Environmental Advantage

Environmental Advantage, Inc. 3636 N. Buffalo Road Orchard Park, New York 14127
Industrial Compliance, Hazardous Materials Management, Site Assessment/Remediation

July 16, 2021

Megan Kuczka, DER Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo, New York 14203

Via email: megan.kuczka@dec.ny.gov;

Re: **Summary Letter – June 2021 Indoor Air Sampling Results**
Pierce Arrow Business Center
155-157 Chandler Street, Buffalo, New York 14207
EA Project No: 01101

Dear Ms. Kuczka:

This letter serves as a notification of the results of the June 2021 indoor air sampling event at the above-referenced site. This sampling event was completed following three consecutive air exceedances of trichloroethylene (TCE) collected at sample location IA-6 during the 2020-2021 monitoring period. This summary letter includes a figure and field notes in Attachment 1, a summary table in Attachment 2, and analytical report in Attachment 3.

In December 2020, EA originally collected summa air canister samples at six indoor locations and one outdoor location and submitted the air canister samples to Alpha Analytical to be analyzed for the presence of volatile organic compounds (VOCs) via USEPA method TO-15. TCE was detected at a concentration of 2.96 ug/m^3 in IA-6 (121120) collected from sample location IA-6, which exceeds its respective NYSDOH Indoor Air guideline value of 2 ug/m^3. As a result of this December 2020 exceedance, EA collected a second indoor air sample from this location in February 2020. TCE was again detected at a concentration of 2.96 ug/m^3 in the IA-6 (021821) air sample. It should be noted that sampling location IA-6 is located in a pass-through hallway containing mailboxes and is not permanently occupied.

Due to these exceedances, EA contacted the Site Owner, Mr. Rocco Termini, and recommended that this hallway be better ventilated. On March 26, 2021, Mr. Termini had a ceiling exhaust fan installed within the hallway in an attempt to improve ventilation. Following the installation of the exhaust fan, EA collected a third indoor air sample from this location on March 31, 2021, identified as IA-6 (033121). TCE was detected at a concentration of 14 ug/m^3 in IA-6 (033121), which exceeds both its respective NYSDOH Indoor Air and NYSDEC Commercial Indoor Air Background (90th percentile) guideline values of 2 ug/m^3 and 4.2 ug/m^3, respectively.

In consideration of these site conditions detected, EA has surmised that more elevated results observed may be related to the ceiling fan creating a negative pressure within the hallway, even though there is no historical record of any underlying concrete slab or subslab TCE contamination in this area of the facility. For strictly test protocol purposes, EA collected an air sample on June 17, 2021, identified at IA-6 (061721). During the sample collection, the two man-door entrances were propped open approximately one inch each to allow the infiltration of fresh outdoor air. TCE was detected at a concentration of 1.31 ug/m^3 in IA-6 (061721), which is below its respective NYSDOH Indoor Air and NYSDEC Commercial Indoor Air Background (90th percentile) guideline values of 2 ug/m^3 and 4.2 ug/m^3, respectively. Based on these results, Mr. Termini proposes to install two approximate 8-inch by 8-inch passive vents within the man-door entrances to allow the infiltration of fresh outdoor air. Following the installation of these vents, after a period of two weeks, EA will collect another indoor air sample (with a duplicate) from this location for TO-15 analysis.

If the post-venting proves to yield acceptable VOCs levels within this hallway, EA will continue to collect indoor air on an annual basis as required by the Site Management Plan[1]. At this point no further corrective actions will be recommended at this time.

If you have comments or questions regarding the contents of these documents, please contact me directly.

Very truly yours,
ENVIRONMENTAL ADVANTAGE, INC.

C. Mark Hanna, CHMM
President

Attachments

cc: R. Termini
S. Lawrence, NYSDOH

[1] "Site Management Plan for MOD-PAC Site, 1801 Elmwood Avenue, City of Buffalo, Erie County, New York, Site No. C915314" prepared by C&S Engineers, Inc., December 2019

ATTACHMENT 1

FIGURE & FIELD NOTES

Environmental Advantage

N

CHANDLER STREET

MANTON PLACE

IA-6 (061721)

EXISTING STACK

Parking Lot Area

(157 Chandler Street)

SSDS-1 20'LF

SSDS-2 20'LF

SSDS-3 20'LF

SSDS-4 20'L

GROTE STREET

KEY

- 3" riser and RadonAway GP201 fan with 20 LF of infiltration trench
- Indoor Air Sample Location (June 2021)

ENVIRONMENTAL ADVANTAGE, INC.

Regulatory Compliance – Site Investigations – Facility Inspections

SUB-SLAB MITIGATION DESIGN
INDOOR AIR SAMPLING LOCATIONS
155 AND 157 CHANDLER STREET
BUFFALO, NEW YORK

R & M LEASING LLC
BUFFALO, NEW YORK

DRAWN BY: LSP	SCALE: NOT TO SCALE	PROJECT: 01101
CHECKED BY: CMH	DATE: 07/2021	FIGURE NO: 1

AIR/VAPOR SAMPLING FIELD DATA SHEET

Client: R&M Leasing Project No.: 01101

Site Name & Address: 155 Chandler St. Buffalo, NY

Person(s) Performing Sampling: Eric Belzold

Sample Identification: IA-6 (061721)

Sample Type: ☒ Indoor Air (ambient) ☐ Outdoor Air ☐ Soil Vapor ☐ Sub-slab Vapor

Date of Collection: 6/17/2021 Setup Time: 7:30 am Stop Time: 3:30 pm

Sample Depth: —

Sample Height: 5'

Sampling Method(s) & Device(s): 2.7 L Summa Canister & Regulator

Purge Volume: —

Sample Volume: 2.7 L

Sampling Canister Type & Size (if applicable): 2.7 L Summa

Canister # 157 Regulator # 01787

Vacuum Pressure of Canister Prior to Sampling: -29.52 "Hg

Vacuum Pressure of Canister After Sampling: -6.03 "Hg

Temperature in Sampling Zone: 65°F

Apparent Moisture Content of Sampling Zone: Low

Soil Type in Sampling Zone: —

Standard Chain of Custody Procedures Used for Handling & Delivery of Samples to Laboratory:

☒ Yes ☐ No. If no, provide reason(s) why? _____

Laboratory Name: Alpha Analytical

Analysis: TO-15

Comments: Ambient Indoor Air: 0.0ppm

The two man-door entrances were left ajar ~1" to allow the infiltration of fresh outdoor a.r.

Sampler's Signature [signature] Date: 6/17/2021

ATTACHMENT 2

TABLE

Environmental Advantage

Table 1
Indoor Air Analytical Testing Results Comparison
155 & 157 Chandler Street, Buffalo, NY
June 2021 Resample

	Guidance Values - Indoor Air		
LOCATION	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-6 (061121) Indoor Air
SAMPLING DATE			6/11/2021
LAB SAMPLE ID			L2132969-01
Volatile Organics in Air (ug/m^3)			
Acetone	98.9	NV	11.3
Carbon tetrachloride*	<1.3	NV	0.711
Chloromethane	3.7	NV	1.20
Dichlorodifluoromethane	16.5	NV	2.47
Ethanol	210	NV	41.6
Isopropanol	NV	NV	28.8
Toluene	43	NV	1.01
Trichloroethene*	4.2	2	1.31
Trichlorofluoromethane	18.1	NV	1.31

Notes:
1. Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report.
2. Analytical testing for VOCs via TO-15 completed by Alpha Laboratories.
3. Results present in ug/m^3 or microgram per cubic meter.
4. Samples were collected during a 8-hour sample duration.
5. 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database Appendix C, in the NYSDOH Guidance Manual, as indicated for indoor and outdoor air only.
6. Air Guideline Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, prepared by New York State Department of Health. Updated September 2013 and August 2015.
7. Grey shaded values represent exceedance of table C2 guidance values; yellow shaded values represents exceedance of NYSDOH Air Guideline Values.
8. NV = No Value

Table 2
Indoor Air Analytical Testing Results Comparison for IA-6
155 & 157 Chandler Street, Buffalo, NY
December 2018 through June 2021

LOCATION	Guidance Values - Indoor Air		IA-1				IA-2			IA-3				IA-4				IA-5							IA-6									OA-1			
	Table C2 Commercial Indoor Air Background (90%)	NYSDOH Air Guideline Value	IA-1 Indoor Air	IA-1 (121219) Indoor Air	IA-1 (121219) Duplicate Indoor Air	IA-1 (121120) Indoor Air	IA-2 Indoor Air	IA-2 (121219) Indoor Air	IA-2 (121120) Indoor Air	IA-3 Indoor Air	IA-3 (121219) Indoor Air	IA-3 (121120) Indoor Air	IA-3 (121120) Duplicate Indoor Air	IA-4 Indoor Air	IA-4 Duplicate Indoor Air	IA-4 (121219) Indoor Air	IA-4 (121120) Indoor Air	IA-5 Indoor Air	IA-5 (0219) Indoor Air	IA-5 (0219) Duplicate Indoor Air	IA-5 (0619) Indoor Air	IA-5 (0619) Duplicate Indoor Air	IA-5 (1212l9) Indoor Air	IA-5 (121120) Indoor Air	IA-6 Indoor Air	IA-6 (121219) Indoor Air	IA-6 (022020) Indoor Air	IA-6 (022020) Duplicate Indoor Air	IA-6 (121120) Indoor Air	IA-6 (021821) Indoor Air	IA-6 (021821) Duplicate Indoor Air	IA-6 (033121) Indoor Air	IA-6 (033121) Duplicate Indoor Air	IA-6 (061121) Indoor Air	OA-1 Outdoor Air	OA-1 (121219) Outdoor Air	OA-1 (121120) Outdoor Air	Table C2 Outdoor Air Guidance Values
SAMPLING DATE			12/18/2018	12/12/2019	12/12/2019	12/11/2020	12/18/2018	12/12/2019	12/11/2020	12/18/2018	12/12/2019	12/11/2020	12/11/2020	12/18/2018	12/18/2018	12/12/2019	12/11/2020	12/18/2018	2/13/2019	2/13/2019	6/21/2019	6/21/2019	12/12/2019	12/11/2020	12/18/2018	12/12/2019	2/20/2020	2/20/2020	12/11/2020	2/18/2021	2/18/2021	3/31/2021	3/31/2021	6/11/2021	12/18/2018	12/12/2019	12/11/2020	
LAB SAMPLE ID			L1852191-06	L1959919-06	L1959919-07	L2055692-06	L1852191-07	L1959919-08	L2055692-07	L1852191-02	L1959919-04	L2055692-03	L2055692-04	L1852191-03	L1852191-04	L1959919-03	L2055692-02	L1852191-01	L1905849-01	L1905849-02	L1927357-01	L1927357-02	L1959919-02	L2055692-01	L1852191-05	L1959919-05	L2007739-01	L2007739-02	L2055692-05	L2108109-01	L2108109-02	L2108109-01	L2108109-01	L2132969-01	L1852191-08	L1959919-01	L2055692-08	
Volatile Organics in Air (ug/m³)																																				
1,2,4-Trichlorobenzene	<6.8	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	1.24	ND	ND	1.20	ND	ND	ND	0.98	ND	ND	<6.4
1,2,4-Trimethylbenzene	9.5	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.09	1.24	ND	ND	1.20	ND	ND	ND	ND	ND	ND	5.8
1,2-Dichloroethane	<0.9	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.163	0.127	0.139	ND	ND	ND	ND	0.103	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	<0.8
2,2,4-trimethylpentane	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.943	1.36	1.29	ND	ND	ND	ND	NV
Acetone	98.9	NV	14.4	11.9	11.8 J	8.46	14.6	12.4	7.98	21.1	13.3	8.29	11.7	24.7	24	8.20	9.93	46.3	33.5 J	36.3 J	38 J	40.4 J	9.45	6.29	5.3	8.69	165	187	7.63	3.99	2.85	21.3	20.3	11.3	4.39	3.44	4.16	43.7
Benzene	9.4	NV	ND	0.744	0.824 J	0.684	ND	0.764	0.687	ND	0.652	ND	0.642	ND	ND	0.684	ND	ND	ND	ND	ND	0.866	0.741	ND	ND	0.655	ND	ND	ND	1.12	1.13	1.30	1.25	ND	ND	ND	ND	6.6
Carbon disulfide	4.2	NV	ND	ND	ND	ND	ND	ND	ND	2.24	1.35	1.36	1.94	ND	ND	ND	ND	ND	ND	ND	0.673	0.704	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.7
Carbon tetrachloride*	<1.3	NV	0.591	0.579	0.572 J	0.522	0.566	0.598	0.516	0.541	0.491	0.428	0.453	0.711	0.723	0.516	0.384	2.31	1.09	1.05	0.591	0.598	0.547	0.415	0.598	2.26	0.434	0.453	0.528	0.434	0.465	0.528	0.535	0.711	0.459	0.484	0.403	0.7
Chloromethane	3.7	NV	1.25	1.19	1.16 J	1.07	1.14	1.22	1.07	2.24	1.18	1.02	1.06	2.95	1.13	1.11	1.04	1.13	0.96	1.01	1.43	1.40	1.23	1.01	1.06	1.09	0.956	0.921	1.01	0.898	0.944	1.08	1.08	1.20	1.13	1.11	0.952	3.7
cis-1,2-Dichloroethene*	<1.9	NV	ND	ND	ND	ND	ND	ND	0.186	ND	ND	ND	ND	ND	ND	ND	ND	0.163	0.127	0.139	ND	ND	ND	0.103	0.270	0.095	0.119	0.079	ND	ND	0.095	0.091	ND	ND	ND	ND	<1.8
Cyclohexane	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.03	ND	ND	ND	ND	ND	ND	ND	ND	0.688	1.16	1.13	ND	ND	ND	ND	NV
Dichlorodifluoromethane	16.5	NV	1.63	2.59	2.59 J	2.20	1.68	2.70	2.12	2.4	2.58	2.02	2.06	1.78	1.66	2.57	2.04	1.61	2.44	2.49	2.69	2.53	2.63	1.93	2.49	2.66	1.86	1.93	2.08	1.99	2.02	2.12	2.16	2.47	1.39	2.55	1.89	8.1
Ethanol	210	NV	155	298	352 J	230	207	224	215	307	931	590	803	148	144	392	1,330	910	298	315	675	667	63.3	3,050	40.1	194	111	129	228	105	104	194	220	41.6	ND	ND	ND	57
Ethyl acetate	5.4	NV	ND	6.85	7.03 J	6.45	ND	9.30	7.24	26.5	231	186	284	3.29	3.33	60.5	12.4	15.9	3.2	3.28	5.19	6.45	ND	12.8	ND	2.01	ND	ND	ND	2.79	2.56	ND	ND	ND	ND	ND	ND	1.5
Ethylbenzene	5.7	NV	2.49	0.869	0.873 J	1.02	2.32	0.877	1.33	2.76	ND	ND	ND	2.79	2.82	ND	ND	4.73	2	2.03	8.38	8.69	0.986	ND	ND	ND	5.52	5.86	ND	1.62	1.73	1.15	1.09	ND	ND	ND	ND	3.5
Heptane	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.906	1.22	ND	ND	ND	ND	ND	ND	ND	0.971	1.08	2.45	2.28	ND	ND	ND	ND	NV
Hexane	NV	NV	ND	0.888	0.962 J	1.34	ND	1.01	1.32	0.811	ND	ND	ND	1.26	1.32	ND	0.839	6.87	2.55	2.81	2.49	4.79	0.807	ND	ND	ND	ND	ND	0.733	3.30	3.41	5.08	4.79	ND	ND	ND	0.705	6.4
Isopropanol	NV	NV	11.9	3.52	3.39 J	6.02	11.3	3.17	5.60	32.4	2.65	6.83	9.88	99.6	97.8	2.48	7.18	873	215	228	1230	1170	4.77	4.42	ND	9.24	5.21	5.19	2.11	1.83	1.93	79.2	79.2	28.8	ND	ND	ND	NV
m&p-Xylene	22.2	NV	9.56	3.36	3.33 J	4.34	9.38	3.32	4.18	10.6	1.74	2.30	2.82	10.6	10.3	ND	2.39	19	8.17	8.17	36.7	36.2	3.82	1.82	ND	ND	18.0	19.3	ND	6.91	7.60	4.39	4.26	ND	ND	ND	ND	12.8
Methyl Ethyl Ketone (2-Butanone)	12	NV	ND	ND	ND	ND	ND	ND	ND	ND	4.28	ND	1.58	ND	ND	ND	1.64	ND	4.63	5.66	6.16	2.56	2.70	ND	ND	ND	ND	ND	ND	1.87	1.67	1.67	1.58	ND	ND	ND	ND	11.3
Methyl Isobutyl Ketone	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19.8	4.51	4.39	5.12	5.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Methylene chloride	10	60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1
o-Xylene	7.9	NV	3.12	1.22	1.29 J	1.83	3.09	1.22	1.47	2.86	ND	ND	0.947	3.14	3.24	ND	ND	5.56	2.4	2.44	12.2	12.2	1.20	ND	ND	ND	5.21	5.60	ND	2.08	2.30	1.49	1.45	ND	ND	ND	ND	4.6
Styrene	1.9	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.932	ND	ND	2.18	2.76	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3
Tetrachloroethene*	15.9	30	0.753	0.651	0.387 J	0.427	0.685	0.346	1.00	0.332	0.488	ND	ND	0.922	0.882	ND	0.156	1.3	0.353	0.319	0.203	0.292	0.271	0.183	0.529	0.448	0.305	0.292	0.285	0.170	0.210	0.353	0.319	ND	ND	ND	ND	6.5
Tetrahydrofuran	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.86	1.55	ND	ND	ND	ND	NV
Toluene	43	NV	4.07	1.53	1.76 J	1.49	1.21	1.57	1.43	1.16	1.38	1.41	1.58	4.26	5.8	1.30	1.15	7.65	5.35	5.39	5.39	8.63	2.58	1.01	ND	1.82	1.17	1.06	1.25	3.72	4.07	6.93	6.59	1.01	ND	0.855	0.806	33.7
trans-1,2-Dichloroethene	NV	NV	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.932	1.44	2.36	2.5	6.15	5.95	1.10	1.67	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NV
Trichloroethene*	4.2	2	0.849	0.833	0.844 J	0.801	0.736	0.742	0.790	0.489	ND	ND	0.145	1.34	1.37	ND	0.478	9.46	4.54	4.58	0.903	0.833	0.688	0.715	0.924	12.0	1.34	1.43	2.96	2.96	2.93	14.0	13.6	1.31	ND	ND	ND	1.3
Trichlorofluoromethane	18.1	NV	1.33	1.25	1.29 J	1.19	1.3	1.29	1.15	1.12	1.27	1.15	ND	1.28	1.25	1.25	ND	1.25	ND	ND	1.41	1.49	1.32	ND	1.26	1.31	ND	ND	1.14	ND	ND	1.15	ND	1.31	1.16	1.24	ND	4.3

Notes:

1. Compounds detected in one or more samples included in this table. For a list of all compounds, refer to analytical report.
2. Analytical testing for VOCs via TO-15 completed by Alpha Laboratories. * = samples analyzed for volatile organics in air by SIM.
3. Results present in ug/m^3 or microgram per cubic meter.
4. Samples were collected during a 8-hour sample duration.
5. 90th percentile values as presented in C2 (EPA 2001: Building assessment and survey evaluation (BASE) database) Appendix C, in the NYSDOH Guidance Manual, as indicated for Indoor and Outdoor air only.
6. Air Guidance Values from "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" dated October 2006, prepared by NYSDOH.
7. Blue shading represents the samples collected during the 2020-2021 (December 2020, February 2021, March 2021, & June 2021).
8. No shading represents the samples most previously collected during the 2018-2020 PRR Reporting Periods.
9. Grey shaded values represent exceedance of table C2 guidance values; yellow shaded values represent exceedance of NYSDOH Air Guidance Values.
10. ND = Non Detect; NV = No Value.

ATTACHMENT 3

ANALYTICAL REPORT

Environmental Advantage

ANALYTICAL REPORT

Lab Number:	L2132969
Client:	Environmental Advantage, Inc. 3636 North Buffalo Road Orchard Park, NY 14127
ATTN:	Mark Hanna
Phone:	(716) 667-3130
Project Name:	JUNE 2021 IA-6 RESAMPLE
Project Number:	01101
Report Date:	06/24/21

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: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101

Lab Number: L2132969
Report Date: 06/24/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2132969-01	IA-6 (061721)	AIR	155 CHANDLER ST. BUFFALO, NY	06/17/21 15:30	06/17/21

Project Name:	JUNE 2021 IA-6 RESAMPLE	**Lab Number:**	L2132969
Project Number:	01101	**Report Date:**	06/24/21

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:	JUNE 2021 IA-6 RESAMPLE	**Lab Number:**	L2132969
Project Number:	01101	**Report Date:**	06/24/21

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on June 16, 2021. The canister certification results are provided as an addendum.

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

Title: Technical Director/Representative Date: 06/24/21

AIR

Project Name: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101
Lab Number: L2132969
Report Date: 06/24/21

SAMPLE RESULTS

Lab ID: L2132969-01
Client ID: IA-6 (061721)
Sample Location: 155 CHANDLER ST. BUFFALO, NY

Date Collected: 06/17/21 15:30
Date Received: 06/17/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 06/22/21 21:01
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.500	0.200	--	2.47	0.989	--		1
Chloromethane	0.582	0.200	--	1.20	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	22.1	5.00	--	41.6	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	4.76	1.00	--	11.3	2.38	--		1
Trichlorofluoromethane	0.233	0.200	--	1.31	1.12	--		1
Isopropanol	11.7	0.500	--	28.8	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: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101
Lab Number: L2132969
Report Date: 06/24/21

SAMPLE RESULTS

Lab ID: L2132969-01
Client ID: IA-6 (061721)
Sample Location: 155 CHANDLER ST. BUFFALO, NY

Date Collected: 06/17/21 15:30
Date Received: 06/17/21
Field Prep: Not Specified

Sample Depth:

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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	ND	0.200	--	ND	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	0.267	0.200	--	1.01	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: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101
Lab Number: L2132969
Report Date: 06/24/21

SAMPLE RESULTS

Lab ID: L2132969-01
Client ID: IA-6 (061721)
Sample Location: 155 CHANDLER ST. BUFFALO, NY

Date Collected: 06/17/21 15:30
Date Received: 06/17/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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	91		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	89		60-140

Project Name: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101
Lab Number: L2132969
Report Date: 06/24/21

SAMPLE RESULTS

Lab ID: L2132969-01
Client ID: IA-6 (061721)
Sample Location: 155 CHANDLER ST. BUFFALO, NY

Date Collected: 06/17/21 15:30
Date Received: 06/17/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 06/22/21 21:01
Analyst: TS

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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	0.113	0.020	--	0.711	0.126	--		1
Trichloroethene	0.243	0.020	--	1.31	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	90		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	91		60-140

Project Name: JUNE 2021 IA-6 RESAMPLE **Lab Number:** L2132969

Project Number: 01101 **Report Date:** 06/24/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/22/21 15:05

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1515522-4								
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: JUNE 2021 IA-6 RESAMPLE **Lab Number:** L2132969

Project Number: 01101 **Report Date:** 06/24/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/22/21 15:05

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1515522-4								
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: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101
Lab Number: L2132969
Report Date: 06/24/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 06/22/21 15:05

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01 Batch: WG1515522-4								
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: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101
Lab Number: L2132969
Report Date: 06/24/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 06/22/21 15:44

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 01 Batch: WG1515525-4								
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: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101

Lab Number: L2132969
Report Date: 06/24/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1515522-3								
Dichlorodifluoromethane	85		-		70-130	-		
Chloromethane	90		-		70-130	-		
Freon-114	88		-		70-130	-		
Vinyl chloride	89		-		70-130	-		
1,3-Butadiene	99		-		70-130	-		
Bromomethane	94		-		70-130	-		
Chloroethane	91		-		70-130	-		
Ethanol	89		-		40-160	-		
Vinyl bromide	90		-		70-130	-		
Acetone	72		-		40-160	-		
Trichlorofluoromethane	107		-		70-130	-		
Isopropanol	75		-		40-160	-		
1,1-Dichloroethene	96		-		70-130	-		
Tertiary butyl Alcohol	86		-		70-130	-		
Methylene chloride	100		-		70-130	-		
3-Chloropropene	98		-		70-130	-		
Carbon disulfide	91		-		70-130	-		
Freon-113	92		-		70-130	-		
trans-1,2-Dichloroethene	86		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	90		-		70-130	-		
2-Butanone	95		-		70-130	-		
cis-1,2-Dichloroethene	97		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101

Lab Number: L2132969
Report Date: 06/24/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1515522-3								
Ethyl Acetate	94		-		70-130	-		
Chloroform	99		-		70-130	-		
Tetrahydrofuran	92		-		70-130	-		
1,2-Dichloroethane	100		-		70-130	-		
n-Hexane	100		-		70-130	-		
1,1,1-Trichloroethane	111		-		70-130	-		
Benzene	99		-		70-130	-		
Carbon tetrachloride	117		-		70-130	-		
Cyclohexane	102		-		70-130	-		
1,2-Dichloropropane	101		-		70-130	-		
Bromodichloromethane	111		-		70-130	-		
1,4-Dioxane	103		-		70-130	-		
Trichloroethene	102		-		70-130	-		
2,2,4-Trimethylpentane	104		-		70-130	-		
Heptane	107		-		70-130	-		
cis-1,3-Dichloropropene	112		-		70-130	-		
4-Methyl-2-pentanone	107		-		70-130	-		
trans-1,3-Dichloropropene	99		-		70-130	-		
1,1,2-Trichloroethane	100		-		70-130	-		
Toluene	92		-		70-130	-		
2-Hexanone	97		-		70-130	-		
Dibromochloromethane	108		-		70-130	-		
1,2-Dibromoethane	92		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101

Lab Number: L2132969
Report Date: 06/24/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01 Batch: WG1515522-3								
Tetrachloroethene	90		-		70-130	-		
Chlorobenzene	91		-		70-130	-		
Ethylbenzene	98		-		70-130	-		
p/m-Xylene	99		-		70-130	-		
Bromoform	110		-		70-130	-		
Styrene	96		-		70-130	-		
1,1,2,2-Tetrachloroethane	100		-		70-130	-		
o-Xylene	104		-		70-130	-		
4-Ethyltoluene	100		-		70-130	-		
1,3,5-Trimethylbenzene	111		-		70-130	-		
1,2,4-Trimethylbenzene	108		-		70-130	-		
Benzyl chloride	115		-		70-130	-		
1,3-Dichlorobenzene	102		-		70-130	-		
1,4-Dichlorobenzene	99		-		70-130	-		
1,2-Dichlorobenzene	102		-		70-130	-		
1,2,4-Trichlorobenzene	115		-		70-130	-		
Hexachlorobutadiene	115		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: JUNE 2021 IA-6 RESAMPLE

Project Number: 01101

Lab Number: L2132969

Report Date: 06/24/21

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 Batch: WG1515525-3								
Vinyl chloride	89		-		70-130	-		25
1,1-Dichloroethene	94		-		70-130	-		25
cis-1,2-Dichloroethene	94		-		70-130	-		25
1,1,1-Trichloroethane	105		-		70-130	-		25
Carbon tetrachloride	114		-		70-130	-		25
Trichloroethene	100		-		70-130	-		25
Tetrachloroethene	92		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101

Lab Number: L2132969
Report Date: 06/24/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1515525-5 QC Sample: L2132969-01 Client ID: IA-6 (061721)						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.113	0.119	ppbV	5		25
Trichloroethene	0.243	0.244	ppbV	0		25
Tetrachloroethene	ND	ND	ppbV	NC		25

Project Name: JUNE 2021 IA-6 RESAMPLE

Lab Number: L2132969

Project Number: 01101

Report Date: 06/24/21

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 Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L2132969-01	IA-6 (061721)	01787	Flow 4	06/16/21	355542		-	-	-	Pass	4.5	4.2	7
L2132969-01	IA-6 (061721)	157	2.7L Can	06/16/21	355542	L2131138-06	Pass	-29.6	-5.7	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2131138
Report Date: 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 06/11/21 01:12
Analyst: AW

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
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
Project Number: CANISTER QC BAT
Lab Number: L2131138
Report Date: 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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
Project Number: CANISTER QC BAT
Lab Number: L2131138
Report Date: 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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
Project Number: CANISTER QC BAT
Lab Number: L2131138
Report Date: 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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
Project Number: CANISTER QC BAT
Lab Number: L2131138
Report Date: 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:

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

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	91		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	90		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2131138
Report Date: 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 06/11/21 01:12
Analyst: AW

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

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L2131138

Project Number: CANISTER QC BAT **Report Date:** 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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	0.050	--	ND	0.188	--		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-Trimethybenzene	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:** L2131138

Project Number: CANISTER QC BAT **Report Date:** 06/24/21

Air Canister Certification Results

Lab ID: L2131138-06
Client ID: CAN 171 SHELF 15
Sample Location:

Date Collected: 06/10/21 08:00
Date Received: 06/10/21
Field Prep: Not Specified

Sample Depth:

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
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	91		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	90		60-140

Project Name: JUNE 2021 IA-6 RESAMPLE
Project Number: 01101

Lab Number: L2132969
Report Date: 06/24/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2132969-01A	Canister - 2.7 Liter	NA	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	JUNE 2021 IA-6 RESAMPLE	**Lab Number:**	L2132969
Project Number:	01101	**Report Date:**	06/24/21

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:	JUNE 2021 IA-6 RESAMPLE	**Lab Number:**	L2132969
Project Number:	01101	**Report Date:**	06/24/21

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 Fluoranthenes/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:	JUNE 2021 IA-6 RESAMPLE	**Lab Number:**	L2132969
Project Number:	01101	**Report Date:**	06/24/21

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.

Report Format: Data Usability Report

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 it's 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, SM4500Cl-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, TL, 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.

AIR ANALYSIS

PAGE 1 OF 1

ALPHA ANALYTICAL — CHAIN OF CUSTODY

320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 6/18/21

ALPHA Job #: L2132969

Client Information

Client: Env. Advantage Inc.
Address: 3636 N. Buffalo Rd
Orchard Park NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: mhanna@envadvantage.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: June 2021 IA-6 Resample
Project Location: 155 chandler st. Buffalo, NY
Project #: 01101
Project Manager: Mark Hanna + Mary Szustak
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☒ ADEx
Criteria Checker:
(Default based on Regulatory Criteria Indicated)
Other Formats:
☐ EMAIL (standard pdf report)
☐ Additional Deliverables:
Report to: (if different than Project Manager)

Billing Information

☒ Same as Client info PO #: 01101

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments: Additionally email results to mszustak@envadvantage.com

Project-Specific Target Compound List: ☐

ANALYSIS

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	TO-15	TO-15 SIM	APH (Subtract Non-petroleum HCs ☐)	Fixed Gases	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
32969-01	IA-6 (061721)	6/17/21	7:30am	3:30pm	-29.52	-6.03	AA	EB	2.7L	1570	01707	X					0.0ppm

*SAMPLE MATRIX CODES

AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type: C5

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

Relinquished By:	Date/Time	Received By:	Date/Time:
Eric B / A&L	6/17/21 1535	A&L	6/17/21 1530
A&L	6/17/21 1748		6/18/21 0430
Wendy Manning	6/18/21 4:00		6/18/21 0425

Form No. 101-02 Rev. (25-Sep-15)