ENVIRONMENTAL CONSULTANTS
DAY ENVIRONMENTAL, INC.

June 24, 2014

Mr. Eugene Melnyk
Division of Environmental Remediation
New York State Department of Environmental Conservation
270 Michigan Avenue
Buffalo, New York 14203-2899

Re: Vapor Intrusion Mitigation
Anderson Cleaners Site
Jamestown, New York
Brownfield Cleanup Program Site #C907027

Dear Mr. Melnyk:

Day Environmental, Inc. (DAY) prepared this letter on behalf of Anderson Cleaners (Anderson) presenting the results of recent studies conducted to assess vapor intrusion in portions of the Anderson facility located on 5 Hunt Road, Jamestown, New York (the Site). In addition, this letter presents mitigation proposed to address identified and potential impacts to the indoor air.

Vapor Intrusion Evaluation

DAY submitted a work plan to the New York State Department of Environmental Conservation (NYSDEC) titled *Vapor Intrusion Study Work Plan, Anderson Cleaners Site, 5 Hunt Road, Jamestown, New York, NYSDEC Brownfield Cleanup Program; Site #C907027* dated April 2014 (the Vapor Intrusion Work Plan). The NYSDEC approved the implementation of the studies outlined in this work plan in a letter dated April 18, 2014, and DAY completed the field work identified in the Vapor Intrusion Work Plan on May 1, 2014. [Note: During the collection of the samples on May 1, 2014, attempts were made to replicate building conditions during the heating season (e.g., doors and windows were closed, etc.).]

As described in the Vapor Intrusion Work Plan, sub-slab (designated with a SS prefix) and adjacent indoor air samples (designated with an AI prefix) were collected from locations in the "Finishing Area" (i.e., samples SS-1 and AI-1), and the "Office/Showroom Area" (i.e., samples SS-2 and AI-2). In addition, a background air sample was collected from an upwind location outside of the Anderson building (i.e., designated Background). The sample locations are depicted on Figure 1.

In accordance with the Vapor Intrusion Work Plan, the samples were collected using Summa Canisters and pre-calibrated regulators over an 8-hour period to replicate the typical period of occupancy of the building. Following collection, the samples were submitted under chain of custody control to Spectrum Analytical, Inc. (Spectrum) for testing via United States Environmental Protection Agency (USEPA) Method TO-15. Copies of the laboratory report prepared by Spectrum and the executed chain of custody documentation are included in Attachment A. The detected volatile organic compounds (VOCs) measured in the samples tested

are presented in Table 1. This table also includes a comparison of the detected VOC concentrations to guidance values presented in the New York State Department of Health (NYSDOH) document titled *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York* dated October 2006 and the September 2013 Fact Sheet prepared by the NYSDOH titled *Tetrachloroethene (PERC) in Indoor and Outdoor Air*.

A review of the test results indicates that the sub-slab and indoor air samples collected from the "Office/Showroom Area" are impacted, and that mitigation is required in this area. Although the sample collected from the "Finishing Area" contained concentrations of various VOCs that exceeded NYSDOH guidance values, the impact was significantly less than that identified in the samples from the "Office/Showroom Area". Mitigation of the "Finishing Area" may not be warranted at this time.

Vapor Mitigation

Anderson retained Mitigation Tech of Brockport, New York to conduct preliminary air communication testing and to develop a scope of work to install a Sub-Slab Depressurization System (SSDS) at the Site. It is proposed that this system be installed in stages to assess the effectiveness of the system in controlling vapor intrusion throughout the facility, and to limit costs. To this end, it is proposed that a SSDS be installed in the "Laundry/Dry Cleaning Area" and a second independent SSDS in the "Office/Showroom Area" (refer to Figure 1). [Note: Although vapor intrusion testing was not conducted within the "Laundry/Dry Cleaning Area" of the building, contamination has historically been identified in this area (e.g., the presence of tetrachloroethene in the form of DNAPL). As such, this area likely represents the primary source area of the vapor impacts identified, and mitigation is warranted. Further, it is suspected that mitigation within the "Laundry/Dry Cleaning Area" may have a positive impact on the "Finishing Area".] When these systems are operational, an assessment of the "Finishing Area" and other locations (if required) will be completed to determine if additional systems and/or modifications to the installed systems are warranted.

Projected Schedule

At the present time, it is anticipated that the installation of the SSDS within the "Laundry Dry Cleaning Area" and the "Office/Showroom Area" will begin after July 7, 2014, and take approximately three days to complete. The start date is dependent on the availability of Mitigation Tech and access to the Site. The NYSDEC will be notified at least three days prior to the start of work. It is proposed that subsequent air communication testing be completed subsequent to the start-up of the SSDS, and that confirmatory testing be completed during the next heating season.

Should you have questions or require further information, please feel free to call.

Very truly yours,
Day Environmental, Inc.

Raymond L. Kampff
Associate Principal

RLK/s

Figures
Figure 1 Site Plan

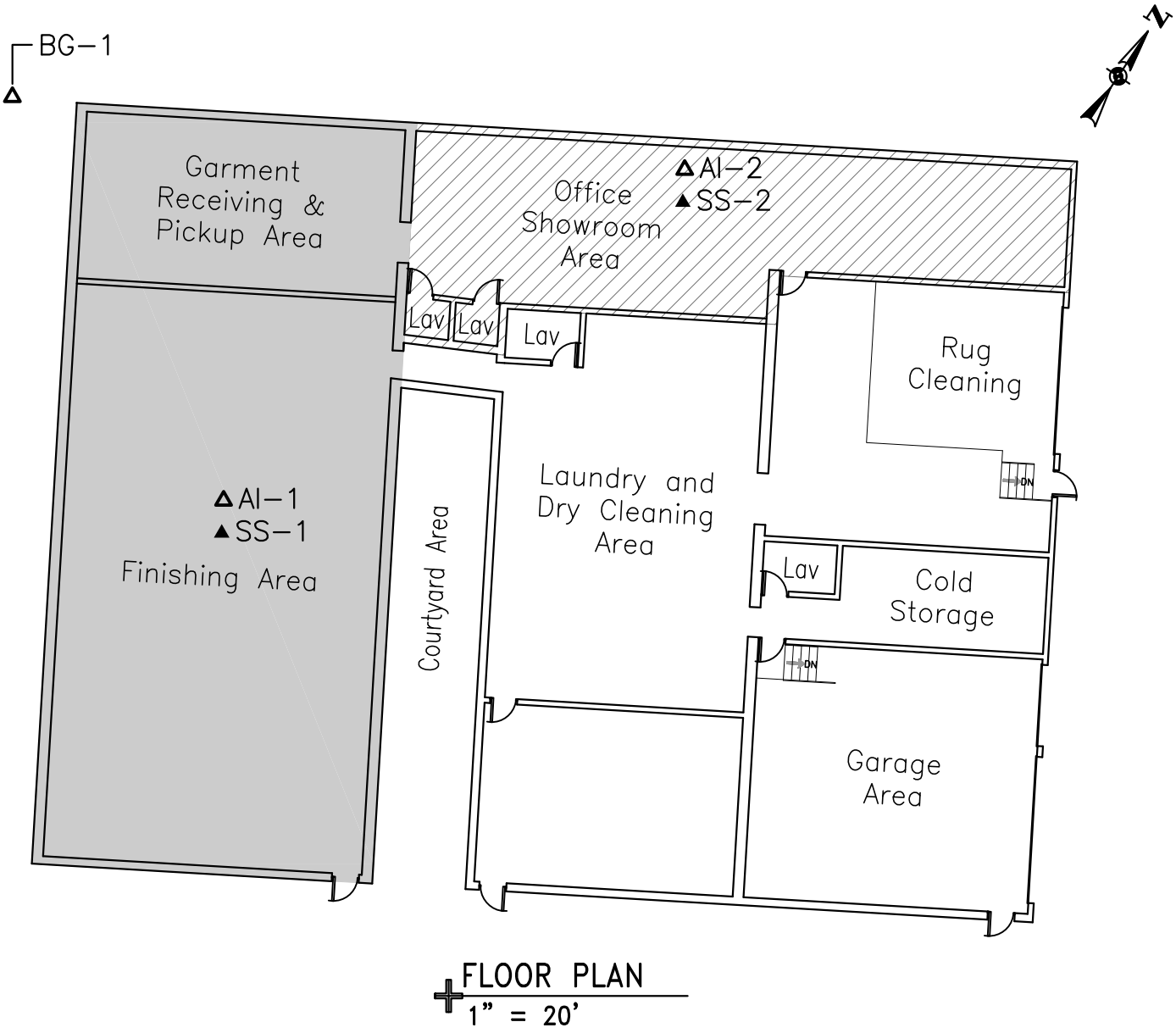
Tables
Table 1 Summary of Detected VOCs – Indoor Air and Sub-Slab Vapor Samples

Attachments
Attachment A: Analytical laboratory Report and Chain of Custody Documentation

cc: M. Lyons

RLK4261

Figures



FLOOR PLAN
1" = 20'

LEGEND:

△BG–1	Background Air Sample Location		Construction Circa 1930's
△AI–1	Indoor Air Sample Locatio		Construction Circa 1985
▲SS–1	Sub–Slab Vapor Sample Location		

NOTES:

1. Site Plan produced from drawings by Habiterra Associates, Thorsell, Kennedy, Casker, Arnone & Hedin. P.C. entitled "Addition and Renovations, Anderson Cleaners, Inc", drawings A–1 Floor Plan dated October 22, 1985 and L–1 Grading Plan and from notes of site visits by representatives of Day Environmental, Inc.
2. DNAPL extraction well locations were obtained by tape measurement from existing site structure. Locations should be considered accurate to the degree implied by the method used.

DATE 6-24-2014	DAY ENVIRONMENTAL, INC. ENVIRONMENTAL CONSULTANTS ROCHESTER, NEW YORK 14606 NEW YORK, NEW YORK 10170	PROJECT TITLE 5 HUNT ROAD JAMESTOWN, NEW YORK VAPOR INTRUSION STUDY WORK PLAN	PROJECT NO. 3563S-04
DRAWN BY RJM		DRAWING TITLE Site Plan With Sample Locations	FIGURE 1
SCALE As Noted			

Ref1: Time Plotted: Tuesday, June 24, 2014 8:56:23 AM Ref2: Ref3: File Name: P:\Drawings\Brownfield\3563\Site Plan With Sample Locations June 2014.dwg Layout: Layout1 Pen Setting File: 800psFullcolor.ctb

Tables

Table 1

5 Hunt Road
Jamestown New York
NYSDEC Site #C907027

Summary of Detected VOCs - Indoor Air and Sub-Slab Vapor Samples

Detected Constituent	NYSDOH Indoor Air Guidance Value[1]	Finishing area		Office/Showroom Area		NYSDOH Outdoor Air Value[2]	Background
		SS-1	AI-1	SS-2	AI-2		BG-1
		5/1/2014	5/1/2014	5/1/2014	5/1/2014		5/1/2014
1,1,1-Trichloroethane	20.6	U	U	11.18	U	2.6	U
1,2-Dichloroethane	<0.9	U	U	U	U	<0.8	**2.11**
1,4-Dichlorobenzene	5.5	U	U	U	0.24	1.2	U
Carbon Tetrachloride	<1.3	U	U	U	0.69	0.7	0.44
Chloromethane	3.7	U	U	U	1.69	3.7	U
cis-1,2-Dichloroethene	<1.9	**14.59**	**5.67**	**1586.09**	**48.77**	<1.8	0.79
Methylene chloride	60[3]	19.72	8.37	U	8.47	6.1	**6.56**
Tetrachloroethene	30[4]	**271.25**	**31.80**	**806.96**	**202.76**	6.5	3.46
Trichloroethene	5[3]	**82.23**	**23.49**	**343.95**	**101.57**	1.3	**1.67**

U = Not detected at concentration above analytical laboratory reporting limit.

[1] Indoor Air Guidance Value is the 90th percentile referenced in Table C2 of the NYSDOH document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York - Appendix C" dated October 2006.

[2] Outdoor Air Value is the 90th percentile referenced in Table C2 of the NYSDOH document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York- Appendix C" dated October 2006.

[3] NYSDOH derived air guidance values in NYSDOH document titled "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006.

[4] Value identified in NYSDOH September 2013 Fact Sheet "Tetrachloroethene (PERC) in Indoor and Outdoor Air".

No NYSDOH criteria is available for soil vapor samples.

Results and Guidance Values are reported as ug/m^3.

14.59 Concentration exceed NYSDOH **Indoor** Air Guidance Value

6.56 Concentration exceed NYSDOH **Outdoor** Air Guidance Value

Attachments

Report Date:
15-May-14 11:48

☑ Final Report
☐ Re-Issued Report
☐ Revised Report

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Laboratory Report

Day Environmental, Inc.
1563 Lyell Avenue
Rochester, NY 14606
Attn: Ray Kampff

Project: 5 Hunt Rd. Jamestown, NY
Project #: 35635-04

Laboratory ID	Client Sample ID	Container	Matrix	Date Sampled	Date Received
SB88919-01	AI-1	Summa canister 6 liter	Indoor/Ambient Air	01-May-14 15:17	02-May-14 21:00
SB88919-02	SS-1	Summa canister 6 liter	Soil Gas	01-May-14 15:17	02-May-14 21:00
SB88919-03	Background	Summa canister 6 liter	Indoor/Ambient Air	01-May-14 15:20	02-May-14 21:00
SB88919-04	AI-2	Summa canister 6 liter	Indoor/Ambient Air	01-May-14 15:20	02-May-14 21:00
SB88919-05	SS-2	Summa canister 6 liter	Soil Gas	01-May-14 15:21	02-May-14 21:00

I attest that the information contained within the report has been reviewed for accuracy and checked against the quality control requirements for each method. These results relate only to the sample(s) as received.
All applicable NELAC requirements have been met.

Massachusetts # M-MA138/MA1110
Connecticut # PH-0777
Florida # E87600/E87936
Maine # MA138
New Hampshire # 2538
New Jersey # MA011/MA012
New York # 11393/11840
Pennsylvania # 68-04426/68-02924
Rhode Island # 98
USDA # S-51435

Authorized by:

Nicole Leja
Laboratory Director

Spectrum Analytical holds certification in the State of New York for the analytes as indicated with an X in the "Cert." column within this report. Please note that the State of New York does not offer certification for all analytes. Please refer to our website for specific certification holdings in each state.
Please note that this report contains 16 pages of analytical data plus Chain of Custody document(s). When the Laboratory Report is indicated as revised, this report supersedes any previously dated reports for the laboratory ID(s) referenced above. Where this report identifies subcontracted analyses, copies of the subcontractor's test report are available upon request. This report may not be reproduced, except in full, without written approval from Spectrum Analytical, Inc.

Spectrum Analytical, Inc. is a NELAC accredited laboratory organization and meets NELAC testing standards. Use of the NELAC logo however does not insure that Spectrum is currently accredited for the specific method or analyte indicated. Please refer to our "Quality" web page at www.spectrum-analytical.com for a full listing of our current certifications and fields of accreditation. States in which Spectrum Analytical, Inc. holds NELAC certification are New York, New Hampshire, New Jersey, Pennsylvania and Florida. All analytical work for Volatile Organic and Air analysis are transferred to and conducted at our 830 Silver Street location (NY-11840, NJ-MA012, PA-68-04426 and FL-E87936).

Please contact the Laboratory or Technical Director at 800-789-9115 with any questions regarding the data contained in this laboratory report.

CASE NARRATIVE:

Data has been reported to the MDL. This report includes estimated concentrations detected below the RDL and above the MDL (J-Flag).

Samples are received and the pressure is recorded from the gauge on the canister. If a canister does not have a gauge, a vacuum gauge is attached to the valve and pressure is recorded. If the canister is below -10 psig, the can must be pressurized to 0 psig. Tedlar bags do not have the pressure recorded. The can pressure can be located within this report in the sample header information.

If a Duplicate (DUP) was not requested on the Chain of Custody, method criteria may have been fulfilled with a source sample not of this Sample Delivery Group.

See below for any non-conformances and issues relating to quality control samples and/or sample analysis/matrix.

EPA TO-15

Calibration:

1404030

Analyte quantified by quadratic equation type calibration.

1,1-Dichloroethene
Methylene chloride

This affected the following samples:

1410791-BLK1
1410791-BS1
AI-2
S403730-ICV1
S405187-CCV1
SS-1
SS-2

1404046

Analyte quantified by quadratic equation type calibration.

1,1-Dichloroethene
Chloromethane

This affected the following samples:

1410802-BLK1
1410802-BS1
AI-1
AI-2
Background
S404057-ICV1
S405200-CCV1

Samples:

SB88919-01 *AI-1*

Due to the low volume of sample collected it was necessary to pressurize the Summa can in laboratory prior to analysis which results in elevated reporting limits.

SB88919-02 *SS-1*

Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.

SB88919-04 *AI-2*

EPA TO-15

Samples:

SB88919-04 *AI-2*

Sample dilution required for high concentration of target analytes to be within the instrument calibration range.

1,1,2-Trichloroethane

This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.

cis-1,2-Dichloroethene
Tetrachloroethene

SB88919-05 *SS-2*

This sample was not able to be analyzed for client requested reporting limits due to high concentrations of target analytes in the sample.

EPA TO-15 SIM

Calibration:

1404046

Analyte quantified by quadratic equation type calibration.

1,1-Dichloroethane
1,1-Dichloroethene
Carbon tetrachloride

This affected the following samples:

1410802-BLK1
1410802-BS1
AI-1
AI-2
Background
S404057-ICV1
S405200-CCV1

Samples:

SB88919-01 *AI-1*

Due to the low volume of sample collected it was necessary to pressurize the Summa can in laboratory prior to analysis which results in elevated reporting limits.

SB88919-04 *AI-2*

This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.

Tetrachloroethene
Trichloroethene

Sample Acceptance Check Form

Client:	Day Environmental, Inc.
Project:	5 Hunt Rd. Jamestown, NY / 35635-04
Work Order:	SB88919
Sample(s) received on:	5/2/2014
Received by:	Vickie Knowles

The following outlines the condition of samples for the attached Chain of Custody upon receipt.

	Yes	No	N/A
1. Were custody seals present?	☐	☑	☐
2. Were custody seals intact?	☐	☐	☑
3. Were samples received at a temperature of ≤ 6°C?	☐	☐	☑
4. Were samples cooled on ice upon transfer to laboratory representative?	☐	☐	☑
5. Were samples refrigerated upon transfer to laboratory representative?	☐	☐	☑
6. Were sample containers received intact?	☑	☐	☐
7. Were samples properly labeled (labels affixed to sample containers and include sample ID, site location, and/or project number and the collection date)?	☑	☐	☐
8. Were samples accompanied by a Chain of Custody document?	☑	☐	☐
9. Does Chain of Custody document include proper, full, and complete documentation, which shall include sample ID, site location, and/or project number, date and time of collection, collector's name, preservation type, sample matrix and any special remarks concerning the sample?	☑	☐	☐
10. Did sample container labels agree with Chain of Custody document?	☑	☐	☐
11. Were samples received within method-specific holding times?	☑	☐	☐

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AI-1	35635-04	Indoor/Ambient Air	01-May-14 15:17	02-May-14
SB88919-01				

CAS No.	Analyte(s)	Result/Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Analyst	Batch	Cert.
Air Quality Analyses											
Low Level Chlorinated VOCs		ppbv	Prepared 13-May-14 Dilution: 2.51			AirP	Can pressure: -16 Can ID: 0255				
74-87-3	Chloromethane	< 0.233	0.251	< 0.48	0.52	U, D	EPA TO-15	13-May-14	BRF	1410802	X
75-01-4	Vinyl chloride	< 0.161	0.251	< 0.41	0.64	U, D	"	"	"	"	X
75-00-3	Chloroethane	< 0.191	0.251	< 0.50	0.66	U, D	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 0.183	0.251	< 0.73	1.00	U, D	"	"	"	"	X
75-09-2	Methylene chloride	**2.41**	0.251	**8.37**	0.87	D	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 0.105	0.251	< 0.42	1.00	U, D	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 0.123	0.251	< 0.50	1.02	U, D	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**1.43**	0.251	**5.67**	1.00	D	"	"	"	"	X
67-66-3	Chloroform	< 0.113	0.251	< 0.55	1.22	U, D	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 0.115	0.251	< 0.47	1.02	U, D	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 0.131	0.251	< 0.71	1.37	U, D	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 0.108	0.251	< 0.68	1.58	U, D	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.123	0.251	< 0.57	1.16	U, D	"	"	"	"	X
79-01-6	Trichloroethene	**3.74**	0.251	**20.10**	1.35	D	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.118	0.251	< 0.54	1.14	U, D	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.118	0.251	< 0.54	1.14	U, D	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 0.166	0.251	< 0.91	1.37	U, D	"	"	"	"	X
127-18-4	Tetrachloroethene	**4.29**	0.251	**29.09**	1.70	D	"	"	"	"	X
108-90-7	Chlorobenzene	< 0.153	0.251	< 0.70	1.16	U, D	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.166	0.251	< 1.14	1.72	U, D	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 0.138	0.251	< 0.83	1.51	U, D	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 0.153	0.251	< 0.92	1.51	U, D	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 0.133	0.251	< 0.80	1.51	U, D	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.100	0.251	< 1.07	2.68	U, D	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
Chlorinated SIM		ppbv	Prepared 13-May-14 Dilution: 2.51			AirP	Can pressure: -16 Can ID: 0255				
75-01-4	Vinyl chloride	< 0.0748	0.100	< 0.19	0.26	U, D	EPA TO-15 SIM	"	BRF	"	X
75-35-4	1,1-Dichloroethene	< 0.0788	0.100	< 0.31	0.40	U, D	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 0.0748	0.100	< 0.30	0.40	U, D	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.0843	0.100	< 0.34	0.40	U, D	"	"	"	"	
56-23-5	Carbon tetrachloride	< 0.0843	0.100	< 0.53	0.63	U, D	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.0894	0.100	< 0.41	0.46	U, D	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.0643	0.100	< 0.43	0.67	U, D	"	"	"	"	
79-01-6	Trichloroethene	**4.37**	0.100	**23.49**	0.54	D	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 0.0843	0.100	< 0.46	0.55	U, D	"	"	"	"	
127-18-4	Tetrachloroethene	**4.69**	0.100	**31.80**	0.68	D	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.0956	0.100	< 0.66	0.69	U, D	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 0.0708	0.100	< 0.43	0.60	U, D	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-1 SB88919-02	35635-04	Soil Gas	01-May-14 15:17	02-May-14

CAS No.	Analyte(s)	Result/Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Analyst	Batch	Cert.
Air Quality Analyses											
Chlorinated VOCs in Air		ppbv	Prepared 13-May-14 Dilution: 4			R05	Can pressure: -7 Can ID: 16004				
74-87-3	Chloromethane	< 1.50	2.00	< 3.10	4.13	U, D	EPA TO-15	13-May-14	KRL	1410791	X
75-01-4	Vinyl chloride	< 1.58	2.00	< 4.04	5.11	U, D	"	"	"	"	X
75-00-3	Chloroethane	< 1.79	2.00	< 4.72	5.28	U, D	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.49	2.00	< 5.91	7.93	U, D	"	"	"	"	X
75-09-2	Methylene chloride	**5.68**	2.00	**19.72**	6.94	D	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 0.852	2.00	< 3.38	7.93	U, D	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 0.800	2.00	< 3.24	8.10	U, D	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**3.68**	2.00	**14.59**	7.93	D	"	"	"	"	X
67-66-3	Chloroform	< 1.14	2.00	< 5.55	9.73	U, D	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.02	2.00	< 4.13	8.10	U, D	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 0.784	2.00	< 4.28	10.91	U, D	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 0.832	2.00	< 5.23	12.58	U, D	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.784	2.00	< 3.62	9.24	U, D	"	"	"	"	X
79-01-6	Trichloroethene	**15.3**	2.00	**82.23**	10.75	D	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.680	2.00	< 3.09	9.08	U, D	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.596	2.00	< 2.71	9.08	U, D	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.05	2.00	< 5.73	10.91	U, D	"	"	"	"	X
127-18-4	Tetrachloroethene	**40.0**	2.00	**271.25**	13.56	D	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.16	2.00	< 5.34	9.21	U, D	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 1.09	2.00	< 7.49	13.73	U, D	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.09	2.00	< 6.55	12.02	U, D	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 0.860	2.00	< 5.17	12.02	U, D	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 0.928	2.00	< 5.58	12.02	U, D	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.936	2.00	< 9.98	21.33	U, D	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*94*		*70-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
Background	35635-04	Indoor/Ambient Air	01-May-14 15:20	02-May-14
SB88919-03				

CAS No.	Analyte(s)	Result/Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Analyst	Batch	Cert.
Air Quality Analyses											
Low Level Chlorinated VOCs		ppbv	Prepared 13-May-14 Dilution: 1				Can pressure: -7 Can ID: 4616				
74-87-3	Chloromethane	< 0.0930	0.100	< 0.19	0.21	U	EPA TO-15	13-May-14	BRF	1410802	X
75-01-4	Vinyl chloride	< 0.0640	0.100	< 0.16	0.26	U	"	"	"	"	X
75-00-3	Chloroethane	< 0.0760	0.100	< 0.20	0.26	U	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 0.0730	0.100	< 0.29	0.40	U	"	"	"	"	X
75-09-2	Methylene chloride	**1.89**	0.100	**6.56**	0.35		"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 0.0420	0.100	< 0.17	0.40	U	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 0.0490	0.100	< 0.20	0.40	U	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**0.200**	0.100	**0.79**	0.40		"	"	"	"	X
67-66-3	Chloroform	< 0.0450	0.100	< 0.22	0.49	U	"	"	"	"	X
107-06-2	1,2-Dichloroethane	**0.520**	0.100	**2.11**	0.40		"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 0.0520	0.100	< 0.28	0.55	U	"	"	"	"	X
56-23-5	Carbon tetrachloride	**0.0700**	0.100	**0.44**	0.63	J	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.0490	0.100	< 0.23	0.46	U	"	"	"	"	X
79-01-6	Trichloroethene	**0.350**	0.100	**1.88**	0.54		"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.0470	0.100	< 0.21	0.45	U	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.0470	0.100	< 0.21	0.45	U	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 0.0660	0.100	< 0.36	0.55	U	"	"	"	"	X
127-18-4	Tetrachloroethene	**0.490**	0.100	**3.32**	0.68		"	"	"	"	X
108-90-7	Chlorobenzene	< 0.0610	0.100	< 0.28	0.46	U	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.0660	0.100	< 0.45	0.69	U	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 0.0550	0.100	< 0.33	0.60	U	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 0.0610	0.100	< 0.37	0.60	U	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 0.0530	0.100	< 0.32	0.60	U	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.0400	0.100	< 0.43	1.07	U	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	
Chlorinated SIM		ppbv	Prepared 13-May-14 Dilution: 1				Can pressure: -7 Can ID: 4616				
75-01-4	Vinyl chloride	< 0.0298	0.0400	< 0.08	0.10	U	EPA TO-15 SIM	"	BRF	"	X
75-35-4	1,1-Dichloroethene	< 0.0314	0.0400	< 0.12	0.16	U	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 0.0298	0.0400	< 0.12	0.16	U	"	"	"	"	
107-06-2	1,2-Dichloroethane	**0.470**	0.0400	**1.90**	0.16		"	"	"	"	
56-23-5	Carbon tetrachloride	< 0.120	0.120	< 0.75	0.75	U	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.0356	0.0400	< 0.16	0.18	U	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.0256	0.0400	< 0.17	0.27	U	"	"	"	"	
79-01-6	Trichloroethene	**0.310**	0.0400	**1.67**	0.21		"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 0.0336	0.0400	< 0.18	0.22	U	"	"	"	"	
127-18-4	Tetrachloroethene	**0.510**	0.0400	**3.46**	0.27		"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.0381	0.0400	< 0.26	0.27	U	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	< 0.0282	0.0400	< 0.17	0.24	U	"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*96*		*70-130 %*			"	"	"	"	

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Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AI-2	35635-04	Indoor/Ambient Air	01-May-14 15:20	02-May-14
SB88919-04				

CAS No.	*Analyte(s)*	*Result/Units*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Air Quality Analyses											
Chlorinated VOCs in Air		ppbv	Prepared 13-May-14 Dilution: 2			GS1	Can pressure: -9 Can ID: 7638				
74-87-3	Chloromethane	**0.820**	1.00	**1.69**	2.07	J, D	EPA TO-15	13-May-14	KRL	1410791	X
75-01-4	Vinyl chloride	< 0.788	1.00	< 2.01	2.56	U, D	"	"	"	"	X
75-00-3	Chloroethane	< 0.896	1.00	< 2.36	2.64	U, D	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 0.746	1.00	< 2.96	3.97	U, D	"	"	"	"	X
75-09-2	Methylene chloride	**2.16**	1.00	**7.50**	3.47	D	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 0.426	1.00	< 1.69	3.97	U, D	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 0.400	1.00	< 1.62	4.05	U, D	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**8.04**	1.00	**31.88**	3.97	D	"	"	"	"	X
67-66-3	Chloroform	< 0.568	1.00	< 2.76	4.87	U, D	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 0.508	1.00	< 2.06	4.05	U, D	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 0.392	1.00	< 2.14	5.46	U, D	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 0.416	1.00	< 2.62	6.29	U, D	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.392	1.00	< 1.81	4.62	U, D	"	"	"	"	X
79-01-6	Trichloroethene	**13.4**	1.00	**72.01**	5.37	D	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.340	1.00	< 1.54	4.54	U, D	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.298	1.00	< 1.35	4.54	U, D	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 0.524	1.00	< 2.86	5.46	GS1, U, D	"	"	"	"	X
127-18-4	Tetrachloroethene	**21.1**	1.00	**143.08**	6.78	D	"	"	"	"	X
108-90-7	Chlorobenzene	< 0.580	1.00	< 2.67	4.61	U, D	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.546	1.00	< 3.75	6.87	U, D	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 0.546	1.00	< 3.28	6.01	U, D	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 0.430	1.00	< 2.59	6.01	U, D	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 0.464	1.00	< 2.79	6.01	U, D	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.468	1.00	< 4.99	10.66	U, D	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*93*		*70-130 %*			"	"	"	"	
Low Level Chlorinated VOCs		ppbv	Prepared 13-May-14 Dilution: 1				Can pressure: -9 Can ID: 7638				
74-87-3	Chloromethane	< 0.0930	0.100	< 0.19	0.21	U	"	13-May-14	"	1410802	X
75-01-4	Vinyl chloride	< 0.0640	0.100	< 0.16	0.26	U	"	"	"	"	X
75-00-3	Chloroethane	< 0.0760	0.100	< 0.20	0.26	U	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 0.0730	0.100	< 0.29	0.40	U	"	"	"	"	X
75-09-2	Methylene chloride	**2.44**	0.100	**8.47**	0.35		"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 0.0420	0.100	< 0.17	0.40	U	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 0.0490	0.100	< 0.20	0.40	U	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**12.3**	0.100	**48.77**	0.40	E	"	"	"	"	X
67-66-3	Chloroform	< 0.0450	0.100	< 0.22	0.49	U	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 0.0460	0.100	< 0.19	0.40	U	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	< 0.0520	0.100	< 0.28	0.55	U	"	"	"	"	X
56-23-5	Carbon tetrachloride	**0.110**	0.100	**0.69**	0.63		"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.0490	0.100	< 0.23	0.46	U	"	"	"	"	X
79-01-6	Trichloroethene	**15.5**	0.100	**83.30**	0.54		"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.0470	0.100	< 0.21	0.45	U	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.0470	0.100	< 0.21	0.45	U	"	"	"	"	X

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
AI-2	35635-04	Indoor/Ambient Air	01-May-14 15:20	02-May-14
SB88919-04				

CAS No.	*Analyte(s)*	*Result/Units*	**RDL*	*Result ug/m³*	**RDL*	*Flag*	*Method Ref.*	*Analyzed*	*Analyst*	*Batch*	*Cert.*
Air Quality Analyses											
Low Level Chlorinated VOCs		ppbv	Prepared 13-May-14 Dilution: 1				Can pressure: -9 Can ID: 7638				
79-00-5	1,1,2-Trichloroethane	< 0.0660	0.100	< 0.36	0.55	U	EPA TO-15	13-May-14	BRF	1410802	X
127-18-4	Tetrachloroethene	**25.2**	0.100	**170.89**	0.68	E	"	"	"	"	X
108-90-7	Chlorobenzene	< 0.0610	0.100	< 0.28	0.46	U	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.0660	0.100	< 0.45	0.69	U	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 0.0550	0.100	< 0.33	0.60	U	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	**0.110**	0.100	**0.66**	0.60		"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 0.0530	0.100	< 0.32	0.60	U	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 0.0400	0.100	< 0.43	1.07	U	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	
Chlorinated SIM		ppbv	Prepared 13-May-14 Dilution: 1				Can pressure: -9 Can ID: 7638				
75-01-4	Vinyl chloride	< 0.0298	0.0400	< 0.08	0.10	U	EPA TO-15 SIM	"	BRF	"	X
75-35-4	1,1-Dichloroethene	< 0.0314	0.0400	< 0.12	0.16	U	"	"	"	"	
75-34-3	1,1-Dichloroethane	< 0.0298	0.0400	< 0.12	0.16	U	"	"	"	"	
107-06-2	1,2-Dichloroethane	< 0.0336	0.0400	< 0.14	0.16	U	"	"	"	"	
56-23-5	Carbon tetrachloride	< 0.120	0.120	< 0.75	0.75	U	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.0356	0.0400	< 0.16	0.18	U	"	"	"	"	
75-27-4	Bromodichloromethane	< 0.0256	0.0400	< 0.17	0.27	U	"	"	"	"	
79-01-6	Trichloroethene	**18.9**	0.0400	**101.57**	0.21	E	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 0.0336	0.0400	< 0.18	0.22	U	"	"	"	"	
127-18-4	Tetrachloroethene	**29.9**	0.0400	**202.76**	0.27	E	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 0.0381	0.0400	< 0.26	0.27	U	"	"	"	"	
106-46-7	1,4-Dichlorobenzene	**0.0400**	0.0400	**0.24**	0.24		"	"	"	"	
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*98*		*70-130 %*			"	"	"	"	

Sample Identification	Client Project #	Matrix	Collection Date/Time	Received
SS-2 SB88919-05	35635-04	Soil Gas	01-May-14 15:21	02-May-14

Air Quality Analyses

CAS No.	Analyte(s)	Result/Units	*RDL	Result ug/m³	*RDL	Flag	Method Ref.	Analyzed	Analyst	Batch	Cert.
Chlorinated VOCs in Air		ppbv	Prepared 13-May-14 Dilution: 5			GS	Can pressure: -7 Can ID: 7637				
74-87-3	Chloromethane	< 1.88	2.50	< 3.88	5.16	U, D	EPA TO-15	13-May-14	KRL	1410791	X
75-01-4	Vinyl chloride	< 1.97	2.50	< 5.04	6.39	U, D	"	"	"	"	X
75-00-3	Chloroethane	< 2.24	2.50	< 5.91	6.60	U, D	"	"	"	"	X
75-35-4	1,1-Dichloroethene	< 1.86	2.50	< 7.38	9.92	U, D	"	"	"	"	X
75-09-2	Methylene chloride	< 2.22	2.50	< 7.71	8.68	U, D	"	"	"	"	X
156-60-5	trans-1,2-Dichloroethene	< 1.06	2.50	< 4.20	9.91	U, D	"	"	"	"	X
75-34-3	1,1-Dichloroethane	< 1.00	2.50	< 4.05	10.12	U, D	"	"	"	"	X
156-59-2	cis-1,2-Dichloroethene	**400**	2.50	**1586.09**	9.91	D	"	"	"	"	X
67-66-3	Chloroform	< 1.42	2.50	< 6.91	12.17	U, D	"	"	"	"	X
107-06-2	1,2-Dichloroethane	< 1.27	2.50	< 5.14	10.12	U, D	"	"	"	"	X
71-55-6	1,1,1-Trichloroethane	**2.05**	2.50	**11.18**	13.64	J, D	"	"	"	"	X
56-23-5	Carbon tetrachloride	< 1.04	2.50	< 6.54	15.73	U, D	"	"	"	"	X
78-87-5	1,2-Dichloropropane	< 0.980	2.50	< 4.53	11.55	U, D	"	"	"	"	X
79-01-6	Trichloroethene	**64.0**	2.50	**343.95**	13.44	D	"	"	"	"	X
10061-01-5	cis-1,3-Dichloropropene	< 0.850	2.50	< 3.86	11.35	U, D	"	"	"	"	X
10061-02-6	trans-1,3-Dichloropropene	< 0.745	2.50	< 3.38	11.35	U, D	"	"	"	"	X
79-00-5	1,1,2-Trichloroethane	< 1.31	2.50	< 7.15	13.64	U, D	"	"	"	"	X
127-18-4	Tetrachloroethene	**119**	2.50	**806.96**	16.95	D	"	"	"	"	X
108-90-7	Chlorobenzene	< 1.45	2.50	< 6.68	11.51	U, D	"	"	"	"	X
79-34-5	1,1,2,2-Tetrachloroethane	< 1.36	2.50	< 9.34	17.17	U, D	"	"	"	"	X
541-73-1	1,3-Dichlorobenzene	< 1.36	2.50	< 8.18	15.03	U, D	"	"	"	"	X
106-46-7	1,4-Dichlorobenzene	< 1.08	2.50	< 6.49	15.03	U, D	"	"	"	"	X
95-50-1	1,2-Dichlorobenzene	< 1.16	2.50	< 6.97	15.03	U, D	"	"	"	"	X
87-68-3	Hexachlorobutadiene	< 1.17	2.50	< 12.48	26.66	U, D	"	"	"	"	X
Surrogate recoveries:											
460-00-4	*4-Bromofluorobenzene*	*93*		*70-130 %*			"	"	"	"	

Certificate of Analysis

Container Type: Summa canister 6 liter **Date of Analysis:** 4/25/2014

Canister ID: 0255 **Analyst's Initials:** BRF

The sampling device detailed above has been tested and is certified to the limits for the target compounds as listed below.

Analyte	*Quantitation Limit (ppbv)*	*Analyte*	*Quantitation Limit (ppbv)*
Acetone	<0.5	Ethanol	<0.5
Acrylonitrile	<0.1	4-Isopropyl Toluene	<0.5
Benzene	<0.1	Ethyl acetate	<0.1
Benzyl chloride	<0.1	Ethylbenzene	<0.1
Bromodichloromethane	<0.1	4-Ethyltoluene	<0.1
Bromoform	<0.1	n-Heptane	<0.1
Bromomethane	<0.1	Hexachlorobutadiene	<0.1
1,3-Butadiene	<0.1	Hexane	<0.1
2-Butanone (MEK)	<0.1	2-Hexanone (MBK)	<0.1
Carbon disulfide	<0.5	Isopropyl alcohol	<0.5
Carbon tetrachloride	<0.1	4-Methyl-2-pentanone (MIBK)	<0.1
Chlorobenzene	<0.1	Methyl tert-butyl ether	<0.1
Chloroethane	<0.1	Methylene chloride	<0.1
1,4-Dioxane	<0.1	Naphthalene	<0.5
n-Butylbenzene	<0.1	1,1,1,2-Tetrachlorethane	<0.1
Chloroform	<0.1	Propene	<0.1
Chloromethane	<0.1	Styrene	<0.1
Cyclohexane	<0.1	1,1,2,2-Tetrachloroethane	<0.1
Dibromochloromethane	<0.1	Tetrachloroethene	<0.1
1,2-Dibromoethane (EDB)	<0.1	Tetrahydrofuran	<0.1
1,2-Dichlorobenzene	<0.1	Toluene	<0.1
1,3-Dichlorobenzene	<0.1	1,2,4-Trichlorobenzene	<0.1
1,4-Dichlorobenzene	<0.1	1,1,1-Trichloroethane	<0.1
Dichlorodifluoromethane (Freon12)	<0.1	1,1,2-Trichloroethane	<0.1
1,1-Dichloroethane	<0.1	Trichloroethene	<0.1
1,2-Dichloroethane	<0.1	1,1,2-Trichlorotrifluoroethane (Freon 113)	<0.1
1,1-Dichloroethene	<0.1	Trichlorofluoromethane (Freon 11)	<0.1
cis-1,2-Dichloroethene	<0.1	1,2,4-Trimethylbenzene	<0.1
trans-1,2-Dichloroethene	<0.1	1,3,5-Trimethylbenzene	<0.1
1,2-Dichloropropane	<0.1	Vinyl chloride	<0.1
cis-1,3-Dichloropropene	<0.1	m,p-Xylene	<0.1
trans-1,3-Dichloropropene	<0.1	o-Xylene	<0.1
1,2-Dichlorotetrafluoroethane (Freon 114)	<0.1	sec-Butylbenzene	<0.1
Isopropylbenzene	<0.1		

This certification applies to the following sampling devices:

0255

Certificate of Analysis

Container Type: Summa canister 6 liter **Date of Analysis:** 4/16/2014

Canister ID: 16004 **Analyst's Initials:** BRF

The sampling device detailed above has been tested and is certified to the limits for the target compounds as listed below.

Analyte	*Quantitation Limit (ppbv)*	*Analyte*	*Quantitation Limit (ppbv)*
Acetone	<0.5	Ethanol	<0.5
Acrylonitrile	<0.1	4-Isopropyl Toluene	<0.5
Benzene	<0.1	Ethyl acetate	<0.1
Benzyl chloride	<0.1	Ethylbenzene	<0.1
Bromodichloromethane	<0.1	4-Ethyltoluene	<0.1
Bromoform	<0.1	n-Heptane	<0.1
Bromomethane	<0.1	Hexachlorobutadiene	<0.1
1,3-Butadiene	<0.1	Hexane	<0.1
2-Butanone (MEK)	<0.1	2-Hexanone (MBK)	<0.1
Carbon disulfide	<0.5	Isopropyl alcohol	<0.5
Carbon tetrachloride	<0.1	4-Methyl-2-pentanone (MIBK)	<0.1
Chlorobenzene	<0.1	Methyl tert-butyl ether	<0.1
Chloroethane	<0.1	Methylene chloride	<0.1
1,4-Dioxane	<0.1	Naphthalene	<0.5
n-Butylbenzene	<0.1	1,1,1,2-Tetrachlorethane	<0.1
Chloroform	<0.1	Propene	<0.1
Chloromethane	<0.1	Styrene	<0.1
Cyclohexane	<0.1	1,1,2,2-Tetrachloroethane	<0.1
Dibromochloromethane	<0.1	Tetrachloroethene	<0.1
1,2-Dibromoethane (EDB)	<0.1	Tetrahydrofuran	<0.1
1,2-Dichlorobenzene	<0.1	Toluene	<0.1
1,3-Dichlorobenzene	<0.1	1,2,4-Trichlorobenzene	<0.1
1,4-Dichlorobenzene	<0.1	1,1,1-Trichloroethane	<0.1
Dichlorodifluoromethane (Freon12)	<0.1	1,1,2-Trichloroethane	<0.1
1,1-Dichloroethane	<0.1	Trichloroethene	<0.1
1,2-Dichloroethane	<0.1	1,1,2-Trichlorotrifluoroethane (Freon 113)	<0.1
1,1-Dichloroethene	<0.1	Trichlorofluoromethane (Freon 11)	<0.1
cis-1,2-Dichloroethene	<0.1	1,2,4-Trimethylbenzene	<0.1
trans-1,2-Dichloroethene	<0.1	1,3,5-Trimethylbenzene	<0.1
1,2-Dichloropropane	<0.1	Vinyl chloride	<0.1
cis-1,3-Dichloropropene	<0.1	m,p-Xylene	<0.1
trans-1,3-Dichloropropene	<0.1	o-Xylene	<0.1
1,2-Dichlorotetrafluoroethane (Freon 114)	<0.1	sec-Butylbenzene	<0.1
Isopropylbenzene	<0.1		

This certification applies to the following sampling devices:

16004

Certificate of Analysis

Container Type: Summa canister 6 liter **Date of Analysis:** 4/25/2014

Canister ID: 4616 **Analyst's Initials:** BRF

The sampling device detailed above has been tested and is certified to the limits for the target compounds as listed below.

Analyte	*Quantitation Limit (ppbv)*	*Analyte*	*Quantitation Limit (ppbv)*
Acetone	<0.5	Ethanol	<0.5
Acrylonitrile	<0.1	4-Isopropyl Toluene	<0.5
Benzene	<0.1	Ethyl acetate	<0.1
Benzyl chloride	<0.1	Ethylbenzene	<0.1
Bromodichloromethane	<0.1	4-Ethyltoluene	<0.1
Bromoform	<0.1	n-Heptane	<0.1
Bromomethane	<0.1	Hexachlorobutadiene	<0.1
1,3-Butadiene	<0.1	Hexane	<0.1
2-Butanone (MEK)	<0.1	2-Hexanone (MBK)	<0.1
Carbon disulfide	<0.5	Isopropyl alcohol	<0.5
Carbon tetrachloride	<0.1	4-Methyl-2-pentanone (MIBK)	<0.1
Chlorobenzene	<0.1	Methyl tert-butyl ether	<0.1
Chloroethane	<0.1	Methylene chloride	<0.1
1,4-Dioxane	<0.1	Naphthalene	<0.5
n-Butylbenzene	<0.1	1,1,1,2-Tetrachlorethane	<0.1
Chloroform	<0.1	Propene	<0.1
Chloromethane	<0.1	Styrene	<0.1
Cyclohexane	<0.1	1,1,2,2-Tetrachloroethane	<0.1
Dibromochloromethane	<0.1	Tetrachloroethene	<0.1
1,2-Dibromoethane (EDB)	<0.1	Tetrahydrofuran	<0.1
1,2-Dichlorobenzene	<0.1	Toluene	<0.1
1,3-Dichlorobenzene	<0.1	1,2,4-Trichlorobenzene	<0.1
1,4-Dichlorobenzene	<0.1	1,1,1-Trichloroethane	<0.1
Dichlorodifluoromethane (Freon12)	<0.1	1,1,2-Trichloroethane	<0.1
1,1-Dichloroethane	<0.1	Trichloroethene	<0.1
1,2-Dichloroethane	<0.1	1,1,2-Trichlorotrifluoroethane (Freon 113)	<0.1
1,1-Dichloroethene	<0.1	Trichlorofluoromethane (Freon 11)	<0.1
cis-1,2-Dichloroethene	<0.1	1,2,4-Trimethylbenzene	<0.1
trans-1,2-Dichloroethene	<0.1	1,3,5-Trimethylbenzene	<0.1
1,2-Dichloropropane	<0.1	Vinyl chloride	<0.1
cis-1,3-Dichloropropene	<0.1	m,p-Xylene	<0.1
trans-1,3-Dichloropropene	<0.1	o-Xylene	<0.1
1,2-Dichlorotetrafluoroethane (Freon 114)	<0.1	sec-Butylbenzene	<0.1
Isopropylbenzene	<0.1		

This certification applies to the following sampling devices:

4616

Certificate of Analysis

Container Type: Summa canister 6 liter **Date of Analysis:** 4/25/2014

Canister ID: 7637 **Analyst's Initials:** BRF

The sampling device detailed above has been tested and is certified to the limits for the target compounds as listed below.

Analyte	*Quantitation Limit (ppbv)*	*Analyte*	*Quantitation Limit (ppbv)*
Acetone	<0.5	Ethanol	<0.5
Acrylonitrile	<0.1	4-Isopropyl Toluene	<0.5
Benzene	<0.1	Ethyl acetate	<0.1
Benzyl chloride	<0.1	Ethylbenzene	<0.1
Bromodichloromethane	<0.1	4-Ethyltoluene	<0.1
Bromoform	<0.1	n-Heptane	<0.1
Bromomethane	<0.1	Hexachlorobutadiene	<0.1
1,3-Butadiene	<0.1	Hexane	<0.1
2-Butanone (MEK)	<0.1	2-Hexanone (MBK)	<0.1
Carbon disulfide	<0.5	Isopropyl alcohol	<0.5
Carbon tetrachloride	<0.1	4-Methyl-2-pentanone (MIBK)	<0.1
Chlorobenzene	<0.1	Methyl tert-butyl ether	<0.1
Chloroethane	<0.1	Methylene chloride	<0.1
1,4-Dioxane	<0.1	Naphthalene	<0.5
n-Butylbenzene	<0.1	1,1,1,2-Tetrachlorethane	<0.1
Chloroform	<0.1	Propene	<0.1
Chloromethane	<0.1	Styrene	<0.1
Cyclohexane	<0.1	1,1,2,2-Tetrachloroethane	<0.1
Dibromochloromethane	<0.1	Tetrachloroethene	<0.1
1,2-Dibromoethane (EDB)	<0.1	Tetrahydrofuran	<0.1
1,2-Dichlorobenzene	<0.1	Toluene	<0.1
1,3-Dichlorobenzene	<0.1	1,2,4-Trichlorobenzene	<0.1
1,4-Dichlorobenzene	<0.1	1,1,1-Trichloroethane	<0.1
Dichlorodifluoromethane (Freon12)	<0.1	1,1,2-Trichloroethane	<0.1
1,1-Dichloroethane	<0.1	Trichloroethene	<0.1
1,2-Dichloroethane	<0.1	1,1,2-Trichlorotrifluoroethane (Freon 113)	<0.1
1,1-Dichloroethene	<0.1	Trichlorofluoromethane (Freon 11)	<0.1
cis-1,2-Dichloroethene	<0.1	1,2,4-Trimethylbenzene	<0.1
trans-1,2-Dichloroethene	<0.1	1,3,5-Trimethylbenzene	<0.1
1,2-Dichloropropane	<0.1	Vinyl chloride	<0.1
cis-1,3-Dichloropropene	<0.1	m,p-Xylene	<0.1
trans-1,3-Dichloropropene	<0.1	o-Xylene	<0.1
1,2-Dichlorotetrafluoroethane (Freon 114)	<0.1	sec-Butylbenzene	<0.1
Isopropylbenzene	<0.1		

This certification applies to the following sampling devices:

7637

Certificate of Analysis

Container Type: Summa canister 6 liter **Date of Analysis:** 4/25/2014

Canister ID: 7638 **Analyst's Initials:** BRF

The sampling device detailed above has been tested and is certified to the limits for the target compounds as listed below.

Analyte	*Quantitation Limit (ppbv)*	*Analyte*	*Quantitation Limit (ppbv)*
Acetone	<0.5	Ethanol	<0.5
Acrylonitrile	<0.1	4-Isopropyl Toluene	<0.5
Benzene	<0.1	Ethyl acetate	<0.1
Benzyl chloride	<0.1	Ethylbenzene	<0.1
Bromodichloromethane	<0.1	4-Ethyltoluene	<0.1
Bromoform	<0.1	n-Heptane	<0.1
Bromomethane	<0.1	Hexachlorobutadiene	<0.1
1,3-Butadiene	<0.1	Hexane	<0.1
2-Butanone (MEK)	<0.1	2-Hexanone (MBK)	<0.1
Carbon disulfide	<0.5	Isopropyl alcohol	<0.5
Carbon tetrachloride	<0.1	4-Methyl-2-pentanone (MIBK)	<0.1
Chlorobenzene	<0.1	Methyl tert-butyl ether	<0.1
Chloroethane	<0.1	Methylene chloride	<0.1
1,4-Dioxane	<0.1	Naphthalene	<0.5
n-Butylbenzene	<0.1	1,1,1,2-Tetrachlorethane	<0.1
Chloroform	<0.1	Propene	<0.1
Chloromethane	<0.1	Styrene	<0.1
Cyclohexane	<0.1	1,1,2,2-Tetrachloroethane	<0.1
Dibromochloromethane	<0.1	Tetrachloroethene	<0.1
1,2-Dibromoethane (EDB)	<0.1	Tetrahydrofuran	<0.1
1,2-Dichlorobenzene	<0.1	Toluene	<0.1
1,3-Dichlorobenzene	<0.1	1,2,4-Trichlorobenzene	<0.1
1,4-Dichlorobenzene	<0.1	1,1,1-Trichloroethane	<0.1
Dichlorodifluoromethane (Freon12)	<0.1	1,1,2-Trichloroethane	<0.1
1,1-Dichloroethane	<0.1	Trichloroethene	<0.1
1,2-Dichloroethane	<0.1	1,1,2-Trichlorotrifluoroethane (Freon 113)	<0.1
1,1-Dichloroethene	<0.1	Trichlorofluoromethane (Freon 11)	<0.1
cis-1,2-Dichloroethene	<0.1	1,2,4-Trimethylbenzene	<0.1
trans-1,2-Dichloroethene	<0.1	1,3,5-Trimethylbenzene	<0.1
1,2-Dichloropropane	<0.1	Vinyl chloride	<0.1
cis-1,3-Dichloropropene	<0.1	m,p-Xylene	<0.1
trans-1,3-Dichloropropene	<0.1	o-Xylene	<0.1
1,2-Dichlorotetrafluoroethane (Freon 114)	<0.1	sec-Butylbenzene	<0.1
Isopropylbenzene	<0.1		

This certification applies to the following sampling devices:

7638

Notes and Definitions

AirP	Due to the low volume of sample collected it was necessary to pressurize the Summa can in laboratory prior to analysis which results in elevated reporting limits.
D	Data reported from a dilution
E	This flag indicates the concentration for this analyte is an estimated value due to exceeding the calibration range or interferences resulting in a biased final concentration.
GS	This sample was not able to be analyzed for client requested reporting limits due to high concentrations of target analytes in the sample.
GS1	Sample dilution required for high concentration of target analytes to be within the instrument calibration range.
J	Detected above the Method Detection Limit but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
R05	Elevated Reporting Limits due to the presence of high levels of non-target analytes; sample may not meet client requested reporting limit for this reason.
U	Analyte included in the analysis, but not detected at or above the MDL.
dry	Sample results reported on a dry weight basis
NR	Not Reported
RPD	Relative Percent Difference

Laboratory Control Sample (LCS): A known matrix spiked with compound(s) representative of the target analytes, which is used to document laboratory performance.

Matrix Duplicate: An intra-laboratory split sample which is used to document the precision of a method in a given sample matrix.

Matrix Spike: An aliquot of a sample spiked with a known concentration of target analyte(s). The spiking occurs prior to sample preparation and analysis. A matrix spike is used to document the bias of a method in a given sample matrix.

Method Blank: An analyte-free matrix to which all reagents are added in the same volumes or proportions as used in sample processing. The method blank should be carried through the complete sample preparation and analytical procedure. The method blank is used to document contamination resulting from the analytical process.

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Reportable Detection Limit (RDL): The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. For many analytes the RDL analyte concentration is selected as the lowest non-zero standard in the calibration curve. While the RDL is approximately 5 to 10 times the MDL, the RDL for each sample takes into account the sample volume/weight, extract/digestate volume, cleanup procedures and, if applicable, dry weight correction. Sample RDLs are highly matrix-dependent.

Surrogate: An organic compound which is similar to the target analyte(s) in chemical composition and behavior in the analytical process, but which is not normally found in environmental samples. These compounds are spiked into all blanks, standards, and samples prior to analysis. Percent recoveries are calculated for each surrogate.

Continuing Calibration Verification: The calibration relationship established during the initial calibration must be verified at periodic intervals. Concentrations, intervals, and criteria are method specific.

Validated by:
Nicole Leja

SB88919 AMF

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Chain of Custody Record/Field Test Data Sheets for Air Analyses

Page 1 of 1

Special Handling:
☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: ______
· All TATs subject to laboratory approval.
· Min. 24-hour notification needed for rushes.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester, NY

Tel #: 585 454 0210

Project Manager: Ray Kampff

Invoice To: Anderson Cleaners
c/o Mike Lyons
5 Hunt Road
Jamestown NY

Attn: Mike Lyons

P.O. No.: RQN:

Project No.: 35635-04

Site Name: 5 Hunt Road

Location: Jamestown **State:** NY

Sampler(s): Mike Lyons / C. Hampton

Analysis: TO-15 Chlorinated

	Can ID	Can Size (L)	Outgoing Canister Pressure ("Hg) (Lab)	Incoming Canister Pressure ("Hg) (Lab)	Flow Reg. ID	Flow Controller Readout (ml/min)	Lab Id:	Sample Id:	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	TO-15 Chlorinated	Indoor /Ambient Air	Soil Gas	Check box if canister is returned unused
"	0255	6	-30		2996	9.3	SB88919-01	AI-1	5/1/14	0715	1517	28.5	15.8	70	70	X	X		
"	16004	6	-30		828	9.2	-02	SS-1	5/1/14	0716	1517	28.0	6.7	70	70	X		X	
"	4616	6	-30		2920	9.3	-03	BACKGROUND	5/1/14	0717	1520	27.7	7.2	—	—	X	X		
"	7638	6	-30		20	9.4	-04	AI-2	5/1/14	0705	1520	28.0	7.0	70	70	X	X		
"	0703	6	-30		2995	9.1		NOT used) - unopened											
"	7637	6	-30		48	9.1	-05	SS-2	5/1/14	0706	1521	28.5	6.2	70	70	X		X	

LABORATORY USE ONLY

23.1/0/23.1 IR01
5/6/14 DL

Date of Request: 4/23/14 Total # Canisters: 6
Requested by: Charles Hampton # LL Canisters: 6
Company: Day Environmental # Flow Controllers: 6
Location: Rochester, NY Flow Rate/Setting: 8hrs
Date Needed: 4/29/14 Order #: 31031 Prepared by: BRF

I attest that all media relinquished from Spectrum Analytical, Inc. have been received in good working condition, based on visual observation, and agree to the terms and conditions as listed on the back of this document.

Signed: Date:

Printed:

QA/QC Reporting Level:
☐ Standard ☐ NY ASP A* ☐ TIER II* ☐ MA DEP CAM
☐ NO QC ☐ NY ASP B* ☐ TIER IV* ☐ CT DPH RCP
☐ DQA* * additional charges may apply contact SA's QA Department for further info.

Client Use	Ambient Temperature (Fahrenheit)	Ambient Pressure (inches of Hg)
Start		
Stop		

Special Instructions/QC Requirements & Comments:

Please contact SA's Air Department immediately at (800) 789-9115 if you experience any technical difficulties or suspect any QC issue(s) with air media.

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	5/2/2014	14:00
[signature]	[signature]	5/2/14	9:36
[signature]	[signature]	5/6/14	2100

☐ EDD Format
☒ E-mail Results to RKampff@daymail.net

SB88919 AMB

SPECTRUM ANALYTICAL, INC.
Featuring
HANIBAL TECHNOLOGY

Chain of Custody Record/Field Test Data Sheets for Air Analyses

Page 1 of 1

Special Handling:
☒ Standard TAT - 7 to 10 business days
☐ Rush TAT - Date Needed: ________
- All TATs subject to laboratory approval.
- Min. 24-hour notification needed for rushes.

Report To: Day Environmental, Inc
1563 Lyell Avenue
Rochester, NY
Tel #: 585 454 0210
Project Manager: Ray Kampff

Invoice To: Anderson Cleaners
c/o Mike Lyons
5 Hunt Road
Jamestown NY
Attn: Mike Lyons
P.O. No.:
RQN:

Project No.: 35635-04
Site Name: 5 Hunt Road
Location: Jamestown **State:** NY
Sampler(s): Mike Lyons / C. Hampton

Can ID	Can Size (L)	Outgoing Canister Pressure ("Hg) (Lab)	Incoming Canister Pressure ("Hg) (Lab)	Flow Reg. ID	Flow Controller Readout (ml/min)	Lab Id	Sample Id:	Sample Date(s)	Time Start (24 hr clock)	Time Stop (24 hr clock)	Canister Pressure in Field ("Hg) (Start)	Canister Pressure in Field ("Hg) (Stop)	Interior Temp. (F) (Start)	Interior Temp. (F) (Stop)	Analysis: TO-15 Chlorinated	Matrix: Indoor / Ambient Air	Matrix: Soil Gas	Check box if canister is returned unused
0255	6	-30	-16	2996	9.3	SB88919-01	AF-1	5/1/14	0715	1517	28.5	15.8	70	70	X	X		
16004	6	-30	-7	828	9.2	-02	SS-1	5/1/14	0716	1517	28.0	6.7	70	70	X		X	
4616	6	-30	-7	2920	9.3	-03	BACKGROUND	5/1/14	0717	1520	27.7	7.2	—	—	X	X		
7638	6	-30	-9	20	9.4	-04	AI-2	5/1/14	0705	1520	28.0	7.0	70	70	X	X		
0703	6	-30		2995	9.1		Not used - unopened											
7637	6	-30	-7	48	9.1	-05	SS-2	5/1/14	0706	1521	28.5	6.2	70	70	X		X	

23 / / IR 01
5/6/14 OC

Date of Request: 4/23/14 **Total # Canisters:** 6
Requested by: Charles Hampton **# LL Canisters:** 6
Company: Day Environmental **# Flow Controllers:** 6
Location: Rochester, NY **Flow Rate/Setting:** 8 hrs
Date Needed: 4/29/14 **Order #:** 31031 **Prepared by:** BRP

I attest that all media relinquished from Spectrum Analytical, Inc. have been received in good working condition, based on visual observation, and agree to the terms and conditions as listed on the back of this document.

Signed: Date:

Printed:

QA/QC Reporting Level:
☐ Standard ☐ NY ASP A* ☐ TIER II* ☐ MA DEP CAM
☐ NO QC ☐ NY ASP B* ☐ TIER IV* ☐ CT DPH RCP
☐ DQA*
* additional charges may apply contact SA's QA Department for further info.

Client Use	Ambient Temperature (Fahrenheit)	Ambient Pressure (inches of Hg)
Start		
Stop		

Special Instructions/QC Requirements & Comments:

Please contact SA's Air Department immediately at (800) 789-9115 if you experience any technical difficulties or suspect any QC issue(s) with air media.

Relinquished by:	Received by:	Date:	Time:
[signature]	[signature]	5/2/2014	14:00
[signature]	[signature]	5/6/14	9:36
[signature]	[signature]	5/6/14	2100

☐ EDD Format
☒ E-mail Results to: RKampff@daymail.net