March 23, 2021

Ms. Megan Kuczka
Environmental Program Specialist
New York State Department of Environmental Conservation
Department of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo NY 14203-2915

Re: Post-Remedial Vapor Assessment Report – March 2021
73-79 West Huron Street Site (C915282), Buffalo, New York

Dear Ms. Kuczka:

Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this letter report to summarize the results of the Vapor Assessment sampling conducted on February 3, 2021 to check the efficacity of the active sub-slab depressurization (ASD) system installed in the existing building at the 73-79 West Huron Street Site, Buffalo, New York (Site; Figure 1).

VAPOR ASSESSMENT TESTING

In accordance with the May 2020 Periodic Review Report (revised June 2020), approved by the New York State Department of Environmental Conservation (NYSDEC) on June 30, 2020, indoor air and outdoor air samples were collected in February of 2021 to satisfy Site Management Plan (SMP) requirements for evaluating efficacity of the ASD system installed in the existing building.

Benchmark performed sampling on February 3, 2021. At that time, the basement of the building was in partial use by teaching staff; all student classes were on upper floors. The existing ASD and heating systems were active, and doors and windows were closed as typical for winter weather conditions (high temperatures were at or below 33 degrees F on the day of sampling). It is important to note that at the time sampling was performed, multiple containers of cleaning supplies and disinfectant related to COVID-19 mitigation were present within the basement.

Benchmark collected indoor air and outdoor air samples from the following locations (see Figure 2):

- **Basement** - Collected two (2) indoor air samples.

- **Outdoor (outside on roof of newly constructed gymnasium)** – Collected one (1) outdoor air sample.

The air samples were collected using laboratory-provided air collection canisters equipped with pre-set timed regulator to draw vapors into the canisters over an 8-hour period. Following the 8-hour sample collection period, the canisters were delivered under chain of custody command to Alpha Analytical Laboratories, located in Mansfield, Massachusetts for analysis of volatile organic compounds per USEPA TO-15 methodology.

Prior to collection of air samples, a chemical product inventory of the basement was performed. The objective of the product inventory is to identify any potential sources which may influence the air sampling. In general, the chemicals identified were primarily comprised of partially used containers of school cleaning and disinfecting supplies, fire extinguishers, and maintenance products including paints, primers, and adhesives. Select photographs from the monitoring event are presented as Attachment 2.

SAMPLE RESULTS

Table 1 provides a comparison of the February 3, 2021 sampling event analytical results to New York State Department of Health (NYSDOH) Guidance for Evaluating Soil Vapor Intrusion in the State of New York - Appendix C2. EPA 2001: Building Assessment and Survey Evaluation (BASE) database, SUMMA Canister Method - 90th Percentile Values for Indoor and Outdoor Air, which are included in Attachment 4 for reference.

As indicated on Table 1, one indoor air sample was detected above its NYSDOH indoor air 90th percentile value for ethanol of 210 ug/m^3 at IA-2 (771 ug/m^3). The indoor air ethanol exceedance is likely related to the abundance of partially used disinfectant containers (i.e. hand sanitizer) located throughout the basement. The outdoor air sample was detected above its NYSDOH outdoor air 90th percentile value for ethyl acetate of 1.5 ug/m^3 at OA-1 (5.8 ug/m^3).

During the vapor assessment performed on February 3, 2021, Benchmark personnel collected magnehelic gauge readings from the two gauges installed on the manifold risers in the basement. Benchmark personnel verified that the ASD system fans were operating properly as indicated by the pressure readings on the magnehelic gauges. Figure 2 illustrates magnehelic gauge locations and pressures readings measured in inches of water.

CONCLUSIONS

Based upon the results of the sampling as summarized herein, the data does not indicate vapor intrusion concerns and the ASD system is operating effectively.

Please contact us if you have any questions or require additional information.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Thomas H. Forbes, P.E.
Principal Engineer

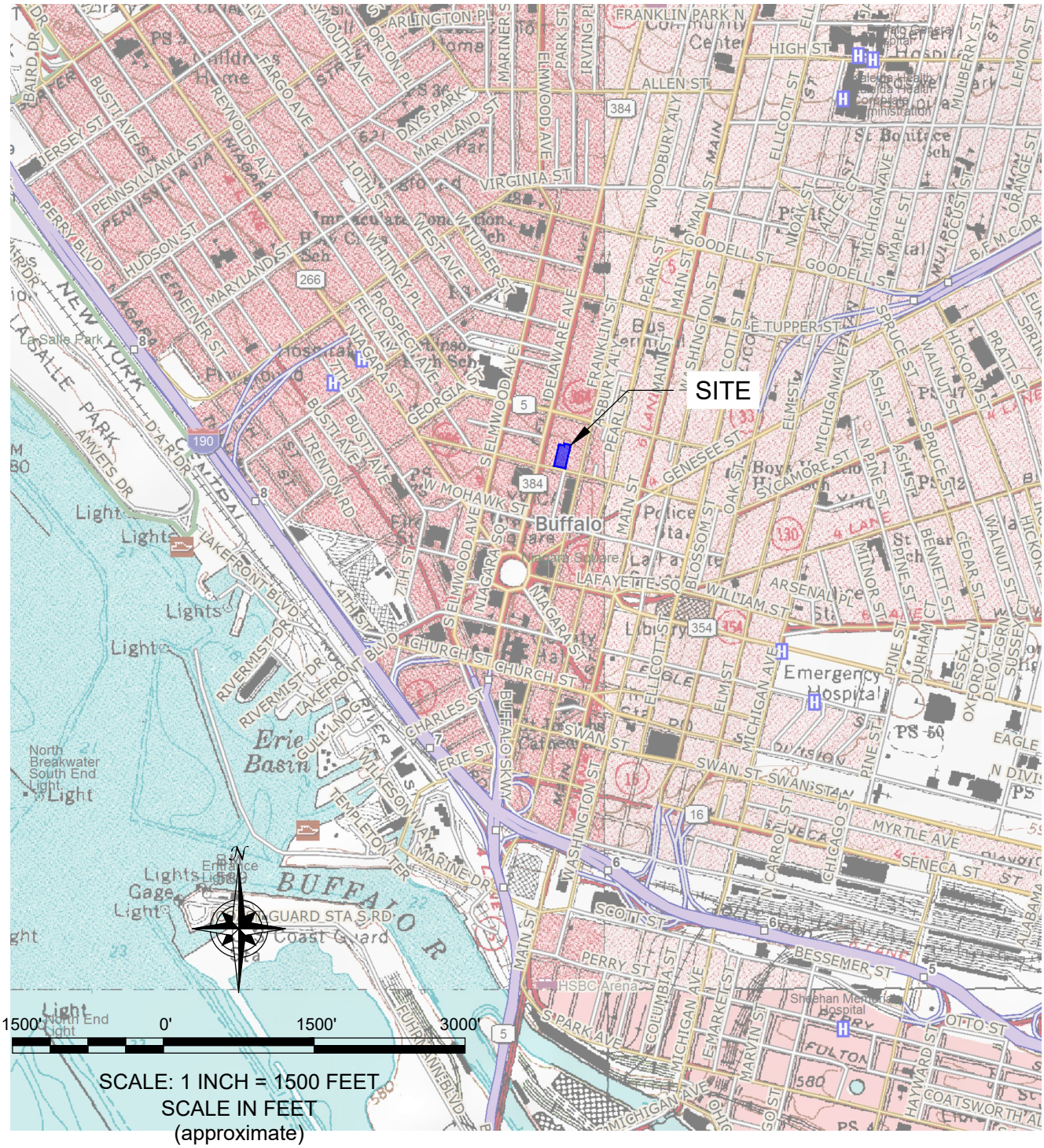
Caroline Bukowski, EIT
Engineer

C: James Mahoney (McGuire)
David Von Derau (McGuire)

FIGURES

F:\CAD\Benchmark\Emerson Huron, LLC\Vapor Assessment - February 2021\Figure 1; Site Location & Vicinity Map.dwg

FIGURE 1



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

PROJECT NO.: 0441-020-001

DATE: MARCH 2021

DRAFTED BY: CCB

SITE LOCATION & VICINITY MAP

VAPOR ASSESSMENT REPORT

73-79 WEST HURON STREET SITE
BCP SITE NO. C915282
BUFFALO, NEW YORK

PREPARED FOR

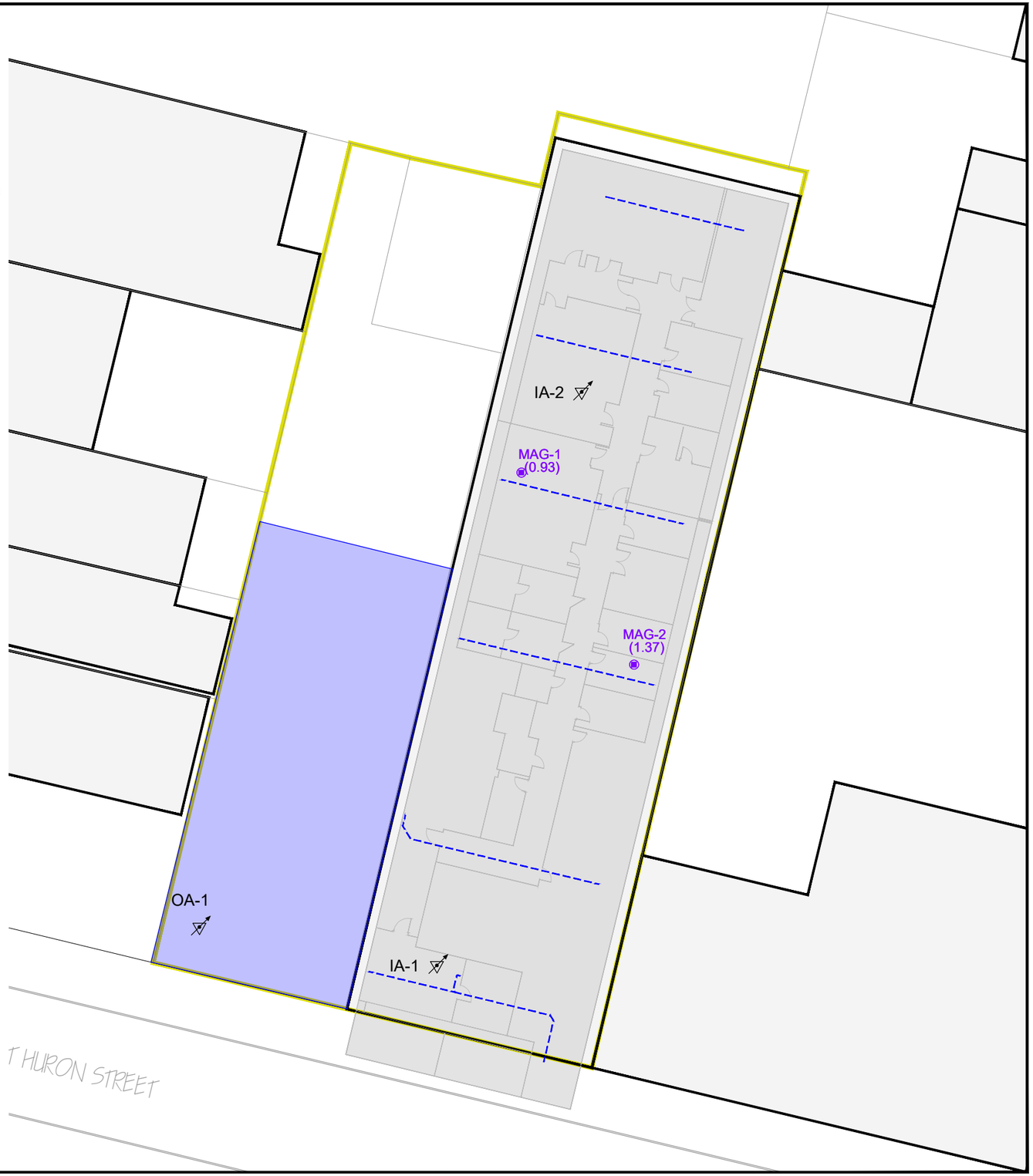
EMERSON HURON, LLC

F:\CAD\Benchmark\Emerson Huron, LLC\Vapor Assessment - February 2021\Figure 1; Indoor & Outdoor Air Sample Locations.dwg

LEGEND:

- BCP / PROPERTY BOUNDARY
- EXISTING BUILDING
- BASEMENT FLOOR PLAN
- APPROXIMATE LOCATION OF NEWLY CONSTRUCTED GYMNASIUM WITH PARKING BELOW
- PARCEL BOUNDARY
- NAME — ROAD
- IA-1 — INDOOR AIR SAMPLE LOCATION
- OA-1 — OUT DOOR AIR SAMPLE LOCATION
- MAG-1 (0.93) — MAGNEHELIC PRESSURE GAUGE LOCATION (PRESSURE READING IN INCHES OF WATER)
- 4-INCH PERFORATED ASD PIPING

NOTE:
BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC COLLECTED NEGATIVE PRESSURE READINGS FROM BOTH MAGNEHELIC GAUGES (MAG-1 & MAG-2) ON FEBRUARY 3, 2021.



N

30' 0' 30' 60'

SCALE: 1 INCH = 30 FEET
SCALE IN FEET
(approximate)

DATE: FEBRUARY 2021
DRAFTED BY: CCB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
2558 HAMBURG TURNPIKE
SUITE 300
BUFFALO, NY 14218
(716) 856-0599

JOB NO.: 0441-020-001

INDOOR & OUTDOOR AIR SAMPLE LOCATIONS

VAPOR ASSESSMENT REPORT

73-79 WEST HURON STREET SITE
BCP SITE NO. C915282
BUFFALO, NEW YORK

PREPARED FOR
EMERSON HURON, LLC

FIGURE 2

TABLE

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF INDOOR AIR AND OUTDOOR AIR SAMPLING ANALYTICAL RESULTS

VAPOR ASSESSMENT REPORT

73-79 WEST HURON STREET SITE
BCP SITE NO. C915282
BUFFALO, NEW YORK

Parameter[1]	90th Percentile Values for Indoor Air[2]	90th Percentile Values for Outdoor Air[2]	Sample Location & Sample Date		
			IA-1	IA-2	OA-1
			2/3/2021		
Volatile Organic Compounds (VOCs, ug/m3)					
Acetone	**98.9**	**43.7**	ND< 2.4	7.25	4.25
Benzene	**9.4**	**6.6**	ND< 0.64	ND< 0.64	0.639
Carbon Tetrachloride	**< 1.3**	**0.7**	0.352	0.371	0.352
Chloromethane	**3.7**	**3.7**	1.06	1.18	1.02
Cyclohexane	**--**	**--**	ND< 0.69	0.861	3.02
Dichlorodifluoromethane	**16.5**	**8.1**	1.82	1.85	1.8
Ethanol	**210**	**57**	33.2	**771**	23
Ethyl acetate	**5.4**	**1.5**	ND< 1.8	ND< 1.8	**5.8**
Isopropanol	**--**	**--**	ND< 1.2	2.9	1.28
Styrene	**1.9**	**1.3**	ND< 0.85	1.37	ND< 0.85
Tetrachloroethene	**15.9**	**6.5**	0.271	0.136	0.183
Tetrahydrofuran	**--**	**--**	ND< 1.5	1.68	ND< 1.5
Toluene	**43**	**33.7**	ND< 0.75	1.39	2.02

Notes:
1. Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table.
2. Values per NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York - Appendix C2. EPA 2001: Building Assessment and Survey Evaluation (BASE) database, SUMMA Canister Method - 90th Percentile Values for Indoor and Outdoor Air

Definitions:
ND = Parameter not detected above laboratory detection limit.

Bold	= Values exceeds Indoor Air 90th Percentile Values
Bold	= Values exceeds Outdoor Air 90th Percentile Values

ATTACHMENT 1

Chemical Inventory

BENCHMARK

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	73-79 W. Huron Street
Job No:	B0441-020-001 (004)
Location:	73-79 W. Huron Street, Buffalo NY
Field Staff:	CCB
Client:	Emerson Huron, LLC

SAMPLE I.D.: IA-1

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	22 F
Ambient Air Temp. - P.M.:	30 F
Wind Direction:	NW
Wind Speed:	10-15 mph
Precipitation:	None

Size of Canister:	2.7 L
Canister Serial No.:	147B
Flow Controller No.:	01719
Sample Date(s):	2/3/2021
Shipping Date:	2/3/2021
Sample Type: ☑ Indoor Air	☐ Outdoor Air
☐ Subslab, complete section below	☐ Soil Gas
Soil Gas Probe Depth:	NA

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	--	-29.5 " Hg	--	LAB
Field Vacuum Check [1]	--	--	--	--
Initial Field Vacuum [2]	7:30	-30.34 " Hg	2/3/2021	CCB
Final Field Vacuum [3]	14:17	-9.25 " Hg	2/3/2021	CCB
Duration of Sample Collection	8 HR			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-30.34 " Hg	
Final Pressure (psia)	-9.25 " Hg	
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration: NA

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed: CAROLINE BUKOWSKI

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	73-79 W. Huron Street
Job No:	B0441-020-001 (004)
Location:	73-79 W. Huron Street, Buffalo NY
Field Staff:	CCB
Client:	Emerson Huron, LLC

SAMPLE I.D.: IA-2

Size of Canister:	2.7 L
Canister Serial No.:	2310
Flow Controller No.:	0478
Sample Date(s):	2/3/2021
Shipping Date:	2/3/2021
Sample Type: ☑ Indoor Air	☐ Outdoor Air
☐ Subslab, complete section below	☐ Soil Gas
Soil Gas Probe Depth:	NA

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	22 F
Ambient Air Temp. - P.M.:	30 F
Wind Direction:	NW
Wind Speed:	10-15 mph
Precipitation:	None

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	--	-29.3 " Hg	--	LAB
Field Vacuum Check [1]	--	--	--	--
Initial Field Vacuum [2]	7:20	-29.81 " Hg	2/3/2021	CCB
Final Field Vacuum [3]	14:10	-9.91 " Hg	2/3/2021	CCB
Duration of Sample Collection	8 HR			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-29.81 " Hg	
Final Pressure (psia)	-9.91 " Hg	
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration: NA

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
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10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed: CAROLINE BUKOWSKI

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project:	73-79 W. Huron Street
Job No:	B0441-020-001 (004)
Location:	73-79 W. Huron Street, Buffalo NY
Field Staff:	CCB
Client:	Emerson Huron, LLC

SAMPLE I.D.:

OA-1

Size of Canister:	2.7 L
Canister Serial No.:	2227
Flow Controller No.:	01640
Sample Date(s):	2/3/2021
Shipping Date:	2/3/2021
Sample Type: ☐ Indoor Air	☑ Outdoor Air
☐ Subslab, complete section below	☐ Soil Gas
Soil Gas Probe Depth:	NA

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:	22 F
Ambient Air Temp. - P.M.:	30 F
Wind Direction:	NW
Wind Speed:	10-15 mph
Precipitation:	None

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	--	-28.7 " Hg	--	LAB
Field Vacuum Check [1]	--	--	--	--
Initial Field Vacuum [2]	7:40	-27.64 " Hg	2/3/2021	CCB
Final Field Vacuum [3]	14:25	-6.70 " Hg	2/3/2021	CCB
Duration of Sample Collection	8 HR			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-27.64 " Hg	
Final Pressure (psia)	-6.70 " Hg	
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration: NA

Calculated tubing volume: x 3 =

Purged Tubing Volume Concentration:

Is the purged volume concentration less than or equal to 10% in shroud?

☐ YES, continue sampling

☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
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NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)

2 Vacuum measured by canister gauge upon opening valve

3 Vacuum measured by canister gauge prior to closing valve

Signed: CAROLINE BUKOWSKI

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

Project Name:	73-79 W. Huron Street	Project No.	B0441-020-001 (004)
Project Location:	73-79 W. Huron Street, Buffalo NY	Client:	Emerson Huron, LLC
Preparer's Name:	Caroline Bukowski	Date/Time:	2/3/2021 7:00
Preparer's Affiliation:		Phone No:	716-856-0599

Purpose of Investigation: SVI Investigation

1. OCCUPANT:

Interviewed: yes **no**

Last Name: First Name:

Address:

County:

Home Phone: Office Phone:

Number of Occupants/persons at this location: Age of Occupants:

2. OWNER OR LANDLORD: (check if same as occupant_____)

Interviewed: yes **no**

Last Name: First Name:

Address:

County:

Home Phone: Office Phone:

3. BUILDING CHARACTERISTICS

Type of Building: check appropriate response)

☐ Residential	☑ School	☐ Commercial/Multi-use
☐ Industrial	☐ Church	☐ Other:

If the property is residential, type? (check appropriate response) NA

☐ Ranch	☐ 2-Family	☐ 3-Family
☐ Raised Ranch	☐ Split Level	☐ Colonial
☐ Cape Cod	☐ Contemporary	☐ Mobile Home
☐ Duplex	☐ Apartment House	☐ Townhouse/Condo
☐ Modular	☐ Log Home	☐ Other:

If multiple units, how many?

If the property is commercial, type?

Business Type(s):

Does it include residences (i.e., multi-use)? yes no If yes, how many?

Other Characteristics:

Number of floors 6 Building age +100 years

Is the building insulated? yes no How air tight? tight average not tight

4. AIR FLOW

Use air current tubes or tracer smoke to evaluate air flow patterns and qualitatively describe:

NA

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (check all that apply)

a. Above grade construction:	☐	wood frame	☑	concrete	☑	stone
b. Basement type:	☑	full	☐	crawlspace	☐	slab
c. Basement floor:	☑	concrete	☐	dirt	☐	stone
d. Basement floor:	☐	uncovered	☑	covered	☐	covered with
e. Concreter floor:	☐	unsealed	☑	sealed	☐	sealed with
f. Foundation walls:	☑	poured	☐	block	☐	stone
g. Foundation walls:	☐	unsealed	☑	sealed	☐	sealed with
h. The basement is:	☐	wet	☐	damp	☑	dry
i. The basement is:	☑	finished	☐	unfinished	☐	partially finished
j. Sump present?	☑	yes	☐	no		
k. Water in Sump?	☑	yes	☐	no	☐	not applicable

Basement/Lowest level depth below grade: ~15 ft

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING, and AIR CONDITIONING (check all that apply)

Type of heating system(s) used in this building: (check all that apply - note primary)

- ☑ Hot air circulation
- ☐ Heat pump
- ☐ Hot water baseboard
- ☐ Space Heaters
- ☐ Steam radiation
- ☐ Radiant floor
- ☐ Electric baseboard
- ☐ Wood stove
- ☐ Outdoor wood boiler
- ☐ Other _____

The primary type of fuel used is:

- ☑ Natural Gas
- ☐ Fuel oil
- ☐ Kerosene
- ☐ Electric
- ☐ Propane
- ☐ Solar
- ☐ Wood
- ☐ Coal
- ☐ Other _____

Domestic hot water tank fueled by: _____

Boiler/furnace located in:

- ☑ Basement
- ☐ Outdoors
- ☐ Main Floor
- ☐ Other _____

Air Conditioning:

- ☑ Central Air
- ☐ Window units
- ☐ Open Windows
- ☐ None _____

Are there air distribution ducts present? ☑ yes ☐ no

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? ☑ Full-time ☐ Occaisionally ☐ Seldom ☐ Almost Never

Level	General Use of Each Floor (e.g., family room, bedroom, laundry, workshop, storage)
Basement	School classrooms, school supply storage, and utilities
First Floor	School classrooms
Second Floor	School classrooms
Third Floor	School classrooms
Fourth Floor	School classrooms

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? ☐ yes ☑ no

b. Does the garage have a separate heating unit? ☐ yes ☐ no ☑ NA

c. Are petroleum-powered machines or vehicles stored in the garage? ☐ yes ☑ no ☐ NA
(e.g., lawnmower, atv, car) If yes, please specify: _____

d. Has the building ever had a fire? ☐ yes ☑ no
If yes, when? _____

e. Is a kerosene or unvented gas space heater present? ☐ yes ☑ no
If yes, where? _____

f. Is there a workshop or hobby/craft area? ☑ yes ☐ no
If yes, where and type? Paint & other supplies located in basement related ro redevelopment

g. Is there smoking in the building? ☐ yes ☑ no
If yes, how frequently? _____

h. Have cleaning products been used recently? ☑ yes ☐ no
If yes, when & type? Typical school cleaning and disinfecting

i. Have cosmetic products been used recently? ☐ yes ☑ no
If yes, when & type? _____

j. Has painting/staining been done in the last 6 months? ☐ yes ☑ no
If yes, where & when? Paint is stored in basement

k. Is there new carpet, drapes, or other textiles? ☐ yes ☑ no
If yes, where & when? _____

l. Have air fresheners been used recently? ☐ yes ☐ no
If yes, when & type? Unknown

m. Is there a kitchen exhaust fan? ☐ yes ☑ no
If yes, where vented? _____

n. Is there a bathroom exhaust fan? ☐ yes ☑ no
If yes, where vented? Dedicated Outdoor Air System from basement bathrooms

8. FACTORS THAT MAY influence INDOOR AIR QUALITY (continued)

o. Is there a clothes dryer? ☑ yes ☐ no

If yes, is it vented outside? yes no

p. Has there been a pesticide application? ☐ yes ☑ no

If yes, when & type?

q. Are there odors in the building? ☐ yes ☑ no

If yes, please describe?

r. Do any of the building occupants use solvents at work? ☐ yes ☑ no

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used?

If yes, are their clothes washed at work? ☐ yes ☐ no Washer and dryer are located in the basement for education purposes

s. Do any of the building occupants regularly use or work at a dry-cleaning service?

(check appropriate response)

☐ yes, use dry-cleaning regularly (weekly) ☐ no

☐ yes, use dry-cleaning infrequently (monthly or less) ☑ unknown

☐ yes, work at a dry-cleaning service

t. Is there a radon mitigation system for the building/structure? ☑ yes ☐ no

If yes, date of installation?

Is the system active or passive?

9. WATER AND SEWAGE

Water Supply: ☑ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well

☐ Other:

Sewage Disposal: ☑ Public Sewer ☐ Septic Tank ☐ Leach Field ☐ Dry Well

☐ Other:

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended:

b. Residents choose to: ☐ remain in home ☐ relocate to friends/family ☐ relocate to hotel/motel

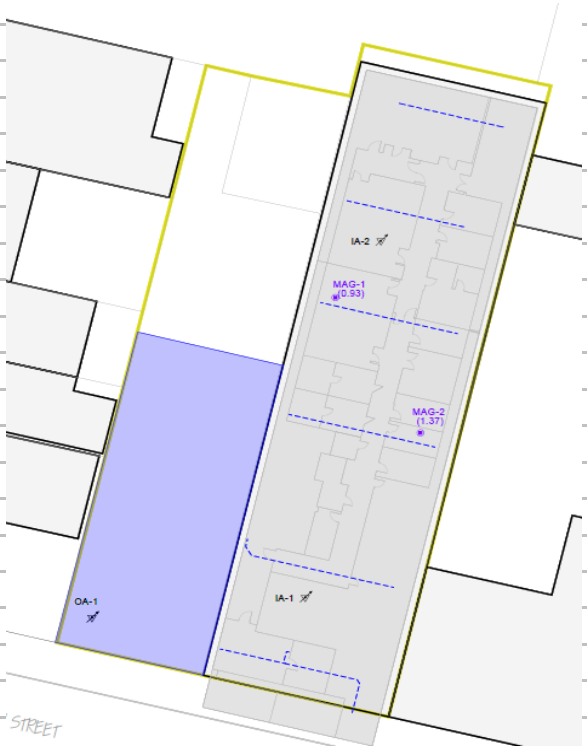
c. Responsibility for costs associated with reimbursement explained? ☐ yes ☐ no

d. Relocation package provided and explained to residents? ☐ yes ☐ no

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

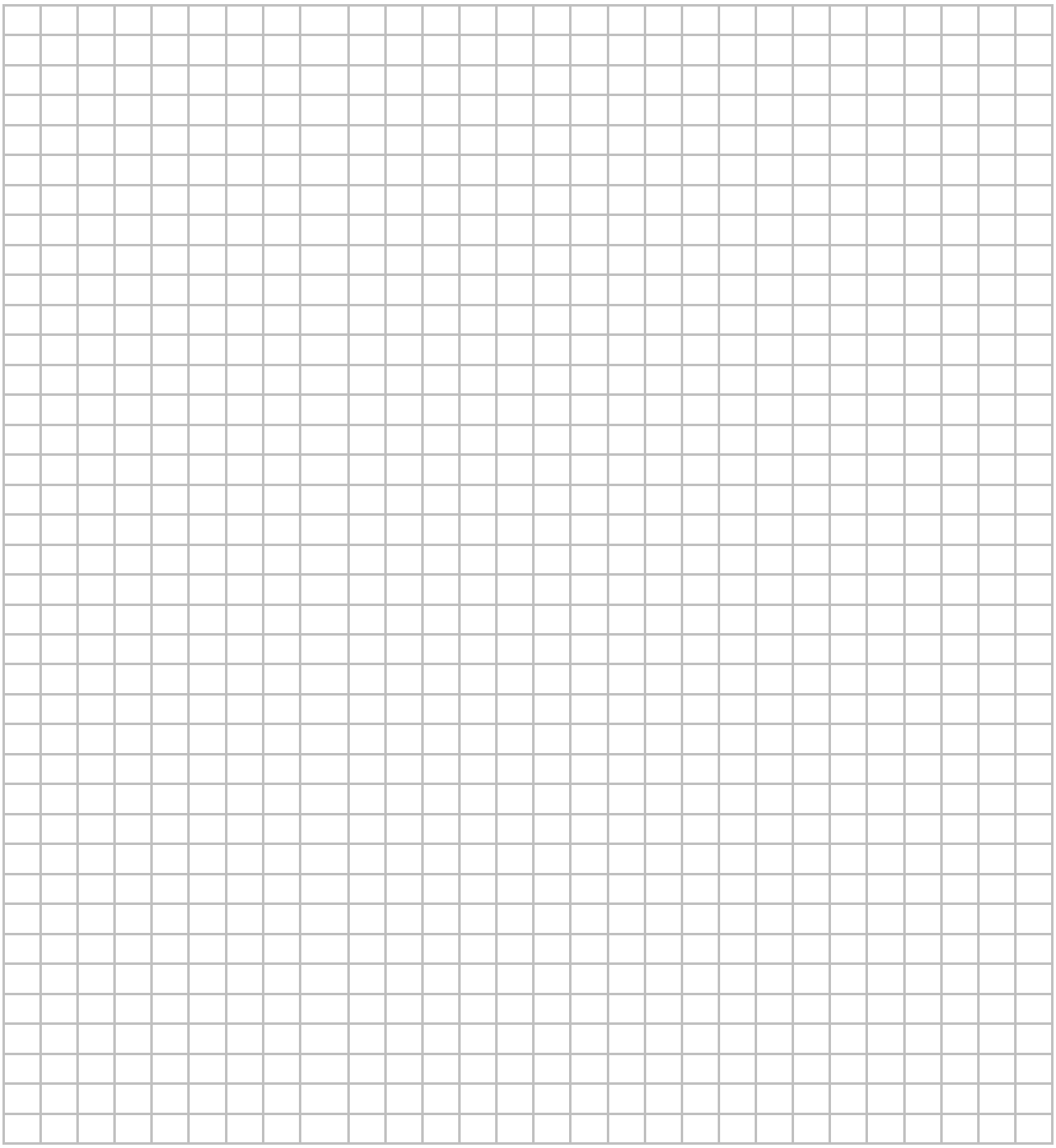


First Floor:

12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s), and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and spetic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: _____

List specific products found in the structure that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition [1]	Chemical Ingredients	Field Instrument Reading (units)	Photo (Y/N)
Basement North	Foaming Hand Sanitizer-Symmetry	(6) 550 mL	U	Ethyl Alcohol		Y
Basement North	Oxivir TB Wipes	(4) 1.9 lbs	U	Hydrogen Peroxide		Y
Basement	Fire Extinguisher		UO			Y
Basement South	Corr Neutra Clean Floor Cleaner	5 gal	U	Nonylphenol Ethoxylate, Tetrasodium ethylenediamine tetraacetate, Sodium Xylene Sulfonate		Y
Basement South	SSS Navigator #61 ACE 256 Disinfectant	2 L	U	Alkyl dimethylbenzyl ammonium chloride(C12-C16), Didecyl dimethyl ammonium chloride, Nonylphenol Ethoxylate, Tetrasodium ethylenediamine tetraacetate		Y
Basement South	Paints, Primers, and Adhesive	Multiple	U			Y

Notes:

1. Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D).**
2. Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

ATTACHMENT 2

Photo Log

BENCHMARK

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Emerson Huron, LLC	73-79 W. Huron Street Site	B0441-020-001 (004)

Photo No.	Date
1	02/03/21

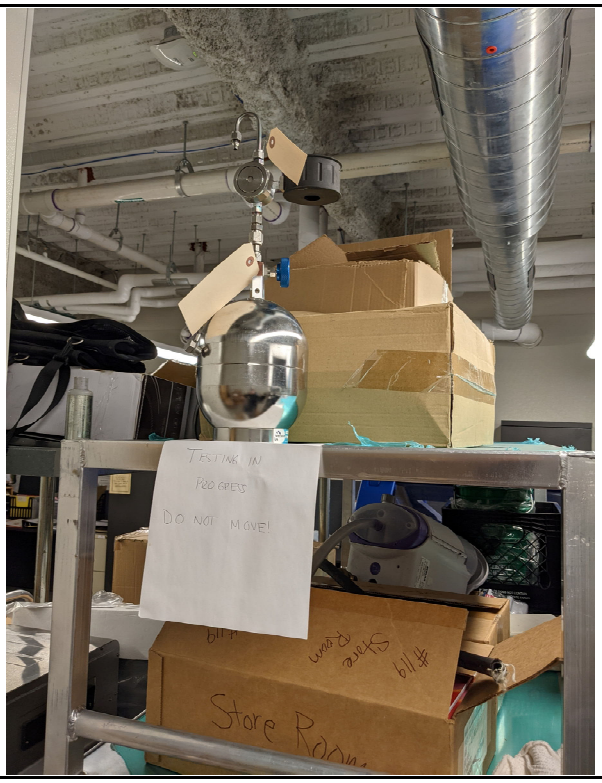
Direction Photo Taken:

Description:
Indoor air sample (IA-1).
Basement - South.

Photo No.	Date
2	02/03/21

Direction Photo Taken:

Description:
Indoor air sample (IA-2).
Basement - North.



Prepared By: CCB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Emerson Huron, LLC	73-79 W. Huron Street Site	B0441-020-001 (004)

Photo No.	Date
3	02/03/21

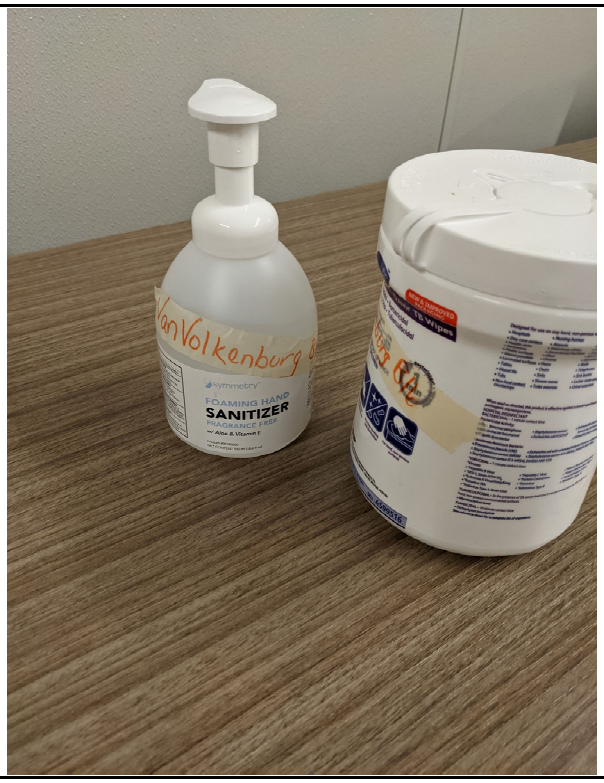
Direction Photo Taken:

Description:
Outdoor air sample (OA-1). Roof of the newly contructed gymnasium.

Photo No.	Date
4	02/03/21

Direction Photo Taken:

Description:
Chemical Inventory - Basement



Prepared By: CCB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Emerson Huron, LLC	73-79 W. Huron Street Site	B0441-020-001 (004)

Photo No.	Date
5	02/03/21

Direction Photo Taken:

Description:
Chemical Inventory - Basement

Photo No.	Date
6	02/03/21

Direction Photo Taken:

Description:
Chemical Inventory - Basement

Prepared By: CCB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

PHOTOGRAPHIC LOG

Client Name:	Site Location:	Project No.:
Emerson Huron, LLC	73-79 W. Huron Street Site	B0441-020-001 (004)

Photo No.	Date
7	02/03/21

Direction Photo Taken:

Description:
Chemical Inventory - Basement

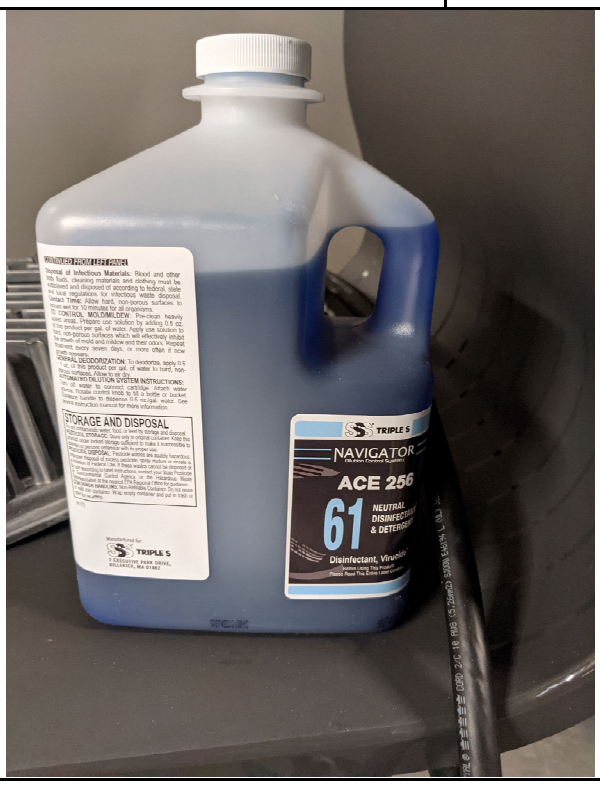


Photo No.	Date
8	02/03/21

Direction Photo Taken:

Description:
Chemical Inventory - Basement

Prepared By: CCB

ATTACHMENT 3

Analytical Laboratory Report

BENCHMARK

ANALYTICAL REPORT

Lab Number:	L2105298
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Caroline Bukowski
Phone:	(716) 856-0599
Project Name:	73 - 79 WEST HURON
Project Number:	B0441-020-001(004)
Report Date:	02/10/21

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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2105298-01	IA-1	AIR	BUFFALO, NY	02/03/21 14:17	02/03/21
L2105298-02	IA-2	AIR	BUFFALO, NY	02/03/21 14:10	02/03/21
L2105298-03	OA-1	AIR	BUFFALO, NY	02/03/21 14:25	02/03/21

Project Name:	73 - 79 WEST HURON	**Lab Number:**	L2105298
Project Number:	B0441-020-001(004)	**Report Date:**	02/10/21

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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)
Lab Number: L2105298
Report Date: 02/10/21

Case Narrative (continued)

Volatile Organics in Air

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

The WG1462433-3 LCS recovery for 1,2,4-trichlorobenzene (150%) is above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of this analyte.

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: 02/10/21

AIR

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:17
Date Received: 02/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/06/21 18:46
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.369	0.200	--	1.82	0.989	--		1
Chloromethane	0.513	0.200	--	1.06	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	17.6	5.00	--	33.2	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
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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:17
Date Received: 02/03/21
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-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	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
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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:17
Date Received: 02/03/21
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	92		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-01
Client ID: IA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:17
Date Received: 02/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/06/21 18:46
Analyst: RY

	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	0.056	0.020	--	0.352	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.040	0.020	--	0.271	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	91		60-140
bromochloromethane	94		60-140
chlorobenzene-d5	92		60-140

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:10
Date Received: 02/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/06/21 19:30
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.375	0.200	--	1.85	0.989	--		1
Chloromethane	0.569	0.200	--	1.18	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	409	5.00	--	771	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	3.05	1.00	--	7.25	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	1.18	0.500	--	2.90	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	0.571	0.500	--	1.68	1.47	--		1

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:10
Date Received: 02/03/21
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-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	0.250	0.200	--	0.861	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	0.368	0.200	--	1.39	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	0.322	0.200	--	1.37	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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:10
Date Received: 02/03/21
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	94		60-140
chlorobenzene-d5	88		60-140

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)
Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-02
Client ID: IA-2
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:10
Date Received: 02/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/06/21 19:30
Analyst: RY

	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	0.059	0.020	--	0.371	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.020	0.020	--	0.136	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	89		60-140
bromochloromethane	93		60-140
chlorobenzene-d5	87		60-140

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:25
Date Received: 02/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/06/21 18:02
Analyst: RY

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.364	0.200	--	1.80	0.989	--		1
Chloromethane	0.494	0.200	--	1.02	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	12.2	5.00	--	23.0	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.79	1.00	--	4.25	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	0.520	0.500	--	1.28	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	1.61	0.500	--	5.80	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:25
Date Received: 02/03/21
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-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	0.200	0.200	--	0.639	0.639	--		1
Cyclohexane	0.878	0.200	--	3.02	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	0.535	0.200	--	2.02	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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:25
Date Received: 02/03/21
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	94		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	91		60-140

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

SAMPLE RESULTS

Lab ID: L2105298-03
Client ID: OA-1
Sample Location: BUFFALO, NY

Date Collected: 02/03/21 14:25
Date Received: 02/03/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/06/21 18:02
Analyst: RY

	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	0.056	0.020	--	0.352	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	0.027	0.020	--	0.183	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	93		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)
Lab Number: L2105298
Report Date: 02/10/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/06/21 15:58

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): 01-03 Batch: WG1462433-4								
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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)
Lab Number: L2105298
Report Date: 02/10/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/06/21 15:58

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): 01-03 Batch: WG1462433-4								
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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)
Lab Number: L2105298
Report Date: 02/10/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/06/21 15:58

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): 01-03 Batch: WG1462433-4								
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: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)
Lab Number: L2105298
Report Date: 02/10/21

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/06/21 16:39

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): 01-03 Batch: WG1462434-4								
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: 73 - 79 WEST HURON

Project Number: B0441-020-001(004)

Lab Number: L2105298

Report Date: 02/10/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1462433-3								
Dichlorodifluoromethane	85		-		70-130	-		
Chloromethane	104		-		70-130	-		
Freon-114	99		-		70-130	-		
Vinyl chloride	88		-		70-130	-		
1,3-Butadiene	106		-		70-130	-		
Bromomethane	90		-		70-130	-		
Chloroethane	88		-		70-130	-		
Ethanol	80		-		40-160	-		
Vinyl bromide	89		-		70-130	-		
Acetone	63		-		40-160	-		
Trichlorofluoromethane	73		-		70-130	-		
Isopropanol	78		-		40-160	-		
1,1-Dichloroethene	83		-		70-130	-		
Tertiary butyl Alcohol	78		-		70-130	-		
Methylene chloride	104		-		70-130	-		
3-Chloropropene	94		-		70-130	-		
Carbon disulfide	93		-		70-130	-		
Freon-113	88		-		70-130	-		
trans-1,2-Dichloroethene	86		-		70-130	-		
1,1-Dichloroethane	90		-		70-130	-		
Methyl tert butyl ether	91		-		70-130	-		
2-Butanone	97		-		70-130	-		
cis-1,2-Dichloroethene	91		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 73 - 79 WEST HURON

Project Number: B0441-020-001(004)

Lab Number: L2105298

Report Date: 02/10/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1462433-3								
Ethyl Acetate	96		-		70-130	-		
Chloroform	94		-		70-130	-		
Tetrahydrofuran	95		-		70-130	-		
1,2-Dichloroethane	72		-		70-130	-		
n-Hexane	100		-		70-130	-		
1,1,1-Trichloroethane	83		-		70-130	-		
Benzene	99		-		70-130	-		
Carbon tetrachloride	87		-		70-130	-		
Cyclohexane	102		-		70-130	-		
1,2-Dichloropropane	100		-		70-130	-		
Bromodichloromethane	95		-		70-130	-		
1,4-Dioxane	105		-		70-130	-		
Trichloroethene	100		-		70-130	-		
2,2,4-Trimethylpentane	102		-		70-130	-		
Heptane	102		-		70-130	-		
cis-1,3-Dichloropropene	106		-		70-130	-		
4-Methyl-2-pentanone	104		-		70-130	-		
trans-1,3-Dichloropropene	88		-		70-130	-		
1,1,2-Trichloroethane	104		-		70-130	-		
Toluene	106		-		70-130	-		
2-Hexanone	113		-		70-130	-		
Dibromochloromethane	110		-		70-130	-		
1,2-Dibromoethane	116		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: 73 - 79 WEST HURON

Project Number: B0441-020-001(004)

Lab Number: L2105298

Report Date: 02/10/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 Batch: WG1462433-3								
Tetrachloroethene	112		-		70-130	-		
Chlorobenzene	116		-		70-130	-		
Ethylbenzene	112		-		70-130	-		
p/m-Xylene	112		-		70-130	-		
Bromoform	115		-		70-130	-		
Styrene	119		-		70-130	-		
1,1,2,2-Tetrachloroethane	127		-		70-130	-		
o-Xylene	115		-		70-130	-		
4-Ethyltoluene	112		-		70-130	-		
1,3,5-Trimethylbenzene	117		-		70-130	-		
1,2,4-Trimethylbenzene	120		-		70-130	-		
Benzyl chloride	116		-		70-130	-		
1,3-Dichlorobenzene	128		-		70-130	-		
1,4-Dichlorobenzene	123		-		70-130	-		
1,2-Dichlorobenzene	124		-		70-130	-		
1,2,4-Trichlorobenzene	**150**	Q	-		70-130	-		
Hexachlorobutadiene	130		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-03 Batch: WG1462434-3								
Vinyl chloride	83		-		70-130	-		25
1,1-Dichloroethene	78		-		70-130	-		25
cis-1,2-Dichloroethene	87		-		70-130	-		25
1,1,1-Trichloroethane	78		-		70-130	-		25
Carbon tetrachloride	83		-		70-130	-		25
Trichloroethene	95		-		70-130	-		25
Tetrachloroethene	110		-		70-130	-		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1462433-5 QC Sample: L2105298-02 Client ID: IA-2						
Dichlorodifluoromethane	0.375	0.365	ppbV	3		25
Chloromethane	0.569	0.557	ppbV	2		25
Freon-114	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethanol	409	449	ppbV	9		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	3.05	3.04	ppbV	0		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
Isopropanol	1.18	1.24	ppbV	5		25
Tertiary butyl Alcohol	ND	ND	ppbV	NC		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
Freon-113	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	ND	ND	ppbV	NC		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1462433-5 QC Sample: L2105298-02 Client ID: IA-2						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	0.571	0.566	ppbV	1		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	ND	ND	ppbV	NC		25
Benzene	ND	ND	ppbV	NC		25
Cyclohexane	0.250	0.244	ppbV	2		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	ND	ND	ppbV	NC		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	0.368	0.360	ppbV	2		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1462433-5 QC Sample: L2105298-02 Client ID: IA-2						
p/m-Xylene	ND	ND	ppbV	NC		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	0.322	0.307	ppbV	5		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	ND	ND	ppbV	NC		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	ND	ND	ppbV	NC		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1462434-5 QC Sample: L2105298-02 Client ID: IA-2						
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	0.059	0.055	ppbV	7		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	0.020	ND	ppbV	NC		25

Project Name: 73 - 79 WEST HURON

Lab Number: L2105298

Project Number: B0441-020-001(004)

Report Date: 02/10/21

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
L2105298-01	IA-1	01719	Flow 5	01/29/21	342063		-	-	-	Pass	4.5	3.8	17
L2105298-01	IA-1	147B	2.7L Can	01/29/21	342063	L2102590-06	Pass	-29.5	-8.7	-	-	-	-
L2105298-02	IA-2	0478	Flow 5	01/29/21	342063		-	-	-	Pass	4.5	4.1	9
L2105298-02	IA-2	2310	2.7L Can	01/29/21	342063	L2102590-06	Pass	-29.3	-8.3	-	-	-	-
L2105298-03	OA-1	01640	Flow 5	01/29/21	342063		-	-	-	Pass	4.5	4.1	9
L2105298-03	OA-1	2227	2.7L Can	01/29/21	342063	L2102590-06	Pass	-28.7	-4.6	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2102590
Report Date: 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/20/21 20:45
Analyst: TS

	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: L2102590
Report Date: 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
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: L2102590
Report Date: 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
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: L2102590
Report Date: 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
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: L2102590
Report Date: 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
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	98		60-140
Bromochloromethane	98		60-140
chlorobenzene-d5	95		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L2102590
Report Date: 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
Field Prep: Not Specified

Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/20/21 20:45
Analyst: TS

	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:** L2102590

Project Number: CANISTER QC BAT **Report Date:** 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
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:** L2102590

Project Number: CANISTER QC BAT **Report Date:** 02/10/21

Air Canister Certification Results

Lab ID: L2102590-06
Client ID: CAN 2021 SHELF 9
Sample Location:

Date Collected: 01/18/21 09:00
Date Received: 01/18/21
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	99		60-140
bromochloromethane	100		60-140
chlorobenzene-d5	96		60-140

Project Name: 73 - 79 WEST HURON
Project Number: B0441-020-001(004)

Lab Number: L2105298
Report Date: 02/10/21

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
N/A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2105298-01A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L2105298-02A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)
L2105298-03A	Canister - 2.7 Liter	N/A	NA			Y	Absent		TO15-SIM(30),TO15-LL(30)

*Values in parentheses indicate holding time in days

Project Name:	73 - 79 WEST HURON	**Lab Number:**	L2105298
Project Number:	B0441-020-001(004)	**Report Date:**	02/10/21

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:	73 - 79 WEST HURON	**Lab Number:**	L2105298
Project Number:	B0441-020-001(004)	**Report Date:**	02/10/21

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 at or above the RL for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. (Note: 'PFAS, Total (6)' is applicable to MassDEP DW compliance analysis only.). 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:	73 - 79 WEST HURON	**Lab Number:**	L2105298
Project Number:	B0441-020-001(004)	**Report Date:**	02/10/21

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 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; 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.
EPA TO-12 Non-methane organics
EPA 3C Fixed gases
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.**

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.

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: 2/4/21

ALPHA Job #: L2105298

Client Information

Client: Benchmark Environmental Eng
Address: 2558 Hamburg Turnpike
Buffalo NY 14218
Phone: 716-856-0599
Fax:
Email: Cbukowski@bm-tk.com

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 73-79 West Huron
Project Location: Buffalo NY
Project #: B0441-020-001 (004)
Project Manager: Cindy Fox
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 #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments: CAT B

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	I D Can	I D - Flow Controller	TO-15	TO-15 SIM	APH (Subset Non-petroleum HCs)	Fixed Gases ☐	Sulfides & Mercaptans by TO-15	Sample Comments (i.e. PID)
05298-01	1A-1	2/3/21	730	1417	-30.34	-9.25	AA	CCB	2.7L	1478	01719	X	X				
02	1A-2	2/3/21	720	1410	-29.81	-9.91	AA	CCB	2.7L	2310	0478	X	X				BLP site, please use lowest detection limits
03	OA-1	2/3/21	740	1425	-27.64	-6.70	AA	CCB	2.7L	2227	01640	X	X				

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

Container Type

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:
AAL	2/3/21 1500	AAL	2/03/21 16:05
AAL	2/03/21 16:30		2/4/21 00:25
Wendy Manning	2/4/21 4:05		2/4/21 0400
	2/4/21 0515		2/4/21 0515

ATTACHMENT 4

NYSDOH Guidance Values

BENCHMARK

FINAL

Guidance for Evaluating Soil Vapor Intrusion in the State of New York

October 2006

NOTE: Updates to this final guidance are available at
health.ny.gov/environmental/indoors/vapor_intrusion/update.htm

Prepared by:

NEW YORK STATE DEPARTMENT OF HEALTH
Center for Environmental Health
Bureau of Environmental Exposure Investigation

Table C2. EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA® canister method

All results are micrograms per cubic meter (mcg/m^3).

Compound	INDOOR AIR											
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max
1,1,1-TRICHLOROETHANE	7	2.3%	298	16.2	<0.5	2.6	5.1	10.8	20.6	33.0	737.9	833.2
1,1,2-TRICHLOROETHANE	136	100.0%	136	0.6	<0.6	<1.0	<1.3	<1.4	<1.5	<1.6	<2.1	<2.3
1,1-DICHLOROETHANE	136	100.0%	136	0.2	<0.2	<0.4	<0.5	<0.5	<0.7	<0.8	<0.9	<0.9
1,1-DICHLOROETHENE	136	100.0%	136	0.5	<0.7	<0.9	<1.1	<1.2	<1.4	<1.6	<1.7	<1.8
1,2,4-TRICHLOROBENZENE	136	100.0%	136	1.1	<0.6	<0.9	<1.0	<1.2	<6.8	<7.2	<8.1	<8.2
1,2,4-TRIMETHYLBENZENE	52	17.7%	294	4.8	<0.4	1.7	2.8	5.1	9.5	13.7	39.0	91.0
1,2-DIBROMOETHANE	258	99.6%	259	0.6	<0.8	<1.1	<1.3	<1.4	<1.5	<1.6	<2.7	1.4
1,2-DICHLOROBENZENE	255	98.5%	259	0.6	<0.6	<0.8	<0.9	<1.0	<1.2	<1.3	10.5	11.2
1,2-DICHLOROETHANE	254	98.1%	259	0.9	<0.4	<0.5	<0.6	<0.7	<0.9	<1.0	24.8	84.9
1,2-DICHLOROPROPANE	136	100.0%	136	0.6	<0.5	<1.0	<1.4	<1.6	<1.6	<1.7	<2.3	<2.6
1,3,5-TRIMETHYLBENZENE	206	79.5%	259	1.6	<0.8	<1.3	<1.5	<4.6	3.7	4.6	9.0	16.6
1,3-BUTADIENE	39	100.0%	39	1.4	<2.1	<2.3	<2.5	<2.7	<3.0	<7.5	<7.9	<7.9
1,3-DICHLOROBENZENE	136	100.0%	136	0.6	<0.5	<0.7	<0.8	<1.1	<2.4	<2.5	<2.8	<2.9
1,4-DICHLOROBENZENE	212	71.1%	298	3.1	<0.5	<0.8	<1.2	1.4	5.5	12.5	80.5	87.1
1-BUTANOL	118	95.9%	123	42.7	<2.4	<3.6	<4.0	<4.3	<4.8	<7.9	35.3	4957.4
2-BUTANONE (MEK)	13	5.0%	259	6.2	<1.4	3.3	5.2	7.5	12.0	13.5	28.1	55.4
2-BUTOXYETHANOL	123	100.0%	123	4.0	<4.8	<7.2	<8.0	<8.6	<9.3	<10.4	<16.4	<16.8
2-ETHYL-1-HEXANOL	160	98.8%	162	3.2	<1.1	<5.0	<7.6	<8.4	<9.2	<9.7	8.2	8.4
2-METHYL-1-PROPANOL	30	76.9%	39	1.2	<0.9	<1.0	<1.1	<3.0	3.1	5.5	5.8	5.8
2-PROPANOL	8	20.5%	39	73.1	<1.3	6.6	30.0	56.0	250.0	475.0	580.0	580.0
3-METHYL PENTANE	125	48.3%	259	3.1	<0.9	<1.7	1.4	4.2	6.5	8.3	22.9	35.4
4-ETHYLTOLUENE	212	81.9%	259	1.7	<0.9	<1.5	<1.6	<3.1	3.6	5.9	9.8	16.4
4-METHYL-2-PENTANONE	153	59.1%	259	3.1	<0.7	<1.2	<1.5	3.0	6.0	8.1	58.4	72.5
ACETONE	0	0.0%	259	54.0	11.6	32.4	45.0	59.8	98.9	120.2	226.6	243.7
a-PINENE	238	79.9%	298	4.2	<0.5	<1.1	<1.2	<2.8	3.6	6.4	67.8	399.1
BENZENE	56	19.0%	294	4.5	<0.8	2.1	3.4	5.1	9.4	12.5	25.0	63.0
BENZYL CHLORIDE	136	100.0%	136	1.2	<0.8	<1.2	<1.4	<1.7	<6.8	<7.2	<8.1	<8.2
BROMOMETHANE	246	95.0%	259	0.6	<0.6	<0.8	<0.9	<1.1	<1.7	<2.1	3.6	4.6
BUTYL ACETATE	232	77.9%	298	2.9	<0.9	<1.5	<1.8	<5.2	4.5	15.8	35.3	50.6
CARBON DISULFIDE	134	51.7%	259	1.9	<0.5	<0.8	<1.3	2.1	4.2	6.4	14.8	24.5
CARBON TETRACHLORIDE	241	93.1%	259	0.5	<0.5	<0.8	<0.9	<1.1	<1.3	0.7	0.9	2.1
CHLOROBENZENE	255	98.5%	259	0.4	<0.4	<0.6	<0.7	<0.8	<0.9	<1.0	1.0	1.2
CHLOROETHANE	254	98.1%	259	1.1	<0.6	<0.8	<0.9	<1.0	<1.1	<1.3	47.9	56.7
CHLOROFORM	203	78.4%	259	0.5	<0.3	<0.4	<0.5	<1.2	1.1	1.4	4.8	12.1
CHLOROMETHANE	2	0.8%	259	2.9	<0.7	2.1	2.5	3.1	3.7	4.4	12.3	21.8
CIS-1,2-DICHLOROETHENE	136	100.0%	136	0.6	<0.6	<0.8	<1.0	<1.2	<1.9	<2.0	<2.2	<2.3

(Continued)

Table C2. EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA® canister method -- Continued

All results are micrograms per cubic meter (mcg/m^3).

Compound	INDOOR AIR											
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max
CIS-1,3-DICHLOROPROPENE	136	100.0%	136	0.9	<1.2	<1.7	<1.9	<2.0	<2.3	<2.5	<2.9	<3.2
DICHLORODIFLUOROMETHANE	18	6.9%	259	13.8	<4.8	4.8	6.7	10.5	16.5	32.9	81.3	942.3
DICHLOROTETRAFLUOROETHANE	136	100.0%	136	1.6	<1.5	<2.2	<2.5	<3.0	<6.8	<7.4	<8.2	<11.3
DIMETHYL DISULFIDE	239	92.3%	259	2.0	<1.4	<2.1	<2.4	<2.7	<3.7	3.6	32.4	70.4
d-LIMONENE	74	24.8%	298	10.8	<0.7	2.5	5.3	11.3	22.5	43.7	136.7	148.0
DODECANE	107	35.9%	298	8.2	<1.7	<4.5	5.4	9.6	15.9	22.0	92.8	110.0
ETHANOL	3	7.7%	39	89.3	<1.2	26.0	79.0	140.0	210.0	290.0	300.0	300.0
ETHYL ACETATE	163	54.7%	298	3.0	<0.6	<1.0	<2.6	3.2	5.4	9.5	59.0	64.2
ETHYLBENZENE	144	49.0%	294	2.8	<0.9	<1.6	1.4	3.4	5.7	7.6	18.5	73.6
HEXACHLOROBUTADIENE	136	100.0%	136	1.5	<1.3	<1.8	<2.1	<2.5	<6.8	<7.2	<8.1	<8.2
HEXANAL	78	63.4%	123	6.8	<2.5	<3.9	<4.6	7.8	12.0	14.7	26.2	235.1
m & p-XYLENES	53	18.0%	294	10.8	<1.5	4.1	6.9	12.2	22.2	28.5	67.6	260.8
METHYL TERTIARY-BUTYL ETHER	198	76.4%	259	3.3	<1.0	<1.5	<1.7	<6.4	11.5	16.1	30.8	34.0
METHYLENE CHLORIDE	94	31.5%	298	21.2	<1.1	<1.7	2.9	5.0	10.0	16.0	1155.6	1496.9
NAPHTHALENE	254	85.8%	296	6.6	<1.4	<2.2	<2.5	<5.2	5.1	20.9	98.0	410.0
n-DECANE	58	19.5%	298	7.4	<0.7	3.0	4.6	8.4	17.5	22.4	48.6	54.8
n-HEPTANAL	36	92.3%	39	1.7	<1.2	<1.3	<1.5	<1.6	<3.6	3.1	34.9	34.9
n-HEXANE	26	16.0%	162	6.3	<.9	1.6	3.1	6.4	10.2	15.2	120.0	130.0
NONANAL	146	90.1%	162	6.8	<1.6	<5.1	<7.8	<8.6	<16.8	30.2	88.9	106.3
NONANE	101	39.0%	259	3.7	<0.5	<1.0	1.7	3.6	7.8	12.4	45.2	53.8
n-UNDECANE	25	9.7%	259	12.6	<1.1	5.1	8.9	16.4	22.6	27.4	68.7	169.6
OCTANE	155	52.0%	298	5.5	<0.4	<0.8	<2.5	2.0	4.5	8.6	47.9	921.7
o-XYLENE	81	27.6%	294	3.8	<0.7	<2.4	2.4	4.4	7.9	11.2	20.1	90.5
PENTANAL	111	90.2%	123	3.0	<2.4	<3.7	<4.1	<4.6	<7.3	7.0	20.0	57.3
STYRENE	251	85.4%	294	1.5	<0.6	<1.6	<1.8	<2.3	1.9	4.3	15.0	40.0
TETRACHLOROETHENE	103	34.6%	298	6.0	<0.9	<1.9	3.0	5.9	15.9	25.4	55.6	65.7
TOLUENE	0	0.0%	294	25.1	3.5	10.7	15.7	25.9	43.0	70.8	348.9	390.3
TRANS-1,3-DICHLOROPROPENE	136	100.0%	136	0.5	<0.5	<0.8	<1.1	<1.2	<1.3	<1.3	<1.8	<2.0
TRICHLOROETHENE	216	72.5%	298	2.6	<0.6	<1.2	<1.4	1.2	4.2	6.5	57.0	88.5
TRICHLOROFLUOROMETHANE	107	35.9%	298	19.4	<1.7	<3.7	3.9	6.7	18.1	54.0	860.6	1015.3
TRICHLOROTRIFLUOROETHANE	217	83.8%	259	2.0	<1.1	<1.7	<1.9	<3.0	3.5	9.4	19.7	30.9
VINYL CHLORIDE	257	99.2%	259	0.5	<0.6	<0.8	<0.9	<1.0	<1.9	<2.2	<2.6	7.5

(Continued)

Table C2. EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA® canister method -- Continued

All results are micrograms per cubic meter (mcg/m^3).

Compound	OUTDOOR AIR											
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max
1,1,1-TRICHLOROETHANE	40	40.0%	100	1.3	<0.4	<0.6	0.8	1.7	2.6	3.8	8.4	8.7
1,1,2-TRICHLOROETHANE	46	100.0%	46	0.6	<0.6	<1.0	<1.2	<1.4	<1.6	<1.6	<1.8	<1.8
1,1-DICHLOROETHANE	46	100.0%	46	0.2	<0.4	<0.4	<0.4	<0.6	<0.6	<0.8	<0.8	<0.8
1,1-DICHLOROETHENE	46	100.0%	46	0.5	<0.8	<1.0	<1.0	<1.2	<1.4	<1.4	<1.6	<1.6
1,2,4-TRICHLOROBENZENE	46	100.0%	46	1.1	<0.6	<0.8	<1.0	<1.2	<6.4	<6.6	<7.8	<7.8
1,2,4-TRIMETHYLBENZENE	30	30.0%	100	2.6	<0.4	<1.6	1.8	3.1	5.8	7.1	19.1	24.2
1,2-DIBROMOETHANE	87	100.0%	87	0.6	<0.8	<1.2	<1.2	<1.4	<1.6	<1.6	<2.0	<2.0
1,2-DICHLOROBENZENE	86	98.9%	87	0.4	<0.6	<0.8	<1.0	<1.0	<1.2	<1.2	1.1	1.1
1,2-DICHLOROETHANE	86	98.9%	87	0.3	<0.4	<0.6	<0.6	<0.6	<0.8	<1.0	0.8	0.8
1,2-DICHLOROPROPANE	46	100.0%	46	0.6	<0.6	<1.2	<1.4	<1.6	<1.6	<1.8	<1.8	<1.8
1,3,5-TRIMETHYLBENZENE	69	79.3%	87	1.2	<0.8	<1.2	<1.4	<2.4	2.7	3.3	8.9	8.9
1,3-BUTADIENE	13	100.0%	13	1.5	<2.2	<2.4	<2.6	<2.8	<3.4	<7.6	<7.6	<7.6
1,3-DICHLOROBENZENE	46	100.0%	46	0.5	<0.6	<0.8	<0.8	<1.0	<2.2	<2.4	<2.8	<2.8
1,4-DICHLOROBENZENE	88	88.0%	100	0.7	<0.6	<0.8	<0.8	<1.4	1.2	1.7	5.4	6.1
1-BUTANOL	41	100.0%	41	2.0	<2.4	<3.4	<4.0	<4.4	<4.8	<5.2	<6.0	<6.0
2-BUTANONE (MEK)	5	5.7%	87	5.2	<1.2	2.2	3.7	5.7	11.3	14.8	43.1	43.1
2-BUTOXYETHANOL	41	100.0%	41	3.9	<4.6	<7.0	<8.0	<8.6	<9.6	<10.4	<11.8	<11.8
2-ETHYL-1-HEXANOL	53	98.1%	54	3.2	<1.2	<4.6	<7.2	<8.4	<9.6	<10.8	5.9	5.9
2-METHYL-1-PROPANOL	13	100.0%	13	0.6	<0.8	<1.0	<1.0	<1.2	<1.4	<3.0	<3.0	<3.0
2-PROPANOL	4	30.8%	13	6.4	<3.0	<4.2	4.7	6.6	16.5	23.5	23.5	23.5
3-METHYL PENTANE	55	63.2%	87	1.8	<1.0	<1.4	<1.6	2.0	4.4	6.6	10.5	10.5
4-ETHYLTOLUENE	75	86.2%	87	1.2	<1.0	<1.4	<1.6	<2.0	3.0	3.3	8.0	8.0
4-METHYL-2-PENTANONE	61	70.1%	87	1.3	<0.8	<1.0	<1.2	0.9	1.9	4.3	21.0	21.0
ACETONE	1	1.1%	87	26.5	<1.8	15.4	22.5	31.7	43.7	56.0	104.2	104.2
a-PINENE	92	92.0%	100	1.0	<0.6	<1.0	<1.2	<1.4	<6.2	3.7	6.8	8.1
BENZENE	22	22.0%	100	3.2	<1.2	1.2	2.7	3.7	6.6	9.6	12.6	13.0
BENZYL CHLORIDE	46	100.0%	46	1.2	<1.0	<1.2	<1.4	<1.6	<6.4	<6.6	<7.8	<7.8
BROMOMETHANE	82	94.3%	87	0.6	<0.6	<0.8	<1.0	<1.0	<1.6	1.0	4.5	4.5
BUTYL ACETATE	94	94.0%	100	1.4	<0.8	<1.4	<1.6	<1.8	<5.8	3.3	18.6	32.7
CARBON DISULFIDE	39	44.8%	87	2.1	<0.6	<0.8	0.9	2.2	3.7	8.3	22.0	22.0
CARBON TETRACHLORIDE	69	79.3%	87	0.5	<0.6	<0.8	<1.0	<1.0	0.7	0.7	1.5	1.5
CHLOROBENZENE	85	97.7%	87	0.4	<0.4	<0.6	<0.8	<0.8	<0.8	<1.0	1.1	1.1
CHLOROETHANE	84	96.6%	87	0.5	<0.6	<0.8	<0.9	<1.0	<1.2	<1.2	3.5	3.5
CHLOROFORM	77	88.5%	87	0.5	<0.2	<0.4	<0.4	<0.6	0.6	0.7	13.8	13.8
CHLOROMETHANE	0	0.0%	87	2.6	0.9	2.0	2.3	3.0	3.7	4.0	10.6	10.6
CIS-1,2-DICHLOROETHENE	45	97.8%	46	0.5	<0.6	<0.8	<1.0	<1.2	<1.8	<1.8	1.1	1.1

(Continued)

Table C2. EPA 2001: Building assessment and survey evaluation (BASE) database, SUMMA® canister method -- Continued

All results are micrograms per cubic meter (mcg/m^3).

Compound	OUTDOOR AIR											
	ND	ND(%)	N	Mean*	Min	25th	Median	75th	90th	95th	99th	Max
CIS-1,3-DICHLOROPROPENE	46	100.0%	46	0.9	<1.4	<1.6	<1.8	<2.0	<2.2	<2.4	<2.6	<2.6
DICHLORODIFLUOROMETHANE	7	8.0%	87	7.3	<4.4	3.8	4.4	5.8	8.1	12.2	183.7	183.7
DICHLOROTETRAFLUOROETHANE	46	100.0%	46	1.6	<1.6	<2.2	<2.4	<3.0	<6.4	<6.6	<7.8	<7.8
DIMETHYL DISULFIDE	74	85.1%	87	1.7	<1.4	<2.0	<2.4	<2.8	2.4	4.5	16.4	16.4
d-LIMONENE	73	73.0%	100	1.5	<0.8	<1.0	<1.4	2.0	3.6	4.1	9.8	12.5
DODECANE	51	51.0%	100	4.6	<2.0	<2.6	<4.0	4.2	10.4	14.1	51.0	52.3
ETHANOL	0	0.0%	13	32.0	3.8	13.0	24.5	47.0	57.0	82.5	82.5	82.5
ETHYL ACETATE	89	89.0%	100	0.7	<0.6	<0.8	<1.0	<1.2	1.5	1.9	3.7	3.9
ETHYLBENZENE	59	59.0%	100	1.4	<0.8	<1.4	<1.8	1.6	3.5	4.3	7.6	7.8
HEXACHLOROBUTADIENE	46	100.0%	46	1.4	<1.4	<1.8	<2.0	<2.6	<6.4	<6.6	<7.8	<7.8
HEXANAL	30	73.2%	41	3.1	<2.4	<3.8	<4.2	2.7	3.3	3.8	36.0	36.0
m & p-XYLENES	26	26.0%	100	5.6	<1.4	<3.6	4.4	7.3	12.8	16.1	24.8	26.8
METHYL TERTIARY-BUTYL ETHER	67	77.0%	87	2.7	<1.0	<1.4	<1.8	<5.4	6.2	13.3	36.0	36.0
METHYLENE CHLORIDE	43	43.0%	100	3.7	<1.0	<1.8	1.3	3.0	6.1	10.3	63.0	78.5
NAPHTHALENE	86	86.0%	100	10.6	<1.4	<2.0	<2.4	<4.8	4.9	15.1	379.8	670.0
n-DECANE	35	35.0%	100	3.7	<0.6	<2.0	2.4	4.2	7.6	11.4	32.4	37.3
n-HEPTANAL	10	76.9%	13	3.0	<1.2	<1.5	<1.8	<2.2	2.2	26.8	26.8	26.8
n-HEXANE	16	29.6%	54	2.5	<.8	<1.2	1.4	2.7	6.4	11.4	15.3	15.3
NONANAL	41	75.9%	54	8.6	<1.6	<6.0	<7.8	<10.8	22.7	37.6	57.0	57.0
NONANE	49	56.3%	87	1.3	<0.4	<0.8	<1.0	1.7	2.8	4.0	15.3	15.3
n-UNDECANE	13	14.9%	87	7.0	<1.0	2.6	3.9	7.8	14.8	19.7	94.8	94.8
OCTANE	73	73.0%	100	0.9	<0.4	<0.6	<0.8	1.0	1.6	1.9	11.9	17.5
o-XYLENE	36	36.0%	100	2.0	<0.6	<1.4	1.4	2.6	4.6	6.0	9.6	11.1
PENTANAL	37	90.2%	41	3.5	<2.4	<3.4	<4.0	<4.4	<6.0	7.0	52.7	52.7
STYRENE	83	83.0%	100	1.7	<0.6	<1.4	<1.6	<2.0	1.3	3.6	34.1	58.0
TETRACHLOROETHENE	51	51.0%	100	2.7	<0.8	<1.4	<2.0	3.0	6.5	10.4	24.8	27.6
TOLUENE	0	0.0%	100	15.4	2.1	5.9	9.6	16.3	33.7	49.2	86.5	93.1
TRANS-1,3-DICHLOROPROPENE	46	100.0%	46	0.5	<0.6	<0.8	<1.0	<1.2	<1.4	<1.4	<1.4	<1.4
TRICHLOROETHENE	81	81.0%	100	1.0	<0.6	<1.0	<1.5	<1.6	1.3	2.6	11.2	13.5
TRICHLOROFLUOROMETHANE	41	41.0%	100	3.6	<2.0	<2.8	1.7	2.8	4.3	5.6	71.1	132.5
TRICHLOROTRIFLUOROETHANE	75	86.2%	87	1.0	<1.2	<1.6	<1.8	<2.0	1.6	1.8	5.4	5.4
VINYL CHLORIDE	87	100.0%	87	0.5	<0.6	<0.8	<1.0	<1.0	<1.8	<2.0	<2.6	<2.6

ND = Number of non-detects

ND (%) = Percentage of total number in sample that are non-detect

N = Total number of samples

* Non-detects were estimated at 1/2 the appropriate detection limit or quantification limit to calculate the mean

Min; Max = minimum and maximum value detected