

October 19, 2017

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
Off-Site Soil Vapor Intrusion Assessment- 6961 Seneca Street Property**

Dear Mr. McPherson:

Benchmark Environmental Engineering and Science, PLLC (Benchmark) has prepared this correspondence to summarize 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 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. The results of the testing are presented in this report.

SVI SAMPLING PROGRAM

To evaluate potential vapor intrusion into the 6961 Seneca Street building, one (1) subslab vapor (SSV) sample designated OS-SS-1, and one (1) indoor air (IA) sample designated OS-IA-1 were collected from the building. One (1) outdoor air (OA) sample designated OS-OA-1 was collected concurrent with the SSV/IA samples. The interior SSV/IA samples were collected from 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 8-hour period in conformance with approved work plan and sent to a New York State

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**2558 Hamburg Turnpike, Suite 300 | Buffalo, NY 14218
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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 September 16, 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.

Based on previous comments provided by the Department and NYSDOH, an additional similar sampling event will be completed in the heating season, which is typically November 15th to March 31st, based on the NYSDOH SVI guidance document.

Please do not hesitate to contact us if you have any questions or require additional information.

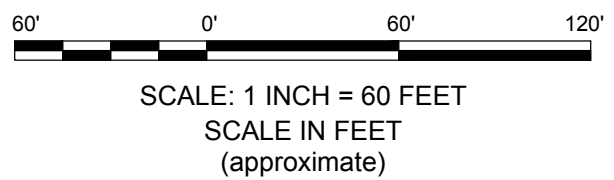
Sincerely,
Benchmark Environmental Engineering & Science, PLLC



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



- LEGEND:**
- BCP SITE BOUNDARY
 - PROPOSED BUILDING ADDITION
 - OS-OA-1 PROPOSED 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
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PROJECT NO.: 0400-017-001

DATE: OCTOBER 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

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TABLES



TABLE 1
SUMMARY OF OFFSITE SUBSLAB VAPOR, INDOOR AIR
AND OUTDOOR AIR ANALYTICAL DATA

170 JAMISON ROAD SITE
ELMA, NEW YORK

Parameter	Sample Location & Sample Date		
	Offsite		Ambient Air
	OS-SS-1	OS-IA-1	OS-OA-1
	9/18/2017		
Volatile Organic Compounds (VOCs, ug/m3)			
1,1,1-Trichloroethane (Matrix B)	4.6	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	0.57 J	0.50 J
1,1,2,2-Tetrachloroethane	8.5	ND	ND
1,1-Dichloroethane	ND	ND	ND
1,2,4-Trichlorobenzene	ND	0.25 J	ND
1,2,4-Trimethylbenzene	16	0.59 J	0.22 J
1,3,5-Trimethylbenzene	7.1	0.19 J	ND
1,4-Dichlorobenzene	ND	ND	ND
1,4-Dioxane	ND	ND	ND
2-Butanone	2.9 J	1.4 J	1.8 J
4-Methyl-2-pentanone (MIBK)	ND	ND	ND
Acetone	130	38	17
Benzene	10	ND	0.36 J
Benzyl Chloride	ND	0.11 J	ND
Carbon Disulfide	9.9	0.13 J	ND
Carbon Tetrachloride (Matrix A)	ND	0.36 J	ND
Chloroform	ND	0.42 J	ND
Chloromethane	ND	1.3	1.1
Cyclohexane	67	ND	ND
Dichlorodifluoromethane	ND	2.7	2.4 J
Ethylbenzene	4.9	0.25 J	0.19 J
Hexachlorobutadiene	ND	ND	ND
Isopropyl alcohol	3.4 J	28	2.60 J
Isopropylbenzene	1.3 J	ND	ND
Naphthalene	2.6 J	0.20 J	0.26 J
Methylene chloride (Matrix B)	ND	0.80 J	0.68 J
n-Hexane	130	0.57 J	0.92 J
Styrene	ND	0.56 J	0.072 J
Tetrachloroethene (Matrix B)	3.8	ND	ND
Tetrahydrofuran	25 J	ND	ND
Toluene	290	2.8	1.2
Total Xylenes	38.4	0.82 J	0.81 J
Trichlorofluoromethane	1.4 J	1.4	1.3

Notes:

1. ND - Not Detected
2. Only those compounds detected at a minimum of one location are presented.
3. Matrix A, B and C refers to NYSDOH Soil Vapor / Indoor Air Matrices dated May 2017.

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	
Building 1																	
Subslab/Indoor Air 1																	
OS-SS-1	ND	NFA	ND	NFA	ND	NFA	ND	NFA	3.8	NFA	4.6	NFA	ND	NFA	ND	NFA	
OS-IA-1	0.36 J		ND		ND		ND		ND		ND		ND		0.8 J		ND
OS-OA-1	ND		ND		ND		ND		ND		0.68 J		ND				

Notes:

1. Concentration in micrograms per cubic meter (ug/m³)

Definitions:

- ND = Not Detected
- J = Results are estimated; 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.

Analyses 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

Analyses 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

Analyses 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

PRODUCT INVENTORY FORM

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)
Storage/Maintenance Closet	Windex	33 oz.	U		NA	N
Storage/Maintenance Closet	Stride Citrus	1 gal.	U		NA	N
Storage/Maintenance Closet	Works Toilet Bowl Cleaner	16 oz.	U		NA	N
Storage/Maintenance Closet	Disinfectant Cleaner	1 gal.	U	Dimethyl benzyl ammonium chloride	NA	N
Storage/Maintenance Closet	Latex Paint	16 oz.	U		NA	N
Storage/Maintenance Closet	Wasp-Hornet Spray	16 oz.	U		NA	N

Notes:
1. Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**.

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: 200-40113-1

Client Project/Site: (Moog) Jamison Road Site- Elma, NY

For:

Benchmark Env. Eng. & Science, PLLC

2558 Hamburg Turnpike

Suite 300

Lackawanna, New York 14218

Attn: Mr. Michael Lesakowski



Authorized for release by:

9/22/2017 2:22:59 PM

Brian Fischer, Manager of Project Management

(716)504-9835

brian.fischer@testamericainc.com

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Definitions/Glossary

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

TestAmerica Job ID: 200-40113-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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)

Case Narrative

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

TestAmerica Job ID: 200-40113-1

Job ID: 200-40113-1

Laboratory: TestAmerica Burlington

Narrative

Job Narrative
200-40113-1

Comments

No additional comments.

Receipt

The samples were received on 9/19/2017 10:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air Toxics

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

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Detection Summary

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-IA-1

Lab Sample ID: 200-40113-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.075	J	0.20	0.041	ppb v/v	1		TO-15	Total/NA
1,2,4-Trichlorobenzene	0.034	J	2.0	0.034	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.12	J	0.20	0.016	ppb v/v	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.038	J	0.20	0.019	ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	0.49	J	1.0	0.092	ppb v/v	1		TO-15	Total/NA
Acetone	16		5.0	0.69	ppb v/v	1		TO-15	Total/NA
Benzyl chloride	0.022	J	0.80	0.018	ppb v/v	1		TO-15	Total/NA
Carbon disulfide	0.041	J	0.50	0.030	ppb v/v	1		TO-15	Total/NA
Carbon tetrachloride	0.057	J	0.20	0.011	ppb v/v	1		TO-15	Total/NA
Chloroform	0.086	J	0.20	0.038	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.65		0.50	0.060	ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	0.55		0.50	0.056	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.059	J	0.20	0.020	ppb v/v	1		TO-15	Total/NA
Hexane	0.16	J	0.80	0.028	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	11		5.0	0.15	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.23	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	0.15	J	0.80	0.025	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.038	J	0.50	0.030	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.042	J	0.20	0.018	ppb v/v	1		TO-15	Total/NA
Styrene	0.13	J	0.20	0.016	ppb v/v	1		TO-15	Total/NA
Toluene	0.74		0.20	0.025	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.26		0.20	0.045	ppb v/v	1		TO-15	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	J	1.5	0.31	ug/m3	1		TO-15	Total/NA
1,2,4-Trichlorobenzene	0.25	J	15	0.25	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.59	J	0.98	0.079	ug/m3	1		TO-15	Total/NA
1,3,5-Trimethylbenzene	0.19	J	0.98	0.093	ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	1.4	J	2.9	0.27	ug/m3	1		TO-15	Total/NA
Acetone	38		12	1.6	ug/m3	1		TO-15	Total/NA
Benzyl chloride	0.11	J	4.1	0.093	ug/m3	1		TO-15	Total/NA
Carbon disulfide	0.13	J	1.6	0.093	ug/m3	1		TO-15	Total/NA
Carbon tetrachloride	0.36	J	1.3	0.069	ug/m3	1		TO-15	Total/NA
Chloroform	0.42	J	0.98	0.19	ug/m3	1		TO-15	Total/NA
Chloromethane	1.3		1.0	0.12	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.7		2.5	0.28	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.25	J	0.87	0.087	ug/m3	1		TO-15	Total/NA
Hexane	0.57	J	2.8	0.099	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	28		12	0.37	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.80	J	1.7	0.42	ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	0.64	J	3.5	0.11	ug/m3	1		TO-15	Total/NA
Naphthalene	0.20	J	2.6	0.16	ug/m3	1		TO-15	Total/NA
o-Xylene	0.18	J	0.87	0.078	ug/m3	1		TO-15	Total/NA
Styrene	0.56	J	0.85	0.068	ug/m3	1		TO-15	Total/NA
Toluene	2.8		0.75	0.094	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.4		1.1	0.25	ug/m3	1		TO-15	Total/NA

Client Sample ID: OS-SS-1

Lab Sample ID: 200-40113-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	0.85		0.40	0.060	ppb v/v	2		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-SS-1 (Continued)

Lab Sample ID: 200-40113-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2,2-Tetrachloroethane	1.2		0.40	0.068	ppb v/v	2		TO-15	Total/NA
1,2,4-Trimethylbenzene	3.2		0.40	0.032	ppb v/v	2		TO-15	Total/NA
1,3,5-Trimethylbenzene	1.4		0.40	0.038	ppb v/v	2		TO-15	Total/NA
2-Butanone (MEK)	0.97	J	2.0	0.18	ppb v/v	2		TO-15	Total/NA
Acetone	55		10	1.4	ppb v/v	2		TO-15	Total/NA
Benzene	3.1		0.40	0.058	ppb v/v	2		TO-15	Total/NA
Carbon disulfide	3.2		1.0	0.060	ppb v/v	2		TO-15	Total/NA
Cyclohexane	19		1.0	0.020	ppb v/v	2		TO-15	Total/NA
Ethylbenzene	1.1		0.40	0.040	ppb v/v	2		TO-15	Total/NA
Hexane	38		1.6	0.056	ppb v/v	2		TO-15	Total/NA
Isopropyl alcohol	1.4	J	10	0.30	ppb v/v	2		TO-15	Total/NA
Isopropylbenzene	0.27	J	1.6	0.038	ppb v/v	2		TO-15	Total/NA
m-Xylene & p-Xylene	6.7		1.6	0.050	ppb v/v	2		TO-15	Total/NA
Naphthalene	0.50	J	1.0	0.060	ppb v/v	2		TO-15	Total/NA
o-Xylene	2.2		0.40	0.036	ppb v/v	2		TO-15	Total/NA
Tetrachloroethene	0.55		0.40	0.060	ppb v/v	2		TO-15	Total/NA
Tetrahydrofuran	8.4	J	10	0.36	ppb v/v	2		TO-15	Total/NA
Toluene	77		0.40	0.050	ppb v/v	2		TO-15	Total/NA
Trichlorofluoromethane	0.25	J	0.40	0.090	ppb v/v	2		TO-15	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	4.6		2.2	0.33	ug/m3	2		TO-15	Total/NA
1,1,2,2-Tetrachloroethane	8.5		2.7	0.47	ug/m3	2		TO-15	Total/NA
1,2,4-Trimethylbenzene	16		2.0	0.16	ug/m3	2		TO-15	Total/NA
1,3,5-Trimethylbenzene	7.1		2.0	0.19	ug/m3	2		TO-15	Total/NA
2-Butanone (MEK)	2.9	J	5.9	0.54	ug/m3	2		TO-15	Total/NA
Acetone	130		24	3.3	ug/m3	2		TO-15	Total/NA
Benzene	10		1.3	0.19	ug/m3	2		TO-15	Total/NA
Carbon disulfide	9.9		3.1	0.19	ug/m3	2		TO-15	Total/NA
Cyclohexane	67		3.4	0.069	ug/m3	2		TO-15	Total/NA
Ethylbenzene	4.9		1.7	0.17	ug/m3	2		TO-15	Total/NA
Hexane	130		5.6	0.20	ug/m3	2		TO-15	Total/NA
Isopropyl alcohol	3.4	J	25	0.74	ug/m3	2		TO-15	Total/NA
Isopropylbenzene	1.3	J	7.9	0.19	ug/m3	2		TO-15	Total/NA
m-Xylene & p-Xylene	29		6.9	0.22	ug/m3	2		TO-15	Total/NA
Naphthalene	2.6	J	5.2	0.31	ug/m3	2		TO-15	Total/NA
o-Xylene	9.4		1.7	0.16	ug/m3	2		TO-15	Total/NA
Tetrachloroethene	3.8		2.7	0.41	ug/m3	2		TO-15	Total/NA
Tetrahydrofuran	25	J	29	1.1	ug/m3	2		TO-15	Total/NA
Toluene	290		1.5	0.19	ug/m3	2		TO-15	Total/NA
Trichlorofluoromethane	1.4	J	2.2	0.51	ug/m3	2		TO-15	Total/NA

Client Sample ID: OS-OA-1

Lab Sample ID: 200-40113-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.065	J	0.20	0.041	ppb v/v	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.044	J	0.20	0.016	ppb v/v	1		TO-15	Total/NA
2-Butanone (MEK)	0.62	J	1.0	0.092	ppb v/v	1		TO-15	Total/NA
Acetone	7.3		5.0	0.69	ppb v/v	1		TO-15	Total/NA
Benzene	0.11	J	0.20	0.029	ppb v/v	1		TO-15	Total/NA
Chloromethane	0.54		0.50	0.060	ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Detection Summary

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-OA-1 (Continued)

Lab Sample ID: 200-40113-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	0.49	J	0.50	0.056	ppb v/v	1		TO-15	Total/NA
Ethylbenzene	0.043	J	0.20	0.020	ppb v/v	1		TO-15	Total/NA
Hexane	0.26	J	0.80	0.028	ppb v/v	1		TO-15	Total/NA
Isopropyl alcohol	1.0	J	5.0	0.15	ppb v/v	1		TO-15	Total/NA
Methylene Chloride	0.19	J	0.50	0.12	ppb v/v	1		TO-15	Total/NA
m-Xylene & p-Xylene	0.13	J	0.80	0.025	ppb v/v	1		TO-15	Total/NA
Naphthalene	0.049	J	0.50	0.030	ppb v/v	1		TO-15	Total/NA
o-Xylene	0.055	J	0.20	0.018	ppb v/v	1		TO-15	Total/NA
Styrene	0.017	J	0.20	0.016	ppb v/v	1		TO-15	Total/NA
Toluene	0.31		0.20	0.025	ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	0.23		0.20	0.045	ppb v/v	1		TO-15	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	J	1.5	0.31	ug/m3	1		TO-15	Total/NA
1,2,4-Trimethylbenzene	0.22	J	0.98	0.079	ug/m3	1		TO-15	Total/NA
2-Butanone (MEK)	1.8	J	2.9	0.27	ug/m3	1		TO-15	Total/NA
Acetone	17		12	1.6	ug/m3	1		TO-15	Total/NA
Benzene	0.36	J	0.64	0.093	ug/m3	1		TO-15	Total/NA
Chloromethane	1.1		1.0	0.12	ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	2.4	J	2.5	0.28	ug/m3	1		TO-15	Total/NA
Ethylbenzene	0.19	J	0.87	0.087	ug/m3	1		TO-15	Total/NA
Hexane	0.92	J	2.8	0.099	ug/m3	1		TO-15	Total/NA
Isopropyl alcohol	2.6	J	12	0.37	ug/m3	1		TO-15	Total/NA
Methylene Chloride	0.68	J	1.7	0.42	ug/m3	1		TO-15	Total/NA
m-Xylene & p-Xylene	0.57	J	3.5	0.11	ug/m3	1		TO-15	Total/NA
Naphthalene	0.26	J	2.6	0.16	ug/m3	1		TO-15	Total/NA
o-Xylene	0.24	J	0.87	0.078	ug/m3	1		TO-15	Total/NA
Styrene	0.072	J	0.85	0.068	ug/m3	1		TO-15	Total/NA
Toluene	1.2		0.75	0.094	ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	1.3		1.1	0.25	ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Burlington

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-IA-1

Lab Sample ID: 200-40113-1

Date Collected: 09/16/17 16:34

Matrix: Air

Date Received: 09/19/17 10:15

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	0.20	U	0.20	0.030	ppb v/v			09/20/17 16:09	1
1,1,1,2-Tetrachloroethane	0.20	U	0.20	0.034	ppb v/v			09/20/17 16:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.075	J	0.20	0.041	ppb v/v			09/20/17 16:09	1
1,1,2-Trichloroethane	0.20	U	0.20	0.037	ppb v/v			09/20/17 16:09	1
1,1-Dichloroethane	0.20	U	0.20	0.028	ppb v/v			09/20/17 16:09	1
1,1-Dichloroethene	0.20	U	0.20	0.010	ppb v/v			09/20/17 16:09	1
1,2,4-Trichlorobenzene	0.034	J	2.0	0.034	ppb v/v			09/20/17 16:09	1
1,2,4-Trimethylbenzene	0.12	J	0.20	0.016	ppb v/v			09/20/17 16:09	1
1,2-Dibromoethane (EDB)	0.20	U	0.20	0.018	ppb v/v			09/20/17 16:09	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20	U	0.20	0.052	ppb v/v			09/20/17 16:09	1
1,2-Dichlorobenzene	0.20	U	0.20	0.018	ppb v/v			09/20/17 16:09	1
1,2-Dichloroethane	0.20	U	0.20	0.052	ppb v/v			09/20/17 16:09	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			09/20/17 16:09	1
1,3,5-Trimethylbenzene	0.038	J	0.20	0.019	ppb v/v			09/20/17 16:09	1
1,3-Dichlorobenzene	0.20	U	0.20	0.020	ppb v/v			09/20/17 16:09	1
1,4-Dichlorobenzene	0.20	U	0.20	0.019	ppb v/v			09/20/17 16:09	1
1,4-Dioxane	5.0	U	5.0	0.16	ppb v/v			09/20/17 16:09	1
2-Butanone (MEK)	0.49	J	1.0	0.092	ppb v/v			09/20/17 16:09	1
4-Methyl-2-pentanone (MIBK)	0.50	U	0.50	0.18	ppb v/v			09/20/17 16:09	1
Acetone	16		5.0	0.69	ppb v/v			09/20/17 16:09	1
Benzene	0.20	U	0.20	0.029	ppb v/v			09/20/17 16:09	1
Benzyl chloride	0.022	J	0.80	0.018	ppb v/v			09/20/17 16:09	1
Bromodichloromethane	0.20	U	0.20	0.029	ppb v/v			09/20/17 16:09	1
Bromoform	0.20	U	0.20	0.025	ppb v/v			09/20/17 16:09	1
Bromomethane	0.20	U	0.20	0.044	ppb v/v			09/20/17 16:09	1
Carbon disulfide	0.041	J	0.50	0.030	ppb v/v			09/20/17 16:09	1
Carbon tetrachloride	0.057	J	0.20	0.011	ppb v/v			09/20/17 16:09	1
Chlorobenzene	0.20	U	0.20	0.018	ppb v/v			09/20/17 16:09	1
Chloroethane	0.80	U	0.80	0.061	ppb v/v			09/20/17 16:09	1
Chloroform	0.086	J	0.20	0.038	ppb v/v			09/20/17 16:09	1
Chloromethane	0.65		0.50	0.060	ppb v/v			09/20/17 16:09	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 16:09	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.029	ppb v/v			09/20/17 16:09	1
Cyclohexane	0.50	U	0.50	0.010	ppb v/v			09/20/17 16:09	1
Dibromochloromethane	0.20	U	0.20	0.020	ppb v/v			09/20/17 16:09	1
Dichlorodifluoromethane	0.55		0.50	0.056	ppb v/v			09/20/17 16:09	1
Ethylbenzene	0.059	J	0.20	0.020	ppb v/v			09/20/17 16:09	1
Hexachlorobutadiene	2.0	U	2.0	0.036	ppb v/v			09/20/17 16:09	1
Hexane	0.16	J	0.80	0.028	ppb v/v			09/20/17 16:09	1
Isopropyl alcohol	11		5.0	0.15	ppb v/v			09/20/17 16:09	1
Isopropylbenzene	0.80	U	0.80	0.019	ppb v/v			09/20/17 16:09	1
Methyl tert-butyl ether	1.0	U	1.0	0.022	ppb v/v			09/20/17 16:09	1
Methylene Chloride	0.23	J	0.50	0.12	ppb v/v			09/20/17 16:09	1
m-Xylene & p-Xylene	0.15	J	0.80	0.025	ppb v/v			09/20/17 16:09	1
Naphthalene	0.038	J	0.50	0.030	ppb v/v			09/20/17 16:09	1
o-Xylene	0.042	J	0.20	0.018	ppb v/v			09/20/17 16:09	1
Styrene	0.13	J	0.20	0.016	ppb v/v			09/20/17 16:09	1

TestAmerica Burlington

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-IA-1

Lab Sample ID: 200-40113-1

Date Collected: 09/16/17 16:34

Matrix: Air

Date Received: 09/19/17 10:15

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
Tetrachloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 16:09	1
Tetrahydrofuran	5.0	U	5.0	0.18	ppb v/v			09/20/17 16:09	1
Toluene	0.74		0.20	0.025	ppb v/v			09/20/17 16:09	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.027	ppb v/v			09/20/17 16:09	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.026	ppb v/v			09/20/17 16:09	1
Trichloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 16:09	1
Trichlorofluoromethane	0.26		0.20	0.045	ppb v/v			09/20/17 16:09	1
Vinyl acetate	5.0	U	5.0	0.083	ppb v/v			09/20/17 16:09	1
Vinyl bromide	0.20	U	0.20	0.020	ppb v/v			09/20/17 16:09	1
Vinyl chloride	0.20	U	0.20	0.026	ppb v/v			09/20/17 16:09	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.1	U	1.1	0.16	ug/m3			09/20/17 16:09	1
1,1,1,2-Tetrachloroethane	1.4	U	1.4	0.23	ug/m3			09/20/17 16:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.57	J	1.5	0.31	ug/m3			09/20/17 16:09	1
1,1,2-Trichloroethane	1.1	U	1.1	0.20	ug/m3			09/20/17 16:09	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			09/20/17 16:09	1
1,1-Dichloroethene	0.79	U	0.79	0.040	ug/m3			09/20/17 16:09	1
1,2,4-Trichlorobenzene	0.25	J	15	0.25	ug/m3			09/20/17 16:09	1
1,2,4-Trimethylbenzene	0.59	J	0.98	0.079	ug/m3			09/20/17 16:09	1
1,2-Dibromoethane (EDB)	1.5	U	1.5	0.14	ug/m3			09/20/17 16:09	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	U	1.4	0.36	ug/m3			09/20/17 16:09	1
1,2-Dichlorobenzene	1.2	U	1.2	0.11	ug/m3			09/20/17 16:09	1
1,2-Dichloroethane	0.81	U	0.81	0.21	ug/m3			09/20/17 16:09	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			09/20/17 16:09	1
1,3,5-Trimethylbenzene	0.19	J	0.98	0.093	ug/m3			09/20/17 16:09	1
1,3-Dichlorobenzene	1.2	U	1.2	0.12	ug/m3			09/20/17 16:09	1
1,4-Dichlorobenzene	1.2	U	1.2	0.11	ug/m3			09/20/17 16:09	1
1,4-Dioxane	18	U	18	0.58	ug/m3			09/20/17 16:09	1
2-Butanone (MEK)	1.4	J	2.9	0.27	ug/m3			09/20/17 16:09	1
4-Methyl-2-pentanone (MIBK)	2.0	U	2.0	0.74	ug/m3			09/20/17 16:09	1
Acetone	38		12	1.6	ug/m3			09/20/17 16:09	1
Benzene	0.64	U	0.64	0.093	ug/m3			09/20/17 16:09	1
Benzyl chloride	0.11	J	4.1	0.093	ug/m3			09/20/17 16:09	1
Bromodichloromethane	1.3	U	1.3	0.19	ug/m3			09/20/17 16:09	1
Bromoform	2.1	U	2.1	0.26	ug/m3			09/20/17 16:09	1
Bromomethane	0.78	U	0.78	0.17	ug/m3			09/20/17 16:09	1
Carbon disulfide	0.13	J	1.6	0.093	ug/m3			09/20/17 16:09	1
Carbon tetrachloride	0.36	J	1.3	0.069	ug/m3			09/20/17 16:09	1
Chlorobenzene	0.92	U	0.92	0.083	ug/m3			09/20/17 16:09	1
Chloroethane	2.1	U	2.1	0.16	ug/m3			09/20/17 16:09	1
Chloroform	0.42	J	0.98	0.19	ug/m3			09/20/17 16:09	1
Chloromethane	1.3		1.0	0.12	ug/m3			09/20/17 16:09	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.12	ug/m3			09/20/17 16:09	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.13	ug/m3			09/20/17 16:09	1
Cyclohexane	1.7	U	1.7	0.034	ug/m3			09/20/17 16:09	1
Dibromochloromethane	1.7	U	1.7	0.17	ug/m3			09/20/17 16:09	1
Dichlorodifluoromethane	2.7		2.5	0.28	ug/m3			09/20/17 16:09	1

TestAmerica Burlington

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-IA-1

Lab Sample ID: 200-40113-1

Date Collected: 09/16/17 16:34

Matrix: Air

Date Received: 09/19/17 10:15

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
Ethylbenzene	0.25	J	0.87	0.087	ug/m3			09/20/17 16:09	1
Hexachlorobutadiene	21	U	21	0.38	ug/m3			09/20/17 16:09	1
Hexane	0.57	J	2.8	0.099	ug/m3			09/20/17 16:09	1
Isopropyl alcohol	28		12	0.37	ug/m3			09/20/17 16:09	1
Isopropylbenzene	3.9	U	3.9	0.093	ug/m3			09/20/17 16:09	1
Methyl tert-butyl ether	3.6	U	3.6	0.079	ug/m3			09/20/17 16:09	1
Methylene Chloride	0.80	J	1.7	0.42	ug/m3			09/20/17 16:09	1
m-Xylene & p-Xylene	0.64	J	3.5	0.11	ug/m3			09/20/17 16:09	1
Naphthalene	0.20	J	2.6	0.16	ug/m3			09/20/17 16:09	1
o-Xylene	0.18	J	0.87	0.078	ug/m3			09/20/17 16:09	1
Styrene	0.56	J	0.85	0.068	ug/m3			09/20/17 16:09	1
Tetrachloroethene	1.4	U	1.4	0.20	ug/m3			09/20/17 16:09	1
Tetrahydrofuran	15	U	15	0.53	ug/m3			09/20/17 16:09	1
Toluene	2.8		0.75	0.094	ug/m3			09/20/17 16:09	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			09/20/17 16:09	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.12	ug/m3			09/20/17 16:09	1
Trichloroethene	1.1	U	1.1	0.16	ug/m3			09/20/17 16:09	1
Trichlorofluoromethane	1.4		1.1	0.25	ug/m3			09/20/17 16:09	1
Vinyl acetate	18	U	18	0.29	ug/m3			09/20/17 16:09	1
Vinyl bromide	0.87	U	0.87	0.087	ug/m3			09/20/17 16:09	1
Vinyl chloride	0.51	U	0.51	0.066	ug/m3			09/20/17 16:09	1

Client Sample ID: OS-SS-1

Lab Sample ID: 200-40113-2

Date Collected: 09/16/17 16:41

Matrix: Air

Date Received: 09/19/17 10:15

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	0.85		0.40	0.060	ppb v/v			09/20/17 17:00	2
1,1,1,2-Tetrachloroethane	1.2		0.40	0.068	ppb v/v			09/20/17 17:00	2
1,1,2-Trichloro-1,2,2-trifluoroethane	0.40	U	0.40	0.082	ppb v/v			09/20/17 17:00	2
1,1,2-Trichloroethane	0.40	U	0.40	0.074	ppb v/v			09/20/17 17:00	2
1,1-Dichloroethane	0.40	U	0.40	0.056	ppb v/v			09/20/17 17:00	2
1,1-Dichloroethene	0.40	U	0.40	0.020	ppb v/v			09/20/17 17:00	2
1,2,4-Trichlorobenzene	4.0	U	4.0	0.068	ppb v/v			09/20/17 17:00	2
1,2,4-Trimethylbenzene	3.2		0.40	0.032	ppb v/v			09/20/17 17:00	2
1,2-Dibromoethane (EDB)	0.40	U	0.40	0.036	ppb v/v			09/20/17 17:00	2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.40	U	0.40	0.10	ppb v/v			09/20/17 17:00	2
1,2-Dichlorobenzene	0.40	U	0.40	0.036	ppb v/v			09/20/17 17:00	2
1,2-Dichloroethane	0.40	U	0.40	0.10	ppb v/v			09/20/17 17:00	2
1,2-Dichloropropane	0.40	U	0.40	0.070	ppb v/v			09/20/17 17:00	2
1,3,5-Trimethylbenzene	1.4		0.40	0.038	ppb v/v			09/20/17 17:00	2
1,3-Dichlorobenzene	0.40	U	0.40	0.040	ppb v/v			09/20/17 17:00	2
1,4-Dichlorobenzene	0.40	U	0.40	0.038	ppb v/v			09/20/17 17:00	2
1,4-Dioxane	10	U	10	0.32	ppb v/v			09/20/17 17:00	2
2-Butanone (MEK)	0.97	J	2.0	0.18	ppb v/v			09/20/17 17:00	2
4-Methyl-2-pentanone (MIBK)	1.0	U	1.0	0.36	ppb v/v			09/20/17 17:00	2
Acetone	55		10	1.4	ppb v/v			09/20/17 17:00	2

TestAmerica Burlington

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-SS-1

Lab Sample ID: 200-40113-2

Date Collected: 09/16/17 16:41

Matrix: Air

Date Received: 09/19/17 10:15

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
Benzene	3.1		0.40	0.058	ppb v/v			09/20/17 17:00	2
Benzyl chloride	1.6	U	1.6	0.036	ppb v/v			09/20/17 17:00	2
Bromodichloromethane	0.40	U	0.40	0.058	ppb v/v			09/20/17 17:00	2
Bromoform	0.40	U	0.40	0.050	ppb v/v			09/20/17 17:00	2
Bromomethane	0.40	U	0.40	0.088	ppb v/v			09/20/17 17:00	2
Carbon disulfide	3.2		1.0	0.060	ppb v/v			09/20/17 17:00	2
Carbon tetrachloride	0.40	U	0.40	0.022	ppb v/v			09/20/17 17:00	2
Chlorobenzene	0.40	U	0.40	0.036	ppb v/v			09/20/17 17:00	2
Chloroethane	1.6	U	1.6	0.12	ppb v/v			09/20/17 17:00	2
Chloroform	0.40	U	0.40	0.076	ppb v/v			09/20/17 17:00	2
Chloromethane	1.0	U	1.0	0.12	ppb v/v			09/20/17 17:00	2
cis-1,2-Dichloroethene	0.40	U	0.40	0.060	ppb v/v			09/20/17 17:00	2
cis-1,3-Dichloropropene	0.40	U	0.40	0.058	ppb v/v			09/20/17 17:00	2
Cyclohexane	19		1.0	0.020	ppb v/v			09/20/17 17:00	2
Dibromochloromethane	0.40	U	0.40	0.040	ppb v/v			09/20/17 17:00	2
Dichlorodifluoromethane	1.0	U	1.0	0.11	ppb v/v			09/20/17 17:00	2
Ethylbenzene	1.1		0.40	0.040	ppb v/v			09/20/17 17:00	2
Hexachlorobutadiene	4.0	U	4.0	0.072	ppb v/v			09/20/17 17:00	2
Hexane	38		1.6	0.056	ppb v/v			09/20/17 17:00	2
Isopropyl alcohol	1.4 J		10	0.30	ppb v/v			09/20/17 17:00	2
Isopropylbenzene	0.27 J		1.6	0.038	ppb v/v			09/20/17 17:00	2
Methyl tert-butyl ether	2.0	U	2.0	0.044	ppb v/v			09/20/17 17:00	2
Methylene Chloride	1.0	U	1.0	0.24	ppb v/v			09/20/17 17:00	2
m-Xylene & p-Xylene	6.7		1.6	0.050	ppb v/v			09/20/17 17:00	2
Naphthalene	0.50 J		1.0	0.060	ppb v/v			09/20/17 17:00	2
o-Xylene	2.2		0.40	0.036	ppb v/v			09/20/17 17:00	2
Styrene	0.40	U	0.40	0.032	ppb v/v			09/20/17 17:00	2
Tetrachloroethene	0.55		0.40	0.060	ppb v/v			09/20/17 17:00	2
Tetrahydrofuran	8.4 J		10	0.36	ppb v/v			09/20/17 17:00	2
Toluene	77		0.40	0.050	ppb v/v			09/20/17 17:00	2
trans-1,2-Dichloroethene	0.40	U	0.40	0.054	ppb v/v			09/20/17 17:00	2
trans-1,3-Dichloropropene	0.40	U	0.40	0.052	ppb v/v			09/20/17 17:00	2
Trichloroethene	0.40	U	0.40	0.060	ppb v/v			09/20/17 17:00	2
Trichlorofluoromethane	0.25 J		0.40	0.090	ppb v/v			09/20/17 17:00	2
Vinyl acetate	10	U	10	0.17	ppb v/v			09/20/17 17:00	2
Vinyl bromide	0.40	U	0.40	0.040	ppb v/v			09/20/17 17:00	2
Vinyl chloride	0.40	U	0.40	0.052	ppb v/v			09/20/17 17:00	2
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.6		2.2	0.33	ug/m3			09/20/17 17:00	2
1,1,2,2-Tetrachloroethane	8.5		2.7	0.47	ug/m3			09/20/17 17:00	2
1,1,2-Trichloro-1,2,2-trifluoroethane	3.1	U	3.1	0.63	ug/m3			09/20/17 17:00	2
1,1,2-Trichloroethane	2.2	U	2.2	0.40	ug/m3			09/20/17 17:00	2
1,1-Dichloroethane	1.6	U	1.6	0.23	ug/m3			09/20/17 17:00	2
1,1-Dichloroethene	1.6	U	1.6	0.079	ug/m3			09/20/17 17:00	2
1,2,4-Trichlorobenzene	30	U	30	0.50	ug/m3			09/20/17 17:00	2
1,2,4-Trimethylbenzene	16		2.0	0.16	ug/m3			09/20/17 17:00	2
1,2-Dibromoethane (EDB)	3.1	U	3.1	0.28	ug/m3			09/20/17 17:00	2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.8	U	2.8	0.73	ug/m3			09/20/17 17:00	2

TestAmerica Burlington

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-SS-1

Lab Sample ID: 200-40113-2

Date Collected: 09/16/17 16:41

Matrix: Air

Date Received: 09/19/17 10:15

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
1,2-Dichlorobenzene	2.4	U	2.4	0.22	ug/m3			09/20/17 17:00	2
1,2-Dichloroethane	1.6	U	1.6	0.42	ug/m3			09/20/17 17:00	2
1,2-Dichloropropane	1.8	U	1.8	0.32	ug/m3			09/20/17 17:00	2
1,3,5-Trimethylbenzene	7.1		2.0	0.19	ug/m3			09/20/17 17:00	2
1,3-Dichlorobenzene	2.4	U	2.4	0.24	ug/m3			09/20/17 17:00	2
1,4-Dichlorobenzene	2.4	U	2.4	0.23	ug/m3			09/20/17 17:00	2
1,4-Dioxane	36	U	36	1.2	ug/m3			09/20/17 17:00	2
2-Butanone (MEK)	2.9	J	5.9	0.54	ug/m3			09/20/17 17:00	2
4-Methyl-2-pentanone (MIBK)	4.1	U	4.1	1.5	ug/m3			09/20/17 17:00	2
Acetone	130		24	3.3	ug/m3			09/20/17 17:00	2
Benzene	10		1.3	0.19	ug/m3			09/20/17 17:00	2
Benzyl chloride	8.3	U	8.3	0.19	ug/m3			09/20/17 17:00	2
Bromodichloromethane	2.7	U	2.7	0.39	ug/m3			09/20/17 17:00	2
Bromoform	4.1	U	4.1	0.52	ug/m3			09/20/17 17:00	2
Bromomethane	1.6	U	1.6	0.34	ug/m3			09/20/17 17:00	2
Carbon disulfide	9.9		3.1	0.19	ug/m3			09/20/17 17:00	2
Carbon tetrachloride	2.5	U	2.5	0.14	ug/m3			09/20/17 17:00	2
Chlorobenzene	1.8	U	1.8	0.17	ug/m3			09/20/17 17:00	2
Chloroethane	4.2	U	4.2	0.32	ug/m3			09/20/17 17:00	2
Chloroform	2.0	U	2.0	0.37	ug/m3			09/20/17 17:00	2
Chloromethane	2.1	U	2.1	0.25	ug/m3			09/20/17 17:00	2
cis-1,2-Dichloroethene	1.6	U	1.6	0.24	ug/m3			09/20/17 17:00	2
cis-1,3-Dichloropropene	1.8	U	1.8	0.26	ug/m3			09/20/17 17:00	2
Cyclohexane	67		3.4	0.069	ug/m3			09/20/17 17:00	2
Dibromochloromethane	3.4	U	3.4	0.34	ug/m3			09/20/17 17:00	2
Dichlorodifluoromethane	4.9	U	4.9	0.55	ug/m3			09/20/17 17:00	2
Ethylbenzene	4.9		1.7	0.17	ug/m3			09/20/17 17:00	2
Hexachlorobutadiene	43	U	43	0.77	ug/m3			09/20/17 17:00	2
Hexane	130		5.6	0.20	ug/m3			09/20/17 17:00	2
Isopropyl alcohol	3.4	J	25	0.74	ug/m3			09/20/17 17:00	2
Isopropylbenzene	1.3	J	7.9	0.19	ug/m3			09/20/17 17:00	2
Methyl tert-butyl ether	7.2	U	7.2	0.16	ug/m3			09/20/17 17:00	2
Methylene Chloride	3.5	U	3.5	0.83	ug/m3			09/20/17 17:00	2
m-Xylene & p-Xylene	29		6.9	0.22	ug/m3			09/20/17 17:00	2
Naphthalene	2.6	J	5.2	0.31	ug/m3			09/20/17 17:00	2
o-Xylene	9.4		1.7	0.16	ug/m3			09/20/17 17:00	2
Styrene	1.7	U	1.7	0.14	ug/m3			09/20/17 17:00	2
Tetrachloroethene	3.8		2.7	0.41	ug/m3			09/20/17 17:00	2
Tetrahydrofuran	25	J	29	1.1	ug/m3			09/20/17 17:00	2
Toluene	290		1.5	0.19	ug/m3			09/20/17 17:00	2
trans-1,2-Dichloroethene	1.6	U	1.6	0.21	ug/m3			09/20/17 17:00	2
trans-1,3-Dichloropropene	1.8	U	1.8	0.24	ug/m3			09/20/17 17:00	2
Trichloroethene	2.1	U	2.1	0.32	ug/m3			09/20/17 17:00	2
Trichlorofluoromethane	1.4	J	2.2	0.51	ug/m3			09/20/17 17:00	2
Vinyl acetate	35	U	35	0.58	ug/m3			09/20/17 17:00	2
Vinyl bromide	1.7	U	1.7	0.17	ug/m3			09/20/17 17:00	2
Vinyl chloride	1.0	U	1.0	0.13	ug/m3			09/20/17 17:00	2

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-OA-1

Lab Sample ID: 200-40113-3

Date Collected: 09/16/17 16:20

Matrix: Air

Date Received: 09/19/17 10:15

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	0.20	U	0.20	0.030	ppb v/v			09/20/17 17:50	1
1,1,1,2-Tetrachloroethane	0.20	U	0.20	0.034	ppb v/v			09/20/17 17:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.065	J	0.20	0.041	ppb v/v			09/20/17 17:50	1
1,1,2-Trichloroethane	0.20	U	0.20	0.037	ppb v/v			09/20/17 17:50	1
1,1-Dichloroethane	0.20	U	0.20	0.028	ppb v/v			09/20/17 17:50	1
1,1-Dichloroethene	0.20	U	0.20	0.010	ppb v/v			09/20/17 17:50	1
1,2,4-Trichlorobenzene	2.0	U	2.0	0.034	ppb v/v			09/20/17 17:50	1
1,2,4-Trimethylbenzene	0.044	J	0.20	0.016	ppb v/v			09/20/17 17:50	1
1,2-Dibromoethane (EDB)	0.20	U	0.20	0.018	ppb v/v			09/20/17 17:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20	U	0.20	0.052	ppb v/v			09/20/17 17:50	1
1,2-Dichlorobenzene	0.20	U	0.20	0.018	ppb v/v			09/20/17 17:50	1
1,2-Dichloroethane	0.20	U	0.20	0.052	ppb v/v			09/20/17 17:50	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			09/20/17 17:50	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.019	ppb v/v			09/20/17 17:50	1
1,3-Dichlorobenzene	0.20	U	0.20	0.020	ppb v/v			09/20/17 17:50	1
1,4-Dichlorobenzene	0.20	U	0.20	0.019	ppb v/v			09/20/17 17:50	1
1,4-Dioxane	5.0	U	5.0	0.16	ppb v/v			09/20/17 17:50	1
2-Butanone (MEK)	0.62	J	1.0	0.092	ppb v/v			09/20/17 17:50	1
4-Methyl-2-pentanone (MIBK)	0.50	U	0.50	0.18	ppb v/v			09/20/17 17:50	1
Acetone	7.3		5.0	0.69	ppb v/v			09/20/17 17:50	1
Benzene	0.11	J	0.20	0.029	ppb v/v			09/20/17 17:50	1
Benzyl chloride	0.80	U	0.80	0.018	ppb v/v			09/20/17 17:50	1
Bromodichloromethane	0.20	U	0.20	0.029	ppb v/v			09/20/17 17:50	1
Bromoform	0.20	U	0.20	0.025	ppb v/v			09/20/17 17:50	1
Bromomethane	0.20	U	0.20	0.044	ppb v/v			09/20/17 17:50	1
Carbon disulfide	0.50	U	0.50	0.030	ppb v/v			09/20/17 17:50	1
Carbon tetrachloride	0.20	U	0.20	0.011	ppb v/v			09/20/17 17:50	1
Chlorobenzene	0.20	U	0.20	0.018	ppb v/v			09/20/17 17:50	1
Chloroethane	0.80	U	0.80	0.061	ppb v/v			09/20/17 17:50	1
Chloroform	0.20	U	0.20	0.038	ppb v/v			09/20/17 17:50	1
Chloromethane	0.54		0.50	0.060	ppb v/v			09/20/17 17:50	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 17:50	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.029	ppb v/v			09/20/17 17:50	1
Cyclohexane	0.50	U	0.50	0.010	ppb v/v			09/20/17 17:50	1
Dibromochloromethane	0.20	U	0.20	0.020	ppb v/v			09/20/17 17:50	1
Dichlorodifluoromethane	0.49	J	0.50	0.056	ppb v/v			09/20/17 17:50	1
Ethylbenzene	0.043	J	0.20	0.020	ppb v/v			09/20/17 17:50	1
Hexachlorobutadiene	2.0	U	2.0	0.036	ppb v/v			09/20/17 17:50	1
Hexane	0.26	J	0.80	0.028	ppb v/v			09/20/17 17:50	1
Isopropyl alcohol	1.0	J	5.0	0.15	ppb v/v			09/20/17 17:50	1
Isopropylbenzene	0.80	U	0.80	0.019	ppb v/v			09/20/17 17:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.022	ppb v/v			09/20/17 17:50	1
Methylene Chloride	0.19	J	0.50	0.12	ppb v/v			09/20/17 17:50	1
m-Xylene & p-Xylene	0.13	J	0.80	0.025	ppb v/v			09/20/17 17:50	1
Naphthalene	0.049	J	0.50	0.030	ppb v/v			09/20/17 17:50	1
o-Xylene	0.055	J	0.20	0.018	ppb v/v			09/20/17 17:50	1
Styrene	0.017	J	0.20	0.016	ppb v/v			09/20/17 17:50	1
Tetrachloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 17:50	1

TestAmerica Burlington

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-OA-1

Lab Sample ID: 200-40113-3

Date Collected: 09/16/17 16:20

Matrix: Air

Date Received: 09/19/17 10:15

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
Tetrahydrofuran	5.0	U	5.0	0.18	ppb v/v			09/20/17 17:50	1
Toluene	0.31		0.20	0.025	ppb v/v			09/20/17 17:50	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.027	ppb v/v			09/20/17 17:50	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.026	ppb v/v			09/20/17 17:50	1
Trichloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 17:50	1
Trichlorofluoromethane	0.23		0.20	0.045	ppb v/v			09/20/17 17:50	1
Vinyl acetate	5.0	U	5.0	0.083	ppb v/v			09/20/17 17:50	1
Vinyl bromide	0.20	U	0.20	0.020	ppb v/v			09/20/17 17:50	1
Vinyl chloride	0.20	U	0.20	0.026	ppb v/v			09/20/17 17:50	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.1	U	1.1	0.16	ug/m3			09/20/17 17:50	1
1,1,1,2-Tetrachloroethane	1.4	U	1.4	0.23	ug/m3			09/20/17 17:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.50 J		1.5	0.31	ug/m3			09/20/17 17:50	1
1,1,2-Trichloroethane	1.1	U	1.1	0.20	ug/m3			09/20/17 17:50	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			09/20/17 17:50	1
1,1-Dichloroethene	0.79	U	0.79	0.040	ug/m3			09/20/17 17:50	1
1,2,4-Trichlorobenzene	15	U	15	0.25	ug/m3			09/20/17 17:50	1
1,2,4-Trimethylbenzene	0.22 J		0.98	0.079	ug/m3			09/20/17 17:50	1
1,2-Dibromoethane (EDB)	1.5	U	1.5	0.14	ug/m3			09/20/17 17:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	U	1.4	0.36	ug/m3			09/20/17 17:50	1
1,2-Dichlorobenzene	1.2	U	1.2	0.11	ug/m3			09/20/17 17:50	1
1,2-Dichloroethane	0.81	U	0.81	0.21	ug/m3			09/20/17 17:50	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			09/20/17 17:50	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.093	ug/m3			09/20/17 17:50	1
1,3-Dichlorobenzene	1.2	U	1.2	0.12	ug/m3			09/20/17 17:50	1
1,4-Dichlorobenzene	1.2	U	1.2	0.11	ug/m3			09/20/17 17:50	1
1,4-Dioxane	18	U	18	0.58	ug/m3			09/20/17 17:50	1
2-Butanone (MEK)	1.8 J		2.9	0.27	ug/m3			09/20/17 17:50	1
4-Methyl-2-pentanone (MIBK)	2.0	U	2.0	0.74	ug/m3			09/20/17 17:50	1
Acetone	17		12	1.6	ug/m3			09/20/17 17:50	1
Benzene	0.36 J		0.64	0.093	ug/m3			09/20/17 17:50	1
Benzyl chloride	4.1	U	4.1	0.093	ug/m3			09/20/17 17:50	1
Bromodichloromethane	1.3	U	1.3	0.19	ug/m3			09/20/17 17:50	1
Bromoform	2.1	U	2.1	0.26	ug/m3			09/20/17 17:50	1
Bromomethane	0.78	U	0.78	0.17	ug/m3			09/20/17 17:50	1
Carbon disulfide	1.6	U	1.6	0.093	ug/m3			09/20/17 17:50	1
Carbon tetrachloride	1.3	U	1.3	0.069	ug/m3			09/20/17 17:50	1
Chlorobenzene	0.92	U	0.92	0.083	ug/m3			09/20/17 17:50	1
Chloroethane	2.1	U	2.1	0.16	ug/m3			09/20/17 17:50	1
Chloroform	0.98	U	0.98	0.19	ug/m3			09/20/17 17:50	1
Chloromethane	1.1		1.0	0.12	ug/m3			09/20/17 17:50	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.12	ug/m3			09/20/17 17:50	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.13	ug/m3			09/20/17 17:50	1
Cyclohexane	1.7	U	1.7	0.034	ug/m3			09/20/17 17:50	1
Dibromochloromethane	1.7	U	1.7	0.17	ug/m3			09/20/17 17:50	1
Dichlorodifluoromethane	2.4 J		2.5	0.28	ug/m3			09/20/17 17:50	1
Ethylbenzene	0.19 J		0.87	0.087	ug/m3			09/20/17 17:50	1

TestAmerica Burlington

Client Sample Results

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-OA-1

Lab Sample ID: 200-40113-3

Date Collected: 09/16/17 16:20

Matrix: Air

Date Received: 09/19/17 10:15

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
Hexachlorobutadiene	21	U	21	0.38	ug/m3			09/20/17 17:50	1
Hexane	0.92	J	2.8	0.099	ug/m3			09/20/17 17:50	1
Isopropyl alcohol	2.6	J	12	0.37	ug/m3			09/20/17 17:50	1
Isopropylbenzene	3.9	U	3.9	0.093	ug/m3			09/20/17 17:50	1
Methyl tert-butyl ether	3.6	U	3.6	0.079	ug/m3			09/20/17 17:50	1
Methylene Chloride	0.68	J	1.7	0.42	ug/m3			09/20/17 17:50	1
m-Xylene & p-Xylene	0.57	J	3.5	0.11	ug/m3			09/20/17 17:50	1
Naphthalene	0.26	J	2.6	0.16	ug/m3			09/20/17 17:50	1
o-Xylene	0.24	J	0.87	0.078	ug/m3			09/20/17 17:50	1
Styrene	0.072	J	0.85	0.068	ug/m3			09/20/17 17:50	1
Tetrachloroethene	1.4	U	1.4	0.20	ug/m3			09/20/17 17:50	1
Tetrahydrofuran	15	U	15	0.53	ug/m3			09/20/17 17:50	1
Toluene	1.2		0.75	0.094	ug/m3			09/20/17 17:50	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			09/20/17 17:50	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.12	ug/m3			09/20/17 17:50	1
Trichloroethene	1.1	U	1.1	0.16	ug/m3			09/20/17 17:50	1
Trichlorofluoromethane	1.3		1.1	0.25	ug/m3			09/20/17 17:50	1
Vinyl acetate	18	U	18	0.29	ug/m3			09/20/17 17:50	1
Vinyl bromide	0.87	U	0.87	0.087	ug/m3			09/20/17 17:50	1
Vinyl chloride	0.51	U	0.51	0.066	ug/m3			09/20/17 17:50	1

QC Sample Results

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

TestAmerica Job ID: 200-40113-1

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

Lab Sample ID: MB 200-121137/8

Matrix: Air

Analysis Batch: 121137

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	0.20	U	0.20	0.030	ppb v/v			09/20/17 15:18	1
1,1,1,2-Tetrachloroethane	0.20	U	0.20	0.034	ppb v/v			09/20/17 15:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	U	0.20	0.041	ppb v/v			09/20/17 15:18	1
1,1,2-Trichloroethane	0.20	U	0.20	0.037	ppb v/v			09/20/17 15:18	1
1,1-Dichloroethane	0.20	U	0.20	0.028	ppb v/v			09/20/17 15:18	1
1,1-Dichloroethene	0.20	U	0.20	0.010	ppb v/v			09/20/17 15:18	1
1,2,4-Trichlorobenzene	2.0	U	2.0	0.034	ppb v/v			09/20/17 15:18	1
1,2,4-Trimethylbenzene	0.20	U	0.20	0.016	ppb v/v			09/20/17 15:18	1
1,2-Dibromoethane (EDB)	0.20	U	0.20	0.018	ppb v/v			09/20/17 15:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20	U	0.20	0.052	ppb v/v			09/20/17 15:18	1
1,2-Dichlorobenzene	0.20	U	0.20	0.018	ppb v/v			09/20/17 15:18	1
1,2-Dichloroethane	0.20	U	0.20	0.052	ppb v/v			09/20/17 15:18	1
1,2-Dichloropropane	0.20	U	0.20	0.035	ppb v/v			09/20/17 15:18	1
1,3,5-Trimethylbenzene	0.20	U	0.20	0.019	ppb v/v			09/20/17 15:18	1
1,3-Dichlorobenzene	0.20	U	0.20	0.020	ppb v/v			09/20/17 15:18	1
1,4-Dichlorobenzene	0.20	U	0.20	0.019	ppb v/v			09/20/17 15:18	1
1,4-Dioxane	5.0	U	5.0	0.16	ppb v/v			09/20/17 15:18	1
2-Butanone (MEK)	1.0	U	1.0	0.092	ppb v/v			09/20/17 15:18	1
4-Methyl-2-pentanone (MIBK)	0.50	U	0.50	0.18	ppb v/v			09/20/17 15:18	1
Acetone	5.0	U	5.0	0.69	ppb v/v			09/20/17 15:18	1
Benzene	0.20	U	0.20	0.029	ppb v/v			09/20/17 15:18	1
Benzyl chloride	0.80	U	0.80	0.018	ppb v/v			09/20/17 15:18	1
Bromodichloromethane	0.20	U	0.20	0.029	ppb v/v			09/20/17 15:18	1
Bromoform	0.20	U	0.20	0.025	ppb v/v			09/20/17 15:18	1
Bromomethane	0.20	U	0.20	0.044	ppb v/v			09/20/17 15:18	1
Carbon disulfide	0.50	U	0.50	0.030	ppb v/v			09/20/17 15:18	1
Carbon tetrachloride	0.20	U	0.20	0.011	ppb v/v			09/20/17 15:18	1
Chlorobenzene	0.20	U	0.20	0.018	ppb v/v			09/20/17 15:18	1
Chloroethane	0.80	U	0.80	0.061	ppb v/v			09/20/17 15:18	1
Chloroform	0.20	U	0.20	0.038	ppb v/v			09/20/17 15:18	1
Chloromethane	0.50	U	0.50	0.060	ppb v/v			09/20/17 15:18	1
cis-1,2-Dichloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 15:18	1
cis-1,3-Dichloropropene	0.20	U	0.20	0.029	ppb v/v			09/20/17 15:18	1
Cyclohexane	0.50	U	0.50	0.010	ppb v/v			09/20/17 15:18	1
Dibromochloromethane	0.20	U	0.20	0.020	ppb v/v			09/20/17 15:18	1
Dichlorodifluoromethane	0.50	U	0.50	0.056	ppb v/v			09/20/17 15:18	1
Ethylbenzene	0.20	U	0.20	0.020	ppb v/v			09/20/17 15:18	1
Hexachlorobutadiene	2.0	U	2.0	0.036	ppb v/v			09/20/17 15:18	1
Hexane	0.80	U	0.80	0.028	ppb v/v			09/20/17 15:18	1
Isopropyl alcohol	5.0	U	5.0	0.15	ppb v/v			09/20/17 15:18	1
Isopropylbenzene	0.80	U	0.80	0.019	ppb v/v			09/20/17 15:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.022	ppb v/v			09/20/17 15:18	1
Methylene Chloride	0.50	U	0.50	0.12	ppb v/v			09/20/17 15:18	1
m-Xylene & p-Xylene	0.80	U	0.80	0.025	ppb v/v			09/20/17 15:18	1
Naphthalene	0.50	U	0.50	0.030	ppb v/v			09/20/17 15:18	1
o-Xylene	0.20	U	0.20	0.018	ppb v/v			09/20/17 15:18	1
Styrene	0.20	U	0.20	0.016	ppb v/v			09/20/17 15:18	1
Tetrachloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 15:18	1

TestAmerica Burlington

QC Sample Results

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

TestAmerica Job ID: 200-40113-1

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

Lab Sample ID: MB 200-121137/8

Matrix: Air

Analysis Batch: 121137

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Tetrahydrofuran	5.0	U	5.0	0.18	ppb v/v			09/20/17 15:18	1
Toluene	0.20	U	0.20	0.025	ppb v/v			09/20/17 15:18	1
trans-1,2-Dichloroethene	0.20	U	0.20	0.027	ppb v/v			09/20/17 15:18	1
trans-1,3-Dichloropropene	0.20	U	0.20	0.026	ppb v/v			09/20/17 15:18	1
Trichloroethene	0.20	U	0.20	0.030	ppb v/v			09/20/17 15:18	1
Trichlorofluoromethane	0.20	U	0.20	0.045	ppb v/v			09/20/17 15:18	1
Vinyl acetate	5.0	U	5.0	0.083	ppb v/v			09/20/17 15:18	1
Vinyl bromide	0.20	U	0.20	0.020	ppb v/v			09/20/17 15:18	1
Vinyl chloride	0.20	U	0.20	0.026	ppb v/v			09/20/17 15:18	1

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	1.1	U	1.1	0.16	ug/m3			09/20/17 15:18	1
1,1,1,2-Tetrachloroethane	1.4	U	1.4	0.23	ug/m3			09/20/17 15:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	1.5	0.31	ug/m3			09/20/17 15:18	1
1,1,2-Trichloroethane	1.1	U	1.1	0.20	ug/m3			09/20/17 15:18	1
1,1-Dichloroethane	0.81	U	0.81	0.11	ug/m3			09/20/17 15:18	1
1,1-Dichloroethene	0.79	U	0.79	0.040	ug/m3			09/20/17 15:18	1
1,2,4-Trichlorobenzene	15	U	15	0.25	ug/m3			09/20/17 15:18	1
1,2,4-Trimethylbenzene	0.98	U	0.98	0.079	ug/m3			09/20/17 15:18	1
1,2-Dibromoethane (EDB)	1.5	U	1.5	0.14	ug/m3			09/20/17 15:18	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	U	1.4	0.36	ug/m3			09/20/17 15:18	1
1,2-Dichlorobenzene	1.2	U	1.2	0.11	ug/m3			09/20/17 15:18	1
1,2-Dichloroethane	0.81	U	0.81	0.21	ug/m3			09/20/17 15:18	1
1,2-Dichloropropane	0.92	U	0.92	0.16	ug/m3			09/20/17 15:18	1
1,3,5-Trimethylbenzene	0.98	U	0.98	0.093	ug/m3			09/20/17 15:18	1
1,3-Dichlorobenzene	1.2	U	1.2	0.12	ug/m3			09/20/17 15:18	1
1,4-Dichlorobenzene	1.2	U	1.2	0.11	ug/m3			09/20/17 15:18	1
1,4-Dioxane	18	U	18	0.58	ug/m3			09/20/17 15:18	1
2-Butanone (MEK)	2.9	U	2.9	0.27	ug/m3			09/20/17 15:18	1
4-Methyl-2-pentanone (MIBK)	2.0	U	2.0	0.74	ug/m3			09/20/17 15:18	1
Acetone	12	U	12	1.6	ug/m3			09/20/17 15:18	1
Benzene	0.64	U	0.64	0.093	ug/m3			09/20/17 15:18	1
Benzyl chloride	4.1	U	4.1	0.093	ug/m3			09/20/17 15:18	1
Bromodichloromethane	1.3	U	1.3	0.19	ug/m3			09/20/17 15:18	1
Bromoform	2.1	U	2.1	0.26	ug/m3			09/20/17 15:18	1
Bromomethane	0.78	U	0.78	0.17	ug/m3			09/20/17 15:18	1
Carbon disulfide	1.6	U	1.6	0.093	ug/m3			09/20/17 15:18	1
Carbon tetrachloride	1.3	U	1.3	0.069	ug/m3			09/20/17 15:18	1
Chlorobenzene	0.92	U	0.92	0.083	ug/m3			09/20/17 15:18	1
Chloroethane	2.1	U	2.1	0.16	ug/m3			09/20/17 15:18	1
Chloroform	0.98	U	0.98	0.19	ug/m3			09/20/17 15:18	1
Chloromethane	1.0	U	1.0	0.12	ug/m3			09/20/17 15:18	1
cis-1,2-Dichloroethene	0.79	U	0.79	0.12	ug/m3			09/20/17 15:18	1
cis-1,3-Dichloropropene	0.91	U	0.91	0.13	ug/m3			09/20/17 15:18	1
Cyclohexane	1.7	U	1.7	0.034	ug/m3			09/20/17 15:18	1
Dibromochloromethane	1.7	U	1.7	0.17	ug/m3			09/20/17 15:18	1
Dichlorodifluoromethane	2.5	U	2.5	0.28	ug/m3			09/20/17 15:18	1
Ethylbenzene	0.87	U	0.87	0.087	ug/m3			09/20/17 15:18	1

TestAmerica Burlington

QC Sample Results

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

TestAmerica Job ID: 200-40113-1

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

Lab Sample ID: MB 200-121137/8

Matrix: Air

Analysis Batch: 121137

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Hexachlorobutadiene	21	U	21	0.38	ug/m3			09/20/17 15:18	1
Hexane	2.8	U	2.8	0.099	ug/m3			09/20/17 15:18	1
Isopropyl alcohol	12	U	12	0.37	ug/m3			09/20/17 15:18	1
Isopropylbenzene	3.9	U	3.9	0.093	ug/m3			09/20/17 15:18	1
Methyl tert-butyl ether	3.6	U	3.6	0.079	ug/m3			09/20/17 15:18	1
Methylene Chloride	1.7	U	1.7	0.42	ug/m3			09/20/17 15:18	1
m-Xylene & p-Xylene	3.5	U	3.5	0.11	ug/m3			09/20/17 15:18	1
Naphthalene	2.6	U	2.6	0.16	ug/m3			09/20/17 15:18	1
o-Xylene	0.87	U	0.87	0.078	ug/m3			09/20/17 15:18	1
Styrene	0.85	U	0.85	0.068	ug/m3			09/20/17 15:18	1
Tetrachloroethene	1.4	U	1.4	0.20	ug/m3			09/20/17 15:18	1
Tetrahydrofuran	15	U	15	0.53	ug/m3			09/20/17 15:18	1
Toluene	0.75	U	0.75	0.094	ug/m3			09/20/17 15:18	1
trans-1,2-Dichloroethene	0.79	U	0.79	0.11	ug/m3			09/20/17 15:18	1
trans-1,3-Dichloropropene	0.91	U	0.91	0.12	ug/m3			09/20/17 15:18	1
Trichloroethene	1.1	U	1.1	0.16	ug/m3			09/20/17 15:18	1
Trichlorofluoromethane	1.1	U	1.1	0.25	ug/m3			09/20/17 15:18	1
Vinyl acetate	18	U	18	0.29	ug/m3			09/20/17 15:18	1
Vinyl bromide	0.87	U	0.87	0.087	ug/m3			09/20/17 15:18	1
Vinyl chloride	0.51	U	0.51	0.066	ug/m3			09/20/17 15:18	1

Lab Sample ID: LCS 200-121137/7

Matrix: Air

Analysis Batch: 121137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,2,2-Tetrachloroethane	10.0	9.73		ppb v/v		97	69 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.2		ppb v/v		102	68 - 128
1,1,2-Trichloroethane	10.0	9.70		ppb v/v		97	69 - 129
1,1-Dichloroethane	10.0	11.0		ppb v/v		110	66 - 126
1,1-Dichloroethene	10.0	10.0		ppb v/v		100	67 - 127
1,2,4-Trichlorobenzene	10.0	7.29		ppb v/v		73	59 - 126
1,2,4-Trimethylbenzene	10.0	9.82		ppb v/v		98	65 - 125
1,2-Dibromoethane (EDB)	10.0	9.34		ppb v/v		93	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	10.0	12.7		ppb v/v		127	78 - 138
1,2-Dichlorobenzene	10.0	9.27		ppb v/v		93	67 - 127
1,2-Dichloroethane	10.0	10.8		ppb v/v		108	67 - 132
1,2-Dichloropropane	10.0	9.97		ppb v/v		100	67 - 127
1,3,5-Trimethylbenzene	10.0	9.73		ppb v/v		97	65 - 125
1,3-Dichlorobenzene	10.0	9.16		ppb v/v		92	67 - 127
1,4-Dichlorobenzene	10.0	9.09		ppb v/v		91	66 - 126
1,4-Dioxane	10.0	8.83		ppb v/v		88	66 - 132
2-Butanone (MEK)	10.0	10.3		ppb v/v		104	62 - 122
4-Methyl-2-pentanone (MIBK)	10.0	10.9		ppb v/v		109	62 - 130
Acetone	10.0	12.4		ppb v/v		124	64 - 136
Benzene	10.0	9.75		ppb v/v		98	67 - 127

TestAmerica Burlington

QC Sample Results

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

TestAmerica Job ID: 200-40113-1

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

Lab Sample ID: LCS 200-1211377

Client Sample ID: Lab Control Sample

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 121137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzyl chloride	10.0	10.1		ppb v/v		101	54 - 135
Bromodichloromethane	10.0	10.2		ppb v/v		102	69 - 129
Bromoform	10.0	8.52		ppb v/v		85	34 - 170
Bromomethane	10.0	11.3		ppb v/v		113	68 - 128
Carbon disulfide	10.0	11.9		ppb v/v		119	81 - 141
Carbon tetrachloride	10.0	9.84		ppb v/v		98	62 - 143
Chlorobenzene	10.0	8.98		ppb v/v		90	68 - 128
Chloroethane	10.0	11.4		ppb v/v		114	65 - 125
Chloroform	10.0	10.5		ppb v/v		105	69 - 129
Chloromethane	10.0	11.4		ppb v/v		114	57 - 126
cis-1,2-Dichloroethene	10.0	9.79		ppb v/v		98	67 - 127
cis-1,3-Dichloropropene	10.0	10.1		ppb v/v		101	70 - 130
Cyclohexane	10.0	10.0		ppb v/v		100	69 - 129
Dibromochloromethane	10.0	9.05		ppb v/v		91	66 - 130
Dichlorodifluoromethane	10.0	11.5		ppb v/v		115	68 - 128
Ethylbenzene	10.0	9.51		ppb v/v		95	68 - 128
Hexachlorobutadiene	10.0	7.96		ppb v/v		80	62 - 130
Hexane	10.0	11.7		ppb v/v		117	71 - 131
Isopropyl alcohol	10.0	10.2		ppb v/v		102	55 - 124
Isopropylbenzene	10.0	9.39		ppb v/v		94	67 - 127
Methyl tert-butyl ether	10.0	10.9		ppb v/v		109	67 - 127
Methylene Chloride	10.0	11.1		ppb v/v		111	62 - 122
m-Xylene & p-Xylene	20.0	18.8		ppb v/v		94	68 - 128
Naphthalene	10.0	6.71		ppb v/v		67	50 - 121
o-Xylene	10.0	9.30		ppb v/v		93	67 - 127
Styrene	10.0	9.45		ppb v/v		94	68 - 128
Tetrachloroethene	10.0	8.48		ppb v/v		85	70 - 130
Tetrahydrofuran	10.0	11.7		ppb v/v		117	61 - 136
Toluene	10.0	9.43		ppb v/v		94	67 - 127
trans-1,2-Dichloroethene	10.0	11.6		ppb v/v		116	72 - 132
trans-1,3-Dichloropropene	10.0	10.3		ppb v/v		103	69 - 129
Trichloroethene	10.0	9.64		ppb v/v		96	68 - 128
Trichlorofluoromethane	10.0	11.7		ppb v/v		117	67 - 127
Vinyl acetate	10.0	12.2		ppb v/v		122	62 - 130
Vinyl bromide	10.0	11.0		ppb v/v		110	67 - 127
Vinyl chloride	10.0	11.7		ppb v/v		117	62 - 125

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	55	55.5		ug/m3		102	70 - 130
1,1,2,2-Tetrachloroethane	69	66.8		ug/m3		97	69 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	77	78.3		ug/m3		102	68 - 128
1,1,2-Trichloroethane	55	52.9		ug/m3		97	69 - 129
1,1-Dichloroethane	40	44.3		ug/m3		110	66 - 126
1,1-Dichloroethene	40	39.7		ug/m3		100	67 - 127
1,2,4-Trichlorobenzene	74	54.1		ug/m3		73	59 - 126
1,2,4-Trimethylbenzene	49	48.3		ug/m3		98	65 - 125
1,2-Dibromoethane (EDB)	77	71.8		ug/m3		93	70 - 130

TestAmerica Burlington

QC Sample Results

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

TestAmerica Job ID: 200-40113-1

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

Lab Sample ID: LCS 200-1211377

Client Sample ID: Lab Control Sample

Matrix: Air

Prep Type: Total/NA

Analysis Batch: 121137

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichloro-1,1,2,2-tetrafluoroethane	70	88.4		ug/m3		127	78 - 138
1,2-Dichlorobenzene	60	55.7		ug/m3		93	67 - 127
1,2-Dichloroethane	40	43.7		ug/m3		108	67 - 132
1,2-Dichloropropane	46	46.1		ug/m3		100	67 - 127
1,3,5-Trimethylbenzene	49	47.8		ug/m3		97	65 - 125
1,3-Dichlorobenzene	60	55.1		ug/m3		92	67 - 127
1,4-Dichlorobenzene	60	54.7		ug/m3		91	66 - 126
1,4-Dioxane	36	31.8		ug/m3		88	66 - 132
2-Butanone (MEK)	29	30.5		ug/m3		104	62 - 122
4-Methyl-2-pentanone (MIBK)	41	44.5		ug/m3		109	62 - 130
Acetone	24	29.5		ug/m3		124	64 - 136
Benzene	32	31.2		ug/m3		98	67 - 127
Benzyl chloride	52	52.1		ug/m3		101	54 - 135
Bromodichloromethane	67	68.3		ug/m3		102	69 - 129
Bromoform	100	88.0		ug/m3		85	34 - 170
Bromomethane	39	44.0		ug/m3		113	68 - 128
Carbon disulfide	31	37.1		ug/m3		119	81 - 141
Carbon tetrachloride	63	61.9		ug/m3		98	62 - 143
Chlorobenzene	46	41.4		ug/m3		90	68 - 128
Chloroethane	26	30.2		ug/m3		114	65 - 125
Chloroform	49	51.2		ug/m3		105	69 - 129
Chloromethane	21	23.6		ug/m3		114	57 - 126
cis-1,2-Dichloroethene	40	38.8		ug/m3		98	67 - 127
cis-1,3-Dichloropropene	45	45.8		ug/m3		101	70 - 130
Cyclohexane	34	34.5		ug/m3		100	69 - 129
Dibromochloromethane	85	77.1		ug/m3		91	66 - 130
Dichlorodifluoromethane	49	56.8		ug/m3		115	68 - 128
Ethylbenzene	43	41.3		ug/m3		95	68 - 128
Hexachlorobutadiene	110	84.8		ug/m3		80	62 - 130
Hexane	35	41.1		ug/m3		117	71 - 131
Isopropyl alcohol	25	25.1		ug/m3		102	55 - 124
Isopropylbenzene	49	46.1		ug/m3		94	67 - 127
Methyl tert-butyl ether	36	39.4		ug/m3		109	67 - 127
Methylene Chloride	35	38.6		ug/m3		111	62 - 122
m-Xylene & p-Xylene	87	81.5		ug/m3		94	68 - 128
Naphthalene	52	35.2		ug/m3		67	50 - 121
o-Xylene	43	40.4		ug/m3		93	67 - 127
Styrene	43	40.2		ug/m3		94	68 - 128
Tetrachloroethene	68	57.5		ug/m3		85	70 - 130
Tetrahydrofuran	29	34.4		ug/m3		117	61 - 136
Toluene	38	35.5		ug/m3		94	67 - 127
trans-1,2-Dichloroethene	40	45.9		ug/m3		116	72 - 132
trans-1,3-Dichloropropene	45	46.7		ug/m3		103	69 - 129
Trichloroethene	54	51.8		ug/m3		96	68 - 128
Trichlorofluoromethane	56	65.9		ug/m3		117	67 - 127
Vinyl acetate	35	43.1		ug/m3		122	62 - 130
Vinyl bromide	44	47.9		ug/m3		110	67 - 127

TestAmerica Burlington

QC Sample Results

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

TestAmerica Job ID: 200-40113-1

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

Lab Sample ID: LCS 200-1211377

Matrix: Air

Analysis Batch: 121137

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	26	30.0		ug/m3		117	62 - 125

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QC Association Summary

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

TestAmerica Job ID: 200-40113-1

Air - GC/MS VOA

Analysis Batch: 121137

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
200-40113-1	OS-IA-1	Total/NA	Air	TO-15	
200-40113-2	OS-SS-1	Total/NA	Air	TO-15	
200-40113-3	OS-OA-1	Total/NA	Air	TO-15	
MB 200-121137/8	Method Blank	Total/NA	Air	TO-15	
LCS 200-121137/7	Lab Control Sample	Total/NA	Air	TO-15	

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Lab Chronicle

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

TestAmerica Job ID: 200-40113-1

Client Sample ID: OS-IA-1

Date Collected: 09/16/17 16:34

Date Received: 09/19/17 10:15

Lab Sample ID: 200-40113-1

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	121137	09/20/17 16:09	ERT	TAL BUR

Client Sample ID: OS-SS-1

Date Collected: 09/16/17 16:41

Date Received: 09/19/17 10:15

Lab Sample ID: 200-40113-2

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		2	121137	09/20/17 17:00	ERT	TAL BUR

Client Sample ID: OS-OA-1

Date Collected: 09/16/17 16:20

Date Received: 09/19/17 10:15

Lab Sample ID: 200-40113-3

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	121137	09/20/17 17:50	ERT	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
Project/Site: (Moog) Jamison Road Site- Elma, NY

TestAmerica Job ID: 200-40113-1

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	09-30-17 *
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-02-18
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	12-31-17
New Hampshire	NELAP	1	2006	12-18-17
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	12-30-17
US Fish & Wildlife	Federal		LE-058448-0	10-31-17
USDA	Federal		P330-11-00093	12-05-19
Vermont	State Program	1	VT-4000	12-31-17
Virginia	NELAP	3	460209	12-14-17

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: 200-40113-1

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: 200-40113-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
200-40113-1	OS-IA-1	Air	09/16/17 16:34	09/19/17 10:15
200-40113-2	OS-SS-1	Air	09/16/17 16:41	09/19/17 10:15
200-40113-3	OS-OA-1	Air	09/16/17 16:20	09/19/17 10:15

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Chain of Custody Record



TestAmerica Burlington
30 Community Drive Suite 11
South Burlington, VT 05403
Phone (802) 660-1990 Fax (802) 660-1919

Client Information
 Client Contact: **Mr. Michael Lesakowski**
 Phone: **(716) 818-8358**
 E-Mail: **brian.fischer@testamericainc.com**
 Company: **Benchmark Env. Eng. & Science, PLLC**

Address: **2558 Hamburg Turnpike Suite 300**
 City: **Lackawanna**
 State, Zip: **NY, 14218**
 Phone: **716-856-0599 (Tel)**
 Email: **mlesakowski@benchmarkturnkey.com**

Lab PM: **Fischer, Brian J**
 Sample: **RIP / TA 13**
 Due Date Requested: **3 DAY**
 TAT Requested (days): **3 DAY**
 PO #: **Purchase Order not required**
 WO #: **0400-017-001**
 Project #: **48016204**
 SSOW#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (Water, Solid, Other)	Field Filtered Sample (Yes or No)		TO15 STD - TA Standard Analyte List	Total Number of Containers	Special Instructions/Note:
					Field Filtered Sample (Yes or No)	TO15 STD - TA Standard Analyte List			
OS IA-1	9/16/17	838 1634	Air	Air	<input checked="" type="checkbox"/>	N			
OS SS-1	9/16/17	836 1641	Air	Air	<input checked="" type="checkbox"/>	N			
OS OA-1	9/16/17	842 1620	Air	Air	<input checked="" type="checkbox"/>	N			

- Preservation Codes:**
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:

- Preservation Codes (continued):**
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2SO4
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4-5
 X - EDTA
 Z - other (specify)

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological
Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:
 Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*
 Relinquished by: *[Signature]*

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months

Received by:	Date/Time:	Company:
<i>[Signature]</i>	9/18/17 856	Benchmark
<i>[Signature]</i>	9/18/17 1700	TA
<i>[Signature]</i>	9/15/17 1015	TA

Cooler Temperature(s) °C and Other Remarks:

ORIGIN ID:DKKA (716) 691-2600
CHAR BRONSON
TEST AMERICA
10 HAZELWOOD

SHIP DATE: 18SEP17
ACTWT: 33.75 LB
CAD: 846654/CAFE3011
DIMS: 22x18x18 IN

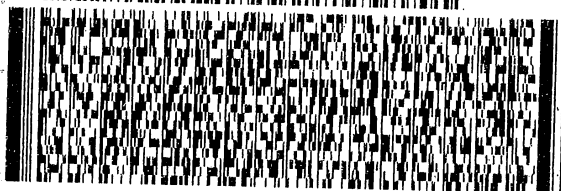
AMHERST, NY 14228
UNITED STATES US

BILL RECIPIENT

TO **SAMPLE MGT.**
TA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 660-1990

REF: TA BURLINGTON



FedEx
Express



J161216101001BY

TRK# 5657 0122 9674
0201

TUE - 19 SEP 3:00P
STANDARD OVERNIGHT

NC BTVA

05403
VT-US BTV

Part # 156148V-434 RIT2 EXP-03/18



Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 200-40113-1

Login Number: 40113

List Number: 1

Creator: Cota, Fred P

List Source: TestAmerica Burlington

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	NA: Lab does not accept radioactive samples
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	No: Thermal preservation not required
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	No: 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	RLP/TAB
There are no discrepancies between the sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	NA: No analysis requiring residual chlorine check assigned

Pre-Shipment Clean Canister Certification Report

System ID				Cleaning Date				Technician				Canister Size				Certification Type							
Top Rack				8/14/2017				EJE				6L				Individual							
Port	Can ID	Initial ¹ (psia)	Final (psia)	Final ("Hg)	Diff. ³	# Cycles	20	Gauge	Date	Time	Tech	Temp	Gauge	Date	Time	Tech	Temp	Gauge	Date	Time	Tech	Temp	Batch
1	3725	.04	.05	-29.8	.01			6K	8.5.17	14:00	EL	23	6K	8.18.17	16:00	EL	23	6K	8.18.17	16:00	EL	23	
2	2565	.04	.05	-29.8	.01			6K	8.18.17	16:00	J	23	6K	8.18.17	16:00	J	23	6K	8.18.17	16:00	J	23	
3	3622	.04	.05	-29.8	.01			6K	8.18.17	16:00	EL	23	6K	8.18.17	16:00	EL	23	6K	8.18.17	16:00	EL	23	
4	3278	.04	.07	-29.8	.03			6K	8.18.17	14:00	EL	23	6K	8.18.17	16:00	EL	23	6K	8.18.17	16:00	EL	23	
5	4016		.04	-29.8	.00																		
6	5967		.05	-29.8	.01																		
7	5433		.08	-29.8	.04																		
8	5442		.08	-29.8	.04																		
9	3641		.08	-29.8	.04																		
10	3007		.06	-29.8	.02																		
11	4870		.05	-29.8	.01																		
12	3233		.05	-29.8	.01																		

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												
Can ID	Date	Sequence	Analyst	Inventory Level	Limited	Secondary Review	Review Date	Reviewer				
3622	8/15/17	26388	KP	XXXX			8/21/17	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:

200-39711-A-3
 3622
 Location: Air-Storage
 Bottle: Summa Canister 6L
 Sampled: 8/14/2017 12:00 AM 200-1064558

Loc: 200
39711
#3
A

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Pre-Shipment Clean Canister Certification Report

System ID		# Cycles		Cleaning Date		Technician		Canister Size		Certification Type:			
Top Rack		20		8/28/2017		EJE		6L		Individual Batch			
Port	Can ID	Initial (psia)	Final (psia)	Diff. ³	Final ("Hg)	Gauge:	Date:	Time:	Temp:	Gauge:	Date:	Time:	Temp:
1	4925	.04	.05	.01	-29.6	G25	8/31/17	13:00	66	G25	9/1/17	15:00	66
2	2644	.04	.05	.01	-29.3		8/31/17	13:00	66		9/1/17	11:30	66
3	3257		.11	.07	-29.3								
4	3164		.07	.05	-29.3								
5	3014		.05	.01	-29.3								
6	4563		.06	.02	-29.3								
7	4829		.05	.01	-29.3								
8	4942		.18	.14	-29.3								
9	4874		.05	.01	-29.3								
10	5963		.05	.01	-29.3								
11	5441		.05	.01	-29.3								
12	3437		.05	.01	-29.3								

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

Can ID	Date	Sequence	Analyst	Inventory Level				Secondary Review	
				1	2	3	4		
4925	8/30/17	26620	AB		XXXX			8/30/17	PAD

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

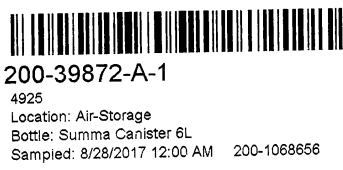
Inventory Level 2: Individual or Batch Certification (TO15 0.04 ppbv).

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: _____



Loc: 200
39872
#1
A



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

Lab Name: TestAmerica Burlington Job No.: 200-39711-1
 SDG No.: _____
 Client Sample ID: 3622 Lab Sample ID: 200-39711-3
 Matrix: Air Lab File ID: 26388_26.D
 Analysis Method: TO-15 Date Collected: 08/14/2017 00:00
 Sample wt/vol: 1000 (mL) Date Analyzed: 08/16/2017 07:43
 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.: 119769 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.: 200-39711-1
 SDG No.: _____
 Client Sample ID: 3622 Lab Sample ID: 200-39711-3
 Matrix: Air Lab File ID: 26388_26.D
 Analysis Method: TO-15 Date Collected: 08/14/2017 00:00
 Sample wt/vol: 1000 (mL) Date Analyzed: 08/16/2017 07:43
 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.: 119769 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.: 200-39711-1
 SDG No.: _____
 Client Sample ID: 3622 Lab Sample ID: 200-39711-3
 Matrix: Air Lab File ID: 26388_26.D
 Analysis Method: TO-15 Date Collected: 08/14/2017 00:00
 Sample wt/vol: 1000 (mL) Date Analyzed: 08/16/2017 07:43
 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.: 119769 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\20170815-26388.b\26388_26.D
 Lims ID: 200-39711-A-3
 Client ID: 3622
 Sample Type: Client
 Inject. Date: 16-Aug-2017 07:43:30 ALS Bottle#: 26 Worklist Smp#: 26
 Purge Vol: 200.000 mL Dil. Factor: 0.2000
 Sample Info: 200-0026388-026
 Misc. Info.: 39711-03
 Operator ID: pad Instrument ID: CHX.i
 Method: \\ChromNA\Burlington\ChromData\CHX.i\20170815-26388.b\TO15_MasterMethod_X.m.m
 Limit Group: AI_TO15_ICAL
 Last Update: 17-Aug-2017 12:13:10 Calib Date: 10-Jul-2017 21:09:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\CHX.i\20170710-25833.b\25833_11.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK004

First Level Reviewer: puangmaleek

Date: 17-Aug-2017 12:13:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41		3.060				ND	
2 Dichlorodifluoromethane	85		3.124				ND	
3 Chlorodifluoromethane	51		3.172				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.375				ND	
5 Chloromethane	50		3.509				ND	
6 Butane	43		3.691				ND	
7 Vinyl chloride	62		3.734				ND	
8 Butadiene	54		3.803				ND	
10 Bromomethane	94		4.451				ND	
11 Chloroethane	64		4.670				ND	
13 Vinyl bromide	106		5.039				ND	
14 Trichlorofluoromethane	101		5.130				ND	
17 Ethanol	45	5.745	5.703	0.042	77	1175	0.1687	
20 1,1,2-Trichloro-1,2,2-trif	101		6.152				ND	
21 1,1-Dichloroethene	96		6.211				ND	
22 Acetone	43		6.468				ND	
23 Carbon disulfide	76		6.596				ND	
24 Isopropyl alcohol	45		6.756				ND	
25 3-Chloro-1-propene	41		6.987				ND	
27 Methylene Chloride	49		7.281				ND	
28 2-Methyl-2-propanol	59		7.532				ND	
29 Methyl tert-butyl ether	73		7.693				ND	
31 trans-1,2-Dichloroethene	61		7.714				ND	
33 Hexane	57		8.089				ND	
34 1,1-Dichloroethane	63		8.602				ND	
35 Vinyl acetate	43		8.688				ND	
S 30 1,2-Dichloroethene, Total	61		9.665				ND	
37 cis-1,2-Dichloroethene	96		9.747				ND	
38 2-Butanone (MEK)	72		9.816				ND	
39 Ethyl acetate	88		9.859				ND	
* 40 Chlorobromomethane	128	10.229	10.228	0.001	94	117187	10.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
41 Tetrahydrofuran	42		10.255				ND	
42 Chloroform	83		10.368				ND	
43 Cyclohexane	84		10.608				ND	
44 1,1,1-Trichloroethane	97		10.646				ND	
45 Carbon tetrachloride	117		10.908				ND	
46 Isooctane	57		11.357				ND	
47 Benzene	78		11.405				ND	
48 1,2-Dichloroethane	62		11.619				ND	
49 n-Heptane	43		11.774				ND	
* 50 1,4-Difluorobenzene	114	12.315	12.315	0.000	97	648909	10.0	
53 Trichloroethene	95		12.807				ND	
54 1,2-Dichloropropane	63		13.406				ND	
55 Methyl methacrylate	69		13.599				ND	
56 1,4-Dioxane	88		13.668				ND	
57 Dibromomethane	174		13.679				ND	
58 Dichlorobromomethane	83		13.989				ND	
60 cis-1,3-Dichloropropene	75		14.968				ND	
61 4-Methyl-2-pentanone (MIBK)	43		15.300				ND	
65 Toluene	92		15.578				ND	
66 trans-1,3-Dichloropropene	75		16.225				ND	
67 1,1,2-Trichloroethane	83		16.621				ND	
68 Tetrachloroethene	166		16.707				ND	
69 2-Hexanone	43		17.113				ND	
71 Chlorodibromomethane	129		17.418				ND	
72 Ethylene Dibromide	107		17.702				ND	
* 74 Chlorobenzene-d5	117	18.649	18.649	0.000	91	592970	10.0	
75 Chlorobenzene	112		18.713				ND	
76 Ethylbenzene	91		18.874				ND	
78 m-Xylene & p-Xylene	106		19.141				ND	
S 73 Xylenes, Total	106		19.600				ND	
79 o-Xylene	106		20.034				ND	
80 Styrene	104		20.093				ND	
81 Bromoform	173		20.564				ND	
82 Isopropylbenzene	105		20.789				ND	
84 1,1,2,2-Tetrachloroethane	83		21.506				ND	
85 N-Propylbenzene	91		21.570				ND	
89 2-Chlorotoluene	91		21.773				ND	
88 4-Ethyltoluene	105		21.773				ND	
90 1,3,5-Trimethylbenzene	105		21.885				ND	
92 tert-Butylbenzene	119		22.404				ND	
93 1,2,4-Trimethylbenzene	105		22.506				ND	
94 sec-Butylbenzene	105		22.747				ND	
95 4-Isopropyltoluene	119		22.961				ND	
96 1,3-Dichlorobenzene	146		22.982				ND	
97 1,4-Dichlorobenzene	146		23.127				ND	
98 Benzyl chloride	91		23.341				ND	
100 n-Butylbenzene	91		23.555				ND	
101 1,2-Dichlorobenzene	146		23.683				ND	
103 1,2,4-Trichlorobenzene	180		26.261				ND	
104 Hexachlorobutadiene	225		26.449				ND	
105 Naphthalene	128		26.764				ND	

Reagents:

ATTO15XISs_00002

Amount Added: 20.00

Units: mL

Run Reagent

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHX.i\20170815-26388.b\26388_26.D

Injection Date: 16-Aug-2017 07:43:30

Instrument ID: CHX.i

Operator ID: pad

Lims ID: 200-39711-A-3

Lab Sample ID: 200-39711-3

Worklist Smp#: 26

Client ID: 3622

Purge Vol: 200.000 mL

Dil. Factor: 0.2000

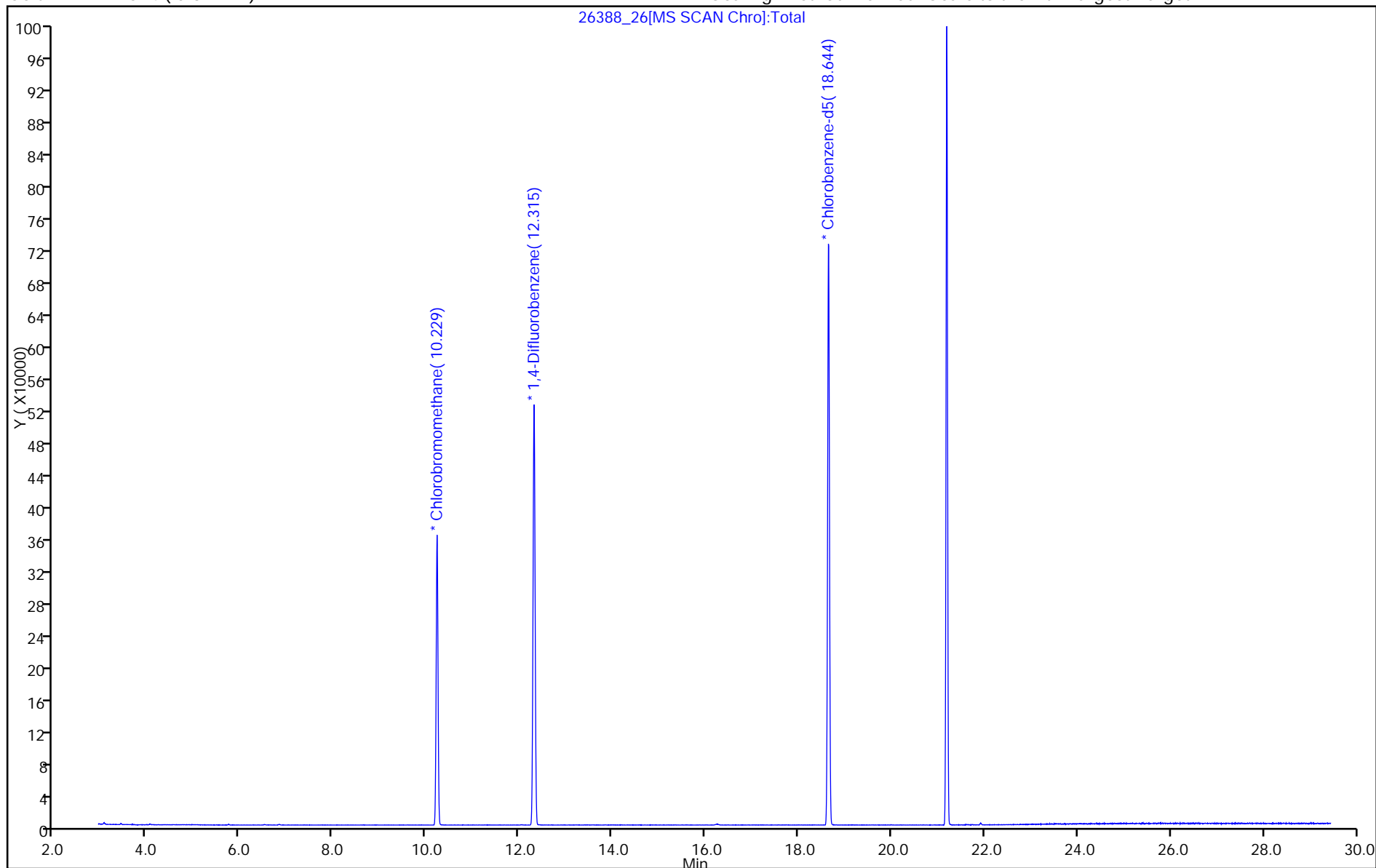
ALS Bottle#: 26

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.: 200-39872-1
 SDG No.: _____
 Client Sample ID: 4925 Lab Sample ID: 200-39872-1
 Matrix: Air Lab File ID: 26620-08.D
 Analysis Method: TO-15 Date Collected: 08/28/2017 00:00
 Sample wt/vol: 1000 (mL) Date Analyzed: 08/29/2017 15:50
 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.: 120325 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.: 200-39872-1
 SDG No.: _____
 Client Sample ID: 4925 Lab Sample ID: 200-39872-1
 Matrix: Air Lab File ID: 26620-08.D
 Analysis Method: TO-15 Date Collected: 08/28/2017 00:00
 Sample wt/vol: 1000 (mL) Date Analyzed: 08/29/2017 15:50
 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.: 120325 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.: 200-39872-1
 SDG No.: _____
 Client Sample ID: 4925 Lab Sample ID: 200-39872-1
 Matrix: Air Lab File ID: 26620-08.D
 Analysis Method: TO-15 Date Collected: 08/28/2017 00:00
 Sample wt/vol: 1000 (mL) Date Analyzed: 08/29/2017 15:50
 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.: 120325 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\CHB.i\20170829-26620.b\26620-08.D
 Lims ID: 200-39872-A-1
 Client ID: 4925
 Sample Type: Client
 Inject. Date: 29-Aug-2017 15:50:30 ALS Bottle#: 8 Worklist Smp#: 8
 Purge Vol: 200.000 mL Dil. Factor: 0.2000
 Sample Info: 200-0026620-008
 Misc. Info.: 39872-01
 Operator ID: pad Instrument ID: CHB.i
 Method: \\ChromNA\Burlington\ChromData\CHB.i\20170829-26620.b\TO15_LLNJ_TO3.m
 Limit Group: AI_TO15_ICAL
 Last Update: 30-Aug-2017 09:37:12 Calib Date: 23-Aug-2017 20:58:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal/External Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Burlington\ChromData\CHB.i\20170823-26532.b\26532-13.D
 Column 1 : RTX-624 (0.32 mm) Det: MS SCAN
 Process Host: XAWRK024

First Level Reviewer: puangmaleek

Date: 30-Aug-2017 09:37:12

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
1 Propene	41	3.150	3.150	0.010	93	3330	0.3928	7
2 Dichlorodifluoromethane	85		3.198				ND	
3 Chlorodifluoromethane	51		3.230				ND	
4 1,2-Dichloro-1,1,2,2-tetra	85		3.417				ND	
5 Chloromethane	50		3.540				ND	
6 Butane	43		3.716				ND	
7 Vinyl chloride	62		3.753				ND	
8 Butadiene	54		3.818				ND	
10 Bromomethane	94		4.490				ND	
11 Chloroethane	64		4.719				ND	
13 Vinyl bromide	106		5.130				ND	
14 Trichlorofluoromethane	101		5.232				ND	
16 Ethanol	45		5.701				ND	
19 1,1,2-Trichloro-1,2,2-trif	101		6.262				ND	
20 1,1-Dichloroethene	96		6.331				ND	
21 Acetone	43		6.486				ND	
22 Isopropyl alcohol	45		6.715				ND	
23 Carbon disulfide	76		6.763				ND	
24 3-Chloro-1-propene	41		7.030				ND	
27 Methylene Chloride	49	7.292	7.292	0.000	34	2591	0.1451	7
28 2-Methyl-2-propanol	59		7.420				ND	
29 Methyl tert-butyl ether	73		7.644				ND	
30 trans-1,2-Dichloroethene	61		7.697				ND	
32 Hexane	57		8.034				ND	
33 1,1-Dichloroethane	63		8.445				ND	
34 Vinyl acetate	43		8.450				ND	
36 2-Butanone (MEK)	72		9.336				ND	
37 cis-1,2-Dichloroethene	96		9.347				ND	
35 Ethyl acetate	88		9.352				ND	
* 39 Chlorobromomethane	128	9.710	9.715	-0.005	73	246843	10.0	
38 Tetrahydrofuran	42		9.731				ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
40 Chloroform	83		9.790				ND	
S 41 1,2-Dichloroethene, Total	61		10.000				ND	
42 1,1,1-Trichloroethane	97		10.051				ND	
43 Cyclohexane	84		10.062				ND	
44 Carbon tetrachloride	117		10.254				ND	
45 Isooctane	57		10.537				ND	
46 Benzene	78		10.579				ND	
47 1,2-Dichloroethane	62		10.675				ND	
48 n-Heptane	43		10.788				ND	
* 50 1,4-Difluorobenzene	114	11.113	11.118	-0.005	91	1216567	10.0	
53 Trichloroethene	95		11.492				ND	
54 1,2-Dichloropropane	63		11.860				ND	
55 Methyl methacrylate	69		11.892				ND	
56 1,4-Dioxane	88		11.988				ND	
57 Dibromomethane	174		12.047				ND	
58 Dichlorobromomethane	83		12.218				ND	
60 cis-1,3-Dichloropropene	75		12.842				ND	
61 4-Methyl-2-pentanone (MIBK)	43		12.992				ND	
64 Toluene	92	13.280	13.275	0.006	95	2310	0.0460	
66 trans-1,3-Dichloropropene	75		13.637				ND	
67 1,1,2-Trichloroethane	83		13.904				ND	
68 Tetrachloroethene	166		14.048				ND	
69 2-Hexanone	43		14.171				ND	
70 Chlorodibromomethane	129		14.459				ND	
71 Ethylene Dibromide	107		14.662				ND	
* 72 Chlorobenzene-d5	117	15.223	15.222	0.001	81	1046620	10.0	
73 Chlorobenzene	112		15.265				ND	
74 Ethylbenzene	91		15.329				ND	
76 m-Xylene & p-Xylene	106	15.479	15.479	0.000	0	1292	0.0284	7
78 o-Xylene	106	15.986	15.986	-0.005	1	317	0.006946	7
S 77 Xylenes, Total	106				0		0.0353	7
79 Styrene	104		16.012				ND	
80 Bromoform	173		16.306				ND	
81 Isopropylbenzene	105		16.402				ND	
83 1,1,2,2-Tetrachloroethane	83		16.808				ND	
84 N-Propylbenzene	91		16.882				ND	
87 4-Ethyltoluene	105		17.005				ND	
88 2-Chlorotoluene	91		17.048				ND	
89 1,3,5-Trimethylbenzene	105		17.069				ND	
91 tert-Butylbenzene	119		17.448				ND	
92 1,2,4-Trimethylbenzene	105	17.507	17.512	-0.010	1	1087	0.0102	7M
93 sec-Butylbenzene	105		17.704				ND	
94 4-Isopropyltoluene	119		17.854				ND	
95 1,3-Dichlorobenzene	146		17.934				ND	
96 1,4-Dichlorobenzene	146		18.046				ND	
97 Benzyl chloride	91		18.195				ND	
99 n-Butylbenzene	91		18.361				ND	
100 1,2-Dichlorobenzene	146		18.531				ND	
103 1,2,4-Trichlorobenzene	180		20.896				ND	
104 Hexachlorobutadiene	225		21.061				ND	
105 Naphthalene	128		21.376				ND	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

M - Manually Integrated

Reagents:

ATTO15BISs_00006

Amount Added: 20.00

Units: mL

Run Reagent

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

TestAmerica Burlington

Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170829-26620.b\26620-08.D

Injection Date: 29-Aug-2017 15:50:30

Instrument ID: CHB.i

Operator ID: pad

Lims ID: 200-39872-A-1

Lab Sample ID: 200-39872-1

Worklist Smp#: 8

Client ID: 4925

Purge Vol: 200.000 mL

Dil. Factor: 0.2000

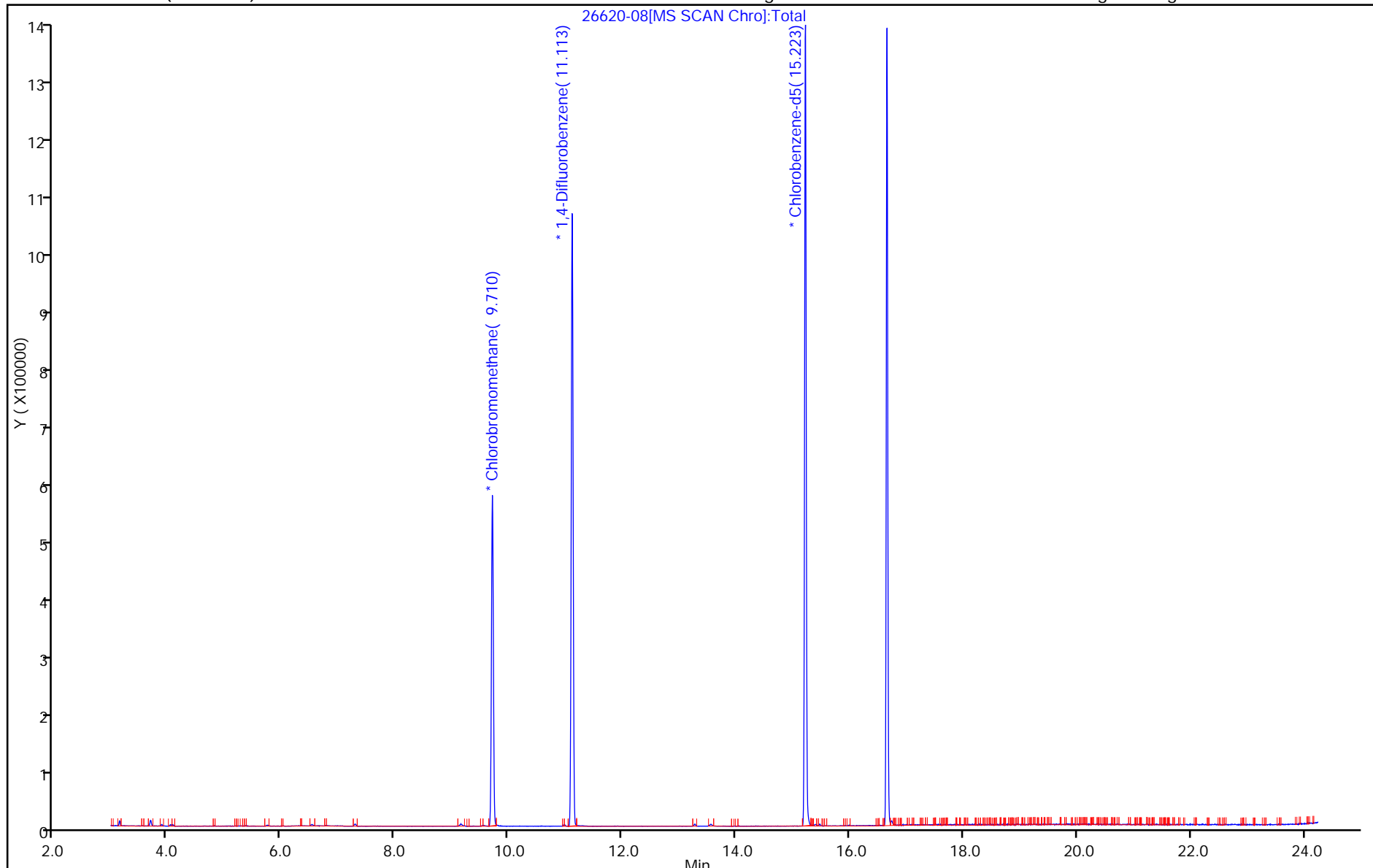
ALS Bottle#: 8

Method: TO15_LLNJ_TO3

Limit Group: AI_TO15_ICAL

Column: RTX-624 (0.32 mm)

Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Burlington

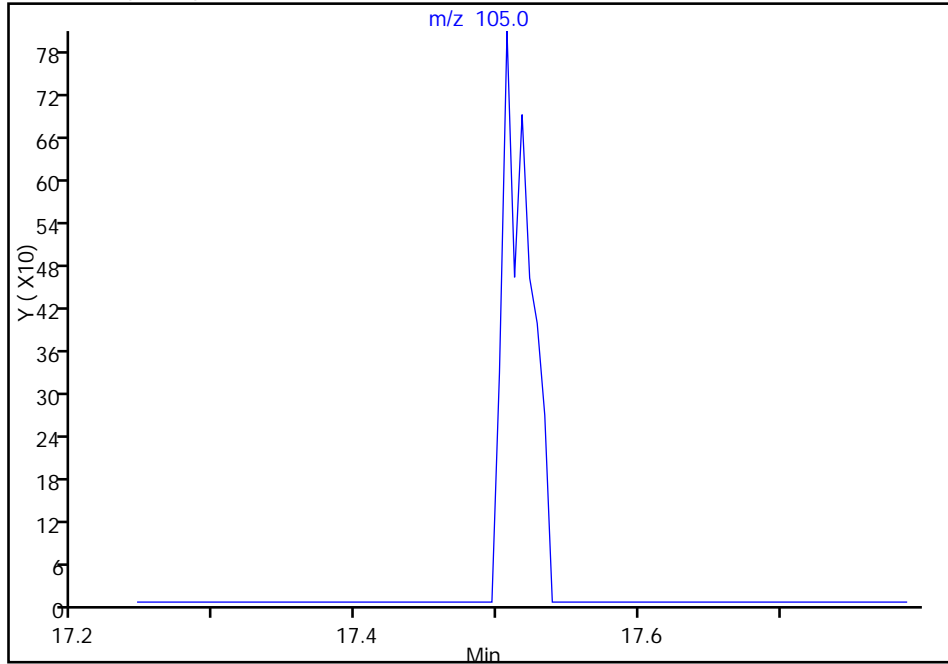
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Injection Date: 29-Aug-2017 15:50:30 Instrument ID: CHB.i
Lims ID: 200-39872-A-1 Lab Sample ID: 200-39872-1
Client ID: 4925
Operator ID: pad ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector: MS SCAN

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

Signal: 1

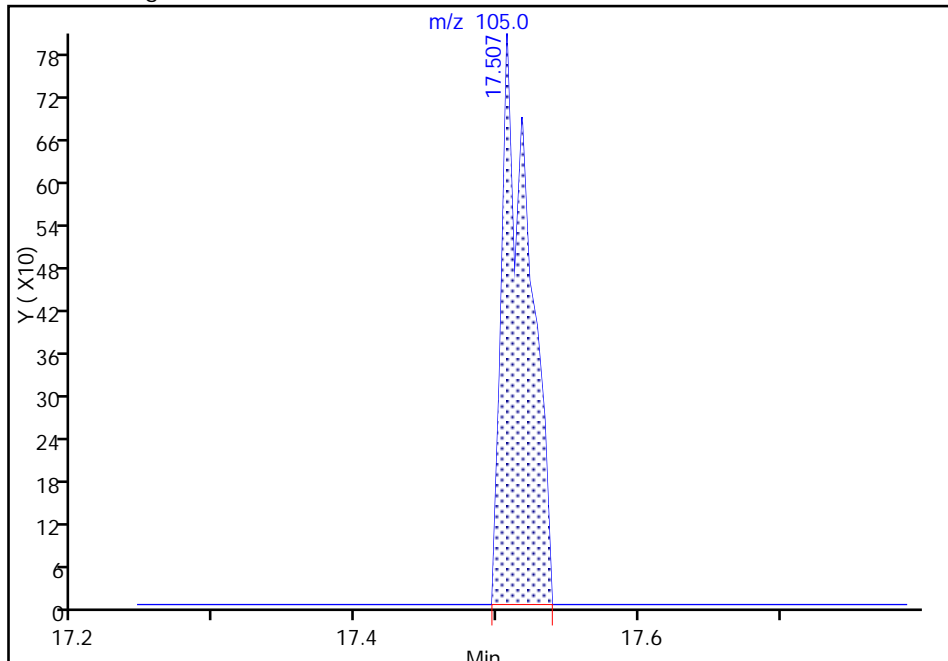
Not Detected
Expected RT: 17.52

Processing Integration Results



Manual Integration Results

RT: 17.51
Area: 1087
Amount: 0.010197
Amount Units: ppb v/v



Reviewer: puangmaleek, 30-Aug-2017 09:36:16

Audit Action: Assigned Compound ID

Audit Reason: Assign Peak



TestAmerica Burlington

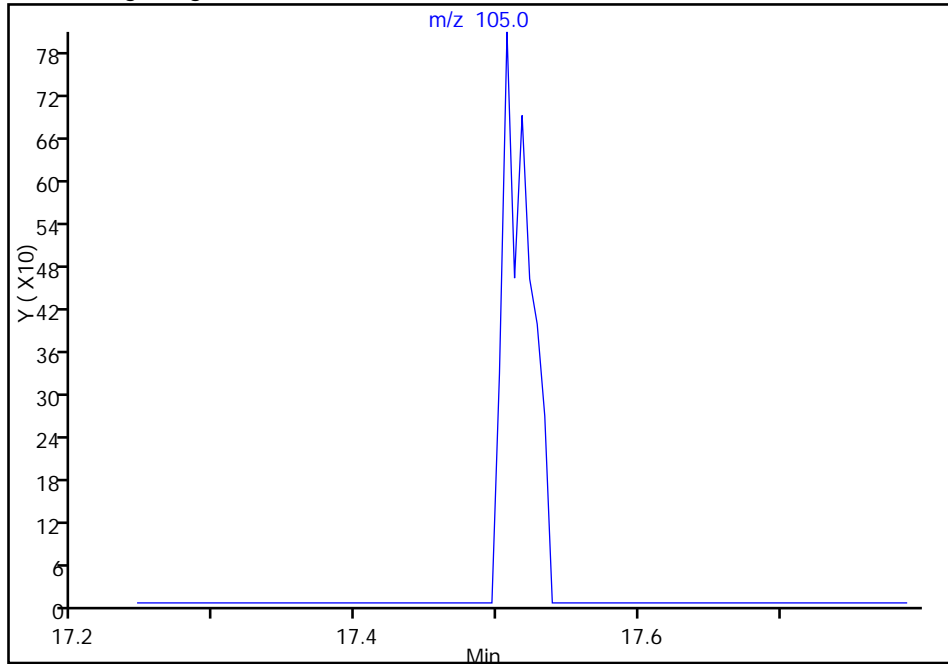
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Injection Date: 29-Aug-2017 15:50:30 Instrument ID: CHB.i
Lims ID: 200-39872-A-1 Lab Sample ID: 200-39872-1
Client ID: 4925
Operator ID: pad ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector: MS SCAN

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

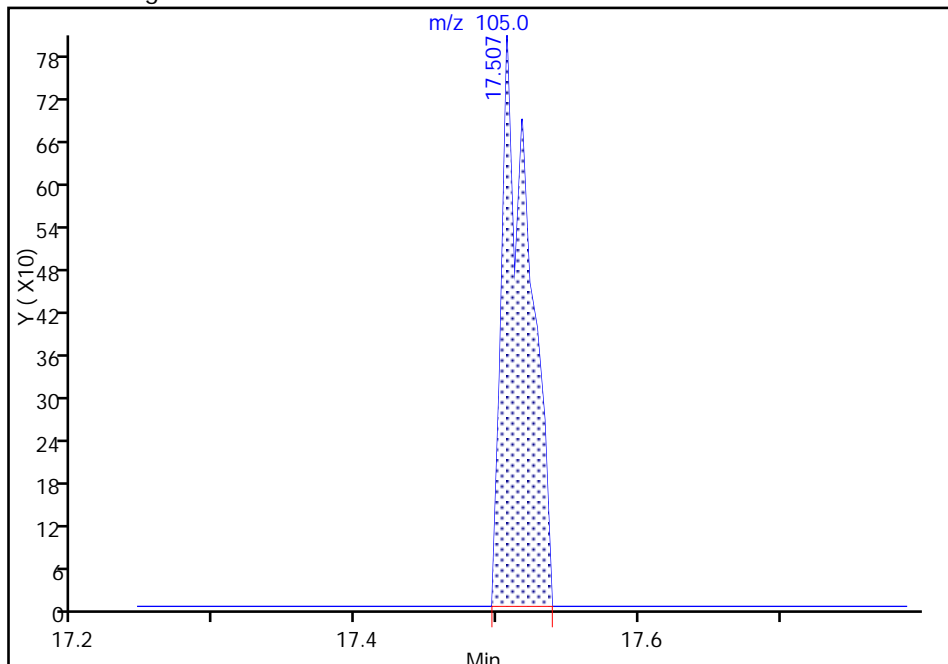
Signal: 1

Not Detected
Expected RT: 17.52

Processing Integration Results



Manual Integration Results



RT: 17.51
Area: 1087
Amount: 0.010197
Amount Units: ppb v/v

Reviewer: puangmaleek, 30-Aug-2017 09:36:27

Audit Action: Manually Integrated

Audit Reason: Assign Peak



TestAmerica Burlington

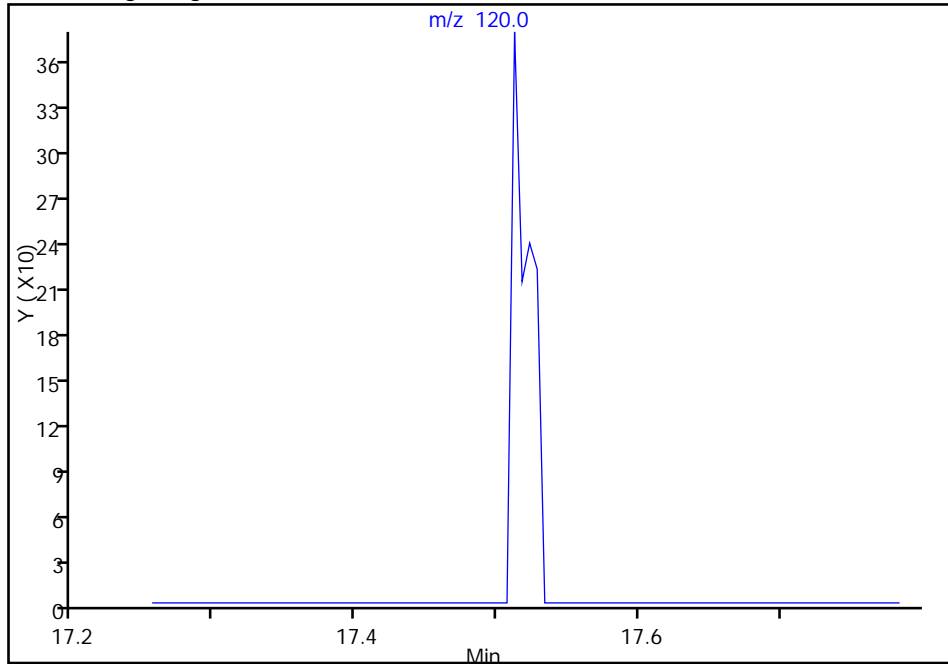
Data File: \\ChromNA\Burlington\ChromData\CHB.i\20170829-26620.b\26620-08.D
Injection Date: 29-Aug-2017 15:50:30 Instrument ID: CHB.i
Lims ID: 200-39872-A-1 Lab Sample ID: 200-39872-1
Client ID: 4925
Operator ID: pad ALS Bottle#: 8 Worklist Smp#: 8
Purge Vol: 200.000 mL Dil. Factor: 0.2000
Method: TO15_LLNJ_TO3 Limit Group: AI_TO15_ICAL
Column: RTX-624 (0.32 mm) Detector: MS SCAN

92 1,2,4-Trimethylbenzene, CAS: 95-63-6

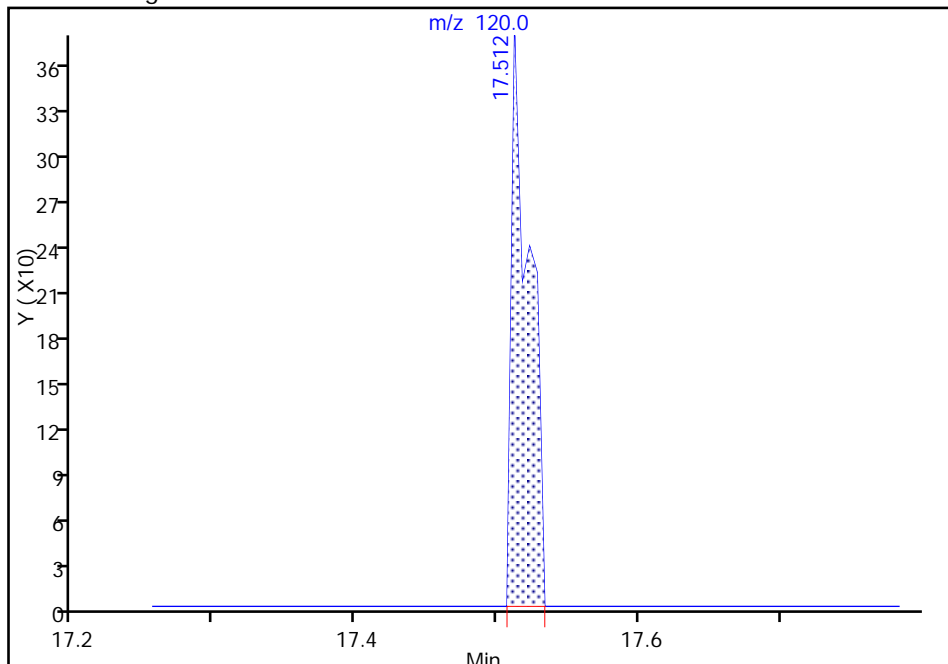
Signal: 2

Not Detected
Expected RT: 17.52

Processing Integration Results



Manual Integration Results



RT: 17.51
Area: 332
Amount: 0.010197
Amount Units: ppb v/v

Reviewer: puangmaleek, 30-Aug-2017 09:36:36

Audit Action: Manually Integrated

Audit Reason: Assign Peak

