BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

February 16, 2018

Mr. Benjamin McPherson
Project Manager
New York State Department of Environmental Conservation
Department of Environmental Remediation, Region 9
270 Michigan Avenue
Buffalo NY 14203-2915

Re: 170 Jamison Road Site #C915315
Additional Off-Site Soil Vapor Intrusion Assessment (Revised)
6961 Seneca Street Property

Dear Mr. McPherson:

Benchmark Environmental Engineering and Science, PLLC (Benchmark) has prepared this correspondence to summarize the additional sub-slab vapor and indoor air sampling results for the property addressed at 6961 Seneca Street (Subject Site), which is located north adjacent to the 170 Jamison Road Brownfield Cleanup Program (BCP) site.

BACKGROUND

Based on the data collected during the BCP Remedial Investigation (RI) in June and July 2017, volatile organic compounds (VOCs) were detected in groundwater and soil vapor samples collected in the northwestern portion of the 170 Jamison Road BCP site proximate the intersection of Jamison Road and Seneca Street. Results of the RI were presented to the New York State Department of Environmental Conservation (NYSDEC) during a meeting in August 2017. Based on discussions during that meeting and subsequent discussions with NYSDEC, Moog voluntarily contacted the owner of 6961 Seneca Street to request access and authorization to complete a soil vapor intrusion (SVI) assessment with the building at 6961 Seneca Street in October 2017.

The results of the October 2017 SVI assessment indicated that there was not a SVI concern in the subject building, which was acknowledged by NYSDEC and New York State Department of Health (NYSDOH). However, NYSDEC and NYSDOH required that an additional SVI sampling event occur in the heating season, which is considered by NYSDOH guidance between November 15 and March 31. Therefore, this additional SVI assessment was completed on December 2, 2017 at a time when the building heating system was running.

SVI SAMPLING PROGRAM

To further evaluate potential vapor intrusion into the 6961 Seneca Street building, one (1) subslab vapor (SSV) sample designated OS-SSV-2, and one (1) indoor air (IA) sample designated OS-IA-2 were collected from the building. One (1) outdoor air (OA) sample designated OS-OA-2 was collected concurrent with the SSV/IA samples. The interior SSV/IA samples were collected from

2558 Hamburg Turnpike, Suite 300 | Buffalo, NY 14218
phone: (716) 856-0599 | fax: (716) 856-0583

the approximate center of the building as shown on Figure 1. The exterior OA sample was collected from an upwind location. The sampling was completed over an approximate 8-hour period in conformance with approved work plan and sent to a New York State Department of Health (NYSDOH)-approved laboratory for analysis of VOCs in accordance with USEPA Method TO-15, including 1,4-dioxane.

Prior to initiation of SSV/IA sampling, a pre-sampling inventory and inspection was performed to identify and conditions that may interfere with the testing. The building is a one-story structure with concrete slab-on-grade construction; the building was noted to be in good condition with no obvious cracks or holes in the floor slab. A building inventory form was completed that identified typical household chemicals (see Attachment 1).

The samples were collected using Summa canisters supplied by TestAmerica Laboratories, Inc. with 8-hour regulators to draw air over an approximate 8-hour period. Sampling was completed on December 2, 2017. Upon completion, the canisters were sealed and the end time and final vacuum recorded. The samples were ultimately shipped to TestAmerica's laboratory in Burlington, Vermont for analysis of VOCs per USEPA TO-15 Methodology.

RESULTS

Table 1 summarizes all of the detected VOC constituents; Table 2 provides a comparison of the analytical results to the NYSDOH Matrix A, B and C thresholds. Attachment 1 includes the analytical report from the laboratory.

CONCLUSIONS

Based on the results of the VOCs compared to NYSDOH decision matrices, no VOCs were detected above the comparative criteria that require further action. These results are consistent with previous SVI sampling completed in September 2017. Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely,
Benchmark Environmental Engineering & Science, PLLC

Michael Lesakowski
Sr. Project Manager

ec: Meri Scappatura, Moog Inc.
Robin Young, Moog Inc.
Jeffrey Stravino, Hodgson Russ
C. Staniszewski, RHWRE, Region 9
Angela Martin, NYSDOH

FIGURE

F:\CAD\Benchmark\Moog\170 Jamison Road\08-Offsite Vapor Sampling\Figure 1; Offsite Subslab Testing.dwg, DWG To PDF.pc3

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)

LEGEND:

- BCP SITE BOUNDARY
- PROPOSED BUILDING ADDITION
- OS-OA-2 — OUTDOOR AIR SAMPLE LOCATION
- OS-SSV/IA-2 — PROPOSED SUB-SLAB VAPOR/INDOOR AIR LOCATION
- SV — RI SOIL VAPOR LOCATION
- MW-1 — EXISTING MONITORING WELLS

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

PROJECT NO.: 0400-017-001

DATE: DECEMBER 2017

DRAFTED BY: RFL

OFF-SITE SUB-SLAB VAPOR AND INDOOR AIR SAMPLING LOCATIONS

170 JAMISON ROAD SITE

ELMA, NEW YORK

PREPARED FOR

MOOG INC.

FIGURE 1

TABLES

TABLE 1
SUMMARY OF SUBSLAB VAPOR, INDOOR AIR AND OUTDOOR AIR
OFF-SITE ANALYTICAL DATA - DECEMBER 2017

170 JAMISON ROAD SITE
ELMA, NEW YORK

Parameter	Sample Location & Sample Date		
	Offsite		Ambient Air
	OS-SSV-2	OS-IA-2	OS-OA-2
	12/7/2017		
Volatile Organic Compounds (VOCs, ug/m3)			
1,1,1-Trichloroethane (Matrix B)	3.9 J	0.16 J	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	0.59 J	0.53 J	0.48 J
1,2,4-Trimethylbenzene	5.5	0.39 J	ND
1,3,5-Trimethylbenzene	3.7	ND	ND
1,3-Butadiene	0.16 J	ND	ND
4-Ethyltoluene	0.90 J	ND	ND
4-Isopropyltouene	0.53 J	ND	ND
2-Butanone	1.8 J	ND	ND
Acetone	21	150	7.1 J
Benzene	4.4	0.53 J	0.50 J
Carbon Disulfide	3.3	1.4 J	0.20 J
Carbon Tetrachloride (Matrix A)	0.26 J	0.37	0.39
Chlorodifluoromethane	2.0 J	1.2 J	0.87 J
Chloroform	3.1	0.27 J	ND
Chloromethane	ND	1.10	1.0
Cyclohexane	61	ND	ND
Dichlorofluoromethane	ND	1.8 J	1.9 J
Ethylbenzene	2.1	0.16 J	ND
Isopropyl alcohol	2.4 J	32.00	0.49 J
Isopropylbenzene	1.1 J	ND	ND
Naphthalene	4.3	ND	2.2 J
Methylene chloride (Matrix B)	1.3 J	0.57 J	0.37 J
n-Butane	68	3.10	1.9
n-Heptane	110	0.29 J	ND
n-Hexane	80	0.38 J	0.30 J
n-Propylbenzene	1.2 J	ND	ND
sec-Butylbenzene	0.77 J	ND	ND
Styrene	0.30 J	0.31 J	ND
Tetrachloroethene (Matrix B)	4.6	0.19 J	ND
Toluene	11	1.1	0.64 J
Total Xylenes	15.2	0.65	ND
Trichloroethene (Matrix A)	0.75	ND	ND
Trichlorofluoromethane	1.1 J	1.1	1.1

Qualifiers:

J = The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.

ND = Not detected

Color Code:

blue = one of eight compounds regulated by the NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York (May 2017)

TABLE 2
COMPARISON OF OFF-SITE SUBSLAB VAPOR, INDOOR AIR AND OUTDOOR AIR ANALYTICAL DATA TO NYSDOH DECISION MATRICES

170 JAMISON ROAD SITE
ELMA, NEW YORK

Sample Location	Carbon Tetrachloride		Trichloroethene (TCE)		cis-1,2-Dichloroethene		1,1-Dichloroethene		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		Methylene Chloride		Vinyl Chloride	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 2	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix 1
Subslab/Indoor Air 2																
OS-SSV-2	0.26 J	NFA	0.75	NFA	ND	NFA	ND	NFA	4.6	NFA	3.9	NFA	1.3 J	NFA	ND	NFA
OS-IA-2	0.37 J		ND		ND		ND		0.19 J		0.16 J		0.57 J		ND	
OS-OA-2	0.39 J		ND		ND		ND		ND		ND		ND		ND	

Notes:

1. Concentration in micrograms per cubic meter (ug/m^3)

Definitions:

ND = Not Detected
J = Results areestimated; results are below the reporting limit, but greater than or equal to the method detection limit.
NFA = No further action.
I, R = Take reasonable and practical actions to identify source(s) and reduce exposures and resample or mitigate.
Monitor = Monitor soil vapor / indoor air
Mitigate = Mitigate source of identified parameter.

Analytes Assigned:
Trichloroethene (TCE), cis-1,2-Dichloroethene (c12-DCE), 1,1-Dichloroethene (11-DCE), Carbon Tetrachloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

Analytes Assigned:
Tetrachloroethene (PCE), 1,1,1-Trichloroethane (111-TCA), Methylene Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)		
	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

Analytes Assigned:
Vinyl Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m^3)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m^3)	
	< 0.2	0.2 and above
< 6	1. No further action	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	3. MONITOR	4. MITIGATE
60 and above	5. MITIGATE	6. MITIGATE

ATTACHMENT 1

BUILDING INVENTORY

BENCHMARK

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

Project Name: Moog SVE	Project No.
Project Location: Edukids	Client: Moog, Inc.
Preparer's Name: Thomas Forbes	Date/Time: 12-2-17 08:00
Preparer's Affiliation: Consultant to Project Sponsor	Phone No:
Purpose of Investigation: Offsite SVE Testing	

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: Ware First Name: Nancy

Address:

County:

Home Phone: Office Phone: 675-6991

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) No

☐ 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? Y

Business Type(s): Day Care

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

Other Characteristics:

Number of floors Building age

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:

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 single floor slab on grade
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:

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)

- [x] Hot air circulation
- [ ] Heat pump
- [ ] Hot water baseboard
- [ ] Space Heaters
- [ ] Steam radiation
- [ ] Radiant floor
- [ ] Electric baseboard
- [ ] Wood stove
- [ ] Outdoor wood boiler
- [ ] Other Forced air, indoor furnace

The primary type of fuel used is:

- [x] Natural Gas
- [ ] Fuel oil
- [ ] Kerosene
- [ ] Electric
- [ ] Propane
- [ ] Solar
- [ ] Wood
- [ ] Coal
- [ ] Other

Domestic hot water tank fueled by: Nat gas

Boiler/furnace located in:

- [ ] Basement
- [ ] Outdoors
- [x] Main Floor
- [ ] Other

Air Conditioning:

- [x] Central Air
- [ ] Window units
- [ ] Open Windows
- [ ] None

Are there air distribution ducts present? [x] 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.

See ductwork above suspended ceiling

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	
First Floor	Day care
Second Floor	
Third Floor	
Fourth Floor	

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

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? _____

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? Carpets cleaned late August ; STD residential cleaners

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? _____

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? _____

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

n. Is there a bathroom exhaust fan? ☒ yes ☐ no
If yes, where vented? outdoor

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

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

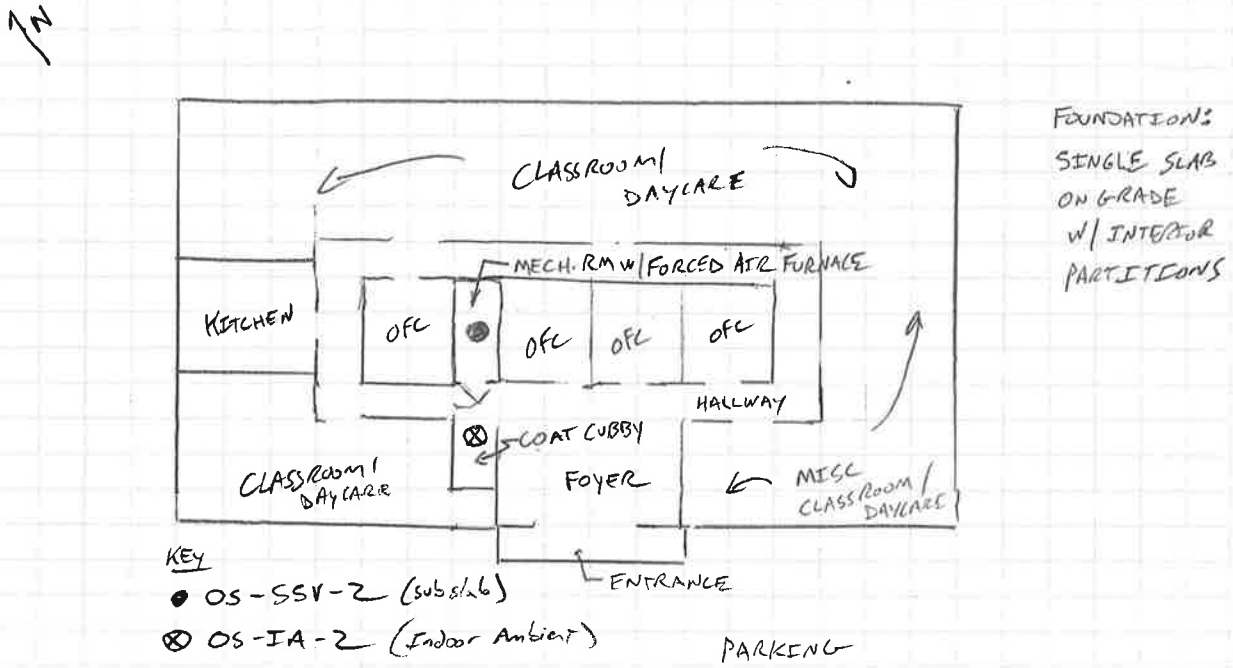
11. FLOOR PLANS

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:

N/A

First Floor:

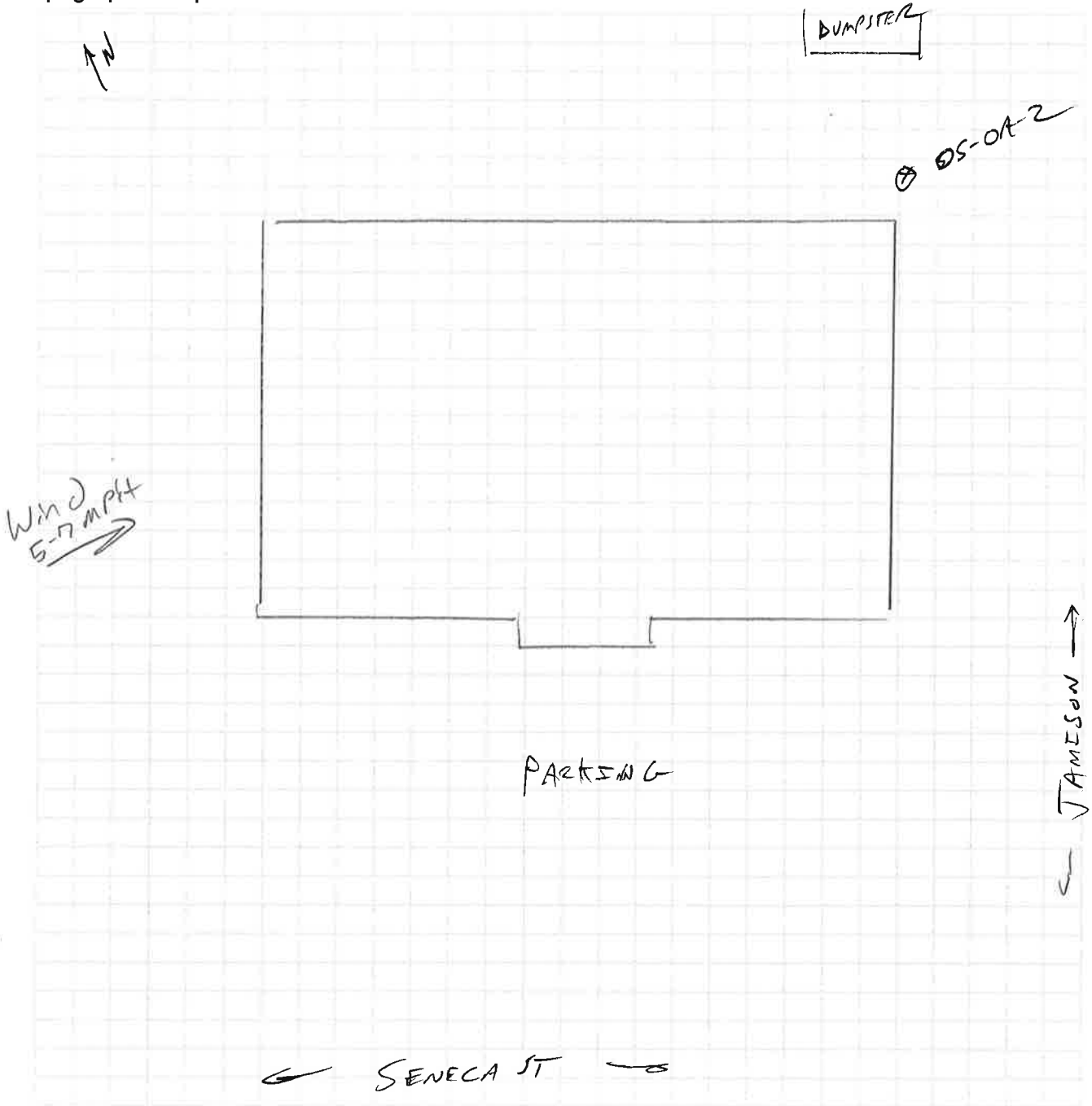


INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

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)
HVAC room	Stride citrus	1gal	good	citric acid		
"	Trim disinfectant	2gal	good	n-alkyl dimethyl-		
				-benzyl ammonium		
				-chloride		
"	water-based paint	2 QT	good			
Kitchen	Dish detergent	2gals	good			
Kitchen	misc household	22oz	good			
Kitchen	Rinse Aid	2gals	good			

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

ANALYTICAL LABORATORY REPORT

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 200-41272-1
Client Project/Site: (Moog) Jamison Road Site- Elma, NY
Revision: 1

For:
Benchmark Env. Eng. & Science, PLLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Attn: Mr. Michael Lesakowski

Authorized for release by:
2/15/2018 3:10:47 PM
Orlette Johnson, Senior Project Manager
(484)685-0864
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Designee for

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

Table of Contents

Qualifiers

Air - GC/MS VOA

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

Glossary

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

Job ID: 200-41272-1

Laboratory: TestAmerica Burlington

Narrative

Job Narrative
200-41272-1

Revision 1
This report is revised to clarify and correct the job narrative 'Receipt Exceptions' section.

Receipt
The samples were received on 12/5/2017 11:35 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Receipt Exceptions
During the canister pressure check performed upon receipt, it was observed that the following sample was received at an elevated residual vacuum level: OS-IA-2 (200-41272-2). The return pressure for the canister was -10.4" Hg, which is just marginally over the threshold at which a notification of pressure deviation is generated (-10.0" Hg). The sample was picked up approximately 30 minutes before the 8-hour period expired. The associated flow controller was acceptable upon return. This receipt exception has no effect on sample results. The client was contacted, and the laboratory was instructed to proceed with sample analysis.

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-SSV-2

Lab Sample ID: 200-41272-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	3.9		1.6	0.21	ug/m3	1.46		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.59	J	2.2	0.30	ug/m3	1.46		TO-15	Total/NA
1,2,4-Trimethylbenzene	5.5		1.4	0.41	ug/m3	1.46		TO-15	Total/NA
1,3,5-Trimethylbenzene	3.7		1.4	0.29	ug/m3	1.46		TO-15	Total/NA
1,3-Butadiene	0.16	J	0.65	0.12	ug/m3	1.46		TO-15	Total/NA
4-Ethyltoluene	0.90	J	1.4	0.29	ug/m3	1.46		TO-15	Total/NA
4-Isopropyltoluene	0.53	J	1.6	0.42	ug/m3	1.46		TO-15	Total/NA
Acetone	21		17	4.5	ug/m3	1.46		TO-15	Total/NA
Benzene	4.4		0.93	0.13	ug/m3	1.46		TO-15	Total/NA
Carbon disulfide	3.3		2.3	0.13	ug/m3	1.46		TO-15	Total/NA
Carbon tetrachloride	0.26	J	0.32	0.10	ug/m3	1.46		TO-15	Total/NA
Chlorodifluoromethane	2.0	J	2.6	1.0	ug/m3	1.46		TO-15	Total/NA
Chloroform	3.1		1.4	0.18	ug/m3	1.46		TO-15	Total/NA
Cumene	1.1	J	1.4	0.28	ug/m3	1.46		TO-15	Total/NA
Cyclohexane	61		1.0	0.23	ug/m3	1.46		TO-15	Total/NA
Ethylbenzene	2.1		1.3	0.22	ug/m3	1.46		TO-15	Total/NA
Isopropyl alcohol	2.4	J	18	0.47	ug/m3	1.46		TO-15	Total/NA
m,p-Xylene	11		3.2	0.49	ug/m3	1.46		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	1.8	J	2.2	0.47	ug/m3	1.46		TO-15	Total/NA
Methylene Chloride	1.3	J	2.5	0.34	ug/m3	1.46		TO-15	Total/NA
Naphthalene	4.3		3.8	0.77	ug/m3	1.46		TO-15	Total/NA
n-Butane	68		1.7	0.16	ug/m3	1.46		TO-15	Total/NA
n-Heptane	110		1.2	0.41	ug/m3	1.46		TO-15	Total/NA
n-Hexane	80		1.0	0.24	ug/m3	1.46		TO-15	Total/NA
n-Propylbenzene	1.2	J	1.4	0.29	ug/m3	1.46		TO-15	Total/NA
o-Xylene	4.2		1.3	0.25	ug/m3	1.46		TO-15	Total/NA
sec-Butylbenzene	0.77	J	1.6	0.30	ug/m3	1.46		TO-15	Total/NA
Styrene	0.30	J	1.2	0.22	ug/m3	1.46		TO-15	Total/NA
Tetrachloroethene	4.6		2.0	0.097	ug/m3	1.46		TO-15	Total/NA
Toluene	11		1.1	0.19	ug/m3	1.46		TO-15	Total/NA
Trichloroethene	0.75		0.27	0.071	ug/m3	1.46		TO-15	Total/NA
Trichlorofluoromethane	1.1	J	1.6	0.25	ug/m3	1.46		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.71		0.29	0.038	ppb v/v	1.46		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.076	J	0.29	0.039	ppb v/v	1.46		TO-15	Total/NA
1,2,4-Trimethylbenzene	1.1		0.29	0.083	ppb v/v	1.46		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.75		0.29	0.058	ppb v/v	1.46		TO-15	Total/NA
1,3-Butadiene	0.071	J	0.29	0.054	ppb v/v	1.46		TO-15	Total/NA
4-Ethyltoluene	0.18	J	0.29	0.058	ppb v/v	1.46		TO-15	Total/NA
4-Isopropyltoluene	0.097	J	0.29	0.076	ppb v/v	1.46		TO-15	Total/NA
Acetone	8.7		7.3	1.9	ppb v/v	1.46		TO-15	Total/NA
Benzene	1.4		0.29	0.041	ppb v/v	1.46		TO-15	Total/NA
Carbon disulfide	1.1		0.73	0.041	ppb v/v	1.46		TO-15	Total/NA
Carbon tetrachloride	0.041	J	0.051	0.016	ppb v/v	1.46		TO-15	Total/NA
Chlorodifluoromethane	0.56	J	0.73	0.29	ppb v/v	1.46		TO-15	Total/NA
Chloroform	0.63		0.29	0.037	ppb v/v	1.46		TO-15	Total/NA
Cumene	0.22	J	0.29	0.057	ppb v/v	1.46		TO-15	Total/NA
Cyclohexane	18		0.29	0.066	ppb v/v	1.46		TO-15	Total/NA
Ethylbenzene	0.49		0.29	0.050	ppb v/v	1.46		TO-15	Total/NA
Isopropyl alcohol	0.99	J	7.3	0.19	ppb v/v	1.46		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-SSV-2 (Continued)

Lab Sample ID: 200-41272-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m,p-Xylene	2.6		0.73	0.11	ppb v/v	1.46		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	0.61	J	0.73	0.16	ppb v/v	1.46		TO-15	Total/NA
Methylene Chloride	0.39	J	0.73	0.099	ppb v/v	1.46		TO-15	Total/NA
Naphthalene	0.82		0.73	0.15	ppb v/v	1.46		TO-15	Total/NA
n-Butane	28		0.73	0.067	ppb v/v	1.46		TO-15	Total/NA
n-Heptane	28		0.29	0.099	ppb v/v	1.46		TO-15	Total/NA
n-Hexane	23		0.29	0.067	ppb v/v	1.46		TO-15	Total/NA
n-Propylbenzene	0.25	J	0.29	0.058	ppb v/v	1.46		TO-15	Total/NA
o-Xylene	0.98		0.29	0.058	ppb v/v	1.46		TO-15	Total/NA
sec-Butylbenzene	0.14	J	0.29	0.054	ppb v/v	1.46		TO-15	Total/NA
Styrene	0.071	J	0.29	0.051	ppb v/v	1.46		TO-15	Total/NA
Tetrachloroethene	0.67		0.29	0.014	ppb v/v	1.46		TO-15	Total/NA
Toluene	3.0		0.29	0.051	ppb v/v	1.46		TO-15	Total/NA
Trichloroethene	0.14		0.051	0.013	ppb v/v	1.46		TO-15	Total/NA
Trichlorofluoromethane	0.19	J	0.29	0.045	ppb v/v	1.46		TO-15	Total/NA

Client Sample ID: OS-IA-2

Lab Sample ID: 200-41272-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.16	J	1.1	0.14	ug/m3	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.53	J	1.5	0.21	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.39	J	0.98	0.28	ug/m3	1		TO-15	Total/NA
Acetone	150	E	12	3.1	ug/m3	1		TO-15	Total/NA
Benzene	0.53	J	0.64	0.089	ug/m3	1		TO-15	Total/NA
Carbon disulfide	1.4	J	1.6	0.087	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.37		0.22	0.069	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	1.2	J	1.8	0.71	ug/m3	1		TO-15	Total/NA
Chloroform	0.27	J	0.98	0.12	ug/m3	1		TO-15	Total/NA
Chloromethane	1.1		1.0	0.33	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	1.8	J	2.5	0.23	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.16	J	0.87	0.15	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	32		12	0.32	ug/m3	1		TO-15	Total/NA
m,p-Xylene	0.47	J	2.2	0.33	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	2.4		1.5	0.32	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.57	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
n-Butane	3.1		1.2	0.11	ug/m3	1		TO-15	Total/NA
n-Heptane	0.29	J	0.82	0.28	ug/m3	1		TO-15	Total/NA
n-Hexane	0.38	J	0.70	0.16	ug/m3	1		TO-15	Total/NA
o-Xylene	0.18	J	0.87	0.17	ug/m3	1		TO-15	Total/NA
Styrene	0.31	J	0.85	0.15	ug/m3	1		TO-15	Total/NA
Tetrachloroethene	0.19	J	1.4	0.066	ug/m3	1		TO-15	Total/NA
Toluene	1.1		0.75	0.13	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.1		1.1	0.17	ug/m3	1		TO-15	Total/NA
Acetone - DL	150		29	7.6	ug/m3	2.45		TO-15	Total/NA
Benzene - DL	0.55	J	1.6	0.22	ug/m3	2.45		TO-15	Total/NA
Carbon disulfide - DL	1.4	J	3.8	0.21	ug/m3	2.45		TO-15	Total/NA
Chloromethane - DL	1.3	J	2.5	0.81	ug/m3	2.45		TO-15	Total/NA
Dichlorodifluoromethane - DL	2.1	J	6.1	0.57	ug/m3	2.45		TO-15	Total/NA
Isopropyl alcohol - DL	32		30	0.78	ug/m3	2.45		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	2.5	J	3.6	0.79	ug/m3	2.45		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OS-IA-2 (Continued)

Lab Sample ID: 200-41272-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
n-Butane - DL	3.2		2.9	0.27	ug/m3	2.45		TO-15	Total/NA
Toluene - DL	1.1	J	1.8	0.32	ug/m3	2.45		TO-15	Total/NA
Trichlorofluoromethane - DL	1.2	J	2.8	0.43	ug/m3	2.45		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.030	J	0.20	0.026	ppb v/v	1		TO-15	Total/NA
1,1,2-Trichlorotrifluoroethane	0.070	J	0.20	0.027	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.079	J	0.20	0.057	ppb v/v	1		TO-15	Total/NA
Acetone	64	E	5.0	1.3	ppb v/v	1		TO-15	Total/NA
Benzene	0.17	J	0.20	0.028	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.44	J	0.50	0.028	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.058		0.035	0.011	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	0.33	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloroform	0.055	J	0.20	0.025	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.55		0.50	0.16	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.36	J	0.50	0.047	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.037	J	0.20	0.034	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	13		5.0	0.13	ppb v/v	1		TO-15	Total/NA
m,p-Xylene	0.11	J	0.50	0.077	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	0.82		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.16	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
n-Butane	1.3		0.50	0.046	ppb v/v	1		TO-15	Total/NA
n-Heptane	0.072	J	0.20	0.068	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.11	J	0.20	0.046	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.042	J	0.20	0.040	ppb v/v	1		TO-15	Total/NA
Styrene	0.072	J	0.20	0.035	ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	0.027	J	0.20	0.0098	ppb v/v	1		TO-15	Total/NA
Toluene	0.29		0.20	0.035	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.031	ppb v/v	1		TO-15	Total/NA
Acetone - DL	65		12	3.2	ppb v/v	2.45		TO-15	Total/NA
Benzene - DL	0.17	J	0.49	0.069	ppb v/v	2.45		TO-15	Total/NA
Carbon disulfide - DL	0.46	J	1.2	0.069	ppb v/v	2.45		TO-15	Total/NA
Chloromethane - DL	0.61	J	1.2	0.39	ppb v/v	2.45		TO-15	Total/NA
Dichlorodifluoromethane - DL	0.42	J	1.2	0.12	ppb v/v	2.45		TO-15	Total/NA
Isopropyl alcohol - DL	13		12	0.32	ppb v/v	2.45		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone) - DL	0.84	J	1.2	0.27	ppb v/v	2.45		TO-15	Total/NA
n-Butane - DL	1.4		1.2	0.11	ppb v/v	2.45		TO-15	Total/NA
Toluene - DL	0.29	J	0.49	0.086	ppb v/v	2.45		TO-15	Total/NA
Trichlorofluoromethane - DL	0.21	J	0.49	0.076	ppb v/v	2.45		TO-15	Total/NA

Client Sample ID: OS-OA-2

Lab Sample ID: 200-41272-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichlorotrifluoroethane	0.48	J	1.5	0.21	ug/m3	1		TO-15	Total/NA
Acetone	7.1	J	12	3.1	ug/m3	1		TO-15	Total/NA
Benzene	0.50	J	0.64	0.089	ug/m3	1		TO-15	Total/NA
Carbon disulfide	0.20	J	1.6	0.087	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.39		0.22	0.069	ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	0.87	J	1.8	0.71	ug/m3	1		TO-15	Total/NA
Chloromethane	1.0		1.0	0.33	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	1.9	J	2.5	0.23	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: OS-OA-2 (Continued)

Lab Sample ID: 200-41272-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropyl alcohol	0.49	J	12	0.32	ug/m3	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	1.6		1.5	0.32	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.37	J	1.7	0.24	ug/m3	1		TO-15	Total/NA
Naphthalene	2.2	J	2.6	0.52	ug/m3	1		TO-15	Total/NA
n-Butane	1.9		1.2	0.11	ug/m3	1		TO-15	Total/NA
n-Hexane	0.30	J	0.70	0.16	ug/m3	1		TO-15	Total/NA
Toluene	0.64	J	0.75	0.13	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.1		1.1	0.17	ug/m3	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichlorotrifluoroethane	0.063	J	0.20	0.027	ppb v/v	1		TO-15	Total/NA
Acetone	3.0	J	5.0	1.3	ppb v/v	1		TO-15	Total/NA
Benzene	0.16	J	0.20	0.028	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.064	J	0.50	0.028	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.061		0.035	0.011	ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	0.25	J	0.50	0.20	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.49		0.50	0.16	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.37	J	0.50	0.047	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	0.20	J	5.0	0.13	ppb v/v	1		TO-15	Total/NA
Methyl Ethyl Ketone (2-Butanone)	0.54		0.50	0.11	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.11	J	0.50	0.068	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.42	J	0.50	0.10	ppb v/v	1		TO-15	Total/NA
n-Butane	0.81		0.50	0.046	ppb v/v	1		TO-15	Total/NA
n-Hexane	0.087	J	0.20	0.046	ppb v/v	1		TO-15	Total/NA
Toluene	0.17	J	0.20	0.035	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.20		0.20	0.031	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-SSV-2
Date Collected: 12/02/17 15:00
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-1
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**3.9**		1.6	0.21	ug/m3			12/06/17 09:19	1.46
1,1,2,2-Tetrachloroethane	ND		2.0	0.26	ug/m3			12/06/17 09:19	1.46
1,1,2-Trichloroethane	ND		1.6	0.14	ug/m3			12/06/17 09:19	1.46
1,1,2-Trichlorotrifluoroethane	**0.59**	**J**	2.2	0.30	ug/m3			12/06/17 09:19	1.46
1,1-Dichloroethane	ND		1.2	0.10	ug/m3			12/06/17 09:19	1.46
1,1-Dichloroethene	ND		0.20	0.20	ug/m3			12/06/17 09:19	1.46
1,2,4-Trichlorobenzene	ND		5.4	2.1	ug/m3			12/06/17 09:19	1.46
1,2,4-Trimethylbenzene	**5.5**		1.4	0.41	ug/m3			12/06/17 09:19	1.46
1,2-Dibromoethane	ND		2.2	0.26	ug/m3			12/06/17 09:19	1.46
1,2-Dichlorobenzene	ND		1.8	0.40	ug/m3			12/06/17 09:19	1.46
1,2-Dichloroethane	ND		1.2	0.20	ug/m3			12/06/17 09:19	1.46
1,2-Dichloropropane	ND		1.3	0.24	ug/m3			12/06/17 09:19	1.46
1,2-Dichlorotetrafluoroethane	ND		2.0	0.42	ug/m3			12/06/17 09:19	1.46
1,3,5-Trimethylbenzene	**3.7**		1.4	0.29	ug/m3			12/06/17 09:19	1.46
1,3-Butadiene	**0.16**	**J**	0.65	0.12	ug/m3			12/06/17 09:19	1.46
1,3-Dichlorobenzene	ND		1.8	0.44	ug/m3			12/06/17 09:19	1.46
1,4-Dichlorobenzene	ND		1.8	0.55	ug/m3			12/06/17 09:19	1.46
1,4-Dioxane	ND		26	4.0	ug/m3			12/06/17 09:19	1.46
2,2,4-Trimethylpentane	ND		1.4	0.29	ug/m3			12/06/17 09:19	1.46
2-Chlorotoluene	ND		1.5	0.26	ug/m3			12/06/17 09:19	1.46
3-Chloropropene	ND		2.3	0.29	ug/m3			12/06/17 09:19	1.46
4-Ethyltoluene	**0.90**	**J**	1.4	0.29	ug/m3			12/06/17 09:19	1.46
4-Isopropyltoluene	**0.53**	**J**	1.6	0.42	ug/m3			12/06/17 09:19	1.46
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		3.0	0.39	ug/m3			12/06/17 09:19	1.46
Acetone	**21**		17	4.5	ug/m3			12/06/17 09:19	1.46
Benzene	**4.4**		0.93	0.13	ug/m3			12/06/17 09:19	1.46
Benzyl chloride	ND		1.5	0.51	ug/m3			12/06/17 09:19	1.46
Bromodichloromethane	ND		2.0	0.58	ug/m3			12/06/17 09:19	1.46
Bromoethene(Vinyl Bromide)	ND		1.3	0.14	ug/m3			12/06/17 09:19	1.46
Bromoform	ND		3.0	0.53	ug/m3			12/06/17 09:19	1.46
Bromomethane	ND		1.1	0.20	ug/m3			12/06/17 09:19	1.46
Carbon disulfide	**3.3**		2.3	0.13	ug/m3			12/06/17 09:19	1.46
Carbon tetrachloride	**0.26**	**J**	0.32	0.10	ug/m3			12/06/17 09:19	1.46
Chlorobenzene	ND		1.3	0.17	ug/m3			12/06/17 09:19	1.46
Chlorodifluoromethane	**2.0**	**J**	2.6	1.0	ug/m3			12/06/17 09:19	1.46
Chloroethane	ND		1.9	0.50	ug/m3			12/06/17 09:19	1.46
Chloroform	**3.1**		1.4	0.18	ug/m3			12/06/17 09:19	1.46
Chloromethane	ND		1.5	0.48	ug/m3			12/06/17 09:19	1.46
cis-1,2-Dichloroethene	ND		0.20	0.17	ug/m3			12/06/17 09:19	1.46
cis-1,3-Dichloropropene	ND		1.3	0.24	ug/m3			12/06/17 09:19	1.46
Cumene	**1.1**	**J**	1.4	0.28	ug/m3			12/06/17 09:19	1.46
Cyclohexane	**61**		1.0	0.23	ug/m3			12/06/17 09:19	1.46
Dibromochloromethane	ND		2.5	0.21	ug/m3			12/06/17 09:19	1.46
Dichlorodifluoromethane	ND		3.6	0.34	ug/m3			12/06/17 09:19	1.46
Ethylbenzene	**2.1**		1.3	0.22	ug/m3			12/06/17 09:19	1.46
Hexachlorobutadiene	ND		3.1	1.0	ug/m3			12/06/17 09:19	1.46
Isopropyl alcohol	**2.4**	**J**	18	0.47	ug/m3			12/06/17 09:19	1.46

Client Sample ID: OS-SSV-2
Date Collected: 12/02/17 15:00
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-1
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	**11**		3.2	0.49	ug/m3			12/06/17 09:19	1.46
Methyl Butyl Ketone (2-Hexanone)	ND		3.0	0.51	ug/m3			12/06/17 09:19	1.46
Methyl Ethyl Ketone (2-Butanone)	**1.8**	**J**	2.2	0.47	ug/m3			12/06/17 09:19	1.46
Methyl methacrylate	ND		3.0	0.66	ug/m3			12/06/17 09:19	1.46
Methyl tert-butyl ether	ND		1.1	0.22	ug/m3			12/06/17 09:19	1.46
Methylene Chloride	**1.3**	**J**	2.5	0.34	ug/m3			12/06/17 09:19	1.46
Naphthalene	**4.3**		3.8	0.77	ug/m3			12/06/17 09:19	1.46
n-Butane	**68**		1.7	0.16	ug/m3			12/06/17 09:19	1.46
n-Butylbenzene	ND		1.6	0.55	ug/m3			12/06/17 09:19	1.46
n-Heptane	**110**		1.2	0.41	ug/m3			12/06/17 09:19	1.46
n-Hexane	**80**		1.0	0.24	ug/m3			12/06/17 09:19	1.46
n-Propylbenzene	**1.2**	**J**	1.4	0.29	ug/m3			12/06/17 09:19	1.46
o-Xylene	**4.2**		1.3	0.25	ug/m3			12/06/17 09:19	1.46
sec-Butylbenzene	**0.77**	**J**	1.6	0.30	ug/m3			12/06/17 09:19	1.46
Styrene	**0.30**	**J**	1.2	0.22	ug/m3			12/06/17 09:19	1.46
tert-Butyl alcohol	ND		22	7.5	ug/m3			12/06/17 09:19	1.46
tert-Butylbenzene	ND		1.6	0.30	ug/m3			12/06/17 09:19	1.46
Tetrachloroethene	**4.6**		2.0	0.097	ug/m3			12/06/17 09:19	1.46
Tetrahydrofuran	ND		22	5.2	ug/m3			12/06/17 09:19	1.46
Toluene	**11**		1.1	0.19	ug/m3			12/06/17 09:19	1.46
trans-1,2-Dichloroethene	ND		1.2	0.29	ug/m3			12/06/17 09:19	1.46
trans-1,3-Dichloropropene	ND		1.3	0.25	ug/m3			12/06/17 09:19	1.46
Trichloroethene	**0.75**		0.27	0.071	ug/m3			12/06/17 09:19	1.46
Trichlorofluoromethane	**1.1**	**J**	1.6	0.25	ug/m3			12/06/17 09:19	1.46
Vinyl chloride	ND		0.13	0.067	ug/m3			12/06/17 09:19	1.46

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.71**		0.29	0.038	ppb v/v			12/06/17 09:19	1.46
1,1,2,2-Tetrachloroethane	ND		0.29	0.038	ppb v/v			12/06/17 09:19	1.46
1,1,2-Trichloroethane	ND		0.29	0.025	ppb v/v			12/06/17 09:19	1.46
1,1,2-Trichlorotrifluoroethane	**0.076**	**J**	0.29	0.039	ppb v/v			12/06/17 09:19	1.46
1,1-Dichloroethane	ND		0.29	0.025	ppb v/v			12/06/17 09:19	1.46
1,1-Dichloroethene	ND		0.051	0.051	ppb v/v			12/06/17 09:19	1.46
1,2,4-Trichlorobenzene	ND		0.73	0.28	ppb v/v			12/06/17 09:19	1.46
1,2,4-Trimethylbenzene	**1.1**		0.29	0.083	ppb v/v			12/06/17 09:19	1.46
1,2-Dibromoethane	ND		0.29	0.034	ppb v/v			12/06/17 09:19	1.46
1,2-Dichlorobenzene	ND		0.29	0.066	ppb v/v			12/06/17 09:19	1.46
1,2-Dichloroethane	ND		0.29	0.050	ppb v/v			12/06/17 09:19	1.46
1,2-Dichloropropane	ND		0.29	0.051	ppb v/v			12/06/17 09:19	1.46
1,2-Dichlorotetrafluoroethane	ND		0.29	0.060	ppb v/v			12/06/17 09:19	1.46
1,3,5-Trimethylbenzene	**0.75**		0.29	0.058	ppb v/v			12/06/17 09:19	1.46
1,3-Butadiene	**0.071**	**J**	0.29	0.054	ppb v/v			12/06/17 09:19	1.46
1,3-Dichlorobenzene	ND		0.29	0.073	ppb v/v			12/06/17 09:19	1.46
1,4-Dichlorobenzene	ND		0.29	0.092	ppb v/v			12/06/17 09:19	1.46
1,4-Dioxane	ND		7.3	1.1	ppb v/v			12/06/17 09:19	1.46
2,2,4-Trimethylpentane	ND		0.29	0.063	ppb v/v			12/06/17 09:19	1.46
2-Chlorotoluene	ND		0.29	0.051	ppb v/v			12/06/17 09:19	1.46
3-Chloropropene	ND		0.73	0.092	ppb v/v			12/06/17 09:19	1.46
4-Ethyltoluene	**0.18**	**J**	0.29	0.058	ppb v/v			12/06/17 09:19	1.46

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-SSV-2
Date Collected: 12/02/17 15:00
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-1
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	**0.097**	**J**	0.29	0.076	ppb v/v			12/06/17 09:19	1.46
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		0.73	0.095	ppb v/v			12/06/17 09:19	1.46
Acetone	**8.7**		7.3	1.9	ppb v/v			12/06/17 09:19	1.46
Benzene	**1.4**		0.29	0.041	ppb v/v			12/06/17 09:19	1.46
Benzyl chloride	ND		0.29	0.098	ppb v/v			12/06/17 09:19	1.46
Bromodichloromethane	ND		0.29	0.086	ppb v/v			12/06/17 09:19	1.46
Bromoethene(Vinyl Bromide)	ND		0.29	0.032	ppb v/v			12/06/17 09:19	1.46
Bromoform	ND		0.29	0.051	ppb v/v			12/06/17 09:19	1.46
Bromomethane	ND		0.29	0.053	ppb v/v			12/06/17 09:19	1.46
Carbon disulfide	**1.1**		0.73	0.041	ppb v/v			12/06/17 09:19	1.46
Carbon tetrachloride	**0.041**	**J**	0.051	0.016	ppb v/v			12/06/17 09:19	1.46
Chlorobenzene	ND		0.29	0.037	ppb v/v			12/06/17 09:19	1.46
Chlorodifluoromethane	**0.56**	**J**	0.73	0.29	ppb v/v			12/06/17 09:19	1.46
Chloroethane	ND		0.73	0.19	ppb v/v			12/06/17 09:19	1.46
Chloroform	**0.63**		0.29	0.037	ppb v/v			12/06/17 09:19	1.46
Chloromethane	ND		0.73	0.23	ppb v/v			12/06/17 09:19	1.46
cis-1,2-Dichloroethene	ND		0.051	0.042	ppb v/v			12/06/17 09:19	1.46
cis-1,3-Dichloropropene	ND		0.29	0.053	ppb v/v			12/06/17 09:19	1.46
Cumene	**0.22**	**J**	0.29	0.057	ppb v/v			12/06/17 09:19	1.46
Cyclohexane	**18**		0.29	0.066	ppb v/v			12/06/17 09:19	1.46
Dibromochloromethane	ND		0.29	0.025	ppb v/v			12/06/17 09:19	1.46
Dichlorodifluoromethane	ND		0.73	0.069	ppb v/v			12/06/17 09:19	1.46
Ethylbenzene	**0.49**		0.29	0.050	ppb v/v			12/06/17 09:19	1.46
Hexachlorobutadiene	ND		0.29	0.093	ppb v/v			12/06/17 09:19	1.46
Isopropyl alcohol	**0.99**	**J**	7.3	0.19	ppb v/v			12/06/17 09:19	1.46
m,p-Xylene	**2.6**		0.73	0.11	ppb v/v			12/06/17 09:19	1.46
Methyl Butyl Ketone (2-Hexanone)	ND		0.73	0.13	ppb v/v			12/06/17 09:19	1.46
Methyl Ethyl Ketone (2-Butanone)	**0.61**	**J**	0.73	0.16	ppb v/v			12/06/17 09:19	1.46
Methyl methacrylate	ND		0.73	0.16	ppb v/v			12/06/17 09:19	1.46
Methyl tert-butyl ether	ND		0.29	0.060	ppb v/v			12/06/17 09:19	1.46
Methylene Chloride	**0.39**	**J**	0.73	0.099	ppb v/v			12/06/17 09:19	1.46
Naphthalene	**0.82**		0.73	0.15	ppb v/v			12/06/17 09:19	1.46
n-Butane	**28**		0.73	0.067	ppb v/v			12/06/17 09:19	1.46
n-Butylbenzene	ND		0.29	0.099	ppb v/v			12/06/17 09:19	1.46
n-Heptane	**28**		0.29	0.099	ppb v/v			12/06/17 09:19	1.46
n-Hexane	**23**		0.29	0.067	ppb v/v			12/06/17 09:19	1.46
n-Propylbenzene	**0.25**	**J**	0.29	0.058	ppb v/v			12/06/17 09:19	1.46
o-Xylene	**0.98**		0.29	0.058	ppb v/v			12/06/17 09:19	1.46
sec-Butylbenzene	**0.14**	**J**	0.29	0.054	ppb v/v			12/06/17 09:19	1.46
Styrene	**0.071**	**J**	0.29	0.051	ppb v/v			12/06/17 09:19	1.46
tert-Butyl alcohol	ND		7.3	2.5	ppb v/v			12/06/17 09:19	1.46
tert-Butylbenzene	ND		0.29	0.054	ppb v/v			12/06/17 09:19	1.46
Tetrachloroethene	**0.67**		0.29	0.014	ppb v/v			12/06/17 09:19	1.46
Tetrahydrofuran	ND		7.3	1.8	ppb v/v			12/06/17 09:19	1.46
Toluene	**3.0**		0.29	0.051	ppb v/v			12/06/17 09:19	1.46
trans-1,2-Dichloroethene	ND		0.29	0.073	ppb v/v			12/06/17 09:19	1.46
trans-1,3-Dichloropropene	ND		0.29	0.055	ppb v/v			12/06/17 09:19	1.46
Trichloroethene	**0.14**		0.051	0.013	ppb v/v			12/06/17 09:19	1.46

Client Sample ID: OS-SSV-2

Lab Sample ID: 200-41272-1

Date Collected: 12/02/17 15:00
Matrix: Air
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	**0.19**	**J**	0.29	0.045	ppb v/v			12/06/17 09:19	1.46
Vinyl chloride	ND		0.051	0.026	ppb v/v			12/06/17 09:19	1.46

Client Sample ID: OS-IA-2

Lab Sample ID: 200-41272-2

Date Collected: 12/02/17 15:00
Matrix: Air
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.16**	**J**	1.1	0.14	ug/m3			12/06/17 05:08	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/06/17 05:08	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/06/17 05:08	1
1,1,2-Trichlorotrifluoroethane	**0.53**	**J**	1.5	0.21	ug/m3			12/06/17 05:08	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/06/17 05:08	1
1,1-Dichloroethene	ND		0.14	0.14	ug/m3			12/06/17 05:08	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/06/17 05:08	1
1,2,4-Trimethylbenzene	**0.39**	**J**	0.98	0.28	ug/m3			12/06/17 05:08	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/06/17 05:08	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/06/17 05:08	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/06/17 05:08	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/06/17 05:08	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/06/17 05:08	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/06/17 05:08	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/06/17 05:08	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/06/17 05:08	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/06/17 05:08	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/06/17 05:08	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/06/17 05:08	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/06/17 05:08	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/06/17 05:08	1
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/06/17 05:08	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/06/17 05:08	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		2.0	0.27	ug/m3			12/06/17 05:08	1
Acetone	**150**	**E**	12	3.1	ug/m3			12/06/17 05:08	1
Benzene	**0.53**	**J**	0.64	0.089	ug/m3			12/06/17 05:08	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/06/17 05:08	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/06/17 05:08	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/06/17 05:08	1
Bromoform	ND		2.1	0.36	ug/m3			12/06/17 05:08	1
Bromomethane	ND		0.78	0.14	ug/m3			12/06/17 05:08	1
Carbon disulfide	**1.4**	**J**	1.6	0.087	ug/m3			12/06/17 05:08	1
Carbon tetrachloride	**0.37**		0.22	0.069	ug/m3			12/06/17 05:08	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/06/17 05:08	1
Chlorodifluoromethane	**1.2**	**J**	1.8	0.71	ug/m3			12/06/17 05:08	1
Chloroethane	ND		1.3	0.34	ug/m3			12/06/17 05:08	1
Chloroform	**0.27**	**J**	0.98	0.12	ug/m3			12/06/17 05:08	1
Chloromethane	**1.1**		1.0	0.33	ug/m3			12/06/17 05:08	1

Client Sample ID: OS-IA-2
Date Collected: 12/02/17 15:00
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-2
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	ND		0.14	0.11	ug/m3			12/06/17 05:08	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/06/17 05:08	1
Cumene	ND		0.98	0.19	ug/m3			12/06/17 05:08	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/06/17 05:08	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/06/17 05:08	1
Dichlorodifluoromethane	**1.8**	**J**	2.5	0.23	ug/m3			12/06/17 05:08	1
Ethylbenzene	**0.16**	**J**	0.87	0.15	ug/m3			12/06/17 05:08	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/06/17 05:08	1
Isopropyl alcohol	**32**		12	0.32	ug/m3			12/06/17 05:08	1
m,p-Xylene	**0.47**	**J**	2.2	0.33	ug/m3			12/06/17 05:08	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/06/17 05:08	1
Methyl Ethyl Ketone (2-Butanone)	**2.4**		1.5	0.32	ug/m3			12/06/17 05:08	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/06/17 05:08	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/06/17 05:08	1
Methylene Chloride	**0.57**	**J**	1.7	0.24	ug/m3			12/06/17 05:08	1
Naphthalene	ND		2.6	0.52	ug/m3			12/06/17 05:08	1
n-Butane	**3.1**		1.2	0.11	ug/m3			12/06/17 05:08	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/06/17 05:08	1
n-Heptane	**0.29**	**J**	0.82	0.28	ug/m3			12/06/17 05:08	1
n-Hexane	**0.38**	**J**	0.70	0.16	ug/m3			12/06/17 05:08	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/06/17 05:08	1
o-Xylene	**0.18**	**J**	0.87	0.17	ug/m3			12/06/17 05:08	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/06/17 05:08	1
Styrene	**0.31**	**J**	0.85	0.15	ug/m3			12/06/17 05:08	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/06/17 05:08	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/06/17 05:08	1
Tetrachloroethene	**0.19**	**J**	1.4	0.066	ug/m3			12/06/17 05:08	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/06/17 05:08	1
Toluene	**1.1**		0.75	0.13	ug/m3			12/06/17 05:08	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/06/17 05:08	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/06/17 05:08	1
Trichloroethene	ND		0.19	0.049	ug/m3			12/06/17 05:08	1
Trichlorofluoromethane	**1.1**		1.1	0.17	ug/m3			12/06/17 05:08	1
Vinyl chloride	ND		0.090	0.046	ug/m3			12/06/17 05:08	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**0.030**	**J**	0.20	0.026	ppb v/v			12/06/17 05:08	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/06/17 05:08	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/06/17 05:08	1
1,1,2-Trichlorotrifluoroethane	**0.070**	**J**	0.20	0.027	ppb v/v			12/06/17 05:08	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/06/17 05:08	1
1,1-Dichloroethene	ND		0.035	0.035	ppb v/v			12/06/17 05:08	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/06/17 05:08	1
1,2,4-Trimethylbenzene	**0.079**	**J**	0.20	0.057	ppb v/v			12/06/17 05:08	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/06/17 05:08	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/06/17 05:08	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/06/17 05:08	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/06/17 05:08	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/06/17 05:08	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-IA-2
Date Collected: 12/02/17 15:00
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-2
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/06/17 05:08	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/06/17 05:08	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/06/17 05:08	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/06/17 05:08	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/06/17 05:08	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/06/17 05:08	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/06/17 05:08	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/06/17 05:08	1
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/06/17 05:08	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/06/17 05:08	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		0.50	0.065	ppb v/v			12/06/17 05:08	1
Acetone	**64**	**E**	5.0	1.3	ppb v/v			12/06/17 05:08	1
Benzene	**0.17**	**J**	0.20	0.028	ppb v/v			12/06/17 05:08	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/06/17 05:08	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/06/17 05:08	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/06/17 05:08	1
Bromoform	ND		0.20	0.035	ppb v/v			12/06/17 05:08	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/06/17 05:08	1
Carbon disulfide	**0.44**	**J**	0.50	0.028	ppb v/v			12/06/17 05:08	1
Carbon tetrachloride	**0.058**		0.035	0.011	ppb v/v			12/06/17 05:08	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/06/17 05:08	1
Chlorodifluoromethane	**0.33**	**J**	0.50	0.20	ppb v/v			12/06/17 05:08	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/06/17 05:08	1
Chloroform	**0.055**	**J**	0.20	0.025	ppb v/v			12/06/17 05:08	1
Chloromethane	**0.55**		0.50	0.16	ppb v/v			12/06/17 05:08	1
cis-1,2-Dichloroethene	ND		0.035	0.029	ppb v/v			12/06/17 05:08	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/06/17 05:08	1
Cumene	ND		0.20	0.039	ppb v/v			12/06/17 05:08	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/06/17 05:08	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/06/17 05:08	1
Dichlorodifluoromethane	**0.36**	**J**	0.50	0.047	ppb v/v			12/06/17 05:08	1
Ethylbenzene	**0.037**	**J**	0.20	0.034	ppb v/v			12/06/17 05:08	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/06/17 05:08	1
Isopropyl alcohol	**13**		5.0	0.13	ppb v/v			12/06/17 05:08	1
m,p-Xylene	**0.11**	**J**	0.50	0.077	ppb v/v			12/06/17 05:08	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/06/17 05:08	1
Methyl Ethyl Ketone (2-Butanone)	**0.82**		0.50	0.11	ppb v/v			12/06/17 05:08	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/06/17 05:08	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/06/17 05:08	1
Methylene Chloride	**0.16**	**J**	0.50	0.068	ppb v/v			12/06/17 05:08	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/06/17 05:08	1
n-Butane	**1.3**		0.50	0.046	ppb v/v			12/06/17 05:08	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/06/17 05:08	1
n-Heptane	**0.072**	**J**	0.20	0.068	ppb v/v			12/06/17 05:08	1
n-Hexane	**0.11**	**J**	0.20	0.046	ppb v/v			12/06/17 05:08	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/06/17 05:08	1
o-Xylene	**0.042**	**J**	0.20	0.040	ppb v/v			12/06/17 05:08	1
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/06/17 05:08	1

Client Sample ID: OS-IA-2
Lab Sample ID: 200-41272-2
Date Collected: 12/02/17 15:00
Matrix: Air
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	**0.072**	**J**	0.20	0.035	ppb v/v			12/06/17 05:08	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/06/17 05:08	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/06/17 05:08	1
Tetrachloroethene	**0.027**	**J**	0.20	0.0098	ppb v/v			12/06/17 05:08	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/06/17 05:08	1
Toluene	**0.29**		0.20	0.035	ppb v/v			12/06/17 05:08	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/06/17 05:08	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/06/17 05:08	1
Trichloroethene	ND		0.035	0.0091	ppb v/v			12/06/17 05:08	1
Trichlorofluoromethane	**0.20**		0.20	0.031	ppb v/v			12/06/17 05:08	1
Vinyl chloride	ND		0.035	0.018	ppb v/v			12/06/17 05:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.7	0.35	ug/m3			12/06/17 08:26	2.45
1,1,2,2-Tetrachloroethane	ND		3.4	0.44	ug/m3			12/06/17 08:26	2.45
1,1,2-Trichloroethane	ND		2.7	0.23	ug/m3			12/06/17 08:26	2.45
1,1,2-Trichlorotrifluoroethane	ND		3.8	0.51	ug/m3			12/06/17 08:26	2.45
1,1-Dichloroethane	ND		2.0	0.17	ug/m3			12/06/17 08:26	2.45
1,1-Dichloroethene	ND		0.34	0.34	ug/m3			12/06/17 08:26	2.45
1,2,4-Trichlorobenzene	ND		9.1	3.5	ug/m3			12/06/17 08:26	2.45
1,2,4-Trimethylbenzene	ND		2.4	0.69	ug/m3			12/06/17 08:26	2.45
1,2-Dibromoethane	ND		3.8	0.43	ug/m3			12/06/17 08:26	2.45
1,2-Dichlorobenzene	ND		2.9	0.66	ug/m3			12/06/17 08:26	2.45
1,2-Dichloroethane	ND		2.0	0.34	ug/m3			12/06/17 08:26	2.45
1,2-Dichloropropane	ND		2.3	0.40	ug/m3			12/06/17 08:26	2.45
1,2-Dichlorotetrafluoroethane	ND		3.4	0.70	ug/m3			12/06/17 08:26	2.45
1,3,5-Trimethylbenzene	ND		2.4	0.48	ug/m3			12/06/17 08:26	2.45
1,3-Butadiene	ND		1.1	0.20	ug/m3			12/06/17 08:26	2.45
1,3-Dichlorobenzene	ND		2.9	0.74	ug/m3			12/06/17 08:26	2.45
1,4-Dichlorobenzene	ND		2.9	0.93	ug/m3			12/06/17 08:26	2.45
1,4-Dioxane	ND		44	6.7	ug/m3			12/06/17 08:26	2.45
2,2,4-Trimethylpentane	ND		2.3	0.49	ug/m3			12/06/17 08:26	2.45
2-Chlorotoluene	ND		2.5	0.44	ug/m3			12/06/17 08:26	2.45
3-Chloropropene	ND		3.8	0.48	ug/m3			12/06/17 08:26	2.45
4-Ethyltoluene	ND		2.4	0.48	ug/m3			12/06/17 08:26	2.45
4-Isopropyltoluene	ND		2.7	0.70	ug/m3			12/06/17 08:26	2.45
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		5.0	0.65	ug/m3			12/06/17 08:26	2.45
Acetone	**150**		29	7.6	ug/m3			12/06/17 08:26	2.45
Benzene	**0.55**	**J**	1.6	0.22	ug/m3			12/06/17 08:26	2.45
Benzyl chloride	ND		2.5	0.85	ug/m3			12/06/17 08:26	2.45
Bromodichloromethane	ND		3.3	0.97	ug/m3			12/06/17 08:26	2.45
Bromoethene(Vinyl Bromide)	ND		2.1	0.24	ug/m3			12/06/17 08:26	2.45
Bromoform	ND		5.1	0.89	ug/m3			12/06/17 08:26	2.45
Bromomethane	ND		1.9	0.34	ug/m3			12/06/17 08:26	2.45
Carbon disulfide	**1.4**	**J**	3.8	0.21	ug/m3			12/06/17 08:26	2.45
Carbon tetrachloride	ND		0.54	0.17	ug/m3			12/06/17 08:26	2.45
Chlorobenzene	ND		2.3	0.28	ug/m3			12/06/17 08:26	2.45

Client Sample ID: OS-IA-2
Date Collected: 12/02/17 15:00
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-2
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorodifluoromethane	ND		4.3	1.7	ug/m3			12/06/17 08:26	2.45
Chloroethane	ND		3.2	0.84	ug/m3			12/06/17 08:26	2.45
Chloroform	ND		2.4	0.30	ug/m3			12/06/17 08:26	2.45
Chloromethane	**1.3**	**J**	2.5	0.81	ug/m3			12/06/17 08:26	2.45
cis-1,2-Dichloroethene	ND		0.34	0.28	ug/m3			12/06/17 08:26	2.45
cis-1,3-Dichloropropene	ND		2.2	0.40	ug/m3			12/06/17 08:26	2.45
Cumene	ND		2.4	0.47	ug/m3			12/06/17 08:26	2.45
Cyclohexane	ND		1.7	0.38	ug/m3			12/06/17 08:26	2.45
Dibromochloromethane	ND		4.2	0.35	ug/m3			12/06/17 08:26	2.45
Dichlorodifluoromethane	**2.1**	**J**	6.1	0.57	ug/m3			12/06/17 08:26	2.45
Ethylbenzene	ND		2.1	0.36	ug/m3			12/06/17 08:26	2.45
Hexachlorobutadiene	ND		5.2	1.7	ug/m3			12/06/17 08:26	2.45
Isopropyl alcohol	**32**		30	0.78	ug/m3			12/06/17 08:26	2.45
m,p-Xylene	ND		5.3	0.82	ug/m3			12/06/17 08:26	2.45
Methyl Butyl Ketone (2-Hexanone)	ND		5.0	0.86	ug/m3			12/06/17 08:26	2.45
Methyl Ethyl Ketone (2-Butanone)	**2.5**	**J**	3.6	0.79	ug/m3			12/06/17 08:26	2.45
Methyl methacrylate	ND		5.0	1.1	ug/m3			12/06/17 08:26	2.45
Methyl tert-butyl ether	ND		1.8	0.36	ug/m3			12/06/17 08:26	2.45
Methylene Chloride	ND		4.3	0.58	ug/m3			12/06/17 08:26	2.45
Naphthalene	ND		6.4	1.3	ug/m3			12/06/17 08:26	2.45
n-Butane	**3.2**		2.9	0.27	ug/m3			12/06/17 08:26	2.45
n-Butylbenzene	ND		2.7	0.91	ug/m3			12/06/17 08:26	2.45
n-Heptane	ND		2.0	0.68	ug/m3			12/06/17 08:26	2.45
n-Hexane	ND		1.7	0.40	ug/m3			12/06/17 08:26	2.45
n-Propylbenzene	ND		2.4	0.48	ug/m3			12/06/17 08:26	2.45
o-Xylene	ND		2.1	0.43	ug/m3			12/06/17 08:26	2.45
sec-Butylbenzene	ND		2.7	0.50	ug/m3			12/06/17 08:26	2.45
Styrene	ND		2.1	0.37	ug/m3			12/06/17 08:26	2.45
tert-Butyl alcohol	ND		37	13	ug/m3			12/06/17 08:26	2.45
tert-Butylbenzene	ND		2.7	0.50	ug/m3			12/06/17 08:26	2.45
Tetrachloroethene	ND		3.3	0.16	ug/m3			12/06/17 08:26	2.45
Tetrahydrofuran	ND		36	8.7	ug/m3			12/06/17 08:26	2.45
Toluene	**1.1**	**J**	1.8	0.32	ug/m3			12/06/17 08:26	2.45
trans-1,2-Dichloroethene	ND		1.9	0.49	ug/m3			12/06/17 08:26	2.45
trans-1,3-Dichloropropene	ND		2.2	0.42	ug/m3			12/06/17 08:26	2.45
Trichloroethene	ND		0.46	0.12	ug/m3			12/06/17 08:26	2.45
Trichlorofluoromethane	**1.2**	**J**	2.8	0.43	ug/m3			12/06/17 08:26	2.45
Vinyl chloride	ND		0.22	0.11	ug/m3			12/06/17 08:26	2.45

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.49	0.064	ppb v/v			12/06/17 08:26	2.45
1,1,2,2-Tetrachloroethane	ND		0.49	0.064	ppb v/v			12/06/17 08:26	2.45
1,1,2-Trichloroethane	ND		0.49	0.042	ppb v/v			12/06/17 08:26	2.45
1,1,2-Trichlorotrifluoroethane	ND		0.49	0.066	ppb v/v			12/06/17 08:26	2.45
1,1-Dichloroethane	ND		0.49	0.042	ppb v/v			12/06/17 08:26	2.45
1,1-Dichloroethene	ND		0.086	0.086	ppb v/v			12/06/17 08:26	2.45
1,2,4-Trichlorobenzene	ND		1.2	0.47	ppb v/v			12/06/17 08:26	2.45
1,2,4-Trimethylbenzene	ND		0.49	0.14	ppb v/v			12/06/17 08:26	2.45
1,2-Dibromoethane	ND		0.49	0.056	ppb v/v			12/06/17 08:26	2.45

Client Sample ID: OS-IA-2
Date Collected: 12/02/17 15:00
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-2
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	ND		0.49	0.11	ppb v/v			12/06/17 08:26	2.45
1,2-Dichloroethane	ND		0.49	0.083	ppb v/v			12/06/17 08:26	2.45
1,2-Dichloropropane	ND		0.49	0.086	ppb v/v			12/06/17 08:26	2.45
1,2-Dichlorotetrafluoroethane	ND		0.49	0.10	ppb v/v			12/06/17 08:26	2.45
1,3,5-Trimethylbenzene	ND		0.49	0.098	ppb v/v			12/06/17 08:26	2.45
1,3-Butadiene	ND		0.49	0.091	ppb v/v			12/06/17 08:26	2.45
1,3-Dichlorobenzene	ND		0.49	0.12	ppb v/v			12/06/17 08:26	2.45
1,4-Dichlorobenzene	ND		0.49	0.15	ppb v/v			12/06/17 08:26	2.45
1,4-Dioxane	ND		12	1.9	ppb v/v			12/06/17 08:26	2.45
2,2,4-Trimethylpentane	ND		0.49	0.11	ppb v/v			12/06/17 08:26	2.45
2-Chlorotoluene	ND		0.49	0.086	ppb v/v			12/06/17 08:26	2.45
3-Chloropropene	ND		1.2	0.15	ppb v/v			12/06/17 08:26	2.45
4-Ethyltoluene	ND		0.49	0.098	ppb v/v			12/06/17 08:26	2.45
4-Isopropyltoluene	ND		0.49	0.13	ppb v/v			12/06/17 08:26	2.45
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		1.2	0.16	ppb v/v			12/06/17 08:26	2.45
Acetone	**65**		12	3.2	ppb v/v			12/06/17 08:26	2.45
Benzene	**0.17**	**J**	0.49	0.069	ppb v/v			12/06/17 08:26	2.45
Benzyl chloride	ND		0.49	0.16	ppb v/v			12/06/17 08:26	2.45
Bromodichloromethane	ND		0.49	0.14	ppb v/v			12/06/17 08:26	2.45
Bromoethene(Vinyl Bromide)	ND		0.49	0.054	ppb v/v			12/06/17 08:26	2.45
Bromoform	ND		0.49	0.086	ppb v/v			12/06/17 08:26	2.45
Bromomethane	ND		0.49	0.088	ppb v/v			12/06/17 08:26	2.45
Carbon disulfide	**0.46**	**J**	1.2	0.069	ppb v/v			12/06/17 08:26	2.45
Carbon tetrachloride	ND		0.086	0.027	ppb v/v			12/06/17 08:26	2.45
Chlorobenzene	ND		0.49	0.061	ppb v/v			12/06/17 08:26	2.45
Chlorodifluoromethane	ND		1.2	0.49	ppb v/v			12/06/17 08:26	2.45
Chloroethane	ND		1.2	0.32	ppb v/v			12/06/17 08:26	2.45
Chloroform	ND		0.49	0.061	ppb v/v			12/06/17 08:26	2.45
Chloromethane	**0.61**	**J**	1.2	0.39	ppb v/v			12/06/17 08:26	2.45
cis-1,2-Dichloroethene	ND		0.086	0.071	ppb v/v			12/06/17 08:26	2.45
cis-1,3-Dichloropropene	ND		0.49	0.088	ppb v/v			12/06/17 08:26	2.45
Cumene	ND		0.49	0.096	ppb v/v			12/06/17 08:26	2.45
Cyclohexane	ND		0.49	0.11	ppb v/v			12/06/17 08:26	2.45
Dibromochloromethane	ND		0.49	0.042	ppb v/v			12/06/17 08:26	2.45
Dichlorodifluoromethane	**0.42**	**J**	1.2	0.12	ppb v/v			12/06/17 08:26	2.45
Ethylbenzene	ND		0.49	0.083	ppb v/v			12/06/17 08:26	2.45
Hexachlorobutadiene	ND		0.49	0.16	ppb v/v			12/06/17 08:26	2.45
Isopropyl alcohol	**13**		12	0.32	ppb v/v			12/06/17 08:26	2.45
m,p-Xylene	ND		1.2	0.19	ppb v/v			12/06/17 08:26	2.45
Methyl Butyl Ketone (2-Hexanone)	ND		1.2	0.21	ppb v/v			12/06/17 08:26	2.45
Methyl Ethyl Ketone (2-Butanone)	**0.84**	**J**	1.2	0.27	ppb v/v			12/06/17 08:26	2.45
Methyl methacrylate	ND		1.2	0.27	ppb v/v			12/06/17 08:26	2.45
Methyl tert-butyl ether	ND		0.49	0.10	ppb v/v			12/06/17 08:26	2.45
Methylene Chloride	ND		1.2	0.17	ppb v/v			12/06/17 08:26	2.45
Naphthalene	ND		1.2	0.25	ppb v/v			12/06/17 08:26	2.45
n-Butane	**1.4**		1.2	0.11	ppb v/v			12/06/17 08:26	2.45
n-Butylbenzene	ND		0.49	0.17	ppb v/v			12/06/17 08:26	2.45
n-Heptane	ND		0.49	0.17	ppb v/v			12/06/17 08:26	2.45

Client Sample ID: OS-IA-2

Lab Sample ID: 200-41272-2

Date Collected: 12/02/17 15:00
Matrix: Air
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Hexane	ND		0.49	0.11	ppb v/v			12/06/17 08:26	2.45
n-Propylbenzene	ND		0.49	0.098	ppb v/v			12/06/17 08:26	2.45
o-Xylene	ND		0.49	0.098	ppb v/v			12/06/17 08:26	2.45
sec-Butylbenzene	ND		0.49	0.091	ppb v/v			12/06/17 08:26	2.45
Styrene	ND		0.49	0.086	ppb v/v			12/06/17 08:26	2.45
tert-Butyl alcohol	ND		12	4.2	ppb v/v			12/06/17 08:26	2.45
tert-Butylbenzene	ND		0.49	0.091	ppb v/v			12/06/17 08:26	2.45
Tetrachloroethene	ND		0.49	0.024	ppb v/v			12/06/17 08:26	2.45
Tetrahydrofuran	ND		12	2.9	ppb v/v			12/06/17 08:26	2.45
Toluene	**0.29**	**J**	0.49	0.086	ppb v/v			12/06/17 08:26	2.45
trans-1,2-Dichloroethene	ND		0.49	0.12	ppb v/v			12/06/17 08:26	2.45
trans-1,3-Dichloropropene	ND		0.49	0.093	ppb v/v			12/06/17 08:26	2.45
Trichloroethene	ND		0.086	0.022	ppb v/v			12/06/17 08:26	2.45
Trichlorofluoromethane	**0.21**	**J**	0.49	0.076	ppb v/v			12/06/17 08:26	2.45
Vinyl chloride	ND		0.086	0.044	ppb v/v			12/06/17 08:26	2.45

Client Sample ID: OS-OA-2

Lab Sample ID: 200-41272-3

Date Collected: 12/02/17 15:02
Matrix: Air
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/06/17 06:02	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/06/17 06:02	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/06/17 06:02	1
1,1,2-Trichlorotrifluoroethane	**0.48**	**J**	1.5	0.21	ug/m3			12/06/17 06:02	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/06/17 06:02	1
1,1-Dichloroethene	ND		0.14	0.14	ug/m3			12/06/17 06:02	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/06/17 06:02	1
1,2,4-Trimethylbenzene	ND		0.98	0.28	ug/m3			12/06/17 06:02	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/06/17 06:02	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/06/17 06:02	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/06/17 06:02	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/06/17 06:02	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/06/17 06:02	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/06/17 06:02	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/06/17 06:02	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/06/17 06:02	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/06/17 06:02	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/06/17 06:02	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/06/17 06:02	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/06/17 06:02	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/06/17 06:02	1
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/06/17 06:02	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/06/17 06:02	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		2.0	0.27	ug/m3			12/06/17 06:02	1
Acetone	**7.1**	**J**	12	3.1	ug/m3			12/06/17 06:02	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-OA-2
Date Collected: 12/02/17 15:02
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-3
Matrix: Air

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.50**	**J**	0.64	0.089	ug/m3			12/06/17 06:02	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/06/17 06:02	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/06/17 06:02	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/06/17 06:02	1
Bromoform	ND		2.1	0.36	ug/m3			12/06/17 06:02	1
Bromomethane	ND		0.78	0.14	ug/m3			12/06/17 06:02	1
Carbon disulfide	**0.20**	**J**	1.6	0.087	ug/m3			12/06/17 06:02	1
Carbon tetrachloride	**0.39**		0.22	0.069	ug/m3			12/06/17 06:02	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/06/17 06:02	1
Chlorodifluoromethane	**0.87**	**J**	1.8	0.71	ug/m3			12/06/17 06:02	1
Chloroethane	ND		1.3	0.34	ug/m3			12/06/17 06:02	1
Chloroform	ND		0.98	0.12	ug/m3			12/06/17 06:02	1
Chloromethane	**1.0**		1.0	0.33	ug/m3			12/06/17 06:02	1
cis-1,2-Dichloroethene	ND		0.14	0.11	ug/m3			12/06/17 06:02	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/06/17 06:02	1
Cumene	ND		0.98	0.19	ug/m3			12/06/17 06:02	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/06/17 06:02	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/06/17 06:02	1
Dichlorodifluoromethane	**1.9**	**J**	2.5	0.23	ug/m3			12/06/17 06:02	1
Ethylbenzene	ND		0.87	0.15	ug/m3			12/06/17 06:02	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/06/17 06:02	1
Isopropyl alcohol	**0.49**	**J**	12	0.32	ug/m3			12/06/17 06:02	1
m,p-Xylene	ND		2.2	0.33	ug/m3			12/06/17 06:02	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/06/17 06:02	1
Methyl Ethyl Ketone (2-Butanone)	**1.6**		1.5	0.32	ug/m3			12/06/17 06:02	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/06/17 06:02	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/06/17 06:02	1
Methylene Chloride	**0.37**	**J**	1.7	0.24	ug/m3			12/06/17 06:02	1
Naphthalene	**2.2**	**J**	2.6	0.52	ug/m3			12/06/17 06:02	1
n-Butane	**1.9**		1.2	0.11	ug/m3			12/06/17 06:02	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/06/17 06:02	1
n-Heptane	ND		0.82	0.28	ug/m3			12/06/17 06:02	1
n-Hexane	**0.30**	**J**	0.70	0.16	ug/m3			12/06/17 06:02	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/06/17 06:02	1
o-Xylene	ND		0.87	0.17	ug/m3			12/06/17 06:02	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/06/17 06:02	1
Styrene	ND		0.85	0.15	ug/m3			12/06/17 06:02	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/06/17 06:02	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/06/17 06:02	1
Tetrachloroethene	ND		1.4	0.066	ug/m3			12/06/17 06:02	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/06/17 06:02	1
Toluene	**0.64**	**J**	0.75	0.13	ug/m3			12/06/17 06:02	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/06/17 06:02	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/06/17 06:02	1
Trichloroethene	ND		0.19	0.049	ug/m3			12/06/17 06:02	1
Trichlorofluoromethane	**1.1**		1.1	0.17	ug/m3			12/06/17 06:02	1
Vinyl chloride	ND		0.090	0.046	ug/m3			12/06/17 06:02	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-OA-2
Date Collected: 12/02/17 15:02
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

Lab Sample ID: 200-41272-3
Matrix: Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/06/17 06:02	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/06/17 06:02	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/06/17 06:02	1
1,1,2-Trichlorotrifluoroethane	**0.063**	**J**	0.20	0.027	ppb v/v			12/06/17 06:02	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/06/17 06:02	1
1,1-Dichloroethene	ND		0.035	0.035	ppb v/v			12/06/17 06:02	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/06/17 06:02	1
1,2,4-Trimethylbenzene	ND		0.20	0.057	ppb v/v			12/06/17 06:02	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/06/17 06:02	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/06/17 06:02	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/06/17 06:02	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/06/17 06:02	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/06/17 06:02	1
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/06/17 06:02	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/06/17 06:02	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/06/17 06:02	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/06/17 06:02	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/06/17 06:02	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/06/17 06:02	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/06/17 06:02	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/06/17 06:02	1
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/06/17 06:02	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/06/17 06:02	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		0.50	0.065	ppb v/v			12/06/17 06:02	1
Acetone	**3.0**	**J**	5.0	1.3	ppb v/v			12/06/17 06:02	1
Benzene	**0.16**	**J**	0.20	0.028	ppb v/v			12/06/17 06:02	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/06/17 06:02	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/06/17 06:02	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/06/17 06:02	1
Bromoform	ND		0.20	0.035	ppb v/v			12/06/17 06:02	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/06/17 06:02	1
Carbon disulfide	**0.064**	**J**	0.50	0.028	ppb v/v			12/06/17 06:02	1
Carbon tetrachloride	**0.061**		0.035	0.011	ppb v/v			12/06/17 06:02	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/06/17 06:02	1
Chlorodifluoromethane	**0.25**	**J**	0.50	0.20	ppb v/v			12/06/17 06:02	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/06/17 06:02	1
Chloroform	ND		0.20	0.025	ppb v/v			12/06/17 06:02	1
Chloromethane	**0.49**		0.50	0.16	ppb v/v			12/06/17 06:02	1
cis-1,2-Dichloroethene	ND		0.035	0.029	ppb v/v			12/06/17 06:02	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/06/17 06:02	1
Cumene	ND		0.20	0.039	ppb v/v			12/06/17 06:02	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/06/17 06:02	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/06/17 06:02	1
Dichlorodifluoromethane	**0.37**	**J**	0.50	0.047	ppb v/v			12/06/17 06:02	1
Ethylbenzene	ND		0.20	0.034	ppb v/v			12/06/17 06:02	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/06/17 06:02	1
Isopropyl alcohol	**0.20**	**J**	5.0	0.13	ppb v/v			12/06/17 06:02	1
m,p-Xylene	ND		0.50	0.077	ppb v/v			12/06/17 06:02	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/06/17 06:02	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-OA-2
Lab Sample ID: 200-41272-3
Date Collected: 12/02/17 15:02
Matrix: Air
Date Received: 12/05/17 11:35
Sample Container: Summa Canister 6L

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl Ethyl Ketone (2-Butanone)	**0.54**		0.50	0.11	ppb v/v			12/06/17 06:02	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/06/17 06:02	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/06/17 06:02	1
Methylene Chloride	**0.11**	**J**	0.50	0.068	ppb v/v			12/06/17 06:02	1
Naphthalene	**0.42**	**J**	0.50	0.10	ppb v/v			12/06/17 06:02	1
n-Butane	**0.81**		0.50	0.046	ppb v/v			12/06/17 06:02	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/06/17 06:02	1
n-Heptane	ND		0.20	0.068	ppb v/v			12/06/17 06:02	1
n-Hexane	**0.087**	**J**	0.20	0.046	ppb v/v			12/06/17 06:02	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/06/17 06:02	1
o-Xylene	ND		0.20	0.040	ppb v/v			12/06/17 06:02	1
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/06/17 06:02	1
Styrene	ND		0.20	0.035	ppb v/v			12/06/17 06:02	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/06/17 06:02	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/06/17 06:02	1
Tetrachloroethene	ND		0.20	0.0098	ppb v/v			12/06/17 06:02	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/06/17 06:02	1
Toluene	**0.17**	**J**	0.20	0.035	ppb v/v			12/06/17 06:02	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/06/17 06:02	1
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/06/17 06:02	1
Trichloroethene	ND		0.035	0.0091	ppb v/v			12/06/17 06:02	1
Trichlorofluoromethane	**0.20**		0.20	0.031	ppb v/v			12/06/17 06:02	1
Vinyl chloride	ND		0.035	0.018	ppb v/v			12/06/17 06:02	1

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

Lab Sample ID: MB 200-124052/4
Matrix: Air
Analysis Batch: 124052

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1	0.14	ug/m3			12/05/17 13:19	1
1,1,2,2-Tetrachloroethane	ND		1.4	0.18	ug/m3			12/05/17 13:19	1
1,1,2-Trichloroethane	ND		1.1	0.093	ug/m3			12/05/17 13:19	1
1,1,2-Trichlorotrifluoroethane	ND		1.5	0.21	ug/m3			12/05/17 13:19	1
1,1-Dichloroethane	ND		0.81	0.069	ug/m3			12/05/17 13:19	1
1,1-Dichloroethene	ND		0.14	0.14	ug/m3			12/05/17 13:19	1
1,2,4-Trichlorobenzene	ND		3.7	1.4	ug/m3			12/05/17 13:19	1
1,2,4-Trimethylbenzene	ND		0.98	0.28	ug/m3			12/05/17 13:19	1
1,2-Dibromoethane	ND		1.5	0.18	ug/m3			12/05/17 13:19	1
1,2-Dichlorobenzene	ND		1.2	0.27	ug/m3			12/05/17 13:19	1
1,2-Dichloroethane	ND		0.81	0.14	ug/m3			12/05/17 13:19	1
1,2-Dichloropropane	ND		0.92	0.16	ug/m3			12/05/17 13:19	1
1,2-Dichlorotetrafluoroethane	ND		1.4	0.29	ug/m3			12/05/17 13:19	1
1,3,5-Trimethylbenzene	ND		0.98	0.20	ug/m3			12/05/17 13:19	1
1,3-Butadiene	ND		0.44	0.082	ug/m3			12/05/17 13:19	1
1,3-Dichlorobenzene	ND		1.2	0.30	ug/m3			12/05/17 13:19	1
1,4-Dichlorobenzene	ND		1.2	0.38	ug/m3			12/05/17 13:19	1
1,4-Dioxane	ND		18	2.7	ug/m3			12/05/17 13:19	1
2,2,4-Trimethylpentane	ND		0.93	0.20	ug/m3			12/05/17 13:19	1
2-Chlorotoluene	ND		1.0	0.18	ug/m3			12/05/17 13:19	1
3-Chloropropene	ND		1.6	0.20	ug/m3			12/05/17 13:19	1
4-Ethyltoluene	ND		0.98	0.20	ug/m3			12/05/17 13:19	1
4-Isopropyltoluene	ND		1.1	0.29	ug/m3			12/05/17 13:19	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		2.0	0.27	ug/m3			12/05/17 13:19	1
Acetone	ND		12	3.1	ug/m3			12/05/17 13:19	1
Benzene	ND		0.64	0.089	ug/m3			12/05/17 13:19	1
Benzyl chloride	ND		1.0	0.35	ug/m3			12/05/17 13:19	1
Bromodichloromethane	ND		1.3	0.40	ug/m3			12/05/17 13:19	1
Bromoethene(Vinyl Bromide)	ND		0.87	0.096	ug/m3			12/05/17 13:19	1
Bromoform	ND		2.1	0.36	ug/m3			12/05/17 13:19	1
Bromomethane	ND		0.78	0.14	ug/m3			12/05/17 13:19	1
Carbon disulfide	ND		1.6	0.087	ug/m3			12/05/17 13:19	1
Carbon tetrachloride	ND		0.22	0.069	ug/m3			12/05/17 13:19	1
Chlorobenzene	ND		0.92	0.12	ug/m3			12/05/17 13:19	1
Chlorodifluoromethane	ND		1.8	0.71	ug/m3			12/05/17 13:19	1
Chloroethane	ND		1.3	0.34	ug/m3			12/05/17 13:19	1
Chloroform	ND		0.98	0.12	ug/m3			12/05/17 13:19	1
Chloromethane	ND		1.0	0.33	ug/m3			12/05/17 13:19	1
cis-1,2-Dichloroethene	ND		0.14	0.11	ug/m3			12/05/17 13:19	1
cis-1,3-Dichloropropene	ND		0.91	0.16	ug/m3			12/05/17 13:19	1
Cumene	ND		0.98	0.19	ug/m3			12/05/17 13:19	1
Cyclohexane	ND		0.69	0.15	ug/m3			12/05/17 13:19	1
Dibromochloromethane	ND		1.7	0.14	ug/m3			12/05/17 13:19	1
Dichlorodifluoromethane	ND		2.5	0.23	ug/m3			12/05/17 13:19	1
Ethylbenzene	ND		0.87	0.15	ug/m3			12/05/17 13:19	1
Hexachlorobutadiene	ND		2.1	0.68	ug/m3			12/05/17 13:19	1
Isopropyl alcohol	ND		12	0.32	ug/m3			12/05/17 13:19	1

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

Lab Sample ID: MB 200-124052/4
Matrix: Air
Analysis Batch: 124052

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m,p-Xylene	ND		2.2	0.33	ug/m3			12/05/17 13:19	1
Methyl Butyl Ketone (2-Hexanone)	ND		2.0	0.35	ug/m3			12/05/17 13:19	1
Methyl Ethyl Ketone (2-Butanone)	ND		1.5	0.32	ug/m3			12/05/17 13:19	1
Methyl methacrylate	ND		2.0	0.45	ug/m3			12/05/17 13:19	1
Methyl tert-butyl ether	ND		0.72	0.15	ug/m3			12/05/17 13:19	1
Methylene Chloride	ND		1.7	0.24	ug/m3			12/05/17 13:19	1
Naphthalene	ND		2.6	0.52	ug/m3			12/05/17 13:19	1
n-Butane	ND		1.2	0.11	ug/m3			12/05/17 13:19	1
n-Butylbenzene	ND		1.1	0.37	ug/m3			12/05/17 13:19	1
n-Heptane	ND		0.82	0.28	ug/m3			12/05/17 13:19	1
n-Hexane	ND		0.70	0.16	ug/m3			12/05/17 13:19	1
n-Propylbenzene	ND		0.98	0.20	ug/m3			12/05/17 13:19	1
o-Xylene	ND		0.87	0.17	ug/m3			12/05/17 13:19	1
sec-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 13:19	1
Styrene	ND		0.85	0.15	ug/m3			12/05/17 13:19	1
tert-Butyl alcohol	ND		15	5.2	ug/m3			12/05/17 13:19	1
tert-Butylbenzene	ND		1.1	0.20	ug/m3			12/05/17 13:19	1
Tetrachloroethene	ND		1.4	0.066	ug/m3			12/05/17 13:19	1
Tetrahydrofuran	ND		15	3.5	ug/m3			12/05/17 13:19	1
Toluene	ND		0.75	0.13	ug/m3			12/05/17 13:19	1
trans-1,2-Dichloroethene	ND		0.79	0.20	ug/m3			12/05/17 13:19	1
trans-1,3-Dichloropropene	ND		0.91	0.17	ug/m3			12/05/17 13:19	1
Trichloroethene	ND		0.19	0.049	ug/m3			12/05/17 13:19	1
Trichlorofluoromethane	ND		1.1	0.17	ug/m3			12/05/17 13:19	1
Vinyl chloride	ND		0.090	0.046	ug/m3			12/05/17 13:19	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20	0.026	ppb v/v			12/05/17 13:19	1
1,1,2,2-Tetrachloroethane	ND		0.20	0.026	ppb v/v			12/05/17 13:19	1
1,1,2-Trichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 13:19	1
1,1,2-Trichlorotrifluoroethane	ND		0.20	0.027	ppb v/v			12/05/17 13:19	1
1,1-Dichloroethane	ND		0.20	0.017	ppb v/v			12/05/17 13:19	1
1,1-Dichloroethene	ND		0.035	0.035	ppb v/v			12/05/17 13:19	1
1,2,4-Trichlorobenzene	ND		0.50	0.19	ppb v/v			12/05/17 13:19	1
1,2,4-Trimethylbenzene	ND		0.20	0.057	ppb v/v			12/05/17 13:19	1
1,2-Dibromoethane	ND		0.20	0.023	ppb v/v			12/05/17 13:19	1
1,2-Dichlorobenzene	ND		0.20	0.045	ppb v/v			12/05/17 13:19	1
1,2-Dichloroethane	ND		0.20	0.034	ppb v/v			12/05/17 13:19	1
1,2-Dichloropropane	ND		0.20	0.035	ppb v/v			12/05/17 13:19	1
1,2-Dichlorotetrafluoroethane	ND		0.20	0.041	ppb v/v			12/05/17 13:19	1
1,3,5-Trimethylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 13:19	1
1,3-Butadiene	ND		0.20	0.037	ppb v/v			12/05/17 13:19	1
1,3-Dichlorobenzene	ND		0.20	0.050	ppb v/v			12/05/17 13:19	1
1,4-Dichlorobenzene	ND		0.20	0.063	ppb v/v			12/05/17 13:19	1
1,4-Dioxane	ND		5.0	0.76	ppb v/v			12/05/17 13:19	1
2,2,4-Trimethylpentane	ND		0.20	0.043	ppb v/v			12/05/17 13:19	1
2-Chlorotoluene	ND		0.20	0.035	ppb v/v			12/05/17 13:19	1
3-Chloropropene	ND		0.50	0.063	ppb v/v			12/05/17 13:19	1

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

Lab Sample ID: MB 200-124052/4
Matrix: Air
Analysis Batch: 124052

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Ethyltoluene	ND		0.20	0.040	ppb v/v			12/05/17 13:19	1
4-Isopropyltoluene	ND		0.20	0.052	ppb v/v			12/05/17 13:19	1
4-Methyl-2-pentanone (Methyl isobutyl ketone)	ND		0.50	0.065	ppb v/v			12/05/17 13:19	1
Acetone	ND		5.0	1.3	ppb v/v			12/05/17 13:19	1
Benzene	ND		0.20	0.028	ppb v/v			12/05/17 13:19	1
Benzyl chloride	ND		0.20	0.067	ppb v/v			12/05/17 13:19	1
Bromodichloromethane	ND		0.20	0.059	ppb v/v			12/05/17 13:19	1
Bromoethene(Vinyl Bromide)	ND		0.20	0.022	ppb v/v			12/05/17 13:19	1
Bromoform	ND		0.20	0.035	ppb v/v			12/05/17 13:19	1
Bromomethane	ND		0.20	0.036	ppb v/v			12/05/17 13:19	1
Carbon disulfide	ND		0.50	0.028	ppb v/v			12/05/17 13:19	1
Carbon tetrachloride	ND		0.035	0.011	ppb v/v			12/05/17 13:19	1
Chlorobenzene	ND		0.20	0.025	ppb v/v			12/05/17 13:19	1
Chlorodifluoromethane	ND		0.50	0.20	ppb v/v			12/05/17 13:19	1
Chloroethane	ND		0.50	0.13	ppb v/v			12/05/17 13:19	1
Chloroform	ND		0.20	0.025	ppb v/v			12/05/17 13:19	1
Chloromethane	ND		0.50	0.16	ppb v/v			12/05/17 13:19	1
cis-1,2-Dichloroethene	ND		0.035	0.029	ppb v/v			12/05/17 13:19	1
cis-1,3-Dichloropropene	ND		0.20	0.036	ppb v/v			12/05/17 13:19	1
Cumene	ND		0.20	0.039	ppb v/v			12/05/17 13:19	1
Cyclohexane	ND		0.20	0.045	ppb v/v			12/05/17 13:19	1
Dibromochloromethane	ND		0.20	0.017	ppb v/v			12/05/17 13:19	1
Dichlorodifluoromethane	ND		0.50	0.047	ppb v/v			12/05/17 13:19	1
Ethylbenzene	ND		0.20	0.034	ppb v/v			12/05/17 13:19	1
Hexachlorobutadiene	ND		0.20	0.064	ppb v/v			12/05/17 13:19	1
Isopropyl alcohol	ND		5.0	0.13	ppb v/v			12/05/17 13:19	1
m,p-Xylene	ND		0.50	0.077	ppb v/v			12/05/17 13:19	1
Methyl Butyl Ketone (2-Hexanone)	ND		0.50	0.086	ppb v/v			12/05/17 13:19	1
Methyl Ethyl Ketone (2-Butanone)	ND		0.50	0.11	ppb v/v			12/05/17 13:19	1
Methyl methacrylate	ND		0.50	0.11	ppb v/v			12/05/17 13:19	1
Methyl tert-butyl ether	ND		0.20	0.041	ppb v/v			12/05/17 13:19	1
Methylene Chloride	ND		0.50	0.068	ppb v/v			12/05/17 13:19	1
Naphthalene	ND		0.50	0.10	ppb v/v			12/05/17 13:19	1
n-Butane	ND		0.50	0.046	ppb v/v			12/05/17 13:19	1
n-Butylbenzene	ND		0.20	0.068	ppb v/v			12/05/17 13:19	1
n-Heptane	ND		0.20	0.068	ppb v/v			12/05/17 13:19	1
n-Hexane	ND		0.20	0.046	ppb v/v			12/05/17 13:19	1
n-Propylbenzene	ND		0.20	0.040	ppb v/v			12/05/17 13:19	1
o-Xylene	ND		0.20	0.040	ppb v/v			12/05/17 13:19	1
sec-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 13:19	1
Styrene	ND		0.20	0.035	ppb v/v			12/05/17 13:19	1
tert-Butyl alcohol	ND		5.0	1.7	ppb v/v			12/05/17 13:19	1
tert-Butylbenzene	ND		0.20	0.037	ppb v/v			12/05/17 13:19	1
Tetrachloroethene	ND		0.20	0.0098	ppb v/v			12/05/17 13:19	1
Tetrahydrofuran	ND		5.0	1.2	ppb v/v			12/05/17 13:19	1
Toluene	ND		0.20	0.035	ppb v/v			12/05/17 13:19	1
trans-1,2-Dichloroethene	ND		0.20	0.050	ppb v/v			12/05/17 13:19	1

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

Lab Sample ID: MB 200-124052/4
Matrix: Air
Analysis Batch: 124052

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.20	0.038	ppb v/v			12/05/17 13:19	1
Trichloroethene	ND		0.035	0.0091	ppb v/v			12/05/17 13:19	1
Trichlorofluoromethane	ND		0.20	0.031	ppb v/v			12/05/17 13:19	1
Vinyl chloride	ND		0.035	0.018	ppb v/v			12/05/17 13:19	1

Lab Sample ID: LCS 200-124052/3
Matrix: Air
Analysis Batch: 124052

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	54.6	49.6		ug/m3		91	70 - 130
1,1,2,2-Tetrachloroethane	68.6	63.8		ug/m3		93	69 - 129
1,1,2-Trichloroethane	54.6	51.5		ug/m3		94	69 - 129
1,1,2-Trichlorotrifluoroethane	76.6	71.5		ug/m3		93	68 - 128
1,1-Dichloroethane	40.5	37.0		ug/m3		91	66 - 126
1,1-Dichloroethene	39.6	34.9		ug/m3		88	67 - 127
1,2,4-Trichlorobenzene	74.2	76.5		ug/m3		103	59 - 126
1,2,4-Trimethylbenzene	49.2	45.5		ug/m3		93	65 - 125
1,2-Dibromoethane	76.8	72.9		ug/m3		95	70 - 130
1,2-Dichlorobenzene	60.1	55.0		ug/m3		91	67 - 127
1,2-Dichloroethane	40.5	37.1		ug/m3		92	67 - 132
1,2-Dichloropropane	46.2	42.1		ug/m3		91	67 - 127
1,2-Dichlorotetrafluoroethane	69.9	71.0		ug/m3		102	78 - 138
1,3,5-Trimethylbenzene	49.2	45.1		ug/m3		92	65 - 125
1,3-Butadiene	22.1	19.4		ug/m3		88	59 - 125
1,3-Dichlorobenzene	60.1	55.7		ug/m3		93	67 - 127
1,4-Dichlorobenzene	60.1	55.5		ug/m3		92	66 - 126
1,4-Dioxane	36.0	31.8		ug/m3		88	66 - 132
2,2,4-Trimethylpentane	46.7	42.8		ug/m3		92	67 - 127
2-Chlorotoluene	51.8	47.6		ug/m3		92	67 - 127
3-Chloropropene	31.3	32.0		ug/m3		102	53 - 133
4-Ethyltoluene	49.2	46.5		ug/m3		95	69 - 129
4-Isopropyltoluene	54.9	49.9		ug/m3		91	67 - 129
4-Methyl-2-pentanone (Methyl isobutyl ketone)	41.0	37.6		ug/m3		92	62 - 130
Acetone	23.7	23.0		ug/m3		97	64 - 136
Benzene	31.9	29.1		ug/m3		91	67 - 127
Benzyl chloride	51.8	51.1		ug/m3		99	54 - 135
Bromodichloromethane	67.0	62.0		ug/m3		93	69 - 129
Bromoethene(Vinyl Bromide)	43.7	40.7		ug/m3		93	67 - 127
Bromoform	103	91.7		ug/m3		89	34 - 170
Bromomethane	38.8	36.2		ug/m3		93	68 - 128
Carbon disulfide	31.1	34.6		ug/m3		111	81 - 141
Carbon tetrachloride	62.9	57.3		ug/m3		91	62 - 143
Chlorobenzene	46.0	42.0		ug/m3		91	68 - 128
Chlorodifluoromethane	35.4	32.6		ug/m3		92	64 - 128
Chloroethane	26.4	24.9		ug/m3		94	65 - 125
Chloroform	48.8	45.5		ug/m3		93	69 - 129
Chloromethane	20.6	18.9		ug/m3		91	57 - 126

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

Lab Sample ID: LCS 200-124052/3
Matrix: Air
Analysis Batch: 124052

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	39.6	34.8		ug/m3		88	67 - 127
cis-1,3-Dichloropropene	45.4	42.9		ug/m3		94	70 - 130
Cumene	49.1	44.2		ug/m3		90	67 - 127
Cyclohexane	34.4	32.2		ug/m3		94	69 - 129
Dibromochloromethane	85.2	78.9		ug/m3		93	66 - 130
Dichlorodifluoromethane	49.4	48.0		ug/m3		97	68 - 128
Ethylbenzene	43.4	40.1		ug/m3		92	68 - 128
Hexachlorobutadiene	107	101		ug/m3		95	62 - 130
Isopropyl alcohol	24.6	21.7		ug/m3		88	55 - 124
m,p-Xylene	86.8	79.4		ug/m3		91	68 - 128
Methyl Butyl Ketone (2-Hexanone)	41.0	38.8		ug/m3		95	61 - 127
Methyl Ethyl Ketone (2-Butanone)	29.5	28.0		ug/m3		95	62 - 122
Methyl methacrylate	40.9	39.2		ug/m3		96	70 - 130
Methyl tert-butyl ether	36.0	33.7		ug/m3		94	67 - 127
Methylene Chloride	34.7	32.9		ug/m3		95	62 - 122
Naphthalene	52.4	54.4		ug/m3		104	50 - 121
n-Butane	23.8	21.6		ug/m3		91	56 - 130
n-Butylbenzene	54.9	51.4		ug/m3		94	67 - 127
n-Heptane	41.0	36.4		ug/m3		89	62 - 130
n-Hexane	35.2	34.8		ug/m3		99	71 - 131
n-Propylbenzene	49.1	44.7		ug/m3		91	67 - 127
o-Xylene	43.4	39.2		ug/m3		90	67 - 127
sec-Butylbenzene	54.9	49.3		ug/m3		90	66 - 126
Styrene	42.6	40.5		ug/m3		95	68 - 128
tert-Butyl alcohol	30.3	27.3		ug/m3		90	64 - 124
tert-Butylbenzene	54.9	49.0		ug/m3		89	63 - 125
Tetrachloroethene	67.8	59.5		ug/m3		88	70 - 130
Tetrahydrofuran	29.5	28.4		ug/m3		96	61 - 136
Toluene	37.7	34.9		ug/m3		93	67 - 127
trans-1,2-Dichloroethene	39.6	39.1		ug/m3		99	72 - 132
trans-1,3-Dichloropropene	45.4	42.4		ug/m3		93	69 - 129
Trichloroethene	53.7	48.8		ug/m3		91	68 - 128
Trichlorofluoromethane	56.2	51.2		ug/m3		91	67 - 127
Vinyl chloride	25.6	22.0		ug/m3		86	62 - 125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	10	9.10		ppb v/v		91	70 - 130
1,1,2,2-Tetrachloroethane	10	9.30		ppb v/v		93	69 - 129
1,1,2-Trichloroethane	10	9.43		ppb v/v		94	69 - 129
1,1,2-Trichlorotrifluoroethane	10	9.34		ppb v/v		93	68 - 128
1,1-Dichloroethane	10	9.13		ppb v/v		91	66 - 126
1,1-Dichloroethene	10	8.80		ppb v/v		88	67 - 127
1,2,4-Trichlorobenzene	10	10.3		ppb v/v		103	59 - 126
1,2,4-Trimethylbenzene	10	9.26		ppb v/v		93	65 - 125
1,2-Dibromoethane	10	9.49		ppb v/v		95	70 - 130
1,2-Dichlorobenzene	10	9.14		ppb v/v		91	67 - 127
1,2-Dichloroethane	10	9.16		ppb v/v		92	67 - 132

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

Lab Sample ID: LCS 200-124052/3
Matrix: Air
Analysis Batch: 124052

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloropropane	10	9.11		ppb v/v		91	67 - 127
1,2-Dichlorotetrafluoroethane	10	10.2		ppb v/v		102	78 - 138
1,3,5-Trimethylbenzene	10	9.16		ppb v/v		92	65 - 125
1,3-Butadiene	10	8.76		ppb v/v		88	59 - 125
1,3-Dichlorobenzene	10	9.26		ppb v/v		93	67 - 127
1,4-Dichlorobenzene	10	9.23		ppb v/v		92	66 - 126
1,4-Dioxane	10	8.83		ppb v/v		88	66 - 132
2,2,4-Trimethylpentane	10	9.15		ppb v/v		92	67 - 127
2-Chlorotoluene	10	9.20		ppb v/v		92	67 - 127
3-Chloropropene	10	10.2		ppb v/v		102	53 - 133
4-Ethyltoluene	10	9.45		ppb v/v		95	69 - 129
4-Isopropyltoluene	10	9.08		ppb v/v		91	67 - 129
4-Methyl-2-pentanone (Methyl isobutyl ketone)	10	9.18		ppb v/v		92	62 - 130
Acetone	10	9.68		ppb v/v		97	64 - 136
Benzene	10	9.11		ppb v/v		91	67 - 127
Benzyl chloride	10	9.86		ppb v/v		99	54 - 135
Bromodichloromethane	10	9.25		ppb v/v		93	69 - 129
Bromoethene(Vinyl Bromide)	10	9.30		ppb v/v		93	67 - 127
Bromoform	10	8.87		ppb v/v		89	34 - 170
Bromomethane	10	9.33		ppb v/v		93	68 - 128
Carbon disulfide	10	11.1		ppb v/v		111	81 - 141
Carbon tetrachloride	10	9.12		ppb v/v		91	62 - 143
Chlorobenzene	10	9.13		ppb v/v		91	68 - 128
Chlorodifluoromethane	10	9.21		ppb v/v		92	64 - 128
Chloroethane	10	9.44		ppb v/v		94	65 - 125
Chloroform	10	9.32		ppb v/v		93	69 - 129
Chloromethane	10	9.15		ppb v/v		91	57 - 126
cis-1,2-Dichloroethene	10	8.77		ppb v/v		88	67 - 127
cis-1,3-Dichloropropene	10	9.45		ppb v/v		94	70 - 130
Cumene	10	8.99		ppb v/v		90	67 - 127
Cyclohexane	10	9.36		ppb v/v		94	69 - 129
Dibromochloromethane	10	9.26		ppb v/v		93	66 - 130
Dichlorodifluoromethane	10	9.71		ppb v/v		97	68 - 128
Ethylbenzene	10	9.24		ppb v/v		92	68 - 128
Hexachlorobutadiene	10	9.46		ppb v/v		95	62 - 130
Isopropyl alcohol	10	8.81		ppb v/v		88	55 - 124
m,p-Xylene	20	18.3		ppb v/v		91	68 - 128
Methyl Butyl Ketone (2-Hexanone)	10	9.46		ppb v/v		95	61 - 127
Methyl Ethyl Ketone (2-Butanone)	10	9.49		ppb v/v		95	62 - 122
Methyl methacrylate	10	9.57		ppb v/v		96	70 - 130
Methyl tert-butyl ether	10	9.35		ppb v/v		94	67 - 127
Methylene Chloride	10	9.47		ppb v/v		95	62 - 122
Naphthalene	10	10.4		ppb v/v		104	50 - 121
n-Butane	10	9.10		ppb v/v		91	56 - 130
n-Butylbenzene	10	9.36		ppb v/v		94	67 - 127
n-Heptane	10	8.88		ppb v/v		89	62 - 130

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

Lab Sample ID: LCS 200-124052/3
Matrix: Air
Analysis Batch: 124052

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
n-Hexane	10	9.87		ppb v/v		99	71 - 131
n-Propylbenzene	10	9.09		ppb v/v		91	67 - 127
o-Xylene	10	9.04		ppb v/v		90	67 - 127
sec-Butylbenzene	10	8.98		ppb v/v		90	66 - 126
Styrene	10	9.51		ppb v/v		95	68 - 128
tert-Butyl alcohol	10	9.00		ppb v/v		90	64 - 124
tert-Butylbenzene	10	8.92		ppb v/v		89	63 - 125
Tetrachloroethene	10	8.78		ppb v/v		88	70 - 130
Tetrahydrofuran	10	9.64		ppb v/v		96	61 - 136
Toluene	10	9.27		ppb v/v		93	67 - 127
trans-1,2-Dichloroethene	10	9.86		ppb v/v		99	72 - 132
trans-1,3-Dichloropropene	10	9.34		ppb v/v		93	69 - 129
Trichloroethene	10	9.09		ppb v/v		91	68 - 128
Trichlorofluoromethane	10	9.11		ppb v/v		91	67 - 127
Vinyl chloride	10	8.59		ppb v/v		86	62 - 125

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Air - GC/MS VOA

Analysis Batch: 124052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-41272-1	OS-SSV-2	Total/NA	Air	TO-15	
200-41272-2	OS-IA-2	Total/NA	Air	TO-15	
200-41272-2 - DL	OS-IA-2	Total/NA	Air	TO-15	
200-41272-3	OS-OA-2	Total/NA	Air	TO-15	
MB 200-124052/4	Method Blank	Total/NA	Air	TO-15	
LCS 200-124052/3	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Client Sample ID: OS-SSV-2
Lab Sample ID: 200-41272-1
Date Collected: 12/02/17 15:00
Matrix: Air
Date Received: 12/05/17 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.46	124052	12/06/17 09:19	K1P	TAL BUR

Client Sample ID: OS-IA-2
Lab Sample ID: 200-41272-2
Date Collected: 12/02/17 15:00
Matrix: Air
Date Received: 12/05/17 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	124052	12/06/17 05:08	K1P	TAL BUR
Total/NA	Analysis	TO-15	DL	2.45	124052	12/06/17 08:26	K1P	TAL BUR

Client Sample ID: OS-OA-2
Lab Sample ID: 200-41272-3
Date Collected: 12/02/17 15:02
Matrix: Air
Date Received: 12/05/17 11:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	124052	12/06/17 06:02	K1P	TAL BUR

Laboratory References:

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

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
TestAmerica Job ID: 200-41272-1
Project/Site: (Moog) Jamison Road Site- Elma, NY

Laboratory: TestAmerica Burlington

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-19
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-01-19
Florida	NELAP	4	E87467	06-30-18
L-A-B	DoD ELAP		L2336	02-25-20
Maine	State Program	1	VT00008	04-17-19
Minnesota	NELAP	5	050-999-436	12-31-18
New Jersey	NELAP	2	VT972	06-30-18
New York	NELAP	2	10391	04-01-18
Pennsylvania	NELAP	3	68-00489	04-30-18
Rhode Island	State Program	1	LAO00298	12-30-18
US Fish & Wildlife	Federal		LE-058448-0	07-31-18
USDA	Federal		P330-11-00093	12-05-19
Vermont	State Program	1	VT-4000	12-31-18
Virginia	NELAP	3	460209	12-14-18

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

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

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

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

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-41272-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-41272-1	OS-SSV-2	Air	12/02/17 15:00	12/05/17 11:35
200-41272-2	OS-IA-2	Air	12/02/17 15:00	12/05/17 11:35
200-41272-3	OS-OA-2	Air	12/02/17 15:02	12/05/17 11:35

TestAmerica Burlington
30 Community Drive
Suite 11
South Burlington, VT 05403-6809
phone 802.660.1990 fax 802.660.1919

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact Information	**Client Project Manager:** Tom Forbes	**Samples Collected By:** Thomas Forbes, Richard Dubiel
Company Name: Benchmark	Phone: 716 856-0599	COC No: 1
Address: 2558 Hamburg Tpk	Email: tforbes@benchmarkturnkey.com	1 of 1 COCs
City/State/Zip: Buffalo, NY 14218	Site Contact: (same as above)	
Phone: 716 856-0599	Tel/Fax	For Lab Use Only:
FAX: 716 856-0583	**Anaylsis Turnaround Time**	Walk-in Client:
Project Name: Moog Offsite SVE	Standard (Specific):	Lab Sampling:
Site/Location: 6961 Seneca	Rush (Specifiy): 3 Day	Job / SDG No.:
PO# B0400-017		(See below for Add'l Items)

Sample Identification	Sample Date(s)	Time Start	Time Stop	Canister Vacuum in Field, 'Hg (Start)'	Canister Vacuum in Field, 'Hg (Stop)'	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes sectio	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
OS-SSV-2	12/2/17	0835	03:00	-30	-11	3744	5139	X									X					
OS-IA-2	12/2/17	0835	03:00	-30	-10	3114	5707	X								X						
OS-OA-2	12/2/17	0835	03:02	-29	-7.5	6119	4793	X								X						

Temperature (Fahrenheit)			
Start	Interior 70°F	Ambient 30°F	
Stop	70°F	45°F	

Pressure (inches of Hg)		
Start	Interior	Ambient
Stop		

200-41272 COC

Special Instructions/QC Requirements & Comments:

Level III QC. Please reference Job no. B0400-017 on invoice. Reporting levels per NYSDOH SVE guidance

Samples Shipped by:	Date / Time: 12-4-17/0820	Samples Received by: VUM 12/5/17 1135 TABUR
Samples Relinquished by:	Date / Time:	Received by:
Relinquished by:	Date / Time:	Received by:

Lab Use Only: Shipper Name: CB Opened by: VUM Condition: Intact

Form No. CA-C-WI-003, Rev. 2.5, dated 9/22/2017

2/15/2018 (Rev. 1)


(802) 923-1058
ORIGIN ID:DKKA (716) 691-2600
CHAR BRONSON
TEST AMERICA
10 HAZELWOOD
AMHERST , NY 14228
UNITED STATES US
SHIP DATE: 04DEC17
ACTWGT: 27.45 LB
CAD: 846654/CAFE3108
BILL RECIPIENT
TO SAMPLE MGT.
TA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 660-1990
REF:
INV:
PO:
DEPT:
FedEx
Express
TUE - 05 DEC 3:00P
TRK# 0201 5657 0123 4971
STANDARD OVERNIGHT
XH BTVA
05403
VT-US
BTV
Part # 156148-434 RIT EXP 09/18

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 200-41272-1

Login Number: 41272
List Number: 1
Creator: Hahl, Victoria L

List Source: TestAmerica Burlington

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

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 200-41272-1

Login Number: 41272
List Number: 2
Creator: Hahl, Victoria L

List Source: TestAmerica Burlington

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

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Oven 3/4	23	11/9/2017	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	3835	.05	.05	0	-29.9	G25	11.10.17	9:22	EE	22	G25	11.24.17	16:00	EE	22
2	3338	"	.05	0	-29.9	G25	"	"	"	"	G25	"	"	"	"
3	4280	"	.07	.02	-29.7	G25	"	"	"	"	G25	"	"	"	"
4	8118	"	.07	.02	"	G25	"	"	"	"	G25	"	"	"	"
5	4377	"	.07	.02	"	G25	"	"	"	"	G25	"	"	"	"
~~6~~	~~3437~~	~~.04~~				~~G25~~	~~11.10.17~~	~~9:22~~	~~EE~~	~~22~~	G25	~~11.24.17~~	~~16:00~~	~~EE~~	~~22~~
7	2988	.05	.07	.02	-29.7	G25	11.10.17	9:22	EE	22	G25	11.24.17	1600	EE	22
8	4100	"	.17	.12	-29.7	G25	"	"	"	"	G25	"	"	"	"
9	2989	"	.05	0	-29.9	G25	"	"	"	"	G25	"	"	"	"
10	3507	"	.05	0	-29.9	G25	"	"	"	"	G25	"	"	"	"
11	3660	"	.08	.03	-29.7	G25	"	"	"	"	G25	"	"	"	"
12	5707	"	.05	0	-29.9	G25	"	"	"	"	G25	"	"	"	"

EE 11.15

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

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

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

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review Limited	Review Date	Reviewer
3137	11/14/17	27829	AB		XXXX				11/14/17	PAD

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

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

Comments:

FAI023:04.26.17:10
TestAmerica Burlington

Pre-Shipment Clean Canister Certification Report

Canister Cleaning & Pre-Shipment Leak Test

System ID	# Cycles	Cleaning Date	Technician	Canister Size		Certification Type:	
Top Rack	20	11/14/2017	EJE	1L	6L	Individual	Batch

Port	Can ID	Initial[1] (psia)	Final (psia)	Diff.[3]	Final ("Hg)	Initial Reading Gauge:	Date:	Time:	Tech:	Temp:	Final Reading Gauge:	Date:	Time:	Tech:	Temp:
1	4084	.04	.06	.02	-29.8	G25	11.11.17	8:35	EE	22	G25	11/16/17	15:40	EE	22
2	3402	.04	.09	0.0	-29.4	G25	11.16.17	9:20	EE	23	G25	11/25/17	1305	SML	21.0
3	4554		.15	.11	-29.4	G25					G25				
4	5686		.04	0	-30.2	G25					G25				
5	5671		.07	-.03	-29.4	G25					G25				
6	4069		.04	0.0	-29.5	G25					G25				
7	2881					G25					G25				
8	5099		-.04	0.0	-29.4	G25					G25	11/25/17	1305	SML	21.0
9	4793		-.06	.02	-29.4	G25					G25				
10	5139		-.04	0.0	-29.4	G25					G25				
11	4360		.21	.17	-29.4	G25					G25				
12	5417		.04	0.0	-29.4	G25					G25				

EE 11/15/17

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

[3] Difference = Final Pressure - Initial Pressure . Acceptance Criteria: (1) The difference must be less than or equal to + 0.25psi. (2) Pressure readings must be at least 24 hours apart.

If time frame was not met, the PM must authorize shipment of canister **PM Authorization** **Date:**

Clean Canister Certification Analysis & Authorization of Release to Inventory

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

Can ID	Date	Sequence	Analyst	Inventory Level 1	2	3	4	Secondary Review: Limited	Review Date	Reviewer
4084	11/16/17	27924	WNO for AB		XXXX				11/17/17	WNO

Inventory Level 1: Individual Canister Certification (TO15LL 0.01).

Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

Inventory Level 3: Individual or Batch Certification (TO15 0.2 ppbv).

Inventory Level 4: Individual or Batch Certification (TO15LLNJ 0.08 ppbv).

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

Comments:

FAI023:04.26.17:10
TestAmerica Burlington

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

Lab Name: TestAmerica Burlington Job No.: 200-40876-1

SDG No.:

Client Sample ID: 3137 Lab Sample ID: 200-40876-6

Matrix: Air Lab File ID: 27829_19.D

Analysis Method: TO-15 Date Collected: 11/09/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 11/11/2017 01:48

Soil Aliquot Vol: Dilution Factor: 0.2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123199 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

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

Lab Name: TestAmerica Burlington Job No.: 200-40876-1

SDG No.:

Client Sample ID: 3137 Lab Sample ID: 200-40876-6

Matrix: Air Lab File ID: 27829_19.D

Analysis Method: TO-15 Date Collected: 11/09/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 11/11/2017 01:48

Soil Aliquot Vol: Dilution Factor: 0.2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123199 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

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

Lab Name: TestAmerica Burlington Job No.: 200-40876-1

SDG No.:

Client Sample ID: 3137 Lab Sample ID: 200-40876-6

Matrix: Air Lab File ID: 27829_19.D

Analysis Method: TO-15 Date Collected: 11/09/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 11/11/2017 01:48

Soil Aliquot Vol: Dilution Factor: 0.2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123199 Units: ppb v/v

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

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171110-27829.b\27829_19.D
Lims ID: 200-40876-A-6
Client ID: 3137
Sample Type: Client
Inject. Date: 11-Nov-2017 01:48:30 ALS Bottle#: 19 Worklist Smp#: 19
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0027829-019
Misc. Info.: 40876-06
Operator ID: pad Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20171110-27829.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 13-Nov-2017 10:02:00 Calib Date: 07-Nov-2017 23:53:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20171107-27777.b\27777_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK026

First Level Reviewer: puangmaleek Date: 13-Nov-2017 10:01:59

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	1 Propene	41		3.076				ND	
	2 Dichlorodifluoromethane	85		3.140				ND	
	3 Chlorodifluoromethane	51		3.188				ND	
	4 1,2-Dichloro-1,1,2,2-tetra	85		3.386				ND	
	5 Chloromethane	50		3.520				ND	
	6 Butane	43		3.702				ND	
	7 Vinyl chloride	62		3.745				ND	
	8 Butadiene	54		3.814				ND	
	10 Bromomethane	94		4.456				ND	
	11 Chloroethane	64		4.670				ND	
	13 Vinyl bromide	106		5.039				ND	
	14 Trichlorofluoromethane	101		5.125				ND	
	17 Ethanol	45	5.692	5.687	0.006	97	2797	0.1694	
	20 1,1,2-Trichloro-1,2,2-trif	101		6.147				ND	
	21 1,1-Dichloroethene	96		6.195				ND	
	22 Acetone	43		6.452				ND	
	23 Carbon disulfide	76		6.585				ND	
	24 Isopropyl alcohol	45		6.735				ND	
	25 3-Chloro-1-propene	41		6.965				ND	
	27 Methylene Chloride	49		7.265				ND	
	28 2-Methyl-2-propanol	59		7.505				ND	
	29 Methyl tert-butyl ether	73		7.671				ND	
	31 trans-1,2-Dichloroethene	61		7.693				ND	
	33 Hexane	57		8.062				ND	
	34 1,1-Dichloroethane	63		8.575				ND	
	35 Vinyl acetate	43		8.656				ND	
S	30 1,2-Dichloroethene, Total	61		9.665				ND	
	37 cis-1,2-Dichloroethene	96		9.709				ND	
	38 2-Butanone (MEK)	72		9.779				ND	
	39 Ethyl acetate	88		9.822				ND	
*	40 Chlorobromomethane	128	10.186	10.191	-0.005	94	277648	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
41 Tetrahydrofuran	42		10.212				ND	
42 Chloroform	83		10.330				ND	
43 Cyclohexane	84		10.565				ND	
44 1,1,1-Trichloroethane	97		10.608				ND	
45 Carbon tetrachloride	117		10.865				ND	
46 Isooctane	57		11.314				ND	
47 Benzene	78		11.368				ND	
48 1,2-Dichloroethane	62		11.571				ND	
49 n-Heptane	43		11.732				ND	
* 50 1,4-Difluorobenzene	114	12.261	12.267	-0.006	96	1426711	10.0	
53 Trichloroethene	95		12.759				ND	
54 1,2-Dichloropropane	63		13.358				ND	
55 Methyl methacrylate	69		13.545				ND	
56 1,4-Dioxane	88		13.615				ND	
57 Dibromomethane	174		13.625				ND	
58 Dichlorobromomethane	83		13.941				ND	
60 cis-1,3-Dichloropropene	75		14.920				ND	
61 4-Methyl-2-pentanone (MIBK	43		15.241				ND	
65 Toluene	92		15.530				ND	
66 trans-1,3-Dichloropropene	75		16.172				ND	
67 1,1,2-Trichloroethane	83		16.562				ND	
68 Tetrachloroethene	166		16.653				ND	
69 2-Hexanone	43		17.055				ND	
71 Chlorodibromomethane	129		17.360				ND	
72 Ethylene Dibromide	107		17.643				ND	
* 74 Chlorobenzene-d5	117	18.590	18.590	0.000	91	1238323	10.0	
75 Chlorobenzene	112		18.654				ND	
76 Ethylbenzene	91		18.815				ND	
78 m-Xylene & p-Xylene	106		19.082				ND	
S 73 Xylenes, Total	106		19.600				ND	
79 o-Xylene	106		19.976				ND	
80 Styrene	104		20.040				ND	
81 Bromoform	173		20.505				ND	
82 Isopropylbenzene	105		20.735				ND	
84 1,1,2,2-Tetrachloroethane	83		21.463				ND	
85 N-Propylbenzene	91		21.522				ND	
88 4-Ethyltoluene	105		21.725				ND	
89 2-Chlorotoluene	91		21.730				ND	
90 1,3,5-Trimethylbenzene	105		21.843				ND	
92 tert-Butylbenzene	119		22.362				ND	
93 1,2,4-Trimethylbenzene	105		22.463				ND	
94 sec-Butylbenzene	105		22.704				ND	
95 4-Isopropyltoluene	119		22.918				ND	
96 1,3-Dichlorobenzene	146		22.945				ND	
97 1,4-Dichlorobenzene	146		23.089				ND	
98 Benzyl chloride	91		23.298				ND	
100 n-Butylbenzene	91		23.512				ND	
101 1,2-Dichlorobenzene	146		23.640				ND	
103 1,2,4-Trichlorobenzene	180		26.208				ND	
104 Hexachlorobutadiene	225		26.395				ND	
105 Naphthalene	128		26.705				ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

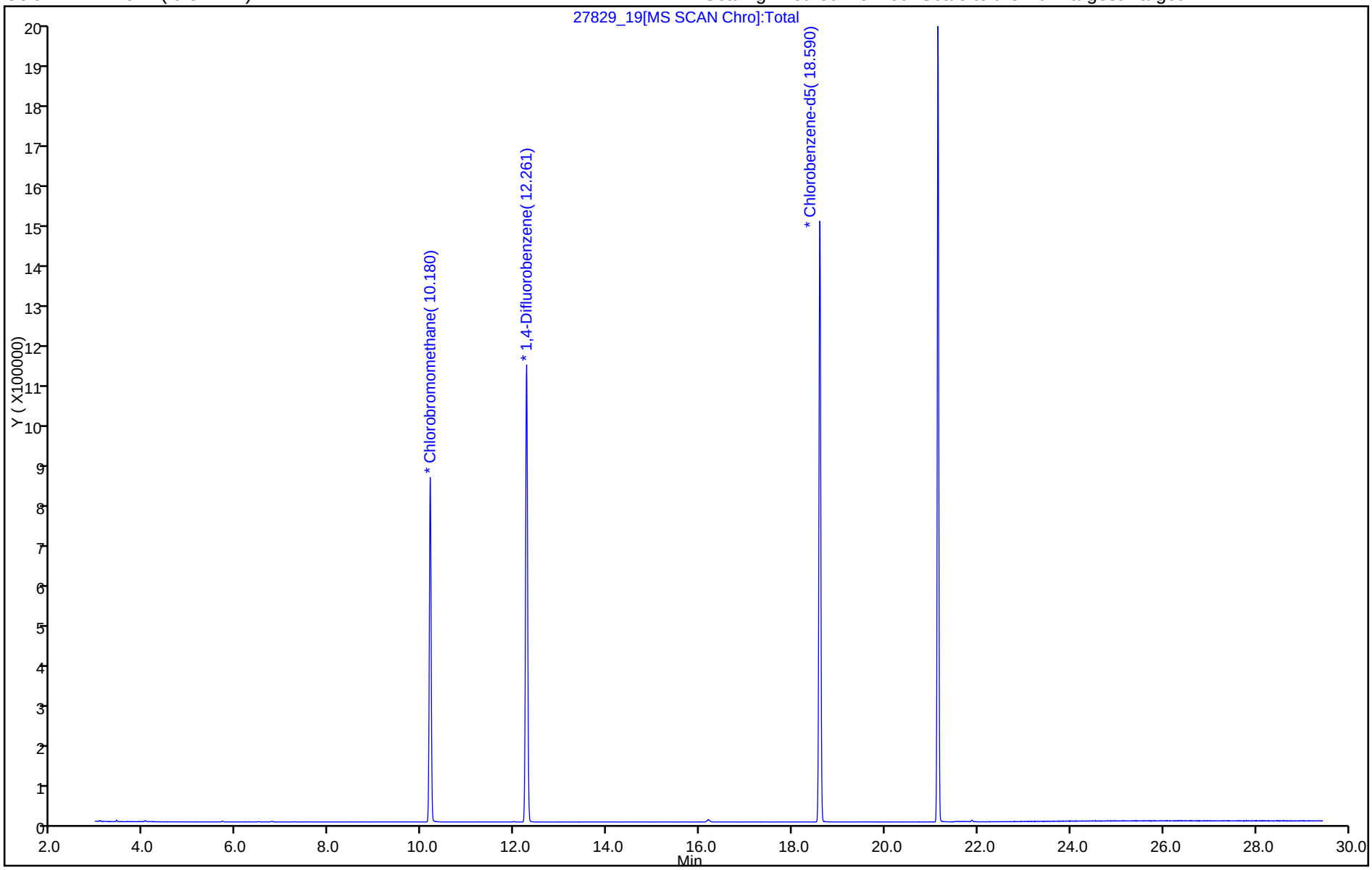
Report Date: 13-Nov-2017 10:02:01 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171110-27829.b\27829_19.D

Injection Date:	11-Nov-2017 01:48:30	Instrument ID:	CHX.i	Operator ID:	pad
Lims ID:	200-40876-A-6	Lab Sample ID:	200-40876-6	Worklist Smp#:	19
Client ID:	3137				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	19
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

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



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

Lab Name: TestAmerica Burlington Job No.: 200-40963-1

SDG No.:

Client Sample ID: 4084 Lab Sample ID: 200-40963-1

Matrix: Air Lab File ID: 27924_13.D

Analysis Method: TO-15 Date Collected: 11/14/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 11/16/2017 20:35

Soil Aliquot Vol: Dilution Factor: 0.2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123422 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
115-07-1	Propylene	1.0	U	1.0	1.0
75-71-8	Dichlorodifluoromethane	0.10	U	0.10	0.10
75-45-6	Freon 22	0.10	U	0.10	0.10
76-14-2	1,2-Dichlorotetrafluoroethane	0.040	U	0.040	0.040
74-87-3	Chloromethane	0.10	U	0.10	0.10
106-97-8	n-Butane	0.10	U	0.10	0.10
75-01-4	Vinyl chloride	0.040	U	0.040	0.040
106-99-0	1,3-Butadiene	0.040	U	0.040	0.040
74-83-9	Bromomethane	0.040	U	0.040	0.040
75-00-3	Chloroethane	0.10	U	0.10	0.10
593-60-2	Bromoethene(Vinyl Bromide)	0.040	U	0.040	0.040
75-69-4	Trichlorofluoromethane	0.040	U	0.040	0.040
64-17-5	Ethanol	1.0	U	1.0	1.0
76-13-1	Freon TF	0.040	U	0.040	0.040
75-35-4	1,1-Dichloroethene	0.040	U	0.040	0.040
67-64-1	Acetone	1.0	U	1.0	1.0
67-63-0	Isopropyl alcohol	1.0	U	1.0	1.0
75-15-0	Carbon disulfide	0.10	U	0.10	0.10
107-05-1	3-Chloropropene	0.10	U	0.10	0.10
75-09-2	Methylene Chloride	0.10	U	0.10	0.10
75-65-0	tert-Butyl alcohol	1.0	U	1.0	1.0
1634-04-4	Methyl tert-butyl ether	0.040	U	0.040	0.040
156-60-5	trans-1,2-Dichloroethene	0.040	U	0.040	0.040
110-54-3	n-Hexane	0.040	U	0.040	0.040
75-34-3	1,1-Dichloroethane	0.040	U	0.040	0.040
108-05-4	Vinyl acetate	1.0	U	1.0	1.0
141-78-6	Ethyl acetate	1.0	U	1.0	1.0
78-93-3	Methyl Ethyl Ketone	0.10	U	0.10	0.10
156-59-2	cis-1,2-Dichloroethene	0.040	U	0.040	0.040
540-59-0	1,2-Dichloroethene, Total	0.080	U	0.080	0.080
67-66-3	Chloroform	0.040	U	0.040	0.040
109-99-9	Tetrahydrofuran	1.0	U	1.0	1.0
71-55-6	1,1,1-Trichloroethane	0.040	U	0.040	0.040
110-82-7	Cyclohexane	0.040	U	0.040	0.040
56-23-5	Carbon tetrachloride	0.040	U	0.040	0.040
540-84-1	2,2,4-Trimethylpentane	0.040	U	0.040	0.040

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

Lab Name: TestAmerica Burlington Job No.: 200-40963-1

SDG No.:

Client Sample ID: 4084 Lab Sample ID: 200-40963-1

Matrix: Air Lab File ID: 27924_13.D

Analysis Method: TO-15 Date Collected: 11/14/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 11/16/2017 20:35

Soil Aliquot Vol: Dilution Factor: 0.2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123422 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	RL
71-43-2	Benzene	0.040	U	0.040	0.040
107-06-2	1,2-Dichloroethane	0.040	U	0.040	0.040
142-82-5	n-Heptane	0.040	U	0.040	0.040
79-01-6	Trichloroethene	0.040	U	0.040	0.040
80-62-6	Methyl methacrylate	0.10	U	0.10	0.10
78-87-5	1,2-Dichloropropane	0.040	U	0.040	0.040
123-91-1	1,4-Dioxane	1.0	U	1.0	1.0
75-27-4	Bromodichloromethane	0.040	U	0.040	0.040
10061-01-5	cis-1,3-Dichloropropene	0.040	U	0.040	0.040
108-10-1	methyl isobutyl ketone	0.10	U	0.10	0.10
108-88-3	Toluene	0.040	U	0.040	0.040
10061-02-6	trans-1,3-Dichloropropene	0.040	U	0.040	0.040
79-00-5	1,1,2-Trichloroethane	0.040	U	0.040	0.040
127-18-4	Tetrachloroethene	0.040	U	0.040	0.040
591-78-6	Methyl Butyl Ketone (2-Hexanone)	0.10	U	0.10	0.10
124-48-1	Dibromochloromethane	0.040	U	0.040	0.040
106-93-4	1,2-Dibromoethane	0.040	U	0.040	0.040
108-90-7	Chlorobenzene	0.040	U	0.040	0.040
100-41-4	Ethylbenzene	0.040	U	0.040	0.040
179601-23-1	m,p-Xylene	0.10	U	0.10	0.10
95-47-6	Xylene, o-	0.040	U	0.040	0.040
1330-20-7	Xylene (total)	0.14	U	0.14	0.14
100-42-5	Styrene	0.040	U	0.040	0.040
75-25-2	Bromoform	0.040	U	0.040	0.040
98-82-8	Cumene	0.040	U	0.040	0.040
79-34-5	1,1,2,2-Tetrachloroethane	0.040	U	0.040	0.040
103-65-1	n-Propylbenzene	0.040	U	0.040	0.040
622-96-8	4-Ethyltoluene	0.040	U	0.040	0.040
108-67-8	1,3,5-Trimethylbenzene	0.040	U	0.040	0.040
95-49-8	2-Chlorotoluene	0.040	U	0.040	0.040
98-06-6	tert-Butylbenzene	0.040	U	0.040	0.040
95-63-6	1,2,4-Trimethylbenzene	0.040	U	0.040	0.040
135-98-8	sec-Butylbenzene	0.040	U	0.040	0.040
99-87-6	4-Isopropyltoluene	0.040	U	0.040	0.040
541-73-1	1,3-Dichlorobenzene	0.040	U	0.040	0.040
106-46-7	1,4-Dichlorobenzene	0.040	U	0.040	0.040

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

Lab Name: TestAmerica Burlington Job No.: 200-40963-1

SDG No.:

Client Sample ID: 4084 Lab Sample ID: 200-40963-1

Matrix: Air Lab File ID: 27924_13.D

Analysis Method: TO-15 Date Collected: 11/14/2017 00:00

Sample wt/vol: 1000(mL) Date Analyzed: 11/16/2017 20:35

Soil Aliquot Vol: Dilution Factor: 0.2

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

% Moisture: Level: (low/med) Low

Analysis Batch No.: 123422 Units: ppb v/v

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

TestAmerica Burlington
Target Compound Quantitation Report

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171116-27924.b\27924_13.D
Lims ID: 200-40963-A-1
Client ID: 4084
Sample Type: Client
Inject. Date: 16-Nov-2017 20:35:30 ALS Bottle#: 11 Worklist Smp#: 13
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Sample Info: 200-0027924-013
Misc. Info.: 40963-1
Operator ID: wrd Instrument ID: CHX.i

Method: \\ChromNA\Burlington\ChromData\CHX.i\20171116-27924.b\TO15_MasterMethod_X.m.m
Limit Group: AI_TO15_ICAL
Last Update: 17-Nov-2017 08:59:55 Calib Date: 07-Nov-2017 23:53:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20171107-27777.b\27777_12.D

Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
Process Host: XAWRK006

First Level Reviewer: desjardinsb Date: 17-Nov-2017 08:59:55

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.044				ND	
2 Dichlorodifluoromethane	85		3.113				ND	
3 Chlorodifluoromethane	51		3.156				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.354				ND	
5 Chloromethane	50		3.488				ND	
6 Butane	43		3.670				ND	
7 Vinyl chloride	62		3.718				ND	
8 Butadiene	54		3.787				ND	
10 Bromomethane	94		4.424				ND	
11 Chloroethane	64		4.643				ND	
13 Vinyl bromide	106		5.013				ND	
14 Trichlorofluoromethane	101		5.098				ND	
17 Ethanol	45	5.697	5.660	0.037	99	3136	0.1770	
20 1,1,2-Trichloro-1,2,2-trif	101		6.120				ND	
21 1,1-Dichloroethene	96		6.173				ND	
22 Acetone	43		6.425				ND	
23 Carbon disulfide	76		6.564				ND	
24 Isopropyl alcohol	45		6.708				ND	
25 3-Chloro-1-propene	41		6.949				ND	
27 Methylene Chloride	49		7.243				ND	
28 2-Methyl-2-propanol	59		7.479				ND	
29 Methyl tert-butyl ether	73		7.645				ND	
31 trans-1,2-Dichloroethene	61		7.677				ND	
33 Hexane	57		8.051				ND	
34 1,1-Dichloroethane	63		8.565				ND	
35 Vinyl acetate	43		8.640				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.699				ND	
38 2-Butanone (MEK)	72		9.768				ND	
39 Ethyl acetate	88		9.806				ND	
* 40 Chlorobromomethane	128	10.186	10.186	0.000	94	297845	10.0	

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
	41 Tetrahydrofuran	42		10.202				ND	
	42 Chloroform	83		10.325				ND	
	43 Cyclohexane	84		10.560				ND	
	44 1,1,1-Trichloroethane	97		10.598				ND	
	45 Carbon tetrachloride	117		10.860				ND	
	46 Isooctane	57		11.309				ND	
	47 Benzene	78		11.363				ND	
	48 1,2-Dichloroethane	62		11.566				ND	
	49 n-Heptane	43		11.726				ND	
*	50 1,4-Difluorobenzene	114	12.267	12.267	0.000	96	1584098		10.0
	53 Trichloroethene	95		12.754				ND	
	54 1,2-Dichloropropane	63		13.353				ND	
	55 Methyl methacrylate	69		13.540				ND	
	56 1,4-Dioxane	88		13.610				ND	
	57 Dibromomethane	174		13.626				ND	
	58 Dichlorobromomethane	83		13.936				ND	
	60 cis-1,3-Dichloropropene	75		14.920				ND	
	61 4-Methyl-2-pentanone (MIBK	43		15.236				ND	
	65 Toluene	92		15.530				ND	
	66 trans-1,3-Dichloropropene	75		16.177				ND	
	67 1,1,2-Trichloroethane	83		16.568				ND	
	68 Tetrachloroethene	166		16.654				ND	
	69 2-Hexanone	43		17.055				ND	
	71 Chlorodibromomethane	129		17.365				ND	
	72 Ethylene Dibromide	107		17.649				ND	
*	74 Chlorobenzene-d5	117	18.596	18.595	0.001	91	1345679		10.0
	75 Chlorobenzene	112		18.660				ND	
	76 Ethylbenzene	91		18.820				ND	
	78 m-Xylene & p-Xylene	106		19.088				ND	
S	73 Xylenes, Total	106		19.600				ND	
	79 o-Xylene	106		19.981				ND	
	80 Styrene	104		20.045				ND	
	81 Bromoform	173		20.516				ND	
	82 Isopropylbenzene	105		20.741				ND	
	84 1,1,2,2-Tetrachloroethane	83		21.468				ND	
	85 N-Propylbenzene	91		21.527				ND	
	88 4-Ethyltoluene	105		21.730				ND	
	89 2-Chlorotoluene	91		21.736				ND	
	90 1,3,5-Trimethylbenzene	105		21.848				ND	
	92 tert-Butylbenzene	119		22.367				ND	
	93 1,2,4-Trimethylbenzene	105		22.469				ND	
	94 sec-Butylbenzene	105		22.709				ND	
	95 4-Isopropyltoluene	119		22.923				ND	
	96 1,3-Dichlorobenzene	146		22.950				ND	
	97 1,4-Dichlorobenzene	146		23.095				ND	
	98 Benzyl chloride	91		23.303				ND	
	100 n-Butylbenzene	91		23.517				ND	
	101 1,2-Dichlorobenzene	146		23.646				ND	
	103 1,2,4-Trichlorobenzene	180		26.213				ND	
	104 Hexachlorobutadiene	225		26.401				ND	
	105 Naphthalene	128		26.711				ND	

Reagents:

ATTO15XISs_00002 Amount Added: 20.00 Units: mL Run Reagent

Report Date: 17-Nov-2017 08:59:56 Chrom Revision: 2.2 28-Sep-2017 09:29:16

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20171116-27924.b\27924_13.D

Injection Date:	16-Nov-2017 20:35:30	Instrument ID:	CHX.i	Operator ID:	wrd
Lims ID:	200-40963-A-1	Lab Sample ID:	200-40963-1	Worklist Smp#:	13
Client ID:	4084				
Purge Vol:	200.000 mL	Dil. Factor:	0.2000	ALS Bottle#:	11
Method:	TO15_MasterMethod_X.m	Limit Group:	AI_TO15_ICAL		

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