Sterling Environmental Engineering, P.C

TROY BELTING & SUPPLY COMPANY
SITE NO. C401067
70 COHOES ROAD
COLONIE, NY

VAPOR MITIGATION SYSTEM PILOT TEST RESULTS AND DESIGN REPORT

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1.0 INTRODUCTION

A Pilot Test (also referred to as a "pressure field extension test" by the New York State Department of Health (NYSDOH)) was conducted at the Troy Belting & Supply Company building at 70 Cohoes Road, Town of Colonie, New York. The test was completed by Sterling Environmental Engineering, P.C. (STERLING) from December 9 through 11, 2014 in support of the design of the future Sub-Slab Depressurization System (SSDS). The test was based upon the approved SSDS Design Report dated July 9, 2014, and the Response to Comments dated September 10, 2014. The objective of this Pilot Test was to determine the potential effectiveness of a SSDS to mitigate the migration of soil vapor into the onsite building (refer to Final Guidance for Evaluating Soil Vapor Intrusion in the State of NY, October 2006 (NYSDOH Final Guidance)). The information obtained from this Pilot Test is the basis for the design of the Vapor Mitigation System presented in this report. The Vapor Mitigation System is proposed as a mitigation of the soil vapor impact as recommended in subparagraph 4.1(e)1.iv of the New York State Department of Environmental Conservation (NYSDEC) Program Policy DER-10/Technical Guidance for Site Investigation and Remediation.

During the course of this Pilot Test, the NYSDEC and NYSDOH directed that the indoor air in the area of the Troy Belting offices should be treated. A system to treat the indoor office air through activated carbon filtration is the subject of a separate design. The system will minimize infiltration of air from the shop into the office space and also will minimize potential infiltration of soil vapor from beneath the slab into the office area.

2.0 PILOT TEST SYSTEM DESIGN

As part of the Interim Remedial Measure (IRM) Report dated April 9, 2014, three (3) sub-slab sampling ports were installed inside the building for sub-slab air sample collection. A 4-inch diameter hole was cored through the concrete slab at each location and internal port components for collecting sub-slab soil vapor samples, pressure readings, or both were installed in the pipe. The locations of the sub-slab soil vapor sampling ports (designated 70-SV-1, 70-SV-2 and 70-SV-3) are shown on Figure 1. 70-SV-1 is located north of the large spray booth and near the center of the area adjacent to the apparent source. 70-SV-2 is located near the center of the building. 70-SV-3 is located in the office area near the northeast corner of the building.

A labeled photograph of the Pilot Test Vapor Mitigation System setup is provided in Figure 2. A Vapor Mitigation System fan (model Fantech 250) was temporarily connected to the existing sub-slab soil vapor sampling port located near the historical spill at location 70-SV-1 using one (1) foot length of 4-inch diameter PVC piping into a 6-inch diameter expander. The sampling port components were removed to allow the soil vapor to flow through the core-hole and into the Vapor Mitigation System. The PVC pipe was held in place using a flange sealed to the concrete by a clay gasket. Sub-slab soil vapor sampling ports 70-SV-2 and 70-SV-3 were monitored for pressure during the Pilot Test without any modification.

During the Pilot Test, the pressurized discharge from the soil vapor withdrawal location (70-SV-1) was directed through an EM-WX 10 Electric Heater, approximately ten (10) feet of 4-inch diameter PVC piping utilized as ducting, and two (2) 90 degree elbows connected to two (2) G-3S Steel Vapor Phase Canisters with 140 pounds of Carbon Type CSV high capacity virgin carbon (CCLA No. 60). The heater raised the temperature of the extracted soil vapor between 90°F and 100°F to reduce the relative humidity and prevent condensation forming in the carbon. Using analytical data for soil vapor samples from the sub-slab obtained in 2014, Carbtrol Corporation estimated the usage of carbon at 11.81 pounds of carbon per day to treat a flow rate of 100 cubic feet per minute (cfm) (see Appendix A). Given the anticipated flow rate of 250 cfm, the carbon would not exhibit breakthrough for the 49 hour duration of the Pilot Test.

A second carbon canister was connected to the Vapor Mitigation System to remove contaminants should a breakthrough from the first carbon canister occur. The air from the second carbon canister was discharged ten (10) feet into a paint booth, where the treated air was emitted through the roof by the paint booth fan. Using the spray booth exhaust avoided the need to install an opening in the wall or roof and ensured the emissions were sufficiently elevated to mitigate the highly unlikely yet potential downwind impacts.

The fan system exhaust was measured with an average operating speed of 11.29 feet per second. The flow of the sub-slab vapor drawn from the sub-slab at the test port was approximately 59.1 cfm through the four (4) inch diameter duct.

Sub-slab vapor sampling ports 70-SV-4, 70-SV-5 and 70-SV-6, shown on Figure 1, were installed using a four (4) inch diameter drill approximately 30, 45, and 60 feet, respectively, from the sub-slab soil vapor withdrawal point located at sampling port 70-SV-1. These ports were installed to allow pressure measurements during the Pilot Test. The installation of the sub-slab soil vapor sampling ports confirmed that the slab is underlain by medium to fine (+) sand. The holes for these additional sub-slab soil vapor sampling ports were prepared in the same manner as the previously installed sub-slab soil vapor sampling ports to allow for pressure testing. Soil vapor samples can be obtained through the sampling ports, if necessary.

Sub-slab vapor sampling port 70-SV-7 was installed as a pressure measurement point (see Figure 1) in the westernmost room of the building to determine if there is sub-slab communication of soil vapor between the space below the main building and the addition. This westernmost room was installed after the original portion of the building was built. Building drawings were not available for review; however, a frost wall was likely installed during the construction of the original portion of the building, potentially separating the subgrade soil below the addition from the soil beneath the main building. Soil vapor withdrawal location 70-SV-7 is located approximately 19.8 feet from the test port.

All newly installed sub-slab soil vapor sampling ports were constructed with flush covers. An informal literature search and experience by STERLING on similar projects indicates the radius of influence in SSDSs generally varies between 15 to 60 feet.

2.1 Pilot Test Implementation

The fan in the Pilot Test was activated at 11:05 AM on December 9, 2014. The sub-slab pressure testing was conducted on December 9 and 11, 2014 at the locations shown on Figure 1. Pressure was measured with an Infiltec digital micro manometer, Model DM1, Serial No. 055602. A Photoionization Detector (PID) 3000 was used to measure the concentration of volatile organic compounds (VOCs) in the sub-slab locations before each pressure measurement. Results of the Pilot Test pressure testing and PID readings are described in Section 3.1 and provided in Tables 1 and 2, respectively.

Sampling of the sub-slab soil vapor was conducted during the Pilot Test to demonstrate the reduction in chemical concentration over time. These sub-slab vapor samples were obtained December 9, 2014, two to three hours after the start of the test, and December 11, 2014, 48 to 49 hours after the start of the test. Samples were collected through a sample port in the 4-inch diameter PVC piping connecting the fan to the electric heater (see photograph provided in Appendix B). A three (3) foot length of Teflon tubing was connected to the sample port and connected into a "T" connection. Tubing from the "T" was attached to two (2) 6-Liter capacity Summa® canisters fitted with a laboratory-calibrated critical orifice flow regulation device set to collect the soil vapor samples over a one (1) hour period (0.1 liter/min.). Soil vapor samples were analyzed by TestAmerica Laboratories, Inc. of Knoxville, Tennessee following the

USEPA's TO-15 GC/MS methodology. Results of the chemical sub-slab soil vapor sampling are described in Section 3.2 and provided in Table 3.

3.0 PILOT TEST RESULTS

3.1 Pilot Test Sub-Slab Pressure and PID Results

Pressure readings were obtained after work hours with all systems and operations shut off, except the paint booth fan, to ensure the differential pressure between the sub-slab and indoor air was not affected by other sources. The spray booth fan was kept on, at a low setting, to ensure the emissions of the treated sub-slab vapors from the Pilot Test continued.

A minimum of four (4) 32-second average pressure readings were obtained from each pressure monitoring location during the Pilot Test period. Zero pressure differential readings indicated that the negative pressure field beneath the sub-slab did not extend to the pressure monitoring locations. Table 1 shows the pressure readings at each location during the Pilot Test. Sampling port 70-SV-7 indicated zero pressure differential readings which supports the likely presence of a frost wall at the original wall position when the addition was built. These readings indicate there is little to no pressure communication beneath the slab between the addition and the original building.

Table 2 shows that the PID readings obtained closer to the source area, near 70-SV-7, were generally greater in the sub-slab than those which were further away from the source area, such as 70-SV-2. Overall, the sub-slab PID measurements were greater than the background indoor PID measurements.

3.2 Pilot Test Air Sample Results

The prior monitoring of the indoor air and sub-slab soil vapor conducted in May and June 2014 determined that carbon tetrachloride, trichloroethene (TCE), and tetrachloroethene (PCE) are potential chemicals of concern (COCs). A sub-slab soil vapor sample obtained May 2, 2014 from 70-SV-1 indicated elevated levels of PCE and TCE. Carbon tetrachloride was not detected. PCE was detected at levels of 12,000 $\mu g/m^3$ and TCE was detected at levels of 47,000 $\mu g/m^3$. STERLING collected soil vapor samples on December 9 and 11, 2014 at the test port identified on Figure 1 immediately above the soil vapor withdrawal location. Samples collected 48 to 49 hours after the test startup showed significant reduction in VOC concentrations compared to those collected 2 to 3 hours after startup. Carbon tetrachloride was not detected in either of the samples taken during the 2 to 3 hour sample or the 48 to 49 hour sample. PCE was detected at average levels of 3,800 $\mu g/m^3$ in the 2 to 3 hour sample and 1,400 $\mu g/m^3$ in the 48 to 49 hour sample. TCE was detected at average levels of 2,900 $\mu g/m^3$ in the 2 to 3 hour sample and 1,550 $\mu g/m^3$ in the 48 to 49 hour sample. Laboratory analytical data for the air samples are provided in Appendix C.

Figures 3 and 4 show the concentrations of PCE and TCE, respectively, versus time, assuming the concentrations of VOCs in the soil vapor at the start of the Pilot Test were similar to the concentrations measured on May 2, 2014. Both figures indicate that the concentrations of PCE and TCE decrease with time. The reductions were relatively large within the first two hours, and then decreased steadily.

3.3 Supplemental Sub-Slab Vapor Sampling Ports Differential Pressure Results

Two (2) additional sub-slab vapor sampling ports were incorporated into the sub-slab Pilot Test design one (1) week after the Pilot Test to more precisely determine the radius of the negative pressure field beneath the slab. Sampling port 70-SV-8 was installed approximately seven (7) feet southeast of the test

port and north of the paint booth. Sampling port 70-SV-9 was installed approximately 15 feet southeast of the soil vapor withdrawal location and east of the paint booth. Both sampling ports were installed December 16, 2014 and are located near the center of the area adjacent to the apparent source (see Figure 1).

STERLING collected sub-slab pressure readings from the supplemental sub-slab vapor sample ports on December 17, 2014 over the course of two (2) hours with the fan operating and during work hours. A minimum of six (6) 32-second average pressure readings were obtained from each sampling location during this additional test period. Negative pressure differential readings indicate communication between the location of the fan and the supplemental sub-slab vapor sample ports to a minimum of 15 feet of the withdrawal location. Table 4 provides the pressure differential readings between the withdrawal location and supplemental sub-slab vapor sample ports. Figure 5 shows a graph of negative pressure readings vs. distance from the withdrawal point to determine the estimated radius of influence of the SSDS. The trend line shown on the graph indicates the radius of influence is approximately 21 feet, corresponding to the distance where the negative pressure equals -0.02 inch water column (inWC).

3.4 Material Safety Data Sheets (MSDS) Review

A product inventory was performed at Troy Belting to determine if products containing COCs are used in daily operations. Over 400 MSDSs were reviewed for products containing one or more of the following COCs:

- 1,1,1-Trichloroethane (1,1,1-TCA);
- Tetrachloroethylene, tetrachloroethene or perchloroethene (PCE); and,
- Trichloroethylene or trichloroethene (TCE).

The following three (3) products were found to contain one or more of the COCs:

1. Heavy Duty Aerosol Degreaser (Product #: 03095), manufactured by CRC Industries, Inc. contains PCE (80 - 90%) and is most commonly sold in 20 oz. aerosol cans.
2. Heavy Duty Lacquer Thinner (Part #: 6782), manufactured by Safety-Kleen Corp., contains 0-1% of 1,1,1-TCA and PCE.
3. Electric Motor Degreaser Spray (Product # VSP-500), manufactured by The Sherwin-Williams Company, contains 49% PCE and 49% TCE by weight.

The degreaser sprays are typically used in 15 or 20 oz. aerosol-type spray cans while the lacquer thinner is typically contained in one quart containers. The MSDSs for these three products are provided as Appendix D.

4.0 VAPOR MITIGATION SYSTEM DESIGN CONSIDERATIONS

The following issues were found during the Pilot Test:

- The sampling port in the building addition (70-SV-7) did not show an influence of pressure from the operation of the fan at the soil vapor withdrawal point even though this port is 19.8 feet from the sub-slab soil vapor withdrawal location at 70-SV-1 in the original building. In order to assess the potential for sub-slab soil vapor intrusion to the building addition, a soil vapor sample should be obtained over a period of 24-hours from the sampling port in the addition (70-SV-7).

- The radius of influence was approximately 21 feet while the soil vapor was extracted at a rate of approximately 59 cubic feet per minute (cfm). This relatively small radius of influence could have several explanations:

  - The floor has construction joints. While the joint filler is unknown, given the apparent general or common construction techniques, the joint filler is probably not designed to be low in vapor permeability. Indoor air may be infiltrating through joints in the floor, thereby reducing the radius of influence.

  - The slab is underlain by medium to fine (+) sand. It is unknown how deep this material extends and what material underlies the frost wall. Variations in the sub-slab soil may allow short circuiting and preferential flow paths that reduce the radius of influence.

Given the above findings, the following recommendations are provided:

- STERLING recommends installing two (2) soil vapor withdrawal points through and beneath the floor of the facility to withdraw sub-slab vapors. A Vapor Mitigation System should be installed adjacent to the former spill. This Vapor Mitigation System will remove the soil vapor with the highest concentration of VOCs and chlorinated VOCs from beneath the building foundation slab.

5.0 VAPOR MITIGATION SYSTEM DESIGN MITIGATION GOALS

The Vapor Mitigation System is designed in accordance with NYSDEC DER-10 Guidance.

The goal of the proposed system will be to reduce VOC concentrations in the sub-slab soil vapor and to maintain a negative pressure beneath a portion of the building slab. The eventual combination of this mitigation measure, any future mitigation measures, interim remedial measures (IRMs) if taken, and remedial measures will be designed to reduce the exposures of building occupants both in the office and in the shop to the appropriate exposures as determined by OSHA and the NYSDOH.

In order to remove chlorinated VOCs where the concentration of VOCs in the soil vapor is highest and as a partial mitigation measure, two (2) withdrawal locations will be installed in the floor slab to create a broad negative pressure and soil vapor collection influence under the foundation adjacent to the area where test pits outside the building indicated the highest concentration of VOCs in soil.

Each withdrawal point will consist of a length of perforated horizontal pipe beneath the slab and will draw a vacuum of approximately 5 inWC negative pressure and transmit approximately 120 cfm of soil vapor. The radius of influence may extend from approximately 21 feet to as much as approximately 31 feet, by increasing the negative pressure by approximately 2.14 inWC at the point where the vapor

withdrawal duct emerges from the slab, as compared to the negative pressure applied during the Pilot Test.

6.0 WITHDRAWAL POINT LOCATIONS

One sub-slab soil vapor withdrawal location will be near the former Pilot Test hole, located to the north of the paint booth (see Plate 1). The second withdrawal location will be on the east side of the wall to the east of the Pilot Test location, approximately 15 feet from the exterior wall. The zone of influence from the two withdrawal points will overlap ensuring there will be no gap in vapor collection between the points.

The withdrawal locations will be formed by cutting out an approximately 2 feet by 4 feet rectangle of concrete floor slab (see detail on Plate 1). Approximately one foot depth of soil will be removed. Approximately four (4) inches of crushed stone will be placed in the hole. A tee consisting of two, four (4) inch diameter perforated duct sections will be inserted in the hole extending horizontally with solid pipe extending upward above the elevation of the concrete floor slab. Additional stone will be placed around the perforated pipe up to the elevation of the bottom of the floor slab. A layer of 10 mil polyethylene sheeting will be placed over the stone. The concrete will be replaced above the stone and poly sheeting to surround the solid pipe to match the original floor.

7.0 INITIAL DUCTING SYSTEM

The nominal 4 inch diameter PVC ducts connected to the withdrawal locations will be securely and tightly joined to the vertical extending from the tee at each withdrawal location (see detail on Plate 1). Each of the ducts will have a ball valve to allow balancing of the system pressures and to ensure balanced withdrawal of soil vapor. A U-tube manometer will be attached to each duct emerging from the floor. The U-tube manometer will be used to indicate whether negative pressure is exerted on the sub-slab withdrawal location.

The nominal 4 inch diameter ducts from each withdrawal location will extend horizontally and will merge at the Tee on the manifold. The Tee will be centered between the perforated sections so that the pressures in the two withdrawal ducts are balanced. The duct will be capable of carrying approximately 240 cfm or more of soil vapor after the soil vapor flows from the manifolded ducts.

8.0 ACTIVATED CARBON TREATMENT SYSTEM

The nominal 4 inch diameter PVC duct will be connected to an Electro Industries Model EM-WX 10 Electric Heater (see detail on Plate 1). From the exit of the heater, a reducer will be used to connect the two (2) G-3S Steel Vapor Phase Canisters with 140 pounds of Carbon Type CSV high capacity virgin carbon (CCLA No. 60). The heater is used to raise the temperature of the extracted soil vapor between 90°F and 100°F to reduce the relative humidity and prevent condensation in the carbon units which reduces the efficiency of the carbon.

Carbtrol Corporation estimated the usage rate of carbon at 0.55 pounds of carbon per day assuming a flow rate of 60 cfm (see Appendix E). The adjusted usage rate is approximately 2.29 pounds per day, assuming the design flow rate of 250 cfm (0.55 lbs./day * 250 cfm/60 cfm). Carbon breakthrough would be anticipated after approximately 61 days (140 lbs carbon/2.29 lbs/day). Sub-slab VOC concentrations

may decrease, and/or actual flow volumes may be less than 250 cfm, based on the pilot study results, thereby extending the effective life of the carbon.

Air samples will be obtained using Summa® canisters following the first carbon canister. The results will be used to detect breakthrough of the VOCs through the initial activated carbon canister (see Section 10 for the schedule of VOC testing the treated soil vapor flow from the first canister). Once breakthrough of the VOCs is identified, the second activated carbon canister will replace the first canister and a new activated carbon canister will be added to the second position.

9.0 FINAL DUCTING SYSTEM, FAN, AND EMISSION

The exhaust duct will rise and extend above the roof (see detail on Plate 1). A Model PB-10A Cincinnati Fan will be located on the ground along the exterior of the building and will create a negative pressure in the interior duct, heater, activated carbon canisters, etc. within the building. Air will be drawn into the duct and soil vapor will not leak out of the duct into the building, if a leak develops in one of these system components.

The fan will be connected to the electrical system in conformance with applicable code. The fan will be equipped with a shut off and a variable rate controller. Once started, the fan will run continuously, except when changing activated carbon. Breakthrough of VOCs in the initial activated carbon canister will be monitored to ensure the carbon is changed frequently enough to provide effective emission treatment.

The emission duct above the fan will be a vertical, 4 inch diameter PVC pipe attached to the wall of the building acting as a stack that will extend at least ten (10) feet above the roof elevation to facilitate dispersion of the emissions (see Plate 1). The height of the stack is designed to conform to the recommendation in the NYSDEC Air Guide 1 that a stack which discharges at 1.5 times the building height will avoid the emission entering the cavity which forms downwind of a building. The emission duct will be wrapped with insulation to minimize condensation inside the duct.

10.0 SCHEDULE FOR INSTALLATION AND MONITORING

The Vapor Mitigation System will be installed and maintained in accordance with the following schedule:

Description	Timeframe
1. Order equipment.	Weeks 1-3
2. Troy Belting staff to install sub-slab withdrawal points and place concrete.	Week 4
3. Connect remaining parts, connect electric supply.	Week 5
4. Initiate the fan, balance the pressures immediately above each withdrawal point, monitor the negative pressures below the slab using existing monitoring points, and monitor the duct for VOCs before and between the activated carbon canisters after the system runs for 48 hours. Monitoring will be over a 4 hour collection period.	Week 6

5. Monitor the VOCs in the soil vapor flow before and between the activated carbon canisters.	At one (1) month from startup, PID monitoring and a soil vapor sample will be obtained. After a revised breakthrough estimate, PID monitoring will be conducted three (3) weeks before predicted breakthrough and every one to two (1 to 2) weeks thereafter. Any increased PID reading above 10 ppm will require obtaining a soil vapor sample. At or before the revised breakthrough date, PID monitoring and a soil vapor sample will be obtained.
6. Inspect manometer and interior ducts and devices for damage or air leaks.	Weekly
7. Indoor Air and Sub-Slab Soil Vapor Monitoring	Approximately one (1) week prior to startup, approximately one to two (1 to 2) weeks after startup, and quarterly thereafter. Representative indoor air and soil vapor monitoring will be conducted.
8. Submit Construction Completion Report including Operations, Maintenance and Monitoring Plan	Week 10

11.0 OPERATIONS, MONITORING AND MAINTENANCE (OM&M) OF THE ENGINEERING CONTROLS

The Vapor Mitigation System will be implemented based on the above recommendations and NYSDEC DER-10 guidance. The operation of the Vapor Mitigation System will be described in an Operation, Monitoring, and Maintenance (OM&M) Plan in which the procedures for inspecting, evaluating, and maintaining the Vapor Mitigation System will be presented in further detail (see Item 8 in the table in Section 10).. The OM&M Plan will include a differential pressure monitoring program and a chemical monitoring program of soil vapor and indoor air. The OM&M Plan will describe the sampling requirements and procedures for both short-term (up to 48 hours), long-term (more than 48 hours), and permanent shutdowns of the Vapor Mitigation System. The OM&M Plan will become part of an Interim Site Management Plan and Construction Completion Report for the Vapor Mitigation System which will also be acting as a soil vapor extraction system for the source area.

TABLES

TABLE 1

Sub-Slab Pressure Monitoring

Sterling Project Name:	**Troy Belting & Supply Company**
Project Location:	**70 Cohoes Road, Colonie, NY**
Sterling Project Number:	**2011-31**
Date:	**December 10 and 11, 2014**
Sampler:	**Amanda Castignetti**

Location	Date 12/10/2014	Temperature (°F)	Indoor Air Pressure (inches of Mercury)	Sub-Slab Vapor Pressure (inch of water column)					
				Reading #1	Reading #2	Reading #3	Reading #4	Reading #5	Reading #6
70-SV-2	5:25pm	65.5	29.56	0.001	-0.001	0.003	0.002	0.001	0.000
70-SV-3	5:30pm	65.5	29.56	0.012	0.015	0.011	0.018	0.012	NA
70-SV-4	5:05pm	65.5	29.56	-0.003	-0.002	-0.001	0.000	0.000	NA
70-SV-5	5:15pm	65.5	29.56	0.000	0.000	0.000	0.000	0.000	NA
70-SV-6	5:20pm	65.5	29.56	0.000	-0.000	-0.000	-0.000	0.000	NA
70-SV-7	4:55pm	65.5	29.56	0.000	-0.000	-0.001	0.000	NA	NA

Location	Date 12/11/2014	Temperature (°F)	Indoor Air Pressure (inches of Mercury)	Sub-Slab Vapor Pressure (inch of water column)					
				Reading #1	Reading #2	Reading #3	Reading #4	Reading #5	Reading #6
70-SV-2	5:13pm	63.6	29.55	0.000	0.000	0.000	0.000	0.000	0.000
70-SV-3	5:17pm	63.6	29.55	0.007	0.009	0.007	0.009	0.009	0.009
70-SV-4	4:58pm	63.6	29.55	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
70-SV-5	5:03pm	63.6	29.55	0.000	0.000	0.000	0.000	0.000	0.000
70-SV-6	5:07pm	63.6	29.55	0.000	0.000	0.000	0.000	0.000	0.000
70-SV-7	4:51pm	63.6	29.55	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000

Note: Readings were taken during the Pilot Test, All Troy Belting activities were ceased, the paint booth exhaust fan was operating on low speed.

NA= Not Available

TABLE 2

Sub-Slab PID Readings

Sterling Project Name:	**Troy Belting & Supply Company**
Project Location:	**70 Cohoes Road, Colonie, NY**
Sterling Project Number:	**2011-31**
Date:	**December 10 and 11, 2014**
Sampler:	**Amanda Castignetti**

Location	Date 12/10/2014		Date 12/11/2014	
	Background(ppm)	Reading(ppm)	Background (ppm)	Reading (ppm)
70-SV-2	1.1	1.5	3.2	3.6
70-SV-3	0.2	0.2	1.4	1.6
70-SV-4	1.1	3.9	4.6	5.9
70-SV-5	1.1	4.2	4.7	7.7
70-SV-6	1.0	4.0	5.0	6.2
70-SV-7	0.9	15.6	1.7	11.3

Note: Readings were taken during the Pilot Test, all Troy Belting activities were ceased, and the paint booth exhaust fan was operating on low speed.

Table 3
Troy Belting & Supply Company
Analyses of Soil Vapor From 70-SV-1 Location
May 2, 2014, December 9 and 11, 2014

Analyte	Specific Method	Units	Sample was collected from the sub-slab in May 2014 over 24 hours.		Samples were collected from hours 2-3 of operations of the Pilot Test system.				Samples were collected from hours 48-49 of operations of the Pilot Test system.			
			70-SV-1 05/02/14		P2A-3A_120914 12/09/14		P2B-3B_120914 (dupicalte of P2A-3A_120914) 12/09/14		P48A-49A_121114 12/11/14		P48B-49B_120914 (dupicalte of P48A-49A_120914) 12/09/14	
1,1,1-Trichloroethane	Volatile Organic Compounds (GC/MS)	µg/m³	390	U	4.9	U	16	J	9.9	J	9.5	J
1,1,2,2-Tetrachloroethane	Volatile Organic Compounds (GC/MS)	µg/m³	490	U	7.0	U	6.9	U	2.8	U	2.8	U
1,1,2-Trichloroethane	Volatile Organic Compounds (GC/MS)	µg/m³	390	U	6.0	U	6.0	U	2.4	U	2.4	U
1,1-Dichloroethane	Volatile Organic Compounds (GC/MS)	µg/m³	290	U	3.4	U	3.4	U	1.4	J	1.5	J
1,1-Dichloroethene	Volatile Organic Compounds (GC/MS)	µg/m³	280	U	1.2	U	1.2	U	0.47	U	0.47	U
1,2,4-Trichlorobenzene	Volatile Organic Compounds (GC/MS)	µg/m³	1300	U	7.5	U	7.5	U	3.0	U	3.0	U
1,2,4-Trimethylbenzene	Volatile Organic Compounds (GC/MS)	µg/m³	350	U	28	J	42		53		51	
1,2-Dibromoethane	Volatile Organic Compounds (GC/MS)	µg/m³	550	U	4.1	U	4.1	U	1.6	U	1.6	U
1,2-Dichlorobenzene	Volatile Organic Compounds (GC/MS)	µg/m³	430	U	3.2	U	3.2	U	1.3	U	1.3	U
1,2-Dichloroethane	Volatile Organic Compounds (GC/MS)	µg/m³	290	U	6.3	U	6.3	U	2.5	U	2.5	U
1,2-Dichloroethene, Total	Volatile Organic Compounds (GC/MS)	µg/m³	7900		440		450		320		310	
1,2-Dichloropropane	Volatile Organic Compounds (GC/MS)	µg/m³	330	U	4.8	U	4.8	U	1.9	U	1.9	U
1,2-Dichlorotetrafluoroethane	Volatile Organic Compounds (GC/MS)	µg/m³	500	U	11	U	11	U	4.3	U	4.3	U
1,3,5-Trimethylbenzene	Volatile Organic Compounds (GC/MS)	µg/m³	350	U	13	J	17	J	19		18	
1,3-Butadiene	Volatile Organic Compounds (GC/MS)	µg/m³	160	U	2.4	U	2.4	U	0.95	U	0.95	U
1,3-Dichlorobenzene	Volatile Organic Compounds (GC/MS)	µg/m³	430	U	3.6	U	3.6	U	1.4	U	1.4	U
1,4-Dichlorobenzene	Volatile Organic Compounds (GC/MS)	µg/m³	430	U	3.4	U	15	J	1.4	U	1.4	U
1,4-Dioxane	Volatile Organic Compounds (GC/MS)	µg/m³	6400	U	17	U	24	J	6.9	U	6.9	U
2,2,4-Trimethylpentane	Volatile Organic Compounds (GC/MS)	µg/m³	330	U	3.2	U	3.2	U	1.3	U	1.3	U
2-Chlorotoluene	Volatile Organic Compounds (GC/MS)	µg/m³	370	U	4.8	U	4.8	U	1.9	U	1.9	U
3-Chloropropene	Volatile Organic Compounds (GC/MS)	µg/m³	560	U	15	U	15	U	6.0	U	6.0	U
4-Ethyltoluene	Volatile Organic Compounds (GC/MS)	µg/m³	350	U	17	J	20	J	19		16	
4-Isopropyltoluene	Volatile Organic Compounds (GC/MS)	µg/m³	390	U	3.3	U	21	J	1.3	U	1.3	U
Acetone	Volatile Organic Compounds (GC/MS)	µg/m³	4200	U	2100		2000		360		340	
Benzene	Volatile Organic Compounds (GC/MS)	µg/m³	230	U	3.4	J	3.2	J	1.1	U	1.1	U
Benzyl chloride	Volatile Organic Compounds (GC/MS)	µg/m³	370	U	2.8	U	2.8	U	1.1	U	1.1	U
Bromodichloromethane	Volatile Organic Compounds (GC/MS)	µg/m³	480	U	5.8	U	5.8	U	2.3	U	2.3	U
Bromoethene(Vinyl Bromide)	Volatile Organic Compounds (GC/MS)	µg/m³	310	U	2.6	U	2.6	U	1.0	U	1.0	U
Bromoform	Volatile Organic Compounds (GC/MS)	µg/m³	740	U	7.7	U	7.7	U	3.1	U	3.1	U
Bromomethane	Volatile Organic Compounds (GC/MS)	µg/m³	280	U	5.1	U	5.1	U	2.0	U	2.0	U
Carbon disulfide	Volatile Organic Compounds (GC/MS)	µg/m³	560	U	2.8	U	2.8	U	1.1	U	1.1	U
Carbon tetrachloride	Volatile Organic Compounds (GC/MS)	µg/m³	90	U	2.1	U	2.1	U	0.82	U	0.82	U
Chlorobenzene	Volatile Organic Compounds (GC/MS)	µg/m³	330	U	2.5	U	2.5	U	0.99	U	0.99	U
Chloroethane	Volatile Organic Compounds (GC/MS)	µg/m³	470	U	4.8	U	4.8	U	1.9	U	1.9	U
Chloroform	Volatile Organic Compounds (GC/MS)	µg/m³	350	U	5.5	U	5.5	U	2.2	U	2.2	U
Chloromethane	Volatile Organic Compounds (GC/MS)	µg/m³	370	U	3.7	U	3.7	U	1.5	U	1.5	U
cis-1,2-Dichloroethene	Volatile Organic Compounds (GC/MS)	µg/m³	7800		260		270		240		230	
cis-1,3-Dichloropropene	Volatile Organic Compounds (GC/MS)	µg/m³	320	U	3.9	U	3.9	U	1.6	U	1.6	U
Cumene	Volatile Organic Compounds (GC/MS)	µg/m³	350	U	2.8	U	7.4	J	2.8	J	2.6	J
Cyclohexane	Volatile Organic Compounds (GC/MS)	µg/m³	250	U	1.0	U	1.0	U	0.41	U	0.41	U
Dibromochloromethane	Volatile Organic Compounds (GC/MS)	µg/m³	610	U	5.1	U	5.1	U	2.0	U	2.0	U
Dichlorodifluoromethane	Volatile Organic Compounds (GC/MS)	µg/m³	880	U	8.3	U	8.2	U	3.3	U	3.3	U
Ethylbenzene	Volatile Organic Compounds (GC/MS)	µg/m³	310	U	380		380		36		34	
Freon 22	Volatile Organic Compounds (GC/MS)	µg/m³	630	U	8.4	U	8.4	U	3.4	U	3.4	U
Freon TF	Volatile Organic Compounds (GC/MS)	µg/m³	550	U	9.4	U	9.3	U	3.7	U	3.7	U
Hexachlorobutadiene	Volatile Organic Compounds (GC/MS)	µg/m³	760	U	11	U	11	U	4.6	U	4.6	U
Isopropyl alcohol	Volatile Organic Compounds (GC/MS)	µg/m³	4400	U	100	J	46	J	16	J	4.4	U
m,p-Xylene	Volatile Organic Compounds (GC/MS)	µg/m³	780	U	1500		1500		150		140	
Methyl Butyl Ketone (2-Hexanone)	Volatile Organic Compounds (GC/MS)	µg/m³	730	U	21	U	21	U	8.3	U	8.3	U
Methyl Ethyl Ketone	Volatile Organic Compounds (GC/MS)	µg/m³	530	U	750		740		83		80	
methyl isobutyl ketone	Volatile Organic Compounds (GC/MS)	µg/m³	730	U	160		120		29		23	J
Methyl methacrylate	Volatile Organic Compounds (GC/MS)	µg/m³	730	U	12	U	12	U	4.7	U	4.7	U
Methyl tert-butyl ether	Volatile Organic Compounds (GC/MS)	µg/m³	260	U	2.4	U	2.4	U	0.94	U	0.94	U
Methylene Chloride	Volatile Organic Compounds (GC/MS)	µg/m³	620	U	12	U	12	U	5.0	U	5.0	U
Naphthalene	Volatile Organic Compounds (GC/MS)	µg/m³	940	U	4.7	U	4.7	U	1.9	U	1.9	U
n-Butane	Volatile Organic Compounds (GC/MS)	µg/m³	420	U	480		460		75		69	
n-Butylbenzene	Volatile Organic Compounds (GC/MS)	µg/m³	390	U	4.6	U	4.6	U	1.8	U	1.8	U
n-Heptane	Volatile Organic Compounds (GC/MS)	µg/m³	290	U	4.5	U	23	J	1.8	U	1.8	U
n-Hexane	Volatile Organic Compounds (GC/MS)	µg/m³	250	U	2.9	U	2.9	U	1.2	U	1.2	U
n-Propylbenzene	Volatile Organic Compounds (GC/MS)	µg/m³	350	U	11	J	3.9	U	10	J	9.5	J
sec-Butylbenzene	Volatile Organic Compounds (GC/MS)	µg/m³	390	U	3.4	U	3.4	U	1.4	U	1.4	U
Styrene	Volatile Organic Compounds (GC/MS)	µg/m³	300	U	2.0	U	2.0	U	0.81	U	0.81	U
tert-Butyl alcohol	Volatile Organic Compounds (GC/MS)	µg/m³	5400	U	11	U	11	U	4.3	U	4.3	U
tert-Butylbenzene	Volatile Organic Compounds (GC/MS)	µg/m³	390	U	3.3	U	3.3	U	1.3	U	1.3	U
Tetrachloroethene	Volatile Organic Compounds (GC/MS)	µg/m³	12,000		3800		3800		1400		1400	
Tetrahydrofuran	Volatile Organic Compounds (GC/MS)	µg/m³	5300	U	16	U	16	U	6.3	U	6.3	U
Toluene	Volatile Organic Compounds (GC/MS)	µg/m³	270	U	1500		1500		190		190	
trans-1,2-Dichloroethene	Volatile Organic Compounds (GC/MS)	µg/m³	280	U	180		180		80		85	
trans-1,3-Dichloropropene	Volatile Organic Compounds (GC/MS)	µg/m³	320	U	3.5	U	3.5	U	1.4	U	1.4	U
Trichloroethene	Volatile Organic Compounds (GC/MS)	µg/m³	47,000		2900		2900		1600		1500	
Trichlorofluoromethane	Volatile Organic Compounds (GC/MS)	µg/m³	400	U	7.5	U	7.5	U	3.0	U	3.0	U
Vinyl chloride	Volatile Organic Compounds (GC/MS)	µg/m³	37	U	4.3		4.8		5.9		5.4	
Xylene (total)	Volatile Organic Compounds (GC/MS)	µg/m³	310	U	2000		2000		210		200	
Xylene, o-	Volatile Organic Compounds (GC/MS)	µg/m³	310	U	490		480		59		55	

U = Indicates the analyte was analyzed for but not detected.
J = Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value.

TABLE 4

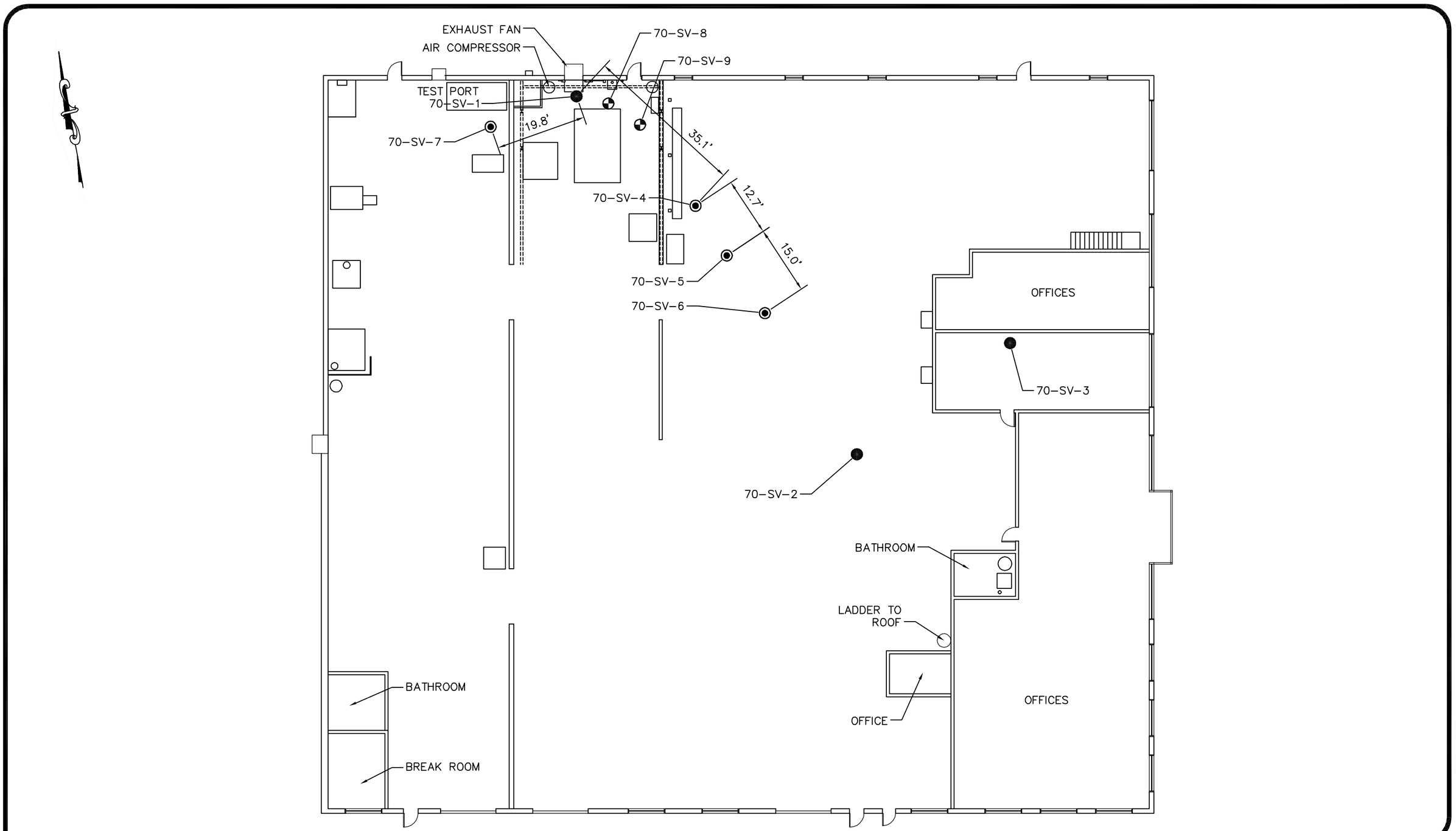
Supplemental Sub-Slab Pressure Monitoring

Sterling Project Name:	**Troy Belting & Supply Company**
Project Location:	**70 Cohoes Road, Colonie, NY**
Sterling Project Number:	**2011-31**
Date:	**December 17, 2014**
Sampler:	**Amanda Castignetti**

Location	Date 12/17/2014	Temperature (°F)	Indoor Air Pressure (inches of Mercury)	Sub-Slab Vapor Pressure (inch of water column)					
				Reading #1	Reading #2	Reading #3	Reading #4	Reading #5	Reading #6
70-SV-8	9:45am	65.6	29.62	-0.110	-0.109	-0.109	-0.111	-0.111	-0.012
70-SV-9	9:55am	65.6	29.62	-0.085	-0.084	-0.085	-0.085	-0.086	-0.086

Note: Readings were taken as a supplement to the Pilot Test during normal operating hours.

FIGURES



LEGEND:

SUB-SLAB SOIL VAPOR SAMPLING PORTS INSTALLED ON:

- MAY 1, 2014
- DECEMBER 8, 2014
- DECEMBER 16, 2014

0 10 20 40

(IN FEET)

1 inch = 20 ft.

STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road • Latham, New York 12110

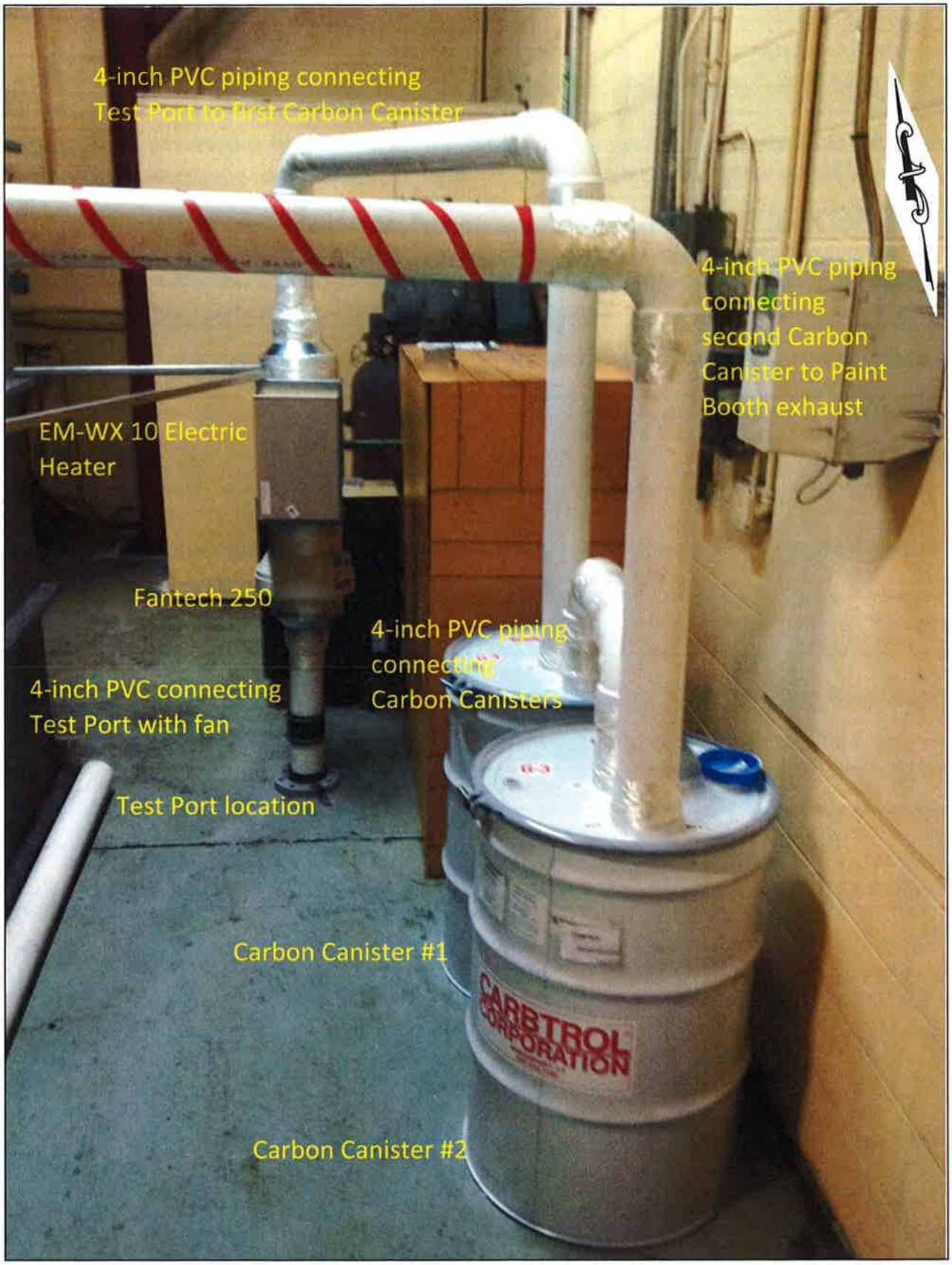
PILOT TEST SUB-SLAB VAPOR SAMPLING PORT LOCATIONS

TROY BELTING & SUPPLY CO.

70 COHOES ROAD

TOWN OF COLONIE ALBANY CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2011-31	4/24/15	1" = 20'	2011-31053	1



STERLING

Sterling Environmental Engineering, P.C.

24 Wade Road ♦ Latham, New York 12110

PILOT TEST DETAIL

TROY BELTING & SUPPLY CO.

70 COHOES ROAD

TOWN OF COLONIE — ALBANY CO., N.Y.

PROJ. No.:	DATE:	SCALE:	DWG. NO.	FIGURE
2011-31	1/8/15	N.T.S.	2011-31054	2

FIGURE 3:

Tetrachloroethene vs. Time
Troy Belting SSDS Pilot Test

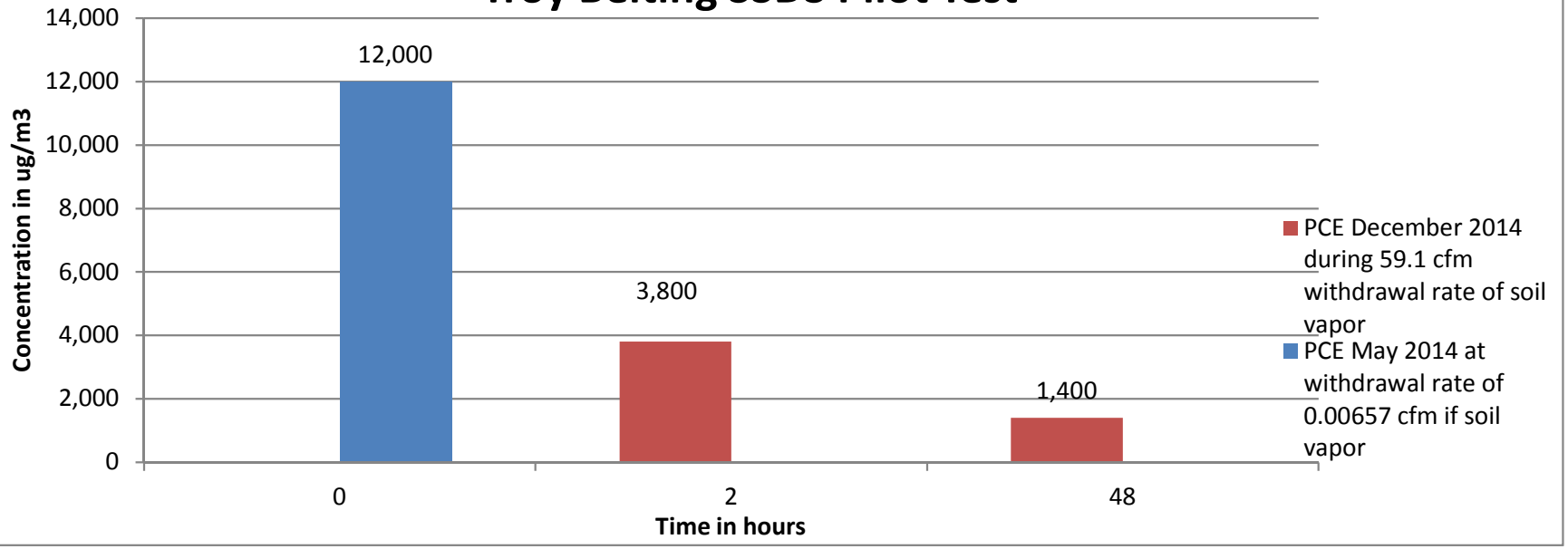


FIGURE 4:

Trichloroethene vs. Time

Troy Belting SSDS Pilot Test

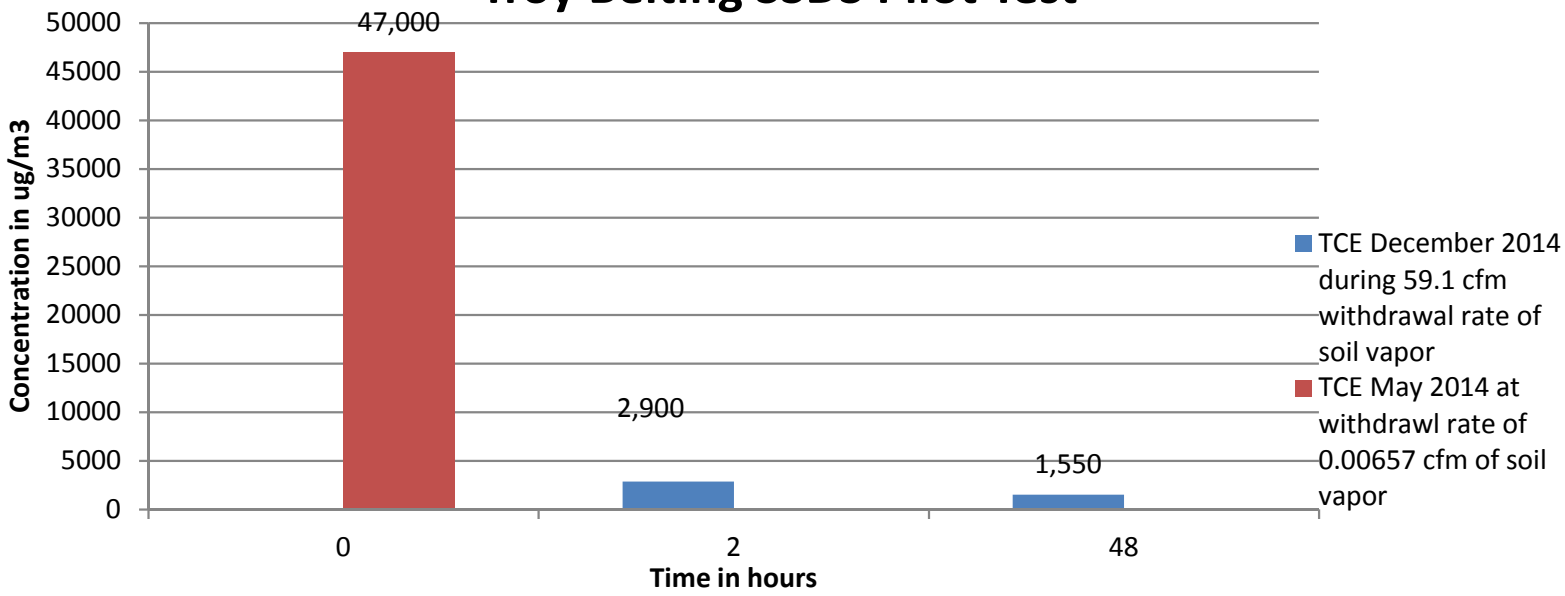


Figure 5
Estimated Radius of Influence
Troy Belting SSDS Pilot Test

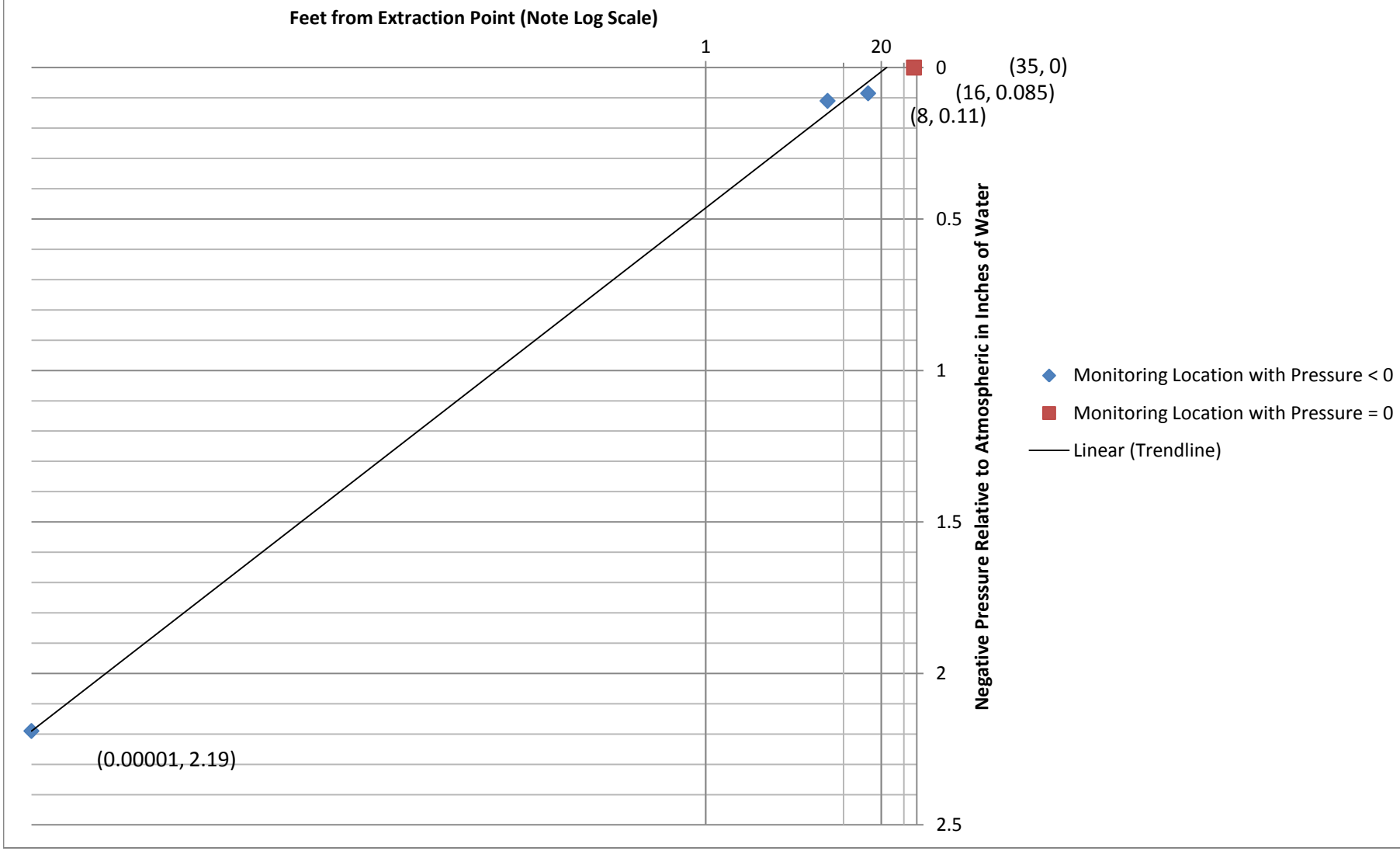
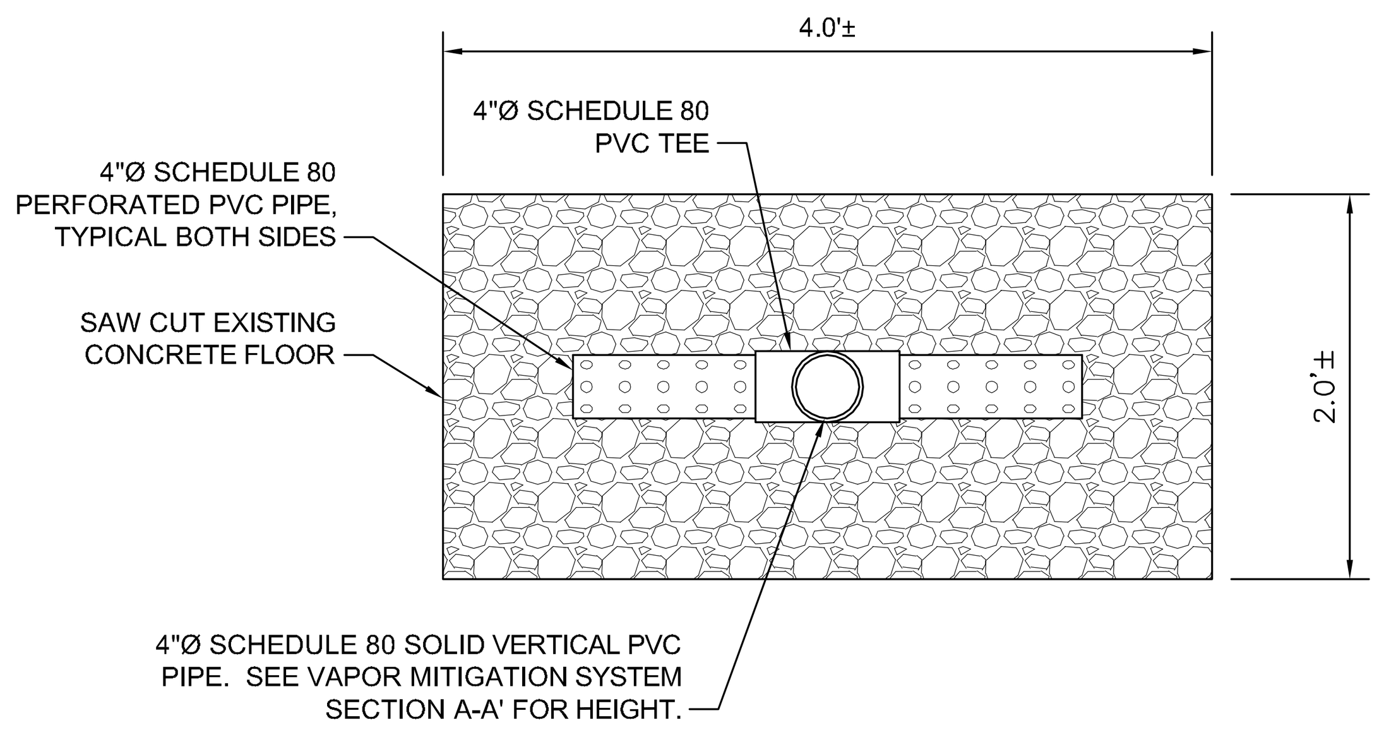
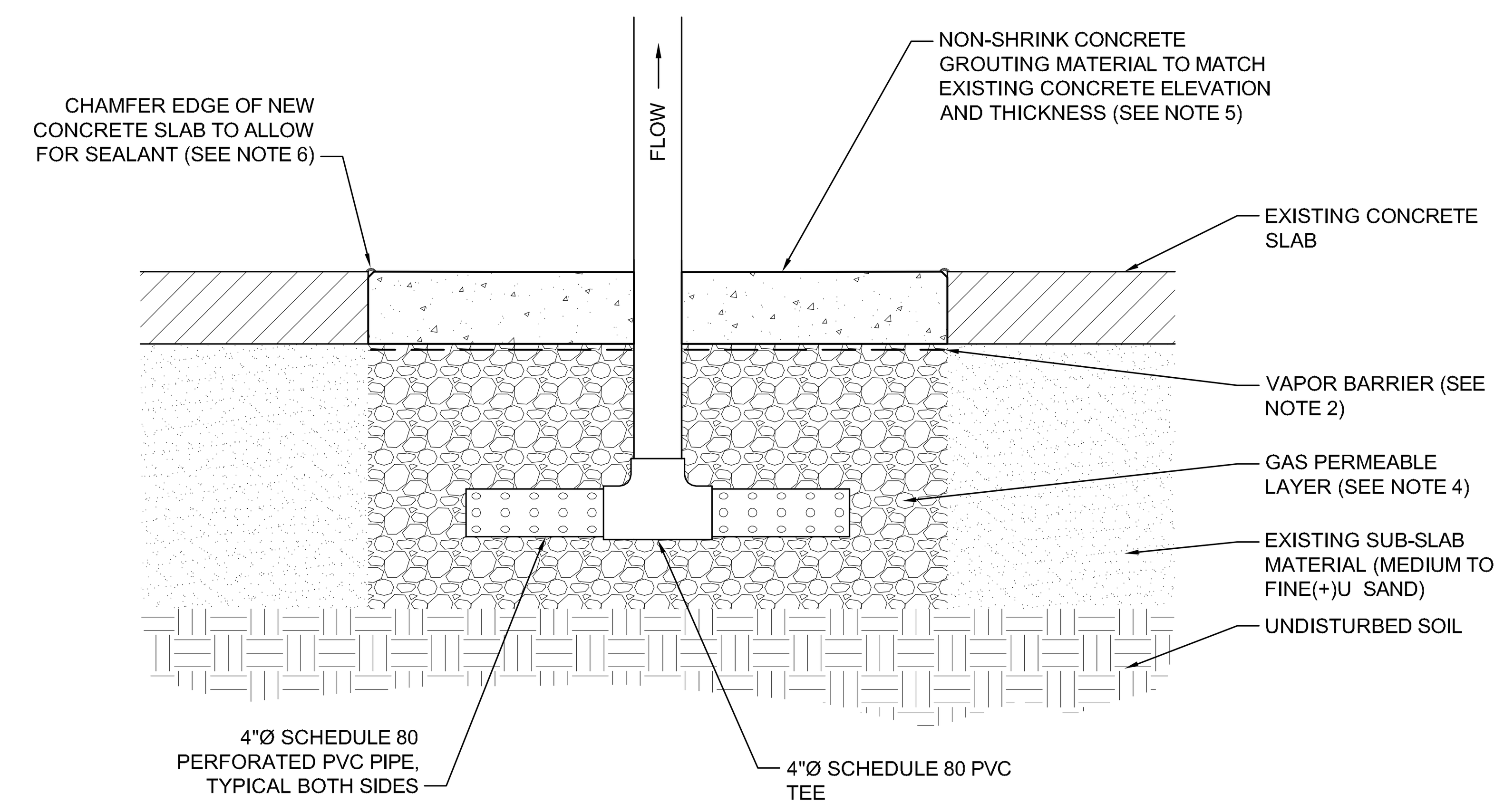


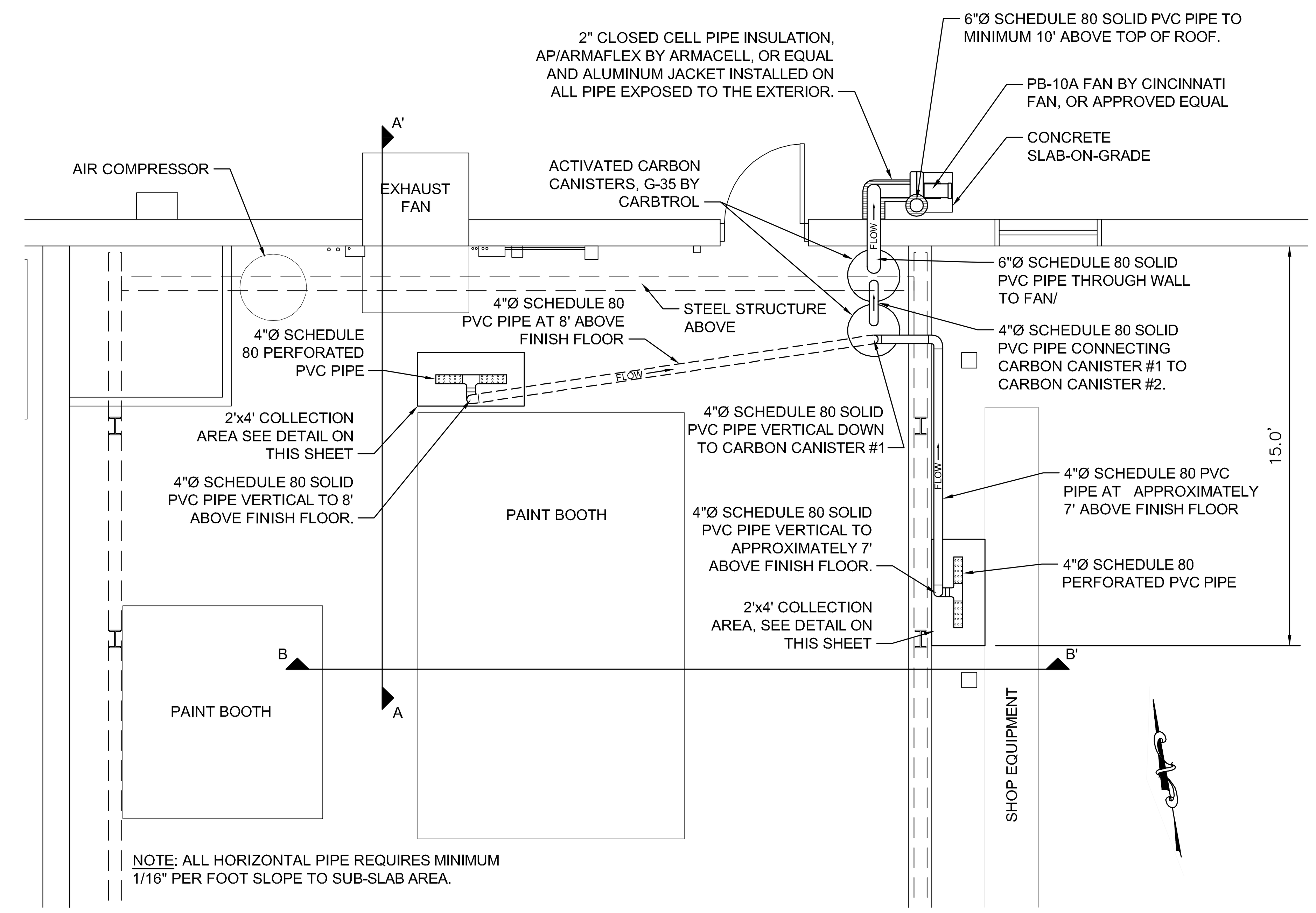
PLATE 1



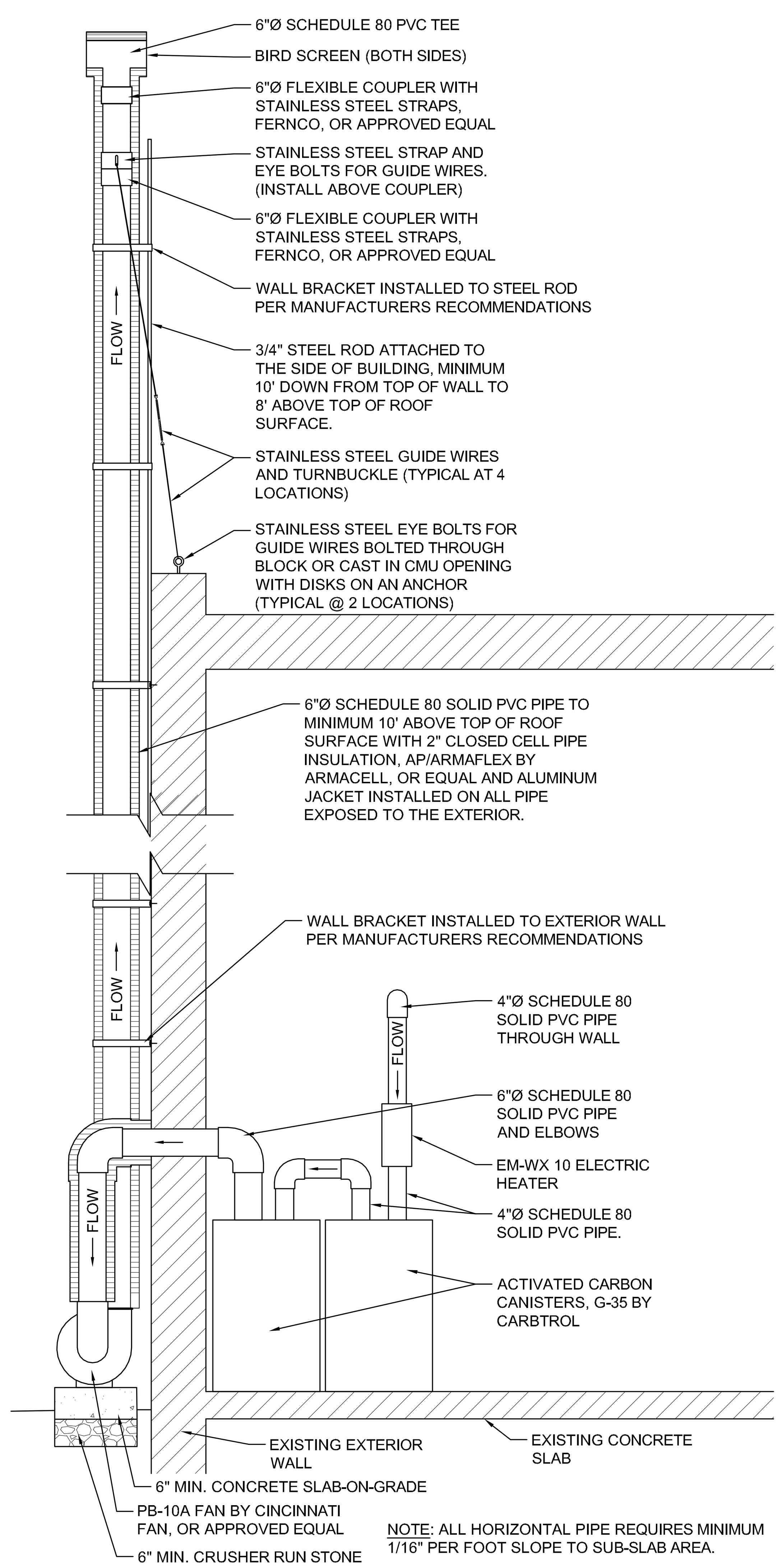
COLLECTION AREA PLAN DETAIL
1" = 1'-0"



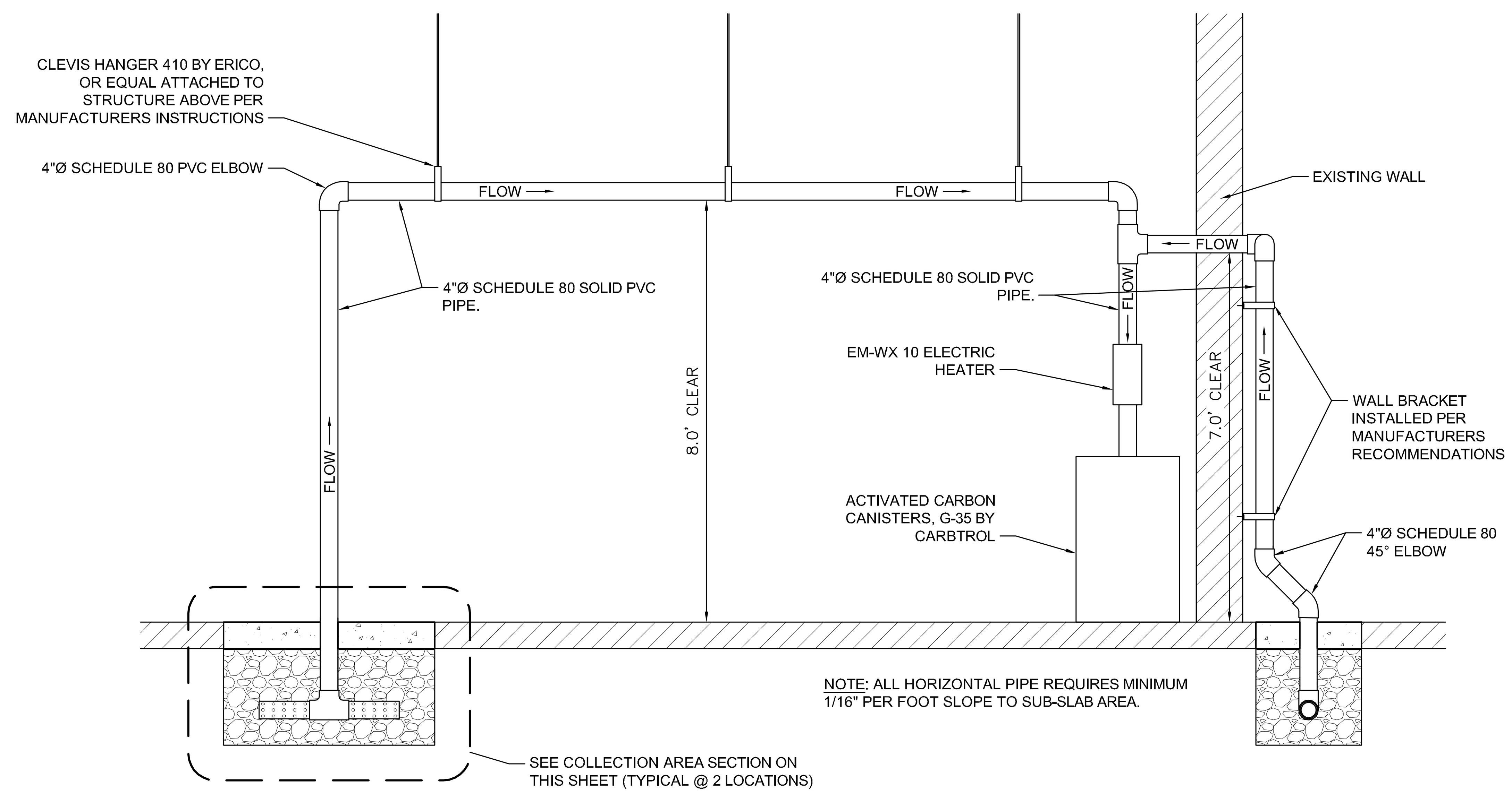
COLLECTION AREA SECTION
1" = 1'-0"



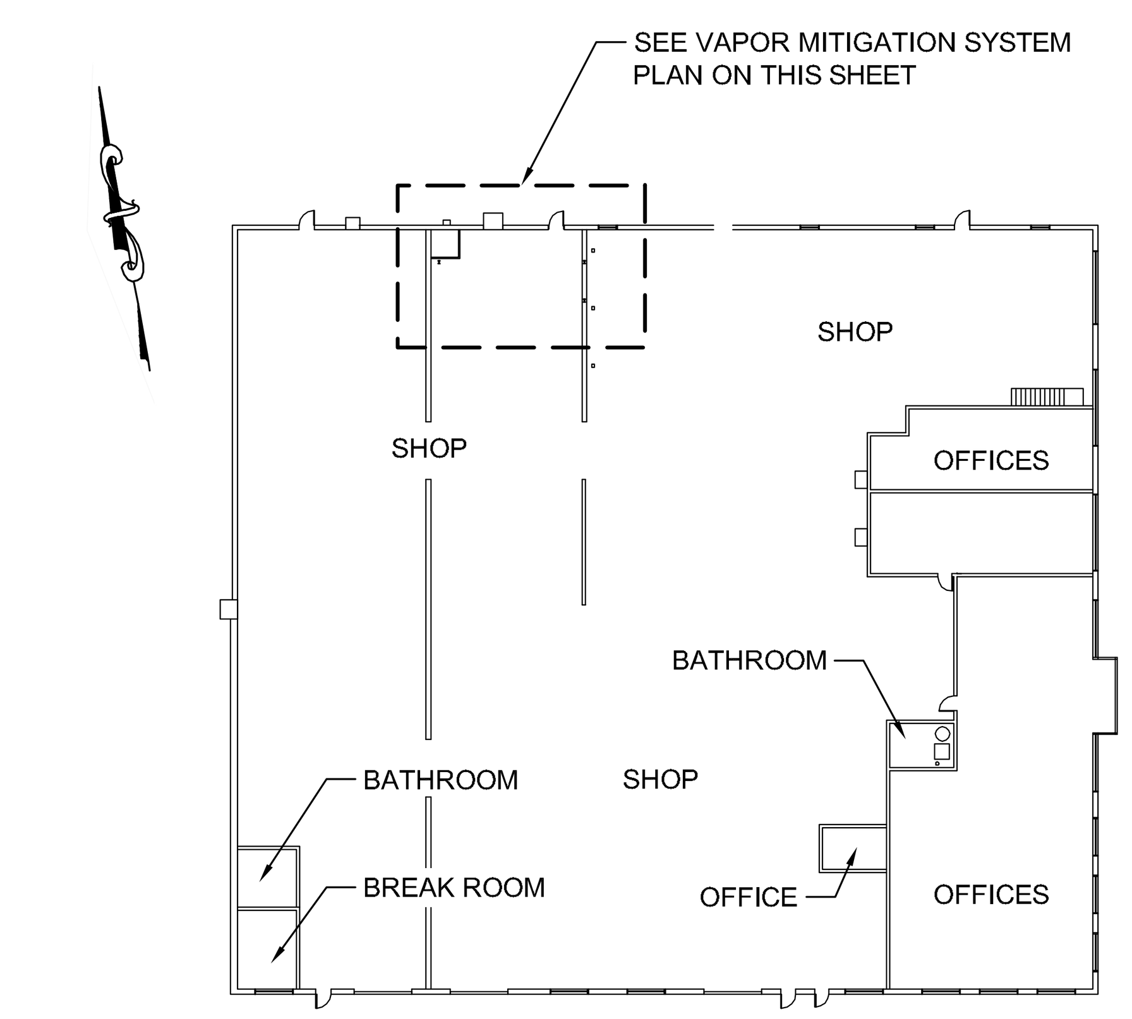
VAPOR MITIGATION SYSTEM PLAN
1/4" = 1'-0"



VAPOR MITIGATION SYSTEM SECTION B-B'
1/2" = 1'-0"



VAPOR MITIGATION SYSTEM SECTION A-A'
1/2" = 1'-0"



KEY PLAN
1" = 40'

NOTES:

1. FOR ALL SOLID PIPE, DUCT, AND FITTINGS, INCH DIMENSION REFERS TO NOMINAL DIAMETER.
2. VAPOR BARRIER WILL BE 10 MIL POLYETHYLENE.
3. ALL PENETRATIONS NEED TO BE TIGHT FITTING AND SEALED.
4. GAS PERMEABLE LAYER PLACED IN TRENCH AS BACKFILL WILL BE CLEAN CRUSHED STONE OR CLEAN CRUSHED GRAVEL MEETING AASHTO M43 SIZE NO. 57 SPECIFICATIONS, NYSDOT DESIGNATION 703-2 SIZE 2 ON TABLE 703-4, OR APPROVED EQUAL.
5. NON-SHRINK CONCRETE GROUTING MATERIAL PER NYSDOT STANDARD SPECIFICATIONS DESIGNATION 701-05 CONCRETE GROUTING MATERIAL
6. ELASTOMERIC JOINT SEALER OR FILLER WILL BE SIKAFLEX-1A ONE PART POLYURETHANE, ELASTOMERIC SEAL AND ADHESIVE, SONOLASTIC NP1 ELASTOMERIC JOINT FILLER CAULK, OR EQUAL.

PLATE 1

RECORD OF WORK

NO.	DATE	RECORD OF WORK	DRN	CKD	APPR

PROJECT

PROJ. ENGR.:	RLA
PROJ. NO.:	2011-31
PREPARED BY:	RLA
DRAFTED BY:	SDB
CHECKED BY:	
APPROVED BY:	
DATUM:	
CONTOUR INTERVAL =	FEET

AS NOTED

VAPOR MITIGATION SYSTEM DESIGN
TROY BELTING & SUPPLY CO.
70 COHOES ROAD
TOWN OF COLONIE — ALBANY CO., N.Y.

STERLING
Sterling Environmental Engineering, P.C.
24 Wade Road • Latham, New York 12110

DATE:	SCALE:	DWG. NO.	PLATE
4/24/15	AS NOTED	2011-31055	1

APPENDIX A

PILOT TEST
VAPOR PHASE CARBON USAGE ESTIMATE

VAPOR PHASE CARBON USAGE ESTIMATE

PROJECT: Troy Belting - NY

Partial Estimate

FLOW IN CFM: 100.00
FLOW IN CFD: 144000.00

PERFORMANCE:

CONTAMINANT	CONC(ppmv)	#CONT /DAY	#CARBON /DAY	#CONT /100,000cf	#CARBON /100,000cf
Benzene	1.42	0.04	0.40	0.03	0.28
Toluene	0.26	0.01	0.06	0.01	0.04
Ethylbenzene	0.07	0.00	0.02	0.00	0.01
Xylene	0.25	0.01	0.06	0.01	0.04
MTBE	0.07	0.00	0.04	0.00	0.03
1,1-Dichloroethane	0.07	0.00	0.12	0.00	0.09
1,2-Dichloroethane	0.07	0.00	0.12	0.00	0.09
1,1-Dichloroethylene	3.95	0.14	2.52	0.10	1.75
cis-1,2-Dichloroethylene	0.07	0.00	0.13	0.00	0.09
Carbon Tetrachloride	0.01	0.00	0.01	0.00	0.00
Chloroform	0.07	0.00	0.10	0.00	0.07
MEK	0.18	0.00	0.27	0.00	0.18
Methylene Chloride	0.18	0.01	1.03	0.00	0.72
Styrene	0.07	0.00	0.01	0.00	0.01
Tetrachloroethylene	1.77	0.11	0.33	0.07	0.23
1,1,1-Trichloroethane	0.07	0.00	0.03	0.00	0.02
Trichloroethylene	8.73	0.42	2.07	0.29	1.44
Acetone	1.77	0.04	2.43	0.03	1.69
Naphthalene	0.18	0.01	0.06	0.01	0.04
Butanol	1.78	0.05	0.26	0.03	0.18
Heptane	0.07	0.00	0.07	0.00	0.05
Hexane	0.07	0.00	0.06	0.00	0.04
Tetrahydrofuran	1.8	0.05	1.60	0.03	1.11
TOTALS	22.98	0.91	11.81	0.63	8.20

Calculation based on CARBTROL CSV carbon having a Carbon Tetrachloride number of: 65.00

NOTE: Carbon Usage Estimate is based on vapor stream temperature of 77 deg F and Relative Humidity less than 50%.
In particular, adsorption of chlorinated hydrocarbons is adversely affected by elevated humidity.

APPENDIX B

PHOTOGRAPH LOG

Photograph 1: View of soil vapor collection point installed in the 4-inch diameter PVC piping connecting the fan to the electric heater. Tubing connects the sample port to the 6-Liter Summa canisters in the bottom right of the photograph.

APPENDIX C

LABORATORY DATA

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
Tel: (802)660-1990

TestAmerica Job ID: 200-25846-1
Client Project/Site: Troy Belting

For:
Sterling Environmental Engineering PC
24 Wade Road
Latham, New York 12110

Attn: Mr. Mark Williams

Lisa Shaffer

Authorized for release by:
12/16/2014 9:31:32 AM

Lisa Shaffer, Project Manager II
(716)504-9816
lisa.shaffer@testamericainc.com

Table of Contents

Job ID: 200-25846-1

Laboratory: TestAmerica Burlington

Narrative

Job Narrative
200-25846-1

Comments
No additional comments.

Receipt
The samples were received on 12/10/2014 11:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 21.0° C.

Except:

The container label for the following sample(s) did not match the information listed on the Chain-of-Custody (COC): P2B-3B_120914 (200-25846-2). The container labels list P2B-3A_120915 while the COC lists P2B-3B_120914, it was logged in per COC.

Air Toxics
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25846-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25846-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-25846-1	P2A-3A_120914	Air	12/09/14 14:25	12/10/14 11:30
200-25846-2	P2B-3B_120914	Air	12/09/14 14:25	12/10/14 11:30

Client Sample ID: P2A-3A_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.0	0.89	ppb v/v			12/12/14 08:26	29.8
1,1,2,2-Tetrachloroethane	ND		6.0	1.0	ppb v/v			12/12/14 08:26	29.8
1,1,2-Trichloroethane	ND		6.0	1.1	ppb v/v			12/12/14 08:26	29.8
1,1-Dichloroethane	ND		6.0	0.83	ppb v/v			12/12/14 08:26	29.8
1,1-Dichloroethene	ND		6.0	0.30	ppb v/v			12/12/14 08:26	29.8
1,2,4-Trichlorobenzene	ND		15	1.0	ppb v/v			12/12/14 08:26	29.8
1,2,4-Trimethylbenzene	**5.6**	**J**	6.0	0.48	ppb v/v			12/12/14 08:26	29.8
1,2-Dibromoethane	ND		6.0	0.54	ppb v/v			12/12/14 08:26	29.8
1,2-Dichlorobenzene	ND		6.0	0.54	ppb v/v			12/12/14 08:26	29.8
1,2-Dichloroethane	ND		6.0	1.5	ppb v/v			12/12/14 08:26	29.8
1,2-Dichloroethene, Total	**110**		6.0	1.6	ppb v/v			12/12/14 08:26	29.8
1,2-Dichloropropane	ND		6.0	1.0	ppb v/v			12/12/14 08:26	29.8
1,2-Dichlorotetrafluoroethane	ND		6.0	1.5	ppb v/v			12/12/14 08:26	29.8
1,3,5-Trimethylbenzene	**2.6**	**J**	6.0	0.57	ppb v/v			12/12/14 08:26	29.8
1,3-Butadiene	ND		6.0	1.1	ppb v/v			12/12/14 08:26	29.8
1,3-Dichlorobenzene	ND		6.0	0.60	ppb v/v			12/12/14 08:26	29.8
1,4-Dichlorobenzene	ND		6.0	0.57	ppb v/v			12/12/14 08:26	29.8
1,4-Dioxane	ND		150	4.8	ppb v/v			12/12/14 08:26	29.8
2,2,4-Trimethylpentane	ND		6.0	0.69	ppb v/v			12/12/14 08:26	29.8
2-Chlorotoluene	ND		6.0	0.92	ppb v/v			12/12/14 08:26	29.8
3-Chloropropene	ND		15	4.8	ppb v/v			12/12/14 08:26	29.8
4-Ethyltoluene	**3.5**	**J**	6.0	0.60	ppb v/v			12/12/14 08:26	29.8
4-Isopropyltoluene	ND		6.0	0.60	ppb v/v			12/12/14 08:26	29.8
Acetone	**870**		150	21	ppb v/v			12/12/14 08:26	29.8
Benzene	**1.1**	**J**	6.0	0.86	ppb v/v			12/12/14 08:26	29.8
Benzyl chloride	ND		6.0	0.54	ppb v/v			12/12/14 08:26	29.8
Bromodichloromethane	ND		6.0	0.86	ppb v/v			12/12/14 08:26	29.8
Bromoethene(Vinyl Bromide)	ND		6.0	0.60	ppb v/v			12/12/14 08:26	29.8
Bromoform	ND		6.0	0.75	ppb v/v			12/12/14 08:26	29.8
Bromomethane	ND		6.0	1.3	ppb v/v			12/12/14 08:26	29.8
Carbon disulfide	ND		15	0.89	ppb v/v			12/12/14 08:26	29.8
Carbon tetrachloride	ND		1.2	0.33	ppb v/v			12/12/14 08:26	29.8
Chlorobenzene	ND		6.0	0.54	ppb v/v			12/12/14 08:26	29.8
Chloroethane	ND		15	1.8	ppb v/v			12/12/14 08:26	29.8
Chloroform	ND		6.0	1.1	ppb v/v			12/12/14 08:26	29.8
Chloromethane	ND		15	1.8	ppb v/v			12/12/14 08:26	29.8
cis-1,2-Dichloroethene	**66**		6.0	0.89	ppb v/v			12/12/14 08:26	29.8
cis-1,3-Dichloropropene	ND		6.0	0.86	ppb v/v			12/12/14 08:26	29.8
Cumene	ND		6.0	0.57	ppb v/v			12/12/14 08:26	29.8
Cyclohexane	ND		6.0	0.30	ppb v/v			12/12/14 08:26	29.8
Dibromochloromethane	ND		6.0	0.60	ppb v/v			12/12/14 08:26	29.8
Dichlorodifluoromethane	ND		15	1.7	ppb v/v			12/12/14 08:26	29.8
Ethylbenzene	**87**		6.0	0.60	ppb v/v			12/12/14 08:26	29.8
Freon 22	ND		15	2.4	ppb v/v			12/12/14 08:26	29.8
Freon TF	ND		6.0	1.2	ppb v/v			12/12/14 08:26	29.8
Hexachlorobutadiene	ND		6.0	1.1	ppb v/v			12/12/14 08:26	29.8
Isopropyl alcohol	**42**	**J**	150	4.5	ppb v/v			12/12/14 08:26	29.8
m,p-Xylene	**340**		15	0.75	ppb v/v			12/12/14 08:26	29.8

Client Sample ID: P2A-3A_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		15	5.1	ppb v/v			12/12/14 08:26	29.8
Methyl Ethyl Ketone	**250**		15	2.7	ppb v/v			12/12/14 08:26	29.8
methyl isobutyl ketone	**38**		15	5.4	ppb v/v			12/12/14 08:26	29.8
Methyl methacrylate	ND		15	2.9	ppb v/v			12/12/14 08:26	29.8
Methyl tert-butyl ether	ND		6.0	0.66	ppb v/v			12/12/14 08:26	29.8
Methylene Chloride	ND		15	3.6	ppb v/v			12/12/14 08:26	29.8
Naphthalene	ND		15	0.89	ppb v/v			12/12/14 08:26	29.8
n-Butane	**200**		15	5.4	ppb v/v			12/12/14 08:26	29.8
n-Butylbenzene	ND		6.0	0.83	ppb v/v			12/12/14 08:26	29.8
n-Heptane	ND		6.0	1.1	ppb v/v			12/12/14 08:26	29.8
n-Hexane	ND		6.0	0.83	ppb v/v			12/12/14 08:26	29.8
n-Propylbenzene	**2.2**	**J**	6.0	0.80	ppb v/v			12/12/14 08:26	29.8
sec-Butylbenzene	ND		6.0	0.63	ppb v/v			12/12/14 08:26	29.8
Styrene	ND		6.0	0.48	ppb v/v			12/12/14 08:26	29.8
tert-Butyl alcohol	ND		150	3.6	ppb v/v			12/12/14 08:26	29.8
tert-Butylbenzene	ND		6.0	0.60	ppb v/v			12/12/14 08:26	29.8
Tetrachloroethene	**560**		6.0	0.89	ppb v/v			12/12/14 08:26	29.8
Tetrahydrofuran	ND		150	5.4	ppb v/v			12/12/14 08:26	29.8
Toluene	**410**		6.0	0.75	ppb v/v			12/12/14 08:26	29.8
trans-1,2-Dichloroethene	**46**		6.0	0.80	ppb v/v			12/12/14 08:26	29.8
trans-1,3-Dichloropropene	ND		6.0	0.77	ppb v/v			12/12/14 08:26	29.8
Trichloroethene	**550**		1.2	0.89	ppb v/v			12/12/14 08:26	29.8
Trichlorofluoromethane	ND		6.0	1.3	ppb v/v			12/12/14 08:26	29.8
Vinyl chloride	**1.7**		1.2	0.77	ppb v/v			12/12/14 08:26	29.8
Xylene (total)	**450**		6.0	1.2	ppb v/v			12/12/14 08:26	29.8
Xylene, o-	**110**		6.0	0.54	ppb v/v			12/12/14 08:26	29.8

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		33	4.9	ug/m3			12/12/14 08:26	29.8
1,1,2,2-Tetrachloroethane	ND		41	7.0	ug/m3			12/12/14 08:26	29.8
1,1,2-Trichloroethane	ND		33	6.0	ug/m3			12/12/14 08:26	29.8
1,1-Dichloroethane	ND		24	3.4	ug/m3			12/12/14 08:26	29.8
1,1-Dichloroethene	ND		24	1.2	ug/m3			12/12/14 08:26	29.8
1,2,4-Trichlorobenzene	ND		110	7.5	ug/m3			12/12/14 08:26	29.8
1,2,4-Trimethylbenzene	**28**	**J**	29	2.3	ug/m3			12/12/14 08:26	29.8
1,2-Dibromoethane	ND		46	4.1	ug/m3			12/12/14 08:26	29.8
1,2-Dichlorobenzene	ND		36	3.2	ug/m3			12/12/14 08:26	29.8
1,2-Dichloroethane	ND		24	6.3	ug/m3			12/12/14 08:26	29.8
1,2-Dichloroethene, Total	**440**		24	6.3	ug/m3			12/12/14 08:26	29.8
1,2-Dichloropropane	ND		28	4.8	ug/m3			12/12/14 08:26	29.8
1,2-Dichlorotetrafluoroethane	ND		42	11	ug/m3			12/12/14 08:26	29.8
1,3,5-Trimethylbenzene	**13**	**J**	29	2.8	ug/m3			12/12/14 08:26	29.8
1,3-Butadiene	ND		13	2.4	ug/m3			12/12/14 08:26	29.8
1,3-Dichlorobenzene	ND		36	3.6	ug/m3			12/12/14 08:26	29.8
1,4-Dichlorobenzene	ND		36	3.4	ug/m3			12/12/14 08:26	29.8
1,4-Dioxane	ND		540	17	ug/m3			12/12/14 08:26	29.8
2,2,4-Trimethylpentane	ND		28	3.2	ug/m3			12/12/14 08:26	29.8
2-Chlorotoluene	ND		31	4.8	ug/m3			12/12/14 08:26	29.8
3-Chloropropene	ND		47	15	ug/m3			12/12/14 08:26	29.8

Client Sample ID: P2A-3A_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	**17**	**J**	29	2.9	ug/m3			12/12/14 08:26	29.8
4-Isopropyltoluene	ND		33	3.3	ug/m3			12/12/14 08:26	29.8
Acetone	**2100**		350	49	ug/m3			12/12/14 08:26	29.8
Benzene	**3.4**	**J**	19	2.8	ug/m3			12/12/14 08:26	29.8
Benzyl chloride	ND		31	2.8	ug/m3			12/12/14 08:26	29.8
Bromodichloromethane	ND		40	5.8	ug/m3			12/12/14 08:26	29.8
Bromoethene(Vinyl Bromide)	ND		26	2.6	ug/m3			12/12/14 08:26	29.8
Bromoform	ND		62	7.7	ug/m3			12/12/14 08:26	29.8
Bromomethane	ND		23	5.1	ug/m3			12/12/14 08:26	29.8
Carbon disulfide	ND		46	2.8	ug/m3			12/12/14 08:26	29.8
Carbon tetrachloride	ND		7.5	2.1	ug/m3			12/12/14 08:26	29.8
Chlorobenzene	ND		27	2.5	ug/m3			12/12/14 08:26	29.8
Chloroethane	ND		39	4.8	ug/m3			12/12/14 08:26	29.8
Chloroform	ND		29	5.5	ug/m3			12/12/14 08:26	29.8
Chloromethane	ND		31	3.7	ug/m3			12/12/14 08:26	29.8
cis-1,2-Dichloroethene	**260**		24	3.5	ug/m3			12/12/14 08:26	29.8
cis-1,3-Dichloropropene	ND		27	3.9	ug/m3			12/12/14 08:26	29.8
Cumene	ND		29	2.8	ug/m3			12/12/14 08:26	29.8
Cyclohexane	ND		21	1.0	ug/m3			12/12/14 08:26	29.8
Dibromochloromethane	ND		51	5.1	ug/m3			12/12/14 08:26	29.8
Dichlorodifluoromethane	ND		74	8.3	ug/m3			12/12/14 08:26	29.8
Ethylbenzene	**380**		26	2.6	ug/m3			12/12/14 08:26	29.8
Freon 22	ND		53	8.4	ug/m3			12/12/14 08:26	29.8
Freon TF	ND		46	9.4	ug/m3			12/12/14 08:26	29.8
Hexachlorobutadiene	ND		64	11	ug/m3			12/12/14 08:26	29.8
Isopropyl alcohol	**100**	**J**	370	11	ug/m3			12/12/14 08:26	29.8
m,p-Xylene	**1500**		65	3.2	ug/m3			12/12/14 08:26	29.8
Methyl Butyl Ketone (2-Hexanone)	ND		61	21	ug/m3			12/12/14 08:26	29.8
Methyl Ethyl Ketone	**750**		44	8.1	ug/m3			12/12/14 08:26	29.8
methyl isobutyl ketone	**160**		61	22	ug/m3			12/12/14 08:26	29.8
Methyl methacrylate	ND		61	12	ug/m3			12/12/14 08:26	29.8
Methyl tert-butyl ether	ND		21	2.4	ug/m3			12/12/14 08:26	29.8
Methylene Chloride	ND		52	12	ug/m3			12/12/14 08:26	29.8
Naphthalene	ND		78	4.7	ug/m3			12/12/14 08:26	29.8
n-Butane	**480**		35	13	ug/m3			12/12/14 08:26	29.8
n-Butylbenzene	ND		33	4.6	ug/m3			12/12/14 08:26	29.8
n-Heptane	ND		24	4.5	ug/m3			12/12/14 08:26	29.8
n-Hexane	ND		21	2.9	ug/m3			12/12/14 08:26	29.8
n-Propylbenzene	**11**	**J**	29	4.0	ug/m3			12/12/14 08:26	29.8
sec-Butylbenzene	ND		33	3.4	ug/m3			12/12/14 08:26	29.8
Styrene	ND		25	2.0	ug/m3			12/12/14 08:26	29.8
tert-Butyl alcohol	ND		450	11	ug/m3			12/12/14 08:26	29.8
tert-Butylbenzene	ND		33	3.3	ug/m3			12/12/14 08:26	29.8
Tetrachloroethene	**3800**		40	6.1	ug/m3			12/12/14 08:26	29.8
Tetrahydrofuran	ND		440	16	ug/m3			12/12/14 08:26	29.8
Toluene	**1500**		22	2.8	ug/m3			12/12/14 08:26	29.8
trans-1,2-Dichloroethene	**180**		24	3.2	ug/m3			12/12/14 08:26	29.8
trans-1,3-Dichloropropene	ND		27	3.5	ug/m3			12/12/14 08:26	29.8

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25846-1

Client Sample ID: P2A-3A_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**2900**		6.4	4.8	ug/m3			12/12/14 08:26	29.8
Trichlorofluoromethane	ND		33	7.5	ug/m3			12/12/14 08:26	29.8
Vinyl chloride	**4.3**		3.0	2.0	ug/m3			12/12/14 08:26	29.8
Xylene (total)	**2000**		26	5.3	ug/m3			12/12/14 08:26	29.8
Xylene, o-	**490**		26	2.3	ug/m3			12/12/14 08:26	29.8

Client Sample ID: P2B-3B_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**3.0**	**J**	5.9	0.89	ppb v/v			12/12/14 09:12	29.7
1,1,2,2-Tetrachloroethane	ND		5.9	1.0	ppb v/v			12/12/14 09:12	29.7
1,1,2-Trichloroethane	ND		5.9	1.1	ppb v/v			12/12/14 09:12	29.7
1,1-Dichloroethane	ND		5.9	0.83	ppb v/v			12/12/14 09:12	29.7
1,1-Dichloroethene	ND		5.9	0.30	ppb v/v			12/12/14 09:12	29.7
1,2,4-Trichlorobenzene	ND		15	1.0	ppb v/v			12/12/14 09:12	29.7
1,2,4-Trimethylbenzene	**8.6**		5.9	0.48	ppb v/v			12/12/14 09:12	29.7
1,2-Dibromoethane	ND		5.9	0.53	ppb v/v			12/12/14 09:12	29.7
1,2-Dichlorobenzene	ND		5.9	0.53	ppb v/v			12/12/14 09:12	29.7
1,2-Dichloroethane	ND		5.9	1.5	ppb v/v			12/12/14 09:12	29.7
1,2-Dichloroethene, Total	**110**		5.9	1.6	ppb v/v			12/12/14 09:12	29.7
1,2-Dichloropropane	ND		5.9	1.0	ppb v/v			12/12/14 09:12	29.7
1,2-Dichlorotetrafluoroethane	ND		5.9	1.5	ppb v/v			12/12/14 09:12	29.7
1,3,5-Trimethylbenzene	**3.6**	**J**	5.9	0.56	ppb v/v			12/12/14 09:12	29.7
1,3-Butadiene	ND		5.9	1.1	ppb v/v			12/12/14 09:12	29.7
1,3-Dichlorobenzene	ND		5.9	0.59	ppb v/v			12/12/14 09:12	29.7
1,4-Dichlorobenzene	**2.4**	**J**	5.9	0.56	ppb v/v			12/12/14 09:12	29.7
1,4-Dioxane	**6.7**	**J**	150	4.8	ppb v/v			12/12/14 09:12	29.7
2,2,4-Trimethylpentane	ND		5.9	0.68	ppb v/v			12/12/14 09:12	29.7
2-Chlorotoluene	ND		5.9	0.92	ppb v/v			12/12/14 09:12	29.7
3-Chloropropene	ND		15	4.8	ppb v/v			12/12/14 09:12	29.7
4-Ethyltoluene	**4.1**	**J**	5.9	0.59	ppb v/v			12/12/14 09:12	29.7
4-Isopropyltoluene	**3.8**	**J**	5.9	0.59	ppb v/v			12/12/14 09:12	29.7
Acetone	**850**		150	20	ppb v/v			12/12/14 09:12	29.7
Benzene	**0.99**	**J**	5.9	0.86	ppb v/v			12/12/14 09:12	29.7
Benzyl chloride	ND		5.9	0.53	ppb v/v			12/12/14 09:12	29.7
Bromodichloromethane	ND		5.9	0.86	ppb v/v			12/12/14 09:12	29.7
Bromoethene(Vinyl Bromide)	ND		5.9	0.59	ppb v/v			12/12/14 09:12	29.7
Bromoform	ND		5.9	0.74	ppb v/v			12/12/14 09:12	29.7
Bromomethane	ND		5.9	1.3	ppb v/v			12/12/14 09:12	29.7
Carbon disulfide	ND		15	0.89	ppb v/v			12/12/14 09:12	29.7
Carbon tetrachloride	ND		1.2	0.33	ppb v/v			12/12/14 09:12	29.7
Chlorobenzene	ND		5.9	0.53	ppb v/v			12/12/14 09:12	29.7
Chloroethane	ND		15	1.8	ppb v/v			12/12/14 09:12	29.7
Chloroform	ND		5.9	1.1	ppb v/v			12/12/14 09:12	29.7
Chloromethane	ND		15	1.8	ppb v/v			12/12/14 09:12	29.7
cis-1,2-Dichloroethene	**68**		5.9	0.89	ppb v/v			12/12/14 09:12	29.7
cis-1,3-Dichloropropene	ND		5.9	0.86	ppb v/v			12/12/14 09:12	29.7
Cumene	**1.5**	**J**	5.9	0.56	ppb v/v			12/12/14 09:12	29.7
Cyclohexane	ND		5.9	0.30	ppb v/v			12/12/14 09:12	29.7
Dibromochloromethane	ND		5.9	0.59	ppb v/v			12/12/14 09:12	29.7
Dichlorodifluoromethane	ND		15	1.7	ppb v/v			12/12/14 09:12	29.7
Ethylbenzene	**88**		5.9	0.59	ppb v/v			12/12/14 09:12	29.7
Freon 22	ND		15	2.4	ppb v/v			12/12/14 09:12	29.7
Freon TF	ND		5.9	1.2	ppb v/v			12/12/14 09:12	29.7
Hexachlorobutadiene	ND		5.9	1.1	ppb v/v			12/12/14 09:12	29.7
Isopropyl alcohol	**19**	**J**	150	4.5	ppb v/v			12/12/14 09:12	29.7
m,p-Xylene	**340**		15	0.74	ppb v/v			12/12/14 09:12	29.7

Client Sample ID: P2B-3B_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		15	5.0	ppb v/v			12/12/14 09:12	29.7
Methyl Ethyl Ketone	**250**		15	2.7	ppb v/v			12/12/14 09:12	29.7
methyl isobutyl ketone	**29**		15	5.3	ppb v/v			12/12/14 09:12	29.7
Methyl methacrylate	ND		15	2.9	ppb v/v			12/12/14 09:12	29.7
Methyl tert-butyl ether	ND		5.9	0.65	ppb v/v			12/12/14 09:12	29.7
Methylene Chloride	ND		15	3.6	ppb v/v			12/12/14 09:12	29.7
Naphthalene	ND		15	0.89	ppb v/v			12/12/14 09:12	29.7
n-Butane	**190**		15	5.3	ppb v/v			12/12/14 09:12	29.7
n-Butylbenzene	ND		5.9	0.83	ppb v/v			12/12/14 09:12	29.7
n-Heptane	**5.6**	J	5.9	1.1	ppb v/v			12/12/14 09:12	29.7
n-Hexane	ND		5.9	0.83	ppb v/v			12/12/14 09:12	29.7
n-Propylbenzene	ND		5.9	0.80	ppb v/v			12/12/14 09:12	29.7
sec-Butylbenzene	ND		5.9	0.62	ppb v/v			12/12/14 09:12	29.7
Styrene	ND		5.9	0.48	ppb v/v			12/12/14 09:12	29.7
tert-Butyl alcohol	ND		150	3.6	ppb v/v			12/12/14 09:12	29.7
tert-Butylbenzene	ND		5.9	0.59	ppb v/v			12/12/14 09:12	29.7
Tetrachloroethene	**560**		5.9	0.89	ppb v/v			12/12/14 09:12	29.7
Tetrahydrofuran	ND		150	5.3	ppb v/v			12/12/14 09:12	29.7
Toluene	**400**		5.9	0.74	ppb v/v			12/12/14 09:12	29.7
trans-1,2-Dichloroethene	**45**		5.9	0.80	ppb v/v			12/12/14 09:12	29.7
trans-1,3-Dichloropropene	ND		5.9	0.77	ppb v/v			12/12/14 09:12	29.7
Trichloroethene	**540**		1.2	0.89	ppb v/v			12/12/14 09:12	29.7
Trichlorofluoromethane	ND		5.9	1.3	ppb v/v			12/12/14 09:12	29.7
Vinyl chloride	**1.9**		1.2	0.77	ppb v/v			12/12/14 09:12	29.7
Xylene (total)	**450**		5.9	1.2	ppb v/v			12/12/14 09:12	29.7
Xylene, o-	**110**		5.9	0.53	ppb v/v			12/12/14 09:12	29.7

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**16**	J	32	4.9	ug/m3			12/12/14 09:12	29.7
1,1,2,2-Tetrachloroethane	ND		41	6.9	ug/m3			12/12/14 09:12	29.7
1,1,2-Trichloroethane	ND		32	6.0	ug/m3			12/12/14 09:12	29.7
1,1-Dichloroethane	ND		24	3.4	ug/m3			12/12/14 09:12	29.7
1,1-Dichloroethene	ND		24	1.2	ug/m3			12/12/14 09:12	29.7
1,2,4-Trichlorobenzene	ND		110	7.5	ug/m3			12/12/14 09:12	29.7
1,2,4-Trimethylbenzene	**42**		29	2.3	ug/m3			12/12/14 09:12	29.7
1,2-Dibromoethane	ND		46	4.1	ug/m3			12/12/14 09:12	29.7
1,2-Dichlorobenzene	ND		36	3.2	ug/m3			12/12/14 09:12	29.7
1,2-Dichloroethane	ND		24	6.3	ug/m3			12/12/14 09:12	29.7
1,2-Dichloroethene, Total	**450**		24	6.2	ug/m3			12/12/14 09:12	29.7
1,2-Dichloropropane	ND		27	4.8	ug/m3			12/12/14 09:12	29.7
1,2-Dichlorotetrafluoroethane	ND		42	11	ug/m3			12/12/14 09:12	29.7
1,3,5-Trimethylbenzene	**17**	J	29	2.8	ug/m3			12/12/14 09:12	29.7
1,3-Butadiene	ND		13	2.4	ug/m3			12/12/14 09:12	29.7
1,3-Dichlorobenzene	ND		36	3.6	ug/m3			12/12/14 09:12	29.7
1,4-Dichlorobenzene	**15**	J	36	3.4	ug/m3			12/12/14 09:12	29.7
1,4-Dioxane	**24**	J	540	17	ug/m3			12/12/14 09:12	29.7
2,2,4-Trimethylpentane	ND		28	3.2	ug/m3			12/12/14 09:12	29.7
2-Chlorotoluene	ND		31	4.8	ug/m3			12/12/14 09:12	29.7
3-Chloropropene	ND		46	15	ug/m3			12/12/14 09:12	29.7

Client Sample ID: P2B-3B_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	**20**	**J**	29	2.9	ug/m3			12/12/14 09:12	29.7
4-Isopropyltoluene	**21**	**J**	33	3.3	ug/m3			12/12/14 09:12	29.7
Acetone	**2000**		350	49	ug/m3			12/12/14 09:12	29.7
Benzene	**3.2**	**J**	19	2.8	ug/m3			12/12/14 09:12	29.7
Benzyl chloride	ND		31	2.8	ug/m3			12/12/14 09:12	29.7
Bromodichloromethane	ND		40	5.8	ug/m3			12/12/14 09:12	29.7
Bromoethene(Vinyl Bromide)	ND		26	2.6	ug/m3			12/12/14 09:12	29.7
Bromoform	ND		61	7.7	ug/m3			12/12/14 09:12	29.7
Bromomethane	ND		23	5.1	ug/m3			12/12/14 09:12	29.7
Carbon disulfide	ND		46	2.8	ug/m3			12/12/14 09:12	29.7
Carbon tetrachloride	ND		7.5	2.1	ug/m3			12/12/14 09:12	29.7
Chlorobenzene	ND		27	2.5	ug/m3			12/12/14 09:12	29.7
Chloroethane	ND		39	4.8	ug/m3			12/12/14 09:12	29.7
Chloroform	ND		29	5.5	ug/m3			12/12/14 09:12	29.7
Chloromethane	ND		31	3.7	ug/m3			12/12/14 09:12	29.7
cis-1,2-Dichloroethene	**270**		24	3.5	ug/m3			12/12/14 09:12	29.7
cis-1,3-Dichloropropene	ND		27	3.9	ug/m3			12/12/14 09:12	29.7
Cumene	**7.4**	**J**	29	2.8	ug/m3			12/12/14 09:12	29.7
Cyclohexane	ND		20	1.0	ug/m3			12/12/14 09:12	29.7
Dibromochloromethane	ND		51	5.1	ug/m3			12/12/14 09:12	29.7
Dichlorodifluoromethane	ND		73	8.2	ug/m3			12/12/14 09:12	29.7
Ethylbenzene	**380**		26	2.6	ug/m3			12/12/14 09:12	29.7
Freon 22	ND		53	8.4	ug/m3			12/12/14 09:12	29.7
Freon TF	ND		46	9.3	ug/m3			12/12/14 09:12	29.7
Hexachlorobutadiene	ND		63	11	ug/m3			12/12/14 09:12	29.7
Isopropyl alcohol	**46**	**J**	370	11	ug/m3			12/12/14 09:12	29.7
m,p-Xylene	**1500**		64	3.2	ug/m3			12/12/14 09:12	29.7
Methyl Butyl Ketone (2-Hexanone)	ND		61	21	ug/m3			12/12/14 09:12	29.7
Methyl Ethyl Ketone	**740**		44	8.1	ug/m3			12/12/14 09:12	29.7
methyl isobutyl ketone	**120**		61	22	ug/m3			12/12/14 09:12	29.7
Methyl methacrylate	ND		61	12	ug/m3			12/12/14 09:12	29.7
Methyl tert-butyl ether	ND		21	2.4	ug/m3			12/12/14 09:12	29.7
Methylene Chloride	ND		52	12	ug/m3			12/12/14 09:12	29.7
Naphthalene	ND		78	4.7	ug/m3			12/12/14 09:12	29.7
n-Butane	**460**		35	13	ug/m3			12/12/14 09:12	29.7
n-Butylbenzene	ND		33	4.6	ug/m3			12/12/14 09:12	29.7
n-Heptane	**23**	**J**	24	4.5	ug/m3			12/12/14 09:12	29.7
n-Hexane	ND		21	2.9	ug/m3			12/12/14 09:12	29.7
n-Propylbenzene	ND		29	3.9	ug/m3			12/12/14 09:12	29.7
sec-Butylbenzene	ND		33	3.4	ug/m3			12/12/14 09:12	29.7
Styrene	ND		25	2.0	ug/m3			12/12/14 09:12	29.7
tert-Butyl alcohol	ND		450	11	ug/m3			12/12/14 09:12	29.7
tert-Butylbenzene	ND		33	3.3	ug/m3			12/12/14 09:12	29.7
Tetrachloroethene	**3800**		40	6.0	ug/m3			12/12/14 09:12	29.7
Tetrahydrofuran	ND		440	16	ug/m3			12/12/14 09:12	29.7
Toluene	**1500**		22	2.8	ug/m3			12/12/14 09:12	29.7
trans-1,2-Dichloroethene	**180**		24	3.2	ug/m3			12/12/14 09:12	29.7
trans-1,3-Dichloropropene	ND		27	3.5	ug/m3			12/12/14 09:12	29.7

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25846-1

Client Sample ID: P2B-3B_120914
Date Collected: 12/09/14 14:25
Date Received: 12/10/14 11:30
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25846-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**2900**		6.4	4.8	ug/m3			12/12/14 09:12	29.7
Trichlorofluoromethane	ND		33	7.5	ug/m3			12/12/14 09:12	29.7
Vinyl chloride	**4.8**		3.0	2.0	ug/m3			12/12/14 09:12	29.7
Xylene (total)	**2000**		26	5.3	ug/m3			12/12/14 09:12	29.7
Xylene, o-	**480**		26	2.3	ug/m3			12/12/14 09:12	29.7

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Air - GC/MS VOA

Analysis Batch: 81960

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-25846-1	P2A-3A_120914	Total/NA	Air	TO-15	
200-25846-2	P2B-3B_120914	Total/NA	Air	TO-15	
LCS 200-81960/3	Lab Control Sample	Total/NA	Air	TO-15	
MB 200-81960/4	Method Blank	Total/NA	Air	TO-15	

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-81960/4
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.030	ppb v/v			12/11/14 14:02	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.034	ppb v/v			12/11/14 14:02	1
1,1,2-Trichloroethane	ND		0.20	0.037	ppb v/v			12/11/14 14:02	1
1,1-Dichloroethane	ND		0.20	0.028	ppb v/v			12/11/14 14:02	1
1,1-Dichloroethene	ND		0.20	0.010	ppb v/v			12/11/14 14:02	1
1,2,4-Trichlorobenzene	ND		0.50	0.034	ppb v/v			12/11/14 14:02	1
1,2,4-Trimethylbenzene	ND		0.20	0.016	ppb v/v			12/11/14 14:02	1
1,2-Dibromoethane	ND		0.20	0.018	ppb v/v			12/11/14 14:02	1
1,2-Dichlorobenzene	ND		0.20	0.018	ppb v/v			12/11/14 14:02	1
1,2-Dichloroethane	ND		0.20	0.052	ppb v/v			12/11/14 14:02	1
1,2-Dichloroethene, Total	ND		0.20	0.053	ppb v/v			12/11/14 14:02	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/11/14 14:02	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.052	ppb v/v			12/11/14 14:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.019	ppb v/v			12/11/14 14:02	1
1,3-Butadiene	ND		0.20	0.036	ppb v/v			12/11/14 14:02	1
1,3-Dichlorobenzene	ND		0.20	0.020	ppb v/v			12/11/14 14:02	1
1,4-Dichlorobenzene	ND		0.20	0.019	ppb v/v			12/11/14 14:02	1
1,4-Dioxane	ND		5.0	0.16	ppb v/v			12/11/14 14:02	1
2,2,4-Trimethylpentane	ND		0.20	0.023	ppb v/v			12/11/14 14:02	1
2-Chlorotoluene	ND		0.20	0.031	ppb v/v			12/11/14 14:02	1
3-Chloropropene	ND		0.50	0.16	ppb v/v			12/11/14 14:02	1
4-Ethyltoluene	ND		0.20	0.020	ppb v/v			12/11/14 14:02	1
4-Isopropyltoluene	ND		0.20	0.020	ppb v/v			12/11/14 14:02	1
Acetone	ND		5.0	0.69	ppb v/v			12/11/14 14:02	1
Benzene	ND		0.20	0.029	ppb v/v			12/11/14 14:02	1
Benzyl chloride	ND		0.20	0.018	ppb v/v			12/11/14 14:02	1
Bromodichloromethane	ND		0.20	0.029	ppb v/v			12/11/14 14:02	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.020	ppb v/v			12/11/14 14:02	1
Bromoform	ND		0.20	0.025	ppb v/v			12/11/14 14:02	1
Bromomethane	ND		0.20	0.044	ppb v/v			12/11/14 14:02	1
Carbon disulfide	ND		0.50	0.030	ppb v/v			12/11/14 14:02	1
Carbon tetrachloride	ND		0.040	0.011	ppb v/v			12/11/14 14:02	1
Chlorobenzene	ND		0.20	0.018	ppb v/v			12/11/14 14:02	1
Chloroethane	ND		0.50	0.061	ppb v/v			12/11/14 14:02	1
Chloroform	ND		0.20	0.038	ppb v/v			12/11/14 14:02	1
Chloromethane	ND		0.50	0.060	ppb v/v			12/11/14 14:02	1
cis-1,2-Dichloroethene	ND		0.20	0.030	ppb v/v			12/11/14 14:02	1
cis-1,3-Dichloropropene	ND		0.20	0.029	ppb v/v			12/11/14 14:02	1
Cumene	ND		0.20	0.019	ppb v/v			12/11/14 14:02	1
Cyclohexane	ND		0.20	0.010	ppb v/v			12/11/14 14:02	1
Dibromochloromethane	ND		0.20	0.020	ppb v/v			12/11/14 14:02	1
Dichlorodifluoromethane	ND		0.50	0.056	ppb v/v			12/11/14 14:02	1
Ethylbenzene	ND		0.20	0.020	ppb v/v			12/11/14 14:02	1
Freon 22	ND		0.50	0.080	ppb v/v			12/11/14 14:02	1
Freon TF	ND		0.20	0.041	ppb v/v			12/11/14 14:02	1
Hexachlorobutadiene	ND		0.20	0.036	ppb v/v			12/11/14 14:02	1
Isopropyl alcohol	ND		5.0	0.15	ppb v/v			12/11/14 14:02	1
m,p-Xylene	ND		0.50	0.025	ppb v/v			12/11/14 14:02	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-81960/4
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.17	ppb v/v			12/11/14 14:02	1
Methyl Ethyl Ketone	ND		0.50	0.092	ppb v/v			12/11/14 14:02	1
methyl isobutyl ketone	ND		0.50	0.18	ppb v/v			12/11/14 14:02	1
Methyl methacrylate	ND		0.50	0.096	ppb v/v			12/11/14 14:02	1
Methyl tert-butyl ether	ND		0.20	0.022	ppb v/v			12/11/14 14:02	1
Methylene Chloride	ND		0.50	0.12	ppb v/v			12/11/14 14:02	1
Naphthalene	ND		0.50	0.030	ppb v/v			12/11/14 14:02	1
n-Butane	ND		0.50	0.18	ppb v/v			12/11/14 14:02	1
n-Butylbenzene	ND		0.20	0.028	ppb v/v			12/11/14 14:02	1
n-Heptane	ND		0.20	0.037	ppb v/v			12/11/14 14:02	1
n-Hexane	ND		0.20	0.028	ppb v/v			12/11/14 14:02	1
n-Propylbenzene	ND		0.20	0.027	ppb v/v			12/11/14 14:02	1
sec-Butylbenzene	ND		0.20	0.021	ppb v/v			12/11/14 14:02	1
Styrene	ND		0.20	0.016	ppb v/v			12/11/14 14:02	1
tert-Butyl alcohol	ND		5.0	0.12	ppb v/v			12/11/14 14:02	1
tert-Butylbenzene	ND		0.20	0.020	ppb v/v			12/11/14 14:02	1
Tetrachloroethene	ND		0.20	0.030	ppb v/v			12/11/14 14:02	1
Tetrahydrofuran	ND		5.0	0.18	ppb v/v			12/11/14 14:02	1
Toluene	ND		0.20	0.025	ppb v/v			12/11/14 14:02	1
trans-1,2-Dichloroethene	ND		0.20	0.027	ppb v/v			12/11/14 14:02	1
trans-1,3-Dichloropropene	ND		0.20	0.026	ppb v/v			12/11/14 14:02	1
Trichloroethene	ND		0.040	0.030	ppb v/v			12/11/14 14:02	1
Trichlorofluoromethane	ND		0.20	0.045	ppb v/v			12/11/14 14:02	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			12/11/14 14:02	1
Xylene (total)	ND		0.20	0.041	ppb v/v			12/11/14 14:02	1
Xylene, o-	ND		0.20	0.018	ppb v/v			12/11/14 14:02	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.16	ug/m3			12/11/14 14:02	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.23	ug/m3			12/11/14 14:02	1
1,1,2-Trichloroethane	ND		1.1	0.20	ug/m3			12/11/14 14:02	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			12/11/14 14:02	1
1,1-Dichloroethene	ND		0.79	0.040	ug/m3			12/11/14 14:02	1
1,2,4-Trichlorobenzene	ND		3.7	0.25	ug/m3			12/11/14 14:02	1
1,2,4-Trimethylbenzene	ND		0.98	0.079	ug/m3			12/11/14 14:02	1
1,2-Dibromoethane	ND		1.5	0.14	ug/m3			12/11/14 14:02	1
1,2-Dichlorobenzene	ND		1.2	0.11	ug/m3			12/11/14 14:02	1
1,2-Dichloroethane	ND		0.81	0.21	ug/m3			12/11/14 14:02	1
1,2-Dichloroethene, Total	ND		0.79	0.21	ug/m3			12/11/14 14:02	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/11/14 14:02	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.36	ug/m3			12/11/14 14:02	1
1,3,5-Trimethylbenzene	ND		0.98	0.093	ug/m3			12/11/14 14:02	1
1,3-Butadiene	ND		0.44	0.080	ug/m3			12/11/14 14:02	1
1,3-Dichlorobenzene	ND		1.2	0.12	ug/m3			12/11/14 14:02	1
1,4-Dichlorobenzene	ND		1.2	0.11	ug/m3			12/11/14 14:02	1
1,4-Dioxane	ND		18	0.58	ug/m3			12/11/14 14:02	1
2,2,4-Trimethylpentane	ND		0.93	0.11	ug/m3			12/11/14 14:02	1
2-Chlorotoluene	ND		1.0	0.16	ug/m3			12/11/14 14:02	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-81960/4
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Chloropropene	ND		1.6	0.50	ug/m3			12/11/14 14:02	1
4-Ethyltoluene	ND		0.98	0.098	ug/m3			12/11/14 14:02	1
4-Isopropyltoluene	ND		1.1	0.11	ug/m3			12/11/14 14:02	1
Acetone	ND		12	1.6	ug/m3			12/11/14 14:02	1
Benzene	ND		0.64	0.093	ug/m3			12/11/14 14:02	1
Benzyl chloride	ND		1.0	0.093	ug/m3			12/11/14 14:02	1
Bromodichloromethane	ND		1.3	0.19	ug/m3			12/11/14 14:02	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.087	ug/m3			12/11/14 14:02	1
Bromoform	ND		2.1	0.26	ug/m3			12/11/14 14:02	1
Bromomethane	ND		0.78	0.17	ug/m3			12/11/14 14:02	1
Carbon disulfide	ND		1.6	0.093	ug/m3			12/11/14 14:02	1
Carbon tetrachloride	ND		0.25	0.069	ug/m3			12/11/14 14:02	1
Chlorobenzene	ND		0.92	0.083	ug/m3			12/11/14 14:02	1
Chloroethane	ND		1.3	0.16	ug/m3			12/11/14 14:02	1
Chloroform	ND		0.98	0.19	ug/m3			12/11/14 14:02	1
Chloromethane	ND		1.0	0.12	ug/m3			12/11/14 14:02	1
cis-1,2-Dichloroethene	ND		0.79	0.12	ug/m3			12/11/14 14:02	1
cis-1,3-Dichloropropene	ND		0.91	0.13	ug/m3			12/11/14 14:02	1
Cumene	ND		0.98	0.093	ug/m3			12/11/14 14:02	1
Cyclohexane	ND		0.69	0.034	ug/m3			12/11/14 14:02	1
Dibromochloromethane	ND		1.7	0.17	ug/m3			12/11/14 14:02	1
Dichlorodifluoromethane	ND		2.5	0.28	ug/m3			12/11/14 14:02	1
Ethylbenzene	ND		0.87	0.087	ug/m3			12/11/14 14:02	1
Freon 22	ND		1.8	0.28	ug/m3			12/11/14 14:02	1
Freon TF	ND		1.5	0.31	ug/m3			12/11/14 14:02	1
Hexachlorobutadiene	ND		2.1	0.38	ug/m3			12/11/14 14:02	1
Isopropyl alcohol	ND		12	0.37	ug/m3			12/11/14 14:02	1
m,p-Xylene	ND		2.2	0.11	ug/m3			12/11/14 14:02	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.70	ug/m3			12/11/14 14:02	1
Methyl Ethyl Ketone	ND		1.5	0.27	ug/m3			12/11/14 14:02	1
methyl isobutyl ketone	ND		2.0	0.74	ug/m3			12/11/14 14:02	1
Methyl methacrylate	ND		2.0	0.39	ug/m3			12/11/14 14:02	1
Methyl tert-butyl ether	ND		0.72	0.079	ug/m3			12/11/14 14:02	1
Methylene Chloride	ND		1.7	0.42	ug/m3			12/11/14 14:02	1
Naphthalene	ND		2.6	0.16	ug/m3			12/11/14 14:02	1
n-Butane	ND		1.2	0.43	ug/m3			12/11/14 14:02	1
n-Butylbenzene	ND		1.1	0.15	ug/m3			12/11/14 14:02	1
n-Heptane	ND		0.82	0.15	ug/m3			12/11/14 14:02	1
n-Hexane	ND		0.70	0.099	ug/m3			12/11/14 14:02	1
n-Propylbenzene	ND		0.98	0.13	ug/m3			12/11/14 14:02	1
sec-Butylbenzene	ND		1.1	0.12	ug/m3			12/11/14 14:02	1
Styrene	ND		0.85	0.068	ug/m3			12/11/14 14:02	1
tert-Butyl alcohol	ND		15	0.36	ug/m3			12/11/14 14:02	1
tert-Butylbenzene	ND		1.1	0.11	ug/m3			12/11/14 14:02	1
Tetrachloroethene	ND		1.4	0.20	ug/m3			12/11/14 14:02	1
Tetrahydrofuran	ND		15	0.53	ug/m3			12/11/14 14:02	1
Toluene	ND		0.75	0.094	ug/m3			12/11/14 14:02	1
trans-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/11/14 14:02	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-81960/4
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.91	0.12	ug/m3			12/11/14 14:02	1
Trichloroethene	ND		0.21	0.16	ug/m3			12/11/14 14:02	1
Trichlorofluoromethane	ND		1.1	0.25	ug/m3			12/11/14 14:02	1
Vinyl chloride	ND		0.10	0.066	ug/m3			12/11/14 14:02	1
Xylene (total)	ND		0.87	0.18	ug/m3			12/11/14 14:02	1
Xylene, o-	ND		0.87	0.078	ug/m3			12/11/14 14:02	1

Lab Sample ID: LCS 200-81960/3
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	10.1		ppb v/v		101	70 - 130
1,1,2,2-Tetrachloroethane	10.0	9.80		ppb v/v		98	70 - 130
1,1,2-Trichloroethane	10.0	9.91		ppb v/v		99	70 - 130
1,1-Dichloroethane	10.0	9.31		ppb v/v		93	70 - 130
1,1-Dichloroethene	10.0	9.28		ppb v/v		93	70 - 130
1,2,4-Trichlorobenzene	10.0	10.3		ppb v/v		103	70 - 130
1,2,4-Trimethylbenzene	10.0	10.2		ppb v/v		102	70 - 130
1,2-Dibromoethane	10.0	10.1		ppb v/v		102	70 - 130
1,2-Dichlorobenzene	10.0	10.1		ppb v/v		101	70 - 130
1,2-Dichloroethane	10.0	10.3		ppb v/v		103	70 - 130
1,2-Dichloropropane	10.0	9.78		ppb v/v		98	70 - 130
1,2-Dichlorotetrafluoroethane	10.0	10.1		ppb v/v		101	70 - 130
1,3,5-Trimethylbenzene	10.0	10.2		ppb v/v		102	70 - 130
1,3-Butadiene	10.0	8.56		ppb v/v		86	70 - 130
1,3-Dichlorobenzene	10.0	10.1		ppb v/v		101	70 - 130
1,4-Dichlorobenzene	10.0	10.2		ppb v/v		102	70 - 130
1,4-Dioxane	10.0	9.19		ppb v/v		92	70 - 130
2,2,4-Trimethylpentane	10.0	9.42		ppb v/v		94	70 - 130
2-Chlorotoluene	10.0	9.88		ppb v/v		99	70 - 130
3-Chloropropene	10.0	8.17		ppb v/v		82	70 - 130
4-Ethyltoluene	10.0	10.3		ppb v/v		103	70 - 130
4-Isopropyltoluene	10.0	10.2		ppb v/v		102	70 - 130
Acetone	10.0	9.97		ppb v/v		100	70 - 130
Benzene	10.0	9.36		ppb v/v		94	70 - 130
Benzyl chloride	10.0	7.52		ppb v/v		75	70 - 130
Bromodichloromethane	10.0	10.4		ppb v/v		104	70 - 130
Bromoethene(Vinyl Bromide)	10.0	9.32		ppb v/v		93	70 - 130
Bromoform	10.0	10.3		ppb v/v		103	70 - 130
Bromomethane	10.0	8.95		ppb v/v		89	70 - 130
Carbon disulfide	10.0	10.0		ppb v/v		100	70 - 130
Carbon tetrachloride	10.0	10.2		ppb v/v		102	70 - 130
Chlorobenzene	10.0	9.75		ppb v/v		98	70 - 130
Chloroethane	10.0	8.81		ppb v/v		88	70 - 130
Chloroform	10.0	9.99		ppb v/v		100	70 - 130
Chloromethane	10.0	8.20		ppb v/v		82	70 - 130
cis-1,2-Dichloroethene	10.0	9.49		ppb v/v		95	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-81960/3
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	10.0	10.6		ppb v/v		106	70 - 130
Cumene	10.0	10.2		ppb v/v		102	70 - 130
Cyclohexane	10.0	9.46		ppb v/v		95	70 - 130
Dibromochloromethane	10.0	10.1		ppb v/v		101	70 - 130
Dichlorodifluoromethane	10.0	9.53		ppb v/v		95	70 - 130
Ethylbenzene	10.0	10.1		ppb v/v		101	70 - 130
Freon 22	10.0	8.99		ppb v/v		90	70 - 130
Freon TF	10.0	9.39		ppb v/v		94	70 - 130
Hexachlorobutadiene	10.0	10.6		ppb v/v		106	70 - 130
Isopropyl alcohol	10.0	8.07		ppb v/v		81	70 - 130
m,p-Xylene	20.0	20.0		ppb v/v		100	70 - 130
Methyl Butyl Ketone (2-Hexanone)	10.0	9.85		ppb v/v		99	70 - 130
Methyl Ethyl Ketone	10.0	8.76		ppb v/v		88	70 - 130
methyl isobutyl ketone	10.0	10.1		ppb v/v		101	70 - 130
Methyl methacrylate	10.0	10.4		ppb v/v		104	70 - 130
Methyl tert-butyl ether	10.0	9.82		ppb v/v		98	70 - 130
Methylene Chloride	10.0	8.38		ppb v/v		84	70 - 130
Naphthalene	10.0	10.5		ppb v/v		105	70 - 130
n-Butane	10.0	8.64		ppb v/v		86	70 - 130
n-Butylbenzene	10.0	9.98		ppb v/v		100	70 - 130
n-Heptane	10.0	9.41		ppb v/v		94	70 - 130
n-Hexane	10.0	9.80		ppb v/v		98	70 - 130
n-Propylbenzene	10.0	9.93		ppb v/v		99	70 - 130
sec-Butylbenzene	10.0	9.92		ppb v/v		99	70 - 130
Styrene	10.0	10.4		ppb v/v		104	70 - 130
tert-Butyl alcohol	10.0	9.17		ppb v/v		92	70 - 130
tert-Butylbenzene	10.0	9.98		ppb v/v		100	70 - 130
Tetrachloroethene	10.0	10.3		ppb v/v		103	70 - 130
Tetrahydrofuran	10.0	8.84		ppb v/v		88	70 - 130
Toluene	10.0	10.1		ppb v/v		101	70 - 130
trans-1,2-Dichloroethene	10.0	9.88		ppb v/v		99	70 - 130
trans-1,3-Dichloropropene	10.0	10.3		ppb v/v		103	70 - 130
Trichloroethene	10.0	10.1		ppb v/v		101	70 - 130
Trichlorofluoromethane	10.0	9.87		ppb v/v		99	70 - 130
Vinyl chloride	10.0	8.52		ppb v/v		85	70 - 130
Xylene, o-	10.0	10.1		ppb v/v		101	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	55	54.8		ug/m3		101	70 - 130
1,1,2,2-Tetrachloroethane	69	67.3		ug/m3		98	70 - 130
1,1,2-Trichloroethane	55	54.1		ug/m3		99	70 - 130
1,1-Dichloroethane	40	37.7		ug/m3		93	70 - 130
1,1-Dichloroethene	40	36.8		ug/m3		93	70 - 130
1,2,4-Trichlorobenzene	74	76.8		ug/m3		103	70 - 130
1,2,4-Trimethylbenzene	49	50.0		ug/m3		102	70 - 130
1,2-Dibromoethane	77	78.0		ug/m3		102	70 - 130
1,2-Dichlorobenzene	60	60.7		ug/m3		101	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-81960/3
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	40	41.7		ug/m3		103	70 - 130
1,2-Dichloropropane	46	45.2		ug/m3		98	70 - 130
1,2-Dichlorotetrafluoroethane	70	70.9		ug/m3		101	70 - 130
1,3,5-Trimethylbenzene	49	50.1		ug/m3		102	70 - 130
1,3-Butadiene	22	18.9		ug/m3		86	70 - 130
1,3-Dichlorobenzene	60	60.8		ug/m3		101	70 - 130
1,4-Dichlorobenzene	60	61.2		ug/m3		102	70 - 130
1,4-Dioxane	36	33.1		ug/m3		92	70 - 130
2,2,4-Trimethylpentane	47	44.0		ug/m3		94	70 - 130
2-Chlorotoluene	52	51.2		ug/m3		99	70 - 130
3-Chloropropene	31	25.6		ug/m3		82	70 - 130
4-Ethyltoluene	49	50.5		ug/m3		103	70 - 130
4-Isopropyltoluene	55	55.8		ug/m3		102	70 - 130
Acetone	24	23.7		ug/m3		100	70 - 130
Benzene	32	29.9		ug/m3		94	70 - 130
Benzyl chloride	52	38.9		ug/m3		75	70 - 130
Bromodichloromethane	67	69.6		ug/m3		104	70 - 130
Bromoethene(Vinyl Bromide)	44	40.8		ug/m3		93	70 - 130
Bromoform	100	106		ug/m3		103	70 - 130
Bromomethane	39	34.7		ug/m3		89	70 - 130
Carbon disulfide	31	31.1		ug/m3		100	70 - 130
Carbon tetrachloride	63	63.9		ug/m3		102	70 - 130
Chlorobenzene	46	44.9		ug/m3		98	70 - 130
Chloroethane	26	23.3		ug/m3		88	70 - 130
Chloroform	49	48.8		ug/m3		100	70 - 130
Chloromethane	21	16.9		ug/m3		82	70 - 130
cis-1,2-Dichloroethene	40	37.6		ug/m3		95	70 - 130
cis-1,3-Dichloropropene	45	48.3		ug/m3		106	70 - 130
Cumene	49	49.9		ug/m3		102	70 - 130
Cyclohexane	34	32.6		ug/m3		95	70 - 130
Dibromochloromethane	85	85.7		ug/m3		101	70 - 130
Dichlorodifluoromethane	49	47.1		ug/m3		95	70 - 130
Ethylbenzene	43	43.8		ug/m3		101	70 - 130
Freon 22	35	31.8		ug/m3		90	70 - 130
Freon TF	77	72.0		ug/m3		94	70 - 130
Hexachlorobutadiene	110	113		ug/m3		106	70 - 130
Isopropyl alcohol	25	19.8		ug/m3		81	70 - 130
m,p-Xylene	87	86.8		ug/m3		100	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41	40.4		ug/m3		99	70 - 130
Methyl Ethyl Ketone	29	25.8		ug/m3		88	70 - 130
methyl isobutyl ketone	41	41.4		ug/m3		101	70 - 130
Methyl methacrylate	41	42.7		ug/m3		104	70 - 130
Methyl tert-butyl ether	36	35.4		ug/m3		98	70 - 130
Methylene Chloride	35	29.1		ug/m3		84	70 - 130
Naphthalene	52	55.2		ug/m3		105	70 - 130
n-Butane	24	20.5		ug/m3		86	70 - 130
n-Butylbenzene	55	54.8		ug/m3		100	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-81960/3
Matrix: Air
Analysis Batch: 81960

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Heptane	41	38.6		ug/m3		94	70 - 130
n-Hexane	35	34.5		ug/m3		98	70 - 130
n-Propylbenzene	49	48.8		ug/m3		99	70 - 130
sec-Butylbenzene	55	54.4		ug/m3		99	70 - 130
Styrene	43	44.4		ug/m3		104	70 - 130
tert-Butyl alcohol	30	27.8		ug/m3		92	70 - 130
tert-Butylbenzene	55	54.8		ug/m3		100	70 - 130
Tetrachloroethene	68	70.0		ug/m3		103	70 - 130
Tetrahydrofuran	29	26.1		ug/m3		88	70 - 130
Toluene	38	38.0		ug/m3		101	70 - 130
trans-1,2-Dichloroethene	40	39.2		ug/m3		99	70 - 130
trans-1,3-Dichloropropene	45	46.6		ug/m3		103	70 - 130
Trichloroethene	54	54.3		ug/m3		101	70 - 130
Trichlorofluoromethane	56	55.5		ug/m3		99	70 - 130
Vinyl chloride	26	21.8		ug/m3		85	70 - 130
Xylene, o-	43	43.8		ug/m3		101	70 - 130

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: R. Aldrich, M Williams	Samples Collected By: A. Castiglietti	of COCs
Company: Sterling Env. Eng	Phone: (518) 456-4900	V. Cirkonic	
Address: 24 Wade Rd	Email: mark.williams@sterlingenvironmental.com		
City/State/Zip: Latham, NY 12110	rodney.aldrich@sterlingenvironmental.com		
Phone: (518) 456-4900	Site Contact: A. Castiglietti		
FAX:	TA Contact: L. Shaffer		
Project Name: Troy Belting	**Analysis Turnaround Time**		
Site: Troy Belting	Standard (Specify) 10 days (std)		
PO # 2011-31	Rush (Specify)		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum In Field, "Hg (Start)	Canister Vacuum In Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15 *	MA-APH	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
P2A-3A_120914	12/9/14	125pm	225pm	-30.0	-7.0	4059	4673	X						X				
P2B-3B-120914	12/9/14	125pm	225pm	-30.0	-12.0	3735	5632	X						X				

12-9-14

200-25846 Chain of Custody

Temperature (Fahrenheit)	Interior	Ambient
Start	67°F	26°F
Stop	65°F	26°F

Pressure (inches of Hg)	Interior	Ambient
Start	30.04	30.04
Stop	30.00	30.00

Special Instructions/QC Requirements & Comments:
- Standard TAT (10 days)
- Standard Report

* TO-15 method: TCE, VC, Carbon Tetrachloride = 0.25 µg/m³
all other VOCs = 1.0 µg/m³

Samples Shipped by:	Date/Time: 12/9/14 330pm	Samples Received by: 12-9-14 15:30
Samples Relinquished by:	Date/Time: 12-9-14 18:00	Received by: 12/10/14 1130 THOM
Relinquished by:	Date/Time:	Received by:

Lab Use Only Shipper Name: Opened by: Condition:

SHIP DATE: 09DEC14
ACTWGT: 16.2 LB
CAD: 552423/CAFE2806
DIMS: 17x10x10 IN

BILL THIRD PARTY

ORIGIN ID:DSVA (518) 438-8140
TIM KNOLLMEYER
TESTAMERICA LAB INC
25 KRAFT AVE

ALBANY, NY 12205
UNITED STATES US

TO SAMPLE RECEIVING
TESTAMERICA-BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403
(802) 660-1990
REF: STERLING TROY BELTING

FedEx
Express

E

J141214073001uv

WED - 10 DEC AA
STANDARD OVERNIGHT

TRK# 0201 4108 5809 9943

EK BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: Sterling Environmental Engineering PC

Job Number: 200-25846-1

Login Number: 25846
List Number: 1
Creator: Young, Joseph W

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	N/A	Not present
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	AMBIENT
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	IDs on containers do not match the COC. Logged in per COC.
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Sterling Environmental Engineering PC

Job Number: 200-25846-1

Login Number: 25846

List Number: 2

Creator: Young, Joseph W

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

Certification Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25846-1

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-15
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-15
Florida	NELAP	4	E87467	06-30-15
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-15
Minnesota	NELAP	5	050-999-436	12-31-15
New Hampshire	NELAP	1	2006	12-18-14 *
New Jersey	NELAP	2	VT972	06-30-15
New York	NELAP	2	10391	03-31-15
Pennsylvania	NELAP	3	68-00489	04-30-15
Rhode Island	State Program	1	LAO00298	12-30-14 *
US Fish & Wildlife	Federal		LE-058448-0	02-28-15
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-14 *
Virginia	NELAP	3	460209	12-14-15

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15

* Certification renewal pending - certification considered valid.

200-25656-A-3
6674

Bottle: Summa Canister 6L
Sampled: 11/26/2014 12:00 AM 200-739414

Loc: 200
25656
#3
A

Pre-Shipment Clean Canister Certification Report

Certification Type: ☑ Batch ☐ Individual

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size
Oven 1-2	10X	11/28/14	BDL	(6L) 1L 3L

Leak Test

Port	Can ID	Initial[1] ("Hg)	Final ("Hg)	Adjusted Initial[2] ("Hg)	Difference[3]
1	5720		-30.6		-0.1
2	3033		-30.7		-0.2
(A)	5674	-30.4	-30.1 (-30.2)	-30.5	+0.4
~~3~~	5716		-30.1	-30.2	+0.1
5	1673		-30.9		-0.4
6	5632		-30.8		-0.3
7	2521		-31.0		-0.5
8	3258		-30.9		-0.4
9	4942		-30.1		+0.4
~~10~~	2946		-30.2	-30.2	0
~~11~~	5045-296	~~-31.0~~	~~-29.8~~		~~-0.5~~
12	5052		-31.0	-30.7	-0.3

Initial Reading		Final Reading		
Gauge ID:	69	Gauge ID:	69	69
Date:	~~11/28/14~~ 12/2/14	Date:	12/5/14	12/6/14
Time:	~~1015~~ 1830	Time:	1100	1400
Tech:	MK	Tech:	BDL	MS
BP:	~~29.8~~ 29.8 ("Hg)	BP:	29.9	29.6 ("Hg)
Temp	20 ~~21~~ (C)	Temp:	22	22 (C)

[3]Acceptance Criteria:
(1) The difference must be less than or equal to + 0.5
(2) Pressure readings must be at least 24 hours apart.
If time frame was not met, the PM must authorize shipment of canister:
PM Authorization:

Signature Date

[1] Batch Certification: The reading is taken on the "batch" canister and this value is used as the initial pressure for all canisters in the batch.

[2] To calculate Adjusted Initial Pressure, subtract Final BP from Initial BP and add the result (positive or negative) to the initial pressure reading.

[3] To calculate Difference, subtract the Adjusted Initial Pressure from the Final Pressure (See Acceptance Criteria)

Clean Canister Certification Analysis & Authorization of Release to Inventory

Test Method: ☐TO15 Routine ☐ TO15 LL ☐ NJDEP-LL TO15

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Limited	Secondary Review: Review Date	Reviewer
5674	12/04/14	10926	MD		✓			✓	12/5/14	AM

Inventory Level 1: Individual Canister Certification Only. Certified clean to RLs listed in laboratory SOP for LLTO15.

Inventory Level 2: Individual or Batch Certification. Certified clean to 0.04 ppbv.

Inventory Level 3: Individual or Batch Certification. Certified clean to 0.20 ppbv.

Inventory Level 4: Individual or Batch Certification. Certified clean following procedures and RLs listed in laboratory SOP NJDEP-LLTO15.

Inventory Level Limited Use: Canisters may only be used for certain projects.

Comments: Routine * No Ethanol *

(A) can re-eval on 12/6 IP = 29.5 FBP = 29.6
FP = OK FBP < 30.0 AIP = -29.9 D.H. = +0.1
Can OK
MS 12/8/14

BR-FAI023:10.19.09:7
TestAmerica

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-25656-1

SDG No.:

Client Sample ID: 5674 Lab Sample ID: 200-25656-3

Matrix: Air Lab File ID: 10926_07.D

Analysis Method: TO-15 Date Collected: 11/28/2014 00:00

Sample wt/vol: Date Analyzed: 12/04/2014 13:37

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 81608 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U *	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.040	U	0.040	0.040
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-25656-1

SDG No.:

Client Sample ID: 5674 Lab Sample ID: 200-25656-3

Matrix: Air Lab File ID: 10926_07.D

Analysis Method: TO-15 Date Collected: 11/28/2014 00:00

Sample wt/vol: Date Analyzed: 12/04/2014 13:37

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 81608 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.040	U	0.040	0.040
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Burlington Job No.: 200-25656-1

SDG No.:

Client Sample ID: 5674 Lab Sample ID: 200-25656-3

Matrix: Air Lab File ID: 10926_07.D

Analysis Method: TO-15 Date Collected: 11/28/2014 00:00

Sample wt/vol: Date Analyzed: 12/04/2014 13:37

Soil Aliquot Vol: Dilution Factor: 0.2

Soil Extract Vol.: GC Column: RTX-624 ID: 0.32(mm)

% Moisture: Level: (low/med) Low

Analysis Batch No.: 81608 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
100-44-7	Benzyl chloride	0.040	U	0.040	0.040
104-51-8	n-Butylbenzene	0.040	U	0.040	0.040
95-50-1	1,2-Dichlorobenzene	0.040	U	0.040	0.040
120-82-1	1,2,4-Trichlorobenzene	0.10	U	0.10	0.10
87-68-3	Hexachlorobutadiene	0.040	U	0.040	0.040
91-20-3	Naphthalene	0.10	U	0.10	0.10

Report Date: 05-Dec-2014 11:25:47 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\BTV-LIMS1\ChromData\CHC.i\20141204-10926.b\10926_07.D
Lims ID: 200-25656-A-3 Lab Sample ID: 200-25656-3
Client ID: 5674
Sample Type: Client
Inject. Date: 04-Dec-2014 13:37:30 ALS Bottle#: 18 Worklist Smp#: 7
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0010926-007
Misc. Info.: 25656-03
Operator ID: pad Instrument ID: CHC.i

Method: \\BTV-LIMS1\ChromData\CHC.i\20141204-10926.b\TO15_LLNJ_TO3_CHC.m
Limit Group: AI_TO15_ICAL
Last Update: 05-Dec-2014 11:25:42 Calib Date: 01-Dec-2014 23:37:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\BTV-LIMS1\ChromData\CHC.i\20141201-10870.b\10870_10.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK012

First Level Reviewer: daiglep Date: 05-Dec-2014 11:11:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	2.991	2.991	0.000	84	3788	0.1730	
2 Dichlorodifluoromethane	85		3.060				ND	
6 Chlorodifluoromethane	51		3.119				ND	
7 1,2-Dichloro-1,1,2,2-tetra	85		3.338				ND	
8 Chloromethane	50		3.476				ND	
9 Butane	43		3.684				ND	
10 Vinyl chloride	62		3.727				ND	
11 Butadiene	54		3.807				ND	
12 Bromomethane	94		4.512				ND	
13 Chloroethane	64		4.757				ND	
15 Vinyl bromide	106		5.163				ND	
16 Trichlorofluoromethane	101		5.269				ND	
19 Ethanol	45		5.910				ND	
23 1,1,2-Trichloro-1,2,2-trif	101		6.385				ND	
24 1,1-Dichloroethene	96		6.422				ND	
25 Acetone	43		6.689				ND	
26 Carbon disulfide	76		6.801				ND	
27 Isopropyl alcohol	45		7.020				ND	
29 3-Chloro-1-propene	41		7.239				ND	
31 Methylene Chloride	49	7.532	7.548	-0.016	62	2573	0.0672	
32 2-Methyl-2-propanol	59		7.810				ND	
33 Methyl tert-butyl ether	73		7.965				ND	
34 trans-1,2-Dichloroethene	61		7.991				ND	
36 Hexane	57	8.365	8.381	-0.016	1	308	0.006955	
37 1,1-Dichloroethane	63		8.888				ND	
38 Vinyl acetate	43		8.984				ND	
39 cis-1,2-Dichloroethene	96		10.025				ND	
40 2-Butanone (MEK)	72		10.094				ND	
42 Ethyl acetate	88		10.142				ND	
S 41 1,2-Dichloroethene, Total	61		10.200				ND	
* 43 Chlorobromomethane	128	10.494	10.500	-0.006	69	431689	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
44 Tetrahydrofuran	42		10.510				ND	
45 Chloroform	83		10.644				ND	
46 Cyclohexane	84		10.868				ND	
47 1,1,1-Trichloroethane	97		10.900				ND	
48 Carbon tetrachloride	117		11.151				ND	
51 Isooctane	57		11.599				ND	
50 Benzene	78	11.626	11.631	-0.005	1	713	0.006092	
52 1,2-Dichloroethane	62		11.834				ND	
53 n-Heptane	43		12.005				ND	
* 54 1,4-Difluorobenzene	114	12.501	12.506	-0.005	94	2011843	10.0	
56 Trichloroethene	95		12.971				ND	
58 1,2-Dichloropropane	63		13.542				ND	
59 Methyl methacrylate	69		13.728				ND	
60 1,4-Dioxane	88		13.793				ND	
61 Dibromomethane	174		13.809				ND	
62 Dichlorobromomethane	83		14.118				ND	
64 cis-1,3-Dichloropropene	75		15.063				ND	
65 4-Methyl-2-pentanone (MIBK	43		15.362				ND	
66 Toluene	92	15.650	15.650	0.000	26	1149	0.0123	
70 trans-1,3-Dichloropropene	75		16.264				ND	
71 1,1,2-Trichloroethane	83		16.642				ND	
72 Tetrachloroethene	166		16.728				ND	
73 2-Hexanone	43		17.096				ND	
74 Chlorodibromomethane	129		17.400				ND	
75 Ethylene Dibromide	107		17.662				ND	
* 76 Chlorobenzene-d5	117	18.558	18.558	0.000	90	1622569	10.0	
77 Chlorobenzene	112		18.617				ND	
78 Ethylbenzene	91	18.783	18.772	0.011	1	137	0.000551	
81 m-Xylene & p-Xylene	106		19.023				ND	
83 o-Xylene	106		19.861				ND	
84 Styrene	104		19.914				ND	
S 82 Xylenes, Total	106		20.100				ND	
85 Bromoform	173		20.336				ND	
86 Isopropylbenzene	105		20.538				ND	
88 1,1,2,2-Tetrachloroethane	83		21.195				ND	
90 N-Propylbenzene	91		21.254				ND	
91 4-Ethyltoluene	105		21.446				ND	
92 2-Chlorotoluene	91		21.451				ND	
94 1,3,5-Trimethylbenzene	105		21.552				ND	
96 tert-Butylbenzene	119		22.033				ND	
97 1,2,4-Trimethylbenzene	105		22.129				ND	
98 sec-Butylbenzene	105		22.358				ND	
99 4-Isopropyltoluene	119		22.556				ND	
100 1,3-Dichlorobenzene	146		22.588				ND	
101 1,4-Dichlorobenzene	146		22.721				ND	
102 Benzyl chloride	91		22.919				ND	
103 n-Butylbenzene	91		23.127				ND	
105 1,2-Dichlorobenzene	146		23.250				ND	
107 1,2,4-Trichlorobenzene	180		25.731				ND	
108 Hexachlorobutadiene	225		25.913				ND	
109 Naphthalene	128		26.212				ND	
$ 87 4-Bromofluorobenzene	95	20.907	20.907	0.000	93	1091101	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

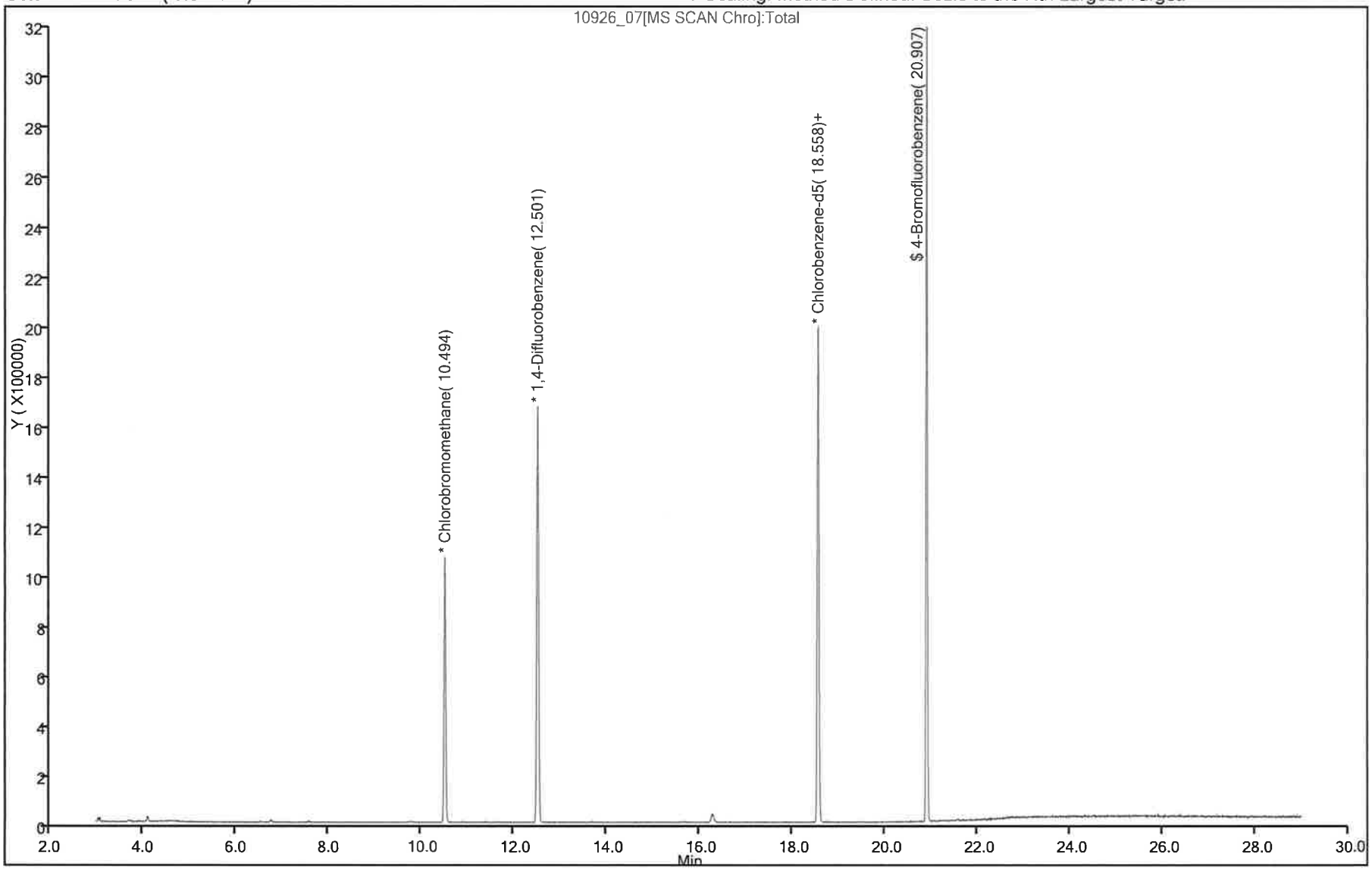
ATTO15CISs_00006 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 05-Dec-2014 11:25:47 Chrom Revision: 2.2 06-Nov-2014 14:50:32

TestAmerica Burlington

Data File:	\\BTV-LIMS1\ChromData\CHC.i\20141204-10926.b\10926_07.D				
Injection Date:	04-Dec-2014 13:37:30	Instrument ID:	CHC.i	Operator ID:	pad
Lims ID:	200-25656-A-3	Lab Sample ID:	200-25656-3	Worklist Smp#:	7
Client ID:	5674				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	18
Method:	TO15_LLNJ_TO3_CHC	Limit Group:	AI_TO15_ICAL		

Column: RTX-624 (0.32 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Detection Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25846-1

Client Sample ID: P2A-3A_120914 — Lab Sample ID: 200-25846-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	5.6	J	6.0	0.48	ppb v/v	29.8		TO-15	Total/NA
1,2-Dichloroethene, Total	110		6.0	1.6	ppb v/v	29.8		TO-15	Total/NA
1,3,5-Trimethylbenzene	2.6	J	6.0	0.57	ppb v/v	29.8		TO-15	Total/NA
4-Ethyltoluene	3.5	J	6.0	0.60	ppb v/v	29.8		TO-15	Total/NA
Acetone	870		150	21	ppb v/v	29.8		TO-15	Total/NA
Benzene	1.1	J	6.0	0.86	ppb v/v	29.8		TO-15	Total/NA
cis-1,2-Dichloroethene	66		6.0	0.89	ppb v/v	29.8		TO-15	Total/NA
Ethylbenzene	87		6.0	0.60	ppb v/v	29.8		TO-15	Total/NA
Isopropyl alcohol	42	J	150	4.5	ppb v/v	29.8		TO-15	Total/NA
m,p-Xylene	340		15	0.75	ppb v/v	29.8		TO-15	Total/NA
Methyl Ethyl Ketone	250		15	2.7	ppb v/v	29.8		TO-15	Total/NA
methyl isobutyl ketone	38		15	5.4	ppb v/v	29.8		TO-15	Total/NA
n-Butane	200		15	5.4	ppb v/v	29.8		TO-15	Total/NA
n-Propylbenzene	2.2	J	6.0	0.80	ppb v/v	29.8		TO-15	Total/NA
Tetrachloroethene	560		6.0	0.89	ppb v/v	29.8		TO-15	Total/NA
Toluene	410		6.0	0.75	ppb v/v	29.8		TO-15	Total/NA
trans-1,2-Dichloroethene	46		6.0	0.80	ppb v/v	29.8		TO-15	Total/NA
Trichloroethene	550		1.2	0.89	ppb v/v	29.8		TO-15	Total/NA
Vinyl chloride	1.7		1.2	0.77	ppb v/v	29.8		TO-15	Total/NA
Xylene (total)	450		6.0	1.2	ppb v/v	29.8		TO-15	Total/NA
Xylene, o-	110		6.0	0.54	ppb v/v	29.8		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	28	J	29	2.3	ug/m3	29.8		TO-15	Total/NA
1,2-Dichloroethene, Total	440		24	6.3	ug/m3	29.8		TO-15	Total/NA
1,3,5-Trimethylbenzene	13	J	29	2.8	ug/m3	29.8		TO-15	Total/NA
4-Ethyltoluene	17	J	29	2.9	ug/m3	29.8		TO-15	Total/NA
Acetone	2100		350	49	ug/m3	29.8		TO-15	Total/NA
Benzene	3.4	J	19	2.8	ug/m3	29.8		TO-15	Total/NA
cis-1,2-Dichloroethene	260		24	3.5	ug/m3	29.8		TO-15	Total/NA
Ethylbenzene	380		26	2.6	ug/m3	29.8		TO-15	Total/NA
Isopropyl alcohol	100	J	370	11	ug/m3	29.8		TO-15	Total/NA
m,p-Xylene	1500		65	3.2	ug/m3	29.8		TO-15	Total/NA
Methyl Ethyl Ketone	750		44	8.1	ug/m3	29.8		TO-15	Total/NA
methyl isobutyl ketone	160		61	22	ug/m3	29.8		TO-15	Total/NA
n-Butane	480		35	13	ug/m3	29.8		TO-15	Total/NA
n-Propylbenzene	11	J	29	4.0	ug/m3	29.8		TO-15	Total/NA
Tetrachloroethene	3800		40	6.1	ug/m3	29.8		TO-15	Total/NA
Toluene	1500		22	2.8	ug/m3	29.8		TO-15	Total/NA
trans-1,2-Dichloroethene	180		24	3.2	ug/m3	29.8		TO-15	Total/NA
Trichloroethene	2900		6.4	4.8	ug/m3	29.8		TO-15	Total/NA
Vinyl chloride	4.3		3.0	2.0	ug/m3	29.8		TO-15	Total/NA
Xylene (total)	2000		26	5.3	ug/m3	29.8		TO-15	Total/NA
Xylene, o-	490		26	2.3	ug/m3	29.8		TO-15	Total/NA

Client Sample ID: P2B-3B_120914 — Lab Sample ID: 200-25846-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3.0	J	5.9	0.89	ppb v/v	29.7		TO-15	Total/NA
1,2,4-Trimethylbenzene	8.6		5.9	0.48	ppb v/v	29.7		TO-15	Total/NA
1,2-Dichloroethene, Total	110		5.9	1.6	ppb v/v	29.7		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: P2B-3B_120914 (Continued)

Lab Sample ID: 200-25846-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	3.6	J	5.9	0.56	ppb v/v	29.7		TO-15	Total/NA
1,4-Dichlorobenzene	2.4	J	5.9	0.56	ppb v/v	29.7		TO-15	Total/NA
1,4-Dioxane	6.7	J	150	4.8	ppb v/v	29.7		TO-15	Total/NA
4-Ethyltoluene	4.1	J	5.9	0.59	ppb v/v	29.7		TO-15	Total/NA
4-Isopropyltoluene	3.8	J	5.9	0.59	ppb v/v	29.7		TO-15	Total/NA
Acetone	850		150	20	ppb v/v	29.7		TO-15	Total/NA
Benzene	0.99	J	5.9	0.86	ppb v/v	29.7		TO-15	Total/NA
cis-1,2-Dichloroethene	68		5.9	0.89	ppb v/v	29.7		TO-15	Total/NA
Cumene	1.5	J	5.9	0.56	ppb v/v	29.7		TO-15	Total/NA
Ethylbenzene	88		5.9	0.59	ppb v/v	29.7		TO-15	Total/NA
Isopropyl alcohol	19	J	150	4.5	ppb v/v	29.7		TO-15	Total/NA
m,p-Xylene	340		15	0.74	ppb v/v	29.7		TO-15	Total/NA
Methyl Ethyl Ketone	250		15	2.7	ppb v/v	29.7		TO-15	Total/NA
methyl isobutyl ketone	29		15	5.3	ppb v/v	29.7		TO-15	Total/NA
n-Butane	190		15	5.3	ppb v/v	29.7		TO-15	Total/NA
n-Heptane	5.6	J	5.9	1.1	ppb v/v	29.7		TO-15	Total/NA
Tetrachloroethene	560		5.9	0.89	ppb v/v	29.7		TO-15	Total/NA
Toluene	400		5.9	0.74	ppb v/v	29.7		TO-15	Total/NA
trans-1,2-Dichloroethene	45		5.9	0.80	ppb v/v	29.7		TO-15	Total/NA
Trichloroethene	540		1.2	0.89	ppb v/v	29.7		TO-15	Total/NA
Vinyl chloride	1.9		1.2	0.77	ppb v/v	29.7		TO-15	Total/NA
Xylene (total)	450		5.9	1.2	ppb v/v	29.7		TO-15	Total/NA
Xylene, o-	110		5.9	0.53	ppb v/v	29.7		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	16	J	32	4.9	ug/m3	29.7		TO-15	Total/NA
1,2,4-Trimethylbenzene	42		29	2.3	ug/m3	29.7		TO-15	Total/NA
1,2-Dichloroethene, Total	450		24	6.2	ug/m3	29.7		TO-15	Total/NA
1,3,5-Trimethylbenzene	17	J	29	2.8	ug/m3	29.7		TO-15	Total/NA
1,4-Dichlorobenzene	15	J	36	3.4	ug/m3	29.7		TO-15	Total/NA
1,4-Dioxane	24	J	540	17	ug/m3	29.7		TO-15	Total/NA
4-Ethyltoluene	20	J	29	2.9	ug/m3	29.7		TO-15	Total/NA
4-Isopropyltoluene	21	J	33	3.3	ug/m3	29.7		TO-15	Total/NA
Acetone	2000		350	49	ug/m3	29.7		TO-15	Total/NA
Benzene	3.2	J	19	2.8	ug/m3	29.7		TO-15	Total/NA
cis-1,2-Dichloroethene	270		24	3.5	ug/m3	29.7		TO-15	Total/NA
Cumene	7.4	J	29	2.8	ug/m3	29.7		TO-15	Total/NA
Ethylbenzene	380		26	2.6	ug/m3	29.7		TO-15	Total/NA
Isopropyl alcohol	46	J	370	11	ug/m3	29.7		TO-15	Total/NA
m,p-Xylene	1500		64	3.2	ug/m3	29.7		TO-15	Total/NA
Methyl Ethyl Ketone	740		44	8.1	ug/m3	29.7		TO-15	Total/NA
methyl isobutyl ketone	120		61	22	ug/m3	29.7		TO-15	Total/NA
n-Butane	460		35	13	ug/m3	29.7		TO-15	Total/NA
n-Heptane	23	J	24	4.5	ug/m3	29.7		TO-15	Total/NA
Tetrachloroethene	3800		40	6.0	ug/m3	29.7		TO-15	Total/NA
Toluene	1500		22	2.8	ug/m3	29.7		TO-15	Total/NA
trans-1,2-Dichloroethene	180		24	3.2	ug/m3	29.7		TO-15	Total/NA
Trichloroethene	2900		6.4	4.8	ug/m3	29.7		TO-15	Total/NA
Vinyl chloride	4.8		3.0	2.0	ug/m3	29.7		TO-15	Total/NA
Xylene (total)	2000		26	5.3	ug/m3	29.7		TO-15	Total/NA
Xylene, o-	480		26	2.3	ug/m3	29.7		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
Tel: (802)660-1990

TestAmerica Job ID: 200-25872-1
Client Project/Site: Troy Belting

For:
Sterling Environmental Engineering PC
24 Wade Road
Latham, New York 12110

Attn: Mr. Mark Williams

Authorized for release by:
12/19/2014 12:50:23 PM
Anne Pridgeon, Project Management Assistant I
anne.pridgeon@testamericainc.com

Designee for

Lisa Shaffer, Project Manager II
(716)504-9816
lisa.shaffer@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 200-25872-1

Laboratory: TestAmerica Burlington

Narrative

Job Narrative
200-25872-1

Comments
No additional comments.

Receipt
The samples were received on 12/12/2014 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 21.0° C.

Air Toxics
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Method Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-25872-1	P48A-49A_121114	Air	12/11/14 13:00	12/12/14 09:00
200-25872-2	P48B-49B_121114	Air	12/11/14 13:00	12/12/14 09:00

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Client Sample ID: P48A-49A_121114
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25872-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1.8**	**J**	2.4	0.36	ppb v/v			12/16/14 22:38	11.9
1,1,2,2-Tetrachloroethane	ND		2.4	0.40	ppb v/v			12/16/14 22:38	11.9
1,1,2-Trichloroethane	ND		2.4	0.44	ppb v/v			12/16/14 22:38	11.9
1,1-Dichloroethane	**0.35**	**J**	2.4	0.33	ppb v/v			12/16/14 22:38	11.9
1,1-Dichloroethene	ND		2.4	0.12	ppb v/v			12/16/14 22:38	11.9
1,2,4-Trichlorobenzene	ND		6.0	0.40	ppb v/v			12/16/14 22:38	11.9
1,2,4-Trimethylbenzene	**11**		2.4	0.19	ppb v/v			12/16/14 22:38	11.9
1,2-Dibromoethane	ND		2.4	0.21	ppb v/v			12/16/14 22:38	11.9
1,2-Dichlorobenzene	ND		2.4	0.21	ppb v/v			12/16/14 22:38	11.9
1,2-Dichloroethane	ND		2.4	0.62	ppb v/v			12/16/14 22:38	11.9
1,2-Dichloroethene, Total	**81**		2.4	0.63	ppb v/v			12/16/14 22:38	11.9
1,2-Dichloropropane	ND		2.4	0.42	ppb v/v			12/16/14 22:38	11.9
1,2-Dichlorotetrafluoroethane	ND		2.4	0.62	ppb v/v			12/16/14 22:38	11.9
1,3,5-Trimethylbenzene	**3.8**		2.4	0.23	ppb v/v			12/16/14 22:38	11.9
1,3-Butadiene	ND		2.4	0.43	ppb v/v			12/16/14 22:38	11.9
1,3-Dichlorobenzene	ND		2.4	0.24	ppb v/v			12/16/14 22:38	11.9
1,4-Dichlorobenzene	ND		2.4	0.23	ppb v/v			12/16/14 22:38	11.9
1,4-Dioxane	ND		60	1.9	ppb v/v			12/16/14 22:38	11.9
2,2,4-Trimethylpentane	ND		2.4	0.27	ppb v/v			12/16/14 22:38	11.9
2-Chlorotoluene	ND		2.4	0.37	ppb v/v			12/16/14 22:38	11.9
3-Chloropropene	ND		6.0	1.9	ppb v/v			12/16/14 22:38	11.9
4-Ethyltoluene	**3.8**		2.4	0.24	ppb v/v			12/16/14 22:38	11.9
4-Isopropyltoluene	ND		2.4	0.24	ppb v/v			12/16/14 22:38	11.9
Acetone	**150**		60	8.2	ppb v/v			12/16/14 22:38	11.9
Benzene	ND		2.4	0.35	ppb v/v			12/16/14 22:38	11.9
Benzyl chloride	ND		2.4	0.21	ppb v/v			12/16/14 22:38	11.9
Bromodichloromethane	ND		2.4	0.35	ppb v/v			12/16/14 22:38	11.9
Bromoethene(Vinyl Bromide)	ND		2.4	0.24	ppb v/v			12/16/14 22:38	11.9
Bromoform	ND		2.4	0.30	ppb v/v			12/16/14 22:38	11.9
Bromomethane	ND		2.4	0.52	ppb v/v			12/16/14 22:38	11.9
Carbon disulfide	ND		6.0	0.36	ppb v/v			12/16/14 22:38	11.9
Carbon tetrachloride	ND		0.48	0.13	ppb v/v			12/16/14 22:38	11.9
Chlorobenzene	ND		2.4	0.21	ppb v/v			12/16/14 22:38	11.9
Chloroethane	ND		6.0	0.73	ppb v/v			12/16/14 22:38	11.9
Chloroform	ND		2.4	0.45	ppb v/v			12/16/14 22:38	11.9
Chloromethane	ND		6.0	0.71	ppb v/v			12/16/14 22:38	11.9
cis-1,2-Dichloroethene	**61**		2.4	0.36	ppb v/v			12/16/14 22:38	11.9
cis-1,3-Dichloropropene	ND		2.4	0.35	ppb v/v			12/16/14 22:38	11.9
Cumene	**0.56**	**J**	2.4	0.23	ppb v/v			12/16/14 22:38	11.9
Cyclohexane	ND		2.4	0.12	ppb v/v			12/16/14 22:38	11.9
Dibromochloromethane	ND		2.4	0.24	ppb v/v			12/16/14 22:38	11.9
Dichlorodifluoromethane	ND		6.0	0.67	ppb v/v			12/16/14 22:38	11.9
Ethylbenzene	**8.3**		2.4	0.24	ppb v/v			12/16/14 22:38	11.9
Freon 22	ND		6.0	0.95	ppb v/v			12/16/14 22:38	11.9
Freon TF	ND		2.4	0.49	ppb v/v			12/16/14 22:38	11.9
Hexachlorobutadiene	ND		2.4	0.43	ppb v/v			12/16/14 22:38	11.9
Isopropyl alcohol	**6.7**	**J**	60	1.8	ppb v/v			12/16/14 22:38	11.9
m,p-Xylene	**36**		6.0	0.30	ppb v/v			12/16/14 22:38	11.9

Client Sample ID: P48A-49A_121114
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25872-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		6.0	2.0	ppb v/v			12/16/14 22:38	11.9
Methyl Ethyl Ketone	**28**		6.0	1.1	ppb v/v			12/16/14 22:38	11.9
methyl isobutyl ketone	**7.1**		6.0	2.1	ppb v/v			12/16/14 22:38	11.9
Methyl methacrylate	ND		6.0	1.1	ppb v/v			12/16/14 22:38	11.9
Methyl tert-butyl ether	ND		2.4	0.26	ppb v/v			12/16/14 22:38	11.9
Methylene Chloride	ND		6.0	1.4	ppb v/v			12/16/14 22:38	11.9
Naphthalene	ND		6.0	0.36	ppb v/v			12/16/14 22:38	11.9
n-Butane	**32**		6.0	2.1	ppb v/v			12/16/14 22:38	11.9
n-Butylbenzene	ND		2.4	0.33	ppb v/v			12/16/14 22:38	11.9
n-Heptane	ND		2.4	0.44	ppb v/v			12/16/14 22:38	11.9
n-Hexane	ND		2.4	0.33	ppb v/v			12/16/14 22:38	11.9
n-Propylbenzene	**2.1**	**J**	2.4	0.32	ppb v/v			12/16/14 22:38	11.9
sec-Butylbenzene	ND		2.4	0.25	ppb v/v			12/16/14 22:38	11.9
Styrene	ND		2.4	0.19	ppb v/v			12/16/14 22:38	11.9
tert-Butyl alcohol	ND		60	1.4	ppb v/v			12/16/14 22:38	11.9
tert-Butylbenzene	ND		2.4	0.24	ppb v/v			12/16/14 22:38	11.9
Tetrachloroethene	**210**		2.4	0.36	ppb v/v			12/16/14 22:38	11.9
Tetrahydrofuran	ND		60	2.1	ppb v/v			12/16/14 22:38	11.9
Toluene	**50**		2.4	0.30	ppb v/v			12/16/14 22:38	11.9
trans-1,2-Dichloroethene	**20**		2.4	0.32	ppb v/v			12/16/14 22:38	11.9
trans-1,3-Dichloropropene	ND		2.4	0.31	ppb v/v			12/16/14 22:38	11.9
Trichloroethene	**300**		0.48	0.36	ppb v/v			12/16/14 22:38	11.9
Trichlorofluoromethane	ND		2.4	0.54	ppb v/v			12/16/14 22:38	11.9
Vinyl chloride	**2.3**		0.48	0.31	ppb v/v			12/16/14 22:38	11.9
Xylene (total)	**49**		2.4	0.49	ppb v/v			12/16/14 22:38	11.9
Xylene, o-	**13**		2.4	0.21	ppb v/v			12/16/14 22:38	11.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**9.9**	**J**	13	1.9	ug/m3			12/16/14 22:38	11.9
1,1,2,2-Tetrachloroethane	ND		16	2.8	ug/m3			12/16/14 22:38	11.9
1,1,2-Trichloroethane	ND		13	2.4	ug/m3			12/16/14 22:38	11.9
1,1-Dichloroethane	**1.4**	**J**	9.6	1.3	ug/m3			12/16/14 22:38	11.9
1,1-Dichloroethene	ND		9.4	0.47	ug/m3			12/16/14 22:38	11.9
1,2,4-Trichlorobenzene	ND		44	3.0	ug/m3			12/16/14 22:38	11.9
1,2,4-Trimethylbenzene	**53**		12	0.94	ug/m3			12/16/14 22:38	11.9
1,2-Dibromoethane	ND		18	1.6	ug/m3			12/16/14 22:38	11.9
1,2-Dichlorobenzene	ND		14	1.3	ug/m3			12/16/14 22:38	11.9
1,2-Dichloroethane	ND		9.6	2.5	ug/m3			12/16/14 22:38	11.9
1,2-Dichloroethene, Total	**320**		9.4	2.5	ug/m3			12/16/14 22:38	11.9
1,2-Dichloropropane	ND		11	1.9	ug/m3			12/16/14 22:38	11.9
1,2-Dichlorotetrafluoroethane	ND		17	4.3	ug/m3			12/16/14 22:38	11.9
1,3,5-Trimethylbenzene	**19**		12	1.1	ug/m3			12/16/14 22:38	11.9
1,3-Butadiene	ND		5.3	0.95	ug/m3			12/16/14 22:38	11.9
1,3-Dichlorobenzene	ND		14	1.4	ug/m3			12/16/14 22:38	11.9
1,4-Dichlorobenzene	ND		14	1.4	ug/m3			12/16/14 22:38	11.9
1,4-Dioxane	ND		210	6.9	ug/m3			12/16/14 22:38	11.9
2,2,4-Trimethylpentane	ND		11	1.3	ug/m3			12/16/14 22:38	11.9
2-Chlorotoluene	ND		12	1.9	ug/m3			12/16/14 22:38	11.9
3-Chloropropene	ND		19	6.0	ug/m3			12/16/14 22:38	11.9

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Client Sample ID: P48A-49A_121114
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25872-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	**19**		12	1.2	ug/m3			12/16/14 22:38	11.9
4-Isopropyltoluene	ND		13	1.3	ug/m3			12/16/14 22:38	11.9
Acetone	**360**		140	20	ug/m3			12/16/14 22:38	11.9
Benzene	ND		7.6	1.1	ug/m3			12/16/14 22:38	11.9
Benzyl chloride	ND		12	1.1	ug/m3			12/16/14 22:38	11.9
Bromodichloromethane	ND		16	2.3	ug/m3			12/16/14 22:38	11.9
Bromoethene(Vinyl Bromide)	ND		10	1.0	ug/m3			12/16/14 22:38	11.9
Bromoform	ND		25	3.1	ug/m3			12/16/14 22:38	11.9
Bromomethane	ND		9.2	2.0	ug/m3			12/16/14 22:38	11.9
Carbon disulfide	ND		19	1.1	ug/m3			12/16/14 22:38	11.9
Carbon tetrachloride	ND		3.0	0.82	ug/m3			12/16/14 22:38	11.9
Chlorobenzene	ND		11	0.99	ug/m3			12/16/14 22:38	11.9
Chloroethane	ND		16	1.9	ug/m3			12/16/14 22:38	11.9
Chloroform	ND		12	2.2	ug/m3			12/16/14 22:38	11.9
Chloromethane	ND		12	1.5	ug/m3			12/16/14 22:38	11.9
cis-1,2-Dichloroethene	**240**		9.4	1.4	ug/m3			12/16/14 22:38	11.9
cis-1,3-Dichloropropene	ND		11	1.6	ug/m3			12/16/14 22:38	11.9
Cumene	**2.8**	J	12	1.1	ug/m3			12/16/14 22:38	11.9
Cyclohexane	ND		8.2	0.41	ug/m3			12/16/14 22:38	11.9
Dibromochloromethane	ND		20	2.0	ug/m3			12/16/14 22:38	11.9
Dichlorodifluoromethane	ND		29	3.3	ug/m3			12/16/14 22:38	11.9
Ethylbenzene	**36**		10	1.0	ug/m3			12/16/14 22:38	11.9
Freon 22	ND		21	3.4	ug/m3			12/16/14 22:38	11.9
Freon TF	ND		18	3.7	ug/m3			12/16/14 22:38	11.9
Hexachlorobutadiene	ND		25	4.6	ug/m3			12/16/14 22:38	11.9
Isopropyl alcohol	**16**	J	150	4.4	ug/m3			12/16/14 22:38	11.9
m,p-Xylene	**150**		26	1.3	ug/m3			12/16/14 22:38	11.9
Methyl Butyl Ketone (2-Hexanone)	ND		24	8.3	ug/m3			12/16/14 22:38	11.9
Methyl Ethyl Ketone	**83**		18	3.2	ug/m3			12/16/14 22:38	11.9
methyl isobutyl ketone	**29**		24	8.8	ug/m3			12/16/14 22:38	11.9
Methyl methacrylate	ND		24	4.7	ug/m3			12/16/14 22:38	11.9
Methyl tert-butyl ether	ND		8.6	0.94	ug/m3			12/16/14 22:38	11.9
Methylene Chloride	ND		21	5.0	ug/m3			12/16/14 22:38	11.9
Naphthalene	ND		31	1.9	ug/m3			12/16/14 22:38	11.9
n-Butane	**75**		14	5.1	ug/m3			12/16/14 22:38	11.9
n-Butylbenzene	ND		13	1.8	ug/m3			12/16/14 22:38	11.9
n-Heptane	ND		9.8	1.8	ug/m3			12/16/14 22:38	11.9
n-Hexane	ND		8.4	1.2	ug/m3			12/16/14 22:38	11.9
n-Propylbenzene	**10**	J	12	1.6	ug/m3			12/16/14 22:38	11.9
sec-Butylbenzene	ND		13	1.4	ug/m3			12/16/14 22:38	11.9
Styrene	ND		10	0.81	ug/m3			12/16/14 22:38	11.9
tert-Butyl alcohol	ND		180	4.3	ug/m3			12/16/14 22:38	11.9
tert-Butylbenzene	ND		13	1.3	ug/m3			12/16/14 22:38	11.9
Tetrachloroethene	**1400**		16	2.4	ug/m3			12/16/14 22:38	11.9
Tetrahydrofuran	ND		180	6.3	ug/m3			12/16/14 22:38	11.9
Toluene	**190**		9.0	1.1	ug/m3			12/16/14 22:38	11.9
trans-1,2-Dichloroethene	**80**		9.4	1.3	ug/m3			12/16/14 22:38	11.9
trans-1,3-Dichloropropene	ND		11	1.4	ug/m3			12/16/14 22:38	11.9

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Client Sample ID: P48A-49A_121114
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25872-1
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**1600**		2.6	1.9	ug/m3			12/16/14 22:38	11.9
Trichlorofluoromethane	ND		13	3.0	ug/m3			12/16/14 22:38	11.9
Vinyl chloride	**5.9**		1.2	0.79	ug/m3			12/16/14 22:38	11.9
Xylene (total)	**210**		10	2.1	ug/m3			12/16/14 22:38	11.9
Xylene, o-	**59**		10	0.93	ug/m3			12/16/14 22:38	11.9

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Client Sample ID: P48B-49B_121114
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25872-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1.7**	**J**	2.4	0.36	ppb v/v			12/16/14 23:24	11.9
1,1,2,2-Tetrachloroethane	ND		2.4	0.40	ppb v/v			12/16/14 23:24	11.9
1,1,2-Trichloroethane	ND		2.4	0.44	ppb v/v			12/16/14 23:24	11.9
1,1-Dichloroethane	**0.37**	**J**	2.4	0.33	ppb v/v			12/16/14 23:24	11.9
1,1-Dichloroethene	ND		2.4	0.12	ppb v/v			12/16/14 23:24	11.9
1,2,4-Trichlorobenzene	ND		6.0	0.40	ppb v/v			12/16/14 23:24	11.9
1,2,4-Trimethylbenzene	**10**		2.4	0.19	ppb v/v			12/16/14 23:24	11.9
1,2-Dibromoethane	ND		2.4	0.21	ppb v/v			12/16/14 23:24	11.9
1,2-Dichlorobenzene	ND		2.4	0.21	ppb v/v			12/16/14 23:24	11.9
1,2-Dichloroethane	ND		2.4	0.62	ppb v/v			12/16/14 23:24	11.9
1,2-Dichloroethene, Total	**79**		2.4	0.63	ppb v/v			12/16/14 23:24	11.9
1,2-Dichloropropane	ND		2.4	0.42	ppb v/v			12/16/14 23:24	11.9
1,2-Dichlorotetrafluoroethane	ND		2.4	0.62	ppb v/v			12/16/14 23:24	11.9
1,3,5-Trimethylbenzene	**3.7**		2.4	0.23	ppb v/v			12/16/14 23:24	11.9
1,3-Butadiene	ND		2.4	0.43	ppb v/v			12/16/14 23:24	11.9
1,3-Dichlorobenzene	ND		2.4	0.24	ppb v/v			12/16/14 23:24	11.9
1,4-Dichlorobenzene	ND		2.4	0.23	ppb v/v			12/16/14 23:24	11.9
1,4-Dioxane	ND		60	1.9	ppb v/v			12/16/14 23:24	11.9
2,2,4-Trimethylpentane	ND		2.4	0.27	ppb v/v			12/16/14 23:24	11.9
2-Chlorotoluene	ND		2.4	0.37	ppb v/v			12/16/14 23:24	11.9
3-Chloropropene	ND		6.0	1.9	ppb v/v			12/16/14 23:24	11.9
4-Ethyltoluene	**3.3**		2.4	0.24	ppb v/v			12/16/14 23:24	11.9
4-Isopropyltoluene	ND		2.4	0.24	ppb v/v			12/16/14 23:24	11.9
Acetone	**140**		60	8.2	ppb v/v			12/16/14 23:24	11.9
Benzene	ND		2.4	0.35	ppb v/v			12/16/14 23:24	11.9
Benzyl chloride	ND		2.4	0.21	ppb v/v			12/16/14 23:24	11.9
Bromodichloromethane	ND		2.4	0.35	ppb v/v			12/16/14 23:24	11.9
Bromoethene(Vinyl Bromide)	ND		2.4	0.24	ppb v/v			12/16/14 23:24	11.9
Bromoform	ND		2.4	0.30	ppb v/v			12/16/14 23:24	11.9
Bromomethane	ND		2.4	0.52	ppb v/v			12/16/14 23:24	11.9
Carbon disulfide	ND		6.0	0.36	ppb v/v			12/16/14 23:24	11.9
Carbon tetrachloride	ND		0.48	0.13	ppb v/v			12/16/14 23:24	11.9
Chlorobenzene	ND		2.4	0.21	ppb v/v			12/16/14 23:24	11.9
Chloroethane	ND		6.0	0.73	ppb v/v			12/16/14 23:24	11.9
Chloroform	ND		2.4	0.45	ppb v/v			12/16/14 23:24	11.9
Chloromethane	ND		6.0	0.71	ppb v/v			12/16/14 23:24	11.9
cis-1,2-Dichloroethene	**58**		2.4	0.36	ppb v/v			12/16/14 23:24	11.9
cis-1,3-Dichloropropene	ND		2.4	0.35	ppb v/v			12/16/14 23:24	11.9
Cumene	**0.53**	**J**	2.4	0.23	ppb v/v			12/16/14 23:24	11.9
Cyclohexane	ND		2.4	0.12	ppb v/v			12/16/14 23:24	11.9
Dibromochloromethane	ND		2.4	0.24	ppb v/v			12/16/14 23:24	11.9
Dichlorodifluoromethane	ND		6.0	0.67	ppb v/v			12/16/14 23:24	11.9
Ethylbenzene	**7.7**		2.4	0.24	ppb v/v			12/16/14 23:24	11.9
Freon 22	ND		6.0	0.95	ppb v/v			12/16/14 23:24	11.9
Freon TF	ND		2.4	0.49	ppb v/v			12/16/14 23:24	11.9
Hexachlorobutadiene	ND		2.4	0.43	ppb v/v			12/16/14 23:24	11.9
Isopropyl alcohol	ND		60	1.8	ppb v/v			12/16/14 23:24	11.9
m,p-Xylene	**33**		6.0	0.30	ppb v/v			12/16/14 23:24	11.9

Client Sample ID: P48B-49B_121114
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25872-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		6.0	2.0	ppb v/v			12/16/14 23:24	11.9
Methyl Ethyl Ketone	**27**		6.0	1.1	ppb v/v			12/16/14 23:24	11.9
methyl isobutyl ketone	**5.6**	**J**	6.0	2.1	ppb v/v			12/16/14 23:24	11.9
Methyl methacrylate	ND		6.0	1.1	ppb v/v			12/16/14 23:24	11.9
Methyl tert-butyl ether	ND		2.4	0.26	ppb v/v			12/16/14 23:24	11.9
Methylene Chloride	ND		6.0	1.4	ppb v/v			12/16/14 23:24	11.9
Naphthalene	ND		6.0	0.36	ppb v/v			12/16/14 23:24	11.9
n-Butane	**29**		6.0	2.1	ppb v/v			12/16/14 23:24	11.9
n-Butylbenzene	ND		2.4	0.33	ppb v/v			12/16/14 23:24	11.9
n-Heptane	ND		2.4	0.44	ppb v/v			12/16/14 23:24	11.9
n-Hexane	ND		2.4	0.33	ppb v/v			12/16/14 23:24	11.9
n-Propylbenzene	**1.9**	**J**	2.4	0.32	ppb v/v			12/16/14 23:24	11.9
sec-Butylbenzene	ND		2.4	0.25	ppb v/v			12/16/14 23:24	11.9
Styrene	ND		2.4	0.19	ppb v/v			12/16/14 23:24	11.9
tert-Butyl alcohol	ND		60	1.4	ppb v/v			12/16/14 23:24	11.9
tert-Butylbenzene	ND		2.4	0.24	ppb v/v			12/16/14 23:24	11.9
Tetrachloroethene	**210**		2.4	0.36	ppb v/v			12/16/14 23:24	11.9
Tetrahydrofuran	ND		60	2.1	ppb v/v			12/16/14 23:24	11.9
Toluene	**51**		2.4	0.30	ppb v/v			12/16/14 23:24	11.9
trans-1,2-Dichloroethene	**21**		2.4	0.32	ppb v/v			12/16/14 23:24	11.9
trans-1,3-Dichloropropene	ND		2.4	0.31	ppb v/v			12/16/14 23:24	11.9
Trichloroethene	**280**		0.48	0.36	ppb v/v			12/16/14 23:24	11.9
Trichlorofluoromethane	ND		2.4	0.54	ppb v/v			12/16/14 23:24	11.9
Vinyl chloride	**2.1**		0.48	0.31	ppb v/v			12/16/14 23:24	11.9
Xylene (total)	**46**		2.4	0.49	ppb v/v			12/16/14 23:24	11.9
Xylene, o-	**13**		2.4	0.21	ppb v/v			12/16/14 23:24	11.9

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**9.5**	**J**	13	1.9	ug/m3			12/16/14 23:24	11.9
1,1,2,2-Tetrachloroethane	ND		16	2.8	ug/m3			12/16/14 23:24	11.9
1,1,2-Trichloroethane	ND		13	2.4	ug/m3			12/16/14 23:24	11.9
1,1-Dichloroethane	**1.5**	**J**	9.6	1.3	ug/m3			12/16/14 23:24	11.9
1,1-Dichloroethene	ND		9.4	0.47	ug/m3			12/16/14 23:24	11.9
1,2,4-Trichlorobenzene	ND		44	3.0	ug/m3			12/16/14 23:24	11.9
1,2,4-Trimethylbenzene	**51**		12	0.94	ug/m3			12/16/14 23:24	11.9
1,2-Dibromoethane	ND		18	1.6	ug/m3			12/16/14 23:24	11.9
1,2-Dichlorobenzene	ND		14	1.3	ug/m3			12/16/14 23:24	11.9
1,2-Dichloroethane	ND		9.6	2.5	ug/m3			12/16/14 23:24	11.9
1,2-Dichloroethene, Total	**310**		9.4	2.5	ug/m3			12/16/14 23:24	11.9
1,2-Dichloropropane	ND		11	1.9	ug/m3			12/16/14 23:24	11.9
1,2-Dichlorotetrafluoroethane	ND		17	4.3	ug/m3			12/16/14 23:24	11.9
1,3,5-Trimethylbenzene	**18**		12	1.1	ug/m3			12/16/14 23:24	11.9
1,3-Butadiene	ND		5.3	0.95	ug/m3			12/16/14 23:24	11.9
1,3-Dichlorobenzene	ND		14	1.4	ug/m3			12/16/14 23:24	11.9
1,4-Dichlorobenzene	ND		14	1.4	ug/m3			12/16/14 23:24	11.9
1,4-Dioxane	ND		210	6.9	ug/m3			12/16/14 23:24	11.9
2,2,4-Trimethylpentane	ND		11	1.3	ug/m3			12/16/14 23:24	11.9
2-Chlorotoluene	ND		12	1.9	ug/m3			12/16/14 23:24	11.9
3-Chloropropene	ND		19	6.0	ug/m3			12/16/14 23:24	11.9

Client Sample ID: P48B-49B_121114
Lab Sample ID: 200-25872-2
Date Collected: 12/11/14 13:00
Matrix: Air
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	**16**		12	1.2	ug/m3			12/16/14 23:24	11.9
4-Isopropyltoluene	ND		13	1.3	ug/m3			12/16/14 23:24	11.9
Acetone	**340**		140	20	ug/m3			12/16/14 23:24	11.9
Benzene	ND		7.6	1.1	ug/m3			12/16/14 23:24	11.9
Benzyl chloride	ND		12	1.1	ug/m3			12/16/14 23:24	11.9
Bromodichloromethane	ND		16	2.3	ug/m3			12/16/14 23:24	11.9
Bromoethene(Vinyl Bromide)	ND		10	1.0	ug/m3			12/16/14 23:24	11.9
Bromoform	ND		25	3.1	ug/m3			12/16/14 23:24	11.9
Bromomethane	ND		9.2	2.0	ug/m3			12/16/14 23:24	11.9
Carbon disulfide	ND		19	1.1	ug/m3			12/16/14 23:24	11.9
Carbon tetrachloride	ND		3.0	0.82	ug/m3			12/16/14 23:24	11.9
Chlorobenzene	ND		11	0.99	ug/m3			12/16/14 23:24	11.9
Chloroethane	ND		16	1.9	ug/m3			12/16/14 23:24	11.9
Chloroform	ND		12	2.2	ug/m3			12/16/14 23:24	11.9
Chloromethane	ND		12	1.5	ug/m3			12/16/14 23:24	11.9
cis-1,2-Dichloroethene	**230**		9.4	1.4	ug/m3			12/16/14 23:24	11.9
cis-1,3-Dichloropropene	ND		11	1.6	ug/m3			12/16/14 23:24	11.9
Cumene	**2.6**	J	12	1.1	ug/m3			12/16/14 23:24	11.9
Cyclohexane	ND		8.2	0.41	ug/m3			12/16/14 23:24	11.9
Dibromochloromethane	ND		20	2.0	ug/m3			12/16/14 23:24	11.9
Dichlorodifluoromethane	ND		29	3.3	ug/m3			12/16/14 23:24	11.9
Ethylbenzene	**34**		10	1.0	ug/m3			12/16/14 23:24	11.9
Freon 22	ND		21	3.4	ug/m3			12/16/14 23:24	11.9
Freon TF	ND		18	3.7	ug/m3			12/16/14 23:24	11.9
Hexachlorobutadiene	ND		25	4.6	ug/m3			12/16/14 23:24	11.9
Isopropyl alcohol	ND		150	4.4	ug/m3			12/16/14 23:24	11.9
m,p-Xylene	**140**		26	1.3	ug/m3			12/16/14 23:24	11.9
Methyl Butyl Ketone (2-Hexanone)	ND		24	8.3	ug/m3			12/16/14 23:24	11.9
Methyl Ethyl Ketone	**80**		18	3.2	ug/m3			12/16/14 23:24	11.9
methyl isobutyl ketone	**23**	J	24	8.8	ug/m3			12/16/14 23:24	11.9
Methyl methacrylate	ND		24	4.7	ug/m3			12/16/14 23:24	11.9
Methyl tert-butyl ether	ND		8.6	0.94	ug/m3			12/16/14 23:24	11.9
Methylene Chloride	ND		21	5.0	ug/m3			12/16/14 23:24	11.9
Naphthalene	ND		31	1.9	ug/m3			12/16/14 23:24	11.9
n-Butane	**69**		14	5.1	ug/m3			12/16/14 23:24	11.9
n-Butylbenzene	ND		13	1.8	ug/m3			12/16/14 23:24	11.9
n-Heptane	ND		9.8	1.8	ug/m3			12/16/14 23:24	11.9
n-Hexane	ND		8.4	1.2	ug/m3			12/16/14 23:24	11.9
n-Propylbenzene	**9.5**	J	12	1.6	ug/m3			12/16/14 23:24	11.9
sec-Butylbenzene	ND		13	1.4	ug/m3			12/16/14 23:24	11.9
Styrene	ND		10	0.81	ug/m3			12/16/14 23:24	11.9
tert-Butyl alcohol	ND		180	4.3	ug/m3			12/16/14 23:24	11.9
tert-Butylbenzene	ND		13	1.3	ug/m3			12/16/14 23:24	11.9
Tetrachloroethene	**1400**		16	2.4	ug/m3			12/16/14 23:24	11.9
Tetrahydrofuran	ND		180	6.3	ug/m3			12/16/14 23:24	11.9
Toluene	**190**		9.0	1.1	ug/m3			12/16/14 23:24	11.9
trans-1,2-Dichloroethene	**85**		9.4	1.3	ug/m3			12/16/14 23:24	11.9
trans-1,3-Dichloropropene	ND		11	1.4	ug/m3			12/16/14 23:24	11.9

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Client Sample ID: P48B-49B_121114
Date Collected: 12/11/14 13:00
Date Received: 12/12/14 09:00
Sample Container: Summa Canister 6L

Lab Sample ID: 200-25872-2
Matrix: Air

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**1500**		2.6	1.9	ug/m3			12/16/14 23:24	11.9
Trichlorofluoromethane	ND		13	3.0	ug/m3			12/16/14 23:24	11.9
Vinyl chloride	**5.4**		1.2	0.79	ug/m3			12/16/14 23:24	11.9
Xylene (total)	**200**		10	2.1	ug/m3			12/16/14 23:24	11.9
Xylene, o-	**55**		10	0.93	ug/m3			12/16/14 23:24	11.9

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 200-82157/4
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.030	ppb v/v			12/16/14 12:35	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.034	ppb v/v			12/16/14 12:35	1
1,1,2-Trichloroethane	ND		0.20	0.037	ppb v/v			12/16/14 12:35	1
1,1-Dichloroethane	ND		0.20	0.028	ppb v/v			12/16/14 12:35	1
1,1-Dichloroethene	ND		0.20	0.010	ppb v/v			12/16/14 12:35	1
1,2,4-Trichlorobenzene	ND		0.50	0.034	ppb v/v			12/16/14 12:35	1
1,2,4-Trimethylbenzene	ND		0.20	0.016	ppb v/v			12/16/14 12:35	1
1,2-Dibromoethane	ND		0.20	0.018	ppb v/v			12/16/14 12:35	1
1,2-Dichlorobenzene	ND		0.20	0.018	ppb v/v			12/16/14 12:35	1
1,2-Dichloroethane	ND		0.20	0.052	ppb v/v			12/16/14 12:35	1
1,2-Dichloroethene, Total	ND		0.20	0.053	ppb v/v			12/16/14 12:35	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/16/14 12:35	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.052	ppb v/v			12/16/14 12:35	1
1,3,5-Trimethylbenzene	ND		0.20	0.019	ppb v/v			12/16/14 12:35	1
1,3-Butadiene	ND		0.20	0.036	ppb v/v			12/16/14 12:35	1
1,3-Dichlorobenzene	ND		0.20	0.020	ppb v/v			12/16/14 12:35	1
1,4-Dichlorobenzene	ND		0.20	0.019	ppb v/v			12/16/14 12:35	1
1,4-Dioxane	ND		5.0	0.16	ppb v/v			12/16/14 12:35	1
2,2,4-Trimethylpentane	ND		0.20	0.023	ppb v/v			12/16/14 12:35	1
2-Chlorotoluene	ND		0.20	0.031	ppb v/v			12/16/14 12:35	1
3-Chloropropene	ND		0.50	0.16	ppb v/v			12/16/14 12:35	1
4-Ethyltoluene	ND		0.20	0.020	ppb v/v			12/16/14 12:35	1
4-Isopropyltoluene	ND		0.20	0.020	ppb v/v			12/16/14 12:35	1
Acetone	ND		5.0	0.69	ppb v/v			12/16/14 12:35	1
Benzene	ND		0.20	0.029	ppb v/v			12/16/14 12:35	1
Benzyl chloride	ND		0.20	0.018	ppb v/v			12/16/14 12:35	1
Bromodichloromethane	ND		0.20	0.029	ppb v/v			12/16/14 12:35	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.020	ppb v/v			12/16/14 12:35	1
Bromoform	ND		0.20	0.025	ppb v/v			12/16/14 12:35	1
Bromomethane	ND		0.20	0.044	ppb v/v			12/16/14 12:35	1
Carbon disulfide	ND		0.50	0.030	ppb v/v			12/16/14 12:35	1
Carbon tetrachloride	ND		0.040	0.011	ppb v/v			12/16/14 12:35	1
Chlorobenzene	ND		0.20	0.018	ppb v/v			12/16/14 12:35	1
Chloroethane	ND		0.50	0.061	ppb v/v			12/16/14 12:35	1
Chloroform	ND		0.20	0.038	ppb v/v			12/16/14 12:35	1
Chloromethane	ND		0.50	0.060	ppb v/v			12/16/14 12:35	1
cis-1,2-Dichloroethene	ND		0.20	0.030	ppb v/v			12/16/14 12:35	1
cis-1,3-Dichloropropene	ND		0.20	0.029	ppb v/v			12/16/14 12:35	1
Cumene	ND		0.20	0.019	ppb v/v			12/16/14 12:35	1
Cyclohexane	ND		0.20	0.010	ppb v/v			12/16/14 12:35	1
Dibromochloromethane	ND		0.20	0.020	ppb v/v			12/16/14 12:35	1
Dichlorodifluoromethane	ND		0.50	0.056	ppb v/v			12/16/14 12:35	1
Ethylbenzene	ND		0.20	0.020	ppb v/v			12/16/14 12:35	1
Freon 22	ND		0.50	0.080	ppb v/v			12/16/14 12:35	1
Freon TF	ND		0.20	0.041	ppb v/v			12/16/14 12:35	1
Hexachlorobutadiene	ND		0.20	0.036	ppb v/v			12/16/14 12:35	1
Isopropyl alcohol	ND		5.0	0.15	ppb v/v			12/16/14 12:35	1
m,p-Xylene	ND		0.50	0.025	ppb v/v			12/16/14 12:35	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-82157/4
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.17	ppb v/v			12/16/14 12:35	1
Methyl Ethyl Ketone	ND		0.50	0.092	ppb v/v			12/16/14 12:35	1
methyl isobutyl ketone	ND		0.50	0.18	ppb v/v			12/16/14 12:35	1
Methyl methacrylate	ND		0.50	0.096	ppb v/v			12/16/14 12:35	1
Methyl tert-butyl ether	ND		0.20	0.022	ppb v/v			12/16/14 12:35	1
Methylene Chloride	ND		0.50	0.12	ppb v/v			12/16/14 12:35	1
Naphthalene	ND		0.50	0.030	ppb v/v			12/16/14 12:35	1
n-Butane	ND		0.50	0.18	ppb v/v			12/16/14 12:35	1
n-Butylbenzene	ND		0.20	0.028	ppb v/v			12/16/14 12:35	1
n-Heptane	ND		0.20	0.037	ppb v/v			12/16/14 12:35	1
n-Hexane	ND		0.20	0.028	ppb v/v			12/16/14 12:35	1
n-Propylbenzene	ND		0.20	0.027	ppb v/v			12/16/14 12:35	1
sec-Butylbenzene	ND		0.20	0.021	ppb v/v			12/16/14 12:35	1
Styrene	ND		0.20	0.016	ppb v/v			12/16/14 12:35	1
tert-Butyl alcohol	ND		5.0	0.12	ppb v/v			12/16/14 12:35	1
tert-Butylbenzene	ND		0.20	0.020	ppb v/v			12/16/14 12:35	1
Tetrachloroethene	ND		0.20	0.030	ppb v/v			12/16/14 12:35	1
Tetrahydrofuran	ND		5.0	0.18	ppb v/v			12/16/14 12:35	1
Toluene	ND		0.20	0.025	ppb v/v			12/16/14 12:35	1
trans-1,2-Dichloroethene	ND		0.20	0.027	ppb v/v			12/16/14 12:35	1
trans-1,3-Dichloropropene	ND		0.20	0.026	ppb v/v			12/16/14 12:35	1
Trichloroethene	ND		0.040	0.030	ppb v/v			12/16/14 12:35	1
Trichlorofluoromethane	ND		0.20	0.045	ppb v/v			12/16/14 12:35	1
Vinyl chloride	ND		0.040	0.026	ppb v/v			12/16/14 12:35	1
Xylene (total)	ND		0.20	0.041	ppb v/v			12/16/14 12:35	1
Xylene, o-	ND		0.20	0.018	ppb v/v			12/16/14 12:35	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.16	ug/m3			12/16/14 12:35	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.23	ug/m3			12/16/14 12:35	1
1,1,2-Trichloroethane	ND		1.1	0.20	ug/m3			12/16/14 12:35	1
1,1-Dichloroethane	ND		0.81	0.11	ug/m3			12/16/14 12:35	1
1,1-Dichloroethene	ND		0.79	0.040	ug/m3			12/16/14 12:35	1
1,2,4-Trichlorobenzene	ND		3.7	0.25	ug/m3			12/16/14 12:35	1
1,2,4-Trimethylbenzene	ND		0.98	0.079	ug/m3			12/16/14 12:35	1
1,2-Dibromoethane	ND		1.5	0.14	ug/m3			12/16/14 12:35	1
1,2-Dichlorobenzene	ND		1.2	0.11	ug/m3			12/16/14 12:35	1
1,2-Dichloroethane	ND		0.81	0.21	ug/m3			12/16/14 12:35	1
1,2-Dichloroethene, Total	ND		0.79	0.21	ug/m3			12/16/14 12:35	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/16/14 12:35	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.36	ug/m3			12/16/14 12:35	1
1,3,5-Trimethylbenzene	ND		0.98	0.093	ug/m3			12/16/14 12:35	1
1,3-Butadiene	ND		0.44	0.080	ug/m3			12/16/14 12:35	1
1,3-Dichlorobenzene	ND		1.2	0.12	ug/m3			12/16/14 12:35	1
1,4-Dichlorobenzene	ND		1.2	0.11	ug/m3			12/16/14 12:35	1
1,4-Dioxane	ND		18	0.58	ug/m3			12/16/14 12:35	1
2,2,4-Trimethylpentane	ND		0.93	0.11	ug/m3			12/16/14 12:35	1
2-Chlorotoluene	ND		1.0	0.16	ug/m3			12/16/14 12:35	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-82157/4
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
3-Chloropropene	ND		1.6	0.50	ug/m3			12/16/14 12:35	1
4-Ethyltoluene	ND		0.98	0.098	ug/m3			12/16/14 12:35	1
4-Isopropyltoluene	ND		1.1	0.11	ug/m3			12/16/14 12:35	1
Acetone	ND		12	1.6	ug/m3			12/16/14 12:35	1
Benzene	ND		0.64	0.093	ug/m3			12/16/14 12:35	1
Benzyl chloride	ND		1.0	0.093	ug/m3			12/16/14 12:35	1
Bromodichloromethane	ND		1.3	0.19	ug/m3			12/16/14 12:35	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.087	ug/m3			12/16/14 12:35	1
Bromoform	ND		2.1	0.26	ug/m3			12/16/14 12:35	1
Bromomethane	ND		0.78	0.17	ug/m3			12/16/14 12:35	1
Carbon disulfide	ND		1.6	0.093	ug/m3			12/16/14 12:35	1
Carbon tetrachloride	ND		0.25	0.069	ug/m3			12/16/14 12:35	1
Chlorobenzene	ND		0.92	0.083	ug/m3			12/16/14 12:35	1
Chloroethane	ND		1.3	0.16	ug/m3			12/16/14 12:35	1
Chloroform	ND		0.98	0.19	ug/m3			12/16/14 12:35	1
Chloromethane	ND		1.0	0.12	ug/m3			12/16/14 12:35	1
cis-1,2-Dichloroethene	ND		0.79	0.12	ug/m3			12/16/14 12:35	1
cis-1,3-Dichloropropene	ND		0.91	0.13	ug/m3			12/16/14 12:35	1
Cumene	ND		0.98	0.093	ug/m3			12/16/14 12:35	1
Cyclohexane	ND		0.69	0.034	ug/m3			12/16/14 12:35	1
Dibromochloromethane	ND		1.7	0.17	ug/m3			12/16/14 12:35	1
Dichlorodifluoromethane	ND		2.5	0.28	ug/m3			12/16/14 12:35	1
Ethylbenzene	ND		0.87	0.087	ug/m3			12/16/14 12:35	1
Freon 22	ND		1.8	0.28	ug/m3			12/16/14 12:35	1
Freon TF	ND		1.5	0.31	ug/m3			12/16/14 12:35	1
Hexachlorobutadiene	ND		2.1	0.38	ug/m3			12/16/14 12:35	1
Isopropyl alcohol	ND		12	0.37	ug/m3			12/16/14 12:35	1
m,p-Xylene	ND		2.2	0.11	ug/m3			12/16/14 12:35	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.70	ug/m3			12/16/14 12:35	1
Methyl Ethyl Ketone	ND		1.5	0.27	ug/m3			12/16/14 12:35	1
methyl isobutyl ketone	ND		2.0	0.74	ug/m3			12/16/14 12:35	1
Methyl methacrylate	ND		2.0	0.39	ug/m3			12/16/14 12:35	1
Methyl tert-butyl ether	ND		0.72	0.079	ug/m3			12/16/14 12:35	1
Methylene Chloride	ND		1.7	0.42	ug/m3			12/16/14 12:35	1
Naphthalene	ND		2.6	0.16	ug/m3			12/16/14 12:35	1
n-Butane	ND		1.2	0.43	ug/m3			12/16/14 12:35	1
n-Butylbenzene	ND		1.1	0.15	ug/m3			12/16/14 12:35	1
n-Heptane	ND		0.82	0.15	ug/m3			12/16/14 12:35	1
n-Hexane	ND		0.70	0.099	ug/m3			12/16/14 12:35	1
n-Propylbenzene	ND		0.98	0.13	ug/m3			12/16/14 12:35	1
sec-Butylbenzene	ND		1.1	0.12	ug/m3			12/16/14 12:35	1
Styrene	ND		0.85	0.068	ug/m3			12/16/14 12:35	1
tert-Butyl alcohol	ND		15	0.36	ug/m3			12/16/14 12:35	1
tert-Butylbenzene	ND		1.1	0.11	ug/m3			12/16/14 12:35	1
Tetrachloroethene	ND		1.4	0.20	ug/m3			12/16/14 12:35	1
Tetrahydrofuran	ND		15	0.53	ug/m3			12/16/14 12:35	1
Toluene	ND		0.75	0.094	ug/m3			12/16/14 12:35	1
trans-1,2-Dichloroethene	ND		0.79	0.11	ug/m3			12/16/14 12:35	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 200-82157/4
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.91	0.12	ug/m3			12/16/14 12:35	1
Trichloroethene	ND		0.21	0.16	ug/m3			12/16/14 12:35	1
Trichlorofluoromethane	ND		1.1	0.25	ug/m3			12/16/14 12:35	1
Vinyl chloride	ND		0.10	0.066	ug/m3			12/16/14 12:35	1
Xylene (total)	ND		0.87	0.18	ug/m3			12/16/14 12:35	1
Xylene, o-	ND		0.87	0.078	ug/m3			12/16/14 12:35	1

Lab Sample ID: LCS 200-82157/3
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10.0	9.76		ppb v/v		98	70 - 130
1,1,2,2-Tetrachloroethane	10.0	9.77		ppb v/v		98	70 - 130
1,1,2-Trichloroethane	10.0	9.91		ppb v/v		99	70 - 130
1,1-Dichloroethane	10.0	9.46		ppb v/v		95	70 - 130
1,1-Dichloroethene	10.0	9.17		ppb v/v		92	70 - 130
1,2,4-Trichlorobenzene	10.0	9.97		ppb v/v		100	70 - 130
1,2,4-Trimethylbenzene	10.0	10.0		ppb v/v		100	70 - 130
1,2-Dibromoethane	10.0	10.2		ppb v/v		102	70 - 130
1,2-Dichlorobenzene	10.0	9.88		ppb v/v		99	70 - 130
1,2-Dichloroethane	10.0	10.1		ppb v/v		101	70 - 130
1,2-Dichloropropane	10.0	9.95		ppb v/v		100	70 - 130
1,2-Dichlorotetrafluoroethane	10.0	10.1		ppb v/v		101	70 - 130
1,3,5-Trimethylbenzene	10.0	10.0		ppb v/v		100	70 - 130
1,3-Butadiene	10.0	8.65		ppb v/v		87	70 - 130
1,3-Dichlorobenzene	10.0	9.89		ppb v/v		99	70 - 130
1,4-Dichlorobenzene	10.0	9.96		ppb v/v		100	70 - 130
1,4-Dioxane	10.0	9.38		ppb v/v		94	70 - 130
2,2,4-Trimethylpentane	10.0	9.55		ppb v/v		96	70 - 130
2-Chlorotoluene	10.0	9.73		ppb v/v		97	70 - 130
3-Chloropropene	10.0	8.95		ppb v/v		89	70 - 130
4-Ethyltoluene	10.0	10.1		ppb v/v		101	70 - 130
4-Isopropyltoluene	10.0	9.93		ppb v/v		99	70 - 130
Acetone	10.0	9.70		ppb v/v		97	70 - 130
Benzene	10.0	9.35		ppb v/v		94	70 - 130
Benzyl chloride	10.0	10.5		ppb v/v		105	70 - 130
Bromodichloromethane	10.0	10.3		ppb v/v		103	70 - 130
Bromoethene(Vinyl Bromide)	10.0	9.13		ppb v/v		91	70 - 130
Bromoform	10.0	10.2		ppb v/v		102	70 - 130
Bromomethane	10.0	8.62		ppb v/v		86	70 - 130
Carbon disulfide	10.0	9.99		ppb v/v		100	70 - 130
Carbon tetrachloride	10.0	9.85		ppb v/v		98	70 - 130
Chlorobenzene	10.0	9.83		ppb v/v		98	70 - 130
Chloroethane	10.0	8.53		ppb v/v		85	70 - 130
Chloroform	10.0	9.97		ppb v/v		100	70 - 130
Chloromethane	10.0	8.42		ppb v/v		84	70 - 130
cis-1,2-Dichloroethene	10.0	9.67		ppb v/v		97	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-82157/3
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,3-Dichloropropene	10.0	10.8		ppb v/v		108	70 - 130
Cumene	10.0	10.1		ppb v/v		101	70 - 130
Cyclohexane	10.0	9.50		ppb v/v		95	70 - 130
Dibromochloromethane	10.0	9.99		ppb v/v		100	70 - 130
Dichlorodifluoromethane	10.0	9.24		ppb v/v		92	70 - 130
Ethylbenzene	10.0	10.2		ppb v/v		102	70 - 130
Freon 22	10.0	8.83		ppb v/v		88	70 - 130
Freon TF	10.0	9.32		ppb v/v		93	70 - 130
Hexachlorobutadiene	10.0	10.3		ppb v/v		103	70 - 130
Isopropyl alcohol	10.0	8.30		ppb v/v		83	70 - 130
m,p-Xylene	20.0	19.9		ppb v/v		100	70 - 130
Methyl Butyl Ketone (2-Hexanone)	10.0	10.0		ppb v/v		100	70 - 130
Methyl Ethyl Ketone	10.0	8.85		ppb v/v		88	70 - 130
methyl isobutyl ketone	10.0	10.2		ppb v/v		102	70 - 130
Methyl methacrylate	10.0	10.7		ppb v/v		107	70 - 130
Methyl tert-butyl ether	10.0	9.94		ppb v/v		99	70 - 130
Methylene Chloride	10.0	8.58		ppb v/v		86	70 - 130
Naphthalene	10.0	9.63		ppb v/v		96	70 - 130
n-Butane	10.0	8.84		ppb v/v		88	70 - 130
n-Butylbenzene	10.0	9.68		ppb v/v		97	70 - 130
n-Heptane	10.0	9.48		ppb v/v		95	70 - 130
n-Hexane	10.0	10.1		ppb v/v		101	70 - 130
n-Propylbenzene	10.0	9.88		ppb v/v		99	70 - 130
sec-Butylbenzene	10.0	9.79		ppb v/v		98	70 - 130
Styrene	10.0	10.4		ppb v/v		104	70 - 130
tert-Butyl alcohol	10.0	8.99		ppb v/v		90	70 - 130
tert-Butylbenzene	10.0	9.85		ppb v/v		99	70 - 130
Tetrachloroethene	10.0	10.4		ppb v/v		104	70 - 130
Tetrahydrofuran	10.0	9.07		ppb v/v		91	70 - 130
Toluene	10.0	10.2		ppb v/v		102	70 - 130
trans-1,2-Dichloroethene	10.0	9.92		ppb v/v		99	70 - 130
trans-1,3-Dichloropropene	10.0	10.8		ppb v/v		108	70 - 130
Trichloroethene	10.0	10.1		ppb v/v		101	70 - 130
Trichlorofluoromethane	10.0	9.48		ppb v/v		95	70 - 130
Vinyl chloride	10.0	8.54		ppb v/v		85	70 - 130
Xylene, o-	10.0	10.1		ppb v/v		101	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	55	53.2		ug/m3		98	70 - 130
1,1,2,2-Tetrachloroethane	69	67.1		ug/m3		98	70 - 130
1,1,2-Trichloroethane	55	54.1		ug/m3		99	70 - 130
1,1-Dichloroethane	40	38.3		ug/m3		95	70 - 130
1,1-Dichloroethene	40	36.4		ug/m3		92	70 - 130
1,2,4-Trichlorobenzene	74	74.0		ug/m3		100	70 - 130
1,2,4-Trimethylbenzene	49	49.3		ug/m3		100	70 - 130
1,2-Dibromoethane	77	78.2		ug/m3		102	70 - 130
1,2-Dichlorobenzene	60	59.4		ug/m3		99	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-82157/3
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloroethane	40	40.7		ug/m3		101	70 - 130
1,2-Dichloropropane	46	46.0		ug/m3		100	70 - 130
1,2-Dichlorotetrafluoroethane	70	70.4		ug/m3		101	70 - 130
1,3,5-Trimethylbenzene	49	49.3		ug/m3		100	70 - 130
1,3-Butadiene	22	19.1		ug/m3		87	70 - 130
1,3-Dichlorobenzene	60	59.4		ug/m3		99	70 - 130
1,4-Dichlorobenzene	60	59.9		ug/m3		100	70 - 130
1,4-Dioxane	36	33.8		ug/m3		94	70 - 130
2,2,4-Trimethylpentane	47	44.6		ug/m3		96	70 - 130
2-Chlorotoluene	52	50.4		ug/m3		97	70 - 130
3-Chloropropene	31	28.0		ug/m3		89	70 - 130
4-Ethyltoluene	49	49.7		ug/m3		101	70 - 130
4-Isopropyltoluene	55	54.5		ug/m3		99	70 - 130
Acetone	24	23.0		ug/m3		97	70 - 130
Benzene	32	29.9		ug/m3		94	70 - 130
Benzyl chloride	52	54.5		ug/m3		105	70 - 130
Bromodichloromethane	67	69.0		ug/m3		103	70 - 130
Bromoethene(Vinyl Bromide)	44	39.9		ug/m3		91	70 - 130
Bromoform	100	105		ug/m3		102	70 - 130
Bromomethane	39	33.5		ug/m3		86	70 - 130
Carbon disulfide	31	31.1		ug/m3		100	70 - 130
Carbon tetrachloride	63	61.9		ug/m3		98	70 - 130
Chlorobenzene	46	45.3		ug/m3		98	70 - 130
Chloroethane	26	22.5		ug/m3		85	70 - 130
Chloroform	49	48.7		ug/m3		100	70 - 130
Chloromethane	21	17.4		ug/m3		84	70 - 130
cis-1,2-Dichloroethene	40	38.3		ug/m3		97	70 - 130
cis-1,3-Dichloropropene	45	49.2		ug/m3		108	70 - 130
Cumene	49	49.8		ug/m3		101	70 - 130
Cyclohexane	34	32.7		ug/m3		95	70 - 130
Dibromochloromethane	85	85.1		ug/m3		100	70 - 130
Dichlorodifluoromethane	49	45.7		ug/m3		92	70 - 130
Ethylbenzene	43	44.2		ug/m3		102	70 - 130
Freon 22	35	31.2		ug/m3		88	70 - 130
Freon TF	77	71.4		ug/m3		93	70 - 130
Hexachlorobutadiene	110	110		ug/m3		103	70 - 130
Isopropyl alcohol	25	20.4		ug/m3		83	70 - 130
m,p-Xylene	87	86.5		ug/m3		100	70 - 130
Methyl Butyl Ketone (2-Hexanone)	41	41.1		ug/m3		100	70 - 130
Methyl Ethyl Ketone	29	26.1		ug/m3		88	70 - 130
methyl isobutyl ketone	41	41.7		ug/m3		102	70 - 130
Methyl methacrylate	41	43.6		ug/m3		107	70 - 130
Methyl tert-butyl ether	36	35.8		ug/m3		99	70 - 130
Methylene Chloride	35	29.8		ug/m3		86	70 - 130
Naphthalene	52	50.5		ug/m3		96	70 - 130
n-Butane	24	21.0		ug/m3		88	70 - 130
n-Butylbenzene	55	53.1		ug/m3		97	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 200-82157/3
Matrix: Air
Analysis Batch: 82157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Heptane	41	38.8		ug/m3		95	70 - 130
n-Hexane	35	35.7		ug/m3		101	70 - 130
n-Propylbenzene	49	48.6		ug/m3		99	70 - 130
sec-Butylbenzene	55	53.7		ug/m3		98	70 - 130
Styrene	43	44.2		ug/m3		104	70 - 130
tert-Butyl alcohol	30	27.2		ug/m3		90	70 - 130
tert-Butylbenzene	55	54.1		ug/m3		99	70 - 130
Tetrachloroethene	68	70.2		ug/m3		104	70 - 130
Tetrahydrofuran	29	26.8		ug/m3		91	70 - 130
Toluene	38	38.4		ug/m3		102	70 - 130
trans-1,2-Dichloroethene	40	39.3		ug/m3		99	70 - 130
trans-1,3-Dichloropropene	45	49.0		ug/m3		108	70 - 130
Trichloroethene	54	54.3		ug/m3		101	70 - 130
Trichlorofluoromethane	56	53.3		ug/m3		95	70 - 130
Vinyl chloride	26	21.8		ug/m3		85	70 - 130
Xylene, o-	43	44.0		ug/m3		101	70 - 130

QC Association Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Air - GC/MS VOA

Analysis Batch: 82157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-25872-1	P48A-49A_121114	Total/NA	Air	TO-15	
200-25872-2	P48B-49B_121114	Total/NA	Air	TO-15	
LCS 200-82157/3	Lab Control Sample	Total/NA	Air	TO-15	
MB 200-82157/4	Method Blank	Total/NA	Air	TO-15	

Certification Summary

Client: Sterling Environmental Engineering PC
Project/Site: Troy Belting

TestAmerica Job ID: 200-25872-1

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-15
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-15
Florida	NELAP	4	E87467	06-30-15
L-A-B	DoD ELAP		L2336	02-26-17
Maine	State Program	1	VT00008	04-17-15
Minnesota	NELAP	5	050-999-436	12-31-15
New Hampshire	NELAP	1	2006	12-18-14 *
New Jersey	NELAP	2	VT972	06-30-15
New York	NELAP	2	10391	03-31-15
Pennsylvania	NELAP	3	68-00489	04-30-15
Rhode Island	State Program	1	LAO00298	12-30-14 *
US Fish & Wildlife	Federal		LE-058448-0	02-28-16
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-14 *
Virginia	NELAP	3	460209	12-14-15

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-15

* Certification renewal pending - certification considered valid.

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403
phone 802-660-1990 fax 802-660-1919

Canister Samples Chain of Custody Record

TestAmerica Analytical Testing Corp. assumes no liability with respect to the collection and shipment of these samples.

Client Contact Information	Project Manager: N. Williams, R. Aldrich	Samples Collected By: A. Castignetti, V. Cirkovic
Company: Sterling Env. Eng	Phone: (518) 456-4900	1 of 1 COCs
Address: 24 Wade Rd	Email: mark.williams@sterlingenvironmental.com, rodney.aldrich@sterlingenvironmental.com	
City/State/Zip: Latham NY 12110	Site Contact: A. Castignetti	
Phone: (518) 456-4900	TA Contact: L. Shaffer	
FAX:	**Analysis Turnaround Time**	
Project Name: Troy Belting	Standard (Specify) 10 day (Std)	
Site: Troy Belting	Rush (Specify)	
PO # 2011-31		

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-15 *	MA-APH	EPA 3C	EPA 25C	ASTM D-1946	Other (Please specify in notes section)	Sample Type: Indoor Air	Ambient Air	Soil Gas	Landfill Gas	Other (Please specify in notes section)
P48A-49A_121114	12/11/14	1200pm	100pm	-30.0	-8.0pm	4198	3338	X						X				
P48B-49B_121114	↓	1200	100pm	-30.0	-7.0	4747	3033	↓						X		↓		

12-11-14

Temperature (Fahrenheit)	Interior	Ambient
Start	@ 71.1°F	[illegible]
Stop	71.9°F	

Pressure (inches of Hg)	Interior	Ambient
Start	29.[illegible]55	29.54
Stop	29.55	29.55

200-25872 Chain of Custody

Special Instructions/QC Requirements & Comments:
- Standard TAT (10 days)
- Standard Report

* TO-15 Method: TCE, VC, Carbon Tetrachloride = 0.25 µg/m³
→ all other VOCs @ 1 µg/m³

Samples Shipped by:	Date/Time: 12/11/14 140pm	Samples Received by: 12-11-14 134
Samples Relinquished by:	Date/Time: 12-11-14 1630	Received by: 12/12/14 0900
Relinquished by:	Date/Time:	Received by:

Lab Use Only Shipper Name: Opened by: Condition:

SHIP DA

FROM:
TIM KNOLLMEYER (518) 438-8140
TESTAMERICA LAB INC
25 KRAFT AVE
ALBANY NY 12205
US

SHIP DATE: 11DEC14
ACTWGT: 35.0 LB
CAD: 552423/CAFE2806

BILL 3rd PARTY

521C2/DC75/6F03

TO SAMPLE RECEIVING/ CALLAHAN
TESTAMERICA - BURLINGTON
30 COMMUNITY DRIVE, SUITE 11

BURLINGTON VT 05403 (US)
(802) 660-1990
REF: STERLING - TROY BELTING

FedEx Ground

TRK# 4108 5809 9987

05403

9622 0417 3 (000 907 2880) 2 00 4108 5809 9987

Login Sample Receipt Checklist

Client: Sterling Environmental Engineering PC

Job Number: 200-25872-1

Login Number: 25872
List Number: 1
Creator: Atherton, Joel E

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	AMBIENT
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Sterling Environmental Engineering PC

Job Number: 200-25872-1

Login Number: 25872
List Number: 2
Creator: Atherton, Joel E

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time.		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

APPENDIX D

MATERIAL SAFETY DATA SHEETS (MSDS)

SAFETY DATA SHEET

1. Identification

Product Identifier	**Heavy Duty Degreaser**
Other means of identification	
Product code	03095, 03095T
Recommended use	General purpose degreaser
Recommended restrictions	None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name	CRC Industries, Inc.
Address	885 Louis Dr. Warminster, PA 18974 US
Telephone	
General Information	215-674-4300
Technical Assistance	800-521-3168
Customer Service	800-272-4620
24-Hour Emergency (CHEMTREC)	800-424-9300 (US) 703-527-3887 (International)
Website	www.crcindustries.com

2. Hazard(s) identification

Physical hazards	Gases under pressure	Compressed gas
Health hazards	Acute toxicity, inhalation	Category 4
	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2B
	Carcinogenicity	Category 1B
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 2
	Hazardous to the aquatic environment, long-term hazard	Category 2
OSHA defined hazards	Not classified.	

Label elements

Signal word	Danger
Hazard statement	Contains gas under pressure; may explode if heated. Causes skin irritation. Causes eye irritation. Harmful if inhaled. May cause drowsiness or dizziness. May cause cancer by inhalation or ingestion. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49°C/120°F. Use with adequate ventilation. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Avoid breathing mist or vapor. Avoid breathing gas. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

Response	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. If exposed or concerned: Get medical attention. Collect spillage.
Storage	Store in a well-ventilated place. Store locked up. Exposure to high temperature may cause can to burst.
Disposal	Dispose of contents/container in accordance with local/regional/national regulations.
Hazard(s) not otherwise classified (HNOC)	None known.

Supplemental information

11.13% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 3.4% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment.
When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Tetrachloroethylene	Perchloroethylene	127-18-4	80 - 90
COzol® 210		Proprietary	5 - 10
Carbon dioxide		124-38-9	1 - 3

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.
Skin contact	Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	If ingestion of a large amount does occur, call a poison control center immediately. Rinse mouth. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	Irritation of eyes and mucous membranes. Irritation of nose and throat. Exposed individuals may experience eye tearing, redness, and discomfort. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
General information	IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water spray. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Contents under pressure. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.
Special protective equipment and precautions for firefighters	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
Fire-fighting equipment/instructions	In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

safety-kleen.

Material Safety Data Sheet

Material Name: SAFETY-KLEEN HEAVY DUTY LACQUER THINNER 6782 **ID: 82343**

*** Section 1 - Chemical Product and Company Identification ***

Product Code: 5820, 5825, 6782
Product Use: Paint gun cleaner. If this product is used in combination with other products, refer to the Material Safety Data Sheet for those products.

THIS PRODUCT IS NOT FOR SALE OR USE IN THE STATE OF CALIFORNIA

Synonyms: None.

Phone: 1-800-669-5740

Safety-Kleen Systems, Inc.
2600 North Central Expressway, Suite 400
Richardson, TX 75080

Issue Date
October 18, 2013

Emergency # 1-800-468-1760
www.safety-kleen.com

Supersedes Issue Date
June 12, 2013

Original Issue Date
July 20, 1989

PREPARED BY: Product MSDS Coordinator APPROVED BY: MSDS Task Force

*** Section 2 - Hazardous Identification ***

EMERGENCY OVERVIEW

Appearance
Liquid, clear and colorless, solvent odor

Signal Word
DANGER!

Physical Hazards
Extremely flammable liquid and vapor. Vapor may cause flash fire.

Health Hazards
May be harmful, fatal or cause blindness if swallowed.
May be harmful if inhaled.
May be harmful if absorbed through the skin.
May irritate the respiratory tract (nose, throat, and lungs) and skin.
May be severely irritating to the eyes.
Contains material which may cause birth defects.
Contains material which may cause central nervous system damage.
Suspect cancer hazard. Contains material which may cause cancer. Risk of cancer depends on duration and level of exposure.

POTENTIAL HEALTH EFFECTS

Inhalation (Breathing)
High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

Eyes
May be severely irritating to the eyes. May cause tearing, redness, swelling, burns, and eye damage.

Skin
May cause irritation. Toluene, n-butyl alcohol and methyl alcohol may be absorbed through the skin and cause harm as noted under **INHALATION (BREATHING)**.

Ingestion (Swallowing)
May be harmful or fatal if swallowed. Ingestion of methanol may cause blindness. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

Medical Conditions Aggravated by Exposure

Individuals with pre-existing respiratory tract (nose, throat, and lungs), cardiovascular, liver, kidney, central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

Chronic

Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis). Prolonged or repeated inhalation may cause brain, liver, kidney, heart, and central nervous system damage. Prolonged or repeated inhalation or ingestion exposure may have reproductive toxicity and/or teratogenicity effects. Prolonged or repeated exposure may have mutagenic effects.

Cancer Information

This product contains ethyl benzene, methylene chloride, and perchloroethylene which may cause cancer. Risk of cancer depends on duration and level of exposure. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

Environmental Hazards

Toxic to fish/plants. See **SECTION 12: ECOLOGICAL INFORMATION**.

* * * Section 3 - Composition / Information on Ingredients * * *

CAS #	Component	Percent
108-88-3	Toluene	30-60
78-93-3	Methyl ethyl ketone	0-60
107-87-9	Methyl propyl ketone	0-60
64741-89-5	C5 to C8 Aliphatic hydrocarbons	0-60
8030-30-6	C9 to C13 Aliphatic hydrocarbons	0-60
110-43-0	Methyl n-amyl ketone	0-60
100-41-4	Ethyl benzene	0-30
108-10-1	Methyl isobutyl ketone	0-30
67-64-1	Acetone	0-20
141-78-6	Ethyl acetate	0-17
763-69-9	Ethyl 3-ethoxypropanoate	0-17
108-21-4	Isopropyl acetate	0-17
108-65-6	Propylene glycol monomethyl ether acetate	0-17
110-19-0	Isobutyl acetate	0-17
123-86-4	n-Butyl acetate	0-17
1330-20-7	Xylenes (o-, m-, p- isomers)	0-15
67-63-0	Isopropyl alcohol	0-10
71-36-3	n-Butyl alcohol	0-10
75-65-0	tert-Butyl alcohol	0-10
64-17-5	Ethyl alcohol	0-10
67-56-1	Methyl alcohol	0-4
127-18-4	Perchloroethylene	0-1
71-55-6	1,1,1-Trichloroethane	0-1
75-09-2	Methylene chloride	0-1

Component Related Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Butyl acetates.

* * * Section 4 - First Aid Measures * * *

Inhalation (Breathing)

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

#14

MATERIAL SAFETY DATA SHEET

VSP-500
01 00

VANGUARD TMS 273

Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NUMBER

VSP-500

HMIS CODES

Health	2*
Flammability	0
Reactivity	0

PRODUCT NAME
Electric Motor Degreaser Spray

MANUFACTURER'S NAME
THE SHERWIN-WILLIAMS COMPANY
Consumer Group - Industrial
Cleveland, OH 44115

EMERGENCY TELEPHONE NO.
(216) 566-2917

INFORMATION TELEPHONE NO.
(800) 251-2486

DATE OF PREPARATION
28-AUG-02

Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT			UNITS	VAPOR PRESSURE
49	71-55-6	1,1,1-Trichloroethane				132 mm
			ACGIH TLV	350	ppm	
			ACGIH TLV	450	ppm STEL	
			OSHA PEL	350	ppm	
			OSHA PEL	450	ppm STEL	
49	127-18-4	Tetrachloroethylene				18 mm
			ACGIH TLV	25	ppm	
			ACGIH TLV	100	ppm STEL	
			OSHA PEL	25	ppm	
3	124-38-9	Carbon Dioxide				
			ACGIH TLV	5000	ppm	
			OSHA PEL	5000	ppm	

Section 3 -- HAZARDS IDENTIFICATION

ROUTES OF EXPOSURE

Exposure may be by INHALATION and/or SKIN or EYE contact, depending on conditions of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

EFFECTS OF OVEREXPOSURE

Irritation of eyes, skin and upper respiratory system.

In a confined area vapors in high concentration may cause headache, nausea or dizziness.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Redness and itching or burning sensation may indicate eye or excessive skin exposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

None generally recognized.

CANCER INFORMATION

For complete discussion of toxicology data refer to Section 11.

Continued on page 2

APPENDIX E

VAPOR MITIGATION SYSTEM FINAL DESIGN
VAPOR PHASE CARBON USAGE ESTIMATE

PROJECT: Sterling Troy Belting Sub Slab
Sample 2

FLOW IN CFM: 60.00
FLOW IN CFD: 86400.00

PERFORMANCE:

CONTAMINANT	CONC(ppmv)	#CONT /DAY	#CARBON /DAY	#CONT /100,000cf	#CARBON /100,000cf
1,1,1-Trichloroethane	0.0017	0.00	0.00	0.00	0.00
1,1-Dichloroethane	0.0004	0.00	0.00	0.00	0.00
Benzene	0.0161	0.00	0.01	0.00	0.01
cis-1,2-Dichloroethylene	0.079	0.00	0.09	0.00	0.10
Toluene	0.0548	0.00	0.01	0.00	0.01
Acetone	0.14	0.00	0.26	0.00	0.30
Ethylbenzene	0.0077	0.00	0.00	0.00	0.00
Xylene	0.046	0.00	0.01	0.00	0.01
MEK	0.0326	0.00	0.05	0.00	0.05
Tetrachloroethylene	0.21	0.01	0.03	0.01	0.03
Trichloroethylene	0.28	0.01	0.07	0.01	0.08
SUB - TOTALS	0.8683	0.02	0.52	0.03	0.61
Vinyl Chloride	0.0021	0.00003	.03		
→ TOTAL	0.8704	0.02003	0.55 ←		

Calculation based on CARBTROL CSV carbon having a Carbon Tetrachloride number of: 65.00

NOTE: Carbon Usage Estimate is based on vapor stream temperature of 77 deg F and Relative Humidity less than 50%.
In particular, adsorption of chlorinated hydrocarbons is adversely affected by elevated humidity.