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	20	IS-LO	ug/m³	16	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
87-68-3	Hexachlorobutadiene	ND	IS-LO	ug/m³	40	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
67-63-0	Isopropanol	ND		ug/m³	18	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	15	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	14	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
75-09-2	Methylene chloride	ND		ug/m³	26	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
142-82-5	n-Heptane	120		ug/m³	15	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
110-54-3	n-Hexane	46		ug/m³	13	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
95-47-6	o-Xylene	29	IS-LO	ug/m³	16	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
179601-23-1	p- & m- Xylenes	59	IS-LO	ug/m³	33	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
622-96-8	* p-Ethyltoluene	65	IS-LO	ug/m³	18	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
115-07-1	* Propylene	17		ug/m³	6.5	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
100-42-5	Styrene	ND	IS-LO	ug/m³	16	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
127-18-4	Tetrachloroethylene	330		ug/m³	6.4	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	22	37.58	EPA TO-15 Certifications:	05/02/2018 22:12	05/02/2018 22:12	LDS
108-88-3	Toluene	41		ug/m³	14	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	15	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	17	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
79-01-6	Trichloroethylene	2000		ug/m³	5.0	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	21	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
108-05-4	Vinyl acetate	ND		ug/m³	13	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
593-60-2	Vinyl bromide	ND		ug/m³	16	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS



Sample Information

Client Sample ID: SV-1

York Sample ID: 18D1217-01

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	20		ug/m³	2.4	37.58	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 22:12	05/02/2018 22:12	LDS
Surrogate Recoveries										
460-00-4 Surrogate: <i>p</i> -Bromofluorobenzene										
Result Acceptance Range										
128 % 70-130										

Sample Information

Client Sample ID: SV-2

York Sample ID: 18D1217-02

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

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	1.2	1.803	EPA TO-15 Certifications:	05/02/2018 04:23	05/02/2018 04:23	LDS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/m³	0.98	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/m³	1.4	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.98	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/m³	0.73	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/m³	0.18	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.3	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
95-63-6	1,2,4-Trimethylbenzene	11		ug/m³	0.89	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.4	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.1	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/m³	0.73	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.83	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS



Sample Information

Client Sample ID: SV-2

York Sample ID: 18D1217-02

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-14-2	1,2-Dichlorotetrafluoroethane	ND	IS-HI	ug/m³	1.3	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
108-67-8	1,3,5-Trimethylbenzene	4.3		ug/m³	0.89	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
106-99-0	1,3-Butadiene	ND	IS-HI	ug/m³	1.2	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.1	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.83	1.803	EPA TO-15 Certifications:	05/02/2018 04:23	05/02/2018 04:23	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.1	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.3	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
78-93-3	2-Butanone	1.8	IS-HI	ug/m³	0.53	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.5	1.803	EPA TO-15 Certifications:	05/02/2018 04:23	05/02/2018 04:23	LDS
107-05-1	3-Chloropropene	ND	IS-HI	ug/m³	2.8	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
108-10-1	4-Methyl-2-pentanone	20		ug/m³	0.74	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
67-64-1	Acetone	9.5	IS-HI	ug/m³	0.86	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
107-13-1	Acrylonitrile	ND	IS-HI	ug/m³	0.39	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
71-43-2	Benzene	1.0	IS-HI	ug/m³	0.58	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.93	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	1.2	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-25-2	Bromoform	ND		ug/m³	1.9	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
74-83-9	Bromomethane	ND	IS-HI	ug/m³	0.70	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-15-0	Carbon disulfide	ND	IS-HI	ug/m³	0.56	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
56-23-5	Carbon tetrachloride	ND	IS-HI	ug/m³	0.28	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.83	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-00-3	Chloroethane	ND	IS-HI	ug/m³	0.48	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS



Sample Information

Client Sample ID: SV-2

York Sample ID: 18D1217-02

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-66-3	Chloroform	ND	IS-HI	ug/m³	0.88	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
74-87-3	Chloromethane	1.0	IS-HI	ug/m³	0.37	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/m³	0.18	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.82	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
110-82-7	Cyclohexane	ND	IS-HI	ug/m³	0.62	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.5	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-71-8	Dichlorodifluoromethane	1.4	IS-HI	ug/m³	0.89	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
141-78-6	* Ethyl acetate	8.0	IS-HI	ug/m³	1.3	1.803	EPA TO-15 Certifications:	05/02/2018 04:23	05/02/2018 04:23	LDS
100-41-4	Ethyl Benzene	1.5		ug/m³	0.78	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.9	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
67-63-0	Isopropanol	6.7	IS-HI	ug/m³	0.89	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.74	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/m³	0.65	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
75-09-2	Methylene chloride	ND	IS-HI	ug/m³	1.3	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
142-82-5	n-Heptane	ND	IS-HI	ug/m³	0.74	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
110-54-3	n-Hexane	1.5	IS-HI	ug/m³	0.64	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
95-47-6	o-Xylene	2.6		ug/m³	0.78	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
179601-23-1	p- & m- Xylenes	5.9		ug/m³	1.6	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
622-96-8	* p-Ethyltoluene	12		ug/m³	0.89	1.803	EPA TO-15 Certifications:	05/02/2018 04:23	05/02/2018 04:23	LDS
115-07-1	* Propylene	11	IS-HI	ug/m³	0.31	1.803	EPA TO-15 Certifications:	05/02/2018 04:23	05/02/2018 04:23	LDS
100-42-5	Styrene	ND		ug/m³	0.77	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS
127-18-4	Tetrachloroethylene	15		ug/m³	0.31	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS



Sample Information

Client Sample ID: SV-2

York Sample ID: 18D1217-02

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst		
109-99-9	* Tetrahydrofuran	ND	IS-HI	ug/m³	1.1	1.803	EPA TO-15 Certifications:	05/02/2018 04:23	05/02/2018 04:23	LDS		
108-88-3	Toluene	6.3		ug/m³	0.68	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS		
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/m³	0.71	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS		
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.82	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS		
79-01-6	Trichloroethylene	9000		ug/m³	4.8	36.06	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 23:13	05/02/2018 23:13	LDS		
75-69-4	Trichlorofluoromethane (Freon 11)	1.0	IS-HI	ug/m³	1.0	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS		
108-05-4	Vinyl acetate	ND	IS-HI	ug/m³	0.63	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS		
593-60-2	Vinyl bromide	ND	IS-HI	ug/m³	0.79	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS		
75-01-4	Vinyl Chloride	ND	IS-HI	ug/m³	0.12	1.803	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 04:23	05/02/2018 04:23	LDS		
Surrogate Recoveries		Result	Acceptance Range									
460-00-4	Surrogate: p-Bromofluorobenzene	126 %			70-130							
460-00-4	Surrogate: p-Bromofluorobenzene	131 %	S-08		70-130							

Sample Information

Client Sample ID: SV-3

York Sample ID: 18D1217-03

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

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	1.1	1.628	EPA TO-15 Certifications:	05/02/2018 05:28	05/02/2018 05:28	LDS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/m³	0.89	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/m³	1.2	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS



Sample Information

<u>Client Sample ID:</u> SV-3	<u>York Sample ID:</u> 18D1217-03			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.89	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/m³	0.66	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/m³	0.16	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
95-63-6	1,2,4-Trimethylbenzene	3.8		ug/m³	0.80	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.98	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/m³	0.66	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.75	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND	IS-HI	ug/m³	1.1	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.80	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
106-99-0	1,3-Butadiene	ND	IS-HI	ug/m³	1.1	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.98	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.75	1.628	EPA TO-15 Certifications:	05/02/2018 05:28	05/02/2018 05:28	LDS
106-46-7	1,4-Dichlorobenzene	4.7		ug/m³	0.98	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
78-93-3	2-Butanone	3.8	IS-HI	ug/m³	0.48	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.628	EPA TO-15 Certifications:	05/02/2018 05:28	05/02/2018 05:28	LDS
107-05-1	3-Chloropropene	ND	IS-HI	ug/m³	2.5	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
108-10-1	4-Methyl-2-pentanone	1.9		ug/m³	0.67	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
67-64-1	Acetone	18	IS-HI	ug/m³	0.77	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
107-13-1	Acrylonitrile	ND	IS-HI	ug/m³	0.35	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS



Sample Information

<u>Client Sample ID:</u> SV-3	<u>York Sample ID:</u> 18D1217-03			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	2.0	IS-HI	ug/m³	0.52	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.84	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-25-2	Bromoform	ND		ug/m³	1.7	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
74-83-9	Bromomethane	ND	IS-HI	ug/m³	0.63	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-15-0	Carbon disulfide	1.3	IS-HI	ug/m³	0.51	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
56-23-5	Carbon tetrachloride	0.41	IS-HI	ug/m³	0.26	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.75	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-00-3	Chloroethane	ND	IS-HI	ug/m³	0.43	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
67-66-3	Chloroform	ND	IS-HI	ug/m³	0.79	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
74-87-3	Chloromethane	0.37	IS-HI	ug/m³	0.34	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
156-59-2	cis-1,2-Dichloroethylene	ND	IS-HI	ug/m³	0.16	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.74	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
110-82-7	Cyclohexane	ND	IS-HI	ug/m³	0.56	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-71-8	Dichlorodifluoromethane	2.0	IS-HI	ug/m³	0.81	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
141-78-6	* Ethyl acetate	1.3	IS-HI	ug/m³	1.2	1.628	EPA TO-15 Certifications:	05/02/2018 05:28	05/02/2018 05:28	LDS
100-41-4	Ethyl Benzene	1.8		ug/m³	0.71	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.7	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
67-63-0	Isopropanol	2.0	IS-HI	ug/m³	0.80	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
80-62-6	Methyl Methacrylate	1.8		ug/m³	0.67	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/m³	0.59	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS



Sample Information

Client Sample ID: SV-3

York Sample ID: 18D1217-03

York Project (SDG) No.
18D1217

Client Project ID
9628-BXNY

Matrix
Soil Vapor

Collection Date/Time
April 27, 2018 3:00 pm

Date Received
04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	6.4	IS-HI	ug/m³	1.1	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
142-82-5	n-Heptane	3.5	IS-HI	ug/m³	0.67	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
110-54-3	n-Hexane	2.6	IS-HI	ug/m³	0.57	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
95-47-6	o-Xylene	2.6		ug/m³	0.71	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
179601-23-1	p- & m- Xylenes	6.9		ug/m³	1.4	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
622-96-8	* p-Ethyltoluene	2.8		ug/m³	0.80	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
115-07-1	* Propylene	0.98	IS-HI	ug/m³	0.28	1.628	EPA TO-15 Certifications:	05/02/2018 05:28	05/02/2018 05:28	LDS
100-42-5	Styrene	ND		ug/m³	0.69	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
127-18-4	Tetrachloroethylene	260		ug/m³	0.28	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
109-99-9	* Tetrahydrofuran	ND	IS-HI	ug/m³	0.96	1.628	EPA TO-15 Certifications:	05/02/2018 05:28	05/02/2018 05:28	LDS
108-88-3	Toluene	16		ug/m³	0.61	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/m³	0.65	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.74	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
79-01-6	Trichloroethylene	330		ug/m³	0.22	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND	IS-HI	ug/m³	0.91	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
108-05-4	Vinyl acetate	ND	IS-HI	ug/m³	0.57	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
593-60-2	Vinyl bromide	ND	IS-HI	ug/m³	0.71	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/m³	0.10	1.628	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 05:28	05/02/2018 05:28	LDS

Surrogate Recoveries

Result

Acceptance Range

460-00-4 Surrogate: p-Bromofluorobenzene 134 % S-08 70-130



Sample Information

<u>Client Sample ID:</u> SV-4	<u>York Sample ID:</u> 18D1217-04			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

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	0.95	1.391	EPA TO-15 Certifications:	05/02/2018 06:32	05/02/2018 06:32	LDS
71-55-6	1,1,1-Trichloroethane	ND	IS-HI	ug/m³	0.76	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.95	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND	IS-HI	ug/m³	1.1	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.76	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-34-3	1,1-Dichloroethane	ND	IS-HI	ug/m³	0.56	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-35-4	1,1-Dichloroethylene	ND	IS-HI	ug/m³	0.14	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.0	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
95-63-6	1,2,4-Trimethylbenzene	7.9		ug/m³	0.68	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.84	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
107-06-2	1,2-Dichloroethane	ND	IS-HI	ug/m³	0.56	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.64	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND	IS-HI	ug/m³	0.97	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
108-67-8	1,3,5-Trimethylbenzene	2.2		ug/m³	0.68	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
106-99-0	1,3-Butadiene	ND	IS-HI	ug/m³	0.92	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.84	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.64	1.391	EPA TO-15 Certifications:	05/02/2018 06:32	05/02/2018 06:32	LDS
106-46-7	1,4-Dichlorobenzene	1.2		ug/m³	0.84	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.0	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
78-93-3	2-Butanone	4.6	IS-HI	ug/m³	0.41	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.1	1.391	EPA TO-15 Certifications:	05/02/2018 06:32	05/02/2018 06:32	LDS



Sample Information

Client Sample ID: SV-4

York Sample ID: 18D1217-04

York Project (SDG) No.
18D1217

Client Project ID
9628-BXNY

Matrix
Soil Vapor

Collection Date/Time
April 27, 2018 3:00 pm

Date Received
04/30/2018

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
107-05-1	3-Chloropropene	ND	IS-HI	ug/m³	2.2	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
108-10-1	4-Methyl-2-pentanone	3.9		ug/m³	0.57	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
67-64-1	Acetone	12	IS-HI	ug/m³	0.66	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
107-13-1	Acrylonitrile	ND	IS-HI	ug/m³	0.30	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
71-43-2	Benzene	5.2	IS-HI	ug/m³	0.44	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.72	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.93	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-25-2	Bromoform	ND		ug/m³	1.4	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
74-83-9	Bromomethane	ND	IS-HI	ug/m³	0.54	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-15-0	Carbon disulfide	2.5	IS-HI	ug/m³	0.43	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
56-23-5	Carbon tetrachloride	0.35	IS-HI	ug/m³	0.22	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.64	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-00-3	Chloroethane	ND	IS-HI	ug/m³	0.37	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
67-66-3	Chloroform	ND	IS-HI	ug/m³	0.68	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
74-87-3	Chloromethane	0.72	IS-HI	ug/m³	0.29	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
156-59-2	cis-1,2-Dichloroethylene	0.99	IS-HI	ug/m³	0.14	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.63	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
110-82-7	Cyclohexane	3.0	IS-HI	ug/m³	0.48	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.2	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-71-8	Dichlorodifluoromethane	2.5	IS-HI	ug/m³	0.69	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
141-78-6	* Ethyl acetate	3.0	IS-HI	ug/m³	1.0	1.391	EPA TO-15 Certifications:	05/02/2018 06:32	05/02/2018 06:32	LDS
100-41-4	Ethyl Benzene	5.9		ug/m³	0.60	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS



Sample Information

<u>Client Sample ID:</u> SV-4	<u>York Sample ID:</u> 18D1217-04
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.5	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
67-63-0	Isopropanol	1.5	IS-HI	ug/m³	0.68	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
80-62-6	Methyl Methacrylate	5.8		ug/m³	0.57	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND	IS-HI	ug/m³	0.50	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-09-2	Methylene chloride	12	IS-HI	ug/m³	0.97	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
142-82-5	n-Heptane	8.4	IS-HI	ug/m³	0.57	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
110-54-3	n-Hexane	13	IS-HI	ug/m³	0.49	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
95-47-6	o-Xylene	7.2		ug/m³	0.60	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
179601-23-1	p- & m- Xylenes	22		ug/m³	1.2	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
622-96-8	* p-Ethyltoluene	7.5		ug/m³	0.68	1.391	EPA TO-15 Certifications:	05/02/2018 06:32	05/02/2018 06:32	LDS
115-07-1	* Propylene	3.4	IS-HI	ug/m³	0.24	1.391	EPA TO-15 Certifications:	05/02/2018 06:32	05/02/2018 06:32	LDS
100-42-5	Styrene	ND		ug/m³	0.59	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
127-18-4	Tetrachloroethylene	120		ug/m³	0.24	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
109-99-9	* Tetrahydrofuran	2.9	IS-HI	ug/m³	0.82	1.391	EPA TO-15 Certifications:	05/02/2018 06:32	05/02/2018 06:32	LDS
108-88-3	Toluene	33		ug/m³	0.52	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
156-60-5	trans-1,2-Dichloroethylene	ND	IS-HI	ug/m³	0.55	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.63	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
79-01-6	Trichloroethylene	130		ug/m³	0.19	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	0.86	IS-HI	ug/m³	0.78	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
108-05-4	Vinyl acetate	ND	IS-HI	ug/m³	0.49	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
593-60-2	Vinyl bromide	ND	IS-HI	ug/m³	0.61	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS
75-01-4	Vinyl Chloride	ND	IS-HI	ug/m³	0.089	1.391	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 06:32	05/02/2018 06:32	LDS

Surrogate Recoveries Result Acceptance Range



Sample Information

Client Sample ID: SV-4

York Sample ID: 18D1217-04

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	129 %			70-130					

Sample Information

Client Sample ID: SV-5

York Sample ID: 18D1217-05

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

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	1.2	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.99	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.2	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.4	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.99	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.73	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.18	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.3	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
95-63-6	1,2,4-Trimethylbenzene	14		ug/m³	0.89	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.4	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	1.1	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.73	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.84	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.3	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS



Sample Information

<u>Client Sample ID:</u> SV-5	<u>York Sample ID:</u> 18D1217-05			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

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
108-67-8	1,3,5-Trimethylbenzene	4.9		ug/m³	0.89	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
106-99-0	1,3-Butadiene	27		ug/m³	1.2	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	1.1	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.84	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	1.1	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.3	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
78-93-3	2-Butanone	120		ug/m³	0.53	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
591-78-6	* 2-Hexanone	4.9		ug/m³	1.5	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.8	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.74	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
67-64-1	Acetone	430		ug/m³	8.6	18.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/03/2018 02:23	05/03/2018 02:23	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.39	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
71-43-2	Benzene	18		ug/m³	0.58	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.94	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	1.2	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-25-2	Bromoform	ND		ug/m³	1.9	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
74-83-9	Bromomethane	ND		ug/m³	0.70	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-15-0	Carbon disulfide	13		ug/m³	0.56	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
56-23-5	Carbon tetrachloride	0.34		ug/m³	0.28	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.83	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-00-3	Chloroethane	ND		ug/m³	0.48	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
67-66-3	Chloroform	15		ug/m³	0.88	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS



Sample Information

<u>Client Sample ID:</u> SV-5	<u>York Sample ID:</u> 18D1217-05			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	1.5		ug/m³	0.37	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.18	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.82	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
110-82-7	Cyclohexane	3.6		ug/m³	0.62	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.5	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-71-8	Dichlorodifluoromethane	1.3		ug/m³	0.90	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	1.3	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
100-41-4	Ethyl Benzene	8.4		ug/m³	0.79	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.9	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
67-63-0	Isopropanol	ND		ug/m³	0.89	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.74	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.65	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-09-2	Methylene chloride	ND		ug/m³	1.3	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
142-82-5	n-Heptane	45		ug/m³	0.74	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
110-54-3	n-Hexane	30		ug/m³	0.64	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
95-47-6	o-Xylene	11		ug/m³	0.79	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
179601-23-1	p- & m- Xylenes	25		ug/m³	1.6	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
622-96-8	* p-Ethyltoluene	12		ug/m³	0.89	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS
115-07-1	* Propylene	170		ug/m³	3.1	18.11	EPA TO-15 Certifications:	05/03/2018 02:23	05/03/2018 02:23	LDS
100-42-5	Styrene	3.8		ug/m³	0.77	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
127-18-4	Tetrachloroethylene	970		ug/m³	3.1	18.11	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/03/2018 02:23	05/03/2018 02:23	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	1.1	1.811	EPA TO-15 Certifications:	05/02/2018 07:37	05/02/2018 07:37	LDS



Sample Information

Client Sample ID: **SV-5**

York Sample ID: **18D1217-05**

York Project (SDG) No.
18D1217

Client Project ID
9628-BXNY

Matrix
Soil Vapor

Collection Date/Time
April 27, 2018 3:00 pm

Date Received
04/30/2018

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
108-88-3	Toluene	36		ug/m³	0.68	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.72	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.82	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
79-01-6	Trichloroethylene	39		ug/m³	0.24	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	1.0	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.64	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.79	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.12	1.811	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 07:37	05/02/2018 07:37	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	136 %	S-08	70-130						
460-00-4	Surrogate: p-Bromofluorobenzene	137 %	S-08	70-130						

Sample Information

Client Sample ID: **SV-6**

York Sample ID: **18D1217-06**

York Project (SDG) No.
18D1217

Client Project ID
9628-BXNY

Matrix
Soil Vapor

Collection Date/Time
April 27, 2018 3:00 pm

Date Received
04/30/2018

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	1.0	1.478	EPA TO-15 Certifications:	05/02/2018 08:43	05/02/2018 08:43	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.81	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.0	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.1	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.81	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS



Sample Information

<u>Client Sample ID:</u> SV-6	<u>York Sample ID:</u> 18D1217-06			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.60	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.15	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.1	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
95-63-6	1,2,4-Trimethylbenzene	7.8		ug/m³	0.73	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.89	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.60	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.68	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
76-14-2	1,2-Dichlortetrafluoroethane	ND		ug/m³	1.0	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
108-67-8	1,3,5-Trimethylbenzene	2.2		ug/m³	0.73	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.98	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.89	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.68	1.478	EPA TO-15 Certifications:	05/02/2018 08:43	05/02/2018 08:43	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.89	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.1	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
78-93-3	2-Butanone	5.1		ug/m³	0.44	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.2	1.478	EPA TO-15 Certifications:	05/02/2018 08:43	05/02/2018 08:43	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.3	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
108-10-1	4-Methyl-2-pentanone	2.7		ug/m³	0.61	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
67-64-1	Acetone	13		ug/m³	0.70	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.32	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
71-43-2	Benzene	5.6		ug/m³	0.47	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS



Sample Information

Client Sample ID: SV-6

York Sample ID: 18D1217-06

York Project (SDG) No.

18D1217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 27, 2018 3:00 pm

Date Received

04/30/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-44-7	Benzyl chloride	ND		ug/m³	0.77	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.99	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-25-2	Bromoform	ND		ug/m³	1.5	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
74-83-9	Bromomethane	ND		ug/m³	0.57	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-15-0	Carbon disulfide	6.2		ug/m³	0.46	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
56-23-5	Carbon tetrachloride	0.37		ug/m³	0.23	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.68	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-00-3	Chloroethane	ND		ug/m³	0.39	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
67-66-3	Chloroform	ND		ug/m³	0.72	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
74-87-3	Chloromethane	ND		ug/m³	0.31	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.15	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.67	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
110-82-7	Cyclohexane	3.0		ug/m³	0.51	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.3	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-71-8	Dichlorodifluoromethane	1.8		ug/m³	0.73	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
141-78-6	* Ethyl acetate	2.0		ug/m³	1.1	1.478	EPA TO-15 Certifications:	05/02/2018 08:43	05/02/2018 08:43	LDS
100-41-4	Ethyl Benzene	5.4		ug/m³	0.64	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.6	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
67-63-0	Isopropanol	ND		ug/m³	0.73	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.61	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.53	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-09-2	Methylene chloride	14		ug/m³	1.0	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS



Sample Information

<u>Client Sample ID:</u> SV-6	<u>York Sample ID:</u> 18D1217-06			
<u>York Project (SDG) No.</u> 18D1217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 27, 2018 3:00 pm	<u>Date Received</u> 04/30/2018

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
142-82-5	n-Heptane	12		ug/m³	0.61	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
110-54-3	n-Hexane	15		ug/m³	0.52	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
95-47-6	o-Xylene	6.7		ug/m³	0.64	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
179601-23-1	p- & m- Xylenes	20		ug/m³	1.3	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
622-96-8	* p-Ethyltoluene	7.0		ug/m³	0.73	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
115-07-1	* Propylene	8.7		ug/m³	0.25	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
100-42-5	Styrene	ND		ug/m³	0.63	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
127-18-4	Tetrachloroethylene	50		ug/m³	0.25	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
109-99-9	* Tetrahydrofuran	2.7		ug/m³	0.87	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
108-88-3	Toluene	31		ug/m³	0.56	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.59	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.67	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
79-01-6	Trichloroethylene	1.9		ug/m³	0.20	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	0.83		ug/m³	0.83	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.52	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.65	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.094	1.478	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 08:43	05/02/2018 08:43	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	126 %	70-130							





Sample and Data Qualifiers Relating to This Work Order

- S-08 The recovery of this surrogate was outside of QC limits.
- QL-03 This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.
- QL-02 This LCS analyte is outside Laboratory Recovery limits due the analyte behavior using the referenced method. The reference method has certain limitations with respect to analytes of this nature.
- IS-LO The internal std associated with this target compound did not meet acceptance criteria (area <50% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
- IS-HI The internal std associated with this target compound did not meet acceptance criteria (area >200% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
- CCV-A The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to detected analytes only.

Definitions and Other Explanations

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

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



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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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



Field Chain-of-Custody Record - AIR

Page ____ of ____

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

York Project No. 1801217

YOUR Information

Company: <u>American Clean Tech</u>	Report To: <u>ACT</u>	Invoice To: <u>ACT</u>	YOUR Project ID <u>9628-BXNY</u>	Turn-Around Time
Address: <u>110 Main St.</u>	Company: <u>ACT</u>	Address: <u>Same</u>	Purchase Order No.	RUSH - Same Day <input type="checkbox"/>
Phone No. <u>516-441-5800</u>	Phone No.	Phone No.		RUSH - Next Day <input type="checkbox"/>
Contact Person: <u>Tim Young</u>	Attention: <u>Paul Stewart</u>	Attention: <u>Karen Friedman</u>		RUSH - Two Day <input type="checkbox"/>
E-Mail Address: <u>tim@act-earth.com</u>	E-Mail Address: <u>Pauls@act-earth.com</u>	E-Mail Address: <u>Karen@act-earth.com</u>		RUSH - Three Day <input type="checkbox"/>
			Samples from: CT <u>NY</u> NJ	RUSH - Four Day <input type="checkbox"/>
			Standard(5-7 Days) <input checked="" type="checkbox"/>	Standard Excel

Print Clearly and Legibly. All Information must be complete. Additional Notes:
Samples will NOT be logged in and the turn-around time clock will not begin until any questions by York are resolved.

Air Matrix Codes

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

Samples Collected/Authorized By (Signature)

Z. J. Yang

Name (printed)

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Canister ID	Flow Cont.ID	ANALYSES REQUESTED	Sampling Media
SV-1	4/27/18	AS	-27	-10	30149	Y30	T0-15	6 Liter canister <input checked="" type="checkbox"/>
SV-2	"	"	-30	-9	28857	5625	"	Tedlar Bag <input type="checkbox"/>
SV-3	"	"	-28	-8	23200	5708	"	6 Liter canister <input type="checkbox"/>
SV-4	"	"	-24	-4	24113	7076	"	Tedlar Bag <input type="checkbox"/>
SV-5	"	"	-30	-8	Y79	5121	"	6 Liter canister <input type="checkbox"/>
SV-6	"	"	-26	-6	18317	7081	"	Tedlar Bag <input checked="" type="checkbox"/>
								6 Liter canister <input type="checkbox"/>
								6 Liter canister <input type="checkbox"/>
								6 Liter canister <input type="checkbox"/>
								6 Liter canister <input type="checkbox"/>
								6 Liter canister <input type="checkbox"/>
								Tedlar Bag <input type="checkbox"/>
								Tedlar Bag <input type="checkbox"/>
								Tedlar Bag <input type="checkbox"/>
								Tedlar Bag <input type="checkbox"/>
								Tedlar Bag <input type="checkbox"/>

Comments

None 4/30/2018
John Date Received 4/30/18
John Date/TIME 8:20 AM
John Samples Relinquished By John
John Date/TIME 4-30-18
John Samples Received in LAB by John
Date/TIME 2020



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Paul Stewart

Report Date: 05/08/2018

Client Project ID: 9628-BXNY

York Project (SDG) No.: 18E0061

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: 05/08/2018
Client Project ID: 9628-BXNY
York Project (SDG) No.: 18E0061

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Paul Stewart

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 01, 2018 and listed below. The project was identified as your project: **9628-BXNY**.

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>
18E0061-01	SV-7	Soil Vapor	04/30/2018	05/01/2018
18E0061-02	SV-9	Soil Vapor	04/30/2018	05/01/2018
18E0061-03	SV-10	Soil Vapor	04/30/2018	05/01/2018
18E0061-04	SV-11	Soil Vapor	04/30/2018	05/01/2018
18E0061-05	SV-12	Soil Vapor	04/30/2018	05/01/2018

General Notes for York Project (SDG) No.: 18E0061

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

Approved By:



Date: 05/08/2018

Benjamin Gulizia
Laboratory Director





Sample Information

Client Sample ID: SV-7

York Sample ID: 18E0061-01

York Project (SDG) No.
18E0061

Client Project ID
9628-BXNY

Matrix
Soil Vapor

Collection Date/Time
April 30, 2018 3:00 pm

Date Received
05/01/2018

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	1.1	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.90	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.90	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.67	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
75-35-4	1,1-Dichloroethylene	0.33		ug/m³	0.16	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	0.81	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.99	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.67	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.76	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.2	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
108-67-8	1,3,5-Trimethylbenzene	7.9		ug/m³	0.81	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.99	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.76	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.99	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
78-93-3	2-Butanone	73		ug/m³	0.49	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS



Sample Information

Client Sample ID: SV-7

York Sample ID: 18E0061-01

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

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
591-78-6	* 2-Hexanone	ND		ug/m³	1.4	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.6	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
108-10-1	4-Methyl-2-pentanone	300		ug/m³	0.68	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
67-64-1	Acetone	150		ug/m³	16	32.96	EPA TO-15 Certifications:	05/04/2018 21:41	05/04/2018 21:41	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.36	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
71-43-2	Benzene	68		ug/m³	0.53	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.85	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
75-25-2	Bromoform	ND		ug/m³	1.7	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
74-83-9	Bromomethane	ND		ug/m³	0.64	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
75-15-0	Carbon disulfide	9.3		ug/m³	0.51	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
56-23-5	Carbon tetrachloride	0.62		ug/m³	0.26	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.76	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
75-00-3	Chloroethane	62		ug/m³	0.43	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
67-66-3	Chloroform	2.5		ug/m³	0.80	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
74-87-3	Chloromethane	2.9		ug/m³	0.34	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
156-59-2	cis-1,2-Dichloroethylene	67		ug/m³	0.16	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.75	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
110-82-7	Cyclohexane	80		ug/m³	0.57	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
75-71-8	Dichlorodifluoromethane	2.5		ug/m³	0.81	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS



Sample Information

<u>Client Sample ID:</u> SV-7	<u>York Sample ID:</u> 18E0061-01			
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 30, 2018 3:00 pm	<u>Date Received</u> 05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	17		ug/m³	0.72	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.8	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
67-63-0	Isopropanol	130		ug/m³	0.81	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.67	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.59	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
142-82-5	n-Heptane	100		ug/m³	0.68	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
110-54-3	n-Hexane	42		ug/m³	0.58	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
95-47-6	o-Xylene	21		ug/m³	0.72	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
179601-23-1	p- & m- Xylenes	51		ug/m³	1.4	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
622-96-8	* p-Ethyltoluene	18		ug/m³	0.81	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
115-07-1	* Propylene	110		ug/m³	0.28	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
100-42-5	Styrene	10		ug/m³	0.70	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
127-18-4	Tetrachloroethylene	260		ug/m³	0.28	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.97	1.648	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 21:10	LDS
108-88-3	Toluene	15		ug/m³	12	32.96	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 21:41	05/04/2018 21:41	LDS
156-60-5	trans-1,2-Dichloroethylene	2.4		ug/m³	0.65	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.75	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
79-01-6	Trichloroethylene	420		ug/m³	4.4	32.96	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 21:41	05/04/2018 21:41	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	1.7		ug/m³	0.93	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.58	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.72	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS
75-01-4	Vinyl Chloride	11		ug/m³	0.11	1.648	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 21:10	LDS



Sample Information

Client Sample ID: SV-7

York Sample ID: 18E0061-01

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst					
Surrogate Recoveries															
Surrogate: <i>p</i> -Bromofluorobenzene															
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	89.3 %			70-130										
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	104 %			70-130										

Sample Information

Client Sample ID: SV-9

York Sample ID: 18E0061-02

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

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	1.0	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.82	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.0	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.2	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.82	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.61	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.15	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.1	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
95-63-6	1,2,4-Trimethylbenzene	1.4		ug/m³	0.74	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.2	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.91	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.61	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.70	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS



Sample Information

<u>Client Sample ID:</u> SV-9	<u>York Sample ID:</u> 18E0061-02			
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 30, 2018 3:00 pm	<u>Date Received</u> 05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.74	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	1.0	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.91	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.70	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.91	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.1	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
78-93-3	2-Butanone	5.1		ug/m³	0.45	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.2	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.4	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.62	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
67-64-1	Acetone	36		ug/m³	0.72	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.33	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
71-43-2	Benzene	4.5		ug/m³	0.48	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.78	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	1.0	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-25-2	Bromoform	ND		ug/m³	1.6	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
74-83-9	Bromomethane	ND		ug/m³	0.59	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-15-0	Carbon disulfide	4.3		ug/m³	0.47	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.24	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.70	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-00-3	Chloroethane	ND		ug/m³	0.40	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS



Sample Information

Client Sample ID: SV-9

York Sample ID: 18E0061-02

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-66-3	Chloroform	ND		ug/m³	0.74	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
74-87-3	Chloromethane	ND		ug/m³	0.31	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.15	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.69	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
110-82-7	Cyclohexane	2.0		ug/m³	0.52	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.3	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-71-8	Dichlorodifluoromethane	3.1		ug/m³	0.75	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	1.1	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
100-41-4	Ethyl Benzene	1.8		ug/m³	0.66	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.6	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
67-63-0	Isopropanol	2.7		ug/m³	0.74	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.62	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.54	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-09-2	Methylene chloride	5.0		ug/m³	1.0	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
142-82-5	n-Heptane	6.4		ug/m³	0.62	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
110-54-3	n-Hexane	8.5		ug/m³	0.53	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
95-47-6	o-Xylene	2.3		ug/m³	0.66	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
179601-23-1	p- & m- Xylenes	6.0		ug/m³	1.3	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
622-96-8	* p-Ethyltoluene	1.9		ug/m³	0.74	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
115-07-1	* Propylene	8.6		ug/m³	0.26	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
100-42-5	Styrene	3.3		ug/m³	0.64	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
127-18-4	Tetrachloroethylene	1900	IS-HI	ug/m³	5.1	30.22	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 13:43	05/04/2018 13:43	LDS



Sample Information

Client Sample ID: SV-9

York Sample ID: 18E0061-02

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.89	1.511	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:03	LDS
108-88-3	Toluene	10		ug/m³	0.57	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.60	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.69	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
79-01-6	Trichloroethylene	59		ug/m³	0.20	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	1.7		ug/m³	0.85	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.53	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.66	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.097	1.511	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:03	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	93.5 %	70-130							
460-00-4	Surrogate: p-Bromofluorobenzene	97.6 %	70-130							

Sample Information

Client Sample ID: SV-10

York Sample ID: 18E0061-03

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

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	1.1	1.583	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:55	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.86	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.2	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS



Sample Information

<u>Client Sample ID:</u> SV-10	<u>York Sample ID:</u> 18E0061-03			
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 30, 2018 3:00 pm	<u>Date Received</u> 05/01/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.86	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.64	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
95-63-6	1,2,4-Trimethylbenzene	3.3		ug/m³	0.78	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.2	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.95	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.64	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.73	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.1	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
108-67-8	1,3,5-Trimethylbenzene	1.4		ug/m³	0.78	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	1.1	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.95	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.73	1.583	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:55	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.95	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.1	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
78-93-3	2-Butanone	5.6		ug/m³	0.47	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.3	1.583	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:55	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.5	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
108-10-1	4-Methyl-2-pentanone	2.1		ug/m³	0.65	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
67-64-1	Acetone	20		ug/m³	0.75	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.34	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS



Sample Information

Client Sample ID: SV-10

York Sample ID: 18E0061-03

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
71-43-2	Benzene	5.8		ug/m³	0.51	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.82	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	1.1	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-25-2	Bromoform	ND		ug/m³	1.6	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
74-83-9	Bromomethane	ND		ug/m³	0.61	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-15-0	Carbon disulfide	4.8		ug/m³	0.49	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
56-23-5	Carbon tetrachloride	0.40		ug/m³	0.25	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.73	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-00-3	Chloroethane	ND		ug/m³	0.42	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
67-66-3	Chloroform	2.2		ug/m³	0.77	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
74-87-3	Chloromethane	0.75		ug/m³	0.33	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
156-59-2	cis-1,2-Dichloroethylene	1.8		ug/m³	0.16	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.72	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
110-82-7	Cyclohexane	2.7		ug/m³	0.54	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.3	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-71-8	Dichlorodifluoromethane	3.4		ug/m³	0.78	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	1.1	1.583	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 22:55	LDS
100-41-4	Ethyl Benzene	3.4		ug/m³	0.69	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.7	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
67-63-0	Isopropanol	3.2		ug/m³	0.78	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
80-62-6	Methyl Methacrylate	4.1		ug/m³	0.65	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.57	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS



Sample Information

<u>Client Sample ID:</u> SV-10		<u>York Sample ID:</u> 18E0061-03
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> April 30, 2018 3:00 pm <u>Date Received</u> 05/01/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-09-2	Methylene chloride	17		ug/m³	1.1	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
142-82-5	n-Heptane	11		ug/m³	0.65	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
110-54-3	n-Hexane	18		ug/m³	0.56	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
95-47-6	o-Xylene	3.6		ug/m³	0.69	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
179601-23-1	p- & m- Xylenes	8.8		ug/m³	1.4	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
622-96-8	* p-Ethyltoluene	3.0		ug/m³	0.78	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
115-07-1	* Propylene	10		ug/m³	0.27	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
100-42-5	Styrene	ND		ug/m³	0.67	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
127-18-4	Tetrachloroethylene	3000		ug/m³	5.4	31.66	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 14:29	05/04/2018 14:29	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.93	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
108-88-3	Toluene	16		ug/m³	0.60	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.63	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.72	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
79-01-6	Trichloroethylene	56		ug/m³	0.21	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	1.7		ug/m³	0.89	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.56	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.69	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.10	1.583	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 22:55	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	95.5 %	70-130							
460-00-4	Surrogate: p-Bromofluorobenzene	89.7 %	70-130							



Sample Information

<u>Client Sample ID:</u> SV-11	<u>York Sample ID:</u> 18E0061-04
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY
	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> April 30, 2018 3:00 pm <u>Date Received</u> 05/01/2018

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	1.1	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.90	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.1	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.3	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.90	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.67	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.16	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.2	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
95-63-6	1,2,4-Trimethylbenzene	6.5		ug/m³	0.81	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.3	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.99	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.67	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.76	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.2	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
108-67-8	1,3,5-Trimethylbenzene	3.1		ug/m³	0.81	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
106-99-0	1,3-Butadiene	5.3		ug/m³	1.1	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.99	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.76	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.99	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.2	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
78-93-3	2-Butanone	26		ug/m³	0.49	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
591-78-6	* 2-Hexanone	ND		ug/m³	1.4	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS



Sample Information

Client Sample ID: SV-11

York Sample ID: 18E0061-04

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

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	2.6	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
108-10-1	4-Methyl-2-pentanone	2.3		ug/m³	0.68	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
67-64-1	Acetone	100		ug/m³	0.79	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.36	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
71-43-2	Benzene	19		ug/m³	0.53	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.86	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-27-4	Bromodichloromethane	3.0		ug/m³	1.1	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-25-2	Bromoform	ND		ug/m³	1.7	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
74-83-9	Bromomethane	ND		ug/m³	0.64	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-15-0	Carbon disulfide	14		ug/m³	0.52	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
56-23-5	Carbon tetrachloride	0.31		ug/m³	0.26	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.76	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-00-3	Chloroethane	ND		ug/m³	0.44	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
67-66-3	Chloroform	1.5		ug/m³	0.81	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
74-87-3	Chloromethane	0.99		ug/m³	0.34	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
156-59-2	cis-1,2-Dichloroethylene	1.2		ug/m³	0.16	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.75	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
110-82-7	Cyclohexane	3.0		ug/m³	0.57	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.4	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-71-8	Dichlorodifluoromethane	2.4		ug/m³	0.82	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	1.2	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
100-41-4	Ethyl Benzene	3.7		ug/m³	0.72	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS



Sample Information

Client Sample ID: SV-11

York Sample ID: 18E0061-04

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.8	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
67-63-0	Isopropanol	2.6		ug/m³	0.81	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
80-62-6	Methyl Methacrylate	5.4		ug/m³	0.68	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.60	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-09-2	Methylene chloride	ND		ug/m³	1.1	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
142-82-5	n-Heptane	27		ug/m³	0.68	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
110-54-3	n-Hexane	19		ug/m³	0.58	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
95-47-6	o-Xylene	4.6		ug/m³	0.72	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
179601-23-1	p- & m- Xylenes	9.6		ug/m³	1.4	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
622-96-8	* p-Ethyltoluene	4.8		ug/m³	0.81	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
115-07-1	* Propylene	36		ug/m³	0.28	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
100-42-5	Styrene	1.8		ug/m³	0.70	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
127-18-4	Tetrachloroethylene	2600		ug/m³	5.6	33.08	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 15:16	05/04/2018 15:16	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.98	1.654	EPA TO-15 Certifications:	05/02/2018 16:24	05/02/2018 23:47	LDS
108-88-3	Toluene	20		ug/m³	0.62	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.66	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.75	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
79-01-6	Trichloroethylene	30		ug/m³	0.22	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	1.6		ug/m³	0.93	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.58	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.72	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.11	1.654	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/02/2018 23:47	LDS

Surrogate Recoveries

Result

Acceptance Range

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RICHMOND HILL, NY 11418

ClientServices@yorklab.com



Sample Information

Client Sample ID: SV-11

York Sample ID: 18E0061-04

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
460-00-4	Surrogate: p-Bromofluorobenzene	89.8 %			70-130					
460-00-4	Surrogate: p-Bromofluorobenzene	97.7 %			70-130					

Sample Information

Client Sample ID: SV-12

York Sample ID: 18E0061-05

York Project (SDG) No.

18E0061

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

April 30, 2018 3:00 pm

Date Received

05/01/2018

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	1.0	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.81	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	1.0	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	1.1	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.81	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.60	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.15	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	1.1	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
95-63-6	1,2,4-Trimethylbenzene	1.5		ug/m³	0.73	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	1.1	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.89	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.60	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.69	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	1.0	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS



Sample Information

<u>Client Sample ID:</u> SV-12	<u>York Sample ID:</u> 18E0061-05			
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 30, 2018 3:00 pm	<u>Date Received</u> 05/01/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	0.73	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.98	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.89	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.69	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.89	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	1.1	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
78-93-3	2-Butanone	14		ug/m³	0.44	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
591-78-6	* 2-Hexanone	1.6		ug/m³	1.2	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
107-05-1	3-Chloropropene	ND		ug/m³	2.3	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
108-10-1	4-Methyl-2-pentanone	1.1		ug/m³	0.61	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
67-64-1	Acetone	48		ug/m³	0.70	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.32	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
71-43-2	Benzene	1.6		ug/m³	0.47	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.77	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.99	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-25-2	Bromoform	ND		ug/m³	1.5	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
74-83-9	Bromomethane	ND		ug/m³	0.58	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-15-0	Carbon disulfide	1.4		ug/m³	0.46	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.23	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.68	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-00-3	Chloroethane	ND		ug/m³	0.39	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
67-66-3	Chloroform	ND		ug/m³	0.72	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS



Sample Information

<u>Client Sample ID:</u> SV-12	<u>York Sample ID:</u> 18E0061-05			
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 30, 2018 3:00 pm	<u>Date Received</u> 05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
74-87-3	Chloromethane	ND		ug/m³	0.31	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.15	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.67	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
110-82-7	Cyclohexane	ND		ug/m³	0.51	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	1.3	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-71-8	Dichlorodifluoromethane	2.0		ug/m³	0.73	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	1.1	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
100-41-4	Ethyl Benzene	0.64		ug/m³	0.64	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.6	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
67-63-0	Isopropanol	1.2		ug/m³	0.73	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
80-62-6	Methyl Methacrylate	2.1		ug/m³	0.61	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.53	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-09-2	Methylene chloride	13		ug/m³	1.0	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
142-82-5	n-Heptane	1.1		ug/m³	0.61	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
110-54-3	n-Hexane	1.6		ug/m³	0.52	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
95-47-6	o-Xylene	0.77		ug/m³	0.64	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
179601-23-1	p- & m- Xylenes	1.9		ug/m³	1.3	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
622-96-8	* p-Ethyltoluene	0.87		ug/m³	0.73	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
115-07-1	* Propylene	7.2		ug/m³	0.26	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS
100-42-5	Styrene	ND		ug/m³	0.63	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
127-18-4	Tetrachloroethylene	500		ug/m³	0.25	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.87	1.483	EPA TO-15 Certifications:	05/02/2018 16:24	05/03/2018 00:39	LDS



Sample Information

<u>Client Sample ID:</u> SV-12	<u>York Sample ID:</u> 18E0061-05			
<u>York Project (SDG) No.</u> 18E0061	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> April 30, 2018 3:00 pm	<u>Date Received</u> 05/01/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-88-3	Toluene	2.6		ug/m³	0.56	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.59	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.67	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
79-01-6	Trichloroethylene	0.48		ug/m³	0.20	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m³	0.83	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.52	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.65	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	0.095	1.483	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/02/2018 16:24	05/03/2018 00:39	LDS
Surrogate Recoveries		Result	Acceptance Range							
460-00-4	Surrogate: p-Bromofluorobenzene	94.8 %	70-130							





Sample and Data Qualifiers Relating to This Work Order

- QL-03 This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.
- IS-HI The internal std associated with this target compound did not meet acceptance criteria (area >200% CCV) at the stated dilution due to matrix effects. Sample was rerun to confirm matrix effects.
- CCV-E The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>20% Difference for average Rf or >20% Drift for quadratic fit).
- CCV-A The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to detected analytes only.

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.



Technical Report

prepared for:

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Paul Stewart

Report Date: 05/10/2018

Client Project ID: 9628-BXNY

York Project (SDG) No.: 18E0217

CT Cert. No. PH-0723

New Jersey Cert. No. CT005 and NY037



New York Cert. Nos. 10854 and 12058

PA Cert. No. 68-04440

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RICHMOND HILL, NY 11418
ClientServices@yorklab.com

Report Date: 05/10/2018
Client Project ID: 9628-BXNY
York Project (SDG) No.: 18E0217

Advanced Cleanup Technologies, Inc.
110 Main Street
Port Washington NY, 11050
Attention: Paul Stewart

Purpose and Results

This report contains the analytical data for the sample(s) identified on the attached chain-of-custody received in our laboratory on May 03, 2018 and listed below. The project was identified as your project: **9628-BXNY**.

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>
18E0217-01	SV-8	Soil Vapor	05/03/2018	05/03/2018

General Notes for York Project (SDG) No.: 18E0217

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

Approved By:



Date: 05/10/2018

Benjamin Gulizia
Laboratory Director





Sample Information

Client Sample ID: **SV-8**

York Sample ID: **18E0217-01**

York Project (SDG) No.
18E0217

Client Project ID
9628-BXNY

Matrix
Soil Vapor

Collection Date/Time
May 3, 2018 12:00 pm

Date Received
05/03/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	0.55	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	0.69	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	0.77	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	0.55	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	0.40	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	0.099	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	0.74	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
95-63-6	1,2,4-Trimethylbenzene	30		ug/m³	0.83	1.682	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	0.77	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	0.40	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	0.70	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
108-67-8	1,3,5-Trimethylbenzene	10		ug/m³	0.83	1.682	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	0.66	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	0.46	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	0.60	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	0.72	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
78-93-3	2-Butanone	35		ug/m³	0.50	1.682	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS



Sample Information

<u>Client Sample ID:</u> SV-8	<u>York Sample ID:</u> 18E0217-01			
<u>York Project (SDG) No.</u> 18E0217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor	<u>Collection Date/Time</u> May 3, 2018 12:00 pm	<u>Date Received</u> 05/03/2018

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
591-78-6	* 2-Hexanone	ND		ug/m³	0.82	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
107-05-1	3-Chloropropene	ND		ug/m³	1.6	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	0.41	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
67-64-1	Acetone	280		ug/m³	8.0	16.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/05/2018 16:11	05/05/2018 16:11	LDS
107-13-1	Acrylonitrile	ND		ug/m³	0.22	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
71-43-2	Benzene	5.3		ug/m³	0.54	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
100-44-7	Benzyl chloride	ND		ug/m³	0.52	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	0.67	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
75-25-2	Bromoform	ND		ug/m³	1.0	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
74-83-9	Bromomethane	ND		ug/m³	0.39	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
75-15-0	Carbon disulfide	24		ug/m³	0.52	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	0.16	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
108-90-7	Chlorobenzene	ND		ug/m³	0.46	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
75-00-3	Chloroethane	ND		ug/m³	0.26	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
67-66-3	Chloroform	9.1		ug/m³	0.82	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
74-87-3	Chloromethane	ND		ug/m³	0.21	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	0.099	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
110-82-7	Cyclohexane	140		ug/m³	0.58	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	0.85	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	0.49	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	0.72	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS



Sample Information

<u>Client Sample ID:</u> SV-8		<u>York Sample ID:</u> 18E0217-01
<u>York Project (SDG) No.</u> 18E0217	<u>Client Project ID</u> 9628-BXNY	<u>Matrix</u> Soil Vapor <u>Collection Date/Time</u> May 3, 2018 12:00 pm <u>Date Received</u> 05/03/2018

Volatile Organics, EPA TO15 Full List

Sample Prepared by Method: EPA TO15 PREP

Log-in Notes:

Sample Notes:

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	9.6		ug/m³	0.73	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
87-68-3	Hexachlorobutadiene	ND		ug/m³	1.1	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
67-63-0	Isopropanol	12		ug/m³	0.83	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
80-62-6	Methyl Methacrylate	ND		ug/m³	0.41	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	0.36	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
75-09-2	Methylene chloride	15		ug/m³	1.2	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
142-82-5	n-Heptane	71		ug/m³	0.69	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
110-54-3	n-Hexane	50		ug/m³	0.59	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
95-47-6	o-Xylene	15		ug/m³	0.73	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
179601-23-1	p- & m- Xylenes	26		ug/m³	1.5	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
622-96-8	* p-Ethyltoluene	16		ug/m³	0.83	1.682	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
115-07-1	* Propylene	8.3		ug/m³	0.29	1.682	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
100-42-5	Styrene	ND		ug/m³	0.43	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
127-18-4	Tetrachloroethylene	27		ug/m³	0.29	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
109-99-9	* Tetrahydrofuran	ND		ug/m³	0.59	1	EPA TO-15 Certifications:	05/04/2018 20:03	05/04/2018 20:03	LDS
108-88-3	Toluene	19		ug/m³	0.63	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	0.40	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	0.45	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
79-01-6	Trichloroethylene	630		ug/m³	2.3	16.82	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/05/2018 16:11	05/05/2018 16:11	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	0.56	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
108-05-4	Vinyl acetate	ND		ug/m³	0.35	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
593-60-2	Vinyl bromide	ND		ug/m³	0.44	1	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS



Sample Information

Client Sample ID: SV-8

York Sample ID: 18E0217-01

York Project (SDG) No.

18E0217

Client Project ID

9628-BXNY

Matrix

Soil Vapor

Collection Date/Time

May 3, 2018 12:00 pm

Date Received

05/03/2018

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	2.9		ug/m³	0.11	1.682	EPA TO-15 Certifications: NELAC-NY12058,NJDEP-Queens	05/04/2018 20:03	05/04/2018 20:03	LDS
Surrogate Recoveries										
Surrogate: <i>p</i> -Bromofluorobenzene										
102 %										
70-130										
Surrogate: <i>p</i> -Bromofluorobenzene										
120 %										
70-130										





Sample and Data Qualifiers Relating to This Work Order

QL-03 This LCS analyte recovered outside of acceptance limits. The LCS contains approximately 70 compounds, a limited number of which may be outside acceptance windows.

E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate.

CCV-A The value reported is ESTIMATED. The value is estimated due to its behavior during continuing calibration verification (>30% Difference for average Rf). This applies to detected analytes only.

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.
