Advanced Cleanup Technologies, Inc.
ENVIRONMENTAL CONSULTANTS

August 30, 2016

Ms. Desiree Clemenza
Signature Bank
68 South Service Road
Melville, NY 11747

Re: Tier II: Soil Vapor Encroachment Screen
29-31 and 37-39 North Main Street
Port Chester, NY 10573

Dear Ms. Clemenza,

Advanced Cleanup Technologies, Inc. (ACT) was contracted to conduct a Tier II Soil Vapor Encroachment Screen (Tier II VE Screen) at 29-31 and 37-39 North Main Street (the Site). A Phase I Environmental Site Assessment (ESA) report prepared by ACT dated July 25th, 2016 identified a recognized environmental condition, namely former dry cleaning operations at the Site. The recommendation of the Phase I ESA was to perform soil vapor sampling to determine whether a vapor encroachment condition exists at the Site.

On August 17, 2016, ACT conducted a Tier II VE Screen at the Site. All work was performed in general conformity to the New York State Department of Health's *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006 (NYSDOH Guidance). The following sections summarize the results of the Tier II VE Screen.

Soil Vapor Sampling

Two soil vapor samples (SS-1 and SS-2) were collected approximately 10 inches beneath the property's asphalt parking lot in the eastern portion of the Site. Soil vapor sample SS-1 was collected south of the 1-story addition and SS-2 was collected to the north of the 1-story addition. A diagram of sampling locations is provided in Figure 1.

A third soil vapor sample was proposed beneath the building's basement floor. However, groundwater was encountered during drilling activities immediately beneath the basement floor, which precluded the collection of soil vapor samples beneath the building itself.

Each soil vapor sample was collected utilizing a power drill, a 1-foot long drill bit, dedicated polyethylene tubing and volatile organic compound (VOC) free putty for sealant. The portion of the polyethylene tubing emerging from the floor was connected to a low flow vacuum pump that purged the probe of sub-slab soil vapor at a rate that did not exceed 0.2 liters per minute. 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 polyethylene tubing and allowed to collect sub-slab soil vapor for approximately 4 hours until the canisters were full.

The two 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 contained in Appendix A.

Soil Vapor Analysis

NYSDOH has soil vapor screening levels for only seven chlorinated VOCs. Table 1 contains a summary of these seven compounds in soil vapor beneath the Site. It can be seen from Table 1 that Tetrachloroethene was detected in soil vapor sample SS-1 at a concentration of 250 ug/m^3, which is above its NYSDOH soil vapor screening level of 100 ug/m^3. Tetrachloroethene was not detected in sample SS-2. Tetrachloroethene is an organic solvent historically utilized in dry cleaning operations.

Table 1

Chlorinated Volatile Organic Compounds in Soil Vapor

Sample ID	NYSDOH Soil Vapor Screening Level	SS-1	SS-2
Sampling Date		8/17/16	8/17/16
Parameters			
Trichloroethene	5 [1]	ND	ND
Tetrachloroethene	100 [2]	**250**	ND
Carbon tetrachloride	5 [1]	ND	ND
Vinyl Chloride	5 [1]	ND	ND
1,1,1-Trichloroethane	100 [2]	ND	ND
1,1-Dichloroethene	100 [2]	ND	ND
cis-1,2-Dichloroethene	100 [2]	ND	ND

All units in µg/m3
EPA Method TO-15
Highlighted values signify detection above screening level
ND= Compound not detected
[1] Matrix 1, NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006)
[2] Matrix 2, NYSDOH "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" (October 2006)

Conclusions

The results of the August 17, 2016 Tier II VE Screen are contained in this report. Based upon this investigation, ACT makes the following conclusions concerning the environmental quality of the subject property:

- The presence of Tetrachloroethene in soil vapor beneath the Site above its NYSDOH screening level indicates that a vapor encroachment condition exists beneath the Site.

Recommendations

According to Matrix 2 of the NYSDOH Guidance, indoor air samples should be collected and analyzed to determine whether soil vapor intrusion is taking place. ACT also recommends the collection and analysis of groundwater samples beneath the building foundations to make sure groundwater has not been impacted beneath the Site. The cost for these tasks should not exceed $2,500.

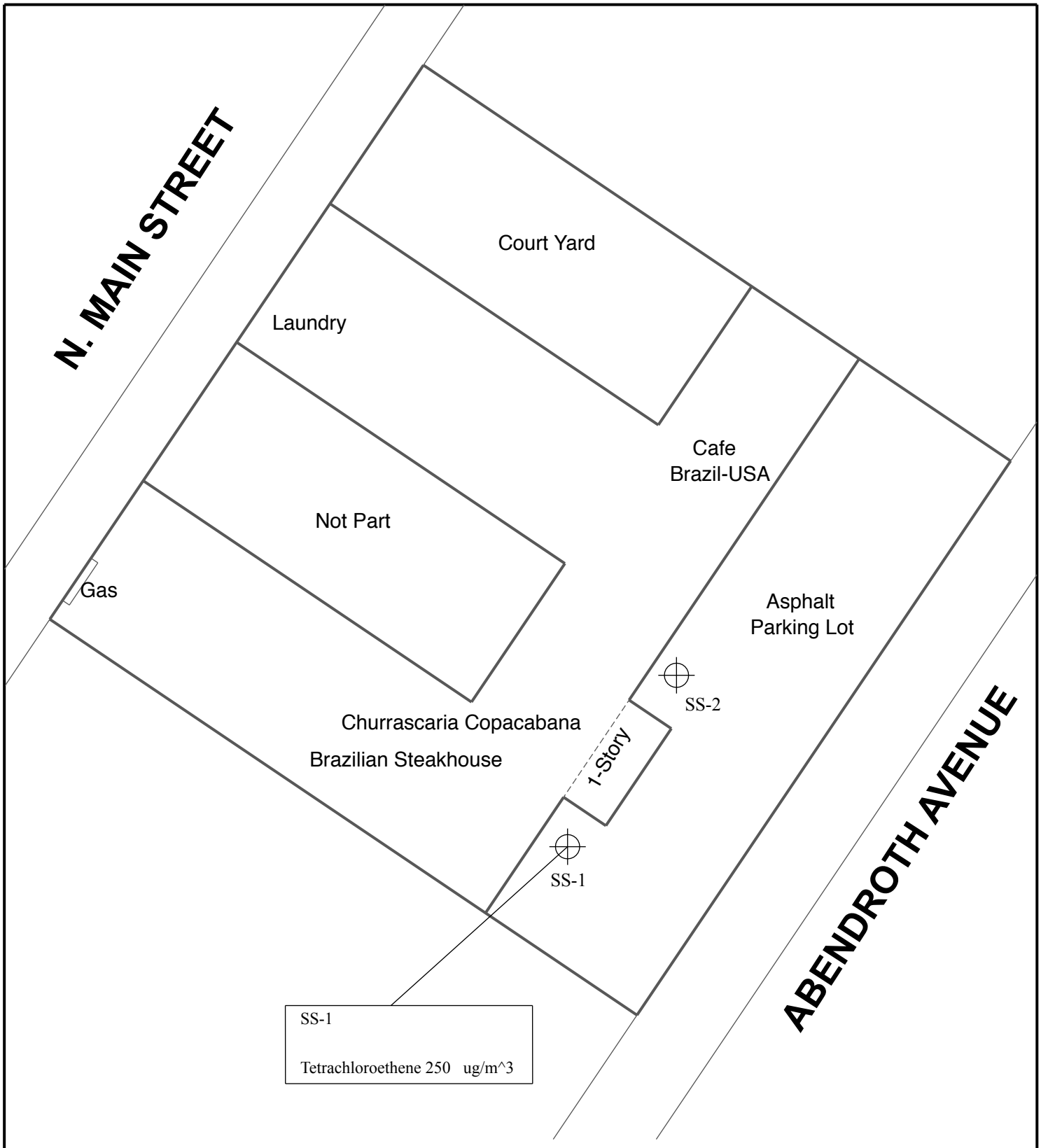
Please feel free to contact the undersigned should you have any questions or comments concerning the above.

Very truly yours,

Paul P. Stewart, MS
President

FIGURE 1

Sampling Diagram



Legend

Soil Vapor Sample

N

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.: 9015-PCNY	Figure No.: 1
Date: 08/30/2016	Scale: Not To Scale

APPENDIX A

Laboratory Reports

Technical Report

prepared for:

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

Report Date: 08/24/2016
Client Project ID: 9015-PCNY
York Project (SDG) No.: 16H0812

Report Date: 08/24/2016
Client Project ID: 9015-PCNY
York Project (SDG) No.: 16H0812

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 August 18, 2016 and listed below. The project was identified as your project: **9015-PCNY**.

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 Notes 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 attachment to 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
16H0812-01	SS-1	Soil Vapor	08/17/2016	08/18/2016
16H0812-02	SS-2	Soil Vapor	08/17/2016	08/18/2016

General Notes for York Project (SDG) No.: 16H0812

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 samples were received in proper condition for analysis with proper documentation, unless otherwise noted.
6. All analyses conducted met method or Laboratory SOP requirements. See the Qualifiers and/or Narrative sections for further information.
7. It is noted that no analyses reported herein were subcontracted to another laboratory, unless noted in the report.
8. This report reflects results that relate only to the samples submitted on the attached chain-of-custody form(s) received by York.

Approved By: 

Date: 08/24/2016

Benjamin Gulizia
Laboratory Director

Sample Information

Client Sample ID: SS-1 **York Sample ID:** 16H0812-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	18	18	26.53	EPA TO-15 Certifications:	08/19/2016 13:25	08/19/2016 16:30	LDS
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	14	14	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	18	18	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	20	20	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	14	14	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
75-34-3	1,1-Dichloroethane	ND		ug/m³	11	11	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
75-35-4	1,1-Dichloroethylene	ND		ug/m³	11	11	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	20	20	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m³	13	13	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
106-93-4	1,2-Dibromoethane	ND		ug/m³	20	20	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	16	16	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
107-06-2	1,2-Dichloroethane	ND		ug/m³	11	11	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
78-87-5	1,2-Dichloropropane	ND		ug/m³	12	12	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	19	19	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	13	13	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
106-99-0	1,3-Butadiene	ND		ug/m³	18	18	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	16	16	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	12	12	26.53	EPA TO-15 Certifications:	08/19/2016 13:25	08/19/2016 16:30	LDS
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	16	16	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
123-91-1	1,4-Dioxane	ND		ug/m³	19	19	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
78-93-3	2-Butanone	ND		ug/m³	7.8	7.8	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS

Sample Information

Client Sample ID: SS-1 **York Sample ID:** 16H0812-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
591-78-6	* 2-Hexanone	ND		ug/m³	22	22	26.53	EPA TO-15 Certifications:	08/19/2016 13:25	08/19/2016 16:30	LDS
107-05-1	3-Chloropropene	ND		ug/m³	42	42	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	11	11	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
67-64-1	**Acetone**	**14**		ug/m³	13	13	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
107-13-1	Acrylonitrile	ND		ug/m³	5.8	5.8	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
71-43-2	Benzene	ND		ug/m³	8.5	8.5	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
100-44-7	Benzyl chloride	ND		ug/m³	14	14	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
75-27-4	Bromodichloromethane	ND		ug/m³	18	18	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
75-25-2	Bromoform	ND		ug/m³	27	27	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
74-83-9	Bromomethane	ND		ug/m³	10	10	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
75-15-0	Carbon disulfide	ND		ug/m³	8.3	8.3	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
56-23-5	Carbon tetrachloride	ND		ug/m³	4.2	4.2	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
108-90-7	Chlorobenzene	ND		ug/m³	12	12	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
75-00-3	Chloroethane	ND		ug/m³	7.0	7.0	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
67-66-3	Chloroform	ND		ug/m³	13	13	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
74-87-3	Chloromethane	ND		ug/m³	5.5	5.5	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	11	11	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	12	12	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
110-82-7	Cyclohexane	ND		ug/m³	9.1	9.1	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
124-48-1	Dibromochloromethane	ND		ug/m³	23	23	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
75-71-8	Dichlorodifluoromethane	ND		ug/m³	13	13	26.53	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 16:30	LDS
141-78-6	* Ethyl acetate	ND		ug/m³	19	19	26.53	EPA TO-15 Certifications:	08/19/2016 13:25	08/19/2016 16:30	LDS

Sample Information

Client Sample ID: SS-1 **York Sample ID:** 16H0812-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
100-41-4	Ethyl Benzene	ND		ug/m³	12	12	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
87-68-3	Hexachlorobutadiene	ND		ug/m³	28	28	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
67-63-0	Isopropanol	ND		ug/m³	13	13	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
80-62-6	Methyl Methacrylate	ND		ug/m³	11	11	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	9.6	9.6	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-09-2	Methylene chloride	ND		ug/m³	18	18	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
142-82-5	n-Heptane	ND		ug/m³	11	11	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
110-54-3	n-Hexane	ND		ug/m³	9.4	9.4	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
95-47-6	o-Xylene	ND		ug/m³	12	12	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
179601-23-1	p- & m- Xylenes	ND		ug/m³	23	23	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
622-96-8	* p-Ethyltoluene	ND		ug/m³	13	13	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications:			
115-07-1	* Propylene	ND		ug/m³	4.6	4.6	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications:			
100-42-5	Styrene	ND		ug/m³	11	11	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
127-18-4	**Tetrachloroethylene**	**250**		ug/m³	4.5	4.5	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
109-99-9	* Tetrahydrofuran	ND		ug/m³	16	16	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications:			
108-88-3	Toluene	ND		ug/m³	10	10	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	11	11	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	12	12	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
79-01-6	Trichloroethylene	ND		ug/m³	3.6	3.6	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	15	15	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
108-05-4	Vinyl acetate	ND		ug/m³	9.3	9.3	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			
593-60-2	Vinyl bromide	ND		ug/m³	12	12	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: SS-1 **York Sample ID:** 16H0812-01

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m³	6.8	6.8	26.53	EPA TO-15	08/19/2016 13:25	08/19/2016 16:30	LDS
								Certifications: NELAC-NY10854,NJDEP			

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*97.0 %*	*72-118*

Sample Information

Client Sample ID: SS-2 **York Sample ID:** 16H0812-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
630-20-6	* 1,1,1,2-Tetrachloroethane	ND		ug/m³	20	20	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications:			
71-55-6	1,1,1-Trichloroethane	ND		ug/m³	16	16	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m³	20	20	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m³	22	22	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
79-00-5	1,1,2-Trichloroethane	ND		ug/m³	16	16	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-34-3	1,1-Dichloroethane	ND		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-35-4	1,1-Dichloroethylene	ND		ug/m³	11	11	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m³	21	21	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
95-63-6	**1,2,4-Trimethylbenzene**	**15**		ug/m³	14	14	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
106-93-4	1,2-Dibromoethane	ND		ug/m³	22	22	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
95-50-1	1,2-Dichlorobenzene	ND		ug/m³	17	17	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
107-06-2	1,2-Dichloroethane	ND		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
78-87-5	1,2-Dichloropropane	ND		ug/m³	13	13	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: SS-2 **York Sample ID:** 16H0812-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m³	20	20	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m³	14	14	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
106-99-0	1,3-Butadiene	ND		ug/m³	19	19	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
541-73-1	1,3-Dichlorobenzene	ND		ug/m³	17	17	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
142-28-9	* 1,3-Dichloropropane	ND		ug/m³	13	13	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications:			
106-46-7	1,4-Dichlorobenzene	ND		ug/m³	17	17	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
123-91-1	1,4-Dioxane	ND		ug/m³	21	21	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
78-93-3	**2-Butanone**	**10**		ug/m³	8.4	8.4	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
591-78-6	* 2-Hexanone	ND		ug/m³	23	23	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications:			
107-05-1	3-Chloropropene	ND		ug/m³	45	45	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
108-10-1	4-Methyl-2-pentanone	ND		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
67-64-1	**Acetone**	**43**		ug/m³	14	14	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
107-13-1	Acrylonitrile	ND		ug/m³	6.2	6.2	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
71-43-2	**Benzene**	**9.1**		ug/m³	9.1	9.1	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
100-44-7	Benzyl chloride	ND		ug/m³	15	15	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-27-4	Bromodichloromethane	ND		ug/m³	19	19	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-25-2	Bromoform	ND		ug/m³	29	29	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
74-83-9	Bromomethane	ND		ug/m³	11	11	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-15-0	**Carbon disulfide**	**8.9**		ug/m³	8.9	8.9	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
56-23-5	Carbon tetrachloride	ND		ug/m³	4.5	4.5	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
108-90-7	Chlorobenzene	ND		ug/m³	13	13	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-00-3	Chloroethane	ND		ug/m³	7.5	7.5	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: SS-2 **York Sample ID:** 16H0812-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-66-3	**Chloroform**	**90**		ug/m³	14	14	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
74-87-3	Chloromethane	ND		ug/m³	5.9	5.9	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m³	11	11	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m³	13	13	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
110-82-7	Cyclohexane	ND		ug/m³	9.8	9.8	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
124-48-1	Dibromochloromethane	ND		ug/m³	24	24	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-71-8	Dichlorodifluoromethane	ND		ug/m³	14	14	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
141-78-6	* Ethyl acetate	ND		ug/m³	21	21	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications:			
100-41-4	**Ethyl Benzene**	**19**		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
87-68-3	Hexachlorobutadiene	ND		ug/m³	30	30	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
67-63-0	Isopropanol	ND		ug/m³	14	14	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
80-62-6	Methyl Methacrylate	ND		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m³	10	10	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
75-09-2	Methylene chloride	ND		ug/m³	20	20	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
142-82-5	n-Heptane	ND		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
110-54-3	n-Hexane	ND		ug/m³	10	10	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
95-47-6	o-Xylene	ND		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
179601-23-1	p- & m- Xylenes	ND		ug/m³	25	25	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
622-96-8	* **p-Ethyltoluene**	**24**		ug/m³	14	14	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications:			
115-07-1	* **Propylene**	**30**		ug/m³	4.9	4.9	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications:			
100-42-5	Styrene	ND		ug/m³	12	12	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			
127-18-4	Tetrachloroethylene	ND		ug/m³	4.8	4.8	28.47	EPA TO-15	08/19/2016 13:25	08/19/2016 17:18	LDS
								Certifications: NELAC-NY10854,NJDEP			

Sample Information

Client Sample ID: SS-2 **York Sample ID:** 16H0812-02

York Project (SDG) No.	Client Project ID	Matrix	Collection Date/Time	Date Received
16H0812	9015-PCNY	Soil Vapor	August 17, 2016 3:00 pm	08/18/2016

Volatile Organics, EPA TO15 Full List

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	LOD/MDL	Reported to LOQ	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
109-99-9	* Tetrahydrofuran	ND		ug/m³	17	17	28.47	EPA TO-15 Certifications:	08/19/2016 13:25	08/19/2016 17:18	LDS
108-88-3	**Toluene**	**23**		ug/m³	11	11	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m³	11	11	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m³	13	13	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS
79-01-6	Trichloroethylene	ND		ug/m³	3.8	3.8	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS
75-69-4	Trichlorofluoromethane (Freon 11)	ND		ug/m³	16	16	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS
108-05-4	Vinyl acetate	ND		ug/m³	10	10	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS
593-60-2	Vinyl bromide	ND		ug/m³	12	12	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS
75-01-4	Vinyl Chloride	ND		ug/m³	7.3	7.3	28.47	EPA TO-15 Certifications: NELAC-NY10854,NJDEP	08/19/2016 13:25	08/19/2016 17:18	LDS

	Surrogate Recoveries	Result	Acceptance Range
460-00-4	*Surrogate: p-Bromofluorobenzene*	*98.4 %*	*72-118*

Notes and Definitions

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.

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

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

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

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

Certification for pH is no longer offered by NYDOH ELAP.

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

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

Field Chain-of-Custody Record - AIR

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

York Project No. 16H0812

YOUR Information
Company: Advanced Cleanup Tech
Address: 110 Main Street Suite103, Port Washington
Phone No. (516)441-5800
Contact Person: Mark Gelband
E-Mail Address: markg@act-earth

Report To:
Company: same
Address:
Phone No.
Attention: Paul Stewart
E-Mail Address: Paul s@act-earth

Invoice To:
Company:
Address: same
Phone No.
Attention: Karen Friedman
E-Mail Address: Karenf@act-earth

YOUR Project ID
9015-PC NY

Purchase Order No.

Samples from: CT ___ NY ✓ NJ ___

Turn-Around Time
- RUSH - Same Day ☐
- RUSH - Next Day ☐
- RUSH - Two Day ☐
- RUSH - Three Day ☐
- RUSH - Four Day ☐
- Standard(5-7 Days) ☒

Report Type/Deliverables
- Summary Report ____
- Summary w/ QA Summary ____
- CT RCP Package ____
- NY ASP A Package ____
- NY ASP B/CLP Pkg ____
- NJDEP Reduced ____

Electronic Deliverables:
- EDD (Specify Type) ____
- Standard Excel ____
- Regulatory Comparison Excel ____

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

Jessica Lam
Samples Collected/Authorized By (Signature)

Jessica Lam
Name (printed)

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

Additional Notes:

Please enter the following Field Data

Detection Limits Required
- ≤ 1 ug/m³ ____
- NYSDEC VI Limits ____ (VI =vapor instrusion)
- NJDEP low level ____
- Routine Survey ____
- Other ____

Special Instructions

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Canister ID	Flow Cont.ID	ANALYSES REQUESTED	Sampling Media
~~SS-1a~~	08/17/2016	AS	-26.5	0	1694	Y27	TO-15	6 Liter canister ___ Tedlar Bag ___
~~SS-1b~~ SS-1	08/17/2016	↓	-30+	-10	Y69	~~3356~~ Y40	↓ TO-15	6 Liter canister ___ Tedlar Bag ___
SS-2	08/17/2016	↓	-30+	-11	Y52	3350	↓	6 Liter canister ___ Tedlar Bag ___
								6 Liter canister ___ Tedlar Bag ___
								6 Liter canister ___ Tedlar Bag ___
								6 Liter canister ___ Tedlar Bag ___
								6 Liter canister ___ Tedlar Bag ___
								6 Liter canister ___ Tedlar Bag ___
								6 Liter canister ___ Tedlar Bag ___
								6 Liter canister ___ Tedlar Bag ___

Comments: Please do not analyze SS-1a (defective gauge)

Samples Relinquished By — Date/Time: 8/18/16 11:05

Samples Relinquished By — Date/Time:

Samples Received By — Date/Time: 8/18/16 1105

Samples Received in LAB by — Date/Time: 8/18/16 1909