

**SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS)  
INITIATION REPORT**

*n*

520 Albany Avenue  
Kingston, Ulster County, New York

February 7, 2014

**DT CONSULTING SERVICES, INC.**  
1291 Old Post Road  
Ulster Park, New York 12487  
(845) 658-3484 phone/(845) 658-3320 fax  
dtconsulting@hvc.rr.com

February 7, 2014

Krista Scibelli  
111 Whalesback Road  
Red Hook, New York 12571

**RE: SUB-SLAB DEPRESSURIZATION SYSTEM INITIATION REPORT**  
520 Albany Avenue  
Kingston, Ulster County, New York

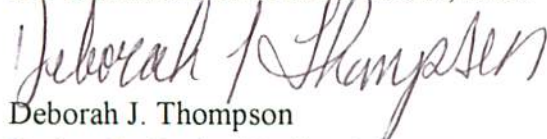
Dear Mrs. Scibelli:

DT Consulting Services, Inc. (DTCS) is pleased to present the attached Sub-slab Depressurization System (SSDS) Initiation Report as generated for the above referenced site. As required, a copy of this report will be forwarded to the New York State Department of Environmental Conservation (NYSDEC) for their review and comment. The necessity for further action is at the discretion of the NYSDEC.

If you have any questions regarding the enclosed, please feel free to contact me at (845) 658-3484. DTCS thanks you for the opportunity to work with you on this project.

Sincerely,

**DT CONSULTING SERVICES, INC.**



Deborah J. Thompson

Senior Geologist / Project Manager

Cc: E. Moore, P.E./NYSDEC Region III

**DT CONSULTING SERVICES, INC.**

**SUB-SLAB DEPRESSURIZATION SYSTEM (SSDS)**  
**INITIATION REPORT**

**Pertaining to:**

520 Albany Avenue  
Kingston, Ulster County, New York

**Prepared for:**

Krista Scibelli  
111 Whalesback Road  
Red Hook, New York 12571

**Prepared by:**

Ms. Deborah J. Thompson  
Senior Geologist/Project Manager  
**DT CONSULTING SERVICES, INC.**  
1291 Old Post Road  
Ulster Park, New York 12487

**Date:** February 7, 2014

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## 1.0 INTRODUCTION/SITE INFORMATION

DT Consulting Services, Inc. (DTCS) was initially contracted by Krista Scibelli, property owner of 520 Albany Avenue, Kingston, Ulster County, New York (heretofore referenced as the site or subject property) to perform investigative-remedial actions on-site to quantify subsurface conditions and remediate previously detected soil contamination, respectively. Historically, the subject property was utilized as a dry cleaning establishment from the late 1950s – 1980s. The site was renovated in 2004, having been completely updated as a used car service and sales outlet. According to facility representatives, no known underground storage tanks have ever been employed on site. A site location map and a site (base) plan (Figures 1 and 2, respectively) are included for your reference.

The approximate 0.66-acre property is presently improved with a single-story masonry construction office/retail building with approximately 2,579 square feet of space with paved parking areas. Up until its recent closure (November 1, 2013), the property was utilized by Eastchester Auto for retail automobile sales and service. The site is bounded by Albany Avenue and Quick Check Gasoline/Convenience Store the north-northwest, single family residences directly to the south, Wrentham Street and L. T. Begnal Motor Company to the east, while Tri-Star Auto Sales, Inc. - Auto Tech is present to the west. Town roadways adjoining the site include Albany Avenue to the north-northwest and Wrentham Street to the east. Site topography is generally level and at grade with Albany Avenue. Potable water and wastewater disposal are reportedly provided by the local municipality.

## 2.0 SITE BACKGROUND/INVESTIGATIVE WORK PERFORMED

On February 4, 2013, DTCS was on-site to perform a subsurface investigation. While performing the field survey, soil contamination was encountered as

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displayed by stained soils, a petroleum film and positive field readings with a Photoionization Detector or PID. This material was documented along the southwest corner of the site structure, directly down gradient of several 55-gallon drums utilized by the historical tenant, Eastchester Auto, to store waste oil. On account of the contamination encountered, DTCS notified the New York State Department of Environmental Conservation (NYSDEC) and Spill Number 12-15279 was generated for the site. Upon review of field data with the NYSDEC, the Department requested remediation of the petroleum contaminated soils documented during the February 2013 survey. Subsequent remediation (April 22, 2013) of the source materials has been performed to remedy the impacts to soil and groundwater quality. The removal and ultimate off-site disposal of 34.82 tons of contaminated soils and 1,241 gallons of captured groundwater appears to have remediated this site impact. The Department concurred, and officially closed the spill number on September 4, 2013.

While conducting further investigation on the subject parcel in June 2013, it became apparent that historical dry cleaning operations have had an impact to the subsurface environment. To further delineate and quantify the compounds of concern, additional borings were advanced for the purpose of defining the chlorinated solvent plume within subsurface materials including soil, soil gas and groundwater beneath the site. Based upon the results of this investigation, DTCS proposed and received approval from the Department for the installation of a SSDS within the open garage space of the above referenced site (DTCS, SSDS Pilot Study and Design Report, December 17, 2013).

### 3.0 SSDS INSTALLATION

Designed to create a negative pressure field directly beneath the site structure, two extraction points were installed below the concrete floor slab on January 7 & 8, 2014 (see Figure 2 for locations). These extraction points were created by cutting through the concrete slab and excavating a six inch diameter hole, two feet deep.

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A two-inch diameter ten slot screen, eighteen inches long, connected to an appropriate length of solid riser pipe was then installed in the excavation. To provide the suction necessary to maintain the required vacuum under the floor slab, the two extraction points were interconnected to a single, sub-slab two-inch pipe traversing down the center of the garage. Vapor discharge piping was then attached to the suction side of a Rotron DR454M Regenerative Blower which was mounted to the outside of the building on the back wall. The exhaust stack for the sub-slab system was attached to the wall and extended to a height above the roof line of the building. Sampling ports and a fresh air bleed valve were also installed to facilitate the collection of air quality samples, routine monitoring of the system and to allow the introduction of diluted air into the system (as necessary). Note that all sub-slab excavations (extraction piping and discharge trench) were backfilled with ¼” washed stone and at completion, disturbed cement flooring was restored to create a tight seal. To finalize the SSDS installation, an alarm light was installed within the garage area of the site structure for a quick visual determination as to whether the system is operating.

**4.0 INITIAL SSDS START-UP**

On January 23, 2014, DTCS initiated the Sub-slab Depressurization Remedial System. Upon start-up DTCS recorded vacuum measurements, photoionization detector (PID) readings, and performed analysis of the vapor discharge. Collected system information is as follows (note that calculations of the cumulative mass removed will be computed upon completion of the next monitoring event):

<b>Date</b>	<b>Air Pressure (in H2O)</b>	<b>Vacuum - Blower Discharge (cfm)</b>	<b>Vapor Concentrations (ppm)</b>
January 23, 2014	16	110	115
February 3, 2014			1.2

## 5.0 AIR QUALITY SAMPLING

Upon initiation of the SSDS on January 23, 2014, collection and analysis of the effluent vapor was performed by DTCS. In addition to effluent sampling, indoor air within the building (office and garage areas) was sampled 24 hours after the initial startup of the system or on January 24, 2014. All vapor sampling was collected for analysis employing a six liter SUMMA canister equipped with a laboratory-calibrated flow control device to facilitate the collection of the samples for a 2-hour sample duration time. During both purging and sampling, the flow rate was restricted to less than (<) 0.2 liters per minute and connected directly to the dedicated tubing. Samples collected in Summa canisters were certified clean by the laboratory and analyzed by using USEPA Method TO-15. A sample log sheet was maintained summarizing sample identification, date and time of sample collection, identity of samplers, sampling methods and devices, soil vapor purge volumes, volume of the soil vapor extracted, vacuum of canisters before and after the samples are collected, and chain of custody protocols. Samples submitted for laboratory analyses were denoted as follows:

**Sample No. 001** = SSDS Effluent

**Sample No. 002** = Garage

**Sample No. 003** = Office

The complete laboratory package may be found in Attachment A for your review.

## 5.1 Findings

The results of soil vapor sampling indicate that twenty-five VOCs are present within the three soil gas samples collected on-site. A summary table of data for all chemical analytical work performed on soil vapor is included in Table 1.



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The major vapor concentrations (total concentrations of VOCs) range from .5 microgram per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 20,000  $\mu\text{g}/\text{m}^3$  within the vapor sample collected at the SSDS discharge. Soil vapor samples collected at this monitoring point showed significant detections of Tetrachloroethylene at a concentration of 20,000  $\mu\text{g}/\text{m}^3$  and Trichloroethylene at concentration of 200  $\mu\text{g}/\text{m}^3$ . All other laboratory reportable compounds were below USEPA OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils and/or NYS DOH Final Guidance on Soil Vapor Intrusion (October 2006).

After SSD system startup, indoor air quality sampling was performed to confirm volatile organic compound (VOC) concentrations in indoor air. All laboratory reportable compounds were below USEPA OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils and/or NYS DOH Final Guidance on Soil Vapor Intrusion (October 2006). The VOC of concern, namely Tetrachloroethylene was reported at concentration of 90  $\mu\text{g}/\text{m}^3$  within the garage area, and 47  $\mu\text{g}/\text{m}^3$  within the office/administration area which is below the NYS DOH standard of 100  $\mu\text{g}/\text{m}^3$  for this compound.

Additional sampling to be conducted thirty days after system startup will likely show a significant reduction in VOC concentrations within the three vapor monitoring points.

**6.0 OPERATION, MAINTENANCE AND MONITORING**

An evaluation of recent vapor data suggests that the SSDS effluent could potentially exceed the maximum permitted level of VOCs. As such; the fresh air bleed was utilized to dilute the airstream until the initial purge of the system is complete and discharge levels are within acceptable regulatory limitations.

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As previously discussed, the accepted monitoring locations, frequency and analytical parameters are as follows (as approved by the NYSDEC):

- Subsequent monitoring would be conducted to determine when dilution and/or treatment of extracted vapor is no longer necessary, and to support adjustments to the SSDS extraction rate based upon contaminant concentrations. Monitoring would include sampling for VOCs using SUMMA type air canisters, as well as recording of PID readings and vacuum measurements of the system. Samples collected in Summa canisters will be certified clean by the laboratory and analyzed by using USEPA Method TO-15. This monitoring will be conducted monthly during months one - three; then revert to quarterly.
- Indoor air VOC monitoring will be conducted within the garage and office space monthly after system start-up to establish indoor air quality with the mitigation system in operation, and then revert to quarterly. Monitoring parameters of the indoor air will be the same as for the system stated above.

### 7.0 LIMITATIONS

DTCS has prepared this assessment using reasonable efforts in each phase of its work to determine the extent of contamination within the locations of potential environmental concern. This report is not definitive, and should not be assumed to be a complete or specific definition of all conditions above or below grade. The conclusions/recommendations set forth herein are applicable only to the facts and conditions described at the time of this report.

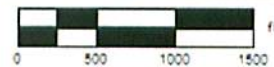
FIGURES



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Data Zoom 14-2

DT Consulting Services, Inc.  
 1291 Old Post Road  
 Ulster Park, New York 12487  
 (845) 658-3484

Client: Krista Scibelli

Location: 520 Albany Avenue, Kingston, New York

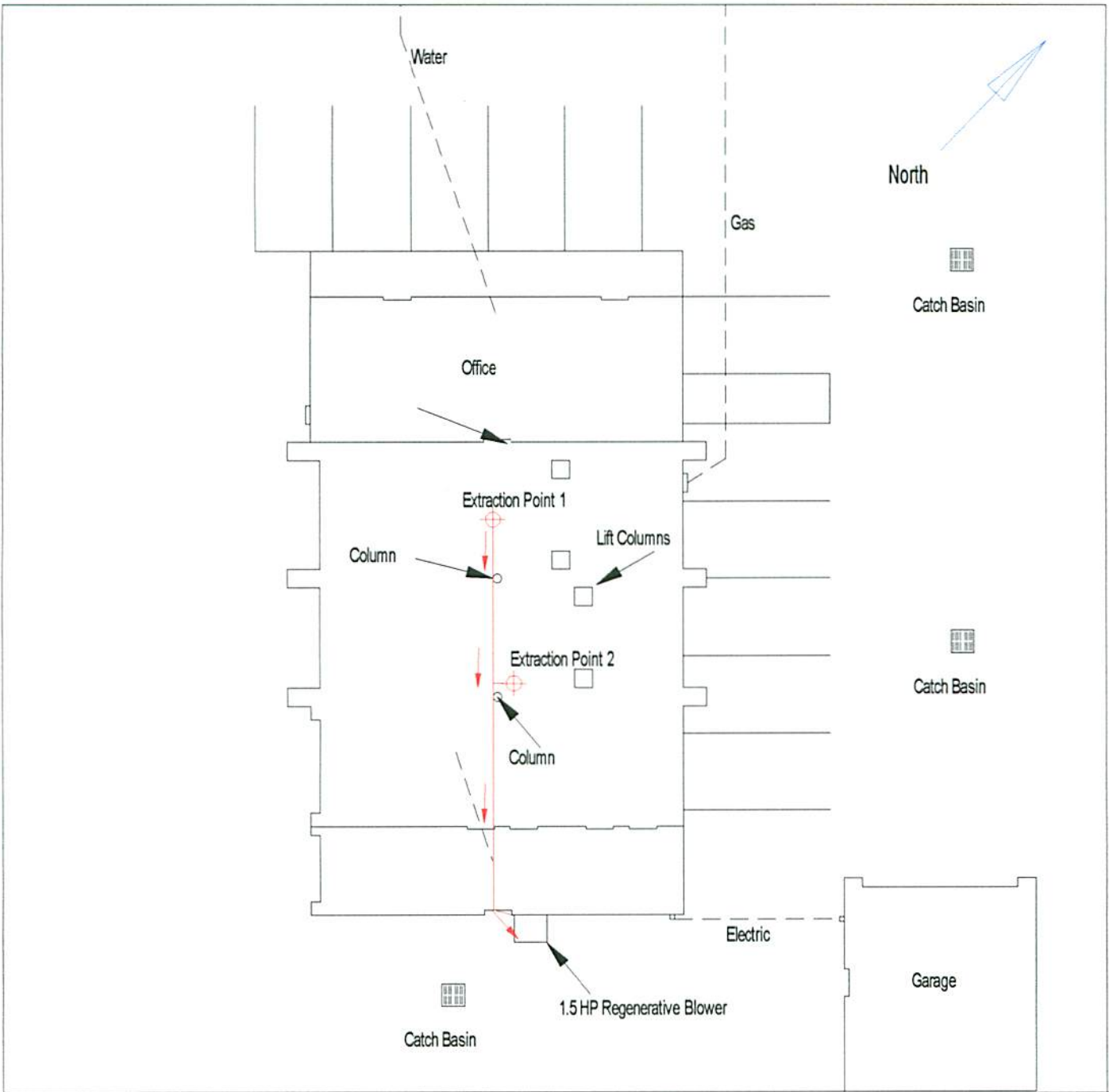
Title: Site Location Map

Spill No: N/A

Scale: Graphic

Drawn By: O.T.

Fig.#: 1



**Key**  
 --- Underground Utilities  
 — 2" Schedule 40 SSDS Piping

DT Consulting Services, Inc.  
 1291 Old Post Road  
 Ulster Park, New York 12487  
 (845) 658-3484

Client: Krista Scibelli	
Location: 520 Albany Avenue, Kingston, New York	
Title: Site (base) Map - SSDS Installation	Spill No: N/A
Scale: Graphic	Drawn By: O.T. Fig.#: 2

**DT CONSULTING SERVICES, INC.**

**TABLES**

TABLE 1:

## SUMMARY OF TO-15 VOLATILES IN AIR SAMPLES

Page 1 of 1

Site: Krista Scibelli  
Address: 520 Albany Avenue, Kingston, New York  
NYSDEC Spill Number: N/A

Client: Krista Scibelli  
Address: 111 Whalesback Road  
Red Hook, New York 12571

Contractor: DT Consulting Services, Inc.  
Laboratory: York Analytical Laboratories, Inc.  
Stratford, CT 06615

Sample ID: Location: Depth (ft.): Date: Lab Sample ID: Units:	NYSDOH Air Guideline Values  µg/m <sup>3</sup>	USEPA TARGET SHALLOW GAS CONCENTRATIONS(1)  µg/m <sup>3</sup>	SSDS Effluent Indoor Ambient Air 1/23/2014 14A0729 µg/m <sup>3</sup>	Garage Indoor Ambient Air 1/24/2014 14A0729 µg/m <sup>3</sup>	Office Indoor Ambient Air 1/24/2014 14A0729 µg/m <sup>3</sup>
<b>Analysis:</b> EPA Method TO-15 Volatiles in Air					
1,1,1-Trichloroethane	NS	22000	ND	ND	ND
1,1,2,2-Tetrachloroethane	NS	42	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	NS	NS	ND	ND	ND
1,1,2-Trichloroethane	NS	150	ND	ND	ND
1,1-Dichloroethane	NS	5000	ND	ND	ND
1,1-Dichloroethylene	NS	NS	2.9	ND	ND
1,2,4-Trichlorobenzene	NS	2000	ND	ND	ND
1,2,4-Trimethylbenzene	NS	60	ND	0.9	ND
1,2-Dibromoethane	NS	2	ND	ND	ND
1,2-Dichlorobenzene	NS	2000	ND	ND	ND
1,2-Dichloroethane	NS	94	ND	ND	ND
1,2-Dichloropropane	NS	40	ND	ND	ND
1,2-Dichlorotetrafluoroethane	NS	NS	ND	ND	ND
1,3,5-Trimethylbenzene	NS	60	ND	ND	ND
1,3-Butadiene	NS	8.7	ND	0.62	ND
1,3-Dichlorobenzene	NS	1100	ND	ND	ND
1,4-Dichlorobenzene	NS	8000	ND	ND	ND
1,4-Dioxane	NS	NS	ND	ND	ND
2-Butanone	NS	10000	36	1.2	1.7
2-Hexanone	NS	NS	ND	ND	ND
4-Methyl-2-pentanone	NS	800	ND	ND	ND
Acetone	NS	3500	150	5.9	7.7
Benzene	NS	310	1.4	1.6	0.78
Benzyl chloride	NS	50	ND	ND	ND
Bromodichloromethane	NS	140	ND	ND	ND
Bromoform	NS	2200	ND	ND	ND
Bromomethane	NS	NS	ND	ND	ND
Carbon Disulfide	NS	7000	ND	ND	ND
Carbon Tetrachloride	NS	160	ND	ND	ND
Chlorobenzene	NS	600	ND	ND	ND
Chloroethane	NS	10000	ND	ND	ND
Chloroform	NS	110	4.9	ND	ND
Chloromethane	NS	NS	0.99	1.2	1.2
cis-1,2-Dichloroethylene	NS	350	77	ND	ND
cis-1,3-Dichloropropylene	NS	200	ND	ND	ND
Cyclohexane	NS	NS	2.3	ND	ND
Dibromochloromethane	NS	100	ND	ND	ND
Dichlorodifluoromethane	NS	2000	2.6	2.5	2.6
Ethyl acetate	NS	32000	ND	ND	ND
Ethyl Benzene	NS	2200	0.53	0.79	ND
Hexachlorobutadiene	NS	110	ND	ND	ND
Isopropanol	NS	NS	ND	ND	ND
MTBE	NS	30000	ND	ND	ND
Methylene chloride	60	5200	2.6	1.8	2.1
n-Heptane	NS	NS	0.75	0.83	ND
n-Hexane	NS	2000	0.5	0.68	0.5
o-Xylene	NS	70000	0.57	0.93	ND
p- & m- Xylenes	NS	70000	1.3	2.4	ND
p-Ethyltoluene	NS	NS	ND	0.85	ND
Propylene	NS	NS	1.3	2.1	0.96
Styrene	NS	NS	0.74	ND	ND
Tetrachloroethylene	100	810	<b>20000</b>	90	47
Tetrahydrofuran	NS	NS	180	1.9	1.9
Toluene	NS	4000	3.2	5.3	1.3
trans-1,2-Dichloroethylene	NS	700	0.6	ND	ND
trans-1,3-Dichloropropylene	NS	200	ND	ND	ND
Trichloroethylene	5	220	<b>200</b>	ND	ND
Trichlorofluoromethane	NS	7000	1.3	1.4	1.4
Vinyl acetate	NS	200	ND	ND	ND
Vinyl Chloride	NS	280	ND	ND	ND

**Notes:**

- Those analytes which exceeded NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006 are presented in bold type as such: **100**.
- USEPA OSWER Draft Guidance for Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance) November 2002: Table 2A Target Shallow Soil Gas Concentration - Corresponding to Target Indoor Air Concentration Where the Soil Gas to Indoor Air Attenuation Factor = 0.1.
- ND = Non-detect.
- NS = No Standard.

**DT CONSULTING SERVICES, INC.**

**ATTACHMENTS**



**DT CONSULTING SERVICES, INC.**

**ATTACHMENT A**



# Technical Report

prepared for:

**DT Consulting Services**  
1291 Old Post Road  
Ulster Park NY, 12487  
**Attention: Deborah Thompson**

Report Date: 02/03/2014  
**Client Project ID: 520 Albany Avenue**  
York Project (SDG) No.: 14A0729

CT Cert. No. PH-0723

New Jersey Cert. No. CT-005



New York Cert. No. 10854

PA Cert. No. 68-04440

120 RESEARCH DRIVE

STRATFORD, CT 06615

(203) 325-1371

FAX (203) 357-0158

Report Date: 02/03/2014  
Client Project ID: 520 Albany Avenue  
York Project (SDG) No.: 14A0729

**DT Consulting Services**  
1291 Old Post Road  
Ulster Park NY, 12487  
Attention: Deborah Thompson

## 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 January 27, 2014 and listed below. The project was identified as your project: **520 Albany Avenue**.

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.

<u>York Sample ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Date Collected</u>	<u>Date Received</u>
14A0729-01	SSDS Effluent	Indoor Ambient Air	01/23/2014	01/27/2014
14A0729-02	Garage	Indoor Ambient Air	01/24/2014	01/27/2014
14A0729-03	Office	Indoor Ambient Air	01/24/2014	01/27/2014

## General Notes for York Project (SDG) No.: 14A0729

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:



Benjamin Gulizia  
Laboratory Director

Date: 02/03/2014





### Sample Information

**Client Sample ID:** SSDS Effluent

**York Sample ID:** 14A0729-01

**York Project (SDG) No.**

14A0729

**Client Project ID**

520 Albany Avenue

**Matrix**

Indoor Ambient Air

**Collection Date/Time**

January 23, 2014 3:00 pm

**Date Received**

01/27/2014

**Volatile Organics, EPA TO15 Full List**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.26	0.26	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.36	0.36	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
79-01-6	Trichloroethylene	200		ug/m <sup>3</sup>	92	92	336	EPA TO-15	01/29/2014 09:24	01/30/2014 08:48	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.46	0.46	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
156-60-5	trans-1,2-Dichloroethylene	0.60		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
108-88-3	Toluene	3.2		ug/m <sup>3</sup>	0.38	0.38	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
109-99-9	Tetrahydrofuran	180		ug/m <sup>3</sup>	100	100	336	EPA TO-15	01/29/2014 09:24	01/30/2014 08:48	RB
127-18-4	Tetrachloroethylene	20000		ug/m <sup>3</sup>	230	230	336	EPA TO-15	01/29/2014 09:24	01/30/2014 08:48	RB
100-42-5	Styrene	0.74		ug/m <sup>3</sup>	0.43	0.43	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
115-07-1	Propylene	1.3		ug/m <sup>3</sup>	0.18	0.18	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
622-96-8	p-Ethyltoluene	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
179601-23-1	p- & m- Xylenes	1.3		ug/m <sup>3</sup>	0.88	0.88	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
95-47-6	o-Xylene	0.57		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
110-54-3	n-Hexane	0.50		ug/m <sup>3</sup>	0.36	0.36	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
142-82-5	n-Heptane	0.75		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-09-2	Methylene chloride	2.6	B	ug/m <sup>3</sup>	0.35	0.35	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
67-63-0	Isopropanol	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	1.1	1.1	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
100-41-4	Ethyl Benzene	0.53		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
141-78-6	Ethyl acetate	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
110-82-7	Cyclohexane	2.3		ug/m <sup>3</sup>	0.35	0.35	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.46	0.46	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
156-59-2	cis-1,2-Dichloroethylene	77		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
74-87-3	Chloromethane	0.99		ug/m <sup>3</sup>	0.21	0.21	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
67-66-3	Chloroform	4.9		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.27	0.27	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.39	0.39	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB



**Sample Information**

**Client Sample ID:** SSSS Effluent  
**Client Project ID:** 14A0729  
**Client Project (SDG) No.:** 520 Albany Avenue  
**Matix:** Indoor Ambient Air  
**Collection Date/Time:** January 23, 2014 3:00 pm  
**Date Received:** 01/27/2014  
**York Sample ID:** 14A0729-01

**Volatile Organics, EPA TO15 Full List**

**Log-In Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MUL	RI	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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75-25-2	Bromoform	ND		ug/m <sup>3</sup>	1.1	1.1	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-27-4	Bromodichloroethane	ND		ug/m <sup>3</sup>	0.63	0.63	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.53	0.53	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
71-43-2	Benzene	1.4		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
67-64-1	Acetone	150		ug/m <sup>3</sup>	81	81	336	EPA TO-15	01/29/2014 09:24	01/30/2014 08:48	RB
591-78-6	2-Hexanone	ND		ug/m <sup>3</sup>	0.83	0.83	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
78-93-3	2-Butanone	36		ug/m <sup>3</sup>	0.30	0.30	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.71	0.71	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.47	0.47	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.41	0.41	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.75	0.75	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-35-4	1,1-Dichloroethylene	2.9		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.41	0.41	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-69-4	Trichlorofluoroethane (Freon 11)	1.3		ug/m <sup>3</sup>	0.57	0.57	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.55	0.55	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.78	0.78	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.70	0.70	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.55	0.55	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
75-71-8	Dichlorodifluoroethane	2.6		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
106-93-4	1,2-Dibromochloroethane	ND		ug/m <sup>3</sup>	0.78	0.78	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
124-48-1	Dibromochloroethane	ND		ug/m <sup>3</sup>	0.82	0.82	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.47	0.47	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB
460-00-4	Surrogate: p-Bromofluorobenzene	116 %		ug/m <sup>3</sup>	0.47	0.47	1	EPA TO-15	01/29/2014 09:24	01/29/2014 17:11	RB



**Sample Information**

Client Sample ID: SSDS Effluent York Project (SDG) No. 14A0729  
 Client Project ID 520 Albany Avenue  
 Matrix Indoor Ambient Air Collection Date/Time January 23, 2014 3:00 pm  
 Date Received 01/27/2014  
 York Sample ID: 14A0729-01

**Sample Information**

Client Sample ID: Garage York Project (SDG) No. 14A0729  
 Client Project ID 520 Albany Avenue  
 Matrix Indoor Ambient Air Collection Date/Time January 24, 2014 3:00 pm  
 Date Received 01/27/2014  
 York Sample ID: 14A0729-02

**Volatile Organics, EPA TO15 Full List**

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RI	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
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75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.26	0.26	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.36	0.36	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
79-01-6	Trichloroethylene	ND		ug/m <sup>3</sup>	0.27	0.27	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.46	0.46	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
108-88-3	Toluene	5.3		ug/m <sup>3</sup>	0.38	0.38	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
109-99-9	Tetrahydrofuran	1.9		ug/m <sup>3</sup>	0.30	0.30	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
127-18-4	Tetrachloroethylene	90		ug/m <sup>3</sup>	0.69	0.69	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.43	0.43	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
115-07-1	Propylene	2.1		ug/m <sup>3</sup>	0.18	0.18	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
622-96-8	p-Ethyltoluene	0.85		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
179601-23-1	p- & m- Xylenes	2.4		ug/m <sup>3</sup>	0.88	0.88	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
95-47-6	o-Xylene	0.93		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
110-54-3	n-Hexane	0.68		ug/m <sup>3</sup>	0.36	0.36	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
142-82-5	n-Heptane	0.83		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-09-2	Methylene chloride	1.8	B	ug/m <sup>3</sup>	0.35	0.35	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
163-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
108-10-1	4-Methyl-2-pentanone	ND		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
67-63-0	Isopropanol	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	1.1	1.1	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
100-41-4	Ethyl Benzene	0.79		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
141-78-6	Ethyl acetate	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
110-82-7	Cyclohexane	ND		ug/m <sup>3</sup>	0.35	0.35	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.46	0.46	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
74-87-3	Chloroethane	1.2		ug/m <sup>3</sup>	0.21	0.21	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB

120 RESEARCH DRIVE

STRATFORD, CT 06615

(203) 325-1371

FAX (203) 367-0166



**Sample Information**

Client Sample ID: Garage

York Sample ID: 14A0729-02

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

14A0729

520 Albany Avenue

Indoor Ambient Air

January 24, 2014 3:00 pm

01/27/2014

**Volatile Organics, EPA TO15 Full List**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.27	0.27	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.39	0.39	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	1.1	1.1	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.63	0.63	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.53	0.53	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
71-43-2	Benzene	1.6		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
67-64-1	Acetone	5.9		ug/m <sup>3</sup>	0.24	0.24	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
591-78-6	2-Hexanone	ND		ug/m <sup>3</sup>	0.83	0.83	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
78-93-3	2-Butanone	1.2		ug/m <sup>3</sup>	0.30	0.30	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
106-99-0	1,3-Butadiene	0.62		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.71	0.71	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.47	0.47	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.41	0.41	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
95-63-6	1,2,4-Trimethylbenzene	0.90		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.75	0.75	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.41	0.41	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-69-4	Trichlorofluoromethane (Freon 11)	1.4		ug/m <sup>3</sup>	0.57	0.57	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.55	0.55	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.78	0.78	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.70	0.70	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.55	0.55	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
75-71-8	Dichlorodifluoromethane	2.5		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB



### Sample Information

**Client Sample ID:** Garage **York Sample ID:** 14A0729-02  
**York Project (SDG) No.:** 14A0729 **Client Project ID:** 520 Albany Avenue **Matrix:** Indoor Ambient Air **Collection Date/Time:** January 24, 2014 3:00 pm **Date Received:** 01/27/2014

#### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.78	0.78	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.82	0.82	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.47	0.47	1	EPA TO-15	01/29/2014 09:24	01/30/2014 08:06	RB
<b>Surrogate Recoveries</b>		<b>Result</b>	<b>Acceptance Range</b>								
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	96.5 %	70-130								

### Sample Information

**Client Sample ID:** Office **York Sample ID:** 14A0729-03  
**York Project (SDG) No.:** 14A0729 **Client Project ID:** 520 Albany Avenue **Matrix:** Indoor Ambient Air **Collection Date/Time:** January 24, 2014 3:00 pm **Date Received:** 01/27/2014

#### Volatile Organics, EPA TO15 Full List

#### Log-in Notes:

#### Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
75-01-4	Vinyl Chloride	ND		ug/m <sup>3</sup>	0.26	0.26	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
108-05-4	Vinyl acetate	ND		ug/m <sup>3</sup>	0.36	0.36	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
79-01-6	Trichloroethylene	ND		ug/m <sup>3</sup>	0.27	0.27	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
10061-02-6	trans-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.46	0.46	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
156-60-5	trans-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
108-88-3	Toluene	1.3		ug/m <sup>3</sup>	0.38	0.38	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
109-99-9	Tetrahydrofuran	1.9		ug/m <sup>3</sup>	0.30	0.30	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
127-18-4	Tetrachloroethylene	47		ug/m <sup>3</sup>	0.69	0.69	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
100-42-5	Styrene	ND		ug/m <sup>3</sup>	0.43	0.43	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
115-07-1	Propylene	0.96		ug/m <sup>3</sup>	0.18	0.18	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
622-96-8	<i>p</i> -Ethyltoluene	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
179601-23-1	<i>p</i> - & <i>m</i> - Xylenes	ND		ug/m <sup>3</sup>	0.88	0.88	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
95-47-6	<i>o</i> -Xylene	ND		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
110-54-3	<i>n</i> -Hexane	0.50		ug/m <sup>3</sup>	0.36	0.36	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
142-82-5	<i>n</i> -Heptane	ND		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-09-2	Methylene chloride	2.1	B	ug/m <sup>3</sup>	0.35	0.35	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
1634-04-4	Methyl tert-butyl ether (MTBE)	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB





### Sample Information

Client Sample ID: Office

York Sample ID: 14A0729-03

York Project (SDG) No.

Client Project ID

Matrix

Collection Date/Time

Date Received

14A0729

520 Albany Avenue

Indoor Ambient Air

January 24, 2014 3:00 pm

01/27/2014

**Volatile Organics, EPA TO15 Full List**

Log-in Notes:

Sample Notes:

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
108-10-1	4-Methyl-2-pentanone	ND		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
67-63-0	Isopropanol	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
87-68-3	Hexachlorobutadiene	ND		ug/m <sup>3</sup>	1.1	1.1	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
100-41-4	Ethyl Benzene	ND		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
141-78-6	Ethyl acetate	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
110-82-7	Cyclohexane	ND		ug/m <sup>3</sup>	0.35	0.35	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
10061-01-5	cis-1,3-Dichloropropylene	ND		ug/m <sup>3</sup>	0.46	0.46	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
156-59-2	cis-1,2-Dichloroethylene	ND		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
74-87-3	Chloromethane	1.2		ug/m <sup>3</sup>	0.21	0.21	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
67-66-3	Chloroform	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-00-3	Chloroethane	ND		ug/m <sup>3</sup>	0.27	0.27	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
56-23-5	Carbon tetrachloride	ND		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-15-0	Carbon disulfide	ND		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
74-83-9	Bromomethane	ND		ug/m <sup>3</sup>	0.39	0.39	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-25-2	Bromoform	ND		ug/m <sup>3</sup>	1.1	1.1	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-27-4	Bromodichloromethane	ND		ug/m <sup>3</sup>	0.63	0.63	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
100-44-7	Benzyl chloride	ND		ug/m <sup>3</sup>	0.53	0.53	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
71-43-2	Benzene	0.78		ug/m <sup>3</sup>	0.32	0.32	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
67-64-1	Acetone	7.7		ug/m <sup>3</sup>	0.24	0.24	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
591-78-6	2-Hexanone	ND		ug/m <sup>3</sup>	0.83	0.83	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
78-93-3	2-Butanone	1.7		ug/m <sup>3</sup>	0.30	0.30	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
123-91-1	1,4-Dioxane	ND		ug/m <sup>3</sup>	0.37	0.37	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
106-46-7	1,4-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
541-73-1	1,3-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
106-99-0	1,3-Butadiene	ND		ug/m <sup>3</sup>	0.44	0.44	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
108-67-8	1,3,5-Trimethylbenzene	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
76-14-2	1,2-Dichlorotetrafluoroethane	ND		ug/m <sup>3</sup>	0.71	0.71	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
78-87-5	1,2-Dichloropropane	ND		ug/m <sup>3</sup>	0.47	0.47	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
107-06-2	1,2-Dichloroethane	ND		ug/m <sup>3</sup>	0.41	0.41	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
95-50-1	1,2-Dichlorobenzene	ND		ug/m <sup>3</sup>	0.61	0.61	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
95-63-6	1,2,4-Trimethylbenzene	ND		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB



### Sample Information

Client Sample ID: Office

York Sample ID: 14A0729-03

York Project (SDG) No.

14A0729

Client Project ID

520 Albany Avenue

Matrix

Indoor Ambient Air

Collection Date/Time

January 24, 2014 3:00 pm

Date Received

01/27/2014

**Volatile Organics, EPA TO15 Full List**

**Log-in Notes:**

**Sample Notes:**

Sample Prepared by Method: EPA TO15 PREP

CAS No.	Parameter	Result	Flag	Units	MDL	RL	Dilution	Reference Method	Date/Time Prepared	Date/Time Analyzed	Analyst
120-82-1	1,2,4-Trichlorobenzene	ND		ug/m <sup>3</sup>	0.75	0.75	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-35-4	1,1-Dichloroethylene	ND		ug/m <sup>3</sup>	0.40	0.40	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-34-3	1,1-Dichloroethane	ND		ug/m <sup>3</sup>	0.41	0.41	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-69-4	Trichlorofluoromethane (Freon 11)	<b>1.4</b>		ug/m <sup>3</sup>	0.57	0.57	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
79-00-5	1,1,2-Trichloroethane	ND		ug/m <sup>3</sup>	0.55	0.55	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	ND		ug/m <sup>3</sup>	0.78	0.78	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
79-34-5	1,1,2,2-Tetrachloroethane	ND		ug/m <sup>3</sup>	0.70	0.70	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
71-55-6	1,1,1-Trichloroethane	ND		ug/m <sup>3</sup>	0.55	0.55	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
75-71-8	Dichlorodifluoromethane	<b>2.6</b>		ug/m <sup>3</sup>	0.50	0.50	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
106-93-4	1,2-Dibromoethane	ND		ug/m <sup>3</sup>	0.78	0.78	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
124-48-1	Dibromochloromethane	ND		ug/m <sup>3</sup>	0.82	0.82	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
80-62-6	Methyl Methacrylate	ND		ug/m <sup>3</sup>	0.42	0.42	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
108-90-7	Chlorobenzene	ND		ug/m <sup>3</sup>	0.47	0.47	1	EPA TO-15	01/29/2014 09:24	01/29/2014 18:43	RB
	<b>Surrogate Recoveries</b>	<b>Result</b>			<b>Acceptance Range</b>						
460-00-4	Surrogate: <i>p</i> -Bromofluorobenzene	92.0 %			70-130						



## Notes and Definitions

B Analyte is found in the associated analysis batch blank. For volatiles, methylene chloride and acetone are common lab contaminants. Data users should consider anything <10x the blank value as artifact.

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ND Analyte NOT DETECTED at the stated Reporting Limit (RL) or above.

RL REPORTING LIMIT - the minimum reportable value based upon the lowest point in the analyte calibration curve.

MDL METHOD DETECTION LIMIT - the minimum concentration that can be measured and reported with a 99% confidence that the concentration is greater than zero. If requested or required, a value reported below the RL and above the MDL is considered estimated and is noted with a "J" flag.

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 MDL, with values between the MDL and the RL being "J" flagged as estimated results.

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# YORK

ANALYTICAL LABORATORIES, INC.

120 RESEARCH DR. STRATFORD, CT 06615  
(203) 325-1371 FAX (203) 357-0166

## Field Chain-of-Custody Record - AIR

Page 1 of 1

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

York Project No. 14A0729

<b>YOUR Information</b>		<b>Report To:</b>		<b>Invoice To:</b>		<b>YOUR Project ID</b>		<b>Turn-Around Time</b>		<b>Report Type/Deliverables</b>	
Company: <u>DT Consulting Services Inc</u>		Company: <u>Same</u>		Company: <u>Same</u>		<u>520 Albany Avenue</u>		RUSH - Same Day <input type="checkbox"/>		Summary Report <input checked="" type="checkbox"/>	
Address: <u>Services Inc</u>		Address: _____		Address: _____		Purchase Order No. _____		RUSH - Next Day <input type="checkbox"/>		Summary w/ QA Summary _____	
Phone No. _____		Phone No. _____		Phone No. _____		Samples from: CT <input type="checkbox"/> NY <input checked="" type="checkbox"/> NJ <input type="checkbox"/>		RUSH - Two Day <input type="checkbox"/>		CT RCP Package _____	
Contact Person: <u>Deborah</u>		Attention: _____		Attention: _____		Standard (5-7 Days) <input checked="" type="checkbox"/>		RUSH - Three Day <input type="checkbox"/>		NY ASPA Package _____	
E-Mail Address: <u>Tompson</u>		E-Mail Address: _____		E-Mail Address: _____				RUSH - Four Day <input type="checkbox"/>		NY ASPB/CLP Pkg _____	

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.

Deborah Thompson  
Samples Collected/Authorized By (Signature)  
Deborah Thompson  
Name (printed)

<b>Air Matrix Codes</b>		<b>TO15 Volatiles and Other Gas Analyses</b>	
AI - INDOOR Ambient Air	EPA TO-15 List	EPA TO-14A List	Detection Limits Required ≤ 1 ug/m <sup>3</sup> <input checked="" type="checkbox"/>
AO - OUTDOOR Amb. Air	NYSDEC VI list	Tentatively Identified Compounds	
AE - Vapor Extraction Well/Process Gas/Effluent	NYSDEC STARS List	Air VPH	NYSDEC VI Limits _____
AS - SOIL Vapor/Sub-Slab	Project Specific List by TO-15	Helium	NJDEP low level _____
	NJDEP Target List	Methane	Routine Survey _____
	CTDEP RCP Target List	OTHER _____	Other _____

**Special Instructions**

Sample Identification	Date Sampled	AIR Matrix	Canister Vacuum Before Sampling (in. Hg)	Canister Vacuum After Sampling (in. Hg)	Choose Analyses Needed from the Menu Above and Enter Below	Sampling Media
SSDS Effluent	1/23/14	AI	30	2	TO-15	6 Liter Summa canister Tedlar Bag
Garage	1/24/14	↓	30	0	↓	6 Liter Summa canister Tedlar Bag
Office	↓	↓	30	1	↓	6 Liter Summa canister Tedlar Bag
						6 Liter Summa canister Tedlar Bag
						6 Liter Summa canister Tedlar Bag
						6 Liter Summa canister Tedlar Bag
						6 Liter Summa canister Tedlar Bag
						6 Liter Summa canister Tedlar Bag
						6 Liter Summa canister Tedlar Bag
						6 Liter Summa canister Tedlar Bag

<b>Comments</b> Container NOS: 1) SSDS = 441 2) Garage = 439 3) Office = 436	<u>Deborah Thompson</u> 1/27/14 Samples Relinquished By / Date/Time	<u>Chic</u> 1-27-14 10:45 Samples Received By / Date/Time
	_____ Samples Relinquished By / Date/Time	<u>APace</u> 1-27-14 1525 Samples Received in LAB by / Date/Time

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