

Viridian® Inc., Environmental Field Services
P.O. Box 3009
Upper Montclair, NJ 07043



January 27, 2022

Mr. Sam Lichtenstein
V.P. Acquisitions and Management
Midland Properties LLC
44 Olympia Lane
Monsey, NY 10952

**Re: Vapor Intrusion Assessment Report
175 Route 59, Spring Valley, NY 10977**

Mr. Lichtenstein:

Viridian® Inc. Environmental Field Services (Viridian) performed indoor air sampling at 175 Route 59, Spring Valley, NY (Site). A summary of the results is presented herein.

At the clients request a total of four (4) indoor air samples and one (1) outdoor ambient air sample were collected for the purposes of assessing the existing sub-slab depressurization system operation and indoor air quality. All samples were collected in accordance with the Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York (NYSDOH October 2006). The site is a single story (double height ceilings) commercial building. To note, NYSDOH relies on the concurrent analysis of indoor air and sub-slab vapor data, in this case the NYSDOH guidance is being applied solely to indoor air data.

Methodology

The indoor air samples were collected from a height of 4' feet above existing grade to mimic the breathing zone. Samples were collected in Summa canisters, which were certified clean by the laboratory and analyzed by using USEPA Method TO-15. Indoor air sampling occurred for the duration of approximately twenty four hours.

Results

Indoor air sample results collected during this investigation were compared to the compounds listed in the Vapor Intrusion Matrices A, B & C as detailed in the New York State Department of Health (NYSDOH) Final Guidance for Evaluating Soil Vapor Intrusion, dated October 2006, updated in 2015.

In addition, the laboratory reported standard volatile organic compounds (VOCs) per the TO-15 analysis list and as included in the indoor air on **Table 1**. The tables summarize the analytical findings from this assessment.

Indoor Air Samples Summary– Table 1

- Methylene Chloride was detected at a maximum concentration of 8.75 ug/m³ in Indoor Air Sample #2, corresponding to the Matrix B range of 3 ug/m³ to 10 ug/m³. In the absence of corresponding sub-slab vapor data, this corresponds to “No Further Action” on NYSDOH Matrix B should the lowest concentration of less than 100 ug/m³ in sub-slab vapor be applied. This compound is typically associated with hairspray, paint stripper, rug cleaners and insecticides. Methylene Chloride is a Matrix B Compound.
- Carbon Tetrachloride was detected at a maximum concentration of 0.811 ug/m³ in Indoor Air Sample #3 corresponding to the Matrix A range of 0.2-1 ug/m³. In the absence of corresponding sub-slab vapor data, this corresponds to “No Further Action” on NYSDOH Matrix A should the lowest concentration of less than 6 ug/m³ in sub-slab vapor be applied. To note, this compound was also detected in ambient air at a concentration of 0.541 ug/m³ indicating potential background levels of this compound. This compound is usually associated with propellants for aerosol cans, solvent for oils, fats and lacquers, and as a dry-cleaning agent. Carbon Tetrachloride is a Matrix A Compound.
- Tetrachloroethane (PCE) was detected at a maximum concentration of 2.12 ug/m³ in Indoor Air Sample #1, below the Matrix B value of 3 ug/m³. In the absence of

corresponding sub-slab vapor data, this corresponds to "No Further Action" on NYSDOH Matrix A should the lowest concentration of less than 100 ug/m³ in sub-slab vapor be applied. To note, this compound was also detected in ambient air at a concentration of 0.38 ug/m³ indicating potential background levels of this compound. This compound is usually associated with dry cleaning, metal degreasing, adhesives and glues, insecticides, and rug cleaners. Tetrachloroethane is a Matrix B Compound.

A review of the analytical summary as noted above indicates spot detections of chlorinated compounds established by the NYSDOH Matrices. Viridian recommends continued monitoring of indoor air and sub slab vapor levels if the building is occupied to ensure future conditions do not exceed NYSDOH established action levels.

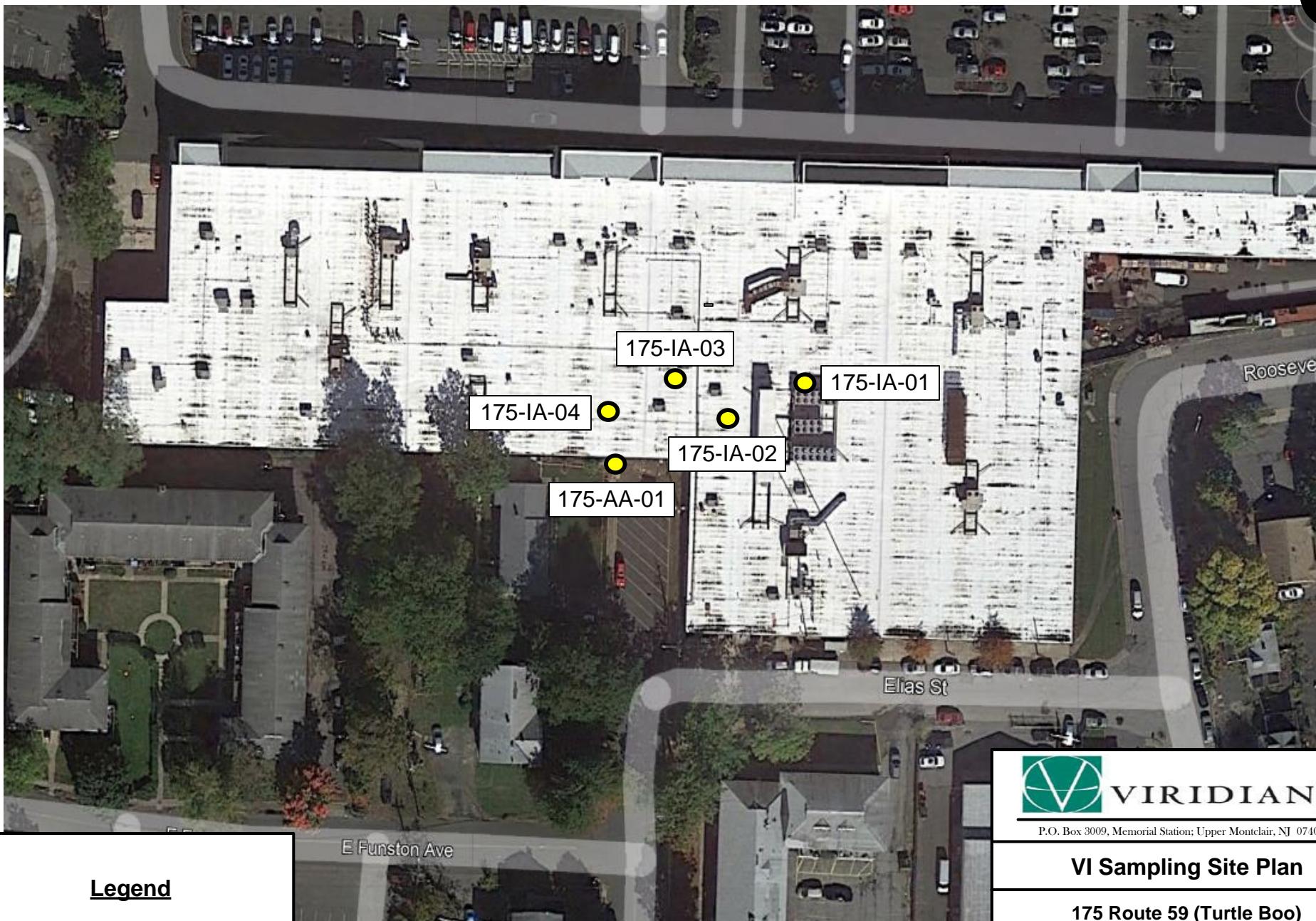
For Viridian® Inc., Environmental Field Services,



Craig Puerta, PE
Engineer

Attachments:

Table 1 – Analytical Data
Site Map



Legend

● IA Location



VI Sampling Site Plan

**175 Route 59 (Turtle Boo)
Spring Valley, NY 07461**

FIG. NO.:	PROJ. NO.:	DATE:
1	1208-21	Jan. 2022



ANALYTICAL REPORT

Lab Number:	L2171636
Client:	Viridian, Inc. PO Box 3009 Memorial Station Upper Montclair, NJ 07043
ATTN:	Flint Kinkade
Phone:	(973) 746-7600
Project Name:	175 RT. 59
Project Number:	1208-21
Report Date:	01/14/22

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA030), NH NELAP (2062), CT (PH-0141), DoD (L2474), FL (E87814), IL (200081), LA (85084), ME (MA00030), MD (350), NJ (MA015), NY (11627), NC (685), OH (CL106), PA (68-02089), RI (LAO00299), TX (T104704419), VT (VT-0015), VA (460194), WA (C954), US Army Corps of Engineers, USDA (Permit #P330-17-00150), USFWS (Permit #206964).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2171636-01	175-IA-01	AIR	SPRING VALLEY	12/30/21 12:21	12/30/21
L2171636-02	175-IA-02	AIR	SPRING VALLEY	12/30/21 12:25	12/30/21
L2171636-03	175-IA-03	AIR	SPRING VALLEY	12/30/21 12:30	12/30/21
L2171636-04	175-IA-04	AIR	SPRING VALLEY	12/30/21 12:38	12/30/21
L2171636-05	175-AA-01	AIR	SPRING VALLEY	12/30/21 12:43	12/30/21

Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

Case Narrative (continued)

Report Submission

This is a partial report including the final results for the samples reported. A final report will be issued as soon as the follow up dilutions are completed.

Volatile Organics in Air

Canisters were released from the laboratory on December 29, 2021. The canister certification results are provided as an addendum.

L2171636-01D, -02D, and -05D: The samples were re-analyzed on dilution in order to quantitate the results within the calibration range. The result(s) should be considered estimated, and are qualified with an E flag, for any compound(s) that exceeded the calibration range in the initial analysis. The re-analysis was performed only for the compound(s) that exceeded the calibration range.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Christopher J. Anderson Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/14/22

AIR



Project Name: 175 RT. 59**Project Number:** 1208-21**Lab Number:** L2171636**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-01
 Client ID: 175-IA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:21
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Anaytical Method: 48,TO-15
 Analytical Date: 01/14/22 00:52
 Analyst: RY

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
Dichlorodifluoromethane	0.793	0.200	--	3.92	0.989	--	1
Chloromethane	0.851	0.200	--	1.76	0.413	--	1
Freon-114	ND	0.200	--	ND	1.40	--	1
1,3-Butadiene	ND	0.200	--	ND	0.442	--	1
Bromomethane	ND	0.200	--	ND	0.777	--	1
Chloroethane	ND	0.200	--	ND	0.528	--	1
Ethanol	1200	5.00	--	2260	9.42	--	E 1
Vinyl bromide	ND	0.200	--	ND	0.874	--	1
Acetone	17.7	1.00	--	42.0	2.38	--	1
Trichlorofluoromethane	0.501	0.200	--	2.82	1.12	--	1
Isopropanol	81.0	0.500	--	199	1.23	--	1
Tertiary butyl Alcohol	0.668	0.500	--	2.03	1.52	--	1
Methylene chloride	1.97	0.500	--	6.84	1.74	--	1
3-Chloropropene	ND	0.200	--	ND	0.626	--	1
Carbon disulfide	ND	0.200	--	ND	0.623	--	1
Freon-113	ND	0.200	--	ND	1.53	--	1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	1
2-Butanone	0.806	0.500	--	2.38	1.47	--	1
Ethyl Acetate	3.48	0.500	--	12.5	1.80	--	1
Chloroform	0.779	0.200	--	3.80	0.977	--	1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--	1



Project Name: 175 RT. 59**Project Number:** 1208-21**Lab Number:** L2171636**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-01
 Client ID: 175-IA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:21
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	1.02	0.200	--	3.59	0.705	--	1
Benzene	0.567	0.200	--	1.81	0.639	--	1
Cyclohexane	0.320	0.200	--	1.10	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
2,2,4-Trimethylpentane	0.490	0.200	--	2.29	0.934	--	1
Heptane	0.380	0.200	--	1.56	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	2.04	0.200	--	7.69	0.754	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	0.678	0.400	--	2.94	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	0.233	0.200	--	0.992	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	0.273	0.200	--	1.19	0.869	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1



Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-01
 Client ID: 175-IA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:21
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	0.244	0.200	--	1.20	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	69		60-140
Bromochloromethane	72		60-140
chlorobenzene-d5	85		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-01
 Client ID: 175-IA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:21
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/14/22 00:52
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	0.025	0.020	--	0.099	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.118	0.020	--	0.742	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.312	0.020	--	2.12	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	69		60-140
bromochloromethane	72		60-140
chlorobenzene-d5	86		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-01 D
 Client ID: 175-IA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:21
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Anaytical Method: 48,TO-15
 Analytical Date: 01/14/22 10:07
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethanol	1540	50.0	--	2900	94.2	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	55	Q	60-140
Bromochloromethane	61		60-140
chlorobenzene-d5	72		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-02
 Client ID: 175-IA-02
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:25
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Anaytical Method: 48,TO-15
 Analytical Date: 01/14/22 01:32
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.757	0.200	--	3.74	0.989	--		1
Chloromethane	0.855	0.200	--	1.77	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	1160	5.00	--	2190	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	20.5	1.00	--	48.7	2.38	--		1
Trichlorofluoromethane	0.454	0.200	--	2.55	1.12	--		1
Isopropanol	66.2	0.500	--	163	1.23	--		1
Tertiary butyl Alcohol	0.739	0.500	--	2.24	1.52	--		1
Methylene chloride	2.52	0.500	--	8.75	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	0.204	0.200	--	0.809	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.930	0.500	--	2.74	1.47	--		1
Ethyl Acetate	3.38	0.500	--	12.2	1.80	--		1
Chloroform	0.981	0.200	--	4.79	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: 175 RT. 59**Project Number:** 1208-21**Lab Number:** L2171636**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-02
 Client ID: 175-IA-02
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:25
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.769	0.200	--	2.71	0.705	--	1
Benzene	0.520	0.200	--	1.66	0.639	--	1
Cyclohexane	0.279	0.200	--	0.960	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
2,2,4-Trimethylpentane	0.405	0.200	--	1.89	0.934	--	1
Heptane	0.366	0.200	--	1.50	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	2.30	0.200	--	8.67	0.754	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	0.206	0.200	--	0.895	0.869	--	1
p/m-Xylene	0.677	0.400	--	2.94	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	0.283	0.200	--	1.23	0.869	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1



Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-02
 Client ID: 175-IA-02
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:25
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	72		60-140
Bromochloromethane	75		60-140
chlorobenzene-d5	85		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-02
 Client ID: 175-IA-02
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:25
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/14/22 01:32
 Analyst: RY

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Carbon tetrachloride	0.120	0.020	--	0.755	0.126	--	1
Trichloroethene	ND	0.020	--	ND	0.107	--	1
Tetrachloroethene	0.244	0.020	--	1.65	0.136	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	72		60-140
bromochloromethane	74		60-140
chlorobenzene-d5	84		60-140

Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

SAMPLE RESULTS

Lab ID:	L2171636-02 D	Date Collected:	12/30/21 12:25
Client ID:	175-IA-02	Date Received:	12/30/21
Sample Location:	SPRING VALLEY	Field Prep:	Not Specified

Sample Depth:

Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/14/22 10:44
Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethanol	1600	50.0	--	3010	94.2	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	55	Q	60-140
Bromochloromethane	60		60-140
chlorobenzene-d5	72		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-03
 Client ID: 175-IA-03
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:30
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 01/14/22 02:12
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.763	0.200	--	3.77	0.989	--		1
Chloromethane	0.827	0.200	--	1.71	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	1350	5.00	--	2540	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	20.2	1.00	--	48.0	2.38	--		1
Trichlorofluoromethane	0.449	0.200	--	2.52	1.12	--		1
Isopropanol	67.6	0.500	--	166	1.23	--		1
Tertiary butyl Alcohol	0.718	0.500	--	2.18	1.52	--		1
Methylene chloride	2.19	0.500	--	7.61	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.898	0.500	--	2.65	1.47	--		1
Ethyl Acetate	3.29	0.500	--	11.9	1.80	--		1
Chloroform	0.933	0.200	--	4.56	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: 175 RT. 59**Project Number:** 1208-21**Lab Number:** L2171636**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-03
 Client ID: 175-IA-03
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:30
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.664	0.200	--	2.34	0.705	--	1
Benzene	0.515	0.200	--	1.65	0.639	--	1
Cyclohexane	0.260	0.200	--	0.895	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
2,2,4-Trimethylpentane	0.369	0.200	--	1.72	0.934	--	1
Heptane	0.346	0.200	--	1.42	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	2.08	0.200	--	7.84	0.754	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	0.201	0.200	--	0.873	0.869	--	1
p/m-Xylene	0.646	0.400	--	2.81	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	0.274	0.200	--	1.19	0.869	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1



Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-03
 Client ID: 175-IA-03
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:30
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	72		60-140
Bromochloromethane	75		60-140
chlorobenzene-d5	85		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-03
 Client ID: 175-IA-03
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:30
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/14/22 02:12
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.129	0.020	--	0.811	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.209	0.020	--	1.42	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	72		60-140
bromochloromethane	75		60-140
chlorobenzene-d5	86		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-04
 Client ID: 175-IA-04
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:38
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 01/14/22 02:52
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.729	0.200	--	3.60	0.989	--		1
Chloromethane	0.900	0.200	--	1.86	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	1070	5.00	--	2020	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	19.2	1.00	--	45.6	2.38	--		1
Trichlorofluoromethane	0.414	0.200	--	2.33	1.12	--		1
Isopropanol	82.9	0.500	--	204	1.23	--		1
Tertiary butyl Alcohol	0.591	0.500	--	1.79	1.52	--		1
Methylene chloride	1.95	0.500	--	6.77	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	0.965	0.500	--	2.85	1.47	--		1
Ethyl Acetate	2.66	0.500	--	9.59	1.80	--		1
Chloroform	0.768	0.200	--	3.75	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-04
 Client ID: 175-IA-04
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:38
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	0.432	0.200	--	1.52	0.705	--	1
Benzene	0.449	0.200	--	1.43	0.639	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
2,2,4-Trimethylpentane	0.304	0.200	--	1.42	0.934	--	1
Heptane	0.279	0.200	--	1.14	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	2.14	0.200	--	8.06	0.754	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	0.553	0.400	--	2.40	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	0.235	0.200	--	1.02	0.869	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1



Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-04
 Client ID: 175-IA-04
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:38
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	73		60-140
Bromochloromethane	76		60-140
chlorobenzene-d5	86		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-04
 Client ID: 175-IA-04
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:38
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/14/22 02:52
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.122	0.020	--	0.767	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.115	0.020	--	0.780	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	73		60-140
bromochloromethane	76		60-140
chlorobenzene-d5	87		60-140

Project Name: 175 RT. 59**Project Number:** 1208-21**Lab Number:** L2171636**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-05
 Client ID: 175-AA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:43
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Anaytical Method: 48,TO-15
 Analytical Date: 01/13/22 20:10
 Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.670	0.200	--	3.31	0.989	--		1
Chloromethane	0.670	0.200	--	1.38	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	973	5.00	--	1830	9.42	--	E	1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	2.01	1.00	--	4.77	2.38	--		1
Trichlorofluoromethane	0.280	0.200	--	1.57	1.12	--		1
Isopropanol	2.54	0.500	--	6.24	1.23	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1



Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-05
 Client ID: 175-AA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:43
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
Benzene	0.279	0.200	--	0.891	0.639	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	0.330	0.200	--	1.24	0.754	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	ND	0.200	--	ND	0.869	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1



Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-05
 Client ID: 175-AA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:43
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	78		60-140
Bromochloromethane	80		60-140
chlorobenzene-d5	85		60-140

Project Name: 175 RT. 59**Lab Number:** L2171636**Project Number:** 1208-21**Report Date:** 01/14/22**SAMPLE RESULTS**

Lab ID: L2171636-05
 Client ID: 175-AA-01
 Sample Location: SPRING VALLEY

Date Collected: 12/30/21 12:43
 Date Received: 12/30/21
 Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 01/13/22 20:10
 Analyst: RY

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Carbon tetrachloride	0.086	0.020	--	0.541	0.126	--	1
Trichloroethene	ND	0.020	--	ND	0.107	--	1
Tetrachloroethene	0.056	0.020	--	0.380	0.136	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	78		60-140
bromochloromethane	80		60-140
chlorobenzene-d5	85		60-140

Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

SAMPLE RESULTS

Lab ID:	L2171636-05 D	Date Collected:	12/30/21 12:43
Client ID:	175-AA-01	Date Received:	12/30/21
Sample Location:	SPRING VALLEY	Field Prep:	Not Specified

Sample Depth:

Matrix: Air
Analytical Method: 48,TO-15
Analytical Date: 01/14/22 07:40
Analyst: RY

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Ethanol	1380	25.0	--	2600	47.1	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	66		60-140
Bromochloromethane	71		60-140
chlorobenzene-d5	80		60-140

Project Name: 175 RT. 59

Lab Number: L2171636

Project Number: 1208-21

Report Date: 01/14/22

Method Blank Analysis

Batch Quality Control

Analytical Method: 48,TO-15
 Analytical Date: 01/13/22 17:01

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1593772-4							
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--	1
Chloromethane	ND	0.200	--	ND	0.413	--	1
Freon-114	ND	0.200	--	ND	1.40	--	1
Vinyl chloride	ND	0.200	--	ND	0.511	--	1
1,3-Butadiene	ND	0.200	--	ND	0.442	--	1
Bromomethane	ND	0.200	--	ND	0.777	--	1
Chloroethane	ND	0.200	--	ND	0.528	--	1
Ethanol	ND	5.00	--	ND	9.42	--	1
Vinyl bromide	ND	0.200	--	ND	0.874	--	1
Acetone	ND	1.00	--	ND	2.38	--	1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--	1
Isopropanol	ND	0.500	--	ND	1.23	--	1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--	1
Methylene chloride	ND	0.500	--	ND	1.74	--	1
3-Chloropropene	ND	0.200	--	ND	0.626	--	1
Carbon disulfide	ND	0.200	--	ND	0.623	--	1
Freon-113	ND	0.200	--	ND	1.53	--	1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--	1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--	1
2-Butanone	ND	0.500	--	ND	1.47	--	1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--	1
Ethyl Acetate	ND	0.500	--	ND	1.80	--	1
Chloroform	ND	0.200	--	ND	0.977	--	1



Project Name: 175 RT. 59

Lab Number: L2171636

Project Number: 1208-21

Report Date: 01/14/22

Method Blank Analysis

Batch Quality Control

Analytical Method: 48,TO-15
 Analytical Date: 01/13/22 17:01

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1593772-4							
Tetrahydrofuran	ND	0.500	--	ND	1.47	--	1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--	1
n-Hexane	ND	0.200	--	ND	0.705	--	1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Benzene	ND	0.200	--	ND	0.639	--	1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--	1
Cyclohexane	ND	0.200	--	ND	0.688	--	1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--	1
Bromodichloromethane	ND	0.200	--	ND	1.34	--	1
1,4-Dioxane	ND	0.200	--	ND	0.721	--	1
Trichloroethene	ND	0.200	--	ND	1.07	--	1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--	1
Heptane	ND	0.200	--	ND	0.820	--	1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--	1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--	1
Toluene	ND	0.200	--	ND	0.754	--	1
2-Hexanone	ND	0.200	--	ND	0.820	--	1
Dibromochloromethane	ND	0.200	--	ND	1.70	--	1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--	1
Tetrachloroethene	ND	0.200	--	ND	1.36	--	1
Chlorobenzene	ND	0.200	--	ND	0.921	--	1
Ethylbenzene	ND	0.200	--	ND	0.869	--	1
p/m-Xylene	ND	0.400	--	ND	1.74	--	1



Project Name: 175 RT. 59

Lab Number: L2171636

Project Number: 1208-21

Report Date: 01/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
 Analytical Date: 01/13/22 17:01

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air - Mansfield Lab for sample(s): 01-05 Batch: WG1593772-4							
Bromoform	ND	0.200	--	ND	2.07	--	1
Styrene	ND	0.200	--	ND	0.852	--	1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--	1
o-Xylene	ND	0.200	--	ND	0.869	--	1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--	1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--	1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--	1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--	1



Project Name: 175 RT. 59

Lab Number: L2171636

Project Number: 1208-21

Report Date: 01/14/22

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM

Analytical Date: 01/13/22 17:41

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01-05 Batch: WG1593775-4							
Vinyl chloride	ND	0.020	--	ND	0.051	--	1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--	1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--	1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--	1
Trichloroethene	ND	0.020	--	ND	0.107	--	1
Tetrachloroethene	ND	0.020	--	ND	0.136	--	1



Lab Control Sample Analysis

Batch Quality Control

Project Name: 175 RT. 59

Lab Number: L2171636

Project Number: 1208-21

Report Date: 01/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1593772-3								
Dichlorodifluoromethane	119		-		70-130	-		
Chloromethane	113		-		70-130	-		
Freon-114	122		-		70-130	-		
Vinyl chloride	115		-		70-130	-		
1,3-Butadiene	122		-		70-130	-		
Bromomethane	117		-		70-130	-		
Chloroethane	113		-		70-130	-		
Ethanol	107		-		40-160	-		
Vinyl bromide	114		-		70-130	-		
Acetone	124		-		40-160	-		
Trichlorofluoromethane	115		-		70-130	-		
Isopropanol	115		-		40-160	-		
1,1-Dichloroethene	108		-		70-130	-		
Tertiary butyl Alcohol	104		-		70-130	-		
Methylene chloride	103		-		70-130	-		
3-Chloropropene	115		-		70-130	-		
Carbon disulfide	104		-		70-130	-		
Freon-113	109		-		70-130	-		
trans-1,2-Dichloroethene	104		-		70-130	-		
1,1-Dichloroethane	104		-		70-130	-		
Methyl tert butyl ether	116		-		70-130	-		
2-Butanone	107		-		70-130	-		
cis-1,2-Dichloroethene	108		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 175 RT. 59

Lab Number: L2171636

Project Number: 1208-21

Report Date: 01/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1593772-3								
Ethyl Acetate	107		-		70-130	-		
Chloroform	114		-		70-130	-		
Tetrahydrofuran	104		-		70-130	-		
1,2-Dichloroethane	114		-		70-130	-		
n-Hexane	105		-		70-130	-		
1,1,1-Trichloroethane	112		-		70-130	-		
Benzene	95		-		70-130	-		
Carbon tetrachloride	115		-		70-130	-		
Cyclohexane	103		-		70-130	-		
1,2-Dichloropropane	102		-		70-130	-		
Bromodichloromethane	114		-		70-130	-		
1,4-Dioxane	108		-		70-130	-		
Trichloroethene	104		-		70-130	-		
2,2,4-Trimethylpentane	107		-		70-130	-		
Heptane	109		-		70-130	-		
cis-1,3-Dichloropropene	116		-		70-130	-		
4-Methyl-2-pentanone	111		-		70-130	-		
trans-1,3-Dichloropropene	103		-		70-130	-		
1,1,2-Trichloroethane	107		-		70-130	-		
Toluene	94		-		70-130	-		
2-Hexanone	111		-		70-130	-		
Dibromochloromethane	114		-		70-130	-		
1,2-Dibromoethane	107		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-05 Batch: WG1593772-3								
Tetrachloroethene	106		-		70-130	-		
Chlorobenzene	104		-		70-130	-		
Ethylbenzene	105		-		70-130	-		
p/m-Xylene	106		-		70-130	-		
Bromoform	118		-		70-130	-		
Styrene	108		-		70-130	-		
1,1,2,2-Tetrachloroethane	112		-		70-130	-		
o-Xylene	110		-		70-130	-		
4-Ethyltoluene	112		-		70-130	-		
1,3,5-Trimethylbenzene	111		-		70-130	-		
1,2,4-Trimethylbenzene	118		-		70-130	-		
Benzyl chloride	123		-		70-130	-		
1,3-Dichlorobenzene	116		-		70-130	-		
1,4-Dichlorobenzene	114		-		70-130	-		
1,2-Dichlorobenzene	114		-		70-130	-		
1,2,4-Trichlorobenzene	122		-		70-130	-		
Hexachlorobutadiene	117		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 175 RT. 59

Lab Number: L2171636

Project Number: 1208-21

Report Date: 01/14/22

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-05 Batch: WG1593775-3								
Vinyl chloride	112		-		70-130	-		25
1,1-Dichloroethene	102		-		70-130	-		25
cis-1,2-Dichloroethene	102		-		70-130	-		25
1,1,1-Trichloroethane	101		-		70-130	-		25
Carbon tetrachloride	111		-		70-130	-		25
Trichloroethene	99		-		70-130	-		25
Tetrachloroethene	98		-		70-130	-		25

Project Name: 175 RT. 59

Serial_No:01142217:14

Project Number: 1208-21

Lab Number: L2171636

Report Date: 01/14/22

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controller Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2171636-01	175-IA-01	02215	Flow 5	12/29/21	374390		-	-	-	Pass	3.0	1.1	93
L2171636-01	175-IA-01	922	6.0L Can	12/29/21	374390	L2170457-04	Pass	-29.0	-9.5	-	-	-	-
L2171636-02	175-IA-02	01739	Flow 5	12/29/21	374390		-	-	-	Pass	3.0	3.5	15
L2171636-02	175-IA-02	3576	6.0L Can	12/29/21	374390	L2170457-08	Pass	-29.0	-8.9	-	-	-	-
L2171636-03	175-IA-03	0920	Flow 5	12/29/21	374390		-	-	-	Pass	3.0	2.9	3
L2171636-03	175-IA-03	2983	6.0L Can	12/29/21	374390	L2170457-08	Pass	-29.0	-9.1	-	-	-	-
L2171636-04	175-IA-04	01022	Flow 5	12/29/21	374390		-	-	-	Pass	3.0	3.4	13
L2171636-04	175-IA-04	1877	6.0L Can	12/29/21	374390	L2170457-04	Pass	-29.0	-9.7	-	-	-	-
L2171636-05	175-AA-01	01187	Flow 5	12/29/21	374390		-	-	-	Pass	3.0	3.6	18
L2171636-05	175-AA-01	1891	6.0L Can	12/29/21	374390	L2170457-08	Pass	-29.0	-6.5	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-04 Date Collected: 12/21/21 14:00
 Client ID: CAN 3286 SHELF 37 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/24/21 00:20
 Analyst: TS

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air - Mansfield Lab							
Chlorodifluoromethane	ND	0.200	--	0.707	--		1
Propylene	ND	0.500	--	0.861	--		1
Propane	ND	0.500	--	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	0.989	--		1
Chloromethane	ND	0.200	--	0.413	--		1
Freon-114	ND	0.200	--	1.40	--		1
Methanol	ND	5.00	--	6.55	--		1
Vinyl chloride	ND	0.200	--	0.511	--		1
1,3-Butadiene	ND	0.200	--	0.442	--		1
Butane	ND	0.200	--	0.475	--		1
Bromomethane	ND	0.200	--	0.777	--		1
Chloroethane	ND	0.200	--	0.528	--		1
Ethanol	ND	5.00	--	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	0.842	--		1
Vinyl bromide	ND	0.200	--	0.874	--		1
Acrolein	ND	0.500	--	1.15	--		1
Acetone	ND	1.00	--	2.38	--		1
Acetonitrile	ND	0.200	--	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	1.12	--		1
Isopropanol	ND	0.500	--	1.23	--		1
Acrylonitrile	ND	0.500	--	1.09	--		1
Pentane	ND	0.200	--	0.590	--		1
Ethyl ether	ND	0.200	--	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-04 Date Collected: 12/21/21 14:00
 Client ID: CAN 3286 SHELF 37 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-04 Date Collected: 12/21/21 14:00
 Client ID: CAN 3286 SHELF 37 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-04 Date Collected: 12/21/21 14:00
 Client ID: CAN 3286 SHELF 37 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION

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Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-04 Date Collected: 12/21/21 14:00
 Client ID: CAN 3286 SHELF 37 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air - Mansfield Lab							

	Results	Qualifier	Units	RDL	
--	---------	-----------	-------	-----	--

Tentatively Identified Compounds

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID:	L2170457-04	Date Collected:	12/21/21 14:00
Client ID:	CAN 3286 SHELF 37	Date Received:	12/22/21
Sample Location:		Field Prep:	Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/24/21 00:20
 Analyst: TS

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	ND	0.200	--	0.989	--		1
Chloromethane	ND	0.200	--	0.413	--		1
Freon-114	ND	0.050	--	0.349	--		1
Vinyl chloride	ND	0.020	--	0.051	--		1
1,3-Butadiene	ND	0.020	--	0.044	--		1
Bromomethane	ND	0.020	--	0.078	--		1
Chloroethane	ND	0.100	--	0.264	--		1
Acrolein	ND	0.050	--	0.115	--		1
Acetone	ND	1.00	--	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	0.281	--		1
Acrylonitrile	ND	0.500	--	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	0.079	--		1
Methylene chloride	ND	0.500	--	1.74	--		1
Freon-113	ND	0.050	--	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	0.721	--		1
2-Butanone	ND	0.500	--	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	0.079	--		1
Chloroform	ND	0.020	--	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	0.109	--		1
Benzene	ND	0.100	--	0.319	--		1
Carbon tetrachloride	ND	0.020	--	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

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Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-04 Date Collected: 12/21/21 14:00
 Client ID: CAN 3286 SHELF 37 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	Results	RL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--	1
Bromodichloromethane	ND	0.020	--	ND	0.134	--	1
1,4-Dioxane	ND	0.100	--	ND	0.360	--	1
Trichloroethene	ND	0.020	--	ND	0.107	--	1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--	1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Toluene	ND	0.100	--	ND	0.377	--	1
Dibromochloromethane	ND	0.020	--	ND	0.170	--	1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--	1
Tetrachloroethene	ND	0.020	--	ND	0.136	--	1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	1
Chlorobenzene	ND	0.100	--	ND	0.461	--	1
Ethylbenzene	ND	0.020	--	ND	0.087	--	1
p/m-Xylene	ND	0.040	--	ND	0.174	--	1
Bromoform	ND	0.020	--	ND	0.207	--	1
Styrene	ND	0.020	--	ND	0.085	--	1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	1
o-Xylene	ND	0.020	--	ND	0.087	--	1
Isopropylbenzene	ND	0.200	--	ND	0.983	--	1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--	1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-04 Date Collected: 12/21/21 14:00
 Client ID: CAN 3286 SHELF 37 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
sec-Butylbenzene	ND	0.200	--	ND	1.10	--	1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--	1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
n-Butylbenzene	ND	0.200	--	ND	1.10	--	1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Naphthalene	ND	0.050	--	ND	0.262	--	1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-08 Date Collected: 12/22/21 08:00
 Client ID: CAN 3602 SHELF 40 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15
 Analytical Date: 12/24/21 01:39
 Analyst: TS

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-08 Date Collected: 12/22/21 08:00
 Client ID: CAN 3602 SHELF 40 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Xylenes, total	ND	0.600	--	ND	0.869	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,2-Dichloroethene (total)	ND	1.00	--	ND	1.00	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-08 Date Collected: 12/22/21 08:00
 Client ID: CAN 3602 SHELF 40 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-08 Date Collected: 12/22/21 08:00
 Client ID: CAN 3602 SHELF 40 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Qualifier	Dilution Factor
	Results	RL	MDL	Results	RL	MDL		
Volatile Organics in Air - Mansfield Lab								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-08 Date Collected: 12/22/21 08:00
 Client ID: CAN 3602 SHELF 40 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	ppbV			ug/m3			Dilution Factor
	Results	RL	MDL	Results	RL	MDL	Qualifier
Volatile Organics in Air - Mansfield Lab							

Results	Qualifier	Units	RDL	Dilution Factor
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Tentatively Identified Compounds

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	97		60-140
chlorobenzene-d5	96		60-140

Project Name: BATCH CANISTER CERTIFICATION

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Report Date: 01/14/22

Air Canister Certification Results

Lab ID:	L2170457-08	Date Collected:	12/22/21 08:00
Client ID:	CAN 3602 SHELF 40	Date Received:	12/22/21
Sample Location:		Field Prep:	Not Specified

Sample Depth:

Matrix: Air
 Analytical Method: 48,TO-15-SIM
 Analytical Date: 12/24/21 01:39
 Analyst: TS

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
Dichlorodifluoromethane	ND	0.200	--	0.989	--		1
Chloromethane	ND	0.200	--	0.413	--		1
Freon-114	ND	0.050	--	0.349	--		1
Vinyl chloride	ND	0.020	--	0.051	--		1
1,3-Butadiene	ND	0.020	--	0.044	--		1
Bromomethane	ND	0.020	--	0.078	--		1
Chloroethane	ND	0.100	--	0.264	--		1
Acrolein	ND	0.050	--	0.115	--		1
Acetone	ND	1.00	--	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	0.281	--		1
Acrylonitrile	ND	0.500	--	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	0.079	--		1
Methylene chloride	ND	0.500	--	1.74	--		1
Freon-113	ND	0.050	--	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	0.721	--		1
2-Butanone	ND	0.500	--	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	0.079	--		1
Chloroform	ND	0.020	--	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	0.109	--		1
Benzene	ND	0.100	--	0.319	--		1
Carbon tetrachloride	ND	0.020	--	0.126	--		1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

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Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-08 Date Collected: 12/22/21 08:00
 Client ID: CAN 3602 SHELF 40 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	Results	RL		
Volatile Organics in Air by SIM - Mansfield Lab							
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--	1
Bromodichloromethane	ND	0.020	--	ND	0.134	--	1
1,4-Dioxane	ND	0.100	--	ND	0.360	--	1
Trichloroethene	ND	0.020	--	ND	0.107	--	1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--	1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--	1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--	1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--	1
Toluene	ND	0.100	--	ND	0.377	--	1
Dibromochloromethane	ND	0.020	--	ND	0.170	--	1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--	1
Tetrachloroethene	ND	0.020	--	ND	0.136	--	1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	1
Chlorobenzene	ND	0.100	--	ND	0.461	--	1
Ethylbenzene	ND	0.020	--	ND	0.087	--	1
p/m-Xylene	ND	0.040	--	ND	0.174	--	1
Bromoform	ND	0.020	--	ND	0.207	--	1
Styrene	ND	0.020	--	ND	0.085	--	1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--	1
o-Xylene	ND	0.020	--	ND	0.087	--	1
Isopropylbenzene	ND	0.200	--	ND	0.983	--	1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--	1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--	1
Benzyl chloride	ND	0.200	--	ND	1.04	--	1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1



Project Name: BATCH CANISTER CERTIFICATION

Lab Number: L2170457

Project Number: CANISTER QC BAT

Report Date: 01/14/22

Air Canister Certification Results

Lab ID: L2170457-08 Date Collected: 12/22/21 08:00
 Client ID: CAN 3602 SHELF 40 Date Received: 12/22/21
 Sample Location: Field Prep: Not Specified

Sample Depth:

Parameter	Results	ppbV		ug/m3		Qualifier	Dilution Factor
		RL	MDL	RL	MDL		
Volatile Organics in Air by SIM - Mansfield Lab							
sec-Butylbenzene	ND	0.200	--	ND	1.10	--	1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--	1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--	1
n-Butylbenzene	ND	0.200	--	ND	1.10	--	1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Naphthalene	ND	0.050	--	ND	0.262	--	1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--	1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--	1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	96		60-140
bromochloromethane	97		60-140
chlorobenzene-d5	96		60-140

Project Name: 175 RT. 59
Project Number: 1208-21

Serial_No:01142217:14
Lab Number: L2171636
Report Date: 01/14/22

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
N/A	Present/Intact

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2171636-01A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2171636-02A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2171636-03A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2171636-04A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2171636-05A	Canister - 6 Liter	N/A	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report



Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthrenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e., co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: Data Usability Report



Project Name: 175 RT. 59
Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

Data Qualifiers

the identification is based on a mass spectral library search.

- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- V** - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)
- Z** - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report



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Project Number: 1208-21

Lab Number: L2171636
Report Date: 01/14/22

REFERENCES

- 48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at its own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility

EPA 624/624.1: m/p-xylene, o-xylene, Naphthalene

EPA 625/625.1: alpha-Terpineol

EPA 8260C/8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.

EPA 8270D/8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine. SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.

Mansfield Facility

SM 2540D: TSS

EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:

Drinking Water

EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; EPA 353.2: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C**, **SM4500CN-CE**, **EPA 180.1**, **SM2130B**, **SM4500CI-D**, **SM2320B**, **SM2540C**, **SM4500H-B**, **SM4500NO2-B**

EPA 332: Perchlorate; **EPA 524.2**: THMs and VOCs; **EPA 504.1**: EDB, DBCP.

Microbiology: **SM9215B**; **SM9223-P/A**, **SM9223B-Colilert-QT**, **SM9222D**.

Non-Potable Water

SM4500H,B, **EPA 120.1**, **SM2510B**, **SM2540C**, **SM2320B**, **SM4500CL-E**, **SM4500F-BC**, **SM4500NH3-BH**: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, LACHAT 10-107-06-1-B: Ammonia-N, **EPA 351.1**, **SM4500NO3-F**, **EPA 353.2**: Nitrate-N, **SM4500P-E**, **SM4500P-B**, **E**, **SM4500SO4-E**, **SM5220D**, **EPA 410.4**, **SM5210B**, **SM5310C**, **SM4500CL-D**, **EPA 1664**, **EPA 420.1**, **SM4500-CN-CE**, **SM2540D**, **EPA 300**: Chloride, Sulfate, Nitrate.

EPA 624.1: Volatile Halocarbons & Aromatics,

EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.

Microbiology: **SM9223B-Colilert-QT**; **Enterolert-QT**, **SM9221E**, **EPA 1600**, **EPA 1603**, **SM9222D**.

Mansfield Facility:

Drinking Water

EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8**: Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg. **EPA 522**, **EPA 537.1**.

Non-Potable Water

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, V, Zn.

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.

EPA 245.1 Hg.

SM2340B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.



Alpha Analytical

320 Forbes Blvd
Mansfield, MA 02048-1806
Tel: 508-822-9300
Fax: 508-822-3288

Serial No:01142217:14

AIR Chain-of-Custody - ~~NY~~ NY

Client Contact Information

Project Information

Date Rec'd in Lab

12/31/21

ALPHA Job#

L21711B36

1 of 1 COCs

Company: Viridian Inc.	Project Name: 175 RT. 59
Address: P.O. Box 3009	Project No: 1208-21
City/State/Zip: Montclair NJ 07043	Site/Location: Spring Valley
Phone: 973-746-7600	Project Manager: Flint Kinkade
FAX: 973-746-2682	
Email: Chris@viridianinc.com	
Site Contact:	Standard (Specify)
Site Contact Phone:	Rush (Specify)

NJ DEP Information

Bureau: Division: Contract No:

Report Information - Data Deliverables:

- FAX:
 ADEX Criteria Checker:
 Email (standard pdf report)

NRISL/RIASL

(NY)

Billing Information

Same as Client Info PO #: 1208-21

ALPHA LAB ID (Lab Use Only)	Sample Identification	Sample Date(s)	Time	Time	Canister	Canister	Interior	Outgoing	Incoming	Flow	Batch Cert ID	TO-15	EPA 3C	Indoor / Ambient Air	Soil Gas
			Start (24 hr clock)	Stop (24 hr clock)	Pressure in Field (Hg) (Start)	Pressure in Field (Hg) (Stop)	Temp. (F) (Start)	Temp. (F) (Stop)	Canister Pressure (Hg) (Note 1)						
71636-01	175-IA-01	12/29-12/30/21	1314	1221	-29.8	-8.9			-29.0	02215	922	6	3.0	X	X
-02	175-IA-02	12/29-12/30/21	1323	1225	-29.7	-8.0			-29.0	01739	3576	6	3.0	X	X
-03	175-IA-03	12/29-12/30/21	1329	1230	-29.8	-8.7			-29.0	0920	2983	6	3.0	X	X
-04	175-IA-04	12/29-12/30/21	1334	1238	-29.8	-9.0			-29.0	01022	1877	6	3.0	X	X
-05	175-AA-01	12/29-12/30/21	1340	1243	-29.7	-6.9			-29.0	01187	1891	6	3.0	X	X

Custody Seals:

Outgoing Seal No: 2161
(refer to crate seal)Incoming Seal No: _____
(if applicable)

Temperature (Fahrenheit)

Ambient Maximum Minimum

Start	40		
Stop	45		

Individual Preparing Canister/Containers and Laboratory Canister Certification

Name: Brandon D. Zier

Signature:

Pressure (Inches of Hg)

Ambient Maximum Minimum

Start	29.87		
Stop	29.91		

Footnotes:

- (1) Refer to equipment tags for these readings.
(2) Readings provided in data deliverable package.

Special Instructions/QC Requirements & Comments:

Property name: Analyze for New York IA Screening Levels (both Non-Residential and Residential)
* Turtle Brook * * please email results to: flint@viridianinc.com

Canisters Shipped by:

Date/Time:

Canisters Received by:

Date/Time:

Samples Relinquished by:

Date/Time:

Received by:

Date/Time:

Relinquished by:

Date/Time:

Received by:

Date/Time:

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until all ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms. See reverse side.