



Groundwater & Environmental Services, Inc.

415 Lawrence Bell Drive, Suite 6
Williamsville, NY 14221

T. 800.287.7857

November 18, 2020

Damianos T. Skaros
New York State Department of Environmental Conservation
Division of Environmental Remediation
270 Michigan Avenue
Buffalo, New York 14203

**Re: Soil Vapor Investigation Summary
Vac-Air Alloys
300 Falconer Road
Frewsburg, New York
NYSDEC Site #907016
Main industrial building on site**

Dear Mr. Skaros:

Please find the results of the Soil Vapor Investigation (SVI) reported herein, which was conducted by Groundwater & Environmental Services, Inc. (GES) at the request of the NYSDEC. This report provides a summary of the SVI methodology and results conducted in association with the above referenced property (hereto referenced as "the Site") in Frewsburg, New York. The overall goal of the SVI was to evaluate potential human exposure to volatile organic compounds (VOCs) known to occur in the subsurface at the Vac-Air Alloys Site.

SVI Investigation

At the direction of the NYSDEC, GES conducted the SVI at 300 Falconer Road, Frewsburg, New York. The SVI was completed in accordance with the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York* (October 2006) (hereto referred to as the "NYSDOH SVI Guidance"). SVI samples were collected from six sub-slab areas, with one duplicate sample, and two indoor ambient locations inside the main building at the referenced address.

On September 12, 2019, GES conducted a sampling program at the eight sampling locations described above. An active approach, utilizing laboratory certified canisters were used to evaluate the soil vapor conditions. Samples were collected using 6-liter stainless steel Summa canisters, provided by TestAmerica Laboratory, Inc. (a NYSDEC contracted laboratory), of Knoxville, Tennessee.

The sub-slab air samples were collected from six predetermined locations with historic significance to the site, see Sample Location Map (**Figure 1**) for details. The two ambient air samples were centrally located in predetermined locations. Ambient samples were kept at a height of approximately two to three feet above the floor level, utilizing a Summa canister fitted with a preset air intake regulator. The samples were collected over a 24-hour period, and were retrieved at approximately the same time as they were started, on the following day. Sub-Slab samples were sealed and tested with a helium detector to ensure only sub-slab air was sampled. A field duplicate indoor sub-slab air sample (DUP0926) was also collected at the same time, at the same location of SS-03. Field data readings, sample times, and observations are shown in **Table 1**.

Upon collection of the sample canisters, the samples were submitted to TestAmerica under chain of custody for laboratory analysis utilizing Method TO-15. TestAmerica was also instructed to prepare a NYSDEC Analytical Services Protocol (ASP) Category B laboratory data package for the purpose of data validation. A summary of the analytical data is provided in **Table 2**. The full Laboratory Analytical Report can be found in **Appendix A**.

All eight samples had detections of Volatile Organic Compounds (VOCs). A detection summary is provided in **Table 2**.

- Trichloroethene was detected in all 8 samples. Concentrations ranged from 7.5 µg/m³ at SS-05 to 37,000 µg/m³ at SS-02.
- Methylene chloride was detected in 7 of the 8 samples SS-02 had no detection for this compound. Concentrations ranged from 1.6 µg/m³ at AA-01 to 480 µg/m³ at SS-06
- cis-1,2-Dichloroethane was detected in 7 of the 8 samples, SS-02 had no detection for this compound. Concentrations ranged from 0.43 µg/m³ at SS-03 to 23,000 µg/m³ at SS-06
- Various other VOCs were detected at lower concentrations as shown in **Table 2**.

Analytical data was evaluated using the NYSDOH Soil Vapor/Indoor Air Decision Matrices (**Appendix B**). **Table 3** identifies VOC detections at, or above action levels described in the NYSDOH matrices. The NYSDOH matrices evaluate both sub-slab and indoor air concentrations to determine the most appropriate actions. Ambient samples were not collected with each sub-slab sample; therefore, the closest ambient sample was used when comparing data to the matrices. Analytical results identified concentrations of at least one VOC in all sub slab samples that indicate the requirement for mitigation when compared with the ambient samples. A summary of the individual VOCs identified at or above actions levels is below:

- Trichloroethene concentrations at all sub-slab sample points meet or exceed NYSDOH mitigation levels when compared with the two ambient samples.
- cis-1,2-Dichloroethene concentrations at SS-01, SS-04, and SS-06 meet or exceed NYSDOH mitigation levels when compared with the two ambient samples.
- Vinyl Chloride was only detected in SS-04; however, the concentration of 940 µg/m³ exceed NYSDOH mitigation levels despite non-detect values for the ambient air samples.
- Carbon tetrachloride concentrations at SS-03 and SS-05 were below thresholds for sub-slab concentrations; however, the detections in both ambient air samples were sufficient to indicate the need to identify source(s) and resample or mitigate.

In addition to the sampling, the presence and description of any odors were noted and portable vapor monitoring equipment readings (utilizing a RAE Systems® ppb RAE 2000 photoionization detector [PID] with an 11.7 electron-Volt lamp) were recorded. Various drums of metal scraps,



and buckets of unknown chemicals still remains in some locations on site. The metal materials are contained in one section of the building and remaining chemicals were contained in the boiler room of the building. The location of the metal storage area and the boiler room is shown on **Figure 2**. There were no other chemicals to note. PPB readings near these items did not exhibit any elevated readings above the background levels when the PPB RAE was placed near them (less than 100 parts per billion).

If you have any questions or concerns, please contact GES at 1-800-287-7857.

Sincerely,

GROUNDWATER & ENVIRONMENTAL SERVICES, INC.

A handwritten signature in blue ink, appearing to read "Thomas D. Palmer".

Thomas D. Palmer,
Senior Project Manager

Attachments

Figure 1 – Soil Vapor and Indoor Air Sample Location Map

Figure 2– Waste Location Map

Table 1 – Soil Vapor Sampling Field Data

Table 2 – Air Analytical Summary

Table 3 – Air Analytical Summary with NYSDOH Matrix

Appendix A - Laboratory Analytical Reports

Appendix B- NYSDOH Soil Vapor/Indoor Air Matrix Guidance



Figures

Figure 1

Soil Vapor and Indoor Air Sample Location Map

- Approximate location of Sub-Slab sample
- Approximate location of Ambient Air sample

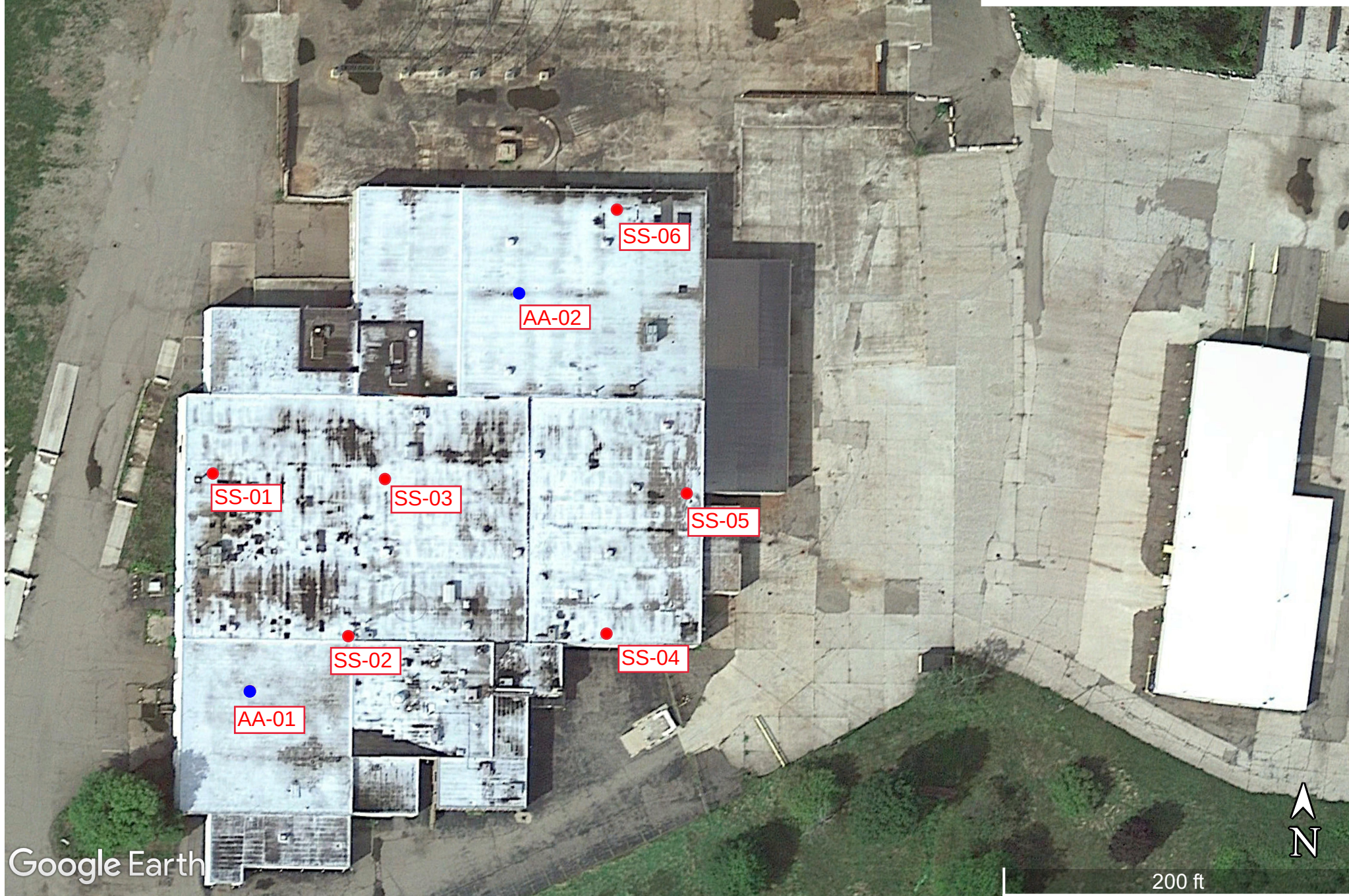


Figure 2. Waste Location map

300 Falconer St. Frewsburg NY

Legend

Approximate location of scrap metals and 55 gallon drums.

Approximate location of various 5 gallon buckets of unknown materials.

Google Earth

200 ft





Tables

Table 1
Soil Vapor Investigation Field Data
September 26-27, 2019
300 Falconer Road
Frewsburg, New York
NYSDEC Site #907016

Sample ID	Sample Type	Location	Helium Test	Canister #	Regulator #	Date Start	Time Start	Pressure Start ("Hg)	Date End	Time End	Pressure End ("Hg)	Comments
SS-01	Sub-Slab Air	West wall	NA	11043	8634	9/26/2019	10:48	28.9	9/27/2019	11:43	6	NA
SS-02	Sub-Slab Air	South wall	NA	10102	-	9/26/2019	10:52	30	9/27/2019	11:38	3	NA
SS-03	Sub-Slab Air	Center of site	NA	9973	7107	9/26/2019	10:56	30	9/27/2019	11:25	6	NA
SS-04	Sub-Slab Air	SE wall	NA	11699	8645	9/26/2019	11:00	22	9/27/2019	10:20	2	NA
SS-05	Sub-Slab Air	East wall	NA	09961	8464	9/26/2019	11:07	28.9	9/27/2019	10:23	2	NA
SS-06	Sub-Slab Air	NE corner	NA	10383	7047	9/26/2019	11:08	28.9	9/27/2019	11:14	5	NA
AA-01	Indoor Ambient Air	SW area	NA	10313	8792	9/26/2019	10:52	29	9/27/2019	11:35	5	NA
AA-02	Indoor Ambient Air	North room center	NA	8790	10389	9/26/2019	11:09	28	9/27/2019	11:19	5	NA
DUP0926 (SS-03)	Sub-Slab Air	Center of site	NA	11973	11584	9/26/2019	10:56	30	9/27/2019	11:25	3	NA

Note:

NA = not applicable

"Hg = inches of mercury

Table 2- Air Analytical Summary
Method TO-15
September 26-27, 2019
300 Falconer Road
Frewsburg, New York
NYSDEC Site #907016

Sample ID		SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	AA-01	AA-02
Sample Location		Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Ambient	Indoor Ambient
Sample Pickup Date		9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019
CAS #	COMPOUND (µg/m ³)								
95-63-6	1,2,4-Trimethylbenzene	ND	ND	2.30	ND	1.50	ND	1.20	0.63
108-67-8	1,3,5-Trimethylbenzene	ND	ND	0.68	ND	0.43	ND	0.53	ND
78-93-3	2-Butanone (MEK)	ND	ND	6.50	ND	1.60	ND	1.70	1.30
71-43-2	Benzene	ND	ND	3.80	ND	1.80	ND	2.10	1.00
56-23-5	Carbon tetrachloride	ND	ND	0.42	ND	0.30	ND	0.45	3.60
74-87-3	Chloromethane	ND	ND	0.91	ND	ND	ND	1.50	1.60
156-59-2	cis-1,2-Dichloroethene	380.00	ND	0.43	320.00	0.44	23,000.00	0.57	0.71
75-71-8	Dichlorodifluoromethane	ND	ND	1.00	ND	1.10	ND	1.10	1.10
64-17-5	Ethanol	ND	ND	64.00	520.00	66.00	ND	6.10	4.90
100-41-4	Ethylbenzene	ND	ND	2.00	ND	1.40	ND	0.89	0.51
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND
110-54-3	n-Hexane	ND	ND	1.60	ND	0.81	ND	0.94	ND
1634-04-4	Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	200 B	ND	3.60	59.00	2.3 B	480.00	1.6 B	1.9 B
136777-61-2	m-Xylene & p-Xylene	ND	ND	5.60	ND	4.10	ND	2.60	1.50
95-47-6	o-Xylene	ND	ND	2.20	ND	1.60	ND	1.00	0.56
75-65-0	tert-Butyl alcohol	ND	ND	3.20	ND	1.70	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	9.00	ND	ND	ND
108-88-3	Toluene	ND	ND	8.10	ND	4.70	ND	5.20	2.50
79-01-6	Trichloroethene	5,200.00	37,000.00	19.00	190.00	7.50	11,000.00	30.00	12.00
75-69-4	Trichlorofluoromethane	ND	ND	1.10	ND	1.20	ND	1.20	1.20
75-01-4	Vinyl chloride	ND	ND	0.11	940.00	0.57	ND	ND	ND

ND = not detected at or above laboratory reporting limit.
µg/m³ = micrograms per cubic meter

Table 3- Air Analytical Summary
Method TO-15 with NYSDOH Matrix standards.
300 Falconer Road
Frewsburg, New York
NYSDEC Site #907016

Sample ID		SS-01	SS-02	SS-03	SS-04	SS-05	SS-06	AA-01	AA-02
Sample Location		Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Sub-Slab	Indoor Ambient	Indoor Ambient
Sample Pickup Date		9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019	9/27/2019
CAS #	COMPOUND (µg/m ³)								
95-63-6	1,2,4-Trimethylbenzene	ND	ND	2.30	ND	1.50	ND	1.20	0.63
108-67-8	1,3,5-Trimethylbenzene	ND	ND	0.68	ND	0.43	ND	0.53	ND
78-93-3	2-Butanone (MEK)	ND	ND	6.50	ND	1.60	ND	1.70	1.30
71-43-2	Benzene	ND	ND	3.80	ND	1.80	ND	2.10	1.00
56-23-5	Carbon tetrachloride	ND	ND	0.42	ND	0.30	ND	0.45	3.60
74-87-3	Chloromethane	ND	ND	0.91	ND	ND	ND	1.50	1.60
156-59-2	cis-1,2-Dichloroethene	380.00	ND	0.43	320.00	0.44	23,000.00	0.57	0.71
75-71-8	Dichlorodifluoromethane	ND	ND	1.00	ND	1.10	ND	1.10	1.10
64-17-5	Ethanol	ND	ND	64.00	520.00	66.00	ND	6.10	4.90
100-41-4	Ethylbenzene	ND	ND	2.00	ND	1.40	ND	0.89	0.51
87-68-3	Hexachlorobutadiene	ND	ND	ND	ND	ND	ND	ND	ND
110-54-3	n-Hexane	ND	ND	1.60	ND	0.81	ND	0.94	ND
1634-04-4	Methyl tert-butyl ether	ND	ND	ND	ND	ND	ND	ND	ND
75-09-2	Methylene chloride	200 B	ND	3.60	59.00	2.3 B	480.00	1.6 B	1.9 B
136777-61-2	m-Xylene & p-Xylene	ND	ND	5.60	ND	4.10	ND	2.60	1.50
95-47-6	o-Xylene	ND	ND	2.20	ND	1.60	ND	1.00	0.56
75-65-0	tert-Butyl alcohol	ND	ND	3.20	ND	1.70	ND	ND	ND
127-18-4	Tetrachloroethene	ND	ND	ND	ND	9.00	ND	ND	ND
108-88-3	Toluene	ND	ND	8.10	ND	4.70	ND	5.20	2.50
79-01-6	Trichloroethene	5,200.00	37,000.00	19.00	190.00	7.50	11,000.00	30.00	12.00
75-69-4	Trichlorofluoromethane	ND	ND	1.10	ND	1.20	ND	1.20	1.20
75-01-4	Vinyl chloride	ND	ND	0.11	940.00	0.57	ND	ND	ND

ND = not detected at or above laboratory reporting limit.

µg/m³ = micrograms per cubic meter

Identify source(s) and resample or Mitigate
Mitigate

Recommendations are based off
NYSDOH Guidance for Evaluating Soil
Vapor Intrusion in the State of New
York (updated 2017)



Appendix A – Laboratory Analytical Report

ANALYTICAL REPORT

Job Number: 140-16882-1

Job Description: Frewsburg #0901685

Contract Number: C100700

For:

New York State D.E.C.
270 Michigan Avenue
Buffalo, NY 14203

Attention: Mr. Maurice Moore



Approved for release.
Diana L. Lange
Project Management Assistant II
10/15/2019 1:09 PM

Designee for
Jamie A McKinney, Senior Project Manager
5815 Middlebrook Pike, Knoxville, TN, 37921
(865)291-3000
jamie.mckinney@testamericainc.com
10/15/2019

The test results in this report meet all 2003 NELAC and 2003 TNI requirements for accredited parameters, exceptions are noted in this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

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.

Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	6
Client Sample Results	11
Default Detection Limits	33
Surrogate Summary	35
QC Sample Results	36
QC Association	51
Chronicle	52
Certification Summary	55
Method Summary	56
Sample Summary	57
Organic Sample Data	58
Air - GC/MS VOA	58
Method TO15 Low Level	58
Method TO15 Low Level QC Summary	59
Method TO15 Low Level Sample Data	77
Standards Data	265
Method TO15 Low Level ICAL Data	265
Method TO15 Low Level CCAL Data	333
Raw QC Data	361
Method TO15 Low Level Tune Data	361
Method TO15 Low Level Blank Data	380
Method TO15 Low Level LCS/LCSD Data	402

Table of Contents

Method TO15 Low Level Run Logs	423
Method TO15 Low Level Prep Data	434
Air Canister Dilution	437
Clean Canister Certification	438
Clean Canister Data	438
Shipping and Receiving Documents	454
Client Chain of Custody	455
Sample Receipt Checklist	457

Definitions/Glossary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.

Glossary

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

Job Narrative
140-16882-1

Comments

No additional comments.

Receipt

The samples were received on 10/2/2019 9:45 AM; the samples arrived in good condition, properly preserved and, where required, on ice.

Air - GC/MS VOA

Method(s) TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-34104 exhibited % difference of > 30% for the following analyte(s) Benzyl chloride; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Method(s) TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-34104: Benzyl chloride. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

Method(s) TO 15 LL: The method blank for analytical batch 140-34104 contained Methylene Chloride above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because this compound is a common laboratory contaminant and its concentration was less than 5 times the RL. Samples SS-01 (140-16882-1), SS-05 (140-16882-5), AA-01 (140-16882-7), AA-02 (140-16882-8), DUP 0926 (140-16882-9) and (MB 140-34104/5) were affected. The result was "B" qualified.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-34105 recovered above the upper control limit for 1,2-Dichloro-1,1,2,2-tetrafluoroethane. The samples associated with this CCV were non-detects above the reporting limit (RL) for the affected analytes; therefore, the data have been reported.

Method(s) TO 15 LL: The laboratory control sample (LCS) for analytical batch 140-34105 recovered outside control limits for the following analytes: 1,2-Dichloro-1,1,2,2-tetrafluoroethane. These analytes were biased high in the LCS and were not detected above the reporting limit (RL) in the associated samples; therefore, the data have been reported.

Method(s) TO 15 LL: The continuing calibration verification (CCV) associated with batch 140-34106 exhibited % difference of > 30% for the following analyte(s) t-Butyl alcohol, Ethanol, 4-Methyl-2-pentanone (MIBK), 1,4-Dioxane and 1,2-Dichloroethane; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria and were within laboratory marginal exceedance criteria.

Method(s) TO 15 LL: The following analyte(s) recovered outside control limits for the LCS associated with analytical batch 140-34106: 1,2-Dichloroethane. This is not indicative of a systematic control problem because these were random marginal exceedances. Qualified results have been reported.

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

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-01

Lab Sample ID: 140-16882-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	95		11		ppb v/v	12.57		TO 15 LL	Total/NA
Methylene Chloride	58	B	57		ppb v/v	12.57		TO 15 LL	Total/NA
Trichloroethene	970		10		ppb v/v	12.57		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	380		45		ug/m3	12.57		TO 15 LL	Total/NA
Methylene Chloride	200	B	200		ug/m3	12.57		TO 15 LL	Total/NA
Trichloroethene	5200		55		ug/m3	12.57		TO 15 LL	Total/NA

Client Sample ID: SS-02

Lab Sample ID: 140-16882-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	6900		37		ppb v/v	41.12		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	37000		200		ug/m3	41.12		TO 15 LL	Total/NA

Client Sample ID: SS-03

Lab Sample ID: 140-16882-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.47		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.14		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	2.2		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	1.2		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.066		0.032		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.44		0.20		ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.11		0.040		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.20		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	34		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.47		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.44		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	1.0		0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.3		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.51		0.080		ppb v/v	1		TO 15 LL	Total/NA
t-Butyl alcohol	1.1		0.32		ppb v/v	1		TO 15 LL	Total/NA
Toluene	2.2		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	3.5		0.036		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.045		0.040		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2.3		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.68		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	6.5		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	3.8		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.42		0.20		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	0.91		0.41		ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.43		0.16		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.0		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	64		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	2.0		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	1.6		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	3.6		0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	5.6		0.35		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-03 (Continued)

Lab Sample ID: 140-16882-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
o-Xylene	2.2		0.35		ug/m3	1		TO 15 LL	Total/NA
t-Butyl alcohol	3.2		0.97		ug/m3	1		TO 15 LL	Total/NA
Toluene	8.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	19		0.19		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Vinyl chloride	0.11		0.10		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SS-04

Lab Sample ID: 140-16882-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	81		3.2		ppb v/v	1.72		TO 15 LL	Total/NA
Ethanol	270		160		ppb v/v	1.72		TO 15 LL	Total/NA
Methylene Chloride	17		16		ppb v/v	1.72		TO 15 LL	Total/NA
Trichloroethene	36		2.9		ppb v/v	1.72		TO 15 LL	Total/NA
Vinyl chloride	370		3.2		ppb v/v	1.72		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	320		13		ug/m3	1.72		TO 15 LL	Total/NA
Ethanol	520		310		ug/m3	1.72		TO 15 LL	Total/NA
Methylene Chloride	59		56		ug/m3	1.72		TO 15 LL	Total/NA
Trichloroethene	190		16		ug/m3	1.72		TO 15 LL	Total/NA
Vinyl chloride	940		8.3		ug/m3	1.72		TO 15 LL	Total/NA

Client Sample ID: SS-05

Lab Sample ID: 140-16882-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.31		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.088		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.53		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.56		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.048		0.032		ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.11		0.040		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	35		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.33		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.23		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.65	B	0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.96		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.37		0.080		ppb v/v	1		TO 15 LL	Total/NA
t-Butyl alcohol	0.58		0.32		ppb v/v	1		TO 15 LL	Total/NA
Tetrachloroethene	1.3		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.2		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	1.4		0.036		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.22		0.040		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.5		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.43		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.6		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	1.8		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.30		0.20		ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.44		0.16		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-05 (Continued)

Lab Sample ID: 140-16882-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Dichlorodifluoromethane	1.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	66		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	1.4		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	0.81		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	2.3	B	0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	4.1		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	1.6		0.35		ug/m3	1		TO 15 LL	Total/NA
t-Butyl alcohol	1.7		0.97		ug/m3	1		TO 15 LL	Total/NA
Tetrachloroethene	9.0		0.54		ug/m3	1		TO 15 LL	Total/NA
Toluene	4.7		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	7.5		0.19		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA
Vinyl chloride	0.57		0.10		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: SS-06

Lab Sample ID: 140-16882-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5800		25		ppb v/v	147.17		TO 15 LL	Total/NA
Methylene Chloride	140		120		ppb v/v	147.17		TO 15 LL	Total/NA
Trichloroethene	2000		22		ppb v/v	147.17		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	23000		97		ug/m3	147.17		TO 15 LL	Total/NA
Methylene Chloride	480		430		ug/m3	147.17		TO 15 LL	Total/NA
Trichloroethene	11000		120		ug/m3	147.17		TO 15 LL	Total/NA

Client Sample ID: AA-01

Lab Sample ID: 140-16882-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.11		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.56		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.67		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.071		0.032		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.75		0.20		ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.14		0.040		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	3.2		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.21		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.27		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.46	B	0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.59		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.24		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.4		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	5.6		0.036		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.2		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.53		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.7		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	2.1		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.45		0.20		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: AA-01 (Continued)

Lab Sample ID: 140-16882-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloromethane	1.5		0.41		ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.57		0.16		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	6.1		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.89		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	0.94		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.6	B	0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	2.6		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	1.0		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	5.2		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	30		0.19		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: AA-02

Lab Sample ID: 140-16882-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	0.43		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	0.32		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.057		0.032		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.77		0.20		ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.18		0.040		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	2.6		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.56	B	0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	0.34		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.13		0.080		ppb v/v	1		TO 15 LL	Total/NA
Toluene	0.67		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	2.3		0.036		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.21		0.080		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.63		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	1.3		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	1.0		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.36		0.20		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.6		0.41		ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.71		0.16		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	4.9		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	0.51		0.35		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.9	B	0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.5		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	0.56		0.35		ug/m3	1		TO 15 LL	Total/NA
Toluene	2.5		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	12		0.19		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.2		0.45		ug/m3	1		TO 15 LL	Total/NA

Client Sample ID: DUP 0926

Lab Sample ID: 140-16882-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	0.45		0.080		ppb v/v	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville

Detection Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: DUP 0926 (Continued)

Lab Sample ID: 140-16882-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	0.12		0.080		ppb v/v	1		TO 15 LL	Total/NA
2-Butanone	2.4		0.32		ppb v/v	1		TO 15 LL	Total/NA
Benzene	1.1		0.080		ppb v/v	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.063		0.032		ppb v/v	1		TO 15 LL	Total/NA
Chloromethane	0.62		0.20		ppb v/v	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.10		0.040		ppb v/v	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	0.22		0.080		ppb v/v	1		TO 15 LL	Total/NA
Ethanol	30		2.0		ppb v/v	1		TO 15 LL	Total/NA
Ethylbenzene	0.41		0.080		ppb v/v	1		TO 15 LL	Total/NA
Hexane	0.38		0.20		ppb v/v	1		TO 15 LL	Total/NA
Methylene Chloride	0.41	B	0.20		ppb v/v	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	1.1		0.080		ppb v/v	1		TO 15 LL	Total/NA
o-Xylene	0.43		0.080		ppb v/v	1		TO 15 LL	Total/NA
t-Butyl alcohol	1.0		0.32		ppb v/v	1		TO 15 LL	Total/NA
Toluene	1.8		0.12		ppb v/v	1		TO 15 LL	Total/NA
Trichloroethene	3.0		0.036		ppb v/v	1		TO 15 LL	Total/NA
Trichlorofluoromethane	0.19		0.080		ppb v/v	1		TO 15 LL	Total/NA
Vinyl chloride	0.046		0.040		ppb v/v	1		TO 15 LL	Total/NA
Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2.2		0.39		ug/m3	1		TO 15 LL	Total/NA
1,3,5-Trimethylbenzene	0.57		0.39		ug/m3	1		TO 15 LL	Total/NA
2-Butanone	7.2		0.94		ug/m3	1		TO 15 LL	Total/NA
Benzene	3.5		0.26		ug/m3	1		TO 15 LL	Total/NA
Carbon tetrachloride	0.40		0.20		ug/m3	1		TO 15 LL	Total/NA
Chloromethane	1.3		0.41		ug/m3	1		TO 15 LL	Total/NA
cis-1,2-Dichloroethene	0.41		0.16		ug/m3	1		TO 15 LL	Total/NA
Dichlorodifluoromethane	1.1		0.40		ug/m3	1		TO 15 LL	Total/NA
Ethanol	57		3.8		ug/m3	1		TO 15 LL	Total/NA
Ethylbenzene	1.8		0.35		ug/m3	1		TO 15 LL	Total/NA
Hexane	1.3		0.70		ug/m3	1		TO 15 LL	Total/NA
Methylene Chloride	1.4	B	0.69		ug/m3	1		TO 15 LL	Total/NA
m-Xylene & p-Xylene	4.9		0.35		ug/m3	1		TO 15 LL	Total/NA
o-Xylene	1.9		0.35		ug/m3	1		TO 15 LL	Total/NA
t-Butyl alcohol	3.2		0.97		ug/m3	1		TO 15 LL	Total/NA
Toluene	6.8		0.45		ug/m3	1		TO 15 LL	Total/NA
Trichloroethene	16		0.19		ug/m3	1		TO 15 LL	Total/NA
Trichlorofluoromethane	1.1		0.45		ug/m3	1		TO 15 LL	Total/NA
Vinyl chloride	0.12		0.10		ug/m3	1		TO 15 LL	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-01

Lab Sample ID: 140-16882-1

Date Collected: 09/27/19 11:43

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,1,2,2-Tetrachloroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,1,2-Trichloroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,1,2-Trichlorotrifluoroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,1-Dichloroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,1-Dichloroethene	ND		11		ppb v/v			10/03/19 17:18	12.57
1,2,4-Trichlorobenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
1,2,4-Trimethylbenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
1,2-Dibromoethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,2-Dichlorobenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
1,2-Dichloroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,2-Dichloropropane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,2-Dichlorotetrafluoroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
1,3,5-Trimethylbenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
1,3-Dichlorobenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
1,4-Dichlorobenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
1,4-Dioxane	ND		57		ppb v/v			10/03/19 17:18	12.57
2,2,4-Trimethylpentane	ND		57		ppb v/v			10/03/19 17:18	12.57
2-Butanone	ND		91		ppb v/v			10/03/19 17:18	12.57
4-Methyl-2-pentanone (MIBK)	ND		57		ppb v/v			10/03/19 17:18	12.57
Benzene	ND		23		ppb v/v			10/03/19 17:18	12.57
Benzyl chloride	ND	*	46		ppb v/v			10/03/19 17:18	12.57
Bromodichloromethane	ND		23		ppb v/v			10/03/19 17:18	12.57
Bromoform	ND		23		ppb v/v			10/03/19 17:18	12.57
Bromomethane	ND		23		ppb v/v			10/03/19 17:18	12.57
Carbon tetrachloride	ND		9.1		ppb v/v			10/03/19 17:18	12.57
Chlorobenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
Chloroethane	ND		23		ppb v/v			10/03/19 17:18	12.57
Chloroform	ND		23		ppb v/v			10/03/19 17:18	12.57
Chloromethane	ND		57		ppb v/v			10/03/19 17:18	12.57
cis-1,2-Dichloroethene	95		11		ppb v/v			10/03/19 17:18	12.57
cis-1,3-Dichloropropene	ND		23		ppb v/v			10/03/19 17:18	12.57
Cyclohexane	ND		57		ppb v/v			10/03/19 17:18	12.57
Dibromochloromethane	ND		23		ppb v/v			10/03/19 17:18	12.57
Dichlorodifluoromethane	ND		23		ppb v/v			10/03/19 17:18	12.57
Ethanol	ND		570		ppb v/v			10/03/19 17:18	12.57
Ethylbenzene	ND		23		ppb v/v			10/03/19 17:18	12.57
Hexachlorobutadiene	ND		23		ppb v/v			10/03/19 17:18	12.57
Hexane	ND		57		ppb v/v			10/03/19 17:18	12.57
Methyl tert-butyl ether	ND		46		ppb v/v			10/03/19 17:18	12.57
Methylene Chloride	58 B		57		ppb v/v			10/03/19 17:18	12.57
m-Xylene & p-Xylene	ND		23		ppb v/v			10/03/19 17:18	12.57
o-Xylene	ND		23		ppb v/v			10/03/19 17:18	12.57
Styrene	ND		23		ppb v/v			10/03/19 17:18	12.57
t-Butyl alcohol	ND		91		ppb v/v			10/03/19 17:18	12.57
Tetrachloroethene	ND		23		ppb v/v			10/03/19 17:18	12.57
Toluene	ND		34		ppb v/v			10/03/19 17:18	12.57
trans-1,2-Dichloroethene	ND		23		ppb v/v			10/03/19 17:18	12.57

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-01

Lab Sample ID: 140-16882-1

Date Collected: 09/27/19 11:43

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		23		ppb v/v			10/03/19 17:18	12.57
Trichloroethene	970		10		ppb v/v			10/03/19 17:18	12.57
Trichlorofluoromethane	ND		23		ppb v/v			10/03/19 17:18	12.57
Vinyl chloride	ND		11		ppb v/v			10/03/19 17:18	12.57
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		120		ug/m3			10/03/19 17:18	12.57
1,1,2,2-Tetrachloroethane	ND		160		ug/m3			10/03/19 17:18	12.57
1,1,2-Trichloroethane	ND		120		ug/m3			10/03/19 17:18	12.57
1,1,2-Trichlorotrifluoroethane	ND		180		ug/m3			10/03/19 17:18	12.57
1,1-Dichloroethane	ND		93		ug/m3			10/03/19 17:18	12.57
1,1-Dichloroethene	ND		45		ug/m3			10/03/19 17:18	12.57
1,2,4-Trichlorobenzene	ND		170		ug/m3			10/03/19 17:18	12.57
1,2,4-Trimethylbenzene	ND		110		ug/m3			10/03/19 17:18	12.57
1,2-Dibromoethane	ND		180		ug/m3			10/03/19 17:18	12.57
1,2-Dichlorobenzene	ND		140		ug/m3			10/03/19 17:18	12.57
1,2-Dichloroethane	ND		93		ug/m3			10/03/19 17:18	12.57
1,2-Dichloropropane	ND		110		ug/m3			10/03/19 17:18	12.57
1,2-Dichlorotetrafluoroethane	ND		160		ug/m3			10/03/19 17:18	12.57
1,3,5-Trimethylbenzene	ND		110		ug/m3			10/03/19 17:18	12.57
1,3-Dichlorobenzene	ND		140		ug/m3			10/03/19 17:18	12.57
1,4-Dichlorobenzene	ND		140		ug/m3			10/03/19 17:18	12.57
1,4-Dioxane	ND		210		ug/m3			10/03/19 17:18	12.57
2,2,4-Trimethylpentane	ND		270		ug/m3			10/03/19 17:18	12.57
2-Butanone	ND		270		ug/m3			10/03/19 17:18	12.57
4-Methyl-2-pentanone (MIBK)	ND		230		ug/m3			10/03/19 17:18	12.57
Benzene	ND		73		ug/m3			10/03/19 17:18	12.57
Benzyl chloride	ND	*	240		ug/m3			10/03/19 17:18	12.57
Bromodichloromethane	ND		150		ug/m3			10/03/19 17:18	12.57
Bromoform	ND		240		ug/m3			10/03/19 17:18	12.57
Bromomethane	ND		89		ug/m3			10/03/19 17:18	12.57
Carbon tetrachloride	ND		58		ug/m3			10/03/19 17:18	12.57
Chlorobenzene	ND		110		ug/m3			10/03/19 17:18	12.57
Chloroethane	ND		60		ug/m3			10/03/19 17:18	12.57
Chloroform	ND		110		ug/m3			10/03/19 17:18	12.57
Chloromethane	ND		120		ug/m3			10/03/19 17:18	12.57
cis-1,2-Dichloroethene	380		45		ug/m3			10/03/19 17:18	12.57
cis-1,3-Dichloropropene	ND		100		ug/m3			10/03/19 17:18	12.57
Cyclohexane	ND		200		ug/m3			10/03/19 17:18	12.57
Dibromochloromethane	ND		190		ug/m3			10/03/19 17:18	12.57
Dichlorodifluoromethane	ND		110		ug/m3			10/03/19 17:18	12.57
Ethanol	ND		1100		ug/m3			10/03/19 17:18	12.57
Ethylbenzene	ND		99		ug/m3			10/03/19 17:18	12.57
Hexachlorobutadiene	ND		240		ug/m3			10/03/19 17:18	12.57
Hexane	ND		200		ug/m3			10/03/19 17:18	12.57
Methyl tert-butyl ether	ND		160		ug/m3			10/03/19 17:18	12.57
Methylene Chloride	200	B	200		ug/m3			10/03/19 17:18	12.57
m-Xylene & p-Xylene	ND		99		ug/m3			10/03/19 17:18	12.57
o-Xylene	ND		99		ug/m3			10/03/19 17:18	12.57

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-01

Lab Sample ID: 140-16882-1

Date Collected: 09/27/19 11:43

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		97		ug/m3			10/03/19 17:18	12.57
t-Butyl alcohol	ND		280		ug/m3			10/03/19 17:18	12.57
Tetrachloroethene	ND		160		ug/m3			10/03/19 17:18	12.57
Toluene	ND		130		ug/m3			10/03/19 17:18	12.57
trans-1,2-Dichloroethene	ND		91		ug/m3			10/03/19 17:18	12.57
trans-1,3-Dichloropropene	ND		100		ug/m3			10/03/19 17:18	12.57
Trichloroethene	5200		55		ug/m3			10/03/19 17:18	12.57
Trichlorofluoromethane	ND		130		ug/m3			10/03/19 17:18	12.57
Vinyl chloride	ND		29		ug/m3			10/03/19 17:18	12.57
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		60 - 140					10/03/19 17:18	12.57

Client Sample ID: SS-02

Lab Sample ID: 140-16882-2

Date Collected: 09/27/19 11:38

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,1,2,2-Tetrachloroethane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,1,2-Trichloroethane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,1,2-Trichlorotrifluoroethane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,1-Dichloroethane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,1-Dichloroethene	ND		41		ppb v/v			10/07/19 19:53	41.12
1,2,4-Trichlorobenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
1,2,4-Trimethylbenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
1,2-Dibromoethane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,2-Dichlorobenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
1,2-Dichloroethane	ND	*	82		ppb v/v			10/07/19 19:53	41.12
1,2-Dichloropropane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,2-Dichlorotetrafluoroethane	ND		82		ppb v/v			10/07/19 19:53	41.12
1,3,5-Trimethylbenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
1,3-Dichlorobenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
1,4-Dichlorobenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
1,4-Dioxane	ND		210		ppb v/v			10/07/19 19:53	41.12
2,2,4-Trimethylpentane	ND		210		ppb v/v			10/07/19 19:53	41.12
2-Butanone	ND		330		ppb v/v			10/07/19 19:53	41.12
4-Methyl-2-pentanone (MIBK)	ND		210		ppb v/v			10/07/19 19:53	41.12
Benzene	ND		82		ppb v/v			10/07/19 19:53	41.12
Benzyl chloride	ND		160		ppb v/v			10/07/19 19:53	41.12
Bromodichloromethane	ND		82		ppb v/v			10/07/19 19:53	41.12
Bromoform	ND		82		ppb v/v			10/07/19 19:53	41.12
Bromomethane	ND		82		ppb v/v			10/07/19 19:53	41.12
Carbon tetrachloride	ND		33		ppb v/v			10/07/19 19:53	41.12
Chlorobenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
Chloroethane	ND		82		ppb v/v			10/07/19 19:53	41.12
Chloroform	ND		82		ppb v/v			10/07/19 19:53	41.12

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-02

Lab Sample ID: 140-16882-2

Date Collected: 09/27/19 11:38

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	ND		210		ppb v/v			10/07/19 19:53	41.12
cis-1,2-Dichloroethene	ND		41		ppb v/v			10/07/19 19:53	41.12
cis-1,3-Dichloropropene	ND		82		ppb v/v			10/07/19 19:53	41.12
Cyclohexane	ND		210		ppb v/v			10/07/19 19:53	41.12
Dibromochloromethane	ND		82		ppb v/v			10/07/19 19:53	41.12
Dichlorodifluoromethane	ND		82		ppb v/v			10/07/19 19:53	41.12
Ethanol	ND		2100		ppb v/v			10/07/19 19:53	41.12
Ethylbenzene	ND		82		ppb v/v			10/07/19 19:53	41.12
Hexachlorobutadiene	ND		82		ppb v/v			10/07/19 19:53	41.12
Hexane	ND		210		ppb v/v			10/07/19 19:53	41.12
Methyl tert-butyl ether	ND		160		ppb v/v			10/07/19 19:53	41.12
Methylene Chloride	ND		210		ppb v/v			10/07/19 19:53	41.12
m-Xylene & p-Xylene	ND		82		ppb v/v			10/07/19 19:53	41.12
o-Xylene	ND		82		ppb v/v			10/07/19 19:53	41.12
Styrene	ND		82		ppb v/v			10/07/19 19:53	41.12
t-Butyl alcohol	ND		330		ppb v/v			10/07/19 19:53	41.12
Tetrachloroethene	ND		82		ppb v/v			10/07/19 19:53	41.12
Toluene	ND		120		ppb v/v			10/07/19 19:53	41.12
trans-1,2-Dichloroethene	ND		82		ppb v/v			10/07/19 19:53	41.12
trans-1,3-Dichloropropene	ND		82		ppb v/v			10/07/19 19:53	41.12
Trichloroethene	6900		37		ppb v/v			10/07/19 19:53	41.12
Trichlorofluoromethane	ND		82		ppb v/v			10/07/19 19:53	41.12
Vinyl chloride	ND		41		ppb v/v			10/07/19 19:53	41.12

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		450		ug/m3			10/07/19 19:53	41.12
1,1,2,2-Tetrachloroethane	ND		560		ug/m3			10/07/19 19:53	41.12
1,1,2-Trichloroethane	ND		450		ug/m3			10/07/19 19:53	41.12
1,1,2-Trichlorotrifluoroethane	ND		630		ug/m3			10/07/19 19:53	41.12
1,1-Dichloroethane	ND		330		ug/m3			10/07/19 19:53	41.12
1,1-Dichloroethene	ND		160		ug/m3			10/07/19 19:53	41.12
1,2,4-Trichlorobenzene	ND		610		ug/m3			10/07/19 19:53	41.12
1,2,4-Trimethylbenzene	ND		400		ug/m3			10/07/19 19:53	41.12
1,2-Dibromoethane	ND		630		ug/m3			10/07/19 19:53	41.12
1,2-Dichlorobenzene	ND		490		ug/m3			10/07/19 19:53	41.12
1,2-Dichloroethane	ND	*	330		ug/m3			10/07/19 19:53	41.12
1,2-Dichloropropane	ND		380		ug/m3			10/07/19 19:53	41.12
1,2-Dichlorotetrafluoroethane	ND		570		ug/m3			10/07/19 19:53	41.12
1,3,5-Trimethylbenzene	ND		400		ug/m3			10/07/19 19:53	41.12
1,3-Dichlorobenzene	ND		490		ug/m3			10/07/19 19:53	41.12
1,4-Dichlorobenzene	ND		490		ug/m3			10/07/19 19:53	41.12
1,4-Dioxane	ND		740		ug/m3			10/07/19 19:53	41.12
2,2,4-Trimethylpentane	ND		960		ug/m3			10/07/19 19:53	41.12
2-Butanone	ND		970		ug/m3			10/07/19 19:53	41.12
4-Methyl-2-pentanone (MIBK)	ND		840		ug/m3			10/07/19 19:53	41.12
Benzene	ND		260		ug/m3			10/07/19 19:53	41.12
Benzyl chloride	ND		850		ug/m3			10/07/19 19:53	41.12
Bromodichloromethane	ND		550		ug/m3			10/07/19 19:53	41.12
Bromoform	ND		850		ug/m3			10/07/19 19:53	41.12

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-02

Lab Sample ID: 140-16882-2

Date Collected: 09/27/19 11:38

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		320		ug/m3			10/07/19 19:53	41.12
Carbon tetrachloride	ND		210		ug/m3			10/07/19 19:53	41.12
Chlorobenzene	ND		380		ug/m3			10/07/19 19:53	41.12
Chloroethane	ND		220		ug/m3			10/07/19 19:53	41.12
Chloroform	ND		400		ug/m3			10/07/19 19:53	41.12
Chloromethane	ND		420		ug/m3			10/07/19 19:53	41.12
cis-1,2-Dichloroethene	ND		160		ug/m3			10/07/19 19:53	41.12
cis-1,3-Dichloropropene	ND		370		ug/m3			10/07/19 19:53	41.12
Cyclohexane	ND		710		ug/m3			10/07/19 19:53	41.12
Dibromochloromethane	ND		700		ug/m3			10/07/19 19:53	41.12
Dichlorodifluoromethane	ND		410		ug/m3			10/07/19 19:53	41.12
Ethanol	ND		3900		ug/m3			10/07/19 19:53	41.12
Ethylbenzene	ND		360		ug/m3			10/07/19 19:53	41.12
Hexachlorobutadiene	ND		880		ug/m3			10/07/19 19:53	41.12
Hexane	ND		720		ug/m3			10/07/19 19:53	41.12
Methyl tert-butyl ether	ND		590		ug/m3			10/07/19 19:53	41.12
Methylene Chloride	ND		710		ug/m3			10/07/19 19:53	41.12
m-Xylene & p-Xylene	ND		360		ug/m3			10/07/19 19:53	41.12
o-Xylene	ND		360		ug/m3			10/07/19 19:53	41.12
Styrene	ND		350		ug/m3			10/07/19 19:53	41.12
t-Butyl alcohol	ND		1000		ug/m3			10/07/19 19:53	41.12
Tetrachloroethene	ND		560		ug/m3			10/07/19 19:53	41.12
Toluene	ND		460		ug/m3			10/07/19 19:53	41.12
trans-1,2-Dichloroethene	ND		330		ug/m3			10/07/19 19:53	41.12
trans-1,3-Dichloropropene	ND		370		ug/m3			10/07/19 19:53	41.12
Trichloroethene	37000		200		ug/m3			10/07/19 19:53	41.12
Trichlorofluoromethane	ND		460		ug/m3			10/07/19 19:53	41.12
Vinyl chloride	ND		110		ug/m3			10/07/19 19:53	41.12

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		60 - 140		10/07/19 19:53	41.12

Client Sample ID: SS-03

Lab Sample ID: 140-16882-3

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/04/19 22:39	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/04/19 22:39	1
1,2,4-Trimethylbenzene	0.47		0.080		ppb v/v			10/04/19 22:39	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 22:39	1

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-03

Lab Sample ID: 140-16882-3

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/04/19 22:39	1
1,2-Dichlorotetrafluoroethane	ND	*	0.080		ppb v/v			10/04/19 22:39	1
1,3,5-Trimethylbenzene	0.14		0.080		ppb v/v			10/04/19 22:39	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 22:39	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 22:39	1
1,4-Dioxane	ND		0.20		ppb v/v			10/04/19 22:39	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/04/19 22:39	1
2-Butanone	2.2		0.32		ppb v/v			10/04/19 22:39	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/04/19 22:39	1
Benzene	1.2		0.080		ppb v/v			10/04/19 22:39	1
Benzyl chloride	ND		0.16		ppb v/v			10/04/19 22:39	1
Bromodichloromethane	ND		0.080		ppb v/v			10/04/19 22:39	1
Bromoform	ND		0.080		ppb v/v			10/04/19 22:39	1
Bromomethane	ND		0.080		ppb v/v			10/04/19 22:39	1
Carbon tetrachloride	0.066		0.032		ppb v/v			10/04/19 22:39	1
Chlorobenzene	ND		0.080		ppb v/v			10/04/19 22:39	1
Chloroethane	ND		0.080		ppb v/v			10/04/19 22:39	1
Chloroform	ND		0.080		ppb v/v			10/04/19 22:39	1
Chloromethane	0.44		0.20		ppb v/v			10/04/19 22:39	1
cis-1,2-Dichloroethene	0.11		0.040		ppb v/v			10/04/19 22:39	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 22:39	1
Cyclohexane	ND		0.20		ppb v/v			10/04/19 22:39	1
Dibromochloromethane	ND		0.080		ppb v/v			10/04/19 22:39	1
Dichlorodifluoromethane	0.20		0.080		ppb v/v			10/04/19 22:39	1
Ethanol	34		2.0		ppb v/v			10/04/19 22:39	1
Ethylbenzene	0.47		0.080		ppb v/v			10/04/19 22:39	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/04/19 22:39	1
Hexane	0.44		0.20		ppb v/v			10/04/19 22:39	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/04/19 22:39	1
Methylene Chloride	1.0		0.20		ppb v/v			10/04/19 22:39	1
m-Xylene & p-Xylene	1.3		0.080		ppb v/v			10/04/19 22:39	1
o-Xylene	0.51		0.080		ppb v/v			10/04/19 22:39	1
Styrene	ND		0.080		ppb v/v			10/04/19 22:39	1
t-Butyl alcohol	1.1		0.32		ppb v/v			10/04/19 22:39	1
Tetrachloroethene	ND		0.080		ppb v/v			10/04/19 22:39	1
Toluene	2.2		0.12		ppb v/v			10/04/19 22:39	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/04/19 22:39	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 22:39	1
Trichloroethene	3.5		0.036		ppb v/v			10/04/19 22:39	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			10/04/19 22:39	1
Vinyl chloride	0.045		0.040		ppb v/v			10/04/19 22:39	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/04/19 22:39	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/04/19 22:39	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/04/19 22:39	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/04/19 22:39	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/04/19 22:39	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-03

Lab Sample ID: 140-16882-3

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		0.16		ug/m3			10/04/19 22:39	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/04/19 22:39	1
1,2,4-Trimethylbenzene	2.3		0.39		ug/m3			10/04/19 22:39	1
1,2-Dibromoethane	ND		0.61		ug/m3			10/04/19 22:39	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 22:39	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/04/19 22:39	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/04/19 22:39	1
1,2-Dichlorotetrafluoroethane	ND	*	0.56		ug/m3			10/04/19 22:39	1
1,3,5-Trimethylbenzene	0.68		0.39		ug/m3			10/04/19 22:39	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 22:39	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 22:39	1
1,4-Dioxane	ND		0.72		ug/m3			10/04/19 22:39	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/04/19 22:39	1
2-Butanone	6.5		0.94		ug/m3			10/04/19 22:39	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/04/19 22:39	1
Benzene	3.8		0.26		ug/m3			10/04/19 22:39	1
Benzyl chloride	ND		0.83		ug/m3			10/04/19 22:39	1
Bromodichloromethane	ND		0.54		ug/m3			10/04/19 22:39	1
Bromoform	ND		0.83		ug/m3			10/04/19 22:39	1
Bromomethane	ND		0.31		ug/m3			10/04/19 22:39	1
Carbon tetrachloride	0.42		0.20		ug/m3			10/04/19 22:39	1
Chlorobenzene	ND		0.37		ug/m3			10/04/19 22:39	1
Chloroethane	ND		0.21		ug/m3			10/04/19 22:39	1
Chloroform	ND		0.39		ug/m3			10/04/19 22:39	1
Chloromethane	0.91		0.41		ug/m3			10/04/19 22:39	1
cis-1,2-Dichloroethene	0.43		0.16		ug/m3			10/04/19 22:39	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 22:39	1
Cyclohexane	ND		0.69		ug/m3			10/04/19 22:39	1
Dibromochloromethane	ND		0.68		ug/m3			10/04/19 22:39	1
Dichlorodifluoromethane	1.0		0.40		ug/m3			10/04/19 22:39	1
Ethanol	64		3.8		ug/m3			10/04/19 22:39	1
Ethylbenzene	2.0		0.35		ug/m3			10/04/19 22:39	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/04/19 22:39	1
Hexane	1.6		0.70		ug/m3			10/04/19 22:39	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/04/19 22:39	1
Methylene Chloride	3.6		0.69		ug/m3			10/04/19 22:39	1
m-Xylene & p-Xylene	5.6		0.35		ug/m3			10/04/19 22:39	1
o-Xylene	2.2		0.35		ug/m3			10/04/19 22:39	1
Styrene	ND		0.34		ug/m3			10/04/19 22:39	1
t-Butyl alcohol	3.2		0.97		ug/m3			10/04/19 22:39	1
Tetrachloroethene	ND		0.54		ug/m3			10/04/19 22:39	1
Toluene	8.1		0.45		ug/m3			10/04/19 22:39	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/04/19 22:39	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 22:39	1
Trichloroethene	19		0.19		ug/m3			10/04/19 22:39	1
Trichlorofluoromethane	1.1		0.45		ug/m3			10/04/19 22:39	1
Vinyl chloride	0.11		0.10		ug/m3			10/04/19 22:39	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-03

Lab Sample ID: 140-16882-3

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		60 - 140		10/04/19 22:39	1

Client Sample ID: SS-04

Lab Sample ID: 140-16882-4

Date Collected: 09/27/19 10:20

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,1,2,2-Tetrachloroethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,1,2-Trichloroethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,1,2-Trichlorotrifluoroethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,1-Dichloroethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,1-Dichloroethene	ND		3.2		ppb v/v			10/04/19 23:26	1.72
1,2,4-Trichlorobenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,2,4-Trimethylbenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,2-Dibromoethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,2-Dichlorobenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,2-Dichloroethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,2-Dichloropropane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,2-Dichlorotetrafluoroethane	ND	*	6.5		ppb v/v			10/04/19 23:26	1.72
1,3,5-Trimethylbenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,3-Dichlorobenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,4-Dichlorobenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
1,4-Dioxane	ND		16		ppb v/v			10/04/19 23:26	1.72
2,2,4-Trimethylpentane	ND		16		ppb v/v			10/04/19 23:26	1.72
2-Butanone	ND		26		ppb v/v			10/04/19 23:26	1.72
4-Methyl-2-pentanone (MIBK)	ND		16		ppb v/v			10/04/19 23:26	1.72
Benzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Benzyl chloride	ND		13		ppb v/v			10/04/19 23:26	1.72
Bromodichloromethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Bromoform	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Bromomethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Carbon tetrachloride	ND		2.6		ppb v/v			10/04/19 23:26	1.72
Chlorobenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Chloroethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Chloroform	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Chloromethane	ND		16		ppb v/v			10/04/19 23:26	1.72
cis-1,2-Dichloroethene	81		3.2		ppb v/v			10/04/19 23:26	1.72
cis-1,3-Dichloropropene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Cyclohexane	ND		16		ppb v/v			10/04/19 23:26	1.72
Dibromochloromethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Dichlorodifluoromethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Ethanol	270		160		ppb v/v			10/04/19 23:26	1.72
Ethylbenzene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Hexachlorobutadiene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Hexane	ND		16		ppb v/v			10/04/19 23:26	1.72
Methyl tert-butyl ether	ND		13		ppb v/v			10/04/19 23:26	1.72

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-04

Lab Sample ID: 140-16882-4

Date Collected: 09/27/19 10:20

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	17		16		ppb v/v			10/04/19 23:26	1.72
m-Xylene & p-Xylene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
o-Xylene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Styrene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
t-Butyl alcohol	ND		26		ppb v/v			10/04/19 23:26	1.72
Tetrachloroethene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Toluene	ND		9.7		ppb v/v			10/04/19 23:26	1.72
trans-1,2-Dichloroethene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
trans-1,3-Dichloropropene	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Trichloroethene	36		2.9		ppb v/v			10/04/19 23:26	1.72
Trichlorofluoromethane	ND		6.5		ppb v/v			10/04/19 23:26	1.72
Vinyl chloride	370		3.2		ppb v/v			10/04/19 23:26	1.72
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		35		ug/m3			10/04/19 23:26	1.72
1,1,2,2-Tetrachloroethane	ND		45		ug/m3			10/04/19 23:26	1.72
1,1,2-Trichloroethane	ND		35		ug/m3			10/04/19 23:26	1.72
1,1,2-Trichlorotrifluoroethane	ND		50		ug/m3			10/04/19 23:26	1.72
1,1-Dichloroethane	ND		26		ug/m3			10/04/19 23:26	1.72
1,1-Dichloroethene	ND		13		ug/m3			10/04/19 23:26	1.72
1,2,4-Trichlorobenzene	ND		48		ug/m3			10/04/19 23:26	1.72
1,2,4-Trimethylbenzene	ND		32		ug/m3			10/04/19 23:26	1.72
1,2-Dibromoethane	ND		50		ug/m3			10/04/19 23:26	1.72
1,2-Dichlorobenzene	ND		39		ug/m3			10/04/19 23:26	1.72
1,2-Dichloroethane	ND		26		ug/m3			10/04/19 23:26	1.72
1,2-Dichloropropane	ND		30		ug/m3			10/04/19 23:26	1.72
1,2-Dichlorotetrafluoroethane	ND	*	45		ug/m3			10/04/19 23:26	1.72
1,3,5-Trimethylbenzene	ND		32		ug/m3			10/04/19 23:26	1.72
1,3-Dichlorobenzene	ND		39		ug/m3			10/04/19 23:26	1.72
1,4-Dichlorobenzene	ND		39		ug/m3			10/04/19 23:26	1.72
1,4-Dioxane	ND		58		ug/m3			10/04/19 23:26	1.72
2,2,4-Trimethylpentane	ND		76		ug/m3			10/04/19 23:26	1.72
2-Butanone	ND		77		ug/m3			10/04/19 23:26	1.72
4-Methyl-2-pentanone (MIBK)	ND		66		ug/m3			10/04/19 23:26	1.72
Benzene	ND		21		ug/m3			10/04/19 23:26	1.72
Benzyl chloride	ND		67		ug/m3			10/04/19 23:26	1.72
Bromodichloromethane	ND		43		ug/m3			10/04/19 23:26	1.72
Bromoform	ND		67		ug/m3			10/04/19 23:26	1.72
Bromomethane	ND		25		ug/m3			10/04/19 23:26	1.72
Carbon tetrachloride	ND		16		ug/m3			10/04/19 23:26	1.72
Chlorobenzene	ND		30		ug/m3			10/04/19 23:26	1.72
Chloroethane	ND		17		ug/m3			10/04/19 23:26	1.72
Chloroform	ND		32		ug/m3			10/04/19 23:26	1.72
Chloromethane	ND		34		ug/m3			10/04/19 23:26	1.72
cis-1,2-Dichloroethene	320		13		ug/m3			10/04/19 23:26	1.72
cis-1,3-Dichloropropene	ND		29		ug/m3			10/04/19 23:26	1.72
Cyclohexane	ND		56		ug/m3			10/04/19 23:26	1.72
Dibromochloromethane	ND		55		ug/m3			10/04/19 23:26	1.72
Dichlorodifluoromethane	ND		32		ug/m3			10/04/19 23:26	1.72

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-04

Lab Sample ID: 140-16882-4

Date Collected: 09/27/19 10:20

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethanol	520		310		ug/m3			10/04/19 23:26	1.72
Ethylbenzene	ND		28		ug/m3			10/04/19 23:26	1.72
Hexachlorobutadiene	ND		69		ug/m3			10/04/19 23:26	1.72
Hexane	ND		57		ug/m3			10/04/19 23:26	1.72
Methyl tert-butyl ether	ND		47		ug/m3			10/04/19 23:26	1.72
Methylene Chloride	59		56		ug/m3			10/04/19 23:26	1.72
m-Xylene & p-Xylene	ND		28		ug/m3			10/04/19 23:26	1.72
o-Xylene	ND		28		ug/m3			10/04/19 23:26	1.72
Styrene	ND		28		ug/m3			10/04/19 23:26	1.72
t-Butyl alcohol	ND		79		ug/m3			10/04/19 23:26	1.72
Tetrachloroethene	ND		44		ug/m3			10/04/19 23:26	1.72
Toluene	ND		37		ug/m3			10/04/19 23:26	1.72
trans-1,2-Dichloroethene	ND		26		ug/m3			10/04/19 23:26	1.72
trans-1,3-Dichloropropene	ND		29		ug/m3			10/04/19 23:26	1.72
Trichloroethene	190		16		ug/m3			10/04/19 23:26	1.72
Trichlorofluoromethane	ND		36		ug/m3			10/04/19 23:26	1.72
Vinyl chloride	940		8.3		ug/m3			10/04/19 23:26	1.72
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		60 - 140					10/04/19 23:26	1.72

Client Sample ID: SS-05

Lab Sample ID: 140-16882-5

Date Collected: 09/27/19 10:23

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/03/19 20:41	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/03/19 20:41	1
1,2,4-Trimethylbenzene	0.31		0.080		ppb v/v			10/03/19 20:41	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 20:41	1
1,2-Dichloroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
1,3,5-Trimethylbenzene	0.088		0.080		ppb v/v			10/03/19 20:41	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 20:41	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 20:41	1
1,4-Dioxane	ND		0.20		ppb v/v			10/03/19 20:41	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/03/19 20:41	1
2-Butanone	0.53		0.32		ppb v/v			10/03/19 20:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/03/19 20:41	1
Benzene	0.56		0.080		ppb v/v			10/03/19 20:41	1

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-05

Lab Sample ID: 140-16882-5

Date Collected: 09/27/19 10:23

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzyl chloride	ND	*	0.16		ppb v/v			10/03/19 20:41	1
Bromodichloromethane	ND		0.080		ppb v/v			10/03/19 20:41	1
Bromoform	ND		0.080		ppb v/v			10/03/19 20:41	1
Bromomethane	ND		0.080		ppb v/v			10/03/19 20:41	1
Carbon tetrachloride	0.048		0.032		ppb v/v			10/03/19 20:41	1
Chlorobenzene	ND		0.080		ppb v/v			10/03/19 20:41	1
Chloroethane	ND		0.080		ppb v/v			10/03/19 20:41	1
Chloroform	ND		0.080		ppb v/v			10/03/19 20:41	1
Chloromethane	ND		0.20		ppb v/v			10/03/19 20:41	1
cis-1,2-Dichloroethene	0.11		0.040		ppb v/v			10/03/19 20:41	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/03/19 20:41	1
Cyclohexane	ND		0.20		ppb v/v			10/03/19 20:41	1
Dibromochloromethane	ND		0.080		ppb v/v			10/03/19 20:41	1
Dichlorodifluoromethane	0.22		0.080		ppb v/v			10/03/19 20:41	1
Ethanol	35		2.0		ppb v/v			10/03/19 20:41	1
Ethylbenzene	0.33		0.080		ppb v/v			10/03/19 20:41	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/03/19 20:41	1
Hexane	0.23		0.20		ppb v/v			10/03/19 20:41	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/03/19 20:41	1
Methylene Chloride	0.65	B	0.20		ppb v/v			10/03/19 20:41	1
m-Xylene & p-Xylene	0.96		0.080		ppb v/v			10/03/19 20:41	1
o-Xylene	0.37		0.080		ppb v/v			10/03/19 20:41	1
Styrene	ND		0.080		ppb v/v			10/03/19 20:41	1
t-Butyl alcohol	0.58		0.32		ppb v/v			10/03/19 20:41	1
Tetrachloroethene	1.3		0.080		ppb v/v			10/03/19 20:41	1
Toluene	1.2		0.12		ppb v/v			10/03/19 20:41	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/03/19 20:41	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/03/19 20:41	1
Trichloroethene	1.4		0.036		ppb v/v			10/03/19 20:41	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			10/03/19 20:41	1
Vinyl chloride	0.22		0.040		ppb v/v			10/03/19 20:41	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/03/19 20:41	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/03/19 20:41	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/03/19 20:41	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/03/19 20:41	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/03/19 20:41	1
1,1-Dichloroethene	ND		0.16		ug/m3			10/03/19 20:41	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/03/19 20:41	1
1,2,4-Trimethylbenzene	1.5		0.39		ug/m3			10/03/19 20:41	1
1,2-Dibromoethane	ND		0.61		ug/m3			10/03/19 20:41	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 20:41	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/03/19 20:41	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/03/19 20:41	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			10/03/19 20:41	1
1,3,5-Trimethylbenzene	0.43		0.39		ug/m3			10/03/19 20:41	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 20:41	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 20:41	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-05

Lab Sample ID: 140-16882-5

Date Collected: 09/27/19 10:23

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.72		ug/m3			10/03/19 20:41	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/03/19 20:41	1
2-Butanone	1.6		0.94		ug/m3			10/03/19 20:41	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/03/19 20:41	1
Benzene	1.8		0.26		ug/m3			10/03/19 20:41	1
Benzyl chloride	ND	*	0.83		ug/m3			10/03/19 20:41	1
Bromodichloromethane	ND		0.54		ug/m3			10/03/19 20:41	1
Bromoform	ND		0.83		ug/m3			10/03/19 20:41	1
Bromomethane	ND		0.31		ug/m3			10/03/19 20:41	1
Carbon tetrachloride	0.30		0.20		ug/m3			10/03/19 20:41	1
Chlorobenzene	ND		0.37		ug/m3			10/03/19 20:41	1
Chloroethane	ND		0.21		ug/m3			10/03/19 20:41	1
Chloroform	ND		0.39		ug/m3			10/03/19 20:41	1
Chloromethane	ND		0.41		ug/m3			10/03/19 20:41	1
cis-1,2-Dichloroethene	0.44		0.16		ug/m3			10/03/19 20:41	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/03/19 20:41	1
Cyclohexane	ND		0.69		ug/m3			10/03/19 20:41	1
Dibromochloromethane	ND		0.68		ug/m3			10/03/19 20:41	1
Dichlorodifluoromethane	1.1		0.40		ug/m3			10/03/19 20:41	1
Ethanol	66		3.8		ug/m3			10/03/19 20:41	1
Ethylbenzene	1.4		0.35		ug/m3			10/03/19 20:41	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/03/19 20:41	1
Hexane	0.81		0.70		ug/m3			10/03/19 20:41	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/03/19 20:41	1
Methylene Chloride	2.3	B	0.69		ug/m3			10/03/19 20:41	1
m-Xylene & p-Xylene	4.1		0.35		ug/m3			10/03/19 20:41	1
o-Xylene	1.6		0.35		ug/m3			10/03/19 20:41	1
Styrene	ND		0.34		ug/m3			10/03/19 20:41	1
t-Butyl alcohol	1.7		0.97		ug/m3			10/03/19 20:41	1
Tetrachloroethene	9.0		0.54		ug/m3			10/03/19 20:41	1
Toluene	4.7		0.45		ug/m3			10/03/19 20:41	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/03/19 20:41	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/03/19 20:41	1
Trichloroethene	7.5		0.19		ug/m3			10/03/19 20:41	1
Trichlorofluoromethane	1.2		0.45		ug/m3			10/03/19 20:41	1
Vinyl chloride	0.57		0.10		ug/m3			10/03/19 20:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		60 - 140		10/03/19 20:41	1

Client Sample ID: SS-06

Lab Sample ID: 140-16882-6

Date Collected: 09/27/19 11:14

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		49		ppb v/v			10/07/19 20:41	147.17
1,1,2,2-Tetrachloroethane	ND		49		ppb v/v			10/07/19 20:41	147.17

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-06

Lab Sample ID: 140-16882-6

Date Collected: 09/27/19 11:14

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		49		ppb v/v			10/07/19 20:41	147.17
1,1,2-Trichlorotrifluoroethane	ND		49		ppb v/v			10/07/19 20:41	147.17
1,1-Dichloroethane	ND		49		ppb v/v			10/07/19 20:41	147.17
1,1-Dichloroethene	ND		25		ppb v/v			10/07/19 20:41	147.17
1,2,4-Trichlorobenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
1,2,4-Trimethylbenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
1,2-Dibromoethane	ND		49		ppb v/v			10/07/19 20:41	147.17
1,2-Dichlorobenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
1,2-Dichloroethane	ND	*	49		ppb v/v			10/07/19 20:41	147.17
1,2-Dichloropropane	ND		49		ppb v/v			10/07/19 20:41	147.17
1,2-Dichlorotetrafluoroethane	ND		49		ppb v/v			10/07/19 20:41	147.17
1,3,5-Trimethylbenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
1,3-Dichlorobenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
1,4-Dichlorobenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
1,4-Dioxane	ND		120		ppb v/v			10/07/19 20:41	147.17
2,2,4-Trimethylpentane	ND		120		ppb v/v			10/07/19 20:41	147.17
2-Butanone	ND		200		ppb v/v			10/07/19 20:41	147.17
4-Methyl-2-pentanone (MIBK)	ND		120		ppb v/v			10/07/19 20:41	147.17
Benzene	ND		49		ppb v/v			10/07/19 20:41	147.17
Benzyl chloride	ND		98		ppb v/v			10/07/19 20:41	147.17
Bromodichloromethane	ND		49		ppb v/v			10/07/19 20:41	147.17
Bromoform	ND		49		ppb v/v			10/07/19 20:41	147.17
Bromomethane	ND		49		ppb v/v			10/07/19 20:41	147.17
Carbon tetrachloride	ND		20		ppb v/v			10/07/19 20:41	147.17
Chlorobenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
Chloroethane	ND		49		ppb v/v			10/07/19 20:41	147.17
Chloroform	ND		49		ppb v/v			10/07/19 20:41	147.17
Chloromethane	ND		120		ppb v/v			10/07/19 20:41	147.17
cis-1,2-Dichloroethene	5800		25		ppb v/v			10/07/19 20:41	147.17
cis-1,3-Dichloropropene	ND		49		ppb v/v			10/07/19 20:41	147.17
Cyclohexane	ND		120		ppb v/v			10/07/19 20:41	147.17
Dibromochloromethane	ND		49		ppb v/v			10/07/19 20:41	147.17
Dichlorodifluoromethane	ND		49		ppb v/v			10/07/19 20:41	147.17
Ethanol	ND		1200		ppb v/v			10/07/19 20:41	147.17
Ethylbenzene	ND		49		ppb v/v			10/07/19 20:41	147.17
Hexachlorobutadiene	ND		49		ppb v/v			10/07/19 20:41	147.17
Hexane	ND		120		ppb v/v			10/07/19 20:41	147.17
Methyl tert-butyl ether	ND		98		ppb v/v			10/07/19 20:41	147.17
Methylene Chloride	140		120		ppb v/v			10/07/19 20:41	147.17
m-Xylene & p-Xylene	ND		49		ppb v/v			10/07/19 20:41	147.17
o-Xylene	ND		49		ppb v/v			10/07/19 20:41	147.17
Styrene	ND		49		ppb v/v			10/07/19 20:41	147.17
t-Butyl alcohol	ND		200		ppb v/v			10/07/19 20:41	147.17
Tetrachloroethene	ND		49		ppb v/v			10/07/19 20:41	147.17
Toluene	ND		74		ppb v/v			10/07/19 20:41	147.17
trans-1,2-Dichloroethene	ND		49		ppb v/v			10/07/19 20:41	147.17
trans-1,3-Dichloropropene	ND		49		ppb v/v			10/07/19 20:41	147.17
Trichloroethene	2000		22		ppb v/v			10/07/19 20:41	147.17

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-06

Lab Sample ID: 140-16882-6

Date Collected: 09/27/19 11:14

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		49		ppb v/v			10/07/19 20:41	147.17
Vinyl chloride	ND		25		ppb v/v			10/07/19 20:41	147.17
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		270		ug/m3			10/07/19 20:41	147.17
1,1,2,2-Tetrachloroethane	ND		340		ug/m3			10/07/19 20:41	147.17
1,1,2-Trichloroethane	ND		270		ug/m3			10/07/19 20:41	147.17
1,1,2-Trichlorotrifluoroethane	ND		380		ug/m3			10/07/19 20:41	147.17
1,1-Dichloroethane	ND		200		ug/m3			10/07/19 20:41	147.17
1,1-Dichloroethene	ND		97		ug/m3			10/07/19 20:41	147.17
1,2,4-Trichlorobenzene	ND		360		ug/m3			10/07/19 20:41	147.17
1,2,4-Trimethylbenzene	ND		240		ug/m3			10/07/19 20:41	147.17
1,2-Dibromoethane	ND		380		ug/m3			10/07/19 20:41	147.17
1,2-Dichlorobenzene	ND		290		ug/m3			10/07/19 20:41	147.17
1,2-Dichloroethane	ND	*	200		ug/m3			10/07/19 20:41	147.17
1,2-Dichloropropane	ND		230		ug/m3			10/07/19 20:41	147.17
1,2-Dichlorotetrafluoroethane	ND		340		ug/m3			10/07/19 20:41	147.17
1,3,5-Trimethylbenzene	ND		240		ug/m3			10/07/19 20:41	147.17
1,3-Dichlorobenzene	ND		290		ug/m3			10/07/19 20:41	147.17
1,4-Dichlorobenzene	ND		290		ug/m3			10/07/19 20:41	147.17
1,4-Dioxane	ND		440		ug/m3			10/07/19 20:41	147.17
2,2,4-Trimethylpentane	ND		570		ug/m3			10/07/19 20:41	147.17
2-Butanone	ND		580		ug/m3			10/07/19 20:41	147.17
4-Methyl-2-pentanone (MIBK)	ND		500		ug/m3			10/07/19 20:41	147.17
Benzene	ND		160		ug/m3			10/07/19 20:41	147.17
Benzyl chloride	ND		510		ug/m3			10/07/19 20:41	147.17
Bromodichloromethane	ND		330		ug/m3			10/07/19 20:41	147.17
Bromoform	ND		510		ug/m3			10/07/19 20:41	147.17
Bromomethane	ND		190		ug/m3			10/07/19 20:41	147.17
Carbon tetrachloride	ND		120		ug/m3			10/07/19 20:41	147.17
Chlorobenzene	ND		230		ug/m3			10/07/19 20:41	147.17
Chloroethane	ND		130		ug/m3			10/07/19 20:41	147.17
Chloroform	ND		240		ug/m3			10/07/19 20:41	147.17
Chloromethane	ND		250		ug/m3			10/07/19 20:41	147.17
cis-1,2-Dichloroethene	23000		97		ug/m3			10/07/19 20:41	147.17
cis-1,3-Dichloropropene	ND		220		ug/m3			10/07/19 20:41	147.17
Cyclohexane	ND		420		ug/m3			10/07/19 20:41	147.17
Dibromochloromethane	ND		420		ug/m3			10/07/19 20:41	147.17
Dichlorodifluoromethane	ND		240		ug/m3			10/07/19 20:41	147.17
Ethanol	ND		2300		ug/m3			10/07/19 20:41	147.17
Ethylbenzene	ND		210		ug/m3			10/07/19 20:41	147.17
Hexachlorobutadiene	ND		520		ug/m3			10/07/19 20:41	147.17
Hexane	ND		430		ug/m3			10/07/19 20:41	147.17
Methyl tert-butyl ether	ND		350		ug/m3			10/07/19 20:41	147.17
Methylene Chloride	480		430		ug/m3			10/07/19 20:41	147.17
m-Xylene & p-Xylene	ND		210		ug/m3			10/07/19 20:41	147.17
o-Xylene	ND		210		ug/m3			10/07/19 20:41	147.17
Styrene	ND		210		ug/m3			10/07/19 20:41	147.17
t-Butyl alcohol	ND		590		ug/m3			10/07/19 20:41	147.17

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-06

Lab Sample ID: 140-16882-6

Date Collected: 09/27/19 11:14

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		330		ug/m3			10/07/19 20:41	147.17
Toluene	ND		280		ug/m3			10/07/19 20:41	147.17
trans-1,2-Dichloroethene	ND		190		ug/m3			10/07/19 20:41	147.17
trans-1,3-Dichloropropene	ND		220		ug/m3			10/07/19 20:41	147.17
Trichloroethene	11000		120		ug/m3			10/07/19 20:41	147.17
Trichlorofluoromethane	ND		280		ug/m3			10/07/19 20:41	147.17
Vinyl chloride	ND		63		ug/m3			10/07/19 20:41	147.17
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		60 - 140					10/07/19 20:41	147.17

Client Sample ID: AA-01

Lab Sample ID: 140-16882-7

Date Collected: 09/27/19 11:35

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/03/19 22:21	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/03/19 22:21	1
1,2,4-Trimethylbenzene	0.24		0.080		ppb v/v			10/03/19 22:21	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 22:21	1
1,2-Dichloroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
1,3,5-Trimethylbenzene	0.11		0.080		ppb v/v			10/03/19 22:21	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 22:21	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 22:21	1
1,4-Dioxane	ND		0.20		ppb v/v			10/03/19 22:21	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/03/19 22:21	1
2-Butanone	0.56		0.32		ppb v/v			10/03/19 22:21	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/03/19 22:21	1
Benzene	0.67		0.080		ppb v/v			10/03/19 22:21	1
Benzyl chloride	ND	*	0.16		ppb v/v			10/03/19 22:21	1
Bromodichloromethane	ND		0.080		ppb v/v			10/03/19 22:21	1
Bromoform	ND		0.080		ppb v/v			10/03/19 22:21	1
Bromomethane	ND		0.080		ppb v/v			10/03/19 22:21	1
Carbon tetrachloride	0.071		0.032		ppb v/v			10/03/19 22:21	1
Chlorobenzene	ND		0.080		ppb v/v			10/03/19 22:21	1
Chloroethane	ND		0.080		ppb v/v			10/03/19 22:21	1
Chloroform	ND		0.080		ppb v/v			10/03/19 22:21	1
Chloromethane	0.75		0.20		ppb v/v			10/03/19 22:21	1
cis-1,2-Dichloroethene	0.14		0.040		ppb v/v			10/03/19 22:21	1

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: AA-01

Lab Sample ID: 140-16882-7

Date Collected: 09/27/19 11:35

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/03/19 22:21	1
Cyclohexane	ND		0.20		ppb v/v			10/03/19 22:21	1
Dibromochloromethane	ND		0.080		ppb v/v			10/03/19 22:21	1
Dichlorodifluoromethane	0.22		0.080		ppb v/v			10/03/19 22:21	1
Ethanol	3.2		2.0		ppb v/v			10/03/19 22:21	1
Ethylbenzene	0.21		0.080		ppb v/v			10/03/19 22:21	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/03/19 22:21	1
Hexane	0.27		0.20		ppb v/v			10/03/19 22:21	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/03/19 22:21	1
Methylene Chloride	0.46	B	0.20		ppb v/v			10/03/19 22:21	1
m-Xylene & p-Xylene	0.59		0.080		ppb v/v			10/03/19 22:21	1
o-Xylene	0.24		0.080		ppb v/v			10/03/19 22:21	1
Styrene	ND		0.080		ppb v/v			10/03/19 22:21	1
t-Butyl alcohol	ND		0.32		ppb v/v			10/03/19 22:21	1
Tetrachloroethene	ND		0.080		ppb v/v			10/03/19 22:21	1
Toluene	1.4		0.12		ppb v/v			10/03/19 22:21	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/03/19 22:21	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/03/19 22:21	1
Trichloroethene	5.6		0.036		ppb v/v			10/03/19 22:21	1
Trichlorofluoromethane	0.22		0.080		ppb v/v			10/03/19 22:21	1
Vinyl chloride	ND		0.040		ppb v/v			10/03/19 22:21	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/03/19 22:21	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/03/19 22:21	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/03/19 22:21	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/03/19 22:21	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/03/19 22:21	1
1,1-Dichloroethene	ND		0.16		ug/m3			10/03/19 22:21	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/03/19 22:21	1
1,2,4-Trimethylbenzene	1.2		0.39		ug/m3			10/03/19 22:21	1
1,2-Dibromoethane	ND		0.61		ug/m3			10/03/19 22:21	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 22:21	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/03/19 22:21	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/03/19 22:21	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			10/03/19 22:21	1
1,3,5-Trimethylbenzene	0.53		0.39		ug/m3			10/03/19 22:21	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 22:21	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 22:21	1
1,4-Dioxane	ND		0.72		ug/m3			10/03/19 22:21	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/03/19 22:21	1
2-Butanone	1.7		0.94		ug/m3			10/03/19 22:21	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/03/19 22:21	1
Benzene	2.1		0.26		ug/m3			10/03/19 22:21	1
Benzyl chloride	ND	*	0.83		ug/m3			10/03/19 22:21	1
Bromodichloromethane	ND		0.54		ug/m3			10/03/19 22:21	1
Bromoform	ND		0.83		ug/m3			10/03/19 22:21	1
Bromomethane	ND		0.31		ug/m3			10/03/19 22:21	1
Carbon tetrachloride	0.45		0.20		ug/m3			10/03/19 22:21	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: AA-01

Lab Sample ID: 140-16882-7

Date Collected: 09/27/19 11:35

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	ND		0.37		ug/m3			10/03/19 22:21	1
Chloroethane	ND		0.21		ug/m3			10/03/19 22:21	1
Chloroform	ND		0.39		ug/m3			10/03/19 22:21	1
Chloromethane	1.5		0.41		ug/m3			10/03/19 22:21	1
cis-1,2-Dichloroethene	0.57		0.16		ug/m3			10/03/19 22:21	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/03/19 22:21	1
Cyclohexane	ND		0.69		ug/m3			10/03/19 22:21	1
Dibromochloromethane	ND		0.68		ug/m3			10/03/19 22:21	1
Dichlorodifluoromethane	1.1		0.40		ug/m3			10/03/19 22:21	1
Ethanol	6.1		3.8		ug/m3			10/03/19 22:21	1
Ethylbenzene	0.89		0.35		ug/m3			10/03/19 22:21	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/03/19 22:21	1
Hexane	0.94		0.70		ug/m3			10/03/19 22:21	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/03/19 22:21	1
Methylene Chloride	1.6	B	0.69		ug/m3			10/03/19 22:21	1
m-Xylene & p-Xylene	2.6		0.35		ug/m3			10/03/19 22:21	1
o-Xylene	1.0		0.35		ug/m3			10/03/19 22:21	1
Styrene	ND		0.34		ug/m3			10/03/19 22:21	1
t-Butyl alcohol	ND		0.97		ug/m3			10/03/19 22:21	1
Tetrachloroethene	ND		0.54		ug/m3			10/03/19 22:21	1
Toluene	5.2		0.45		ug/m3			10/03/19 22:21	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/03/19 22:21	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/03/19 22:21	1
Trichloroethene	30		0.19		ug/m3			10/03/19 22:21	1
Trichlorofluoromethane	1.2		0.45		ug/m3			10/03/19 22:21	1
Vinyl chloride	ND		0.10		ug/m3			10/03/19 22:21	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		60 - 140		10/03/19 22:21	1

Client Sample ID: AA-02

Lab Sample ID: 140-16882-8

Date Collected: 09/27/19 11:19

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/04/19 00:09	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/04/19 00:09	1
1,2,4-Trimethylbenzene	0.13		0.080		ppb v/v			10/04/19 00:09	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 00:09	1
1,2-Dichloroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/04/19 00:09	1

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: AA-02

Lab Sample ID: 140-16882-8

Date Collected: 09/27/19 11:19

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			10/04/19 00:09	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 00:09	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 00:09	1
1,4-Dioxane	ND		0.20		ppb v/v			10/04/19 00:09	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/04/19 00:09	1
2-Butanone	0.43		0.32		ppb v/v			10/04/19 00:09	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/04/19 00:09	1
Benzene	0.32		0.080		ppb v/v			10/04/19 00:09	1
Benzyl chloride	ND	*	0.16		ppb v/v			10/04/19 00:09	1
Bromodichloromethane	ND		0.080		ppb v/v			10/04/19 00:09	1
Bromoform	ND		0.080		ppb v/v			10/04/19 00:09	1
Bromomethane	ND		0.080		ppb v/v			10/04/19 00:09	1
Carbon tetrachloride	0.057		0.032		ppb v/v			10/04/19 00:09	1
Chlorobenzene	ND		0.080		ppb v/v			10/04/19 00:09	1
Chloroethane	ND		0.080		ppb v/v			10/04/19 00:09	1
Chloroform	ND		0.080		ppb v/v			10/04/19 00:09	1
Chloromethane	0.77		0.20		ppb v/v			10/04/19 00:09	1
cis-1,2-Dichloroethene	0.18		0.040		ppb v/v			10/04/19 00:09	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 00:09	1
Cyclohexane	ND		0.20		ppb v/v			10/04/19 00:09	1
Dibromochloromethane	ND		0.080		ppb v/v			10/04/19 00:09	1
Dichlorodifluoromethane	0.22		0.080		ppb v/v			10/04/19 00:09	1
Ethanol	2.6		2.0		ppb v/v			10/04/19 00:09	1
Ethylbenzene	0.12		0.080		ppb v/v			10/04/19 00:09	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/04/19 00:09	1
Hexane	ND		0.20		ppb v/v			10/04/19 00:09	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/04/19 00:09	1
Methylene Chloride	0.56	B	0.20		ppb v/v			10/04/19 00:09	1
m-Xylene & p-Xylene	0.34		0.080		ppb v/v			10/04/19 00:09	1
o-Xylene	0.13		0.080		ppb v/v			10/04/19 00:09	1
Styrene	ND		0.080		ppb v/v			10/04/19 00:09	1
t-Butyl alcohol	ND		0.32		ppb v/v			10/04/19 00:09	1
Tetrachloroethene	ND		0.080		ppb v/v			10/04/19 00:09	1
Toluene	0.67		0.12		ppb v/v			10/04/19 00:09	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/04/19 00:09	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 00:09	1
Trichloroethene	2.3		0.036		ppb v/v			10/04/19 00:09	1
Trichlorofluoromethane	0.21		0.080		ppb v/v			10/04/19 00:09	1
Vinyl chloride	ND		0.040		ppb v/v			10/04/19 00:09	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/04/19 00:09	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/04/19 00:09	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/04/19 00:09	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/04/19 00:09	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/04/19 00:09	1
1,1-Dichloroethene	ND		0.16		ug/m3			10/04/19 00:09	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/04/19 00:09	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: AA-02

Lab Sample ID: 140-16882-8

Date Collected: 09/27/19 11:19

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	0.63		0.39		ug/m3			10/04/19 00:09	1
1,2-Dibromoethane	ND		0.61		ug/m3			10/04/19 00:09	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 00:09	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/04/19 00:09	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/04/19 00:09	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			10/04/19 00:09	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			10/04/19 00:09	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 00:09	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 00:09	1
1,4-Dioxane	ND		0.72		ug/m3			10/04/19 00:09	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/04/19 00:09	1
2-Butanone	1.3		0.94		ug/m3			10/04/19 00:09	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/04/19 00:09	1
Benzene	1.0		0.26		ug/m3			10/04/19 00:09	1
Benzyl chloride	ND	*	0.83		ug/m3			10/04/19 00:09	1
Bromodichloromethane	ND		0.54		ug/m3			10/04/19 00:09	1
Bromoform	ND		0.83		ug/m3			10/04/19 00:09	1
Bromomethane	ND		0.31		ug/m3			10/04/19 00:09	1
Carbon tetrachloride	0.36		0.20		ug/m3			10/04/19 00:09	1
Chlorobenzene	ND		0.37		ug/m3			10/04/19 00:09	1
Chloroethane	ND		0.21		ug/m3			10/04/19 00:09	1
Chloroform	ND		0.39		ug/m3			10/04/19 00:09	1
Chloromethane	1.6		0.41		ug/m3			10/04/19 00:09	1
cis-1,2-Dichloroethene	0.71		0.16		ug/m3			10/04/19 00:09	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 00:09	1
Cyclohexane	ND		0.69		ug/m3			10/04/19 00:09	1
Dibromochloromethane	ND		0.68		ug/m3			10/04/19 00:09	1
Dichlorodifluoromethane	1.1		0.40		ug/m3			10/04/19 00:09	1
Ethanol	4.9		3.8		ug/m3			10/04/19 00:09	1
Ethylbenzene	0.51		0.35		ug/m3			10/04/19 00:09	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/04/19 00:09	1
Hexane	ND		0.70		ug/m3			10/04/19 00:09	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/04/19 00:09	1
Methylene Chloride	1.9	B	0.69		ug/m3			10/04/19 00:09	1
m-Xylene & p-Xylene	1.5		0.35		ug/m3			10/04/19 00:09	1
o-Xylene	0.56		0.35		ug/m3			10/04/19 00:09	1
Styrene	ND		0.34		ug/m3			10/04/19 00:09	1
t-Butyl alcohol	ND		0.97		ug/m3			10/04/19 00:09	1
Tetrachloroethene	ND		0.54		ug/m3			10/04/19 00:09	1
Toluene	2.5		0.45		ug/m3			10/04/19 00:09	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/04/19 00:09	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 00:09	1
Trichloroethene	12		0.19		ug/m3			10/04/19 00:09	1
Trichlorofluoromethane	1.2		0.45		ug/m3			10/04/19 00:09	1
Vinyl chloride	ND		0.10		ug/m3			10/04/19 00:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		60 - 140		10/04/19 00:09	1

Eurofins TestAmerica, Knoxville

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: DUP 0926

Lab Sample ID: 140-16882-9

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/04/19 01:02	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/04/19 01:02	1
1,2,4-Trimethylbenzene	0.45		0.080		ppb v/v			10/04/19 01:02	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 01:02	1
1,2-Dichloroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
1,3,5-Trimethylbenzene	0.12		0.080		ppb v/v			10/04/19 01:02	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 01:02	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 01:02	1
1,4-Dioxane	ND		0.20		ppb v/v			10/04/19 01:02	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/04/19 01:02	1
2-Butanone	2.4		0.32		ppb v/v			10/04/19 01:02	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/04/19 01:02	1
Benzene	1.1		0.080		ppb v/v			10/04/19 01:02	1
Benzyl chloride	ND	*	0.16		ppb v/v			10/04/19 01:02	1
Bromodichloromethane	ND		0.080		ppb v/v			10/04/19 01:02	1
Bromoform	ND		0.080		ppb v/v			10/04/19 01:02	1
Bromomethane	ND		0.080		ppb v/v			10/04/19 01:02	1
Carbon tetrachloride	0.063		0.032		ppb v/v			10/04/19 01:02	1
Chlorobenzene	ND		0.080		ppb v/v			10/04/19 01:02	1
Chloroethane	ND		0.080		ppb v/v			10/04/19 01:02	1
Chloroform	ND		0.080		ppb v/v			10/04/19 01:02	1
Chloromethane	0.62		0.20		ppb v/v			10/04/19 01:02	1
cis-1,2-Dichloroethene	0.10		0.040		ppb v/v			10/04/19 01:02	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 01:02	1
Cyclohexane	ND		0.20		ppb v/v			10/04/19 01:02	1
Dibromochloromethane	ND		0.080		ppb v/v			10/04/19 01:02	1
Dichlorodifluoromethane	0.22		0.080		ppb v/v			10/04/19 01:02	1
Ethanol	30		2.0		ppb v/v			10/04/19 01:02	1
Ethylbenzene	0.41		0.080		ppb v/v			10/04/19 01:02	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/04/19 01:02	1
Hexane	0.38		0.20		ppb v/v			10/04/19 01:02	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/04/19 01:02	1
Methylene Chloride	0.41	B	0.20		ppb v/v			10/04/19 01:02	1
m-Xylene & p-Xylene	1.1		0.080		ppb v/v			10/04/19 01:02	1
o-Xylene	0.43		0.080		ppb v/v			10/04/19 01:02	1
Styrene	ND		0.080		ppb v/v			10/04/19 01:02	1
t-Butyl alcohol	1.0		0.32		ppb v/v			10/04/19 01:02	1
Tetrachloroethene	ND		0.080		ppb v/v			10/04/19 01:02	1
Toluene	1.8		0.12		ppb v/v			10/04/19 01:02	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/04/19 01:02	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: DUP 0926

Lab Sample ID: 140-16882-9

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 01:02	1
Trichloroethene	3.0		0.036		ppb v/v			10/04/19 01:02	1
Trichlorofluoromethane	0.19		0.080		ppb v/v			10/04/19 01:02	1
Vinyl chloride	0.046		0.040		ppb v/v			10/04/19 01:02	1
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/04/19 01:02	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/04/19 01:02	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/04/19 01:02	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/04/19 01:02	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/04/19 01:02	1
1,1-Dichloroethene	ND		0.16		ug/m3			10/04/19 01:02	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/04/19 01:02	1
1,2,4-Trimethylbenzene	2.2		0.39		ug/m3			10/04/19 01:02	1
1,2-Dibromoethane	ND		0.61		ug/m3			10/04/19 01:02	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 01:02	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/04/19 01:02	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/04/19 01:02	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			10/04/19 01:02	1
1,3,5-Trimethylbenzene	0.57		0.39		ug/m3			10/04/19 01:02	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 01:02	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 01:02	1
1,4-Dioxane	ND		0.72		ug/m3			10/04/19 01:02	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/04/19 01:02	1
2-Butanone	7.2		0.94		ug/m3			10/04/19 01:02	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/04/19 01:02	1
Benzene	3.5		0.26		ug/m3			10/04/19 01:02	1
Benzyl chloride	ND	*	0.83		ug/m3			10/04/19 01:02	1
Bromodichloromethane	ND		0.54		ug/m3			10/04/19 01:02	1
Bromoform	ND		0.83		ug/m3			10/04/19 01:02	1
Bromomethane	ND		0.31		ug/m3			10/04/19 01:02	1
Carbon tetrachloride	0.40		0.20		ug/m3			10/04/19 01:02	1
Chlorobenzene	ND		0.37		ug/m3			10/04/19 01:02	1
Chloroethane	ND		0.21		ug/m3			10/04/19 01:02	1
Chloroform	ND		0.39		ug/m3			10/04/19 01:02	1
Chloromethane	1.3		0.41		ug/m3			10/04/19 01:02	1
cis-1,2-Dichloroethene	0.41		0.16		ug/m3			10/04/19 01:02	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 01:02	1
Cyclohexane	ND		0.69		ug/m3			10/04/19 01:02	1
Dibromochloromethane	ND		0.68		ug/m3			10/04/19 01:02	1
Dichlorodifluoromethane	1.1		0.40		ug/m3			10/04/19 01:02	1
Ethanol	57		3.8		ug/m3			10/04/19 01:02	1
Ethylbenzene	1.8		0.35		ug/m3			10/04/19 01:02	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/04/19 01:02	1
Hexane	1.3		0.70		ug/m3			10/04/19 01:02	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/04/19 01:02	1
Methylene Chloride	1.4	B	0.69		ug/m3			10/04/19 01:02	1
m-Xylene & p-Xylene	4.9		0.35		ug/m3			10/04/19 01:02	1
o-Xylene	1.9		0.35		ug/m3			10/04/19 01:02	1

Client Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: DUP 0926

Lab Sample ID: 140-16882-9

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Sample Container: Summa Canister 6L

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		0.34		ug/m3			10/04/19 01:02	1
t-Butyl alcohol	3.2		0.97		ug/m3			10/04/19 01:02	1
Tetrachloroethene	ND		0.54		ug/m3			10/04/19 01:02	1
Toluene	6.8		0.45		ug/m3			10/04/19 01:02	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/04/19 01:02	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 01:02	1
Trichloroethene	16		0.19		ug/m3			10/04/19 01:02	1
Trichlorofluoromethane	1.1		0.45		ug/m3			10/04/19 01:02	1
Vinyl chloride	0.12		0.10		ug/m3			10/04/19 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		60 - 140		10/04/19 01:02	1

Default Detection Limits

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.080	0.037	ppb v/v
1,1,1-Trichloroethane	0.44	0.20	ug/m3
1,1,2,2-Tetrachloroethane	0.080	0.014	ppb v/v
1,1,2,2-Tetrachloroethane	0.55	0.096	ug/m3
1,1,2-Trichloroethane	0.080	0.0070	ppb v/v
1,1,2-Trichloroethane	0.44	0.038	ug/m3
1,1,2-Trichlorotrifluoroethane	0.080	0.0080	ppb v/v
1,1,2-Trichlorotrifluoroethane	0.61	0.061	ug/m3
1,1-Dichloroethane	0.080	0.0070	ppb v/v
1,1-Dichloroethane	0.32	0.028	ug/m3
1,1-Dichloroethene	0.040	0.0080	ppb v/v
1,1-Dichloroethene	0.16	0.032	ug/m3
1,2,4-Trichlorobenzene	0.080	0.064	ppb v/v
1,2,4-Trichlorobenzene	0.59	0.47	ug/m3
1,2,4-Trimethylbenzene	0.080	0.020	ppb v/v
1,2,4-Trimethylbenzene	0.39	0.098	ug/m3
1,2-Dibromoethane	0.080	0.0070	ppb v/v
1,2-Dibromoethane	0.61	0.054	ug/m3
1,2-Dichlorobenzene	0.080	0.031	ppb v/v
1,2-Dichlorobenzene	0.48	0.19	ug/m3
1,2-Dichloroethane	0.080	0.010	ppb v/v
1,2-Dichloroethane	0.32	0.040	ug/m3
1,2-Dichloropropane	0.080	0.010	ppb v/v
1,2-Dichloropropane	0.37	0.046	ug/m3
1,2-Dichlorotetrafluoroethane	0.080	0.012	ppb v/v
1,2-Dichlorotetrafluoroethane	0.56	0.084	ug/m3
1,3,5-Trimethylbenzene	0.080	0.022	ppb v/v
1,3,5-Trimethylbenzene	0.39	0.11	ug/m3
1,3-Dichlorobenzene	0.080	0.016	ppb v/v
1,3-Dichlorobenzene	0.48	0.096	ug/m3
1,4-Dichlorobenzene	0.080	0.016	ppb v/v
1,4-Dichlorobenzene	0.48	0.096	ug/m3
1,4-Dioxane	0.20	0.030	ppb v/v
1,4-Dioxane	0.72	0.11	ug/m3
2,2,4-Trimethylpentane	0.20	0.0080	ppb v/v
2,2,4-Trimethylpentane	0.93	0.037	ug/m3
2-Butanone	0.32	0.073	ppb v/v
2-Butanone	0.94	0.22	ug/m3
4-Methyl-2-pentanone (MIBK)	0.20	0.054	ppb v/v
4-Methyl-2-pentanone (MIBK)	0.82	0.22	ug/m3
Benzene	0.080	0.0080	ppb v/v
Benzene	0.26	0.026	ug/m3
Benzyl chloride	0.16	0.038	ppb v/v
Benzyl chloride	0.83	0.20	ug/m3
Bromodichloromethane	0.080	0.018	ppb v/v
Bromodichloromethane	0.54	0.12	ug/m3
Bromoform	0.080	0.0090	ppb v/v
Bromoform	0.83	0.093	ug/m3
Bromomethane	0.080	0.022	ppb v/v
Bromomethane	0.31	0.085	ug/m3
Carbon tetrachloride	0.032	0.0070	ppb v/v
Carbon tetrachloride	0.20	0.044	ug/m3
Chlorobenzene	0.080	0.0060	ppb v/v

Default Detection Limits

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Conti

Analyte	RL	MDL	Units
Chlorobenzene	0.37	0.028	ug/m3
Chloroethane	0.080	0.029	ppb v/v
Chloroethane	0.21	0.077	ug/m3
Chloroform	0.080	0.0070	ppb v/v
Chloroform	0.39	0.034	ug/m3
Chloromethane	0.20	0.066	ppb v/v
Chloromethane	0.41	0.14	ug/m3
cis-1,2-Dichloroethene	0.040	0.010	ppb v/v
cis-1,2-Dichloroethene	0.16	0.040	ug/m3
cis-1,3-Dichloropropene	0.080	0.016	ppb v/v
cis-1,3-Dichloropropene	0.36	0.073	ug/m3
Cyclohexane	0.20	0.023	ppb v/v
Cyclohexane	0.69	0.079	ug/m3
Dibromochloromethane	0.080	0.0070	ppb v/v
Dibromochloromethane	0.68	0.060	ug/m3
Dichlorodifluoromethane	0.080	0.014	ppb v/v
Dichlorodifluoromethane	0.40	0.069	ug/m3
Ethanol	2.0	0.87	ppb v/v
Ethanol	3.8	1.6	ug/m3
Ethylbenzene	0.080	0.013	ppb v/v
Ethylbenzene	0.35	0.056	ug/m3
Hexachlorobutadiene	0.080	0.032	ppb v/v
Hexachlorobutadiene	0.85	0.34	ug/m3
Hexane	0.20	0.013	ppb v/v
Hexane	0.70	0.046	ug/m3
Methyl tert-butyl ether	0.16	0.052	ppb v/v
Methyl tert-butyl ether	0.58	0.19	ug/m3
Methylene Chloride	0.20	0.16	ppb v/v
Methylene Chloride	0.69	0.56	ug/m3
m-Xylene & p-Xylene	0.080	0.029	ppb v/v
m-Xylene & p-Xylene	0.35	0.13	ug/m3
o-Xylene	0.080	0.015	ppb v/v
o-Xylene	0.35	0.065	ug/m3
Styrene	0.080	0.024	ppb v/v
Styrene	0.34	0.10	ug/m3
t-Butyl alcohol	0.32	0.088	ppb v/v
t-Butyl alcohol	0.97	0.27	ug/m3
Tetrachloroethene	0.080	0.0070	ppb v/v
Tetrachloroethene	0.54	0.047	ug/m3
Toluene	0.12	0.078	ppb v/v
Toluene	0.45	0.29	ug/m3
trans-1,2-Dichloroethene	0.080	0.0070	ppb v/v
trans-1,2-Dichloroethene	0.32	0.028	ug/m3
trans-1,3-Dichloropropene	0.080	0.0090	ppb v/v
trans-1,3-Dichloropropene	0.36	0.041	ug/m3
Trichloroethene	0.036	0.0060	ppb v/v
Trichloroethene	0.19	0.032	ug/m3
Trichlorofluoromethane	0.080	0.011	ppb v/v
Trichlorofluoromethane	0.45	0.062	ug/m3
Vinyl chloride	0.040	0.026	ppb v/v
Vinyl chloride	0.10	0.066	ug/m3

Surrogate Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Matrix: Air

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB (60-140)
140-16882-1	SS-01	90
140-16882-2	SS-02	84
140-16882-3	SS-03	98
140-16882-4	SS-04	86
140-16882-5	SS-05	96
140-16882-6	SS-06	85
140-16882-7	AA-01	95
140-16882-8	AA-02	95
140-16882-9	DUP 0926	97
LCS 140-34104/1002	Lab Control Sample	106
LCS 140-34105/1002	Lab Control Sample	98
LCS 140-34106/1002	Lab Control Sample	92
MB 140-34104/5	Method Blank	98
MB 140-34105/4	Method Blank	89
MB 140-34106/4	Method Blank	88

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: MB 140-34104/5

Matrix: Air

Analysis Batch: 34104

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/03/19 13:07	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
1,2-Dichloroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
1,4-Dioxane	ND		0.20		ppb v/v			10/03/19 13:07	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/03/19 13:07	1
2-Butanone	ND		0.32		ppb v/v			10/03/19 13:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/03/19 13:07	1
Benzene	ND		0.080		ppb v/v			10/03/19 13:07	1
Benzyl chloride	ND		0.16		ppb v/v			10/03/19 13:07	1
Bromodichloromethane	ND		0.080		ppb v/v			10/03/19 13:07	1
Bromoform	ND		0.080		ppb v/v			10/03/19 13:07	1
Bromomethane	ND		0.080		ppb v/v			10/03/19 13:07	1
Carbon tetrachloride	ND		0.032		ppb v/v			10/03/19 13:07	1
Chlorobenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
Chloroethane	ND		0.080		ppb v/v			10/03/19 13:07	1
Chloroform	ND		0.080		ppb v/v			10/03/19 13:07	1
Chloromethane	ND		0.20		ppb v/v			10/03/19 13:07	1
cis-1,2-Dichloroethene	ND		0.040		ppb v/v			10/03/19 13:07	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/03/19 13:07	1
Cyclohexane	ND		0.20		ppb v/v			10/03/19 13:07	1
Dibromochloromethane	ND		0.080		ppb v/v			10/03/19 13:07	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			10/03/19 13:07	1
Ethanol	ND		2.0		ppb v/v			10/03/19 13:07	1
Ethylbenzene	ND		0.080		ppb v/v			10/03/19 13:07	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/03/19 13:07	1
Hexane	ND		0.20		ppb v/v			10/03/19 13:07	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/03/19 13:07	1
Methylene Chloride	0.208		0.20		ppb v/v			10/03/19 13:07	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			10/03/19 13:07	1
o-Xylene	ND		0.080		ppb v/v			10/03/19 13:07	1
Styrene	ND		0.080		ppb v/v			10/03/19 13:07	1
t-Butyl alcohol	ND		0.32		ppb v/v			10/03/19 13:07	1
Tetrachloroethene	ND		0.080		ppb v/v			10/03/19 13:07	1
Toluene	ND		0.12		ppb v/v			10/03/19 13:07	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/03/19 13:07	1

Eurofins TestAmerica, Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-34104/5

Matrix: Air

Analysis Batch: 34104

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/03/19 13:07	1
Trichloroethene	ND		0.036		ppb v/v			10/03/19 13:07	1
Trichlorofluoromethane	ND		0.080		ppb v/v			10/03/19 13:07	1
Vinyl chloride	ND		0.040		ppb v/v			10/03/19 13:07	1
Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/03/19 13:07	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/03/19 13:07	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/03/19 13:07	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/03/19 13:07	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/03/19 13:07	1
1,1-Dichloroethene	ND		0.16		ug/m3			10/03/19 13:07	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/03/19 13:07	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			10/03/19 13:07	1
1,2-Dibromoethane	ND		0.61		ug/m3			10/03/19 13:07	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 13:07	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/03/19 13:07	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/03/19 13:07	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			10/03/19 13:07	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			10/03/19 13:07	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 13:07	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/03/19 13:07	1
1,4-Dioxane	ND		0.72		ug/m3			10/03/19 13:07	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/03/19 13:07	1
2-Butanone	ND		0.94		ug/m3			10/03/19 13:07	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/03/19 13:07	1
Benzene	ND		0.26		ug/m3			10/03/19 13:07	1
Benzyl chloride	ND		0.83		ug/m3			10/03/19 13:07	1
Bromodichloromethane	ND		0.54		ug/m3			10/03/19 13:07	1
Bromoform	ND		0.83		ug/m3			10/03/19 13:07	1
Bromomethane	ND		0.31		ug/m3			10/03/19 13:07	1
Carbon tetrachloride	ND		0.20		ug/m3			10/03/19 13:07	1
Chlorobenzene	ND		0.37		ug/m3			10/03/19 13:07	1
Chloroethane	ND		0.21		ug/m3			10/03/19 13:07	1
Chloroform	ND		0.39		ug/m3			10/03/19 13:07	1
Chloromethane	ND		0.41		ug/m3			10/03/19 13:07	1
cis-1,2-Dichloroethene	ND		0.16		ug/m3			10/03/19 13:07	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/03/19 13:07	1
Cyclohexane	ND		0.69		ug/m3			10/03/19 13:07	1
Dibromochloromethane	ND		0.68		ug/m3			10/03/19 13:07	1
Dichlorodifluoromethane	ND		0.40		ug/m3			10/03/19 13:07	1
Ethanol	ND		3.8		ug/m3			10/03/19 13:07	1
Ethylbenzene	ND		0.35		ug/m3			10/03/19 13:07	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/03/19 13:07	1
Hexane	ND		0.70		ug/m3			10/03/19 13:07	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/03/19 13:07	1
Methylene Chloride	0.724		0.69		ug/m3			10/03/19 13:07	1

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-34104/5

Matrix: Air

Analysis Batch: 34104

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
m-Xylene & p-Xylene	ND		0.35		ug/m3			10/03/19 13:07	1
o-Xylene	ND		0.35		ug/m3			10/03/19 13:07	1
Styrene	ND		0.34		ug/m3			10/03/19 13:07	1
t-Butyl alcohol	ND		0.97		ug/m3			10/03/19 13:07	1
Tetrachloroethene	ND		0.54		ug/m3			10/03/19 13:07	1
Toluene	ND		0.45		ug/m3			10/03/19 13:07	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/03/19 13:07	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/03/19 13:07	1
Trichloroethene	ND		0.19		ug/m3			10/03/19 13:07	1
Trichlorofluoromethane	ND		0.45		ug/m3			10/03/19 13:07	1
Vinyl chloride	ND		0.10		ug/m3			10/03/19 13:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		60 - 140		10/03/19 13:07	1

Lab Sample ID: LCS 140-34104/1002

Matrix: Air

Analysis Batch: 34104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2.00	1.72		ppb v/v		86	70 - 130
1,1,2,2-Tetrachloroethane	2.00	2.44		ppb v/v		122	70 - 130
1,1,2-Trichloroethane	2.00	2.00		ppb v/v		100	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.06		ppb v/v		103	70 - 130
1,1-Dichloroethane	2.00	1.78		ppb v/v		89	70 - 130
1,1-Dichloroethene	2.00	2.11		ppb v/v		106	70 - 130
1,2,4-Trichlorobenzene	2.00	2.57		ppb v/v		128	60 - 140
1,2,4-Trimethylbenzene	2.00	2.33		ppb v/v		116	70 - 130
1,2-Dibromoethane	2.00	2.00		ppb v/v		100	70 - 130
1,2-Dichlorobenzene	2.00	2.51		ppb v/v		126	70 - 130
1,2-Dichloroethane	2.00	1.62		ppb v/v		81	70 - 130
1,2-Dichloropropane	2.00	1.74		ppb v/v		87	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.56		ppb v/v		128	60 - 140
1,3,5-Trimethylbenzene	2.00	2.23		ppb v/v		112	70 - 130
1,3-Dichlorobenzene	2.00	2.37		ppb v/v		118	70 - 130
1,4-Dichlorobenzene	2.00	2.48		ppb v/v		124	70 - 130
1,4-Dioxane	2.00	2.12		ppb v/v		106	60 - 140
2,2,4-Trimethylpentane	2.00	1.62		ppb v/v		81	70 - 130
2-Butanone	2.00	1.70		ppb v/v		85	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.48		ppb v/v		74	60 - 140
Benzene	2.00	1.70		ppb v/v		85	70 - 130
Benzyl chloride	2.00	2.61	*	ppb v/v		131	70 - 130
Bromodichloromethane	2.00	1.72		ppb v/v		86	70 - 130
Bromoform	2.00	1.62		ppb v/v		81	60 - 140
Bromomethane	2.00	1.92		ppb v/v		96	70 - 130
Carbon tetrachloride	2.00	1.88		ppb v/v		94	70 - 130
Chlorobenzene	2.00	2.04		ppb v/v		102	70 - 130

Eurofins TestAmerica, Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-34104/1002

Matrix: Air

Analysis Batch: 34104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	2.00	1.73		ppb v/v		87	70 - 130
Chloroform	2.00	1.71		ppb v/v		86	70 - 130
Chloromethane	2.00	1.96		ppb v/v		98	60 - 140
cis-1,2-Dichloroethene	2.00	2.01		ppb v/v		101	70 - 130
cis-1,3-Dichloropropene	2.00	1.86		ppb v/v		93	70 - 130
Cyclohexane	2.00	1.55		ppb v/v		77	70 - 130
Dibromochloromethane	2.00	1.84		ppb v/v		92	70 - 130
Dichlorodifluoromethane	2.00	2.33		ppb v/v		117	60 - 140
Ethanol	10.0	9.64		ppb v/v		96	60 - 140
Ethylbenzene	2.00	1.94		ppb v/v		97	70 - 130
Hexachlorobutadiene	2.00	2.31		ppb v/v		115	60 - 140
Hexane	2.00	1.63		ppb v/v		82	70 - 130
Methyl tert-butyl ether	2.00	1.75		ppb v/v		88	60 - 140
Methylene Chloride	2.00	1.72		ppb v/v		86	70 - 130
m-Xylene & p-Xylene	4.00	3.92		ppb v/v		98	70 - 130
o-Xylene	2.00	2.03		ppb v/v		102	70 - 130
Styrene	2.00	2.20		ppb v/v		110	70 - 130
t-Butyl alcohol	2.00	1.79		ppb v/v		89	60 - 140
Tetrachloroethene	2.00	1.84		ppb v/v		92	70 - 130
Toluene	2.00	1.96		ppb v/v		98	70 - 130
trans-1,2-Dichloroethene	2.00	1.98		ppb v/v		99	70 - 130
trans-1,3-Dichloropropene	2.00	1.84		ppb v/v		92	70 - 130
Trichloroethene	2.00	1.81		ppb v/v		91	70 - 130
Trichlorofluoromethane	2.00	1.91		ppb v/v		95	60 - 140
Vinyl chloride	2.00	2.06		ppb v/v		103	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	9.40		ug/m3		86	70 - 130
1,1,1,2-Tetrachloroethane	14	16.7		ug/m3		122	70 - 130
1,1,2-Trichloroethane	11	10.9		ug/m3		100	70 - 130
1,1,2-Trichlorotrifluoroethane	15	15.8		ug/m3		103	70 - 130
1,1-Dichloroethane	8.1	7.21		ug/m3		89	70 - 130
1,1-Dichloroethene	7.9	8.37		ug/m3		106	70 - 130
1,2,4-Trichlorobenzene	15	19.1		ug/m3		128	60 - 140
1,2,4-Trimethylbenzene	9.8	11.4		ug/m3		116	70 - 130
1,2-Dibromoethane	15	15.4		ug/m3		100	70 - 130
1,2-Dichlorobenzene	12	15.1		ug/m3		126	70 - 130
1,2-Dichloroethane	8.1	6.56		ug/m3		81	70 - 130
1,2-Dichloropropane	9.2	8.05		ug/m3		87	70 - 130
1,2-Dichlorotetrafluoroethane	14	17.9		ug/m3		128	60 - 140
1,3,5-Trimethylbenzene	9.8	11.0		ug/m3		112	70 - 130
1,3-Dichlorobenzene	12	14.2		ug/m3		118	70 - 130
1,4-Dichlorobenzene	12	14.9		ug/m3		124	70 - 130
1,4-Dioxane	7.2	7.64		ug/m3		106	60 - 140
2,2,4-Trimethylpentane	9.3	7.59		ug/m3		81	70 - 130
2-Butanone	5.9	5.01		ug/m3		85	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	6.07		ug/m3		74	60 - 140

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-34104/1002

Matrix: Air

Analysis Batch: 34104

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzene	6.4	5.43		ug/m3		85	70 - 130
Benzyl chloride	10	13.5	*	ug/m3		131	70 - 130
Bromodichloromethane	13	11.5		ug/m3		86	70 - 130
Bromoform	21	16.8		ug/m3		81	60 - 140
Bromomethane	7.8	7.44		ug/m3		96	70 - 130
Carbon tetrachloride	13	11.8		ug/m3		94	70 - 130
Chlorobenzene	9.2	9.38		ug/m3		102	70 - 130
Chloroethane	5.3	4.57		ug/m3		87	70 - 130
Chloroform	9.8	8.36		ug/m3		86	70 - 130
Chloromethane	4.1	4.05		ug/m3		98	60 - 140
cis-1,2-Dichloroethene	7.9	7.98		ug/m3		101	70 - 130
cis-1,3-Dichloropropene	9.1	8.44		ug/m3		93	70 - 130
Cyclohexane	6.9	5.32		ug/m3		77	70 - 130
Dibromochloromethane	17	15.7		ug/m3		92	70 - 130
Dichlorodifluoromethane	9.9	11.5		ug/m3		117	60 - 140
Ethanol	19	18.2		ug/m3		96	60 - 140
Ethylbenzene	8.7	8.40		ug/m3		97	70 - 130
Hexachlorobutadiene	21	24.6		ug/m3		115	60 - 140
Hexane	7.0	5.76		ug/m3		82	70 - 130
Methyl tert-butyl ether	7.2	6.32		ug/m3		88	60 - 140
Methylene Chloride	6.9	5.96		ug/m3		86	70 - 130
m-Xylene & p-Xylene	17	17.0		ug/m3		98	70 - 130
o-Xylene	8.7	8.82		ug/m3		102	70 - 130
Styrene	8.5	9.38		ug/m3		110	70 - 130
t-Butyl alcohol	6.1	5.42		ug/m3		89	60 - 140
Tetrachloroethene	14	12.5		ug/m3		92	70 - 130
Toluene	7.5	7.39		ug/m3		98	70 - 130
trans-1,2-Dichloroethene	7.9	7.86		ug/m3		99	70 - 130
trans-1,3-Dichloropropene	9.1	8.34		ug/m3		92	70 - 130
Trichloroethene	11	9.74		ug/m3		91	70 - 130
Trichlorofluoromethane	11	10.7		ug/m3		95	60 - 140
Vinyl chloride	5.1	5.27		ug/m3		103	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		60 - 140

Lab Sample ID: MB 140-34105/4

Matrix: Air

Analysis Batch: 34105

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/04/19 12:04	1

Eurofins TestAmerica, Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-34105/4
Matrix: Air
Analysis Batch: 34105

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
1,2-Dichloroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
1,4-Dioxane	ND		0.20		ppb v/v			10/04/19 12:04	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/04/19 12:04	1
2-Butanone	ND		0.32		ppb v/v			10/04/19 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/04/19 12:04	1
Benzene	ND		0.080		ppb v/v			10/04/19 12:04	1
Benzyl chloride	ND		0.16		ppb v/v			10/04/19 12:04	1
Bromodichloromethane	ND		0.080		ppb v/v			10/04/19 12:04	1
Bromoform	ND		0.080		ppb v/v			10/04/19 12:04	1
Bromomethane	ND		0.080		ppb v/v			10/04/19 12:04	1
Carbon tetrachloride	ND		0.032		ppb v/v			10/04/19 12:04	1
Chlorobenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
Chloroethane	ND		0.080		ppb v/v			10/04/19 12:04	1
Chloroform	ND		0.080		ppb v/v			10/04/19 12:04	1
Chloromethane	ND		0.20		ppb v/v			10/04/19 12:04	1
cis-1,2-Dichloroethene	ND		0.040		ppb v/v			10/04/19 12:04	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 12:04	1
Cyclohexane	ND		0.20		ppb v/v			10/04/19 12:04	1
Dibromochloromethane	ND		0.080		ppb v/v			10/04/19 12:04	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			10/04/19 12:04	1
Ethanol	ND		2.0		ppb v/v			10/04/19 12:04	1
Ethylbenzene	ND		0.080		ppb v/v			10/04/19 12:04	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/04/19 12:04	1
Hexane	ND		0.20		ppb v/v			10/04/19 12:04	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/04/19 12:04	1
Methylene Chloride	ND		0.20		ppb v/v			10/04/19 12:04	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			10/04/19 12:04	1
o-Xylene	ND		0.080		ppb v/v			10/04/19 12:04	1
Styrene	ND		0.080		ppb v/v			10/04/19 12:04	1
t-Butyl alcohol	ND		0.32		ppb v/v			10/04/19 12:04	1
Tetrachloroethene	ND		0.080		ppb v/v			10/04/19 12:04	1
Toluene	ND		0.12		ppb v/v			10/04/19 12:04	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/04/19 12:04	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/04/19 12:04	1
Trichloroethene	ND		0.036		ppb v/v			10/04/19 12:04	1
Trichlorofluoromethane	ND		0.080		ppb v/v			10/04/19 12:04	1
Vinyl chloride	ND		0.040		ppb v/v			10/04/19 12:04	1

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/04/19 12:04	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/04/19 12:04	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/04/19 12:04	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/04/19 12:04	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/04/19 12:04	1
1,1-Dichloroethene	ND		0.16		ug/m3			10/04/19 12:04	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/04/19 12:04	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			10/04/19 12:04	1
1,2-Dibromoethane	ND		0.61		ug/m3			10/04/19 12:04	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 12:04	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/04/19 12:04	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/04/19 12:04	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			10/04/19 12:04	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			10/04/19 12:04	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 12:04	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/04/19 12:04	1
1,4-Dioxane	ND		0.72		ug/m3			10/04/19 12:04	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/04/19 12:04	1
2-Butanone	ND		0.94		ug/m3			10/04/19 12:04	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/04/19 12:04	1
Benzene	ND		0.26		ug/m3			10/04/19 12:04	1
Benzyl chloride	ND		0.83		ug/m3			10/04/19 12:04	1
Bromodichloromethane	ND		0.54		ug/m3			10/04/19 12:04	1
Bromoform	ND		0.83		ug/m3			10/04/19 12:04	1
Bromomethane	ND		0.31		ug/m3			10/04/19 12:04	1
Carbon tetrachloride	ND		0.20		ug/m3			10/04/19 12:04	1
Chlorobenzene	ND		0.37		ug/m3			10/04/19 12:04	1
Chloroethane	ND		0.21		ug/m3			10/04/19 12:04	1
Chloroform	ND		0.39		ug/m3			10/04/19 12:04	1
Chloromethane	ND		0.41		ug/m3			10/04/19 12:04	1
cis-1,2-Dichloroethene	ND		0.16		ug/m3			10/04/19 12:04	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 12:04	1
Cyclohexane	ND		0.69		ug/m3			10/04/19 12:04	1
Dibromochloromethane	ND		0.68		ug/m3			10/04/19 12:04	1
Dichlorodifluoromethane	ND		0.40		ug/m3			10/04/19 12:04	1
Ethanol	ND		3.8		ug/m3			10/04/19 12:04	1
Ethylbenzene	ND		0.35		ug/m3			10/04/19 12:04	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/04/19 12:04	1
Hexane	ND		0.70		ug/m3			10/04/19 12:04	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/04/19 12:04	1
Methylene Chloride	ND		0.69		ug/m3			10/04/19 12:04	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			10/04/19 12:04	1
o-Xylene	ND		0.35		ug/m3			10/04/19 12:04	1
Styrene	ND		0.34		ug/m3			10/04/19 12:04	1
t-Butyl alcohol	ND		0.97		ug/m3			10/04/19 12:04	1
Tetrachloroethene	ND		0.54		ug/m3			10/04/19 12:04	1
Toluene	ND		0.45		ug/m3			10/04/19 12:04	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/04/19 12:04	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/04/19 12:04	1
Trichloroethene	ND		0.19		ug/m3			10/04/19 12:04	1

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-34105/4

Matrix: Air

Analysis Batch: 34105

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	ND		0.45		ug/m3			10/04/19 12:04	1
Vinyl chloride	ND		0.10		ug/m3			10/04/19 12:04	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		60 - 140					10/04/19 12:04	1

Lab Sample ID: LCS 140-34105/1002

Matrix: Air

Analysis Batch: 34105

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2.00	1.82		ppb v/v		91	70 - 130
1,1,2,2-Tetrachloroethane	2.00	2.32		ppb v/v		116	70 - 130
1,1,2-Trichloroethane	2.00	2.07		ppb v/v		104	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	2.09		ppb v/v		105	70 - 130
1,1-Dichloroethane	2.00	1.86		ppb v/v		93	70 - 130
1,1-Dichloroethene	2.00	2.08		ppb v/v		104	70 - 130
1,2,4-Trichlorobenzene	2.00	2.26		ppb v/v		113	60 - 140
1,2,4-Trimethylbenzene	2.00	2.20		ppb v/v		110	70 - 130
1,2-Dibromoethane	2.00	2.08		ppb v/v		104	70 - 130
1,2-Dichlorobenzene	2.00	2.33		ppb v/v		117	70 - 130
1,2-Dichloroethane	2.00	1.62		ppb v/v		81	70 - 130
1,2-Dichloropropane	2.00	1.88		ppb v/v		94	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.84	*	ppb v/v		142	60 - 140
1,3,5-Trimethylbenzene	2.00	2.25		ppb v/v		113	70 - 130
1,3-Dichlorobenzene	2.00	2.19		ppb v/v		110	70 - 130
1,4-Dichlorobenzene	2.00	2.32		ppb v/v		116	70 - 130
1,4-Dioxane	2.00	2.19		ppb v/v		110	60 - 140
2,2,4-Trimethylpentane	2.00	1.75		ppb v/v		88	70 - 130
2-Butanone	2.00	1.90		ppb v/v		95	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.56		ppb v/v		78	60 - 140
Benzene	2.00	1.87		ppb v/v		93	70 - 130
Benzyl chloride	2.00	2.58		ppb v/v		129	70 - 130
Bromodichloromethane	2.00	1.75		ppb v/v		88	70 - 130
Bromoform	2.00	1.53		ppb v/v		77	60 - 140
Bromomethane	2.00	2.06		ppb v/v		103	70 - 130
Carbon tetrachloride	2.00	1.86		ppb v/v		93	70 - 130
Chlorobenzene	2.00	2.11		ppb v/v		106	70 - 130
Chloroethane	2.00	2.00		ppb v/v		100	70 - 130
Chloroform	2.00	1.81		ppb v/v		90	70 - 130
Chloromethane	2.00	2.17		ppb v/v		108	60 - 140
cis-1,2-Dichloroethene	2.00	2.16		ppb v/v		108	70 - 130
cis-1,3-Dichloropropene	2.00	1.94		ppb v/v		97	70 - 130
Cyclohexane	2.00	1.79		ppb v/v		90	70 - 130
Dibromochloromethane	2.00	1.81		ppb v/v		90	70 - 130
Dichlorodifluoromethane	2.00	2.23		ppb v/v		111	60 - 140
Ethanol	10.0	9.47		ppb v/v		95	60 - 140

Eurofins TestAmerica, Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-34105/1002

Matrix: Air

Analysis Batch: 34105

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethylbenzene	2.00	2.04		ppb v/v		102	70 - 130
Hexachlorobutadiene	2.00	2.09		ppb v/v		105	60 - 140
Hexane	2.00	1.79		ppb v/v		89	70 - 130
Methyl tert-butyl ether	2.00	1.90		ppb v/v		95	60 - 140
Methylene Chloride	2.00	1.77		ppb v/v		89	70 - 130
m-Xylene & p-Xylene	4.00	4.08		ppb v/v		102	70 - 130
o-Xylene	2.00	2.09		ppb v/v		105	70 - 130
Styrene	2.00	2.20		ppb v/v		110	70 - 130
t-Butyl alcohol	2.00	1.85		ppb v/v		92	60 - 140
Tetrachloroethene	2.00	1.96		ppb v/v		98	70 - 130
Toluene	2.00	2.11		ppb v/v		106	70 - 130
trans-1,2-Dichloroethene	2.00	2.10		ppb v/v		105	70 - 130
trans-1,3-Dichloropropene	2.00	1.91		ppb v/v		96	70 - 130
Trichloroethene	2.00	1.96		ppb v/v		98	70 - 130
Trichlorofluoromethane	2.00	1.85		ppb v/v		92	60 - 140
Vinyl chloride	2.00	2.17		ppb v/v		108	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	9.92		ug/m3		91	70 - 130
1,1,2,2-Tetrachloroethane	14	15.9		ug/m3		116	70 - 130
1,1,2-Trichloroethane	11	11.3		ug/m3		104	70 - 130
1,1,2-Trichlorotrifluoroethane	15	16.0		ug/m3		105	70 - 130
1,1-Dichloroethane	8.1	7.55		ug/m3		93	70 - 130
1,1-Dichloroethene	7.9	8.26		ug/m3		104	70 - 130
1,2,4-Trichlorobenzene	15	16.8		ug/m3		113	60 - 140
1,2,4-Trimethylbenzene	9.8	10.8		ug/m3		110	70 - 130
1,2-Dibromoethane	15	16.0		ug/m3		104	70 - 130
1,2-Dichlorobenzene	12	14.0		ug/m3		117	70 - 130
1,2-Dichloroethane	8.1	6.57		ug/m3		81	70 - 130
1,2-Dichloropropane	9.2	8.69		ug/m3		94	70 - 130
1,2-Dichlorotetrafluoroethane	14	19.8	*	ug/m3		142	60 - 140
1,3,5-Trimethylbenzene	9.8	11.1		ug/m3		113	70 - 130
1,3-Dichlorobenzene	12	13.2		ug/m3		110	70 - 130
1,4-Dichlorobenzene	12	14.0		ug/m3		116	70 - 130
1,4-Dioxane	7.2	7.90		ug/m3		110	60 - 140
2,2,4-Trimethylpentane	9.3	8.18		ug/m3		88	70 - 130
2-Butanone	5.9	5.61		ug/m3		95	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	6.41		ug/m3		78	60 - 140
Benzene	6.4	5.96		ug/m3		93	70 - 130
Benzyl chloride	10	13.3		ug/m3		129	70 - 130
Bromodichloromethane	13	11.7		ug/m3		88	70 - 130
Bromoform	21	15.8		ug/m3		77	60 - 140
Bromomethane	7.8	8.02		ug/m3		103	70 - 130
Carbon tetrachloride	13	11.7		ug/m3		93	70 - 130
Chlorobenzene	9.2	9.73		ug/m3		106	70 - 130
Chloroethane	5.3	5.27		ug/m3		100	70 - 130
Chloroform	9.8	8.82		ug/m3		90	70 - 130

Eurofins TestAmerica, Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-34105/1002

Matrix: Air

Analysis Batch: 34105

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	4.1	4.48		ug/m3		108	60 - 140
cis-1,2-Dichloroethene	7.9	8.55		ug/m3		108	70 - 130
cis-1,3-Dichloropropene	9.1	8.81		ug/m3		97	70 - 130
Cyclohexane	6.9	6.17		ug/m3		90	70 - 130
Dibromochloromethane	17	15.4		ug/m3		90	70 - 130
Dichlorodifluoromethane	9.9	11.0		ug/m3		111	60 - 140
Ethanol	19	17.8		ug/m3		95	60 - 140
Ethylbenzene	8.7	8.86		ug/m3		102	70 - 130
Hexachlorobutadiene	21	22.3		ug/m3		105	60 - 140
Hexane	7.0	6.30		ug/m3		89	70 - 130
Methyl tert-butyl ether	7.2	6.86		ug/m3		95	60 - 140
Methylene Chloride	6.9	6.16		ug/m3		89	70 - 130
m-Xylene & p-Xylene	17	17.7		ug/m3		102	70 - 130
o-Xylene	8.7	9.09		ug/m3		105	70 - 130
Styrene	8.5	9.38		ug/m3		110	70 - 130
t-Butyl alcohol	6.1	5.61		ug/m3		92	60 - 140
Tetrachloroethene	14	13.3		ug/m3		98	70 - 130
Toluene	7.5	7.96		ug/m3		106	70 - 130
trans-1,2-Dichloroethene	7.9	8.34		ug/m3		105	70 - 130
trans-1,3-Dichloropropene	9.1	8.67		ug/m3		96	70 - 130
Trichloroethene	11	10.5		ug/m3		98	70 - 130
Trichlorofluoromethane	11	10.4		ug/m3		92	60 - 140
Vinyl chloride	5.1	5.54		ug/m3		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		60 - 140

Lab Sample ID: MB 140-34106/4

Matrix: Air

Analysis Batch: 34106

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,1,2,2-Tetrachloroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,1,2-Trichloroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,1,2-Trichlorotrifluoroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,1-Dichloroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,1-Dichloroethene	ND		0.040		ppb v/v			10/07/19 19:05	1
1,2,4-Trichlorobenzene	ND		0.080		ppb v/v			10/07/19 19:05	1
1,2,4-Trimethylbenzene	ND		0.080		ppb v/v			10/07/19 19:05	1
1,2-Dibromoethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,2-Dichlorobenzene	ND		0.080		ppb v/v			10/07/19 19:05	1
1,2-Dichloroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,2-Dichloropropane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,2-Dichlorotetrafluoroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
1,3,5-Trimethylbenzene	ND		0.080		ppb v/v			10/07/19 19:05	1
1,3-Dichlorobenzene	ND		0.080		ppb v/v			10/07/19 19:05	1

Eurofins TestAmerica, Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-34106/4
Matrix: Air
Analysis Batch: 34106

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	ND		0.080		ppb v/v			10/07/19 19:05	1
1,4-Dioxane	ND		0.20		ppb v/v			10/07/19 19:05	1
2,2,4-Trimethylpentane	ND		0.20		ppb v/v			10/07/19 19:05	1
2-Butanone	ND		0.32		ppb v/v			10/07/19 19:05	1
4-Methyl-2-pentanone (MIBK)	ND		0.20		ppb v/v			10/07/19 19:05	1
Benzene	ND		0.080		ppb v/v			10/07/19 19:05	1
Benzyl chloride	ND		0.16		ppb v/v			10/07/19 19:05	1
Bromodichloromethane	ND		0.080		ppb v/v			10/07/19 19:05	1
Bromoform	ND		0.080		ppb v/v			10/07/19 19:05	1
Bromomethane	ND		0.080		ppb v/v			10/07/19 19:05	1
Carbon tetrachloride	ND		0.032		ppb v/v			10/07/19 19:05	1
Chlorobenzene	ND		0.080		ppb v/v			10/07/19 19:05	1
Chloroethane	ND		0.080		ppb v/v			10/07/19 19:05	1
Chloroform	ND		0.080		ppb v/v			10/07/19 19:05	1
Chloromethane	ND		0.20		ppb v/v			10/07/19 19:05	1
cis-1,2-Dichloroethene	ND		0.040		ppb v/v			10/07/19 19:05	1
cis-1,3-Dichloropropene	ND		0.080		ppb v/v			10/07/19 19:05	1
Cyclohexane	ND		0.20		ppb v/v			10/07/19 19:05	1
Dibromochloromethane	ND		0.080		ppb v/v			10/07/19 19:05	1
Dichlorodifluoromethane	ND		0.080		ppb v/v			10/07/19 19:05	1
Ethanol	ND		2.0		ppb v/v			10/07/19 19:05	1
Ethylbenzene	ND		0.080		ppb v/v			10/07/19 19:05	1
Hexachlorobutadiene	ND		0.080		ppb v/v			10/07/19 19:05	1
Hexane	ND		0.20		ppb v/v			10/07/19 19:05	1
Methyl tert-butyl ether	ND		0.16		ppb v/v			10/07/19 19:05	1
Methylene Chloride	ND		0.20		ppb v/v			10/07/19 19:05	1
m-Xylene & p-Xylene	ND		0.080		ppb v/v			10/07/19 19:05	1
o-Xylene	ND		0.080		ppb v/v			10/07/19 19:05	1
Styrene	ND		0.080		ppb v/v			10/07/19 19:05	1
t-Butyl alcohol	ND		0.32		ppb v/v			10/07/19 19:05	1
Tetrachloroethene	ND		0.080		ppb v/v			10/07/19 19:05	1
Toluene	ND		0.12		ppb v/v			10/07/19 19:05	1
trans-1,2-Dichloroethene	ND		0.080		ppb v/v			10/07/19 19:05	1
trans-1,3-Dichloropropene	ND		0.080		ppb v/v			10/07/19 19:05	1
Trichloroethene	ND		0.036		ppb v/v			10/07/19 19:05	1
Trichlorofluoromethane	ND		0.080		ppb v/v			10/07/19 19:05	1
Vinyl chloride	ND		0.040		ppb v/v			10/07/19 19:05	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.44		ug/m3			10/07/19 19:05	1
1,1,2,2-Tetrachloroethane	ND		0.55		ug/m3			10/07/19 19:05	1
1,1,2-Trichloroethane	ND		0.44		ug/m3			10/07/19 19:05	1
1,1,2-Trichlorotrifluoroethane	ND		0.61		ug/m3			10/07/19 19:05	1
1,1-Dichloroethane	ND		0.32		ug/m3			10/07/19 19:05	1
1,1-Dichloroethene	ND		0.16		ug/m3			10/07/19 19:05	1
1,2,4-Trichlorobenzene	ND		0.59		ug/m3			10/07/19 19:05	1
1,2,4-Trimethylbenzene	ND		0.39		ug/m3			10/07/19 19:05	1

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: MB 140-34106/4

Matrix: Air

Analysis Batch: 34106

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromoethane	ND		0.61		ug/m3			10/07/19 19:05	1
1,2-Dichlorobenzene	ND		0.48		ug/m3			10/07/19 19:05	1
1,2-Dichloroethane	ND		0.32		ug/m3			10/07/19 19:05	1
1,2-Dichloropropane	ND		0.37		ug/m3			10/07/19 19:05	1
1,2-Dichlorotetrafluoroethane	ND		0.56		ug/m3			10/07/19 19:05	1
1,3,5-Trimethylbenzene	ND		0.39		ug/m3			10/07/19 19:05	1
1,3-Dichlorobenzene	ND		0.48		ug/m3			10/07/19 19:05	1
1,4-Dichlorobenzene	ND		0.48		ug/m3			10/07/19 19:05	1
1,4-Dioxane	ND		0.72		ug/m3			10/07/19 19:05	1
2,2,4-Trimethylpentane	ND		0.93		ug/m3			10/07/19 19:05	1
2-Butanone	ND		0.94		ug/m3			10/07/19 19:05	1
4-Methyl-2-pentanone (MIBK)	ND		0.82		ug/m3			10/07/19 19:05	1
Benzene	ND		0.26		ug/m3			10/07/19 19:05	1
Benzyl chloride	ND		0.83		ug/m3			10/07/19 19:05	1
Bromodichloromethane	ND		0.54		ug/m3			10/07/19 19:05	1
Bromoform	ND		0.83		ug/m3			10/07/19 19:05	1
Bromomethane	ND		0.31		ug/m3			10/07/19 19:05	1
Carbon tetrachloride	ND		0.20		ug/m3			10/07/19 19:05	1
Chlorobenzene	ND		0.37		ug/m3			10/07/19 19:05	1
Chloroethane	ND		0.21		ug/m3			10/07/19 19:05	1
Chloroform	ND		0.39		ug/m3			10/07/19 19:05	1
Chloromethane	ND		0.41		ug/m3			10/07/19 19:05	1
cis-1,2-Dichloroethene	ND		0.16		ug/m3			10/07/19 19:05	1
cis-1,3-Dichloropropene	ND		0.36		ug/m3			10/07/19 19:05	1
Cyclohexane	ND		0.69		ug/m3			10/07/19 19:05	1
Dibromochloromethane	ND		0.68		ug/m3			10/07/19 19:05	1
Dichlorodifluoromethane	ND		0.40		ug/m3			10/07/19 19:05	1
Ethanol	ND		3.8		ug/m3			10/07/19 19:05	1
Ethylbenzene	ND		0.35		ug/m3			10/07/19 19:05	1
Hexachlorobutadiene	ND		0.85		ug/m3			10/07/19 19:05	1
Hexane	ND		0.70		ug/m3			10/07/19 19:05	1
Methyl tert-butyl ether	ND		0.58		ug/m3			10/07/19 19:05	1
Methylene Chloride	ND		0.69		ug/m3			10/07/19 19:05	1
m-Xylene & p-Xylene	ND		0.35		ug/m3			10/07/19 19:05	1
o-Xylene	ND		0.35		ug/m3			10/07/19 19:05	1
Styrene	ND		0.34		ug/m3			10/07/19 19:05	1
t-Butyl alcohol	ND		0.97		ug/m3			10/07/19 19:05	1
Tetrachloroethene	ND		0.54		ug/m3			10/07/19 19:05	1
Toluene	ND		0.45		ug/m3			10/07/19 19:05	1
trans-1,2-Dichloroethene	ND		0.32		ug/m3			10/07/19 19:05	1
trans-1,3-Dichloropropene	ND		0.36		ug/m3			10/07/19 19:05	1
Trichloroethene	ND		0.19		ug/m3			10/07/19 19:05	1
Trichlorofluoromethane	ND		0.45		ug/m3			10/07/19 19:05	1
Vinyl chloride	ND		0.10		ug/m3			10/07/19 19:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		60 - 140		10/07/19 19:05	1

Eurofins TestAmerica, Knoxville

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)

Lab Sample ID: LCS 140-34106/1002

Matrix: Air

Analysis Batch: 34106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2.00	1.44		ppb v/v		72	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.73		ppb v/v		87	70 - 130
1,1,2-Trichloroethane	2.00	1.70		ppb v/v		85	70 - 130
1,1,2-Trichlorotrifluoroethane	2.00	1.65		ppb v/v		82	70 - 130
1,1-Dichloroethane	2.00	1.44		ppb v/v		72	70 - 130
1,1-Dichloroethene	2.00	1.68		ppb v/v		84	70 - 130
1,2,4-Trichlorobenzene	2.00	1.68		ppb v/v		84	60 - 140
1,2,4-Trimethylbenzene	2.00	1.64		ppb v/v		82	70 - 130
1,2-Dibromoethane	2.00	1.80		ppb v/v		90	70 - 130
1,2-Dichlorobenzene	2.00	1.78		ppb v/v		89	70 - 130
1,2-Dichloroethane	2.00	1.35 *		ppb v/v		68	70 - 130
1,2-Dichloropropane	2.00	1.51		ppb v/v		76	70 - 130
1,2-Dichlorotetrafluoroethane	2.00	2.36		ppb v/v		118	60 - 140
1,3,5-Trimethylbenzene	2.00	1.72		ppb v/v		86	70 - 130
1,3-Dichlorobenzene	2.00	1.75		ppb v/v		88	70 - 130
1,4-Dichlorobenzene	2.00	1.79		ppb v/v		90	70 - 130
1,4-Dioxane	2.00	1.36		ppb v/v		68	60 - 140
2,2,4-Trimethylpentane	2.00	1.48		ppb v/v		74	70 - 130
2-Butanone	2.00	1.50		ppb v/v		75	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.36		ppb v/v		68	60 - 140
Benzene	2.00	1.59		ppb v/v		79	70 - 130
Benzyl chloride	2.00	1.84		ppb v/v		92	70 - 130
Bromodichloromethane	2.00	1.55		ppb v/v		78	70 - 130
Bromoform	2.00	2.13		ppb v/v		107	60 - 140
Bromomethane	2.00	1.60		ppb v/v		80	70 - 130
Carbon tetrachloride	2.00	1.61		ppb v/v		81	70 - 130
Chlorobenzene	2.00	1.79		ppb v/v		89	70 - 130
Chloroethane	2.00	1.52		ppb v/v		76	70 - 130
Chloroform	2.00	1.52		ppb v/v		76	70 - 130
Chloromethane	2.00	1.64		ppb v/v		82	60 - 140
cis-1,2-Dichloroethene	2.00	1.70		ppb v/v		85	70 - 130
cis-1,3-Dichloropropene	2.00	1.57		ppb v/v		79	70 - 130
Cyclohexane	2.00	1.50		ppb v/v		75	70 - 130
Dibromochloromethane	2.00	1.74		ppb v/v		87	70 - 130
Dichlorodifluoromethane	2.00	1.78		ppb v/v		89	60 - 140
Ethanol	10.0	6.42		ppb v/v		64	60 - 140
Ethylbenzene	2.00	1.69		ppb v/v		85	70 - 130
Hexachlorobutadiene	2.00	1.68		ppb v/v		84	60 - 140
Hexane	2.00	1.43		ppb v/v		71	70 - 130
Methyl tert-butyl ether	2.00	1.47		ppb v/v		73	60 - 140
Methylene Chloride	2.00	1.40		ppb v/v		70	70 - 130
m-Xylene & p-Xylene	4.00	3.39		ppb v/v		85	70 - 130
o-Xylene	2.00	1.63		ppb v/v		82	70 - 130
Styrene	2.00	1.88		ppb v/v		94	70 - 130
t-Butyl alcohol	2.00	1.26		ppb v/v		63	60 - 140
Tetrachloroethene	2.00	1.68		ppb v/v		84	70 - 130
Toluene	2.00	1.75		ppb v/v		87	70 - 130
trans-1,2-Dichloroethene	2.00	1.75		ppb v/v		88	70 - 130

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-34106/1002

Matrix: Air

Analysis Batch: 34106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	2.00	1.56		ppb v/v		78	70 - 130
Trichloroethene	2.00	1.72		ppb v/v		86	70 - 130
Trichlorofluoromethane	2.00	1.47		ppb v/v		74	60 - 140
Vinyl chloride	2.00	1.71		ppb v/v		86	70 - 130
Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	11	7.85		ug/m3		72	70 - 130
1,1,2,2-Tetrachloroethane	14	11.9		ug/m3		87	70 - 130
1,1,2-Trichloroethane	11	9.28		ug/m3		85	70 - 130
1,1,2-Trichlorotrifluoroethane	15	12.6		ug/m3		82	70 - 130
1,1-Dichloroethane	8.1	5.81		ug/m3		72	70 - 130
1,1-Dichloroethene	7.9	6.67		ug/m3		84	70 - 130
1,2,4-Trichlorobenzene	15	12.5		ug/m3		84	60 - 140
1,2,4-Trimethylbenzene	9.8	8.06		ug/m3		82	70 - 130
1,2-Dibromoethane	15	13.9		ug/m3		90	70 - 130
1,2-Dichlorobenzene	12	10.7		ug/m3		89	70 - 130
1,2-Dichloroethane	8.1	5.48	*	ug/m3		68	70 - 130
1,2-Dichloropropane	9.2	6.99		ug/m3		76	70 - 130
1,2-Dichlorotetrafluoroethane	14	16.5		ug/m3		118	60 - 140
1,3,5-Trimethylbenzene	9.8	8.45		ug/m3		86	70 - 130
1,3-Dichlorobenzene	12	10.6		ug/m3		88	70 - 130
1,4-Dichlorobenzene	12	10.8		ug/m3		90	70 - 130
1,4-Dioxane	7.2	4.91		ug/m3		68	60 - 140
2,2,4-Trimethylpentane	9.3	6.93		ug/m3		74	70 - 130
2-Butanone	5.9	4.42		ug/m3		75	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	5.57		ug/m3		68	60 - 140
Benzene	6.4	5.07		ug/m3		79	70 - 130
Benzyl chloride	10	9.53		ug/m3		92	70 - 130
Bromodichloromethane	13	10.4		ug/m3		78	70 - 130
Bromoform	21	22.0		ug/m3		107	60 - 140
Bromomethane	7.8	6.21		ug/m3		80	70 - 130
Carbon tetrachloride	13	10.1		ug/m3		81	70 - 130
Chlorobenzene	9.2	8.23		ug/m3		89	70 - 130
Chloroethane	5.3	4.01		ug/m3		76	70 - 130
Chloroform	9.8	7.41		ug/m3		76	70 - 130
Chloromethane	4.1	3.38		ug/m3		82	60 - 140
cis-1,2-Dichloroethene	7.9	6.73		ug/m3		85	70 - 130
cis-1,3-Dichloropropene	9.1	7.14		ug/m3		79	70 - 130
Cyclohexane	6.9	5.17		ug/m3		75	70 - 130
Dibromochloromethane	17	14.8		ug/m3		87	70 - 130
Dichlorodifluoromethane	9.9	8.82		ug/m3		89	60 - 140
Ethanol	19	12.1		ug/m3		64	60 - 140
Ethylbenzene	8.7	7.35		ug/m3		85	70 - 130
Hexachlorobutadiene	21	17.9		ug/m3		84	60 - 140
Hexane	7.0	5.02		ug/m3		71	70 - 130
Methyl tert-butyl ether	7.2	5.30		ug/m3		73	60 - 140
Methylene Chloride	6.9	4.87		ug/m3		70	70 - 130

QC Sample Results

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method: TO 15 LL - Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS) (Continued)

Lab Sample ID: LCS 140-34106/1002

Matrix: Air

Analysis Batch: 34106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
m-Xylene & p-Xylene	17	14.7		ug/m3		85	70 - 130
o-Xylene	8.7	7.09		ug/m3		82	70 - 130
Styrene	8.5	8.01		ug/m3		94	70 - 130
t-Butyl alcohol	6.1	3.83		ug/m3		63	60 - 140
Tetrachloroethene	14	11.4		ug/m3		84	70 - 130
Toluene	7.5	6.58		ug/m3		87	70 - 130
trans-1,2-Dichloroethene	7.9	6.94		ug/m3		88	70 - 130
trans-1,3-Dichloropropene	9.1	7.08		ug/m3		78	70 - 130
Trichloroethene	11	9.25		ug/m3		86	70 - 130
Trichlorofluoromethane	11	8.26		ug/m3		74	60 - 140
Vinyl chloride	5.1	4.38		ug/m3		86	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		60 - 140

QC Association Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Air - GC/MS VOA

Analysis Batch: 34104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-16882-1	SS-01	Total/NA	Air	TO 15 LL	
140-16882-5	SS-05	Total/NA	Air	TO 15 LL	
140-16882-7	AA-01	Total/NA	Air	TO 15 LL	
140-16882-8	AA-02	Total/NA	Air	TO 15 LL	
140-16882-9	DUP 0926	Total/NA	Air	TO 15 LL	
MB 140-34104/5	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-34104/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 34105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-16882-3	SS-03	Total/NA	Air	TO 15 LL	
140-16882-4	SS-04	Total/NA	Air	TO 15 LL	
MB 140-34105/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-34105/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Analysis Batch: 34106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-16882-2	SS-02	Total/NA	Air	TO 15 LL	
140-16882-6	SS-06	Total/NA	Air	TO 15 LL	
MB 140-34106/4	Method Blank	Total/NA	Air	TO 15 LL	
LCS 140-34106/1002	Lab Control Sample	Total/NA	Air	TO 15 LL	

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: SS-01

Lab Sample ID: 140-16882-1

Date Collected: 09/27/19 11:43

Matrix: Air

Date Received: 10/02/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		12.57	22 mL	500 mL	34104	10/03/19 17:18	HMT	TAL KNX
Instrument ID: MR										

Client Sample ID: SS-02

Lab Sample ID: 140-16882-2

Date Collected: 09/27/19 11:38

Matrix: Air

Date Received: 10/02/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		41.12	20 mL	500 mL	34106	10/07/19 19:53	AFB	TAL KNX
Instrument ID: MR										

Client Sample ID: SS-03

Lab Sample ID: 140-16882-3

Date Collected: 09/27/19 11:25

Matrix: Air

Date Received: 10/02/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34105	10/04/19 22:39	AFB	TAL KNX
Instrument ID: MR										

Client Sample ID: SS-04

Lab Sample ID: 140-16882-4

Date Collected: 09/27/19 10:20

Matrix: Air

Date Received: 10/02/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1.72	10.6 mL	500 mL	34105	10/04/19 23:26	AFB	TAL KNX
Instrument ID: MR										

Client Sample ID: SS-05

Lab Sample ID: 140-16882-5

Date Collected: 09/27/19 10:23

Matrix: Air

Date Received: 10/02/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34104	10/03/19 20:41	HMT	TAL KNX
Instrument ID: MR										

Client Sample ID: SS-06

Lab Sample ID: 140-16882-6

Date Collected: 09/27/19 11:14

Matrix: Air

Date Received: 10/02/19 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		147.17	120 mL	500 mL	34106	10/07/19 20:41	AFB	TAL KNX
Instrument ID: MR										

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: AA-01

Date Collected: 09/27/19 11:35

Date Received: 10/02/19 09:45

Lab Sample ID: 140-16882-7

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34104	10/03/19 22:21	HMT	TAL KNX
Instrument ID: MR										

Client Sample ID: AA-02

Date Collected: 09/27/19 11:19

Date Received: 10/02/19 09:45

Lab Sample ID: 140-16882-8

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34104	10/04/19 00:09	HMT	TAL KNX
Instrument ID: MR										

Client Sample ID: DUP 0926

Date Collected: 09/27/19 11:25

Date Received: 10/02/19 09:45

Lab Sample ID: 140-16882-9

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34104	10/04/19 01:02	HMT	TAL KNX
Instrument ID: MR										

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 140-34104/5

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34104	10/03/19 13:07	HMT	TAL KNX
Instrument ID: MR										

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 140-34105/4

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34105	10/04/19 12:04	AFB	TAL KNX
Instrument ID: MR										

Client Sample ID: Method Blank

Date Collected: N/A

Date Received: N/A

Lab Sample ID: MB 140-34106/4

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34106	10/07/19 19:05	AFB	TAL KNX
Instrument ID: MR										

Lab Chronicle

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-34104/1002

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34104	10/03/19 09:54	HMT	TAL KNX
Instrument ID: MR										

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-34105/1002

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34105	10/04/19 10:37	AFB	TAL KNX
Instrument ID: MR										

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 140-34106/1002

Date Collected: N/A

Matrix: Air

Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO 15 LL		1	500 mL	500 mL	34106	10/07/19 15:52	AFB	TAL KNX
Instrument ID: MR										

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Laboratory: Eurofins TestAmerica, Knoxville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10781	03-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO 15 LL		Air	1,1,2-Trichlorotrifluoroethane
TO 15 LL		Air	1,2,4-Trimethylbenzene
TO 15 LL		Air	1,2-Dichlorotetrafluoroethane
TO 15 LL		Air	1,3,5-Trimethylbenzene
TO 15 LL		Air	Dichlorodifluoromethane
TO 15 LL		Air	Ethanol
TO 15 LL		Air	o-Xylene
TO 15 LL		Air	Trichlorofluoromethane

Method Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Method	Method Description	Protocol	Laboratory
TO 15 LL	Volatile Organic Compounds in Ambient Air, Low Concentration (GC/MS)	EPA	TAL KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL KNX = Eurofins TestAmerica, Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job ID: 140-16882-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-16882-1	SS-01	Air	09/27/19 11:43	10/02/19 09:45	Air Canister (6-Liter) #11043
140-16882-2	SS-02	Air	09/27/19 11:38	10/02/19 09:45	Air Canister (6-Liter) #10102
140-16882-3	SS-03	Air	09/27/19 11:25	10/02/19 09:45	Air Canister (6-Liter) #09973
140-16882-4	SS-04	Air	09/27/19 10:20	10/02/19 09:45	Air Canister (6-Liter) #11699
140-16882-5	SS-05	Air	09/27/19 10:23	10/02/19 09:45	Air Canister (6-Liter) #09961
140-16882-6	SS-06	Air	09/27/19 11:14	10/02/19 09:45	Air Canister (6-Liter) #10383
140-16882-7	AA-01	Air	09/27/19 11:35	10/02/19 09:45	Air Canister (6-Liter) #10313
140-16882-8	AA-02	Air	09/27/19 11:19	10/02/19 09:45	Air Canister (6-Liter) #10389
140-16882-9	DUP 0926	Air	09/27/19 11:25	10/02/19 09:45	Air Canister (6-Liter) #11973

Method T015 Low Level

Volatile Organic Compounds - Low
level (GC/MS) by Method TO 15

FORM II
AIR - GC/MS VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
SDG No.: _____
Matrix: Air Level: Low
GC Column (1): RTX-5 ID: 0.32 (mm)

Client Sample ID	Lab Sample ID	BFB #
SS-01	140-16882-1	90
SS-02	140-16882-2	84
SS-03	140-16882-3	98
SS-04	140-16882-4	86
SS-05	140-16882-5	96
SS-06	140-16882-6	85
AA-01	140-16882-7	95
AA-02	140-16882-8	95
DUP 0926	140-16882-9	97
	MB 140-34104/5	98
	MB 140-34105/4	89
	MB 140-34106/4	88
	LCS 140-34104/1002	106
	LCS 140-34105/1002	98
	LCS 140-34106/1002	92

BFB = 4-Bromofluorobenzene (Surr)

QC LIMITS
60-140

Column to be used to flag recovery values

FORM II TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
SDG No.: _____
Matrix: Air Level: Low Lab File ID: RCCVJ03-LCS.d
Lab ID: LCS 140-34104/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	1.72	86	70-130	
1,1,2,2-Tetrachloroethane	2.00	2.44	122	70-130	
1,1,2-Trichloroethane	2.00	2.00	100	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.06	103	70-130	
1,1-Dichloroethane	2.00	1.78	89	70-130	
1,1-Dichloroethene	2.00	2.11	106	70-130	
1,2,4-Trichlorobenzene	2.00	2.57	128	60-140	
1,2,4-Trimethylbenzene	2.00	2.33	116	70-130	
1,2-Dibromoethane	2.00	2.00	100	70-130	
1,2-Dichlorobenzene	2.00	2.51	126	70-130	
1,2-Dichloroethane	2.00	1.62	81	70-130	
1,2-Dichloropropane	2.00	1.74	87	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.56	128	60-140	
1,3,5-Trimethylbenzene	2.00	2.23	112	70-130	
1,3-Dichlorobenzene	2.00	2.37	118	70-130	
1,4-Dichlorobenzene	2.00	2.48	124	70-130	
1,4-Dioxane	2.00	2.12	106	60-140	
2,2,4-Trimethylpentane	2.00	1.62	81	70-130	
2-Butanone	2.00	1.70	85	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.48	74	60-140	
Benzene	2.00	1.70	85	70-130	
Benzyl chloride	2.00	2.61	131	70-130	*
Bromodichloromethane	2.00	1.72	86	70-130	
Bromoform	2.00	1.62	81	60-140	
Bromomethane	2.00	1.92	96	70-130	
Carbon tetrachloride	2.00	1.88	94	70-130	
Chlorobenzene	2.00	2.04	102	70-130	
Chloroethane	2.00	1.73	87	70-130	
Chloroform	2.00	1.71	86	70-130	
Chloromethane	2.00	1.96	98	60-140	
cis-1,2-Dichloroethene	2.00	2.01	101	70-130	
cis-1,3-Dichloropropene	2.00	1.86	93	70-130	
Cyclohexane	2.00	1.55	77	70-130	
Dibromochloromethane	2.00	1.84	92	70-130	
Dichlorodifluoromethane	2.00	2.33	117	60-140	
Ethanol	10.0	9.64	96	60-140	
Ethylbenzene	2.00	1.94	97	70-130	
Hexachlorobutadiene	2.00	2.31	115	60-140	
Hexane	2.00	1.63	82	70-130	
Methyl tert-butyl ether	2.00	1.75	88	60-140	
Methylene Chloride	2.00	1.72	86	70-130	
m-Xylene & p-Xylene	4.00	3.92	98	70-130	

Column to be used to flag recovery and RPD values

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: RCCVJ03-LCS.d
 Lab ID: LCS 140-34104/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	2.03	102	70-130	
Styrene	2.00	2.20	110	70-130	
t-Butyl alcohol	2.00	1.79	89	60-140	
Tetrachloroethene	2.00	1.84	92	70-130	
Toluene	2.00	1.96	98	70-130	
trans-1,2-Dichloroethene	2.00	1.98	99	70-130	
trans-1,3-Dichloropropene	2.00	1.84	92	70-130	
Trichloroethene	2.00	1.81	91	70-130	
Trichlorofluoromethane	2.00	1.91	95	60-140	
Vinyl chloride	2.00	2.06	103	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
SDG No.: _____
Matrix: Air Level: Low Lab File ID: RCCVJ01A-LCS.d
Lab ID: LCS 140-34105/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	1.82	91	70-130	
1,1,2,2-Tetrachloroethane	2.00	2.32	116	70-130	
1,1,2-Trichloroethane	2.00	2.07	104	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	2.09	105	70-130	
1,1-Dichloroethane	2.00	1.86	93	70-130	
1,1-Dichloroethene	2.00	2.08	104	70-130	
1,2,4-Trichlorobenzene	2.00	2.26	113	60-140	
1,2,4-Trimethylbenzene	2.00	2.20	110	70-130	
1,2-Dibromoethane	2.00	2.08	104	70-130	
1,2-Dichlorobenzene	2.00	2.33	117	70-130	
1,2-Dichloroethane	2.00	1.62	81	70-130	
1,2-Dichloropropane	2.00	1.88	94	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.84	142	60-140	*
1,3,5-Trimethylbenzene	2.00	2.25	113	70-130	
1,3-Dichlorobenzene	2.00	2.19	110	70-130	
1,4-Dichlorobenzene	2.00	2.32	116	70-130	
1,4-Dioxane	2.00	2.19	110	60-140	
2,2,4-Trimethylpentane	2.00	1.75	88	70-130	
2-Butanone	2.00	1.90	95	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.56	78	60-140	
Benzene	2.00	1.87	93	70-130	
Benzyl chloride	2.00	2.58	129	70-130	
Bromodichloromethane	2.00	1.75	88	70-130	
Bromoform	2.00	1.53	77	60-140	
Bromomethane	2.00	2.06	103	70-130	
Carbon tetrachloride	2.00	1.86	93	70-130	
Chlorobenzene	2.00	2.11	106	70-130	
Chloroethane	2.00	2.00	100	70-130	
Chloroform	2.00	1.81	90	70-130	
Chloromethane	2.00	2.17	108	60-140	
cis-1,2-Dichloroethene	2.00	2.16	108	70-130	
cis-1,3-Dichloropropene	2.00	1.94	97	70-130	
Cyclohexane	2.00	1.79	90	70-130	
Dibromochloromethane	2.00	1.81	90	70-130	
Dichlorodifluoromethane	2.00	2.23	111	60-140	
Ethanol	10.0	9.47	95	60-140	
Ethylbenzene	2.00	2.04	102	70-130	
Hexachlorobutadiene	2.00	2.09	105	60-140	
Hexane	2.00	1.79	89	70-130	
Methyl tert-butyl ether	2.00	1.90	95	60-140	
Methylene Chloride	2.00	1.77	89	70-130	
m-Xylene & p-Xylene	4.00	4.08	102	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: RCCVJ01A-LCS.d
 Lab ID: LCS 140-34105/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	2.09	105	70-130	
Styrene	2.00	2.20	110	70-130	
t-Butyl alcohol	2.00	1.85	92	60-140	
Tetrachloroethene	2.00	1.96	98	70-130	
Toluene	2.00	2.11	106	70-130	
trans-1,2-Dichloroethene	2.00	2.10	105	70-130	
trans-1,3-Dichloropropene	2.00	1.91	96	70-130	
Trichloroethene	2.00	1.96	98	70-130	
Trichlorofluoromethane	2.00	1.85	92	60-140	
Vinyl chloride	2.00	2.17	108	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
SDG No.: _____
Matrix: Air Level: Low Lab File ID: RCCVJ07d-LCS.d
Lab ID: LCS 140-34106/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	2.00	1.44	72	70-130	
1,1,2,2-Tetrachloroethane	2.00	1.73	87	70-130	
1,1,2-Trichloroethane	2.00	1.70	85	70-130	
1,1,2-Trichlorotrifluoroethane	2.00	1.65	82	70-130	
1,1-Dichloroethane	2.00	1.44	72	70-130	
1,1-Dichloroethene	2.00	1.68	84	70-130	
1,2,4-Trichlorobenzene	2.00	1.68	84	60-140	
1,2,4-Trimethylbenzene	2.00	1.64	82	70-130	
1,2-Dibromoethane	2.00	1.80	90	70-130	
1,2-Dichlorobenzene	2.00	1.78	89	70-130	
1,2-Dichloroethane	2.00	1.35	68	70-130	*
1,2-Dichloropropane	2.00	1.51	76	70-130	
1,2-Dichlorotetrafluoroethane	2.00	2.36	118	60-140	
1,3,5-Trimethylbenzene	2.00	1.72	86	70-130	
1,3-Dichlorobenzene	2.00	1.75	88	70-130	
1,4-Dichlorobenzene	2.00	1.79	90	70-130	
1,4-Dioxane	2.00	1.36	68	60-140	
2,2,4-Trimethylpentane	2.00	1.48	74	70-130	
2-Butanone	2.00	1.50	75	60-140	
4-Methyl-2-pentanone (MIBK)	2.00	1.36	68	60-140	
Benzene	2.00	1.59	79	70-130	
Benzyl chloride	2.00	1.84	92	70-130	
Bromodichloromethane	2.00	1.55	78	70-130	
Bromoform	2.00	2.13	107	60-140	
Bromomethane	2.00	1.60	80	70-130	
Carbon tetrachloride	2.00	1.61	81	70-130	
Chlorobenzene	2.00	1.79	89	70-130	
Chloroethane	2.00	1.52	76	70-130	
Chloroform	2.00	1.52	76	70-130	
Chloromethane	2.00	1.64	82	60-140	
cis-1,2-Dichloroethene	2.00	1.70	85	70-130	
cis-1,3-Dichloropropene	2.00	1.57	79	70-130	
Cyclohexane	2.00	1.50	75	70-130	
Dibromochloromethane	2.00	1.74	87	70-130	
Dichlorodifluoromethane	2.00	1.78	89	60-140	
Ethanol	10.0	6.42	64	60-140	
Ethylbenzene	2.00	1.69	85	70-130	
Hexachlorobutadiene	2.00	1.68	84	60-140	
Hexane	2.00	1.43	71	70-130	
Methyl tert-butyl ether	2.00	1.47	73	60-140	
Methylene Chloride	2.00	1.40	70	70-130	
m-Xylene & p-Xylene	4.00	3.39	85	70-130	

Column to be used to flag recovery and RPD values

FORM III TO 15 LL

FORM III
AIR - GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Matrix: Air Level: Low Lab File ID: RCCVJ07d-LCS.d
 Lab ID: LCS 140-34106/1002 Client ID: _____

COMPOUND	SPIKE ADDED (ppb v/v)	LCS CONCENTRATION (ppb v/v)	LCS % REC	QC LIMITS REC	#
o-Xylene	2.00	1.63	82	70-130	
Styrene	2.00	1.88	94	70-130	
t-Butyl alcohol	2.00	1.26	63	60-140	
Tetrachloroethene	2.00	1.68	84	70-130	
Toluene	2.00	1.75	87	70-130	
trans-1,2-Dichloroethene	2.00	1.75	88	70-130	
trans-1,3-Dichloropropene	2.00	1.56	78	70-130	
Trichloroethene	2.00	1.72	86	70-130	
Trichlorofluoromethane	2.00	1.47	74	60-140	
Vinyl chloride	2.00	1.71	86	70-130	

Column to be used to flag recovery and RPD values

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
SDG No.: _____
Lab File ID: R500BJ03.D Lab Sample ID: MB 140-34104/5
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: MR Date Analyzed: 10/03/2019 13:07
GC Column: RTX-5 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-34104/1002	RCCVJ03-LCS .d	10/03/2019 09:54
SS-01	140-16882-1	RJ03P101.D	10/03/2019 17:18
SS-05	140-16882-5	RJ03P105.D	10/03/2019 20:41
AA-01	140-16882-7	RJ03P107.D	10/03/2019 22:21
AA-02	140-16882-8	RJ03P108.D	10/04/2019 00:09
DUP 0926	140-16882-9	RJ03P109.D	10/04/2019 01:02

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
SDG No.: _____
Lab File ID: R500BJ04.D Lab Sample ID: MB 140-34105/4
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: MR Date Analyzed: 10/04/2019 12:04
GC Column: RTX-5 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-34105/1002	RCCVJ01A-LC S.d	10/04/2019 10:37
SS-03	140-16882-3	RJ04P110.D	10/04/2019 22:39
SS-04	140-16882-4	RJ04P201.D	10/04/2019 23:26

FORM IV
AIR - GC/MS VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
SDG No.: _____
Lab File ID: RJ07mb500.D Lab Sample ID: MB 140-34106/4
Matrix: Air Heated Purge: (Y/N) N
Instrument ID: MR Date Analyzed: 10/07/2019 19:05
GC Column: RTX-5 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 140-34106/1002	RCCVJ07d-LC S.d	10/07/2019 15:52
SS-02	140-16882-2	RJ07p104.D	10/07/2019 19:53
SS-06	140-16882-6	RJ07p105.D	10/07/2019 20:41

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab File ID: RBFBIO3IC.D BFB Injection Date: 09/03/2019
 Instrument ID: MR BFB Injection Time: 09:57
 Analysis Batch No.: 33257

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	21.0
75	30.0 - 60.0 % of mass 95	47.9
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.8
173	Less than 2.0 % of mass 174	0.6 (0.6) 1
174	50.0 - 120.00 % of mass 95	92.7
175	5.0 - 9.0 % of mass 174	6.5 (7.1) 1
176	95.0 - 101.0 % of mass 174	88.9 (96.0) 1
177	5.0 - 9.0 % of mass 176	5.8 (6.5) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 140-33257/2	RI03IC09.D	09/03/2019	10:26
	IC 140-33257/4	RI03IC10.D	09/03/2019	12:02
	IC 140-33257/7	RI03IC01.D	09/03/2019	14:26
	IC 140-33257/8	RI03IC02.D	09/03/2019	15:13
	IC 140-33257/9	RI03IC03.D	09/03/2019	16:02
	IC 140-33257/10	RI03IC04.D	09/03/2019	16:51
	IC 140-33257/11	RI03IC05.D	09/03/2019	17:39
	IC 140-33257/12	RI03IC06.D	09/03/2019	18:27
	IC 140-33257/14	RI03IC08.D	09/03/2019	20:02
	ICV 140-33257/18	RI03ICV.D	09/03/2019	23:14
	ICIS 140-33257/23	RI03IC07R.D	09/04/2019	09:04

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab File ID: RBFBJ03.D BFB Injection Date: 10/03/2019
 Instrument ID: MR BFB Injection Time: 09:26
 Analysis Batch No.: 34104

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.4
75	30.0 - 60.0 % of mass 95	50.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.4
173	Less than 2.0 % of mass 174	0.6 (0.7) 1
174	50.0 - 120.00 % of mass 95	93.4
175	5.0 - 9.0 % of mass 174	6.4 (6.8) 1
176	95.0 - 101.0 % of mass 174	90.4 (96.8) 1
177	5.0 - 9.0 % of mass 176	5.7 (6.3) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-34104/2	RCCVJ03.D	10/03/2019	09:54
	LCS 140-34104/1002	RCCVJ03-LCS.d	10/03/2019	09:54
	MB 140-34104/5	R500BJ03.D	10/03/2019	13:07
SS-01	140-16882-1	RJ03P101.D	10/03/2019	17:18
SS-05	140-16882-5	RJ03P105.D	10/03/2019	20:41
AA-01	140-16882-7	RJ03P107.D	10/03/2019	22:21
AA-02	140-16882-8	RJ03P108.D	10/04/2019	00:09
DUP 0926	140-16882-9	RJ03P109.D	10/04/2019	01:02

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab File ID: RBFBJ01A.D BFB Injection Date: 10/04/2019
 Instrument ID: MR BFB Injection Time: 10:09
 Analysis Batch No.: 34105

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	19.0	
75	30.0 - 60.0 % of mass 95	46.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	8.3	
173	Less than 2.0 % of mass 174	0.6	(0.6) 1
174	50.0 - 120.00 % of mass 95	90.8	
175	5.0 - 9.0 % of mass 174	6.6	(7.2) 1
176	95.0 - 101.0 % of mass 174	86.7	(95.5) 1
177	5.0 - 9.0 % of mass 176	5.9	(6.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-34105/2	RCCVJ01A.D	10/04/2019	10:37
	LCS 140-34105/1002	RCCVJ01A-LCS.d	10/04/2019	10:37
	MB 140-34105/4	R500BJ04.D	10/04/2019	12:04
SS-03	140-16882-3	RJ04P110.D	10/04/2019	22:39
SS-04	140-16882-4	RJ04P201.D	10/04/2019	23:26

FORM V
AIR - GC/MS VOA INSTRUMENT PERFORMANCE CHECK

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab File ID: RBFBJ07d.D BFB Injection Date: 10/07/2019
 Instrument ID: MR BFB Injection Time: 15:24
 Analysis Batch No.: 34106

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.6
75	30.0 - 60.0 % of mass 95	48.1
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.1
173	Less than 2.0 % of mass 174	0.7 (0.7) 1
174	50.0 - 120.00 % of mass 95	102.1
175	5.0 - 9.0 % of mass 174	7.2 (7.1) 1
176	95.0 - 101.0 % of mass 174	100.9 (98.8) 1
177	5.0 - 9.0 % of mass 176	5.9 (5.8) 2

1-Value is % mass 174

2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 140-34106/2	RCCVJ07d.D	10/07/2019	15:52
	LCS 140-34106/1002	RCCVJ07d-LCS .d	10/07/2019	15:52
	MB 140-34106/4	RJ07mb500.D	10/07/2019	19:05
SS-02	140-16882-2	RJ07p104.D	10/07/2019	19:53
SS-06	140-16882-6	RJ07p105.D	10/07/2019	20:41

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Sample No.: ICIS 140-33257/23 Date Analyzed: 09/04/2019 09:04
 Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): RI03IC07R.D Heated Purge: (Y/N) N
 Calibration ID: 2118

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	371029	8.53	2202831	10.77	1824871	15.57
UPPER LIMIT	519441	8.86	3083963	11.10	2554819	15.90
LOWER LIMIT	222617	8.20	1321699	10.44	1094923	15.24
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 140-33257/18		487104	8.53	2786219	10.77	2417964
						15.57

CBM = Chlorobromomethane (IS)
 DFBZ = 1,4-Difluorobenzene
 CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
 RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Sample No.: CCVIS 140-34104/2 Date Analyzed: 10/03/2019 09:54
 Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): RCCVJ03.D Heated Purge: (Y/N) N
 Calibration ID: 2118

		CBM		DFBZ		CBZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		317552	8.52	1834746	10.75	1448340	15.55
UPPER LIMIT		444573	8.85	2568644	11.08	2027676	15.88
LOWER LIMIT		190531	8.19	1100848	10.42	869004	15.22
LAB SAMPLE ID		CLIENT SAMPLE ID					
LCS 140-34104/1002		317552	8.52	1834746	10.75	1448340	15.55
MB 140-34104/5		355321	8.52	1932990	10.75	1453188	15.55
140-16882-1	SS-01	311299	8.52	1764796	10.75	1257333	15.55
140-16882-5	SS-05	327799	8.52	1892083	10.75	1457722	15.55
140-16882-7	AA-01	328982	8.52	1924809	10.76	1493896	15.55
140-16882-8	AA-02	395616	8.52	2315356	10.75	1769041	15.55
140-16882-9	DUP 0926	429073	8.52	2419194	10.75	1916142	15.55

CBM = Chlorobromomethane (IS)
 DFBZ = 1,4-Difluorobenzene
 CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
 RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Sample No.: CCVIS 140-34105/2 Date Analyzed: 10/04/2019 10:37
 Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): RCCVJ01A.D Heated Purge: (Y/N) N
 Calibration ID: 2118

	CBM		DFBZ		CBZd5	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD	480658	8.53	2844405	10.76	2265315	15.56
UPPER LIMIT	672921	8.86	3982167	11.09	3171441	15.89
LOWER LIMIT	288395	8.20	1706643	10.43	1359189	15.23
LAB SAMPLE ID	CLIENT SAMPLE ID					
LCS 140-34105/1002		480658	8.53	2844405	10.76	2265315
MB 140-34105/4		476393	8.52	2747577	10.76	2102088
140-16882-3	SS-03	328396	8.52	1794391	10.76	1365654
140-16882-4	SS-04	350743	8.52	1955703	10.76	1439828

CBM = Chlorobromomethane (IS)
 DFBZ = 1,4-Difluorobenzene
 CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
 RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII
AIR - GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Sample No.: CCVIS 140-34106/2 Date Analyzed: 10/07/2019 15:52
 Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm)
 Lab File ID (Standard): RCCVJ07d.D Heated Purge: (Y/N) N
 Calibration ID: 2118

	CBM		DFBZ		CBZd5		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	409525	8.52	2342962	10.76	1896667	15.55	
UPPER LIMIT	573335	8.85	3280147	11.09	2655334	15.88	
LOWER LIMIT	245715	8.19	1405777	10.43	1138000	15.22	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 140-34106/1002		409525	8.52	2342962	10.76	1896667	15.55
MB 140-34106/4		415459	8.52	2358718	10.74	1846238	15.55
140-16882-2	SS-02	321683	8.52	1872682	10.76	1447706	15.55
140-16882-6	SS-06	303800	8.52	1771342	10.76	1367761	15.56

CBM = Chlorobromomethane (IS)
 DFBZ = 1,4-Difluorobenzene
 CBZd5 = Chlorobenzene-d5 (IS)

Area Limit = 60%-140% of internal standard area
 RT Limit = $\pm$ 0.33 minutes of internal standard RT

Column used to flag values outside QC limits

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-01 Lab Sample ID: 140-16882-1
 Matrix: Air Lab File ID: RJ03P101.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:43
 Sample wt/vol: 22 (mL) Date Analyzed: 10/03/2019 17:18
 Soil Aliquot Vol: _____ Dilution Factor: 12.57
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		23	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		23	
79-00-5	1,1,2-Trichloroethane	133.41	ND		23	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		23	
75-34-3	1,1-Dichloroethane	98.96	ND		23	
75-35-4	1,1-Dichloroethene	96.94	ND		11	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		23	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		23	
106-93-4	1,2-Dibromoethane	187.87	ND		23	
95-50-1	1,2-Dichlorobenzene	147.00	ND		23	
107-06-2	1,2-Dichloroethane	98.96	ND		23	
78-87-5	1,2-Dichloropropane	112.99	ND		23	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		23	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		23	
541-73-1	1,3-Dichlorobenzene	147.00	ND		23	
106-46-7	1,4-Dichlorobenzene	147.00	ND		23	
123-91-1	1,4-Dioxane	88.11	ND		57	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		57	
78-93-3	2-Butanone	72.11	ND		91	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		57	
71-43-2	Benzene	78.11	ND		23	
100-44-7	Benzyl chloride	126.58	ND	*	46	
75-27-4	Bromodichloromethane	163.83	ND		23	
75-25-2	Bromoform	252.75	ND		23	
74-83-9	Bromomethane	94.94	ND		23	
56-23-5	Carbon tetrachloride	153.81	ND		9.1	
108-90-7	Chlorobenzene	112.56	ND		23	
75-00-3	Chloroethane	64.52	ND		23	
67-66-3	Chloroform	119.38	ND		23	
74-87-3	Chloromethane	50.49	ND		57	
156-59-2	cis-1,2-Dichloroethene	96.94	95		11	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		23	
110-82-7	Cyclohexane	84.16	ND		57	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-01 Lab Sample ID: 140-16882-1
 Matrix: Air Lab File ID: RJ03P101.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:43
 Sample wt/vol: 22 (mL) Date Analyzed: 10/03/2019 17:18
 Soil Aliquot Vol: _____ Dilution Factor: 12.57
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		23	
75-71-8	Dichlorodifluoromethane	120.91	ND		23	
64-17-5	Ethanol	46.07	ND		570	
100-41-4	Ethylbenzene	106.17	ND		23	
87-68-3	Hexachlorobutadiene	260.76	ND		23	
110-54-3	Hexane	86.17	ND		57	
1634-04-4	Methyl tert-butyl ether	88.15	ND		46	
75-09-2	Methylene Chloride	84.93	58	B	57	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		23	
95-47-6	o-Xylene	106.17	ND		23	
100-42-5	Styrene	104.15	ND		23	
75-65-0	t-Butyl alcohol	74.12	ND		91	
127-18-4	Tetrachloroethene	165.83	ND		23	
108-88-3	Toluene	92.14	ND		34	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		23	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		23	
79-01-6	Trichloroethene	131.39	970		10	
75-69-4	Trichlorofluoromethane	137.37	ND		23	
75-01-4	Vinyl chloride	62.50	ND		11	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-01 Lab Sample ID: 140-16882-1
 Matrix: Air Lab File ID: RJ03P101.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:43
 Sample wt/vol: 22 (mL) Date Analyzed: 10/03/2019 17:18
 Soil Aliquot Vol: _____ Dilution Factor: 12.57
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		120	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		160	
79-00-5	1,1,2-Trichloroethane	133.41	ND		120	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		180	
75-34-3	1,1-Dichloroethane	98.96	ND		93	
75-35-4	1,1-Dichloroethene	96.94	ND		45	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		170	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		110	
106-93-4	1,2-Dibromoethane	187.87	ND		180	
95-50-1	1,2-Dichlorobenzene	147.00	ND		140	
107-06-2	1,2-Dichloroethane	98.96	ND		93	
78-87-5	1,2-Dichloropropane	112.99	ND		110	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		160	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		110	
541-73-1	1,3-Dichlorobenzene	147.00	ND		140	
106-46-7	1,4-Dichlorobenzene	147.00	ND		140	
123-91-1	1,4-Dioxane	88.11	ND		210	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		270	
78-93-3	2-Butanone	72.11	ND		270	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		230	
71-43-2	Benzene	78.11	ND		73	
100-44-7	Benzyl chloride	126.58	ND	*	240	
75-27-4	Bromodichloromethane	163.83	ND		150	
75-25-2	Bromoform	252.75	ND		240	
74-83-9	Bromomethane	94.94	ND		89	
56-23-5	Carbon tetrachloride	153.81	ND		58	
108-90-7	Chlorobenzene	112.56	ND		110	
75-00-3	Chloroethane	64.52	ND		60	
67-66-3	Chloroform	119.38	ND		110	
74-87-3	Chloromethane	50.49	ND		120	
156-59-2	cis-1,2-Dichloroethene	96.94	380		45	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		100	
110-82-7	Cyclohexane	84.16	ND		200	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-01 Lab Sample ID: 140-16882-1
 Matrix: Air Lab File ID: RJ03P101.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:43
 Sample wt/vol: 22 (mL) Date Analyzed: 10/03/2019 17:18
 Soil Aliquot Vol: _____ Dilution Factor: 12.57
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		190	
75-71-8	Dichlorodifluoromethane	120.91	ND		110	
64-17-5	Ethanol	46.07	ND		1100	
100-41-4	Ethylbenzene	106.17	ND		99	
87-68-3	Hexachlorobutadiene	260.76	ND		240	
110-54-3	Hexane	86.17	ND		200	
1634-04-4	Methyl tert-butyl ether	88.15	ND		160	
75-09-2	Methylene Chloride	84.93	200	B	200	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		99	
95-47-6	o-Xylene	106.17	ND		99	
100-42-5	Styrene	104.15	ND		97	
75-65-0	t-Butyl alcohol	74.12	ND		280	
127-18-4	Tetrachloroethene	165.83	ND		160	
108-88-3	Toluene	92.14	ND		130	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		91	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		100	
79-01-6	Trichloroethene	131.39	5200		55	
75-69-4	Trichlorofluoromethane	137.37	ND		130	
75-01-4	Vinyl chloride	62.50	ND		29	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	90		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P101.D
 Lims ID: 140-16882-A-1
 Client ID: SS-01
 Sample Type: Client
 Inject. Date: 03-Oct-2019 17:18:30 ALS Bottle#: 1 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 12.5700
 Sample Info: 140-0013261-009
 Misc. Info.: 140-16882-a-1@12.57
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 09:48:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	88	311299	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.749	0.000	93	1764796	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1257333	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	95	667799	3.59	
31 Methylene Chloride	84	5.955	5.950	0.005	91	24528	0.2042	
42 cis-1,2-Dichloroethene	96	8.177	8.183	-0.005	88	37632	0.3326	
58 Trichloroethene	130	11.477	11.477	0.000	95	499248	3.41	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P101.D

Injection Date: 03-Oct-2019 17:18:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16882-A-1

Lab Sample ID: 140-16882-1

Worklist Smp#: 9

Client ID: SS-01

Purge Vol: 500.000 mL

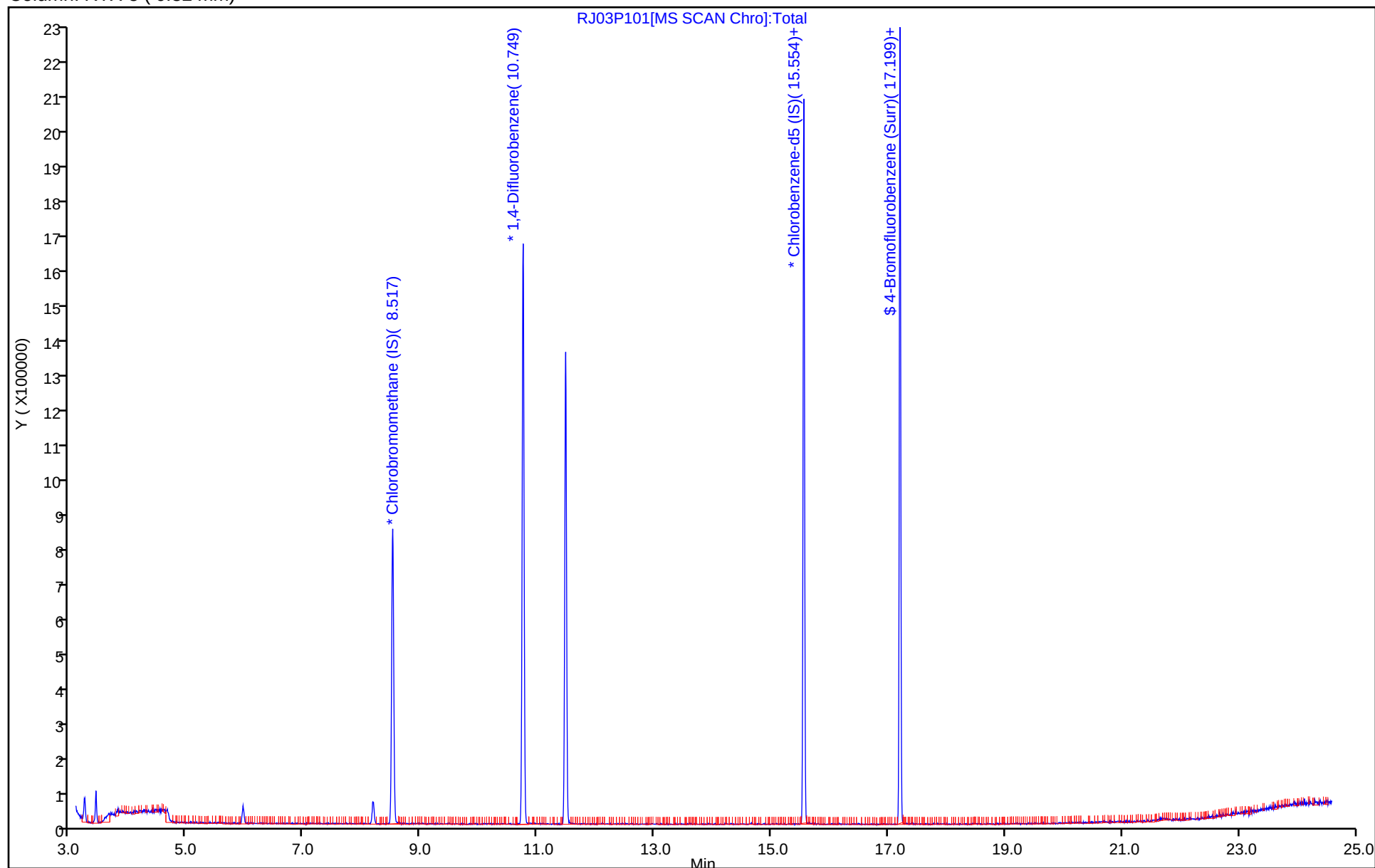
Dil. Factor: 12.5700

ALS Bottle#: 1

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P101.D
Lims ID: 140-16882-A-1
Client ID: SS-01
Sample Type: Client
Inject. Date: 03-Oct-2019 17:18:30 ALS Bottle#: 1 Worklist Smp#: 9
Purge Vol: 500.000 mL Dil. Factor: 12.5700
Sample Info: 140-0013261-009
Misc. Info.: 140-16882-a-1@12.57
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 09:48:42

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.59	89.86

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P101.D

Injection Date: 03-Oct-2019 17:18:30

Instrument ID: MR

Lims ID: 140-16882-A-1

Lab Sample ID: 140-16882-1

Client ID: SS-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 9

Purge Vol: 500.000 mL

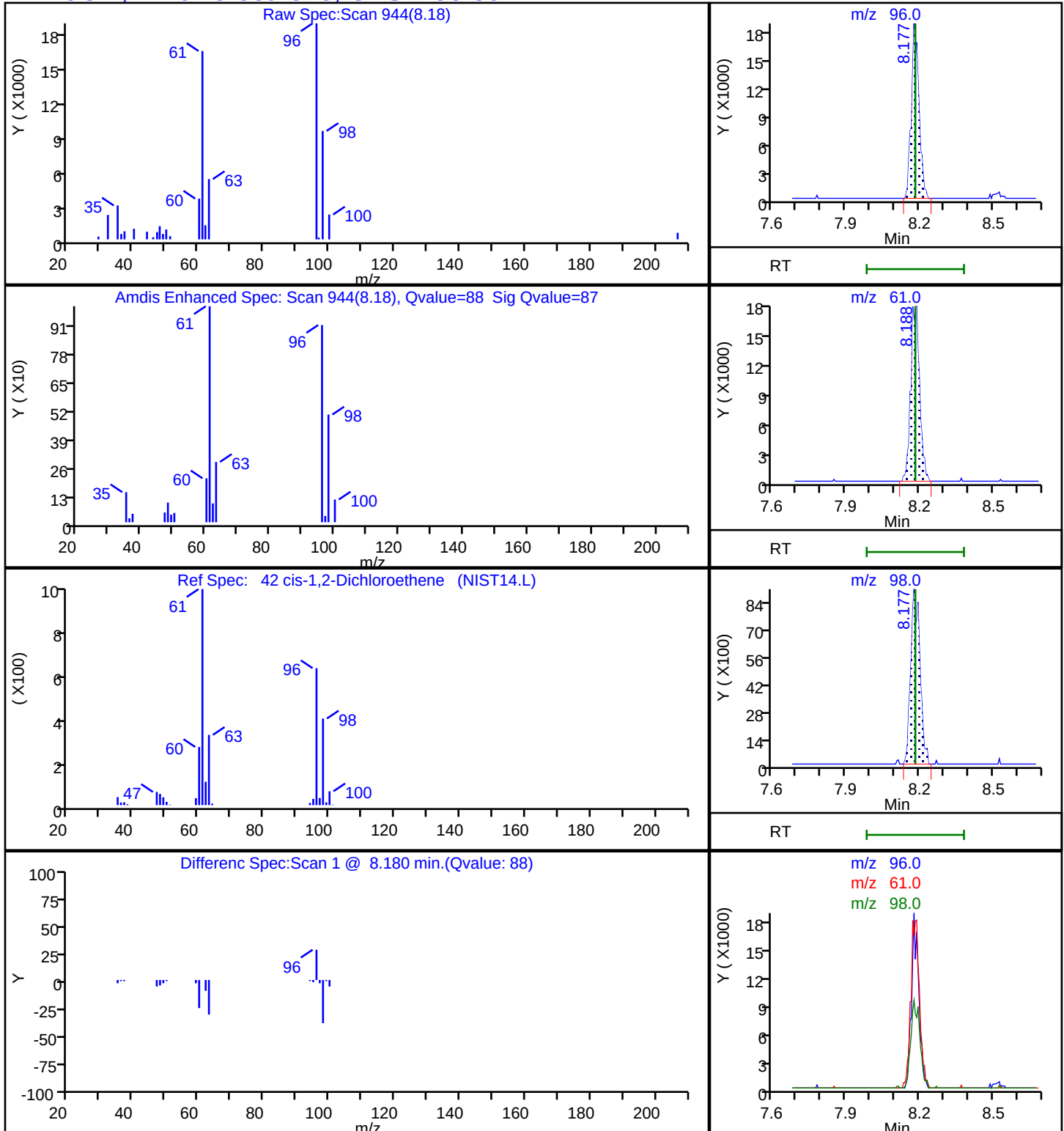
Dil. Factor: 12.5700

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P101.D

Injection Date: 03-Oct-2019 17:18:30

Instrument ID: MR

Lims ID: 140-16882-A-1

Lab Sample ID: 140-16882-1

Client ID: SS-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 9

Purge Vol: 500.000 mL

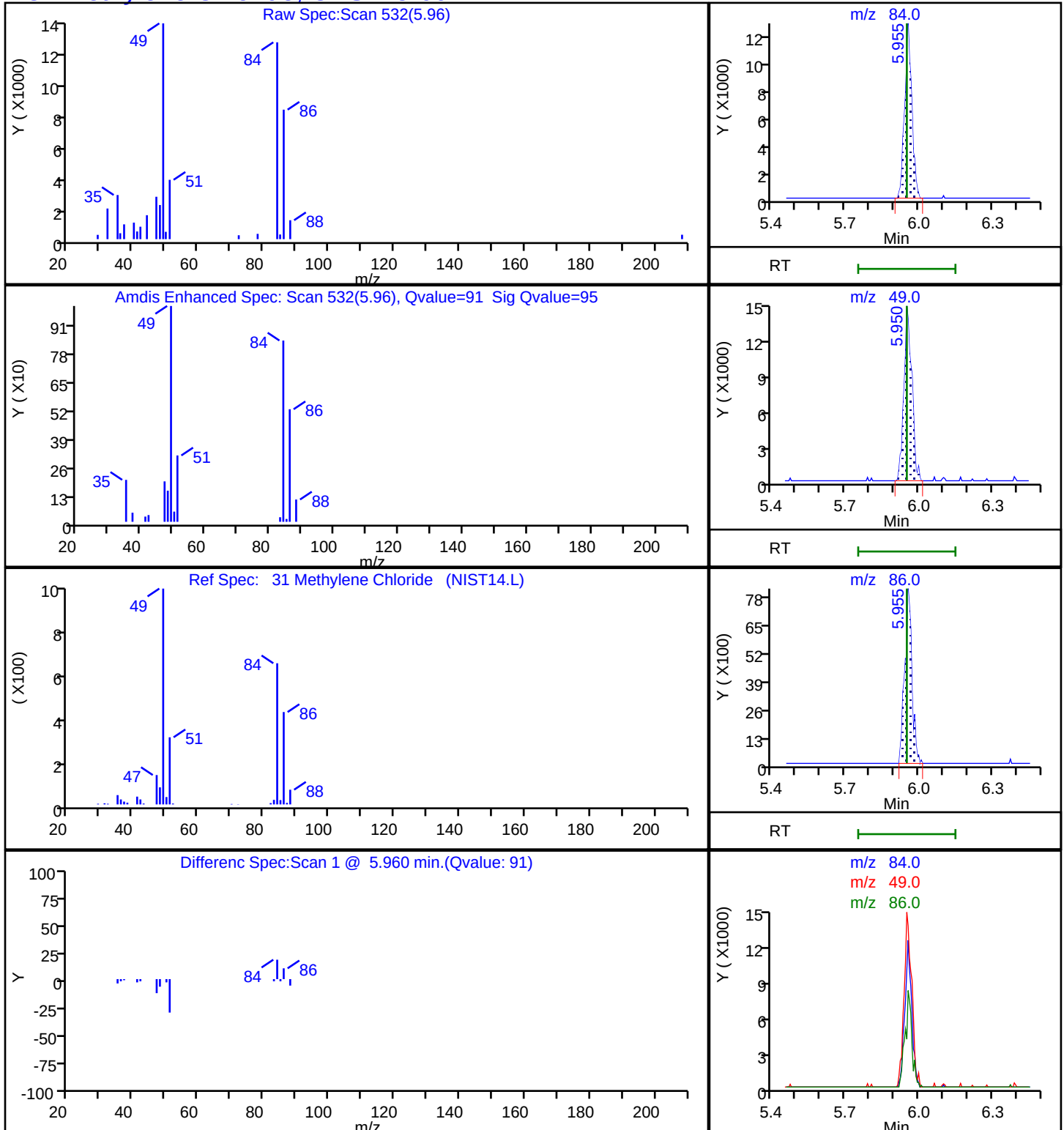
Dil. Factor: 12.5700

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P101.D

Injection Date: 03-Oct-2019 17:18:30

Instrument ID: MR

Lims ID: 140-16882-A-1

Lab Sample ID: 140-16882-1

Client ID: SS-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 9

Purge Vol: 500.000 mL

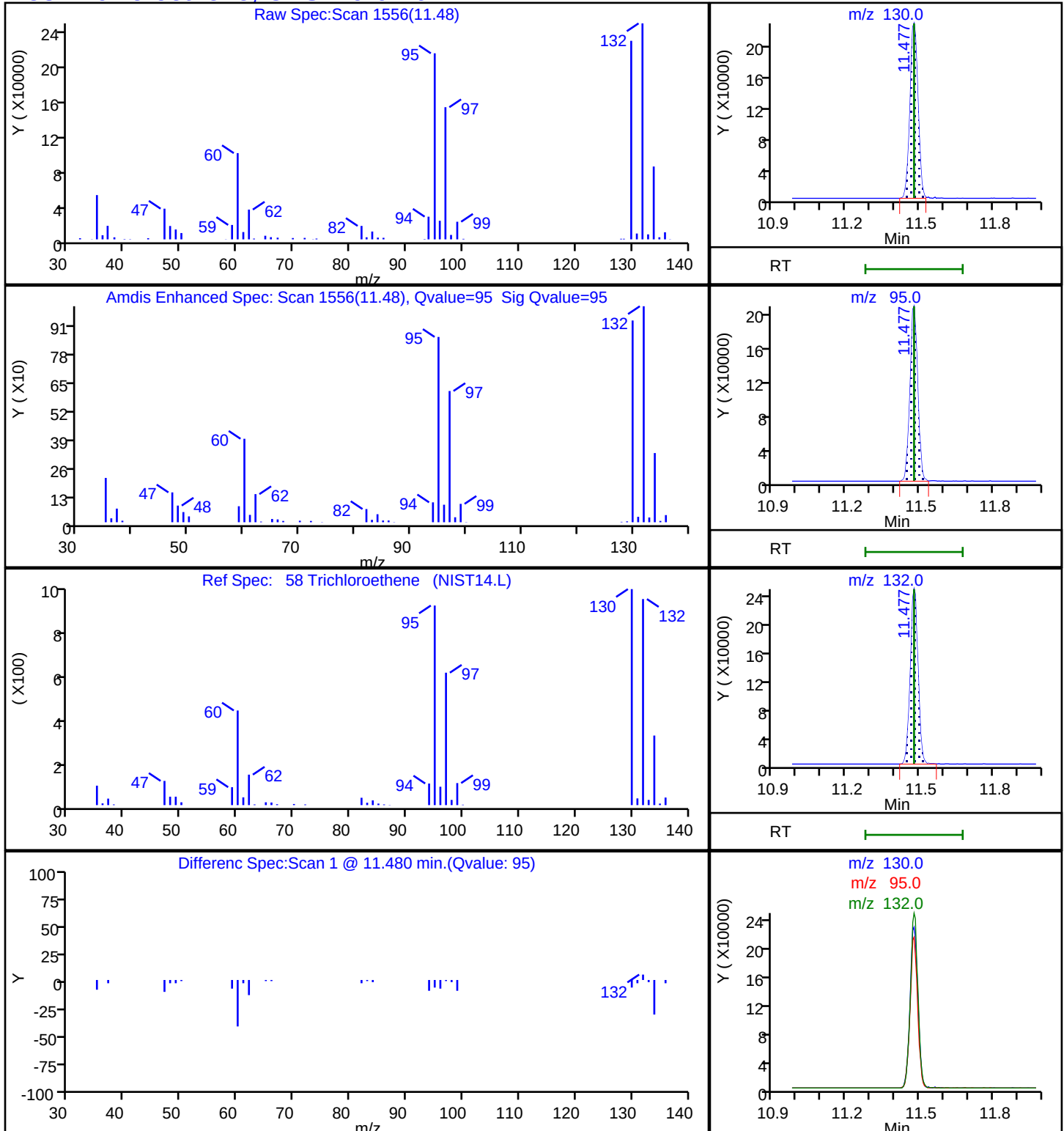
Dil. Factor: 12.5700

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-02 Lab Sample ID: 140-16882-2
 Matrix: Air Lab File ID: RJ07p104.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:38
 Sample wt/vol: 20 (mL) Date Analyzed: 10/07/2019 19:53
 Soil Aliquot Vol: _____ Dilution Factor: 41.12
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		82	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		82	
79-00-5	1,1,2-Trichloroethane	133.41	ND		82	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		82	
75-34-3	1,1-Dichloroethane	98.96	ND		82	
75-35-4	1,1-Dichloroethene	96.94	ND		41	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		82	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		82	
106-93-4	1,2-Dibromoethane	187.87	ND		82	
95-50-1	1,2-Dichlorobenzene	147.00	ND		82	
107-06-2	1,2-Dichloroethane	98.96	ND	*	82	
78-87-5	1,2-Dichloropropane	112.99	ND		82	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		82	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		82	
541-73-1	1,3-Dichlorobenzene	147.00	ND		82	
106-46-7	1,4-Dichlorobenzene	147.00	ND		82	
123-91-1	1,4-Dioxane	88.11	ND		210	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		210	
78-93-3	2-Butanone	72.11	ND		330	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		210	
71-43-2	Benzene	78.11	ND		82	
100-44-7	Benzyl chloride	126.58	ND		160	
75-27-4	Bromodichloromethane	163.83	ND		82	
75-25-2	Bromoform	252.75	ND		82	
74-83-9	Bromomethane	94.94	ND		82	
56-23-5	Carbon tetrachloride	153.81	ND		33	
108-90-7	Chlorobenzene	112.56	ND		82	
75-00-3	Chloroethane	64.52	ND		82	
67-66-3	Chloroform	119.38	ND		82	
74-87-3	Chloromethane	50.49	ND		210	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		41	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		82	
110-82-7	Cyclohexane	84.16	ND		210	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-02 Lab Sample ID: 140-16882-2
 Matrix: Air Lab File ID: RJ07p104.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:38
 Sample wt/vol: 20 (mL) Date Analyzed: 10/07/2019 19:53
 Soil Aliquot Vol: _____ Dilution Factor: 41.12
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		82	
75-71-8	Dichlorodifluoromethane	120.91	ND		82	
64-17-5	Ethanol	46.07	ND		2100	
100-41-4	Ethylbenzene	106.17	ND		82	
87-68-3	Hexachlorobutadiene	260.76	ND		82	
110-54-3	Hexane	86.17	ND		210	
1634-04-4	Methyl tert-butyl ether	88.15	ND		160	
75-09-2	Methylene Chloride	84.93	ND		210	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		82	
95-47-6	o-Xylene	106.17	ND		82	
100-42-5	Styrene	104.15	ND		82	
75-65-0	t-Butyl alcohol	74.12	ND		330	
127-18-4	Tetrachloroethene	165.83	ND		82	
108-88-3	Toluene	92.14	ND		120	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		82	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		82	
79-01-6	Trichloroethene	131.39	6900		37	
75-69-4	Trichlorofluoromethane	137.37	ND		82	
75-01-4	Vinyl chloride	62.50	ND		41	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-02 Lab Sample ID: 140-16882-2
 Matrix: Air Lab File ID: RJ07p104.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:38
 Sample wt/vol: 20 (mL) Date Analyzed: 10/07/2019 19:53
 Soil Aliquot Vol: _____ Dilution Factor: 41.12
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		450	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		560	
79-00-5	1,1,2-Trichloroethane	133.41	ND		450	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		630	
75-34-3	1,1-Dichloroethane	98.96	ND		330	
75-35-4	1,1-Dichloroethene	96.94	ND		160	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		610	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		400	
106-93-4	1,2-Dibromoethane	187.87	ND		630	
95-50-1	1,2-Dichlorobenzene	147.00	ND		490	
107-06-2	1,2-Dichloroethane	98.96	ND	*	330	
78-87-5	1,2-Dichloropropane	112.99	ND		380	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		570	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		400	
541-73-1	1,3-Dichlorobenzene	147.00	ND		490	
106-46-7	1,4-Dichlorobenzene	147.00	ND		490	
123-91-1	1,4-Dioxane	88.11	ND		740	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		960	
78-93-3	2-Butanone	72.11	ND		970	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		840	
71-43-2	Benzene	78.11	ND		260	
100-44-7	Benzyl chloride	126.58	ND		850	
75-27-4	Bromodichloromethane	163.83	ND		550	
75-25-2	Bromoform	252.75	ND		850	
74-83-9	Bromomethane	94.94	ND		320	
56-23-5	Carbon tetrachloride	153.81	ND		210	
108-90-7	Chlorobenzene	112.56	ND		380	
75-00-3	Chloroethane	64.52	ND		220	
67-66-3	Chloroform	119.38	ND		400	
74-87-3	Chloromethane	50.49	ND		420	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		160	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		370	
110-82-7	Cyclohexane	84.16	ND		710	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-02 Lab Sample ID: 140-16882-2
 Matrix: Air Lab File ID: RJ07p104.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:38
 Sample wt/vol: 20 (mL) Date Analyzed: 10/07/2019 19:53
 Soil Aliquot Vol: _____ Dilution Factor: 41.12
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		700	
75-71-8	Dichlorodifluoromethane	120.91	ND		410	
64-17-5	Ethanol	46.07	ND		3900	
100-41-4	Ethylbenzene	106.17	ND		360	
87-68-3	Hexachlorobutadiene	260.76	ND		880	
110-54-3	Hexane	86.17	ND		720	
1634-04-4	Methyl tert-butyl ether	88.15	ND		590	
75-09-2	Methylene Chloride	84.93	ND		710	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		360	
95-47-6	o-Xylene	106.17	ND		360	
100-42-5	Styrene	104.15	ND		350	
75-65-0	t-Butyl alcohol	74.12	ND		1000	
127-18-4	Tetrachloroethene	165.83	ND		560	
108-88-3	Toluene	92.14	ND		460	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		330	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		370	
79-01-6	Trichloroethene	131.39	37000		200	
75-69-4	Trichlorofluoromethane	137.37	ND		460	
75-01-4	Vinyl chloride	62.50	ND		110	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	84		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p104.D
 Lims ID: 140-16882-A-2
 Client ID: SS-02
 Sample Type: Client
 Inject. Date: 07-Oct-2019 19:53:30 ALS Bottle#: 4 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 41.1200
 Sample Info: 140-0013263-005
 Misc. Info.: 140-16882-A-2@41.12
 Operator ID: afb Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 08-Oct-2019 11:25:25 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:25:25

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.517	8.522	-0.005	91	321683	4.00	
* 2 1,4-Difluorobenzene	114	10.755	10.760	-0.005	93	1872682	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1447706	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	94	719968	3.37	
31 Methylene Chloride	84	5.961	5.961	0.000	97	24516	0.1975	
58 Trichloroethene	130	11.483	11.466	0.000	95	1038172	6.68	
73 Tetrachloroethene	129	14.718	14.724	-0.006	16	1031	0.007237	

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p104.D

Injection Date: 07-Oct-2019 19:53:30

Instrument ID: MR

Operator ID: afb

Lims ID: 140-16882-A-2

Lab Sample ID: 140-16882-2

Worklist Smp#: 5

Client ID: SS-02

Purge Vol: 500.000 mL

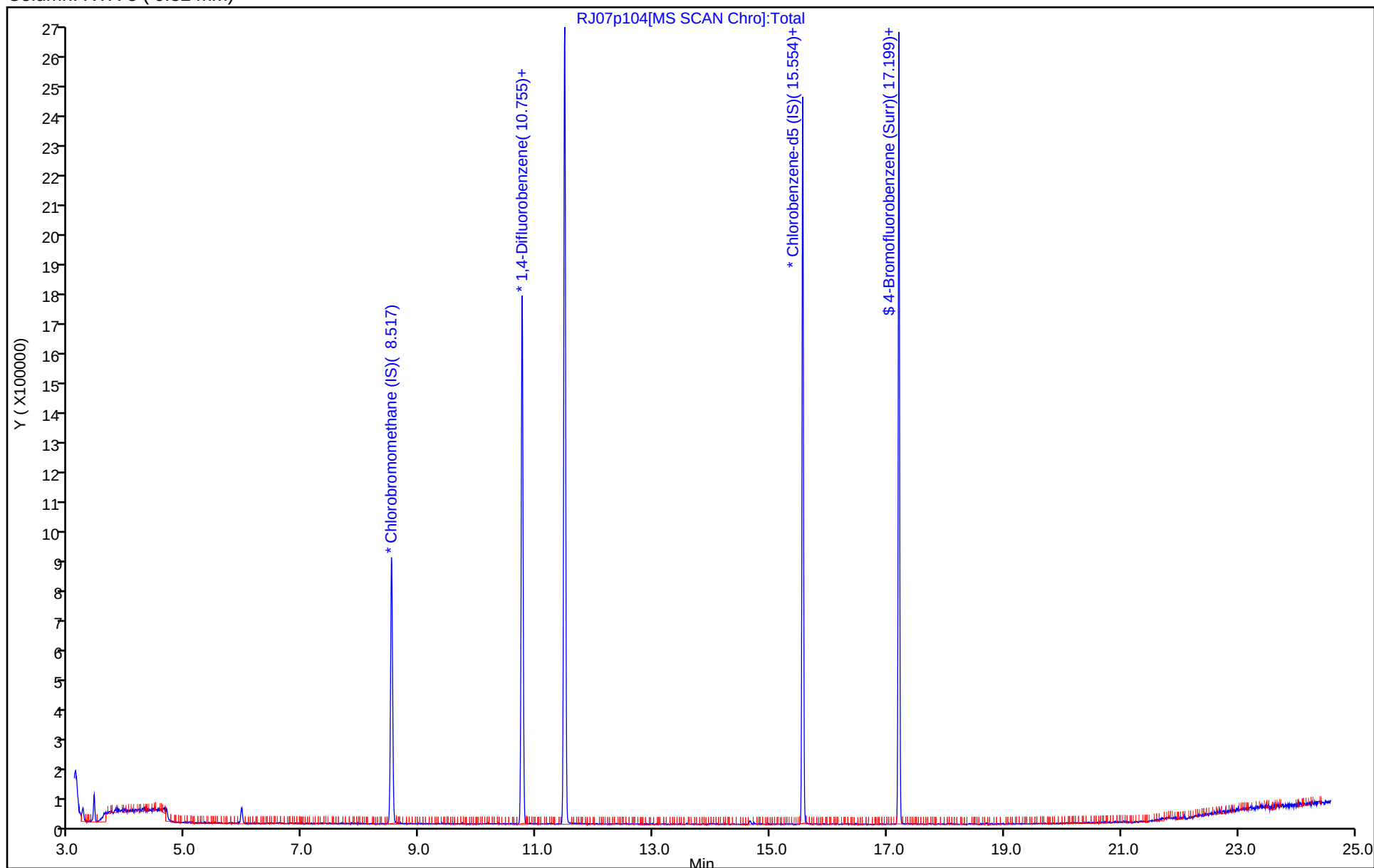
Dil. Factor: 41.1200

ALS Bottle#: 4

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p104.D
Lims ID: 140-16882-A-2
Client ID: SS-02
Sample Type: Client
Inject. Date: 07-Oct-2019 19:53:30 ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 41.1200
Sample Info: 140-0013263-005
Misc. Info.: 140-16882-A-2@41.12
Operator ID: afb Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Oct-2019 11:25:25 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:25:25

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.37	84.14

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p104.D

Injection Date: 07-Oct-2019 19:53:30

Instrument ID: MR

Lims ID: 140-16882-A-2

Lab Sample ID: 140-16882-2

Client ID: SS-02

Operator ID: afb

ALS Bottle#: 4

Worklist Smp#: 5

Purge Vol: 500.000 mL

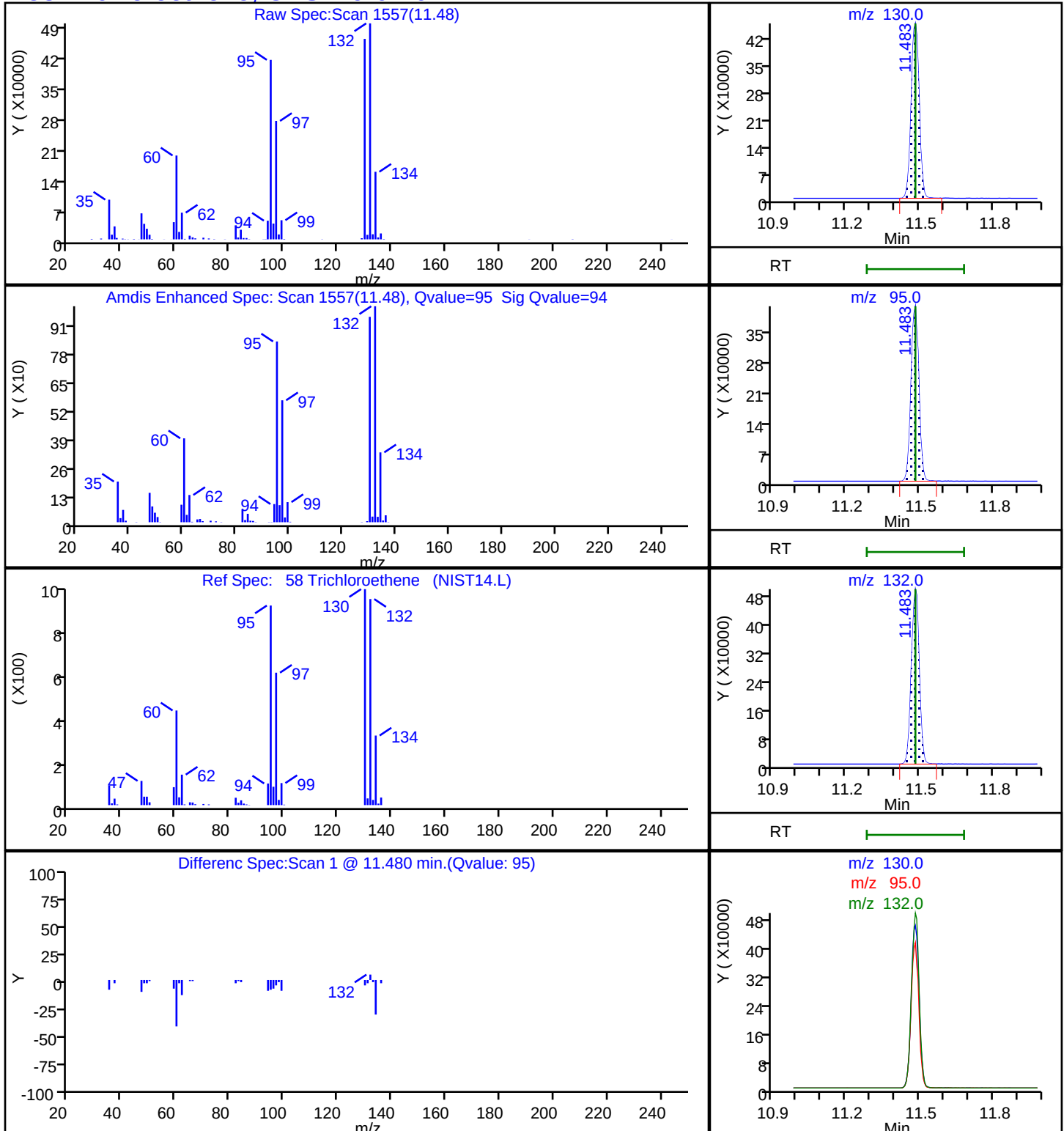
Dil. Factor: 41.1200

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p104.D

Injection Date: 07-Oct-2019 19:53:30

Instrument ID: MR

Lims ID: 140-16882-A-2

Lab Sample ID: 140-16882-2

Client ID: SS-02

Operator ID: afb

ALS Bottle#:

4

Worklist Smp#: 5

Purge Vol: 500.000 mL

Dil. Factor: 41.1200

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

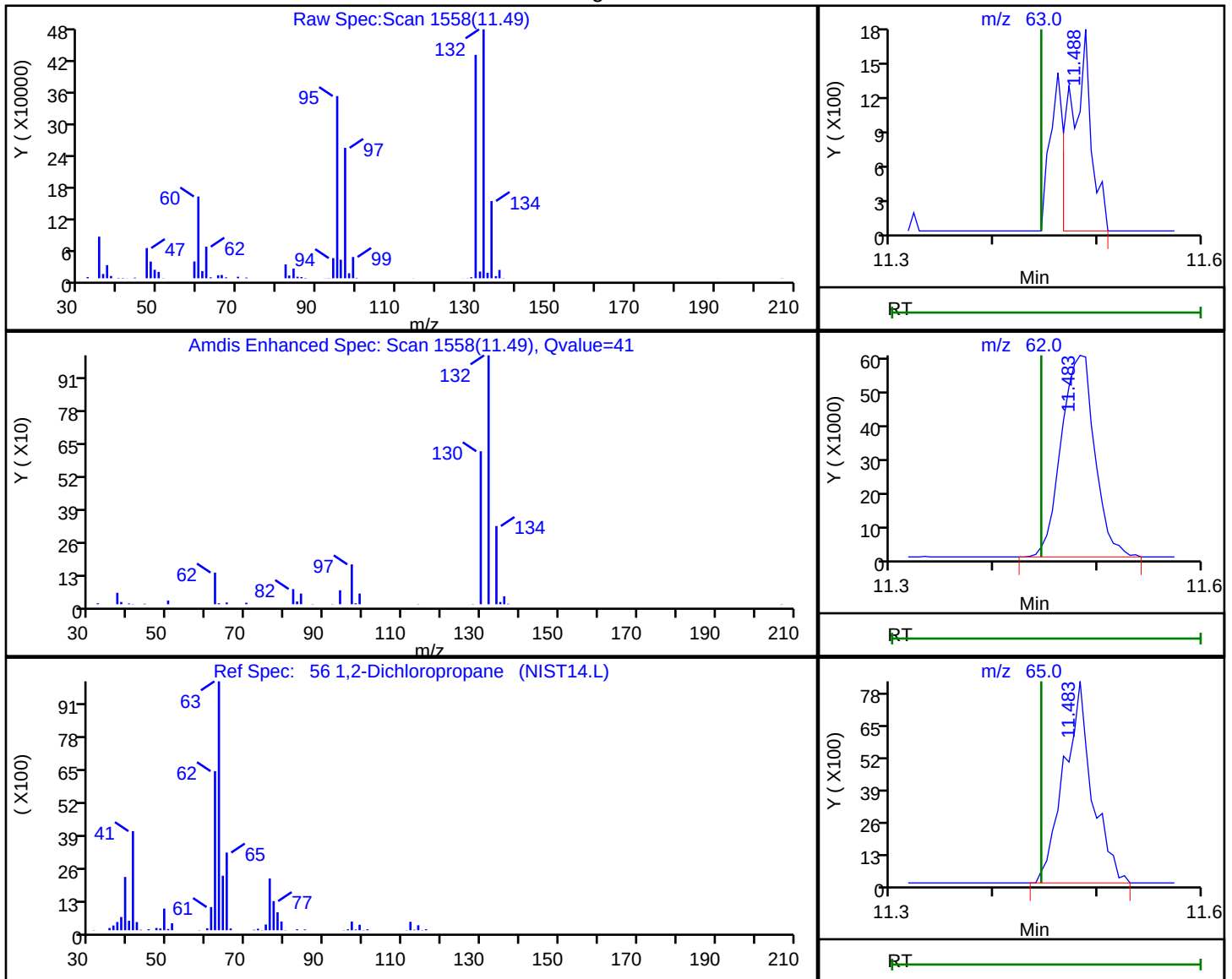
Column: RTX-5 (0.32 mm)

Detector

MS SCAN

56 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
11.49	63.00	2386	0.018334
11.48	62.00	137821	
11.48	65.00	15711	

Reviewer: barlozhetskayaa, 08-Oct-2019 11:24:54

Audit Action: Marked Compound Undetected

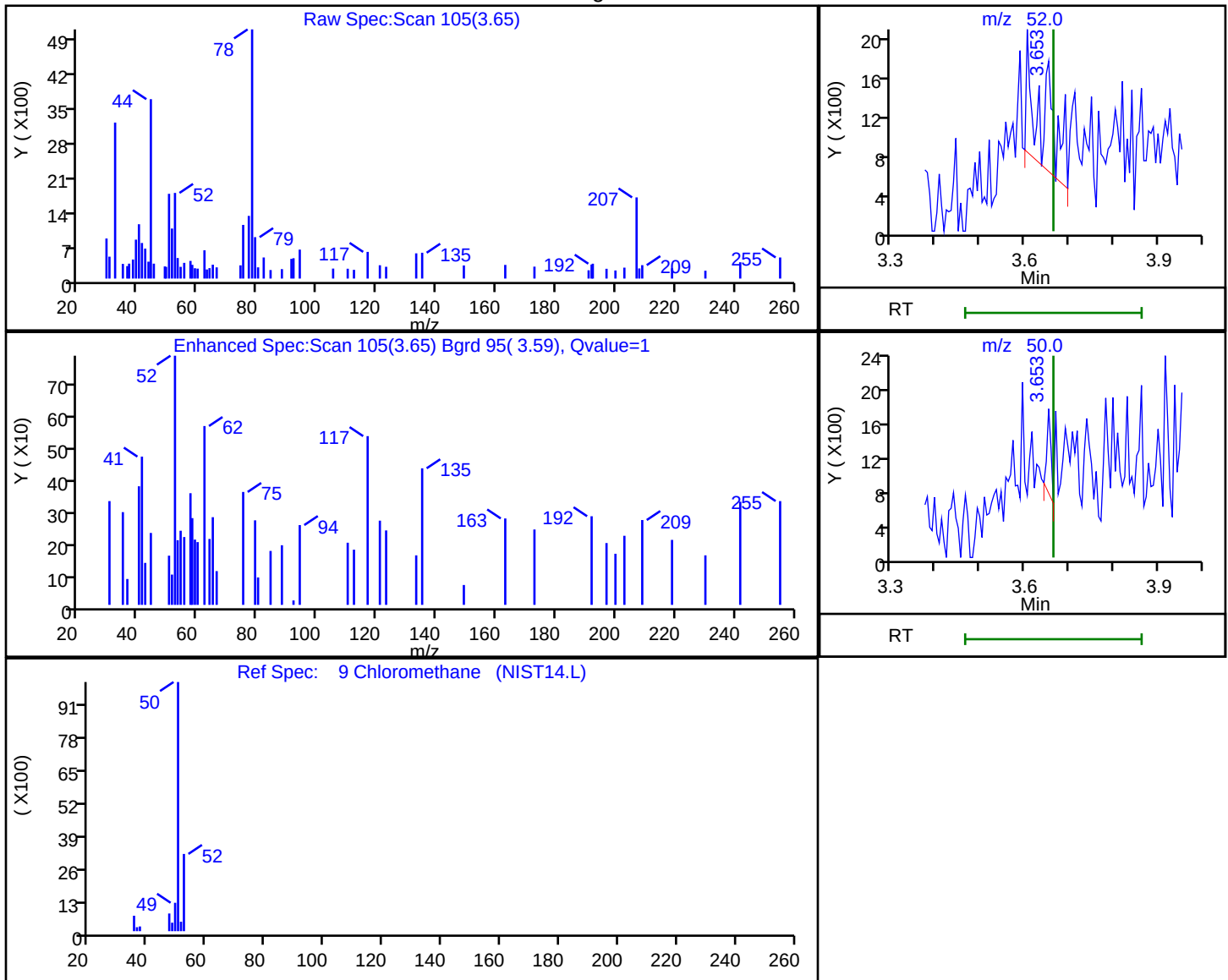
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p104.D
Injection Date: 07-Oct-2019 19:53:30 Instrument ID: MR
Lims ID: 140-16882-A-2 Lab Sample ID: 140-16882-2
Client ID: SS-02
Operator ID: afb ALS Bottle#: 4 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 41.1200
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
3.65	52.00	3089	0.089127
3.65	50.00	596	

Reviewer: barlozhetskayaa, 08-Oct-2019 11:24:45

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-03 Lab Sample ID: 140-16882-3
 Matrix: Air Lab File ID: RJ04P110.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 22:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.47		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND	*	0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.14		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	2.2		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	1.2		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	0.066		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	0.44		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	0.11		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-03 Lab Sample ID: 140-16882-3
 Matrix: Air Lab File ID: RJ04P110.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 22:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	0.20		0.080	
64-17-5	Ethanol	46.07	34		2.0	
100-41-4	Ethylbenzene	106.17	0.47		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.44		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	1.0		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	1.3		0.080	
95-47-6	o-Xylene	106.17	0.51		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	1.1		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	2.2		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	3.5		0.036	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	0.045		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-03 Lab Sample ID: 140-16882-3
 Matrix: Air Lab File ID: RJ04P110.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 22:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.3		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND	*	0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.68		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	6.5		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	3.8		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.42		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	0.91		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	0.43		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-03 Lab Sample ID: 140-16882-3
 Matrix: Air Lab File ID: RJ04P110.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 22:39
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.0		0.40	
64-17-5	Ethanol	46.07	64		3.8	
100-41-4	Ethylbenzene	106.17	2.0		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.6		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	3.6		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	5.6		0.35	
95-47-6	o-Xylene	106.17	2.2		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	3.2		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	8.1		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	19		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	0.11		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D
 Lims ID: 140-16882-A-3
 Client ID: SS-03
 Sample Type: Client
 Inject. Date: 04-Oct-2019 22:39:30 ALS Bottle#: 10 Worklist Smp#: 14
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013262-014
 Misc. Info.: 140-16882-a-3
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Oct-2019 17:08:23 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 17:08:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.528	-0.006	89	328396	4.00	
* 2 1,4-Difluorobenzene	114	10.755	10.760	-0.005	93	1794391	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.560	-0.006	85	1365654	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.220	-0.021	95	789372	3.91	
8 Dichlorodifluoromethane	85	3.480	3.484	-0.006	98	37317	0.2015	
9 Chloromethane	52	3.658	3.659	-0.001	99	15612	0.4412	
12 Vinyl chloride	62	3.820	3.826	-0.006	94	5006	0.0449	
15 Bromomethane	94	4.219	4.219	0.000	76	5809	0.0527	
17 Ethanol	31	4.440	4.467	-0.006	98	1709718	34.0	
21 Trichlorofluoromethane	101	4.899	4.901	-0.005	96	51934	0.1945	
29 2-Methyl-2-propanol	59	5.708	5.699	0.006	94	202303	1.06	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.779	0.000	64	16546	0.0733	
31 Methylene Chloride	84	5.961	5.961	0.000	95	131789	1.04	
36 Methyl tert-butyl ether	73	6.915	6.898	0.021	88	15769	0.0570	
39 2-Butanone (MEK)	72	7.746	7.746	-0.005	98	122391	2.21	
40 Hexane	56	7.778	7.768	0.005	75	39899	0.4438	
42 cis-1,2-Dichloroethene	96	8.193	8.199	-0.001	92	12824	0.1074	
44 Chloroform	83	8.528	8.549	-0.011	28	8777	0.0369	
48 1,2-Dichloroethane	62	9.682	9.697	-0.011	10	2637	0.0187	
51 Cyclohexane	69	10.172	10.194	-0.017	43	8452	0.1649	
49 Benzene	78	10.183	10.189	-0.006	95	408693	1.18	
52 Carbon tetrachloride	117	10.199	10.215	-0.011	82	15121	0.0661	
55 Isooctane	57	10.970	10.976	-0.006	95	84668	0.1575	
58 Trichloroethene	130	11.483	11.482	-0.005	97	518609	3.48	
61 1,4-Dioxane	88	11.742	11.730	0.006	44	7477	0.1490	
64 4-Methyl-2-pentanone (MIBK	43	12.685	12.685	0.000	94	27485	0.0971	
67 Toluene	91	13.570	13.575	-0.005	93	721536	2.16	
73 Tetrachloroethene	129	14.734	14.729	0.005	94	6650	0.0495	
76 Ethylbenzene	91	15.894	15.894	0.000	97	211755	0.4678	
77 m-Xylene & p-Xylene	91	16.050	16.056	-0.006	96	448770	1.29	
79 Styrene	104	16.525	16.525	0.000	91	8023	0.0329	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
80 o-Xylene	91	16.579	16.584	-0.005	99	181836	0.5149	
87 1,3,5-Trimethylbenzene	120	17.964	17.981	-0.017	93	29121	0.1380	
92 1,2,4-Trimethylbenzene	105	18.417	18.439	-0.022	97	211533	0.4730	
93 1,3-Dichlorobenzene	146	18.698	18.719	-0.021	96	23406	0.0691	
95 1,4-Dichlorobenzene	146	18.784	18.806	-0.022	96	14188	0.0433	

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Worklist Smp#: 14

Client ID: SS-03

Purge Vol: 500.000 mL

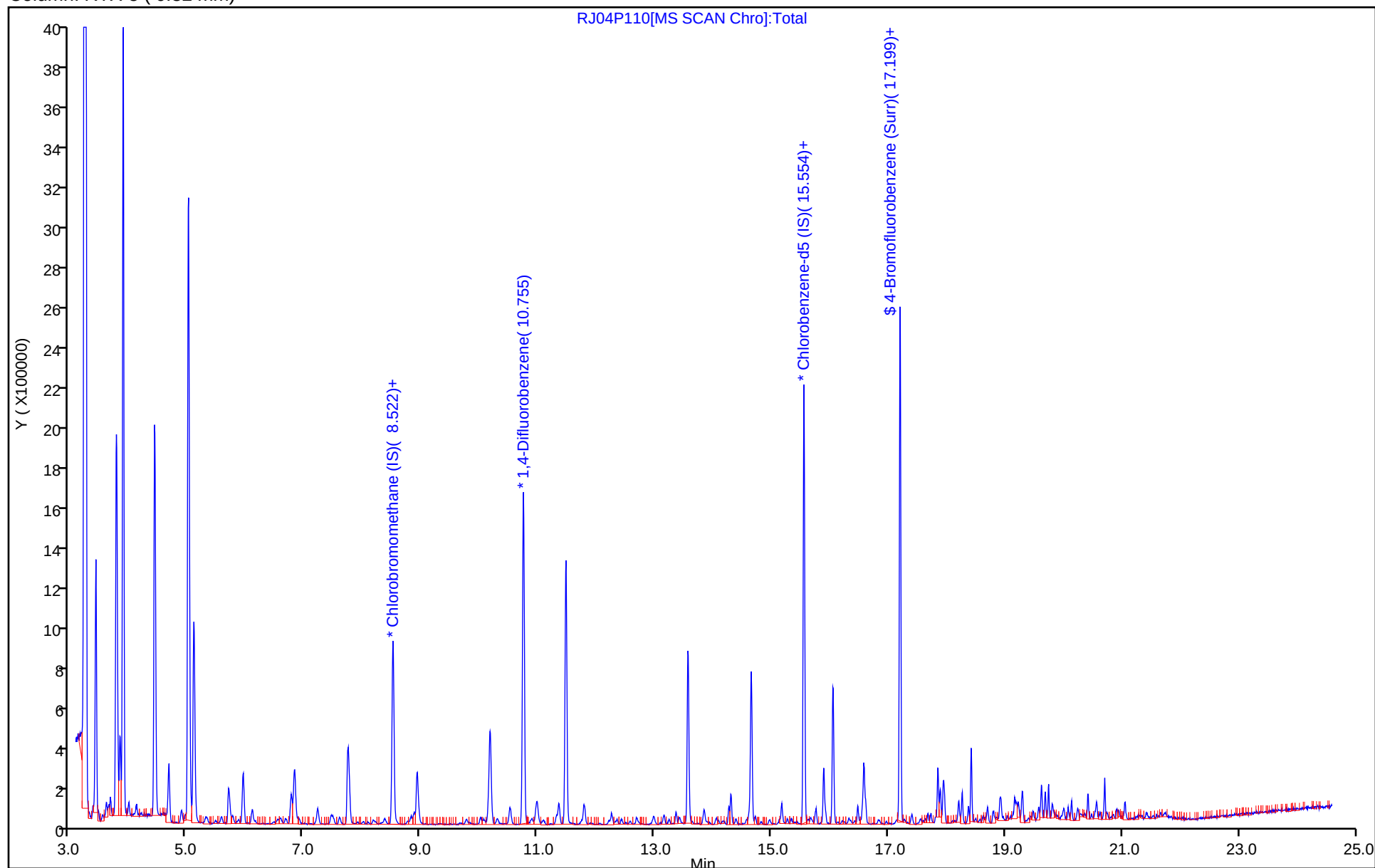
Dil. Factor: 1.0000

ALS Bottle#: 10

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D
Lims ID: 140-16882-A-3
Client ID: SS-03
Sample Type: Client
Inject. Date: 04-Oct-2019 22:39:30 ALS Bottle#: 10 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013262-014
Misc. Info.: 140-16882-a-3
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Oct-2019 17:08:23 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 17:08:23

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.91	97.79

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

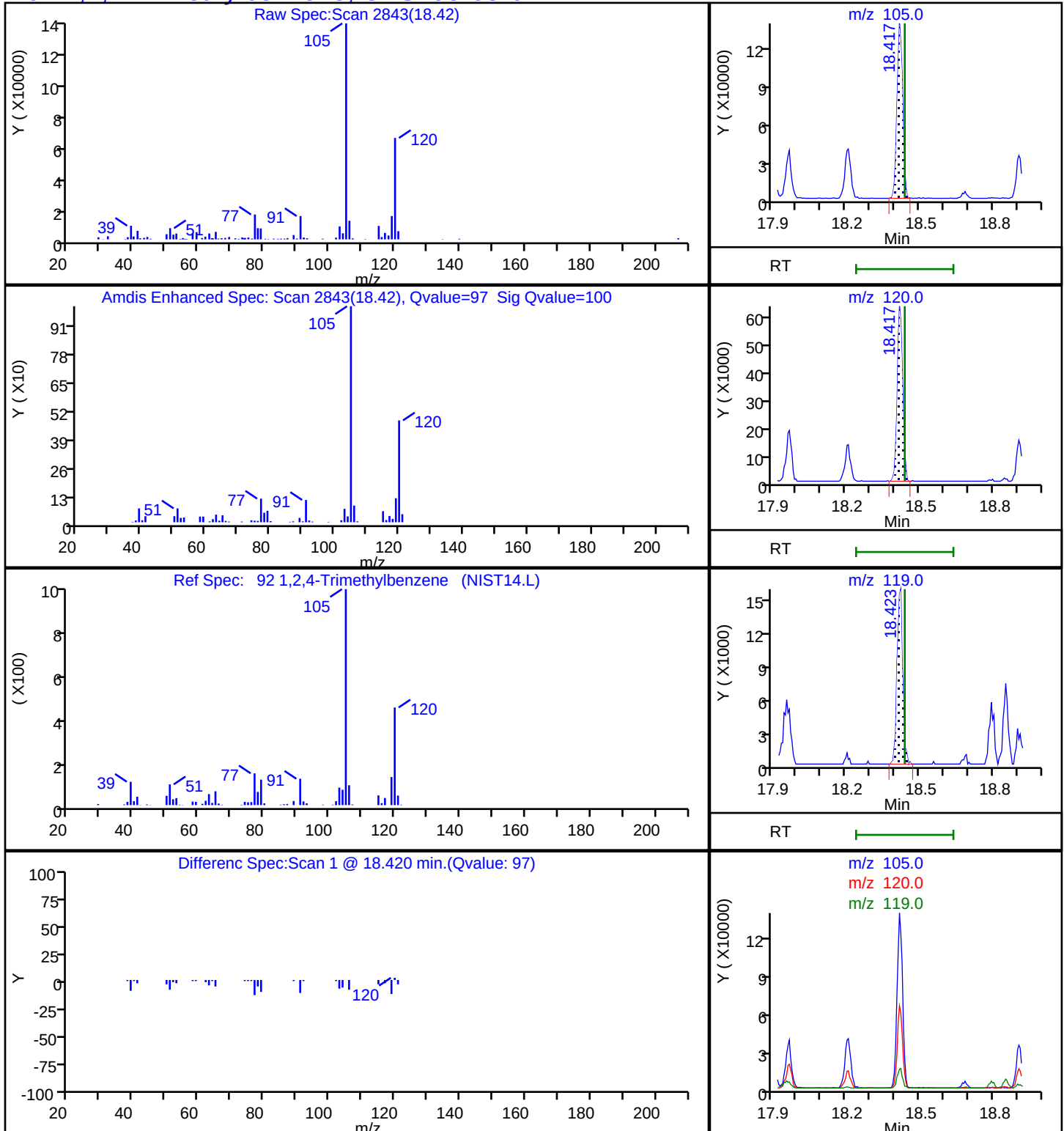
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

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

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

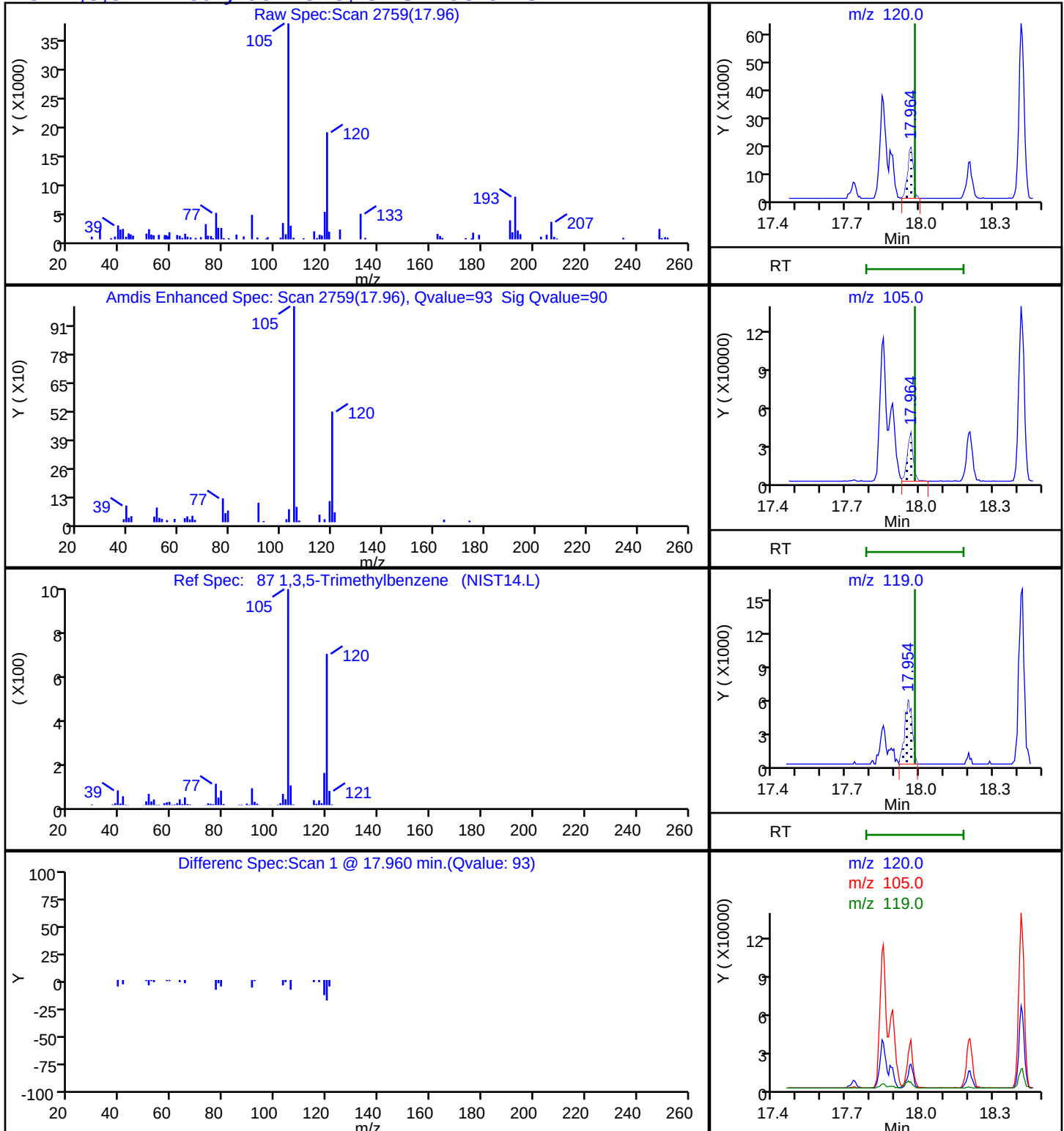
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

87 1,3,5-Trimethylbenzene, CAS: 108-67-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

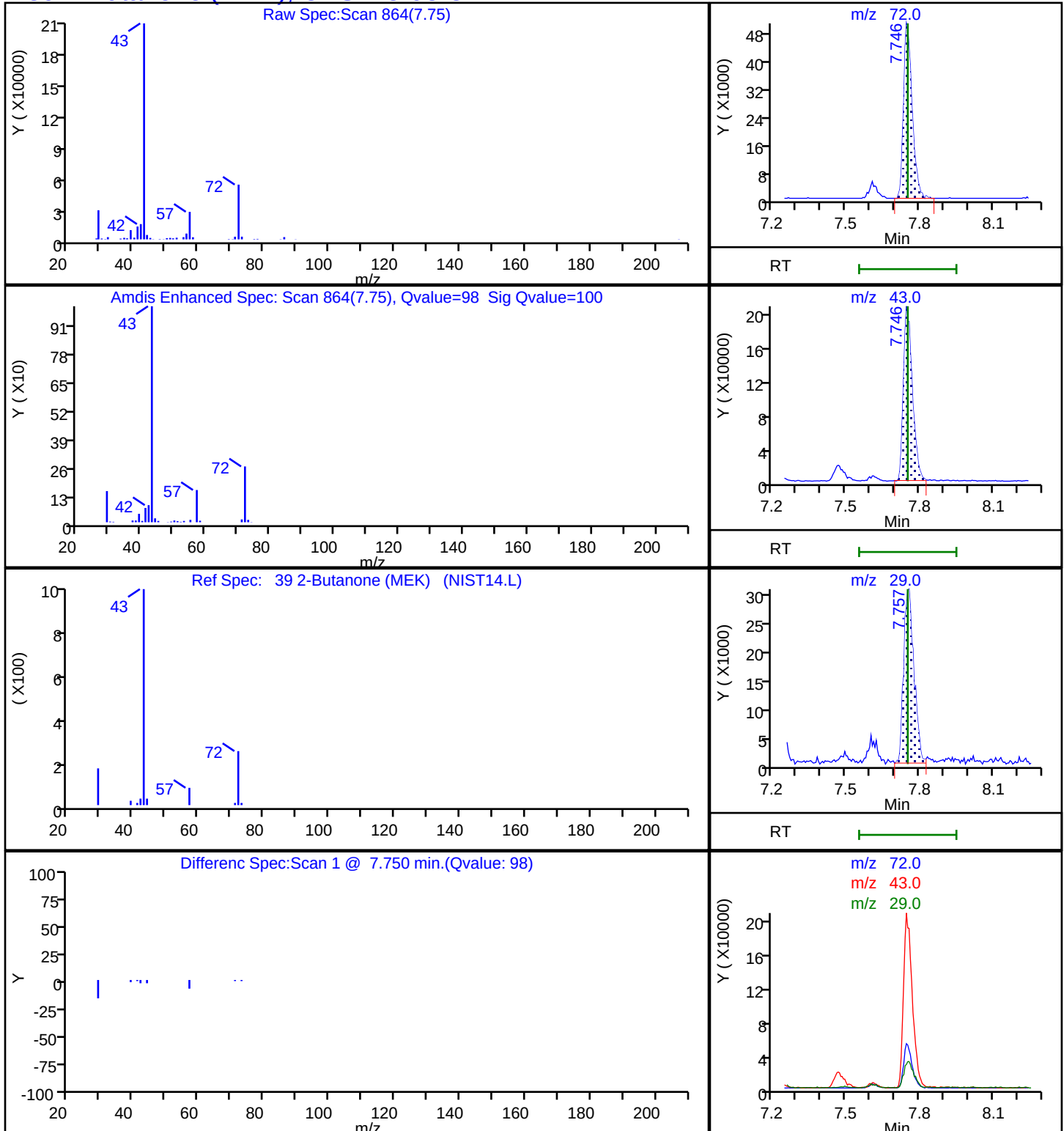
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

39 2-Butanone (MEK), CAS: 78-93-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

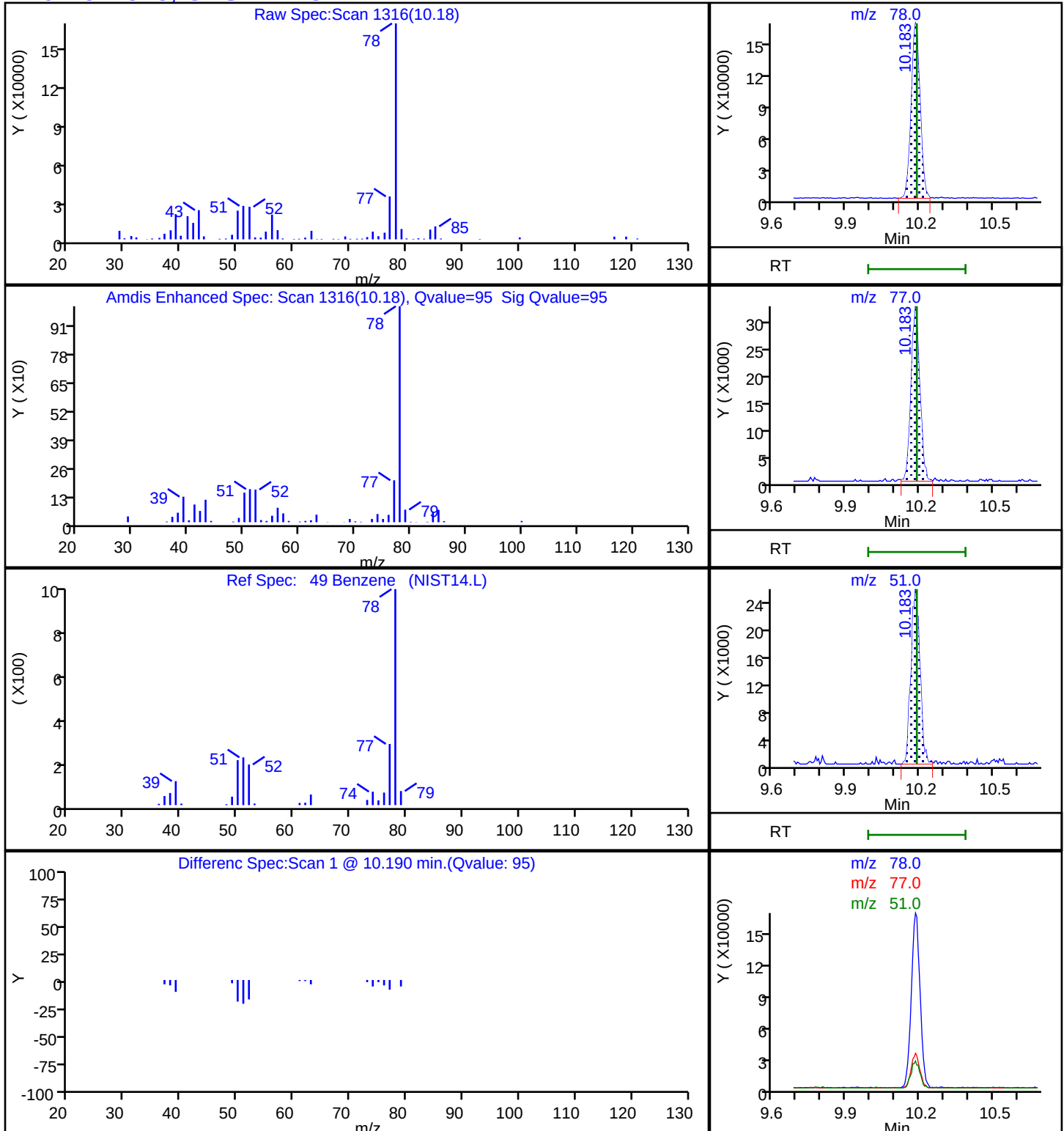
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

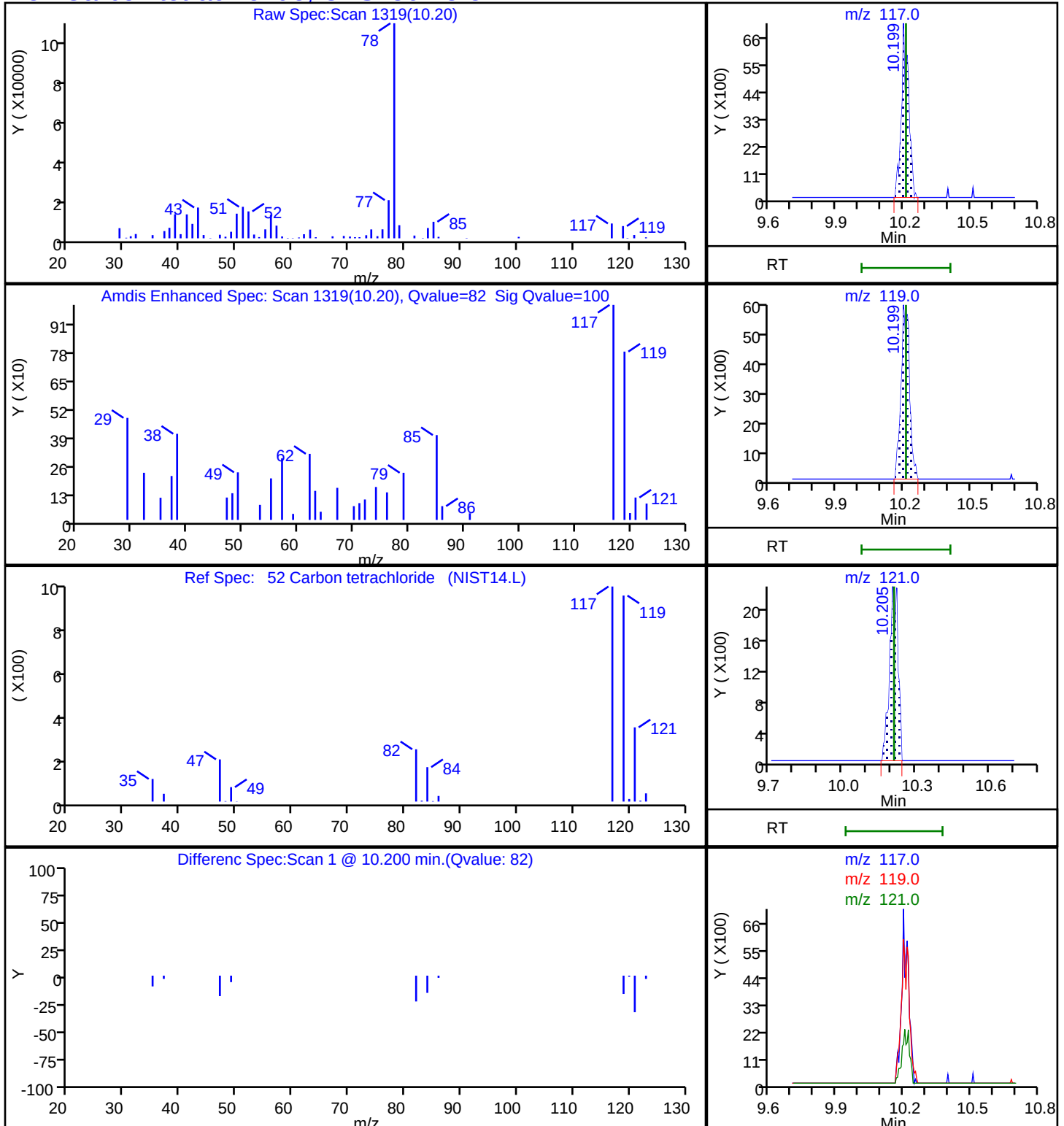
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

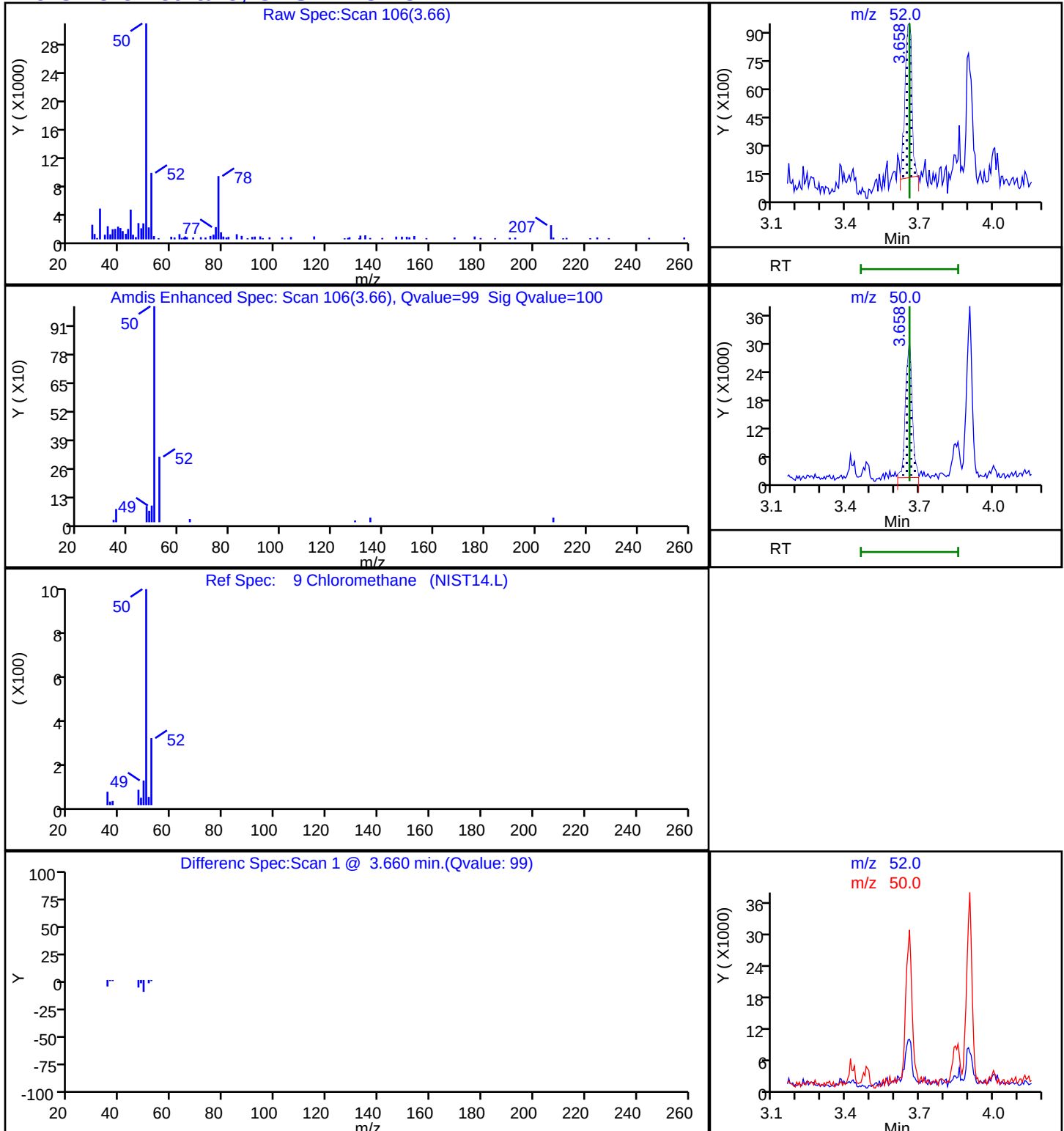
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

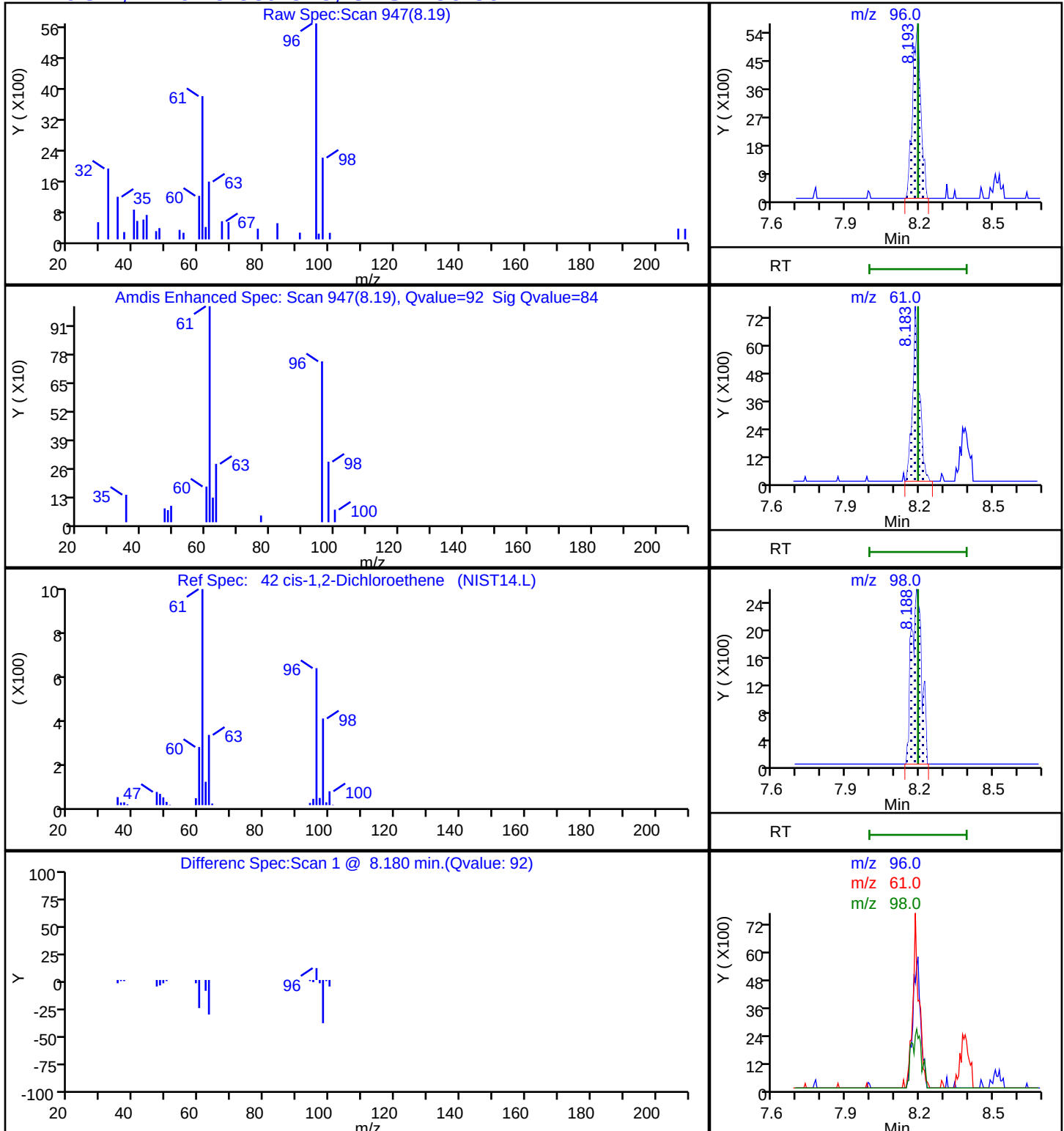
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

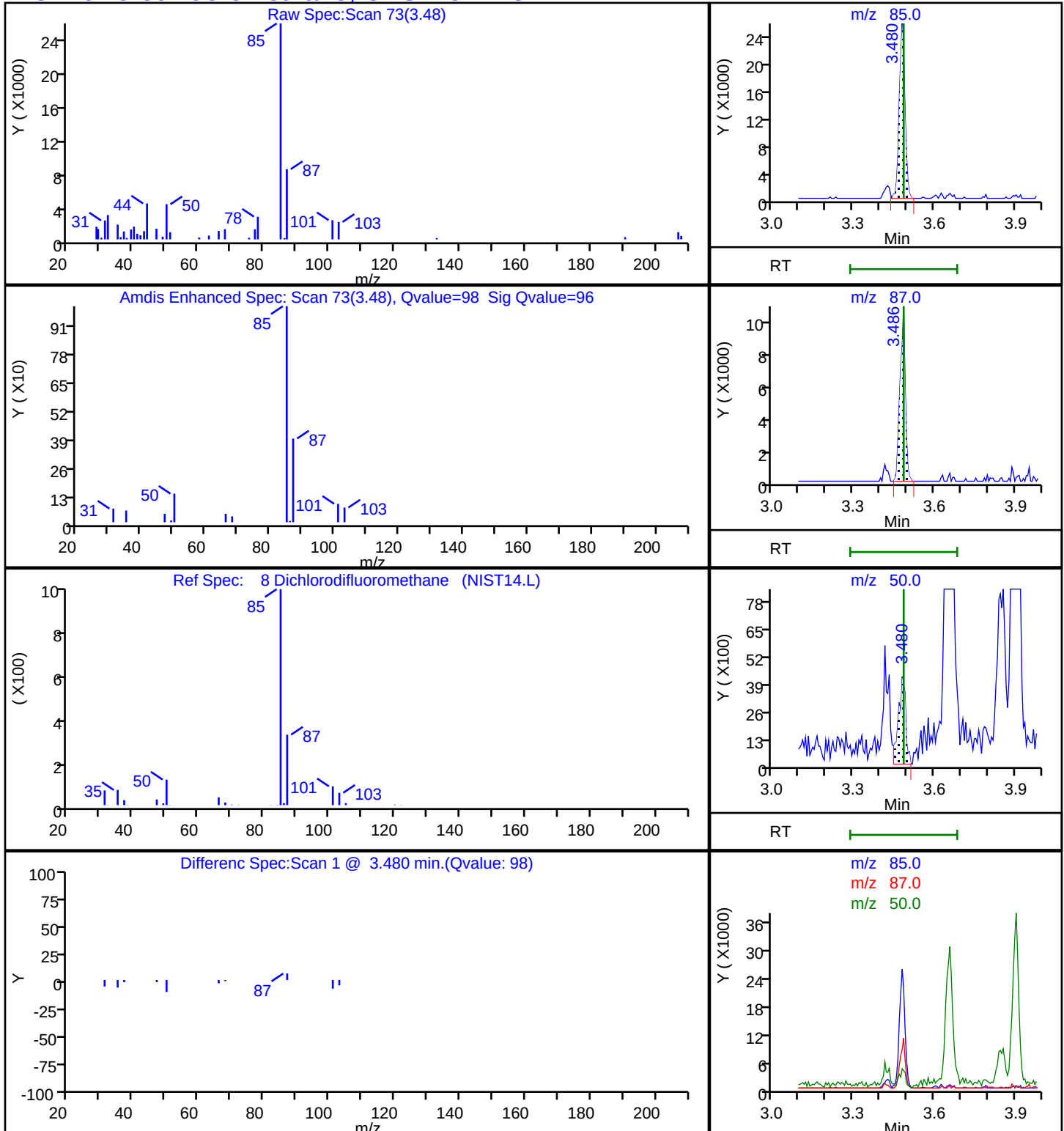
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

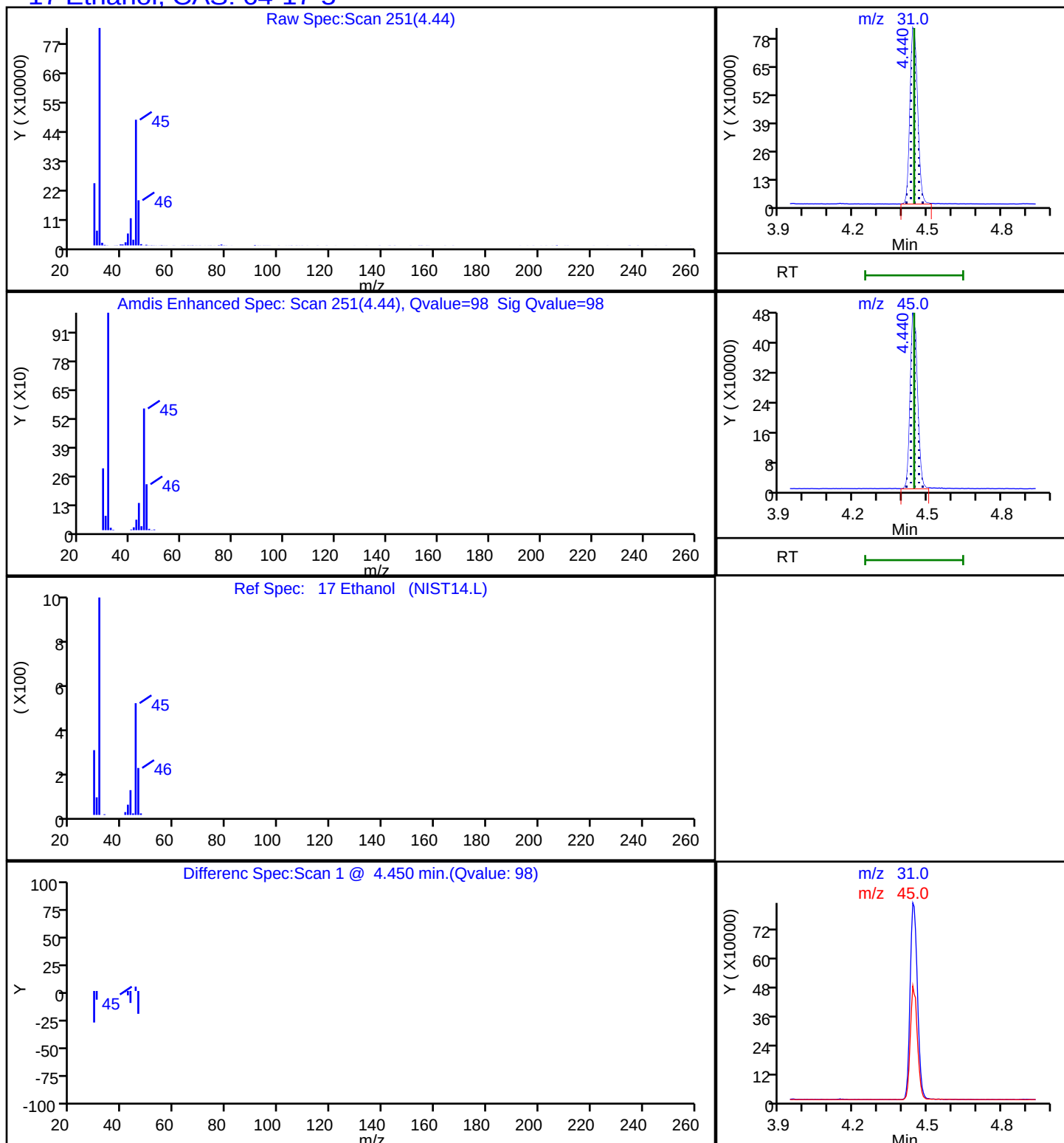
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

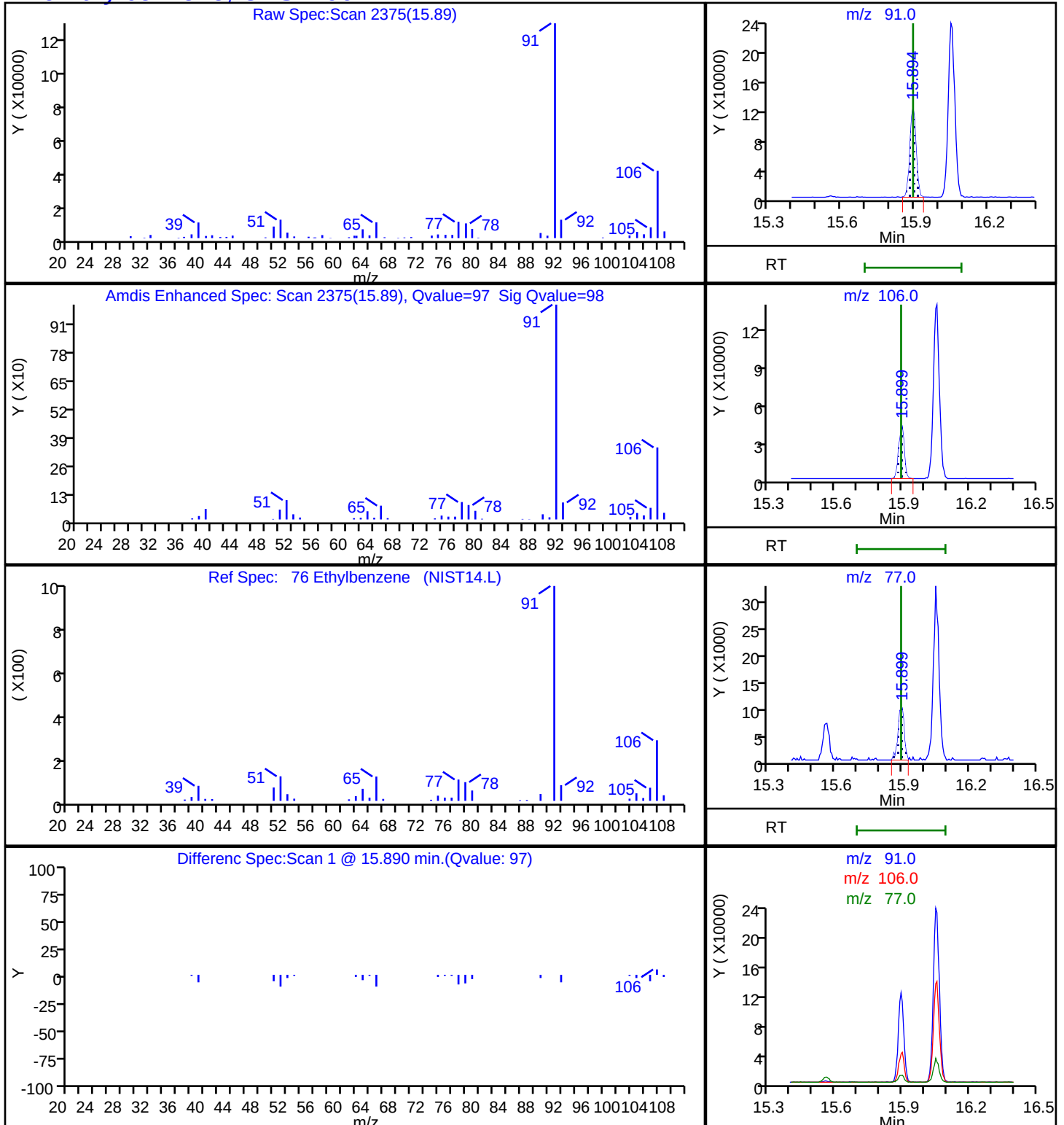
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Ethylbenzene, CAS: 100-41-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

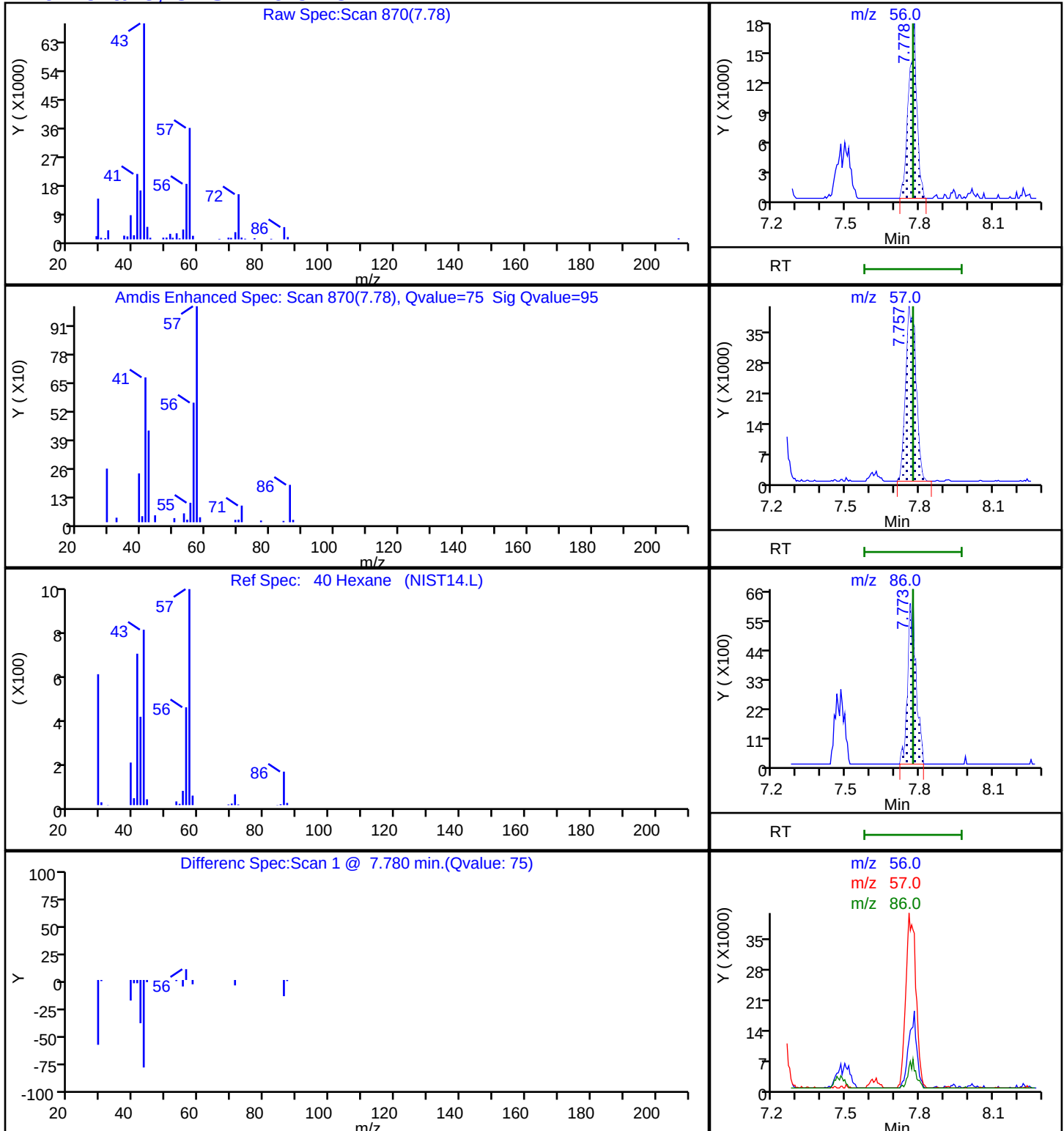
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

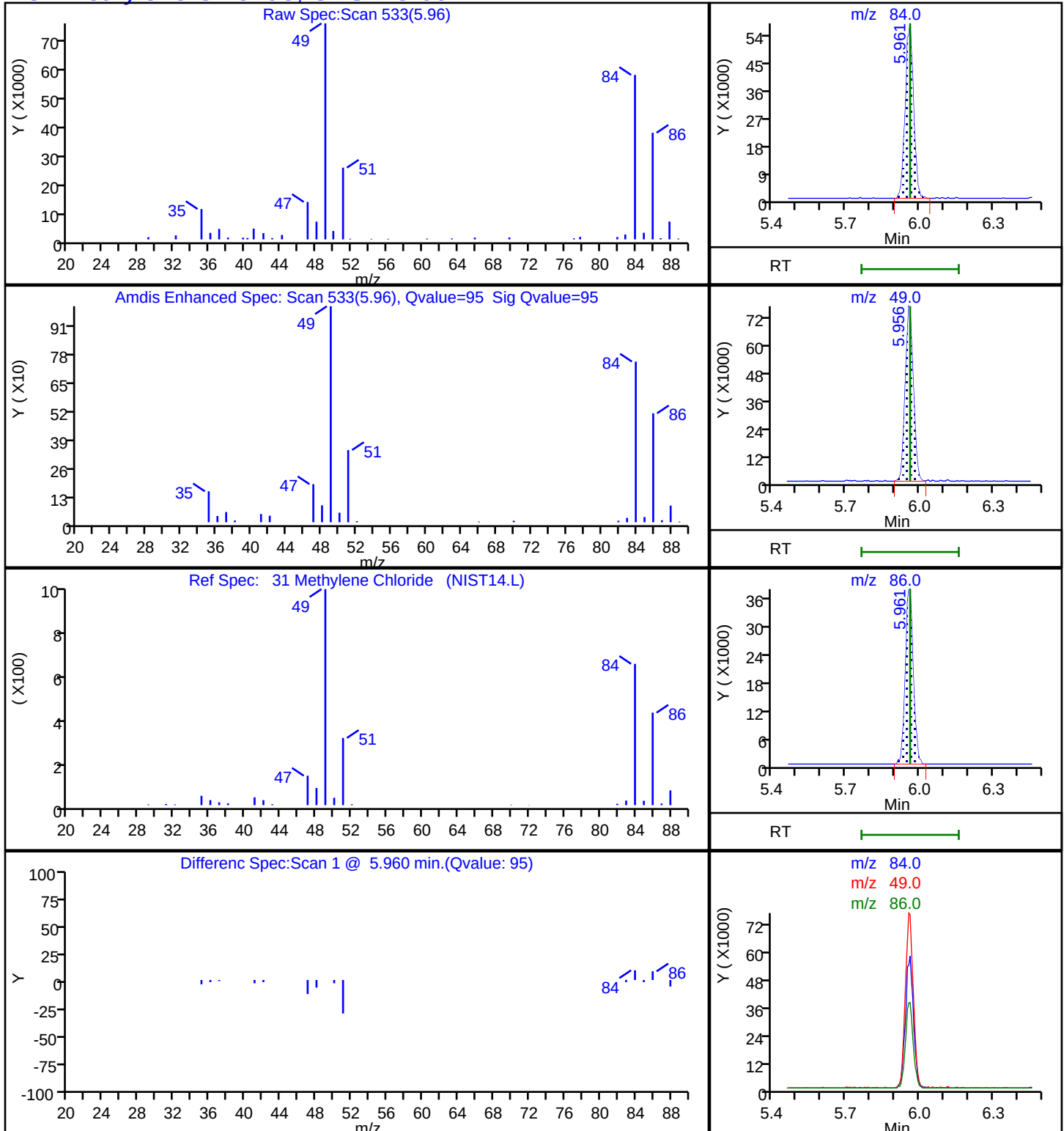
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

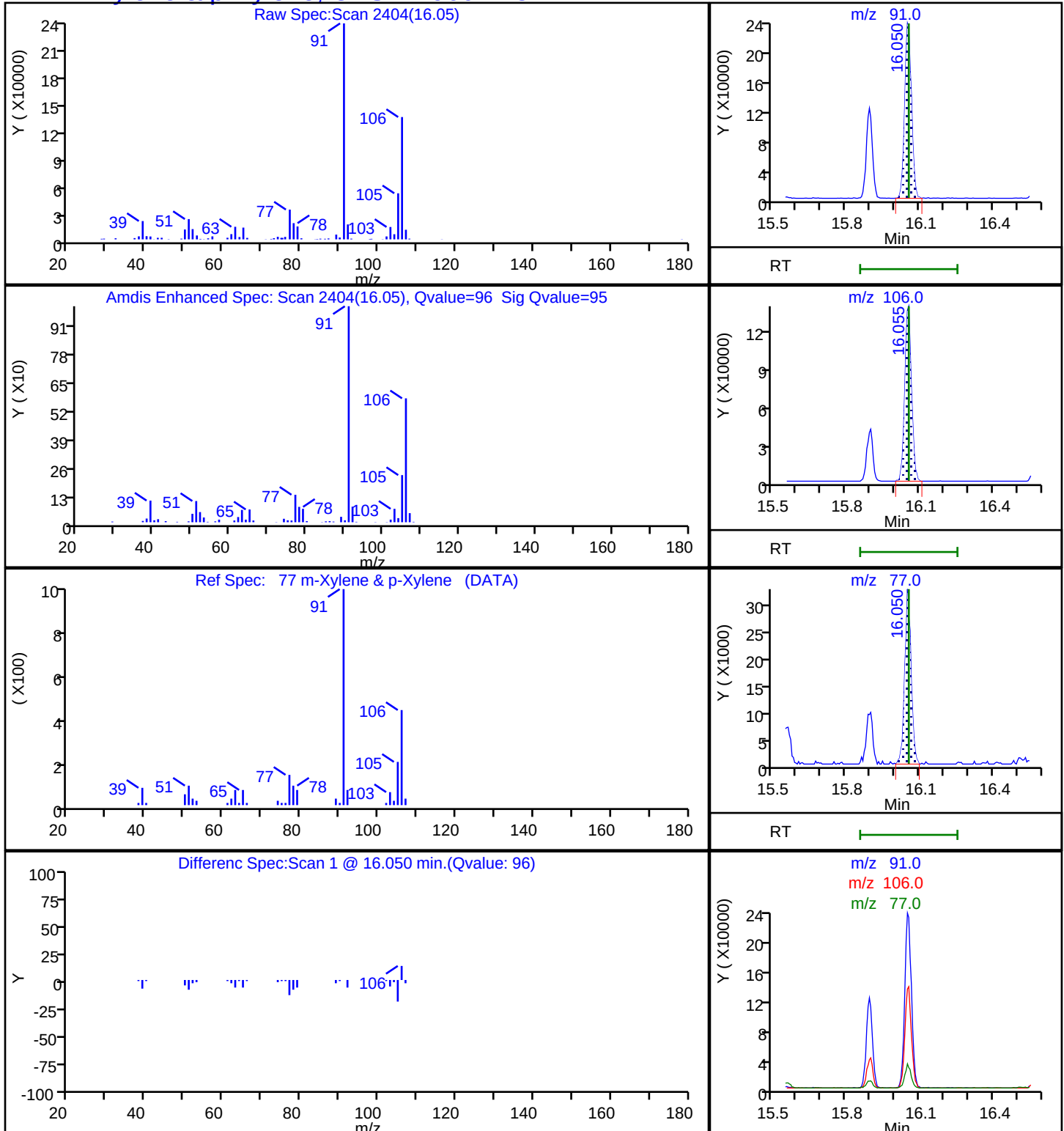
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

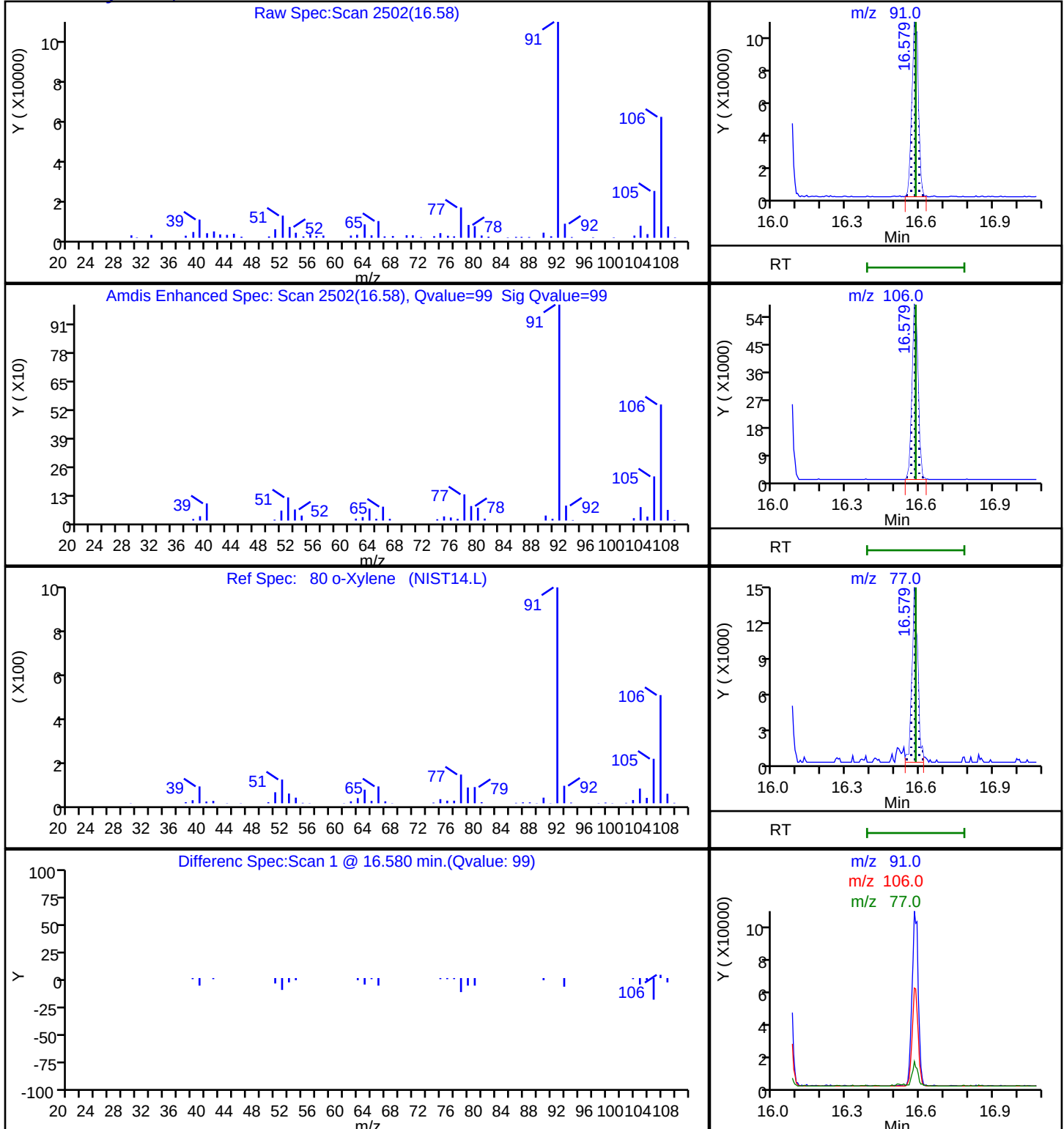
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

80 o-Xylene, CAS: 95-47-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

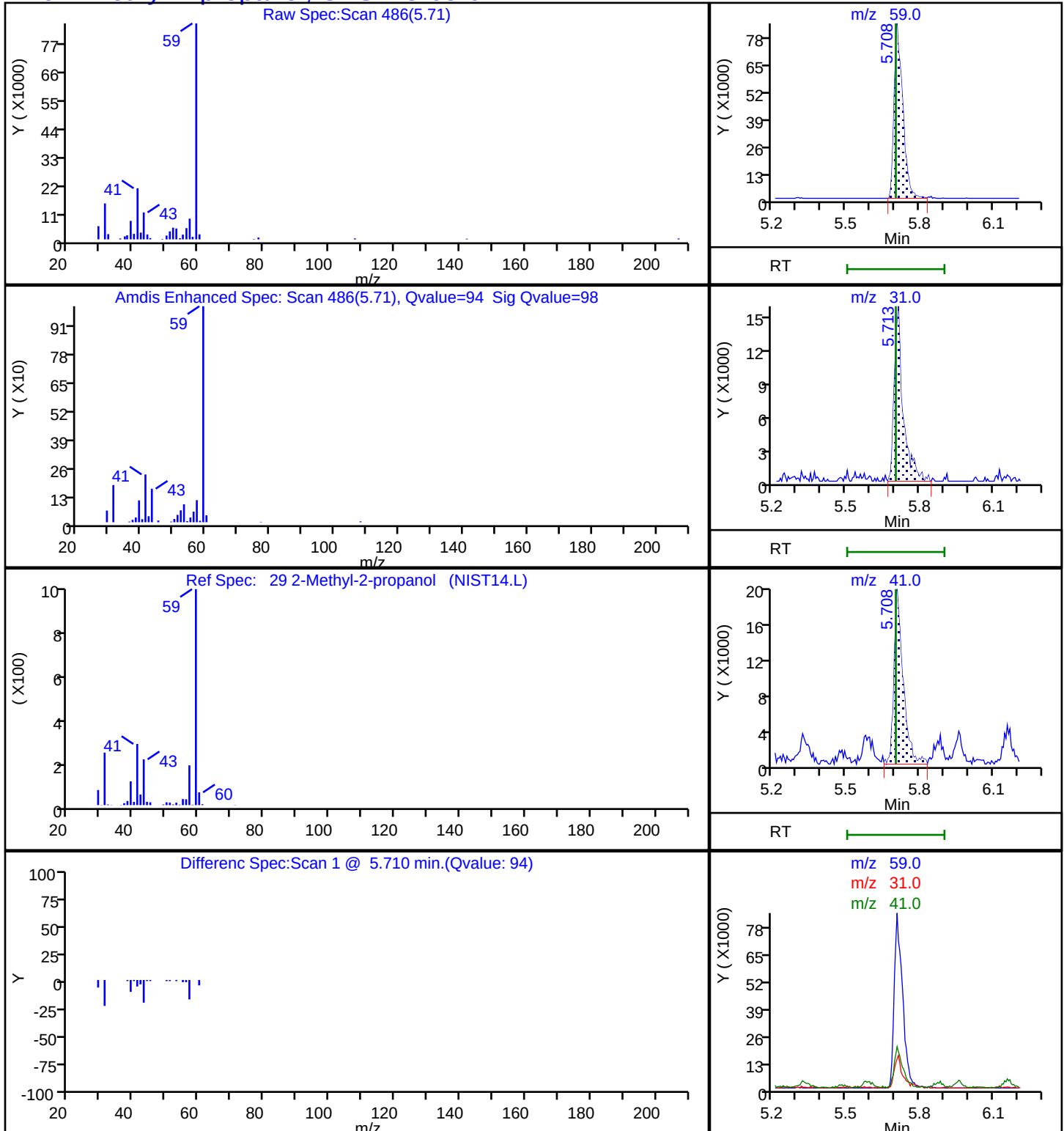
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

29 2-Methyl-2-propanol, CAS: 75-65-0

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

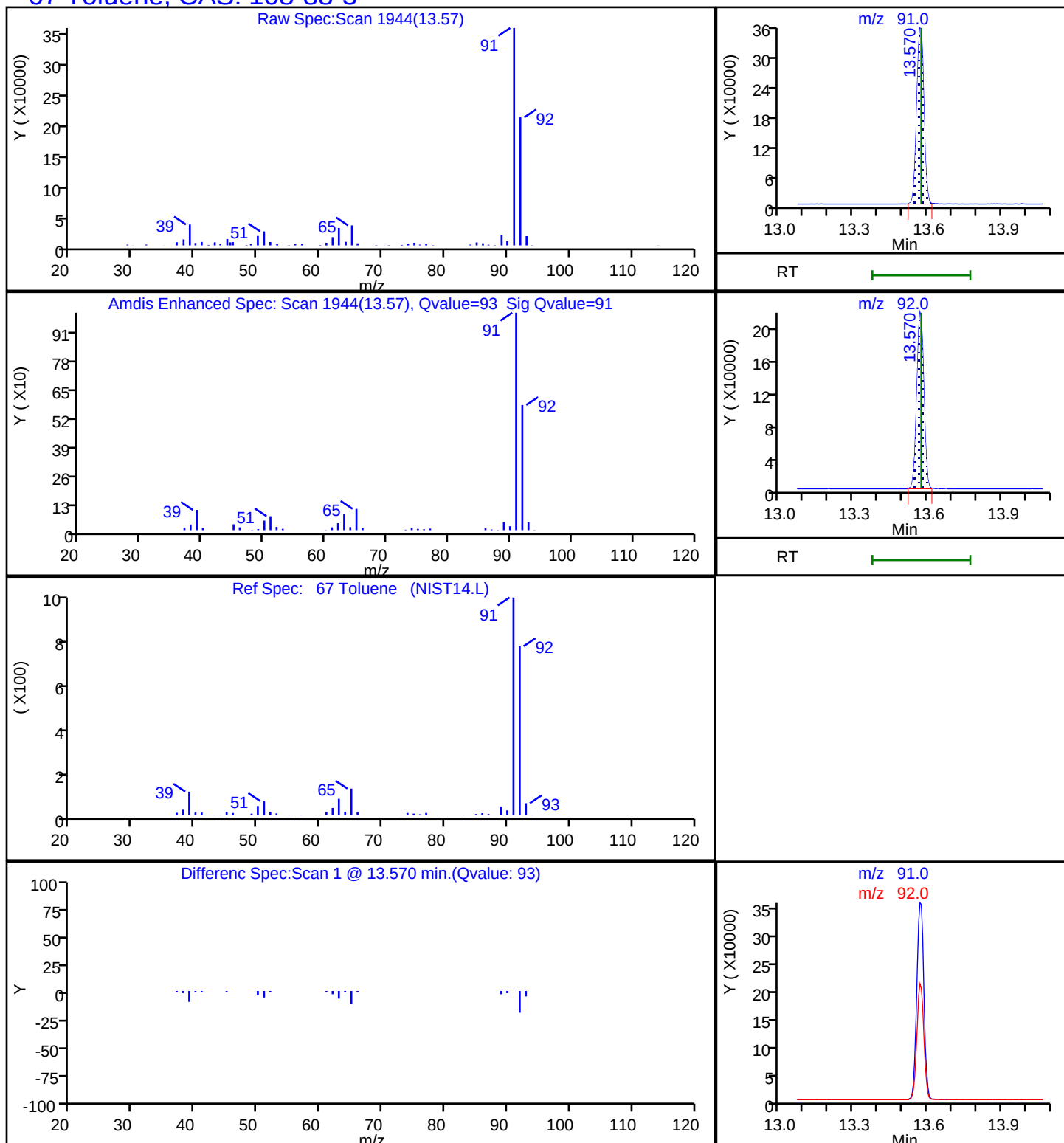
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

67 Toluene, CAS: 108-88-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

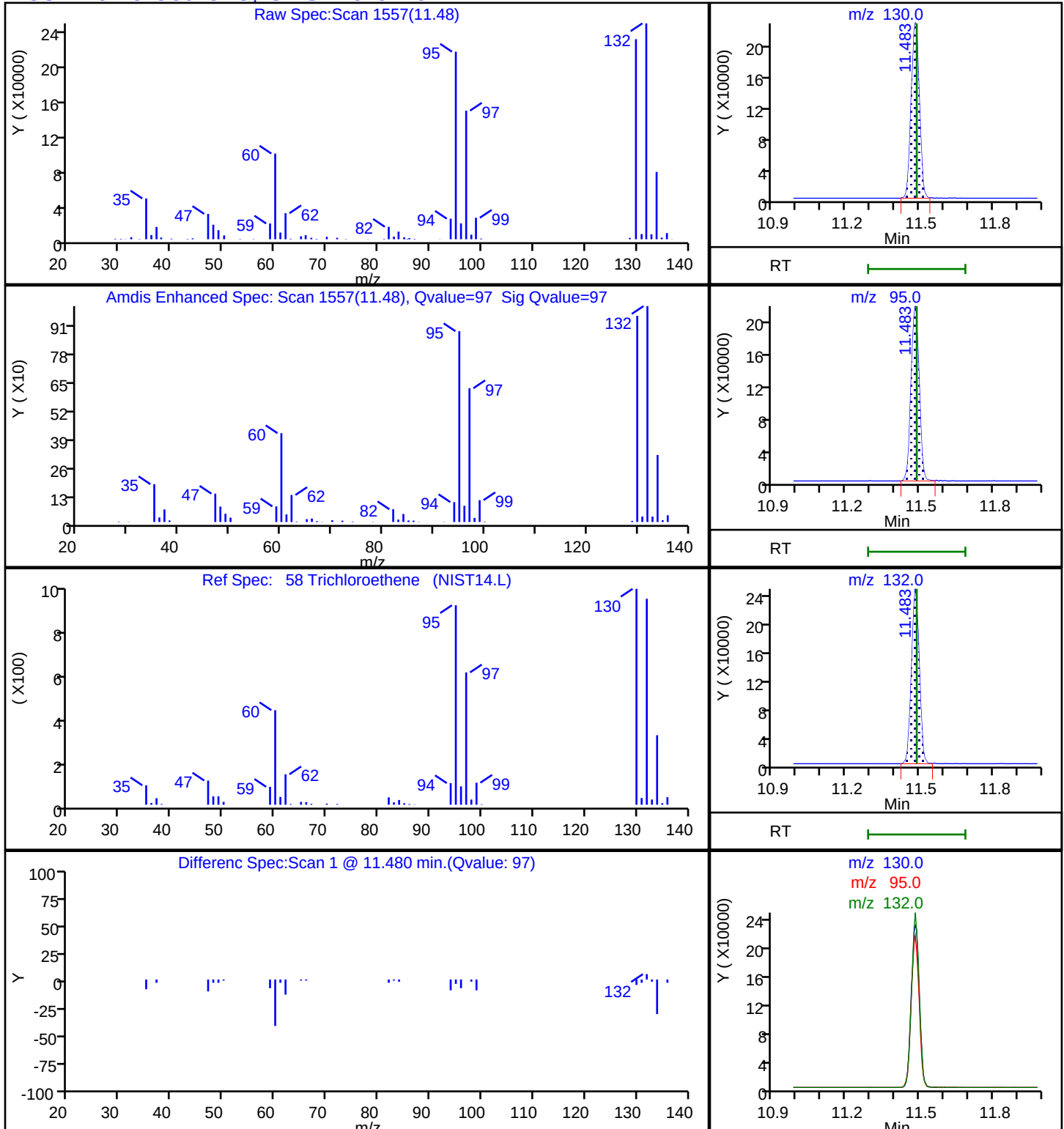
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#:

Worklist Smp#: 14

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

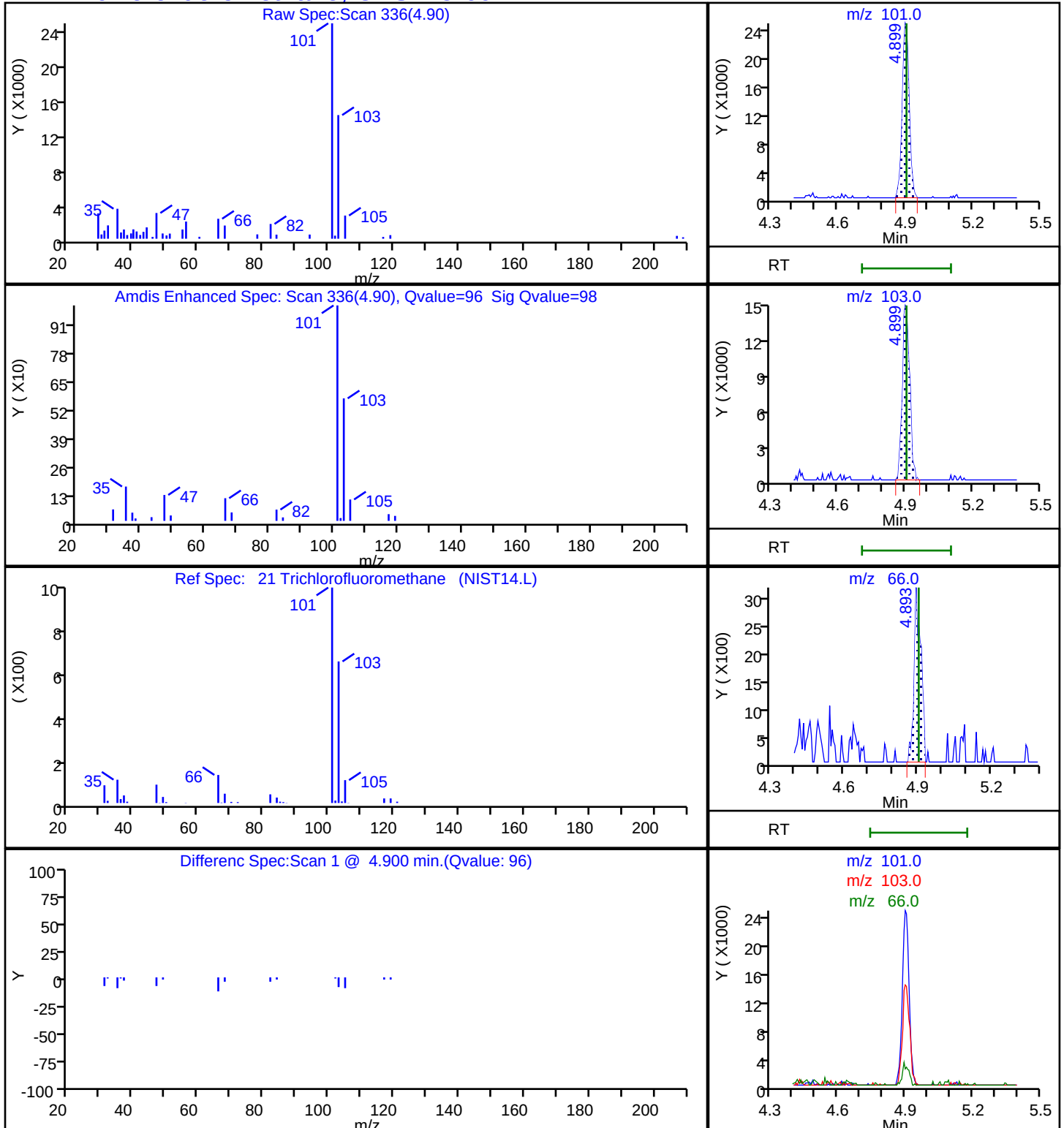
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D

Injection Date: 04-Oct-2019 22:39:30

Instrument ID: MR

Lims ID: 140-16882-A-3

Lab Sample ID: 140-16882-3

Client ID: SS-03

Operator ID:

ALS Bottle#: 10

Worklist Smp#: 14

Purge Vol: 500.000 mL

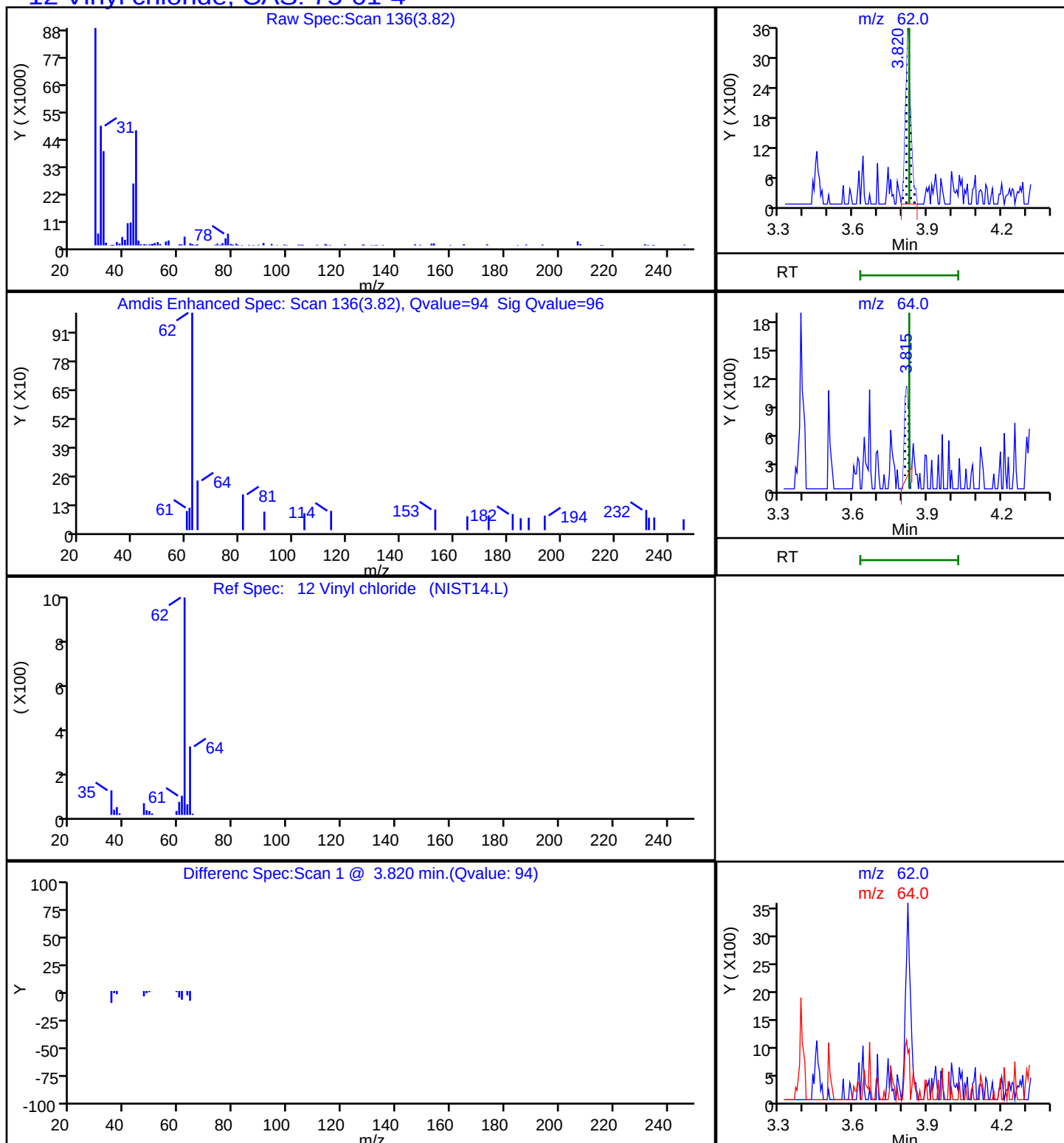
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

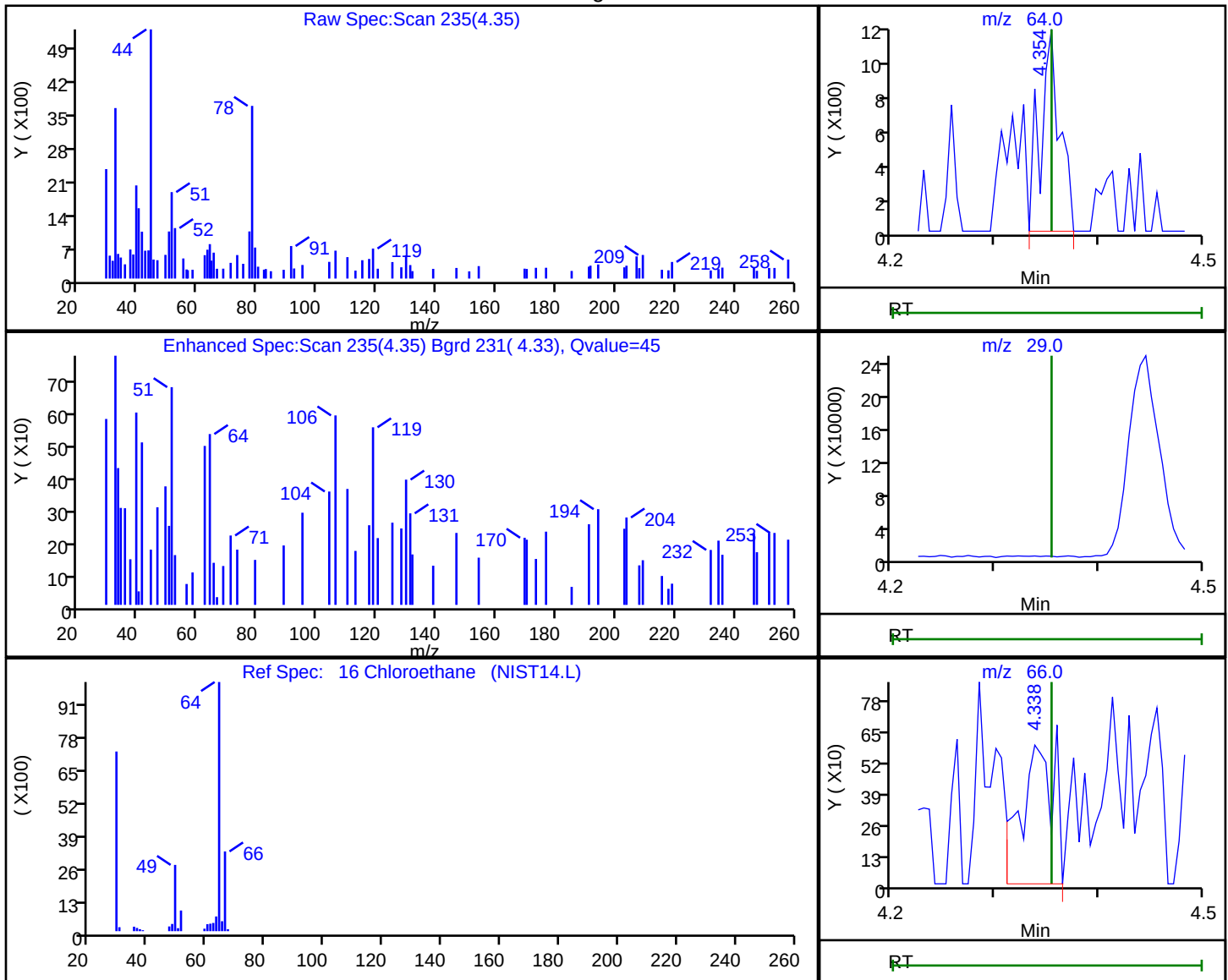
12 Vinyl chloride, CAS: 75-01-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D
Injection Date: 04-Oct-2019 22:39:30 Instrument ID: MR
Lims ID: 140-16882-A-3 Lab Sample ID: 140-16882-3
Client ID: SS-03
Operator ID: ALS Bottle#: 10 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
4.35	64.00	1430	0.030714
4.35	29.00	0	
4.34	66.00	1307	

Reviewer: barlozhetskayaa, 06-Oct-2019 17:07:41

Audit Action: Marked Compound Undetected

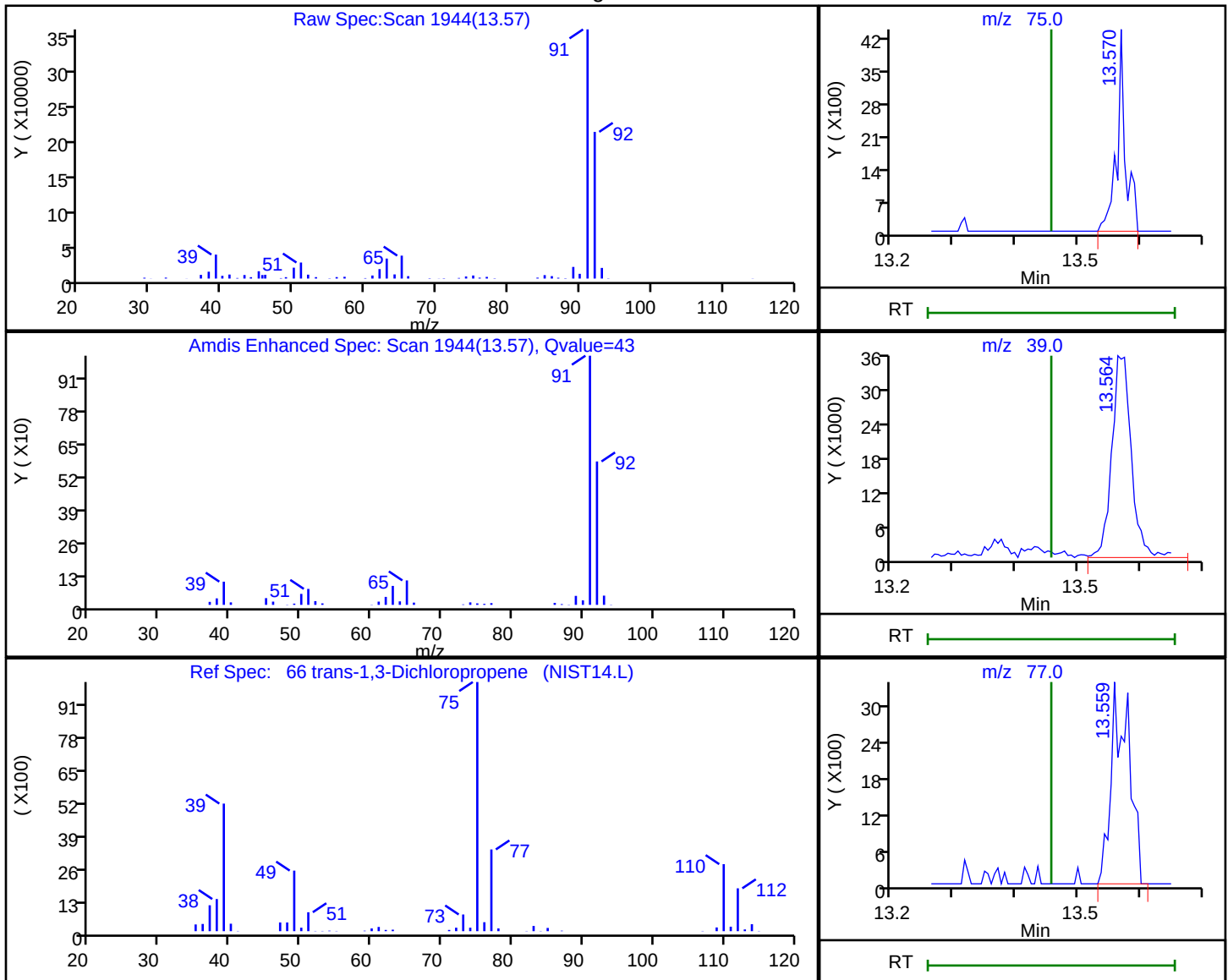
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P110.D
Injection Date: 04-Oct-2019 22:39:30 Instrument ID: MR
Lims ID: 140-16882-A-3 Lab Sample ID: 140-16882-3
Client ID: SS-03
Operator ID: ALS Bottle#: 10 Worklist Smp#: 14
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
13.57	75.00	4269	0.029646
13.56	39.00	77828	
13.56	77.00	6625	

Reviewer: barlozhetskayaa, 06-Oct-2019 17:08:07

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-04 Lab Sample ID: 140-16882-4
 Matrix: Air Lab File ID: RJ04P201.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:20
 Sample wt/vol: 10.6(mL) Date Analyzed: 10/04/2019 23:26
 Soil Aliquot Vol: _____ Dilution Factor: 1.72
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		6.5	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		6.5	
79-00-5	1,1,2-Trichloroethane	133.41	ND		6.5	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		6.5	
75-34-3	1,1-Dichloroethane	98.96	ND		6.5	
75-35-4	1,1-Dichloroethene	96.94	ND		3.2	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		6.5	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		6.5	
106-93-4	1,2-Dibromoethane	187.87	ND		6.5	
95-50-1	1,2-Dichlorobenzene	147.00	ND		6.5	
107-06-2	1,2-Dichloroethane	98.96	ND		6.5	
78-87-5	1,2-Dichloropropane	112.99	ND		6.5	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND	*	6.5	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		6.5	
541-73-1	1,3-Dichlorobenzene	147.00	ND		6.5	
106-46-7	1,4-Dichlorobenzene	147.00	ND		6.5	
123-91-1	1,4-Dioxane	88.11	ND		16	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		16	
78-93-3	2-Butanone	72.11	ND		26	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		16	
71-43-2	Benzene	78.11	ND		6.5	
100-44-7	Benzyl chloride	126.58	ND		13	
75-27-4	Bromodichloromethane	163.83	ND		6.5	
75-25-2	Bromoform	252.75	ND		6.5	
74-83-9	Bromomethane	94.94	ND		6.5	
56-23-5	Carbon tetrachloride	153.81	ND		2.6	
108-90-7	Chlorobenzene	112.56	ND		6.5	
75-00-3	Chloroethane	64.52	ND		6.5	
67-66-3	Chloroform	119.38	ND		6.5	
74-87-3	Chloromethane	50.49	ND		16	
156-59-2	cis-1,2-Dichloroethene	96.94	81		3.2	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		6.5	
110-82-7	Cyclohexane	84.16	ND		16	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-04 Lab Sample ID: 140-16882-4
 Matrix: Air Lab File ID: RJ04P201.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:20
 Sample wt/vol: 10.6(mL) Date Analyzed: 10/04/2019 23:26
 Soil Aliquot Vol: _____ Dilution Factor: 1.72
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		6.5	
75-71-8	Dichlorodifluoromethane	120.91	ND		6.5	
64-17-5	Ethanol	46.07	270		160	
100-41-4	Ethylbenzene	106.17	ND		6.5	
87-68-3	Hexachlorobutadiene	260.76	ND		6.5	
110-54-3	Hexane	86.17	ND		16	
1634-04-4	Methyl tert-butyl ether	88.15	ND		13	
75-09-2	Methylene Chloride	84.93	17		16	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		6.5	
95-47-6	o-Xylene	106.17	ND		6.5	
100-42-5	Styrene	104.15	ND		6.5	
75-65-0	t-Butyl alcohol	74.12	ND		26	
127-18-4	Tetrachloroethene	165.83	ND		6.5	
108-88-3	Toluene	92.14	ND		9.7	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		6.5	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		6.5	
79-01-6	Trichloroethene	131.39	36		2.9	
75-69-4	Trichlorofluoromethane	137.37	ND		6.5	
75-01-4	Vinyl chloride	62.50	370		3.2	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-04 Lab Sample ID: 140-16882-4
 Matrix: Air Lab File ID: RJ04P201.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:20
 Sample wt/vol: 10.6(mL) Date Analyzed: 10/04/2019 23:26
 Soil Aliquot Vol: _____ Dilution Factor: 1.72
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		35	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		45	
79-00-5	1,1,2-Trichloroethane	133.41	ND		35	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		50	
75-34-3	1,1-Dichloroethane	98.96	ND		26	
75-35-4	1,1-Dichloroethene	96.94	ND		13	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		48	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		32	
106-93-4	1,2-Dibromoethane	187.87	ND		50	
95-50-1	1,2-Dichlorobenzene	147.00	ND		39	
107-06-2	1,2-Dichloroethane	98.96	ND		26	
78-87-5	1,2-Dichloropropane	112.99	ND		30	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND	*	45	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		32	
541-73-1	1,3-Dichlorobenzene	147.00	ND		39	
106-46-7	1,4-Dichlorobenzene	147.00	ND		39	
123-91-1	1,4-Dioxane	88.11	ND		58	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		76	
78-93-3	2-Butanone	72.11	ND		77	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		66	
71-43-2	Benzene	78.11	ND		21	
100-44-7	Benzyl chloride	126.58	ND		67	
75-27-4	Bromodichloromethane	163.83	ND		43	
75-25-2	Bromoform	252.75	ND		67	
74-83-9	Bromomethane	94.94	ND		25	
56-23-5	Carbon tetrachloride	153.81	ND		16	
108-90-7	Chlorobenzene	112.56	ND		30	
75-00-3	Chloroethane	64.52	ND		17	
67-66-3	Chloroform	119.38	ND		32	
74-87-3	Chloromethane	50.49	ND		34	
156-59-2	cis-1,2-Dichloroethene	96.94	320		13	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		29	
110-82-7	Cyclohexane	84.16	ND		56	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-04 Lab Sample ID: 140-16882-4
 Matrix: Air Lab File ID: RJ04P201.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:20
 Sample wt/vol: 10.6(mL) Date Analyzed: 10/04/2019 23:26
 Soil Aliquot Vol: _____ Dilution Factor: 1.72
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		55	
75-71-8	Dichlorodifluoromethane	120.91	ND		32	
64-17-5	Ethanol	46.07	520		310	
100-41-4	Ethylbenzene	106.17	ND		28	
87-68-3	Hexachlorobutadiene	260.76	ND		69	
110-54-3	Hexane	86.17	ND		57	
1634-04-4	Methyl tert-butyl ether	88.15	ND		47	
75-09-2	Methylene Chloride	84.93	59		56	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		28	
95-47-6	o-Xylene	106.17	ND		28	
100-42-5	Styrene	104.15	ND		28	
75-65-0	t-Butyl alcohol	74.12	ND		79	
127-18-4	Tetrachloroethene	165.83	ND		44	
108-88-3	Toluene	92.14	ND		37	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		26	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		29	
79-01-6	Trichloroethene	131.39	190		16	
75-69-4	Trichlorofluoromethane	137.37	ND		36	
75-01-4	Vinyl chloride	62.50	940		8.3	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	86		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D
 Lims ID: 140-16882-A-4
 Client ID: SS-04
 Sample Type: Client
 Inject. Date: 04-Oct-2019 23:26:30 ALS Bottle#: 1 Worklist Smp#: 21
 Purge Vol: 500.000 mL Dil. Factor: 1.7200
 Sample Info: 140-0013262-021
 Misc. Info.: 140-16882-a-4@1.72
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Oct-2019 17:09:04 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 17:09:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.528	-0.006	90	350743	4.00	
* 2 1,4-Difluorobenzene	114	10.755	10.760	-0.005	93	1955703	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.560	-0.006	85	1439828	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.204	17.220	-0.016	94	729508	3.43	
12 Vinyl chloride	62	3.815	3.826	-0.011	99	542363	4.55	
17 Ethanol	31	4.446	4.467	0.000	100	181459	3.38	
27 1,1-Dichloroethene	96	5.594	5.602	-0.011	32	1615	0.0142	
29 2-Methyl-2-propanol	59	5.734	5.699	0.032	96	52681	0.2591	
31 Methylene Chloride	84	5.961	5.961	0.000	97	28122	0.2078	
34 trans-1,2-Dichloroethene	96	6.764	6.774	-0.006	37	2990	0.0243	
39 2-Butanone (MEK)	72	7.773	7.746	0.022	93	6338	0.1071	
40 Hexane	56	7.773	7.768	0.000	57	4451	0.0464	
42 cis-1,2-Dichloroethene	96	8.182	8.199	-0.012	84	127181	1.00	
51 Cyclohexane	69	10.183	10.194	-0.006	72	1364	0.0244	
49 Benzene	78	10.183	10.189	-0.006	92	11624	0.0308	
58 Trichloroethene	130	11.477	11.482	-0.011	94	72050	0.4439	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D

Injection Date: 04-Oct-2019 23:26:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16882-A-4

Lab Sample ID: 140-16882-4

Worklist Smp#: 21

Client ID: SS-04

Purge Vol: 500.000 mL

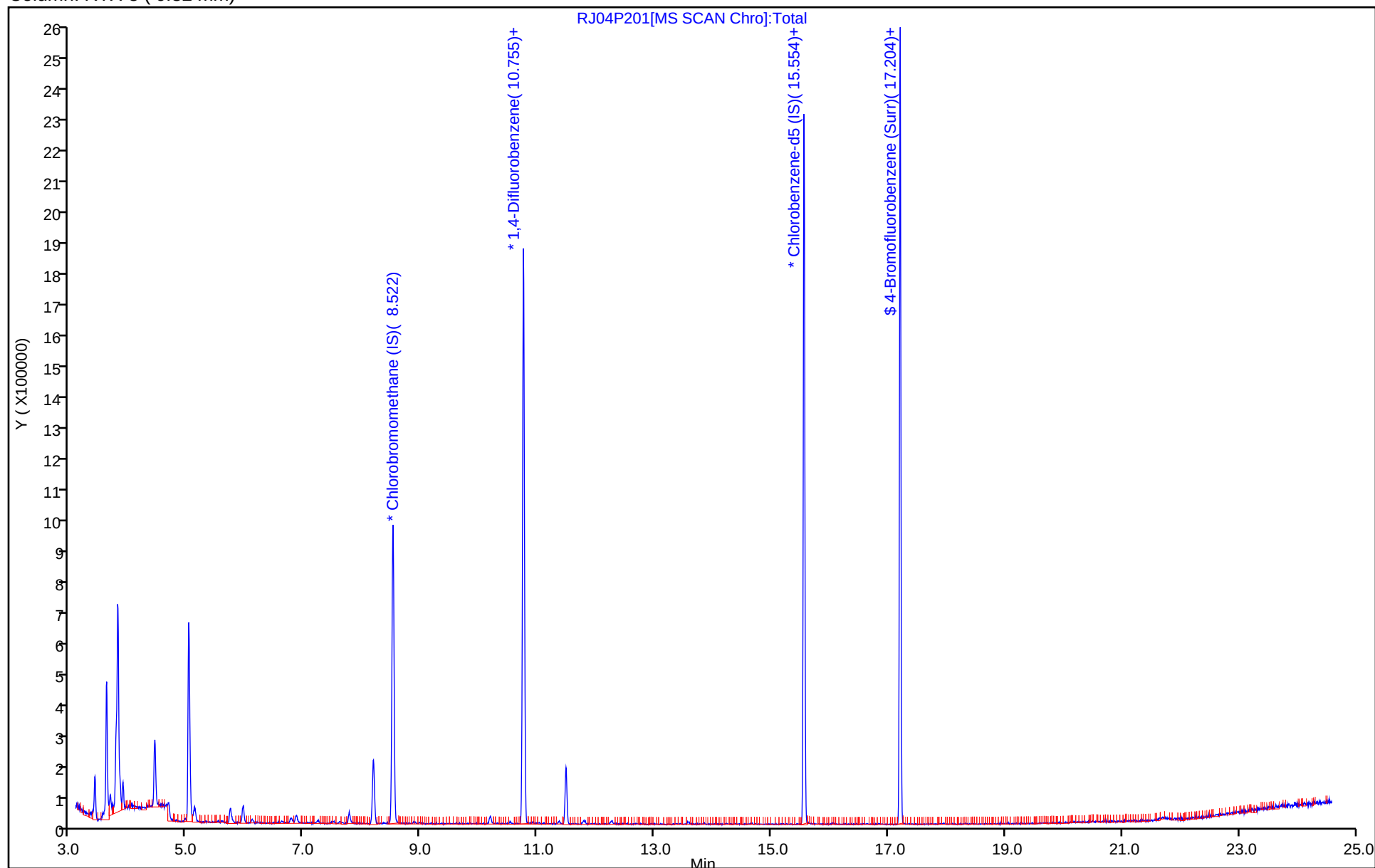
Dil. Factor: 1.7200

ALS Bottle#: 1

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D
Lims ID: 140-16882-A-4
Client ID: SS-04
Sample Type: Client
Inject. Date: 04-Oct-2019 23:26:30 ALS Bottle#: 1 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.7200
Sample Info: 140-0013262-021
Misc. Info.: 140-16882-a-4@1.72
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Oct-2019 17:09:04 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 17:09:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.43	85.72

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D

Injection Date: 04-Oct-2019 23:26:30

Instrument ID: MR

Lims ID: 140-16882-A-4

Lab Sample ID: 140-16882-4

Client ID: SS-04

Operator ID:

ALS Bottle#:

Worklist Smp#: 21

Purge Vol: 500.000 mL

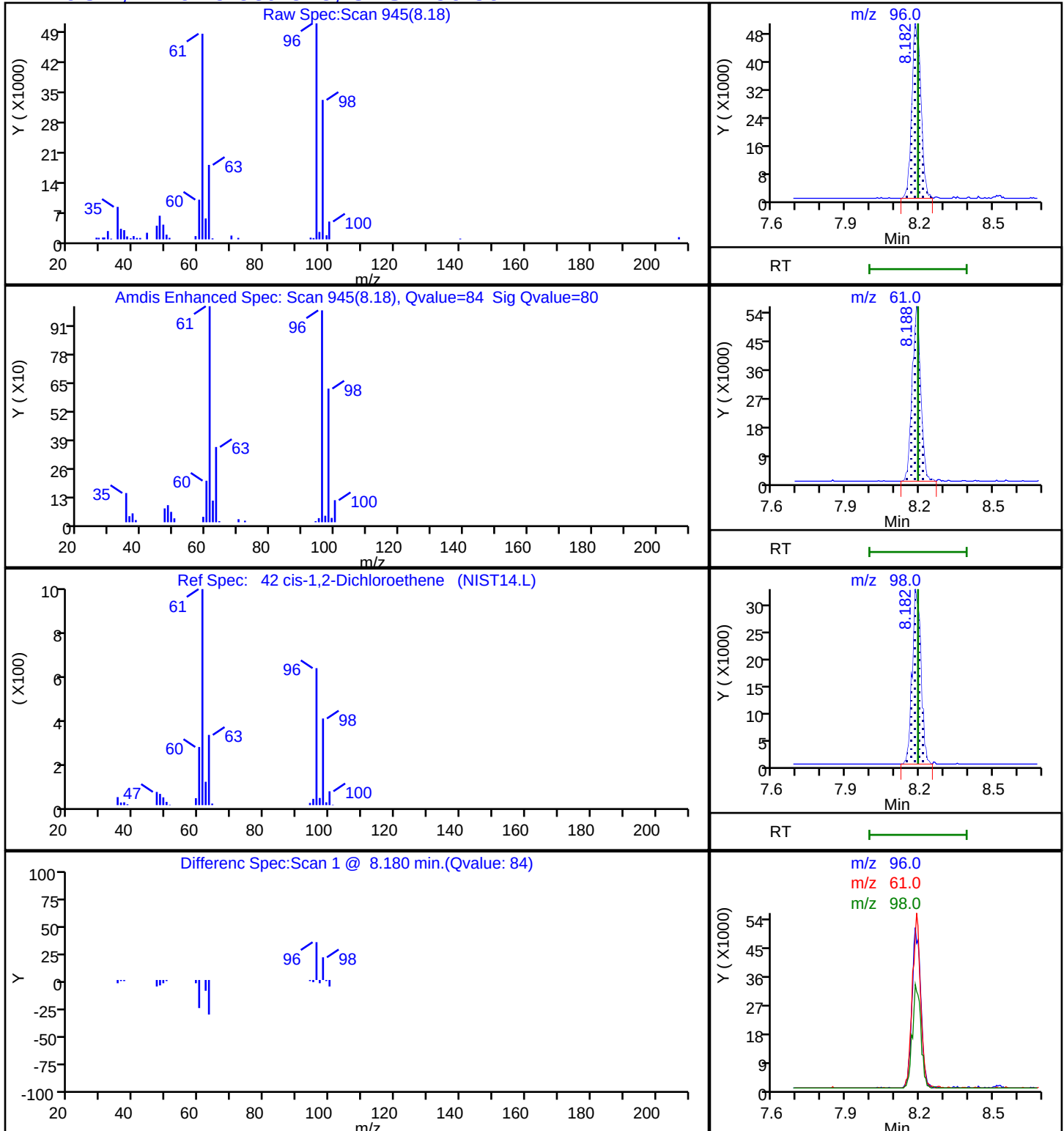
Dil. Factor: 1.7200

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D

Injection Date: 04-Oct-2019 23:26:30

Instrument ID: MR

Lims ID: 140-16882-A-4

Lab Sample ID: 140-16882-4

Client ID: SS-04

Operator ID:

ALS Bottle#:

Worklist Smp#: 21

Purge Vol: 500.000 mL

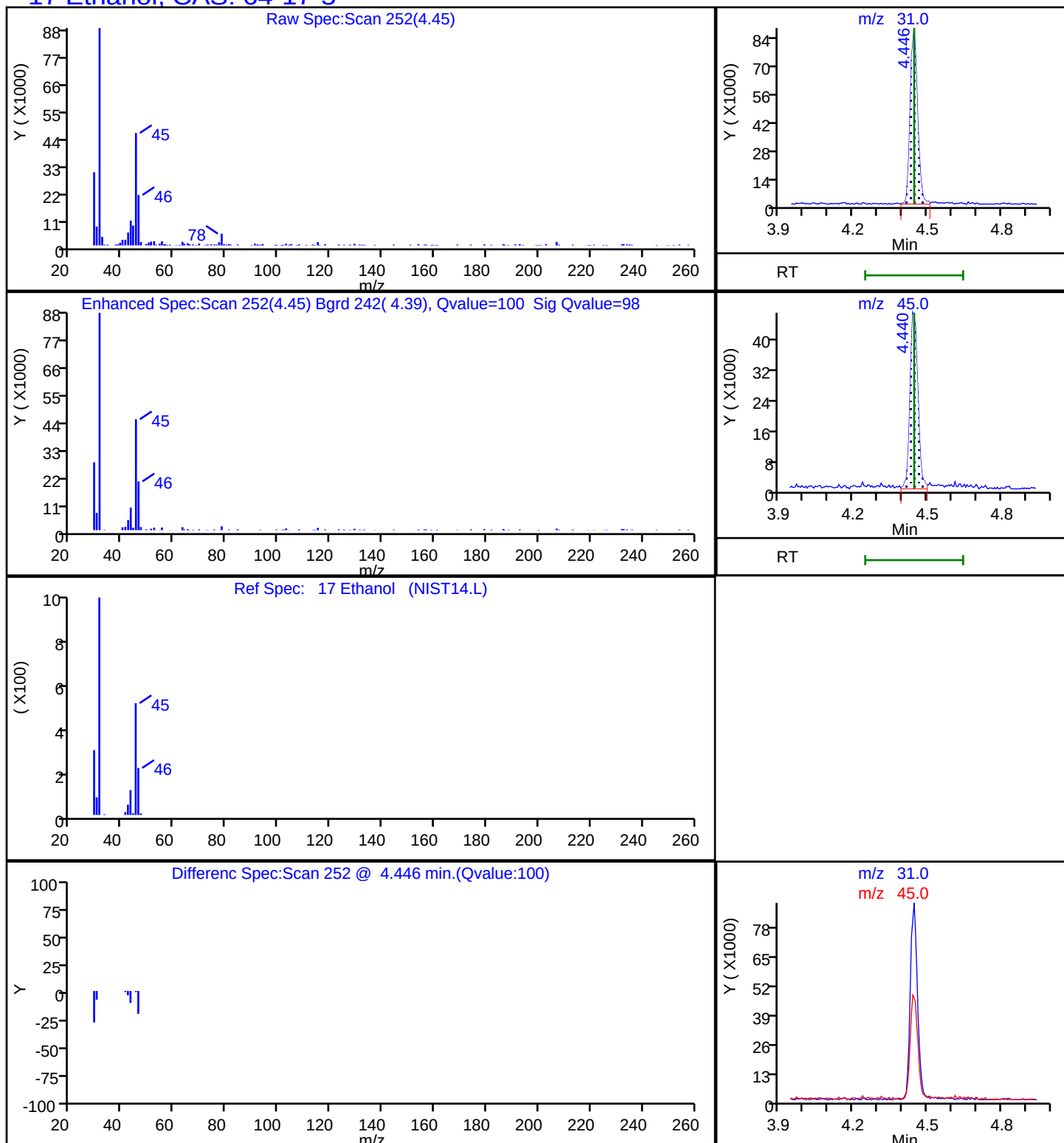
Dil. Factor: 1.7200

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

17 Ethanol, CAS: 64-17-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D

Injection Date: 04-Oct-2019 23:26:30

Instrument ID: MR

Lims ID: 140-16882-A-4

Lab Sample ID: 140-16882-4

Client ID: SS-04

Operator ID:

ALS Bottle#:

Worklist Smp#: 21

Purge Vol: 500.000 mL

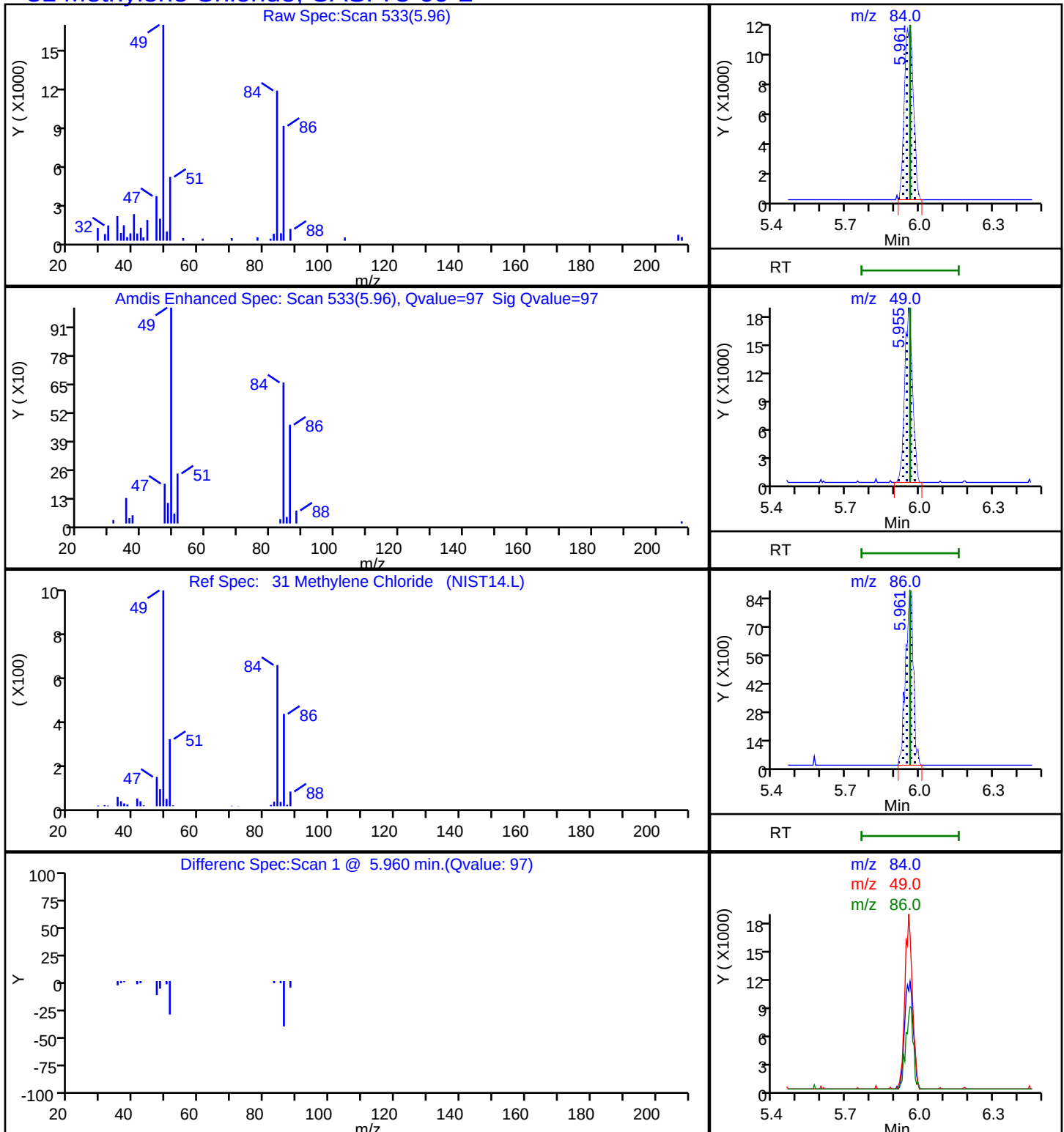
Dil. Factor: 1.7200

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D

Injection Date: 04-Oct-2019 23:26:30

Instrument ID: MR

Lims ID: 140-16882-A-4

Lab Sample ID: 140-16882-4

Client ID: SS-04

Operator ID:

ALS Bottle#:

Worklist Smp#: 21

Purge Vol: 500.000 mL

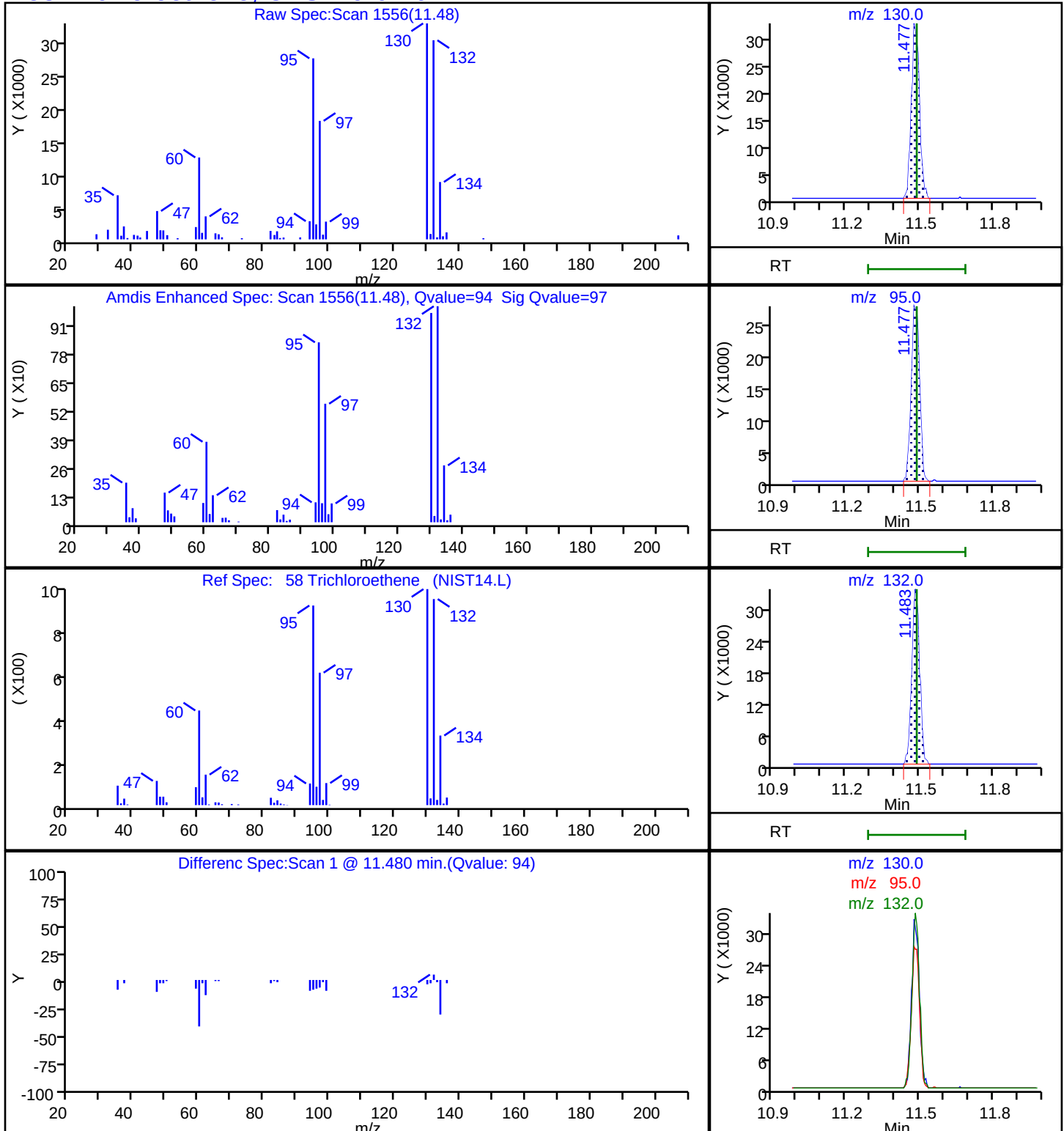
Dil. Factor: 1.7200

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D

Injection Date: 04-Oct-2019 23:26:30

Instrument ID: MR

Lims ID: 140-16882-A-4

Lab Sample ID: 140-16882-4

Client ID: SS-04

Operator ID:

ALS Bottle#:

Worklist Smp#: 21

Purge Vol: 500.000 mL

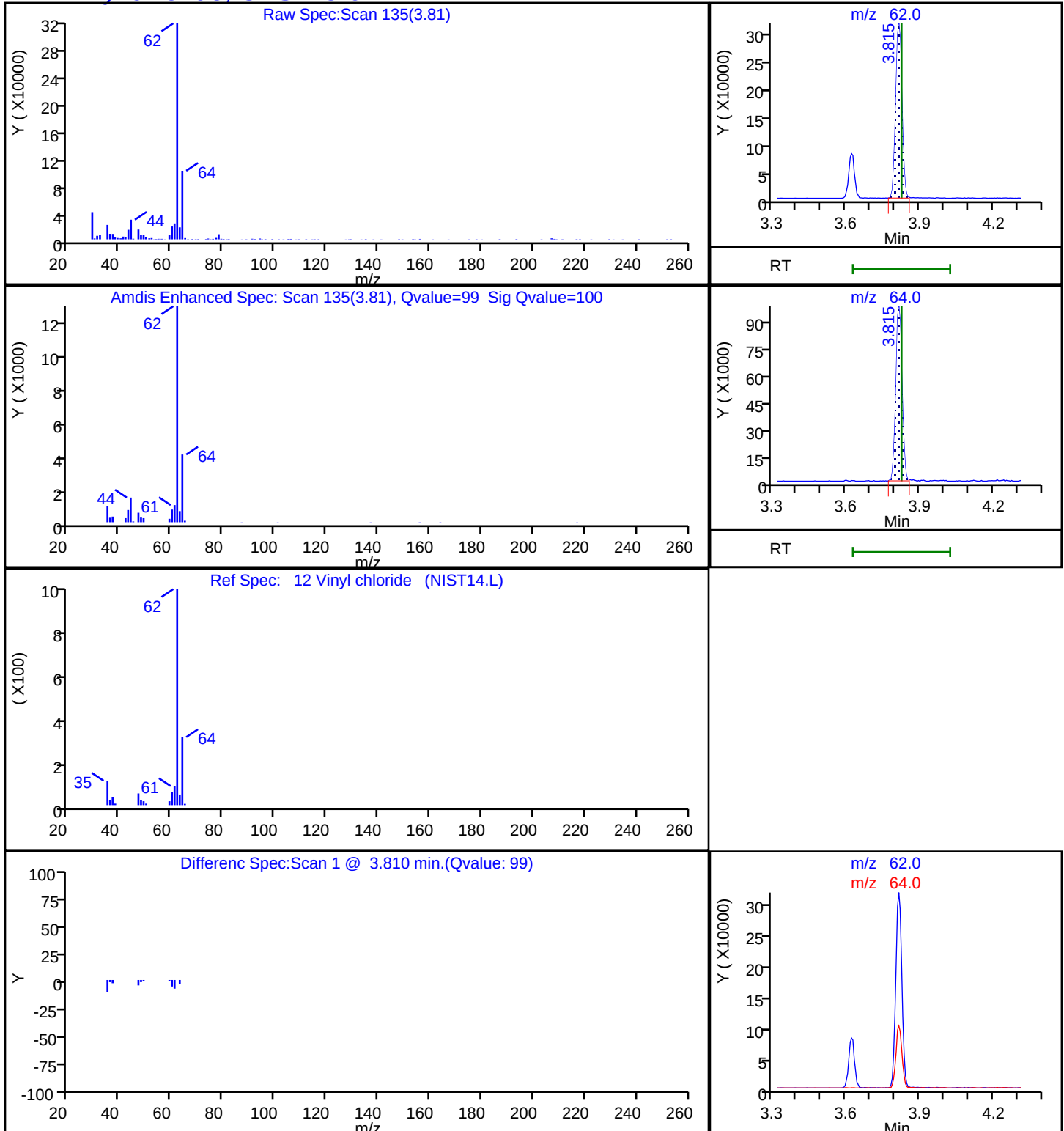
Dil. Factor: 1.7200

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

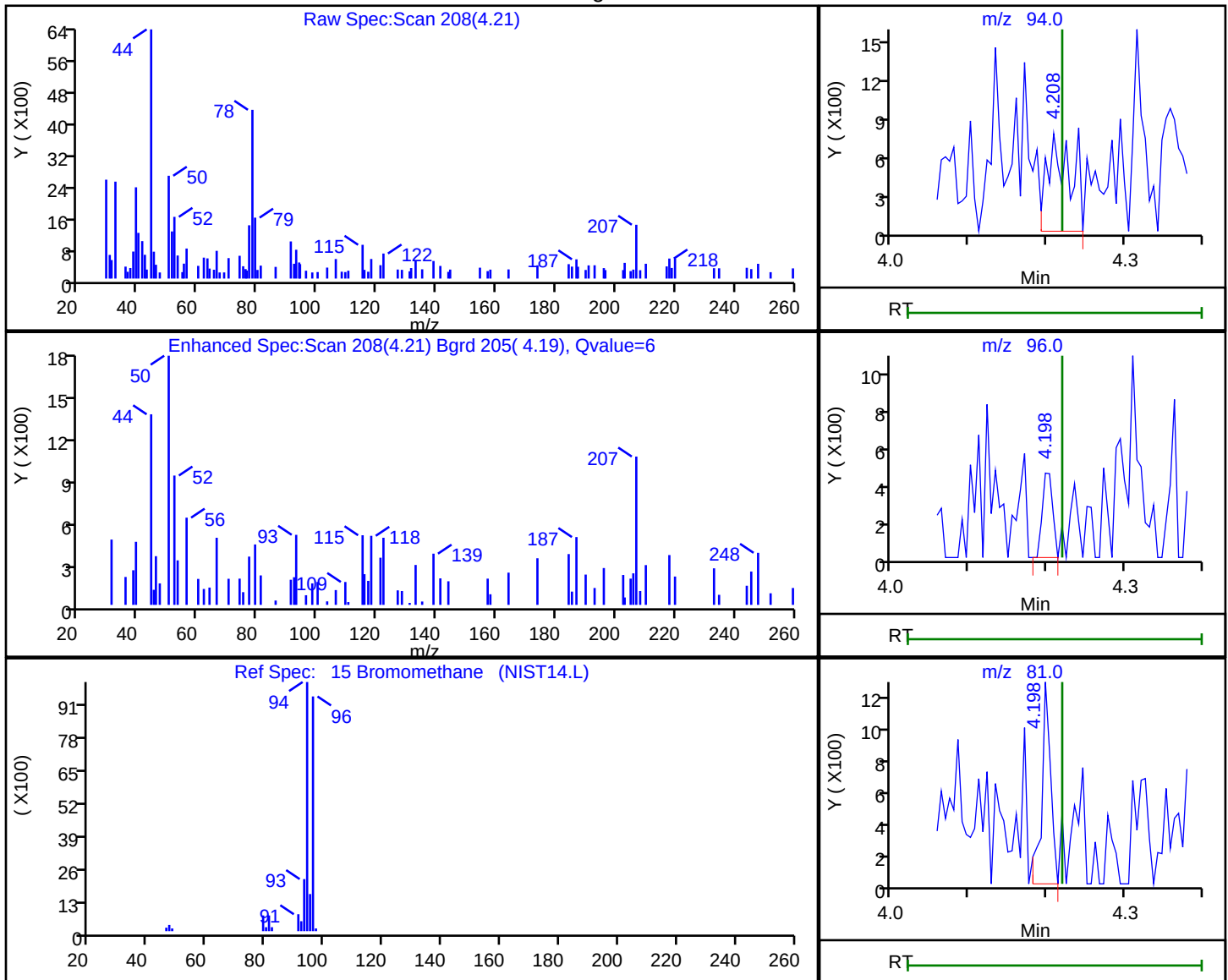
12 Vinyl chloride, CAS: 75-01-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D
Injection Date: 04-Oct-2019 23:26:30 Instrument ID: MR
Lims ID: 140-16882-A-4 Lab Sample ID: 140-16882-4
Client ID: SS-04
Operator ID: ALS Bottle#: 1 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.7200
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
4.21	94.00	1587	0.013471
4.20	96.00	396	
4.20	81.00	1015	

Reviewer: barlozhetskayaa, 06-Oct-2019 17:08:51

Audit Action: Marked Compound Undetected

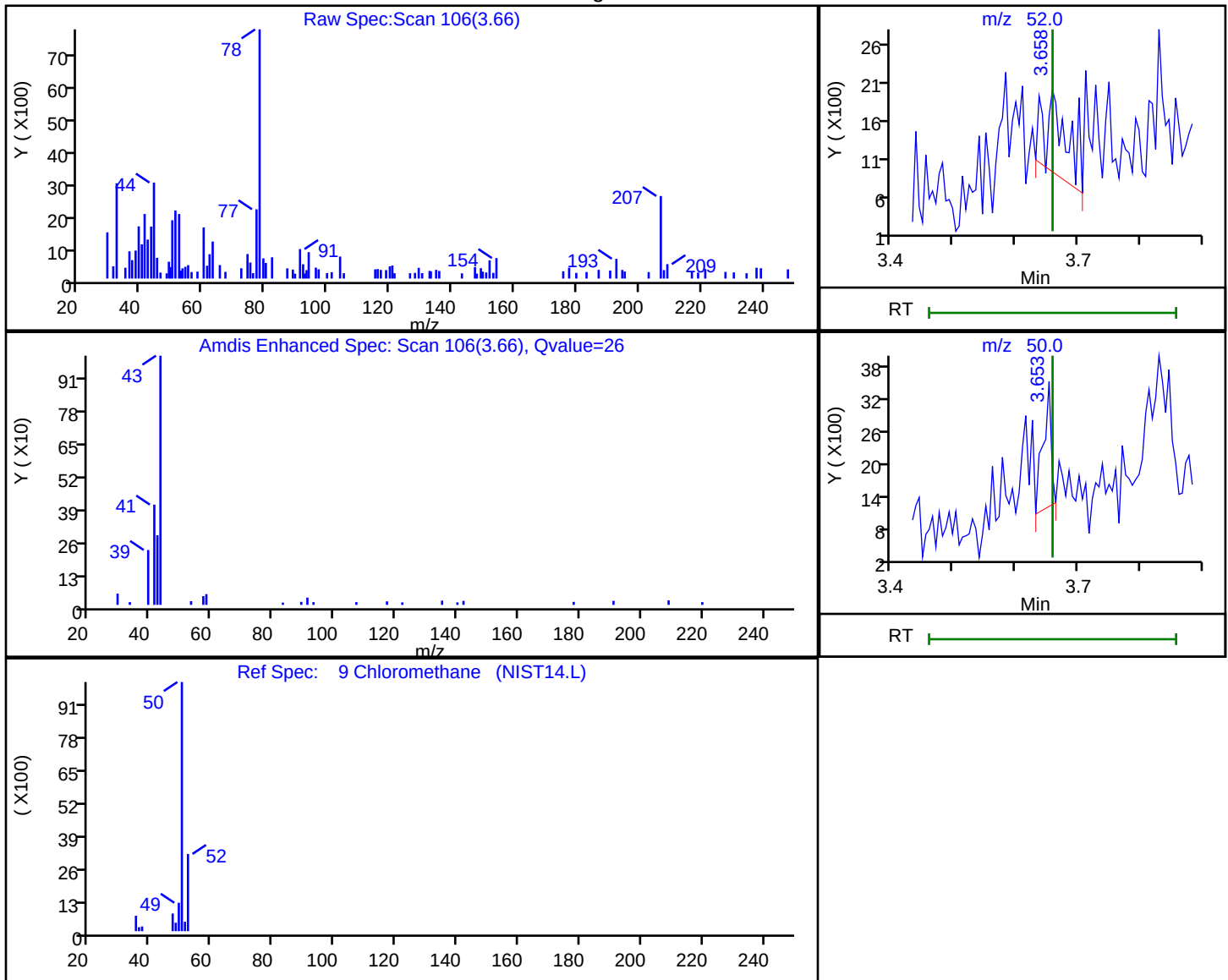
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RJ04P201.D
Injection Date: 04-Oct-2019 23:26:30 Instrument ID: MR
Lims ID: 140-16882-A-4 Lab Sample ID: 140-16882-4
Client ID: SS-04
Operator ID: ALS Bottle#: 1 Worklist Smp#: 21
Purge Vol: 500.000 mL Dil. Factor: 1.7200
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Processing Results



RT	Mass	Response	Amount
3.66	52.00	2629	0.069570
3.65	50.00	2025	

Reviewer: barlozhetskayaa, 06-Oct-2019 17:08:55

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-05 Lab Sample ID: 140-16882-5
 Matrix: Air Lab File ID: RJ03P105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:23
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.31		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.088		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	0.53		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.56		0.080	
100-44-7	Benzyl chloride	126.58	ND	*	0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	0.048		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	0.11		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-05 Lab Sample ID: 140-16882-5
 Matrix: Air Lab File ID: RJ03P105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:23
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	0.22		0.080	
64-17-5	Ethanol	46.07	35		2.0	
100-41-4	Ethylbenzene	106.17	0.33		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.23		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.65	B	0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.96		0.080	
95-47-6	o-Xylene	106.17	0.37		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	0.58		0.32	
127-18-4	Tetrachloroethene	165.83	1.3		0.080	
108-88-3	Toluene	92.14	1.2		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	1.4		0.036	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	0.22		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-05 Lab Sample ID: 140-16882-5
 Matrix: Air Lab File ID: RJ03P105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:23
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.5		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.43		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.6		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.8		0.26	
100-44-7	Benzyl chloride	126.58	ND	*	0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.30		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	0.44		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-05 Lab Sample ID: 140-16882-5
 Matrix: Air Lab File ID: RJ03P105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 10:23
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.1		0.40	
64-17-5	Ethanol	46.07	66		3.8	
100-41-4	Ethylbenzene	106.17	1.4		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.81		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	2.3	B	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	4.1		0.35	
95-47-6	o-Xylene	106.17	1.6		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	1.7		0.97	
127-18-4	Tetrachloroethene	165.83	9.0		0.54	
108-88-3	Toluene	92.14	4.7		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	7.5		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	0.57		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	96		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D
 Lims ID: 140-16882-A-5
 Client ID: SS-05
 Sample Type: Client
 Inject. Date: 03-Oct-2019 20:41:30 ALS Bottle#: 5 Worklist Smp#: 13
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013261-013
 Misc. Info.: 140-16882-a-5
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:01:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	88	327799	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.749	0.000	93	1892083	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	86	1457722	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	95	828732	3.85	
8 Dichlorodifluoromethane	85	3.486	3.480	0.006	98	41024	0.2219	
9 Chloromethane	52	3.658	3.658	0.000	97	5084	0.1440	
12 Vinyl chloride	62	3.825	3.820	0.005	41	24800	0.2227	
17 Ethanol	31	4.446	4.440	0.006	98	1766391	35.2	
21 Trichlorofluoromethane	101	4.904	4.899	0.005	98	58140	0.2182	
29 2-Methyl-2-propanol	59	5.718	5.697	0.021	95	109546	0.5765	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.772	0.011	75	17464	0.0775	
31 Methylene Chloride	84	5.961	5.950	0.011	92	81932	0.6478	
39 2-Butanone (MEK)	72	7.756	7.746	0.010	99	29169	0.5274	
40 Hexane	56	7.773	7.762	0.011	66	20556	0.2291	
42 cis-1,2-Dichloroethene	96	8.188	8.183	0.006	62	13141	0.1103	
44 Chloroform	83	8.522	8.528	-0.006	28	8015	0.0338	
51 Cyclohexane	69	10.183	10.178	0.005	65	8498	0.1572	
49 Benzene	78	10.178	10.178	0.000	94	205481	0.5631	
52 Carbon tetrachloride	117	10.194	10.205	-0.011	83	11523	0.0478	
55 Isooctane	57	10.965	10.965	0.000	96	48792	0.0861	
58 Trichloroethene	130	11.477	11.477	0.000	96	219732	1.40	
61 1,4-Dioxane	88	11.741	11.725	0.016	51	7871	0.1488	
64 4-Methyl-2-pentanone (MIBK	43	12.696	12.680	0.016	95	18909	0.0634	
67 Toluene	91	13.564	13.569	-0.005	93	442576	1.24	
73 Tetrachloroethene	129	14.718	14.723	-0.005	94	190043	1.32	
76 Ethylbenzene	91	15.894	15.894	0.000	97	157530	0.3260	
77 m-Xylene & p-Xylene	91	16.050	16.050	0.000	95	354908	0.9553	
79 Styrene	104	16.519	16.519	0.000	93	9370	0.0360	
80 o-Xylene	91	16.584	16.578	0.006	97	137753	0.3654	
87 1,3,5-Trimethylbenzene	120	17.964	17.980	-0.016	93	19723	0.0876	
92 1,2,4-Trimethylbenzene	105	18.417	18.433	-0.016	95	148382	0.3108	

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Worklist Smp#: 13

Client ID: SS-05

Purge Vol: 500.000 mL

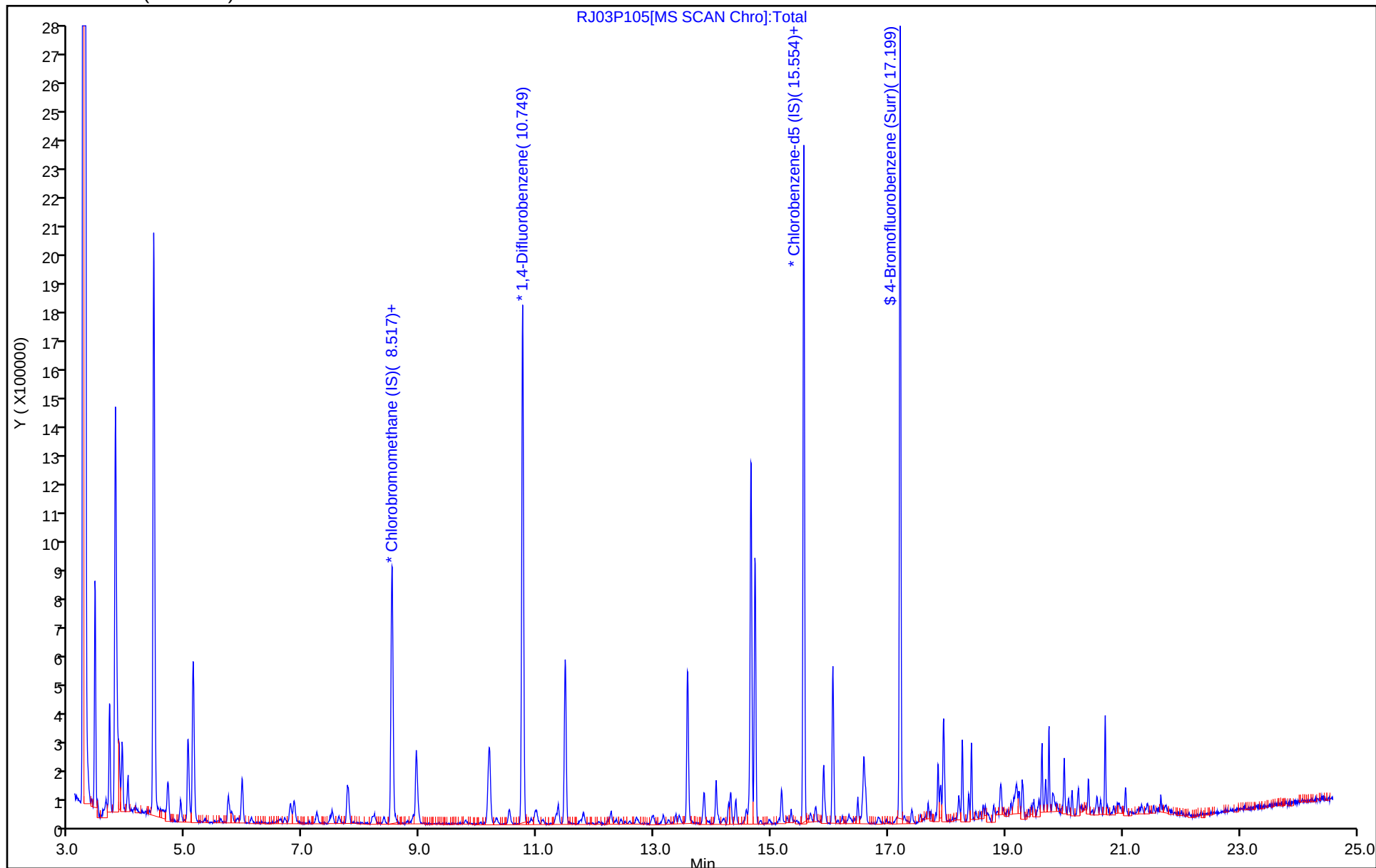
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D
Lims ID: 140-16882-A-5
Client ID: SS-05
Sample Type: Client
Inject. Date: 03-Oct-2019 20:41:30 ALS Bottle#: 5 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013261-013
Misc. Info.: 140-16882-a-5
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:01:15

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.85	96.19

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

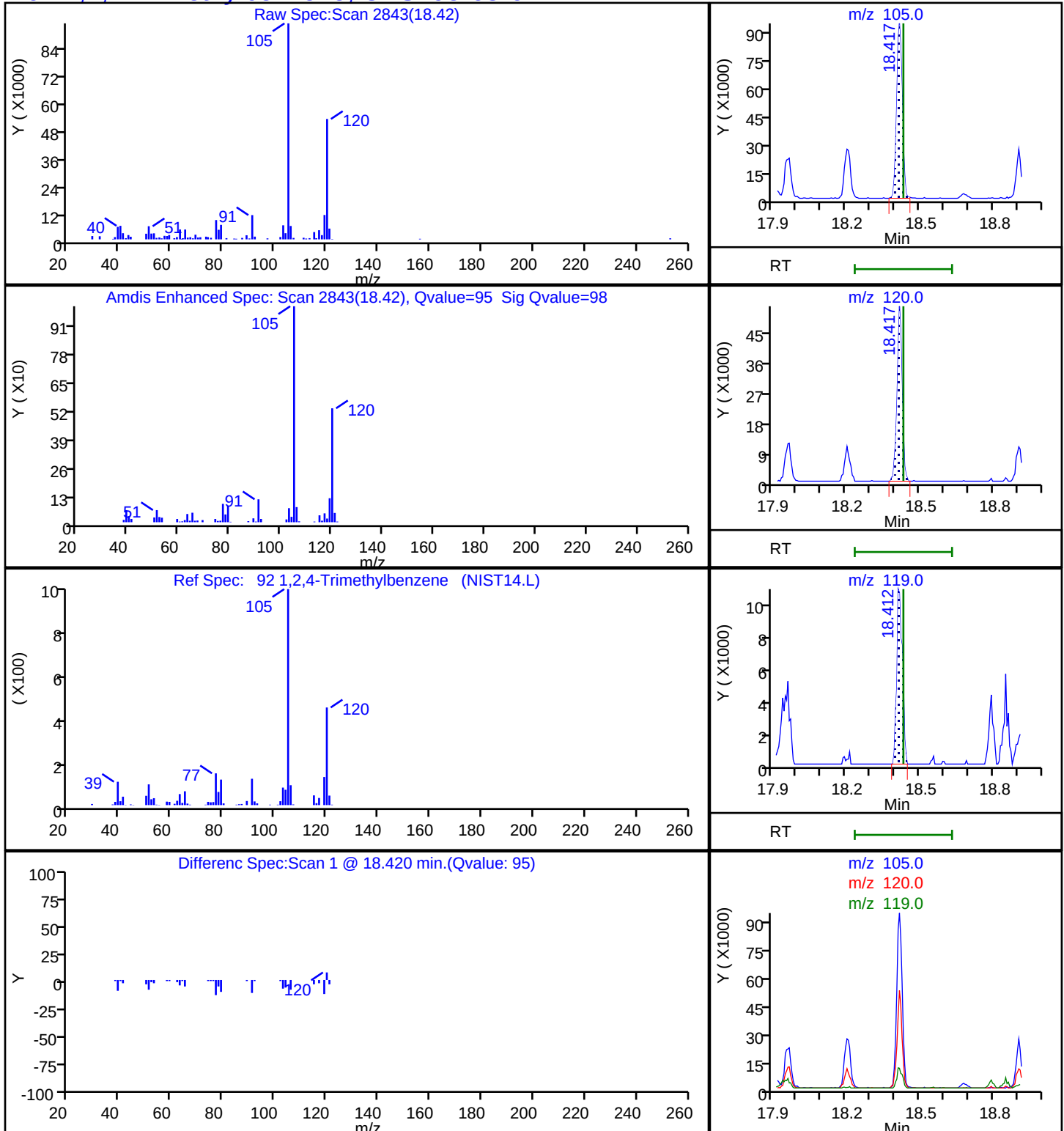
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

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

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

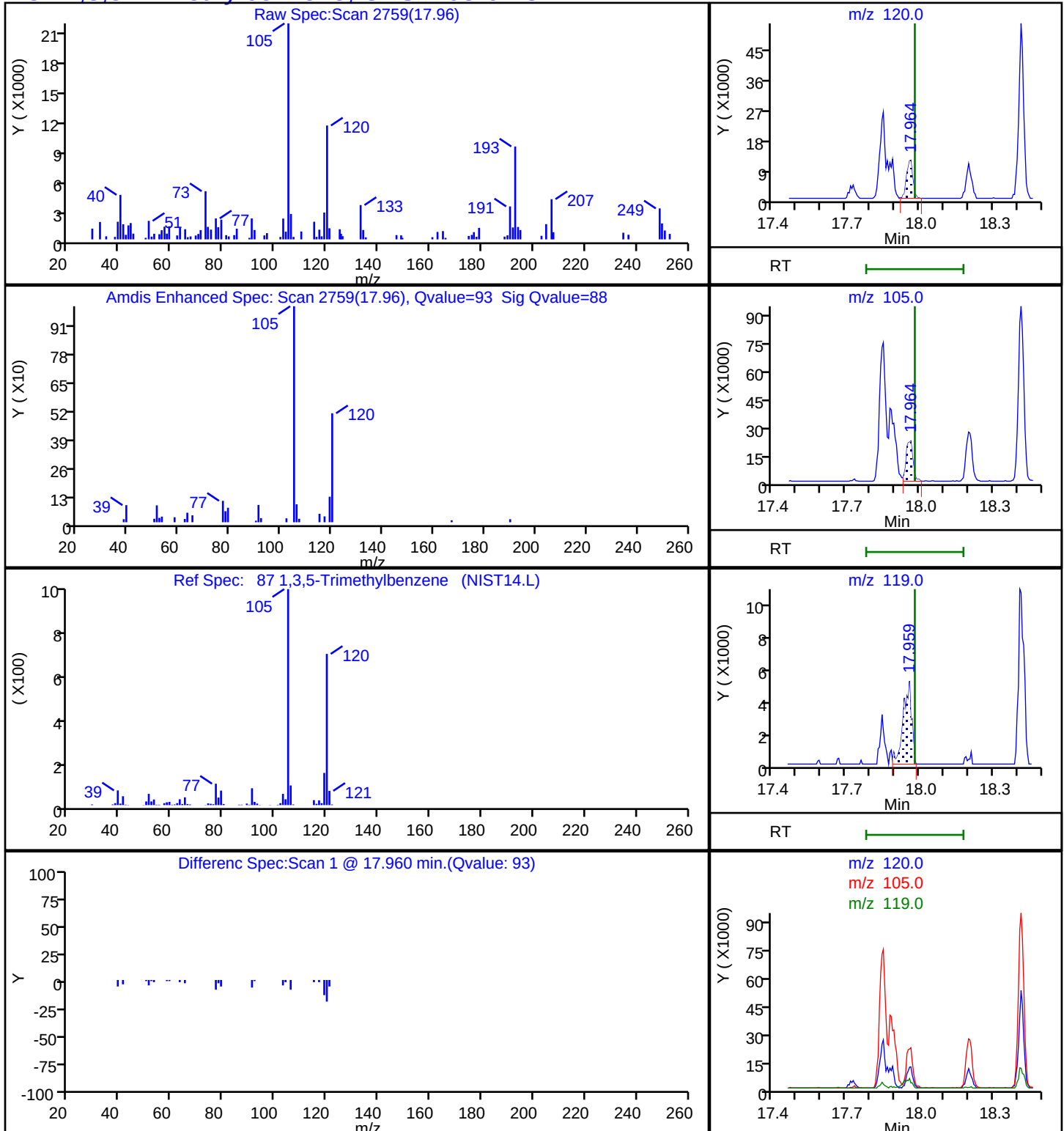
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

87 1,3,5-Trimethylbenzene, CAS: 108-67-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

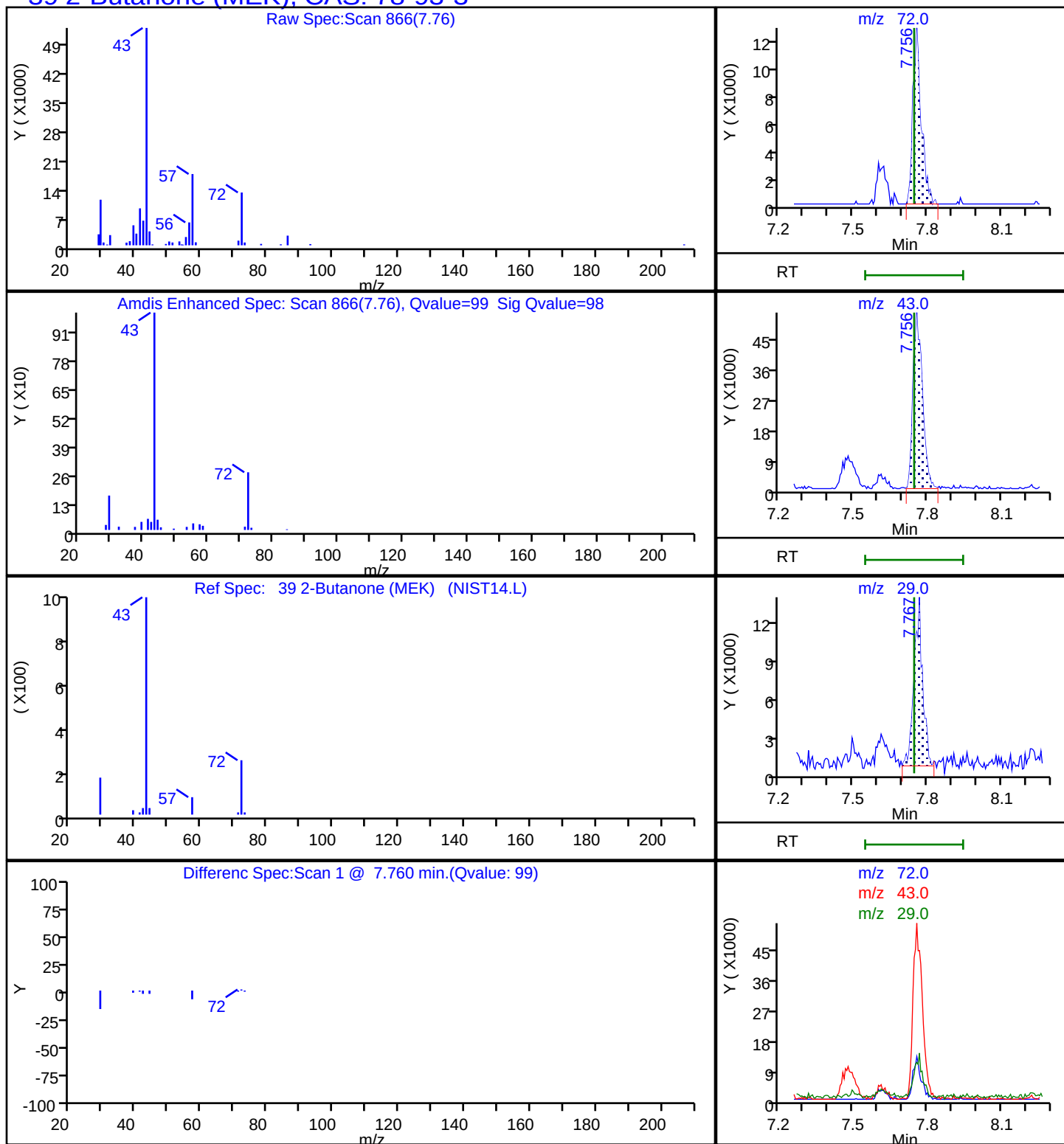
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

39 2-Butanone (MEK), CAS: 78-93-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

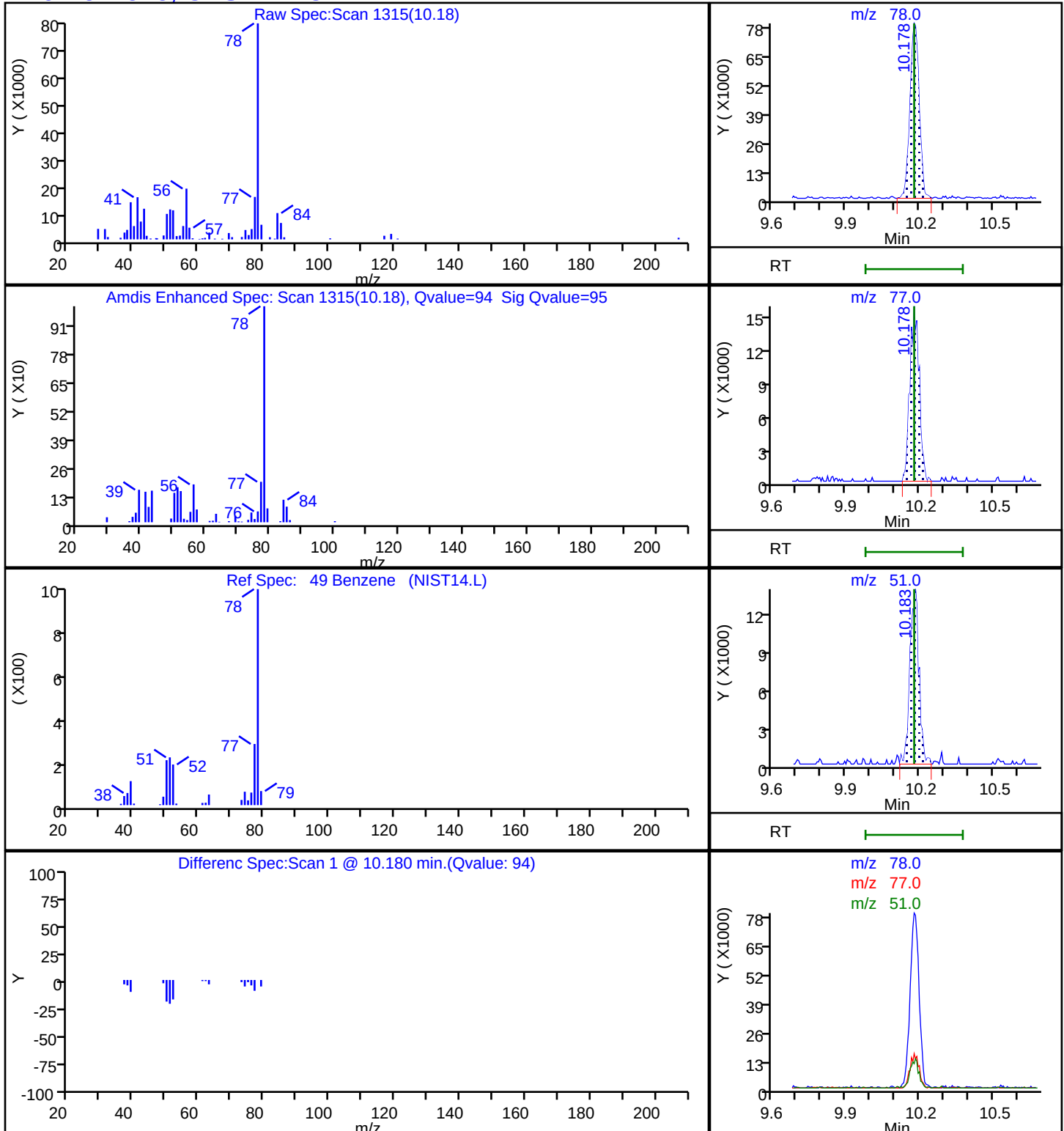
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

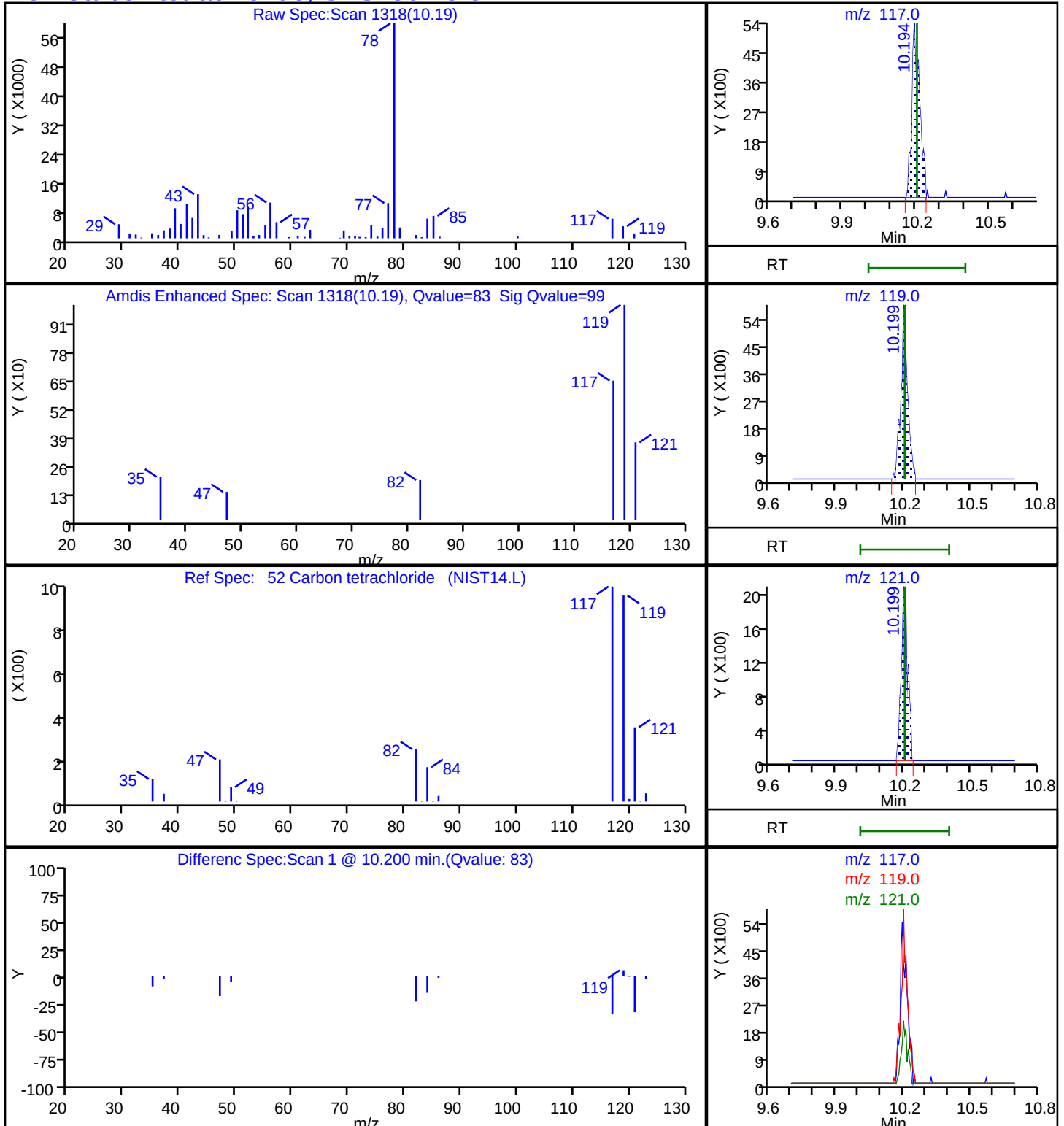
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

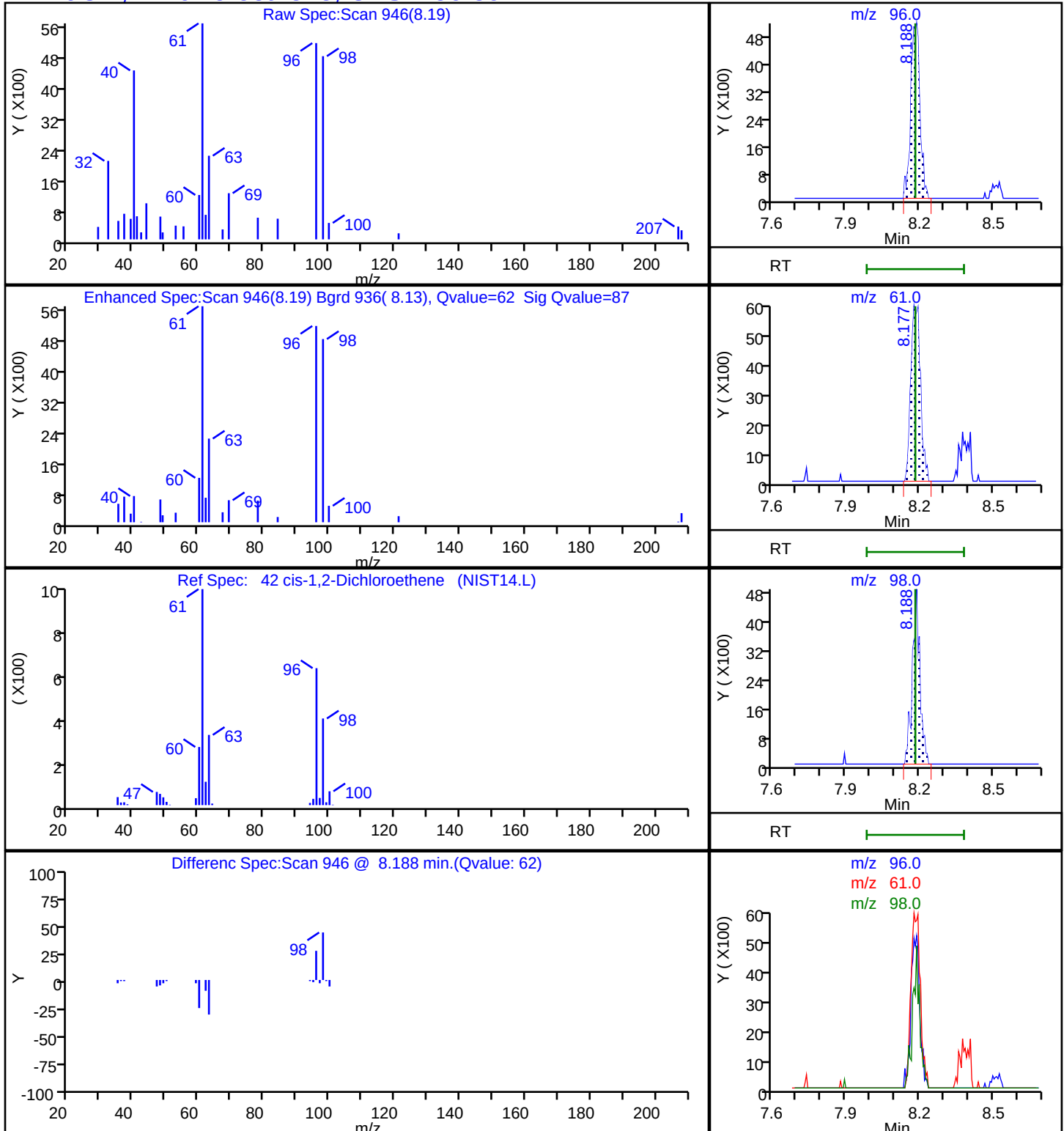
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

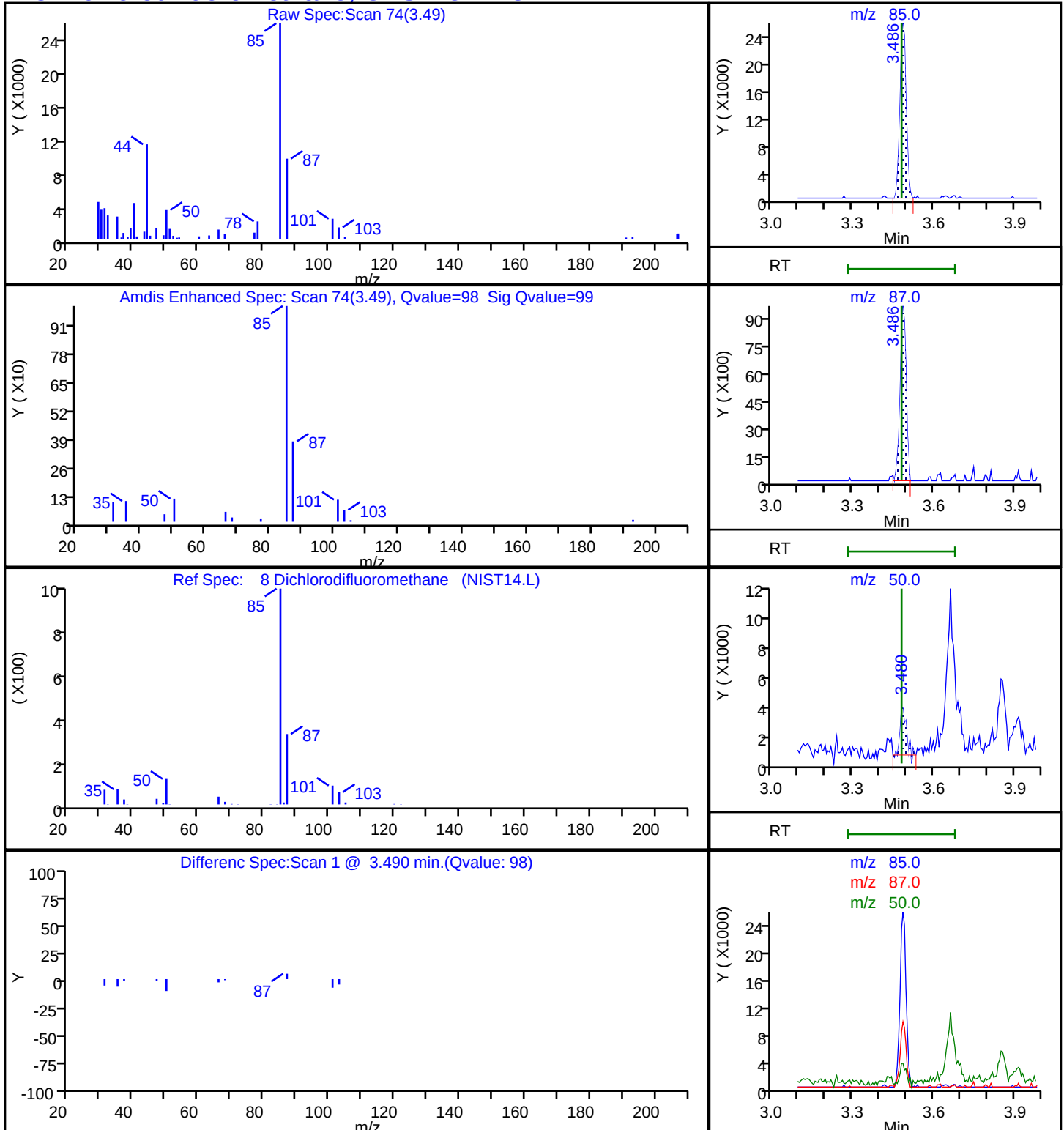
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#: 5

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

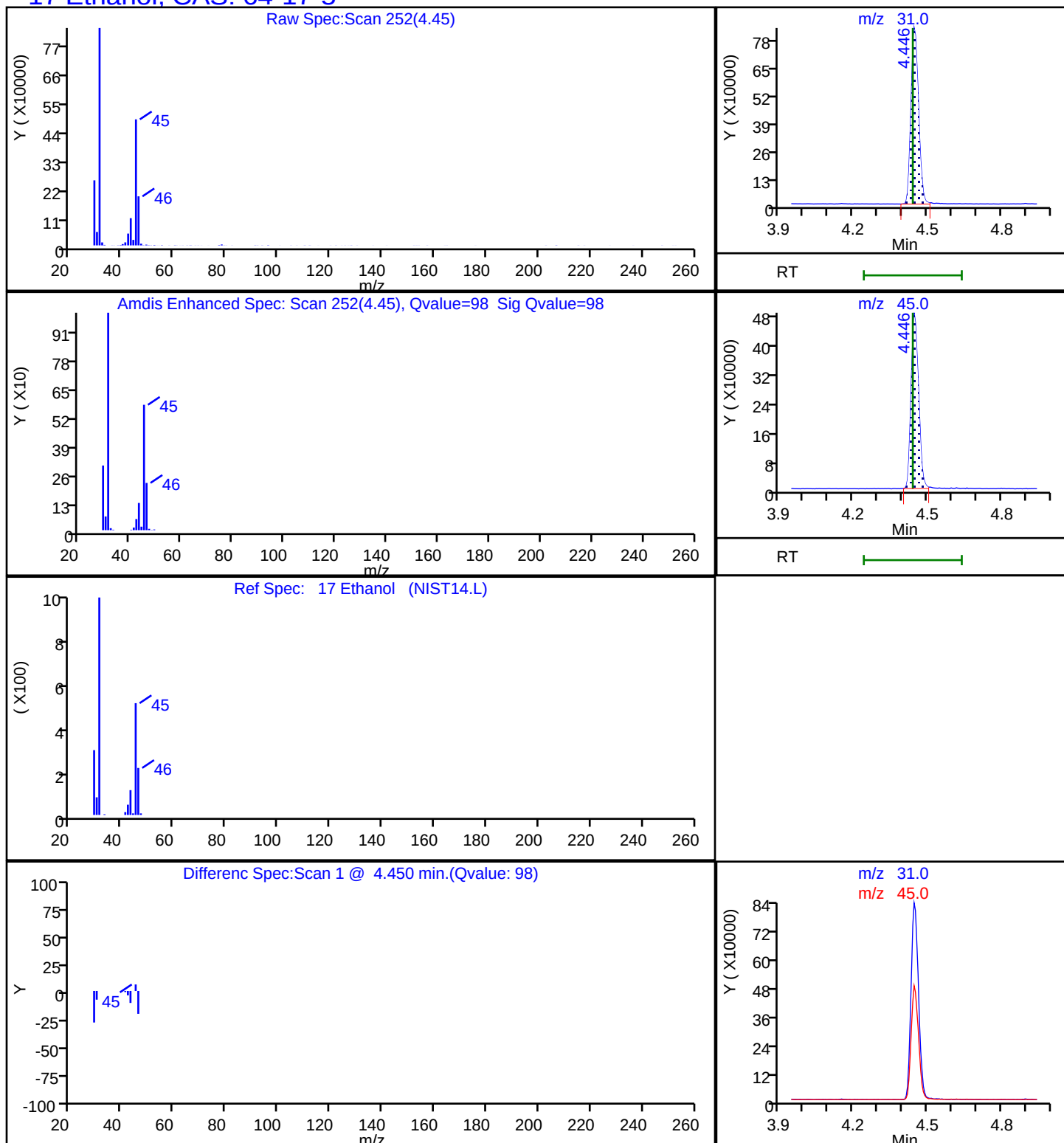
Method: MR TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

17 Ethanol, CAS: 64-17-5



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

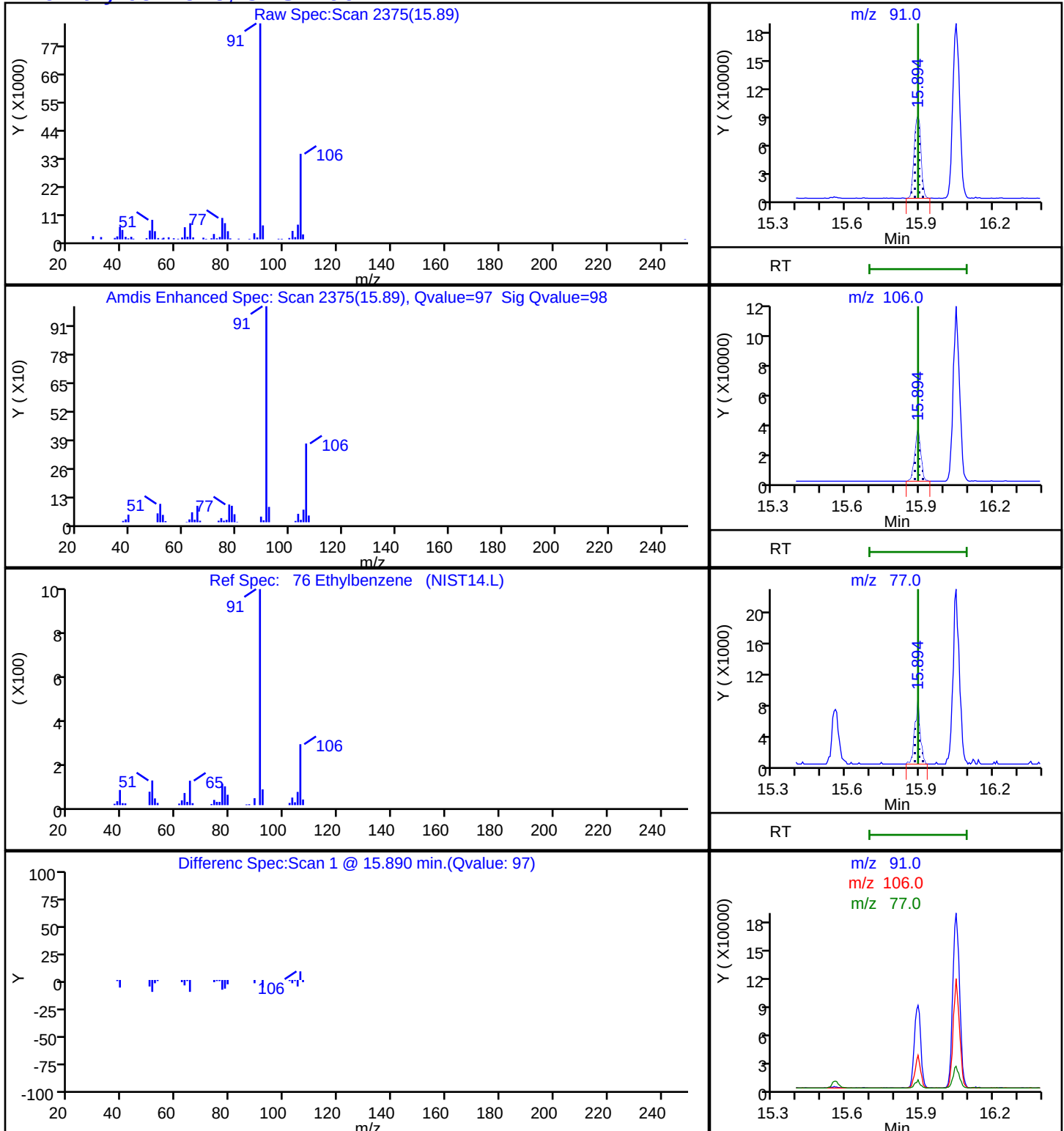
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Ethylbenzene, CAS: 100-41-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

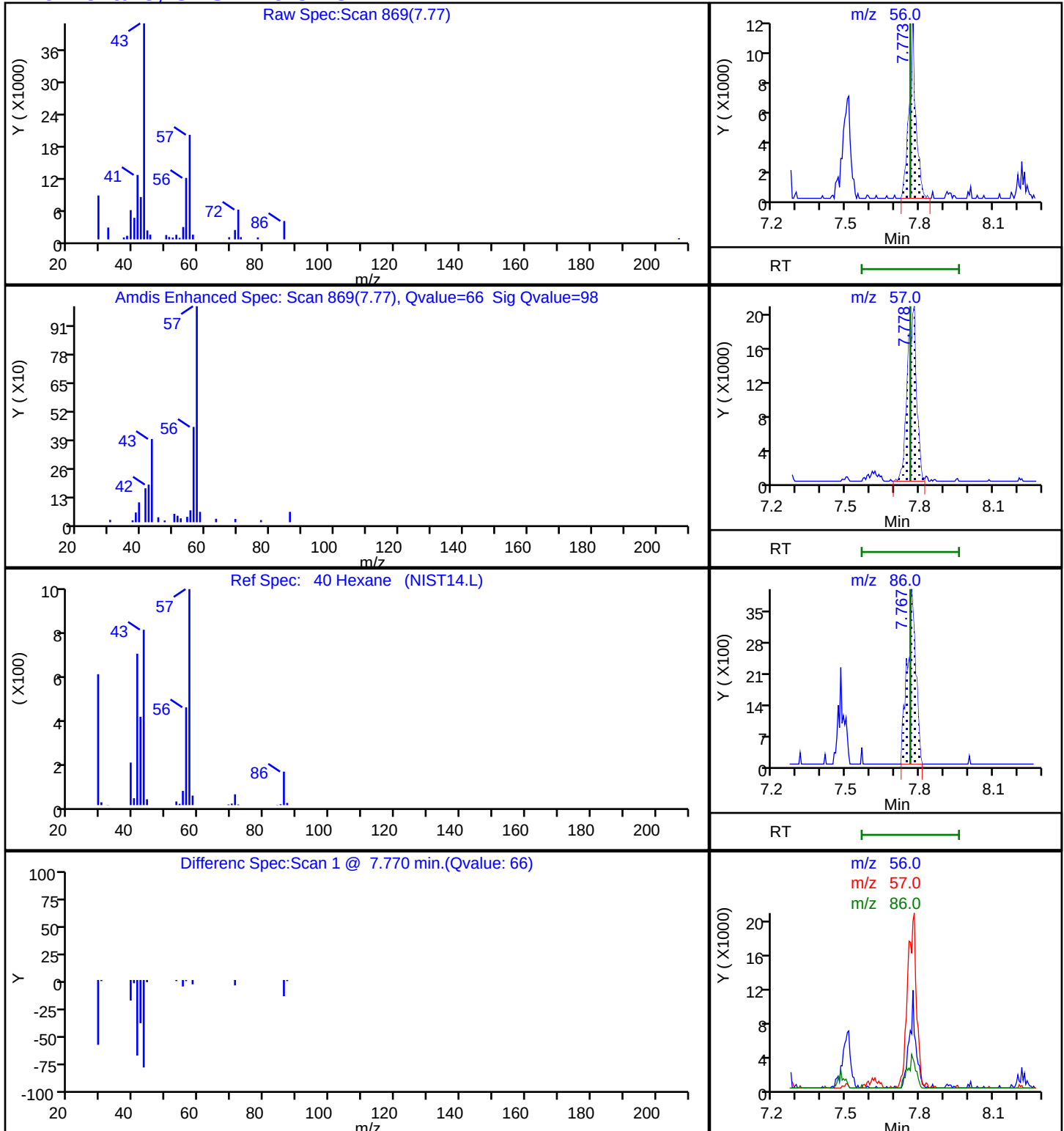
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

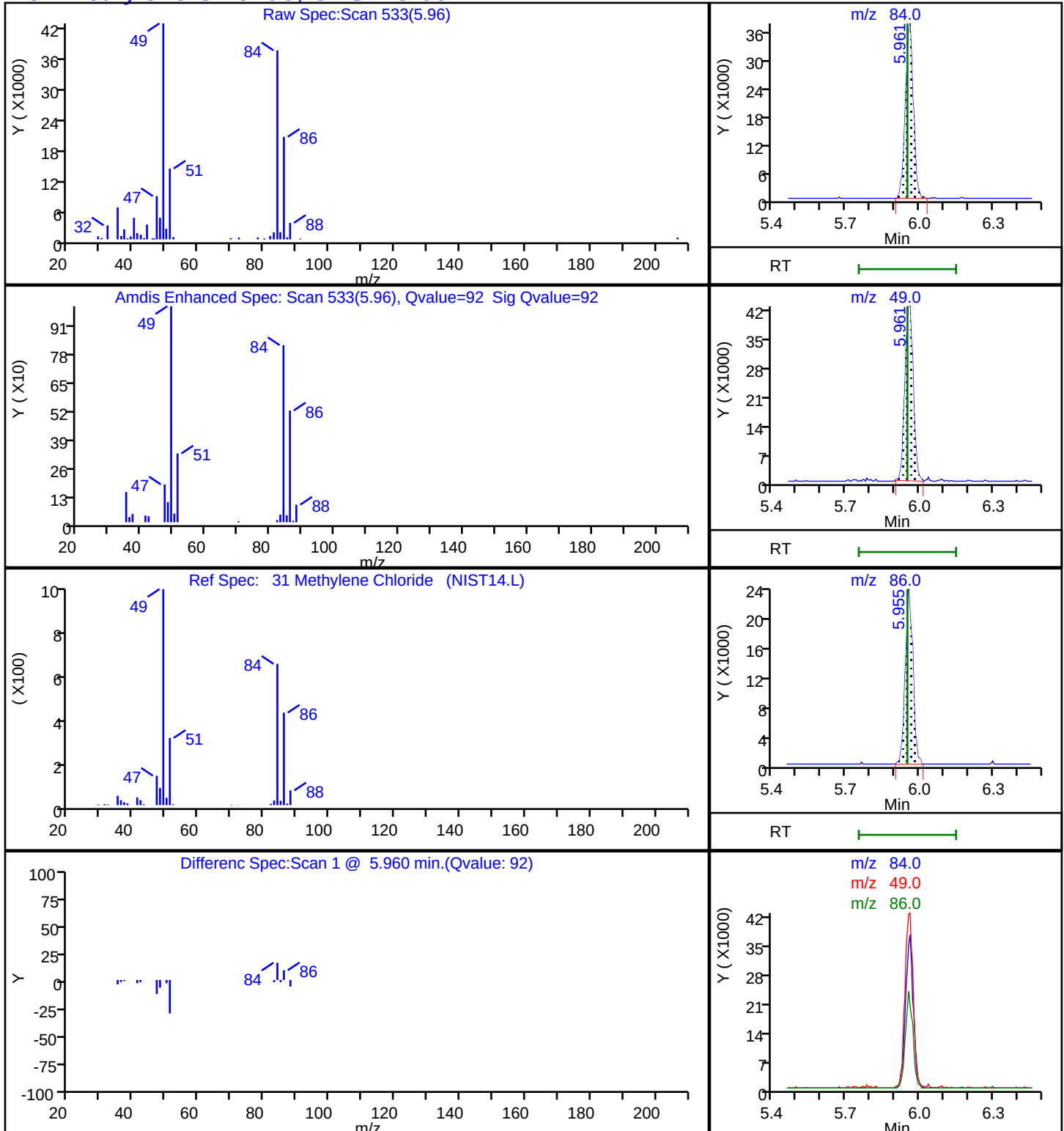
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

5

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

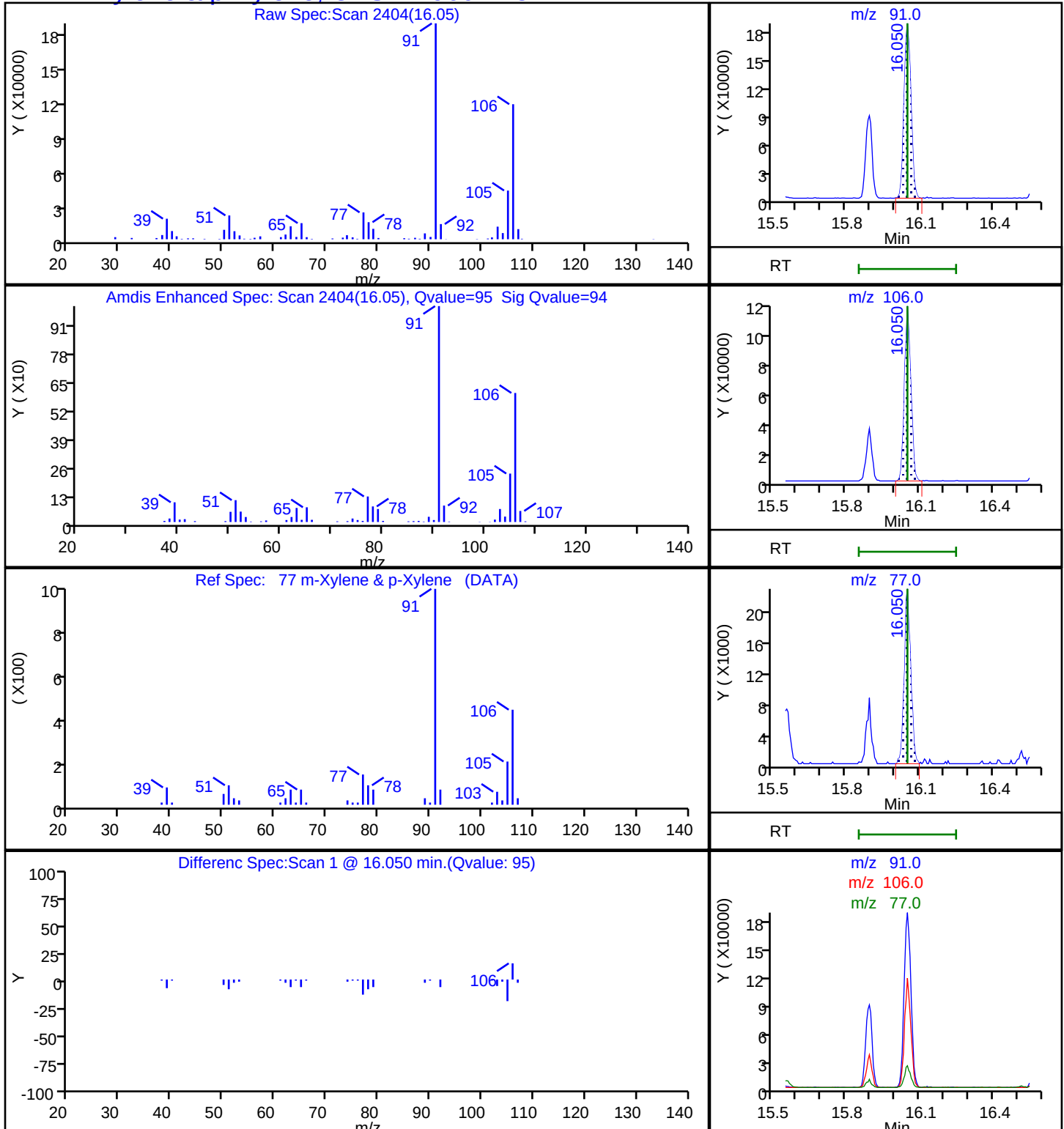
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

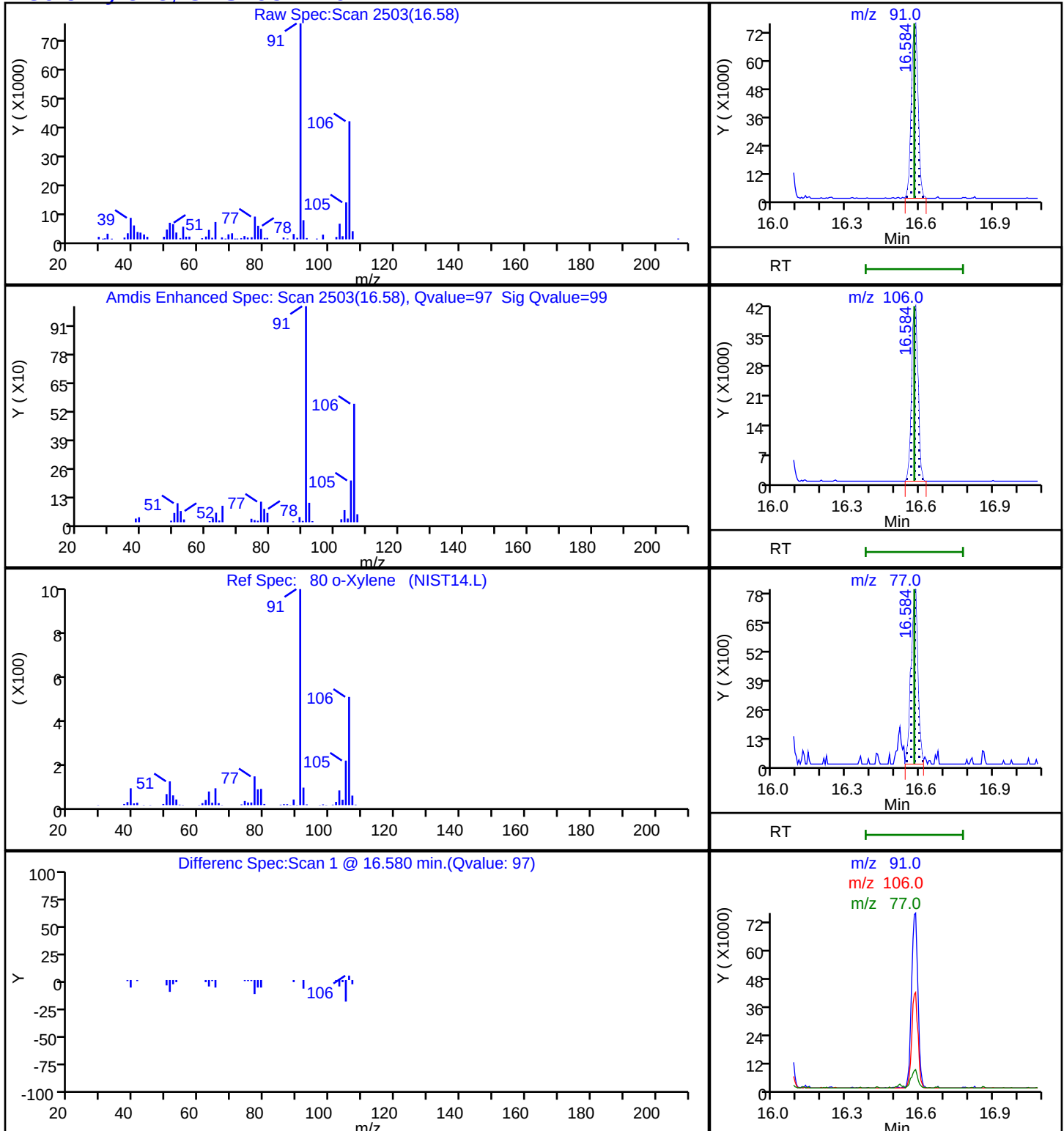
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

80 o-Xylene, CAS: 95-47-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

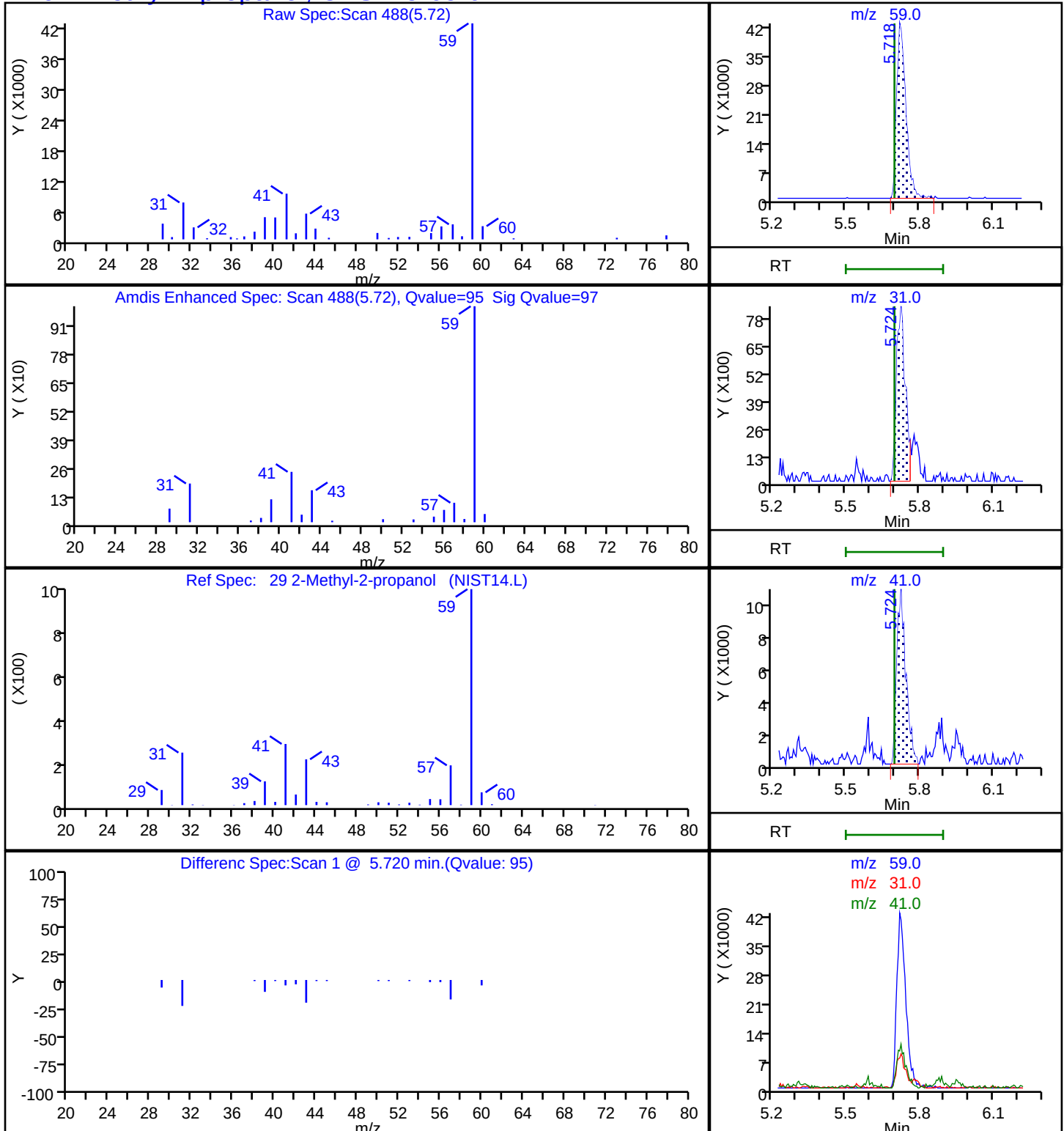
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

29 2-Methyl-2-propanol, CAS: 75-65-0

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

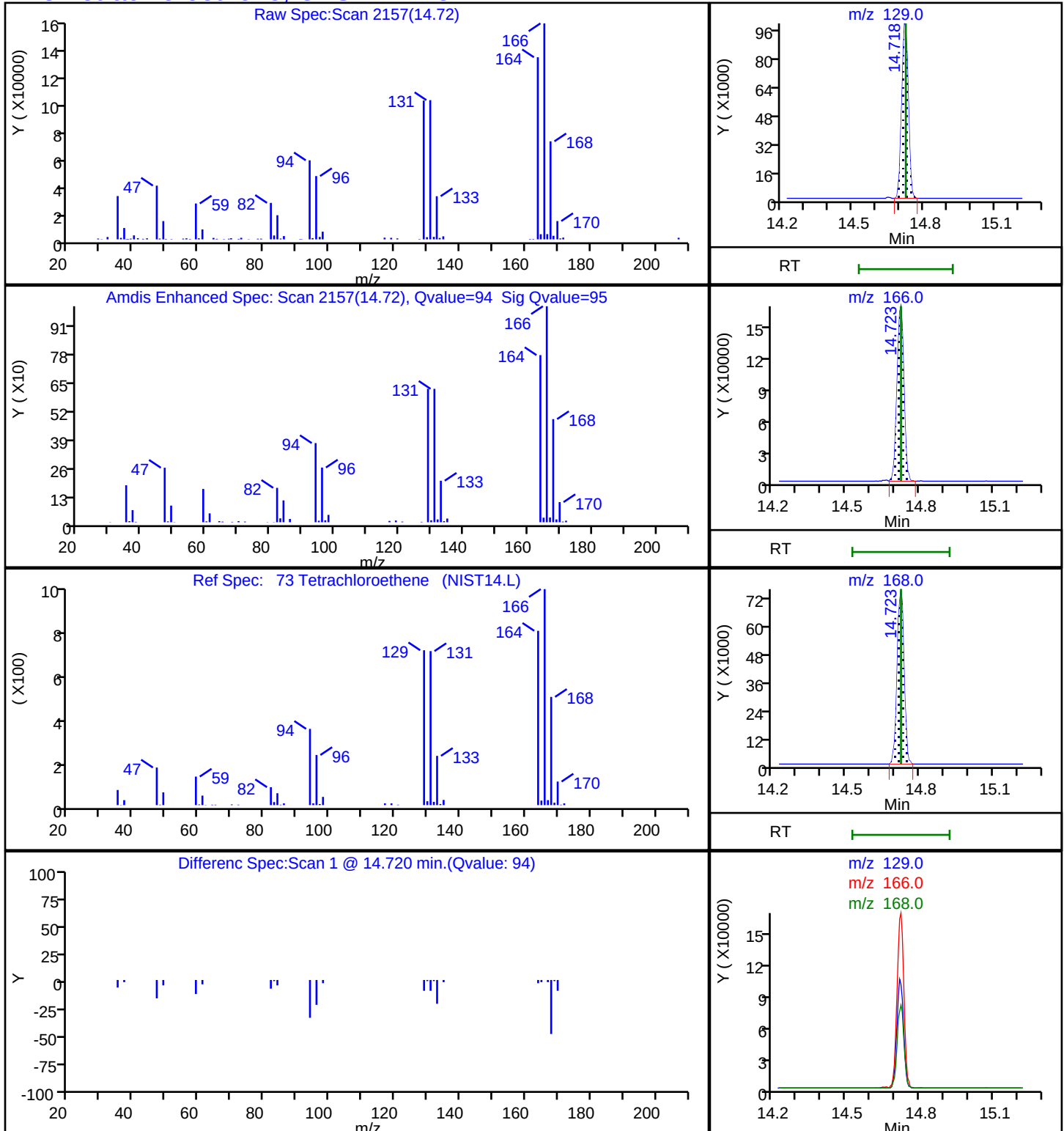
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

73 Tetrachloroethene, CAS: 127-18-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

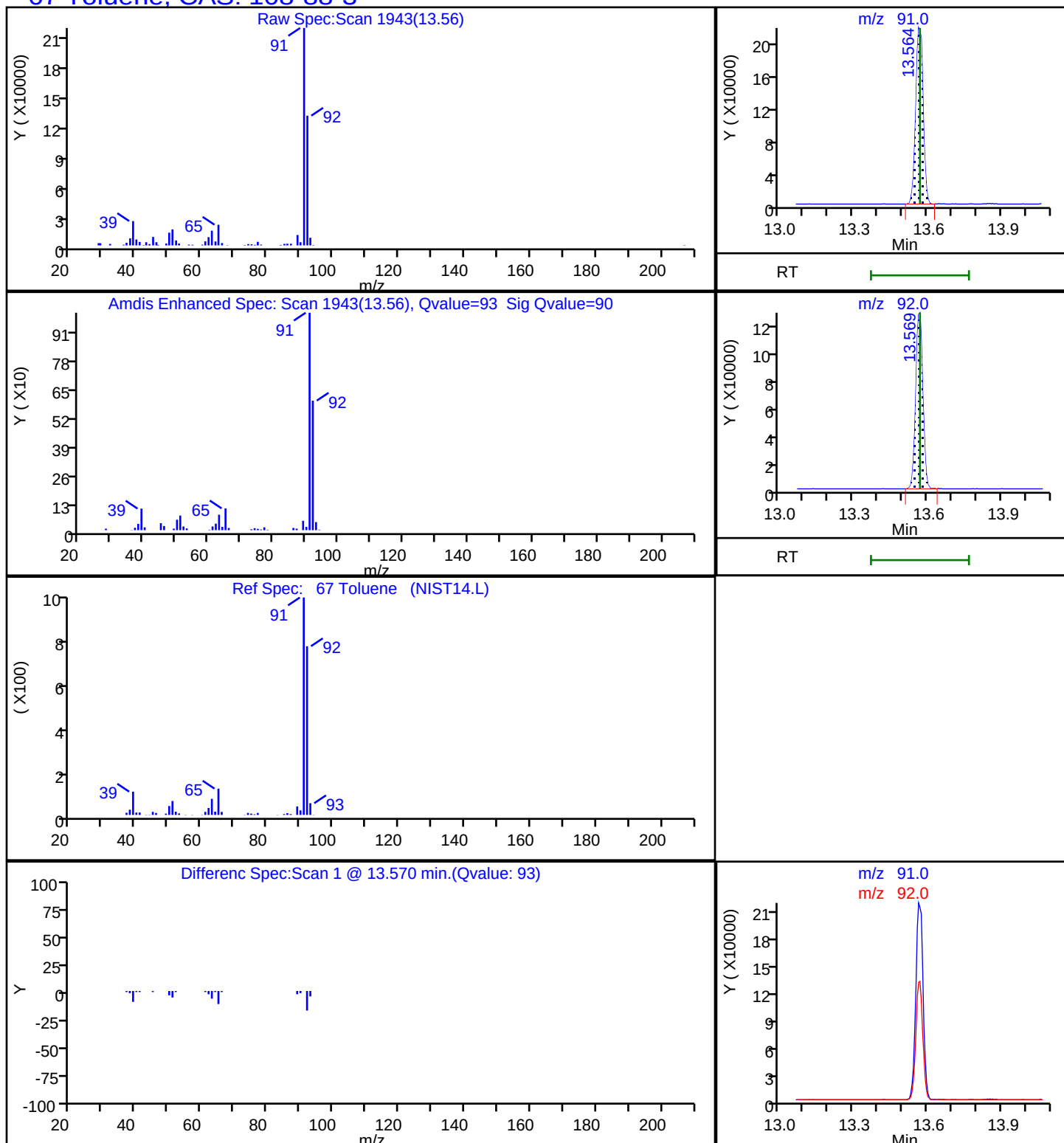
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

67 Toluene, CAS: 108-88-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

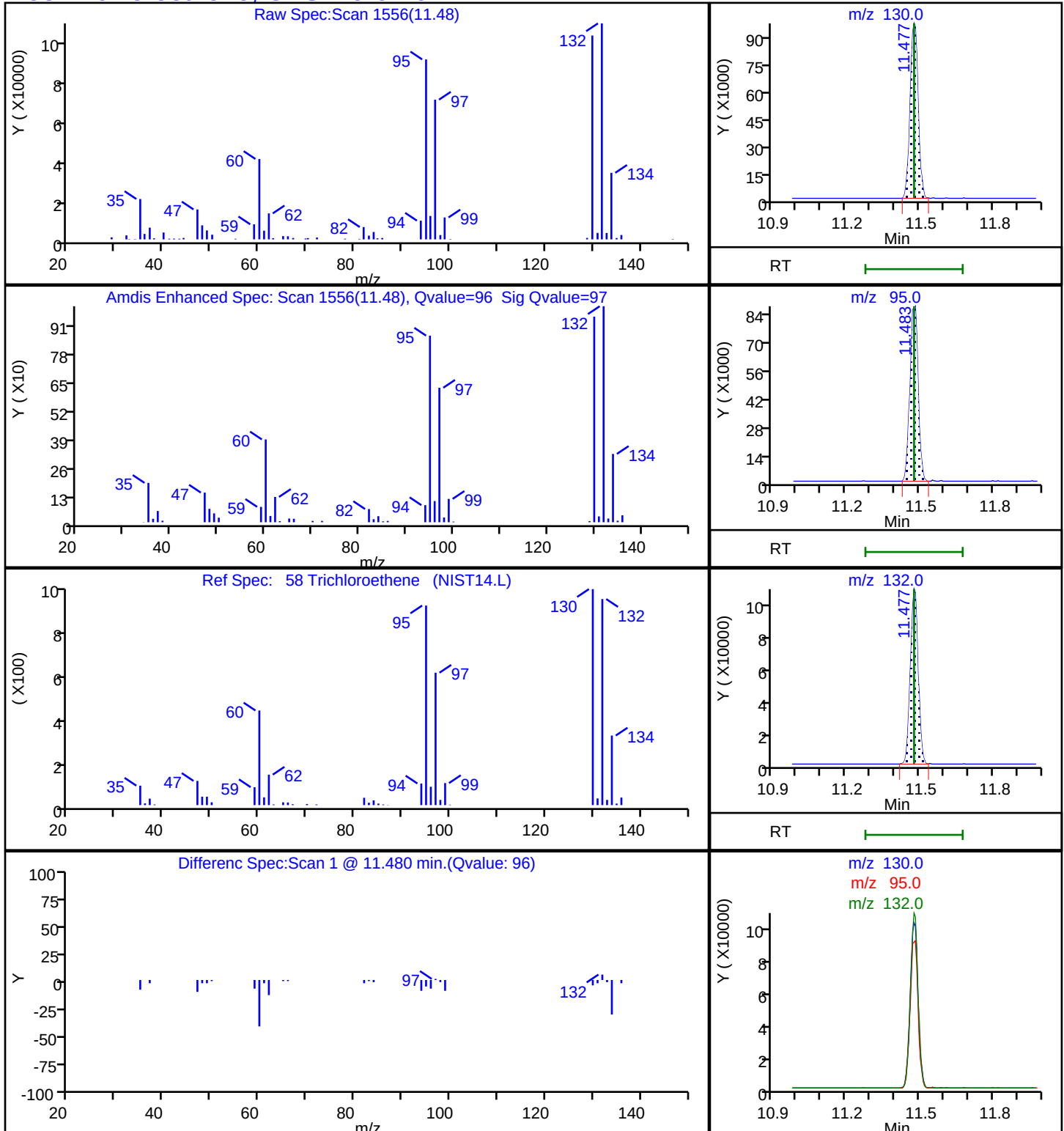
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

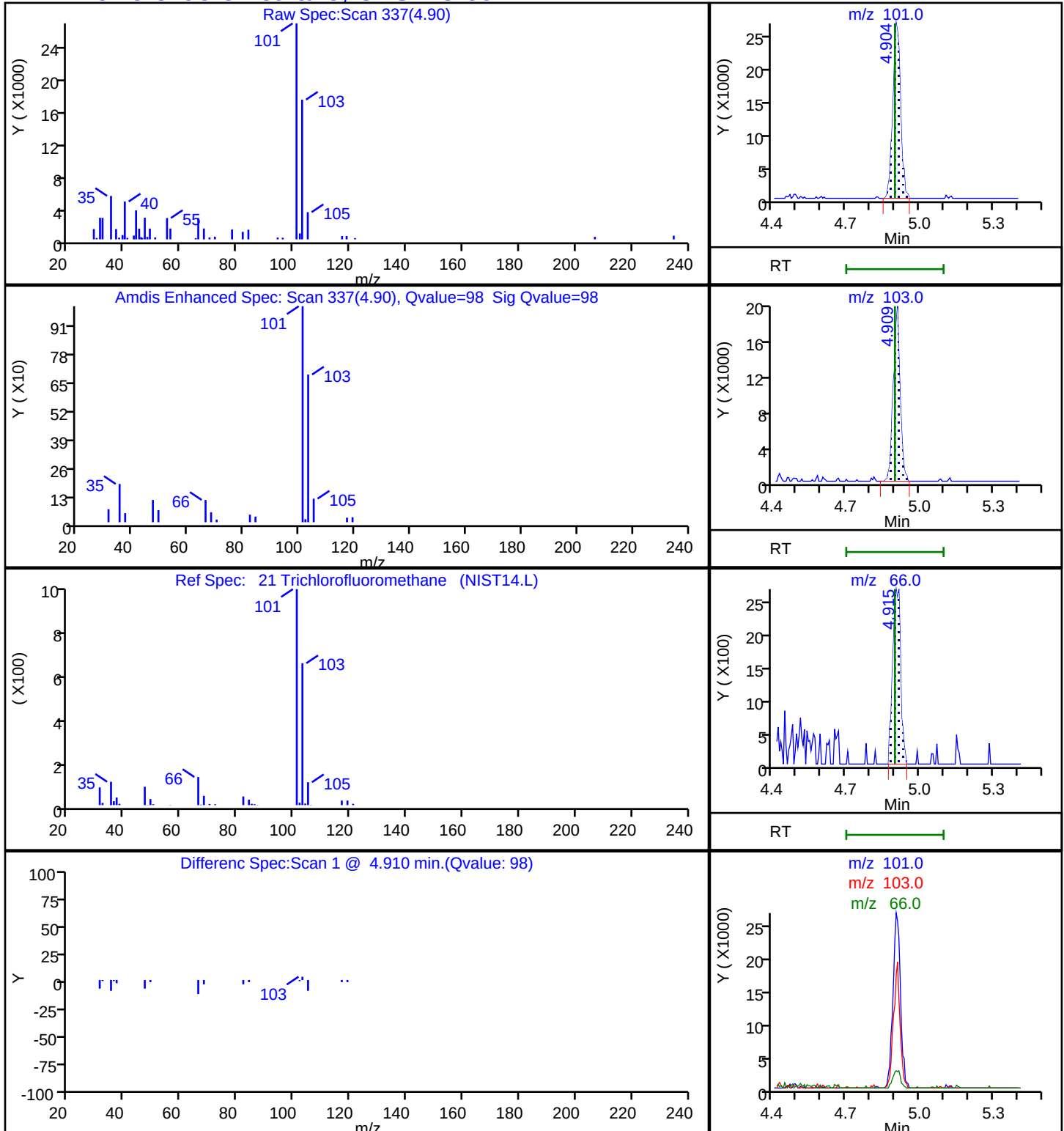
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D

Injection Date: 03-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-5

Lab Sample ID: 140-16882-5

Client ID: SS-05

Operator ID:

ALS Bottle#:

Worklist Smp#: 13

Purge Vol: 500.000 mL

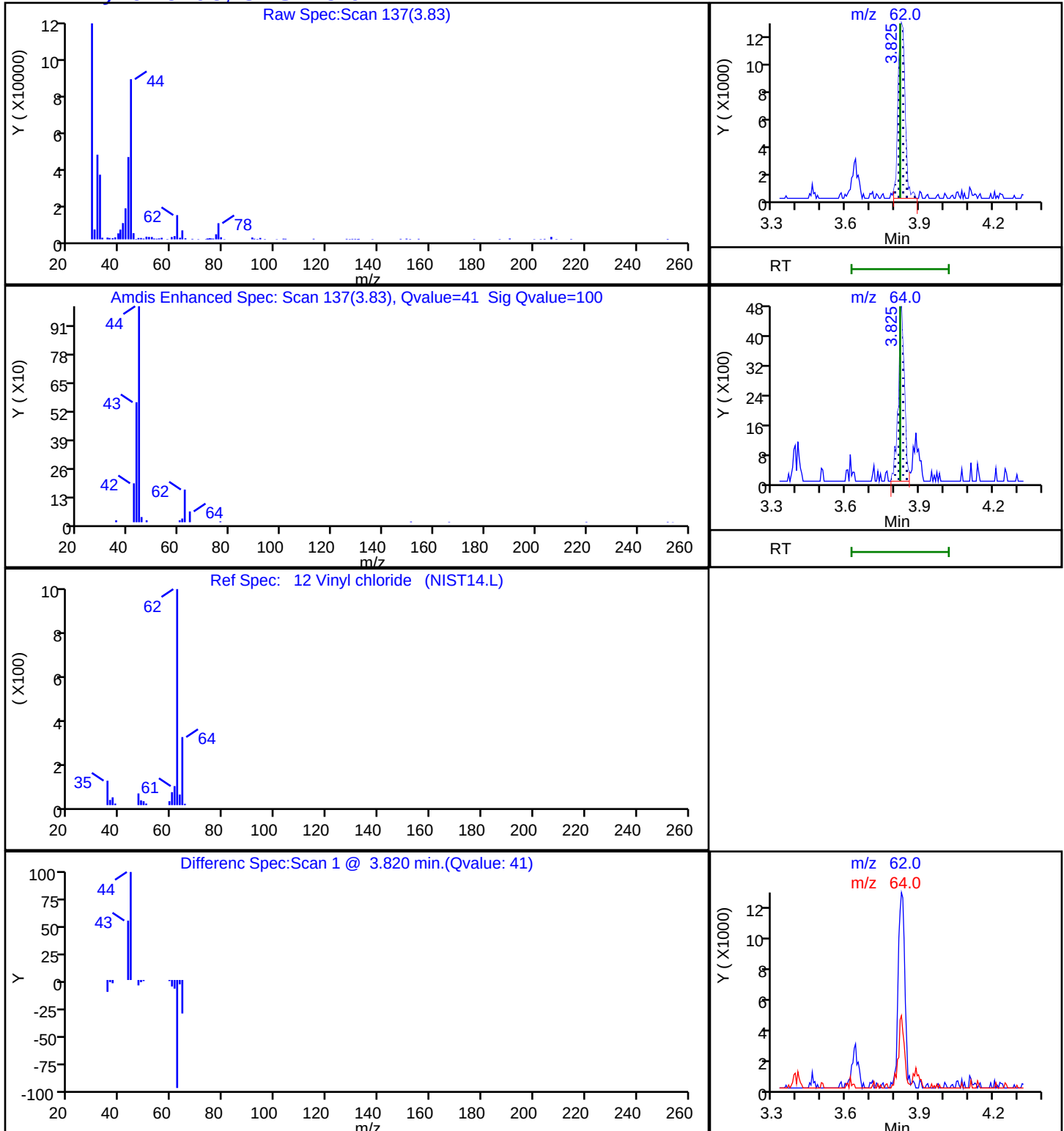
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

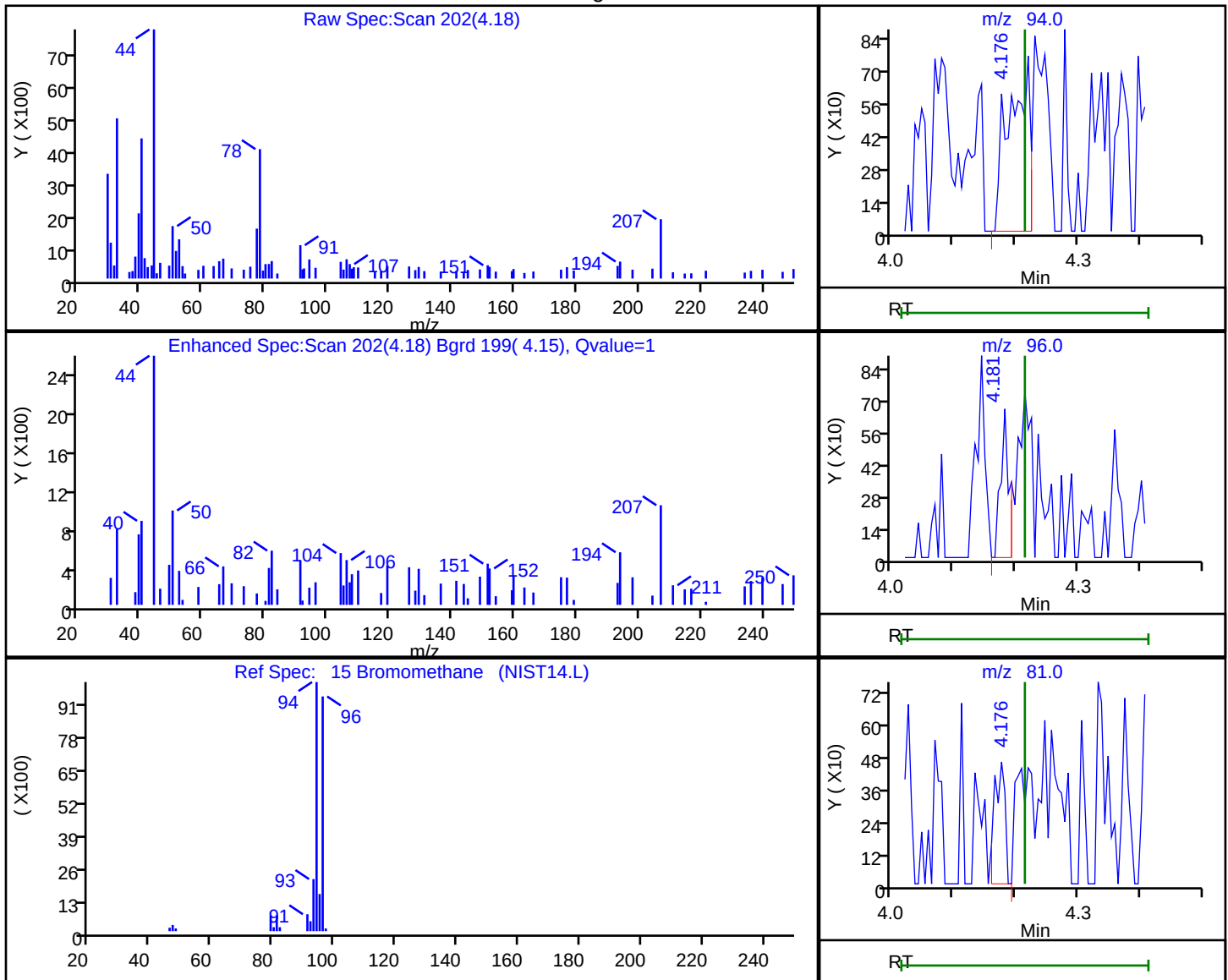
12 Vinyl chloride, CAS: 75-01-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D
Injection Date: 03-Oct-2019 20:41:30 Instrument ID: MR
Lims ID: 140-16882-A-5 Lab Sample ID: 140-16882-5
Client ID: SS-05
Operator ID: ALS Bottle#: 5 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
4.18	94.00	1754	0.015930
4.18	96.00	619	
4.18	81.00	536	

Reviewer: tajh, 04-Oct-2019 11:00:44

Audit Action: Marked Compound Undetected

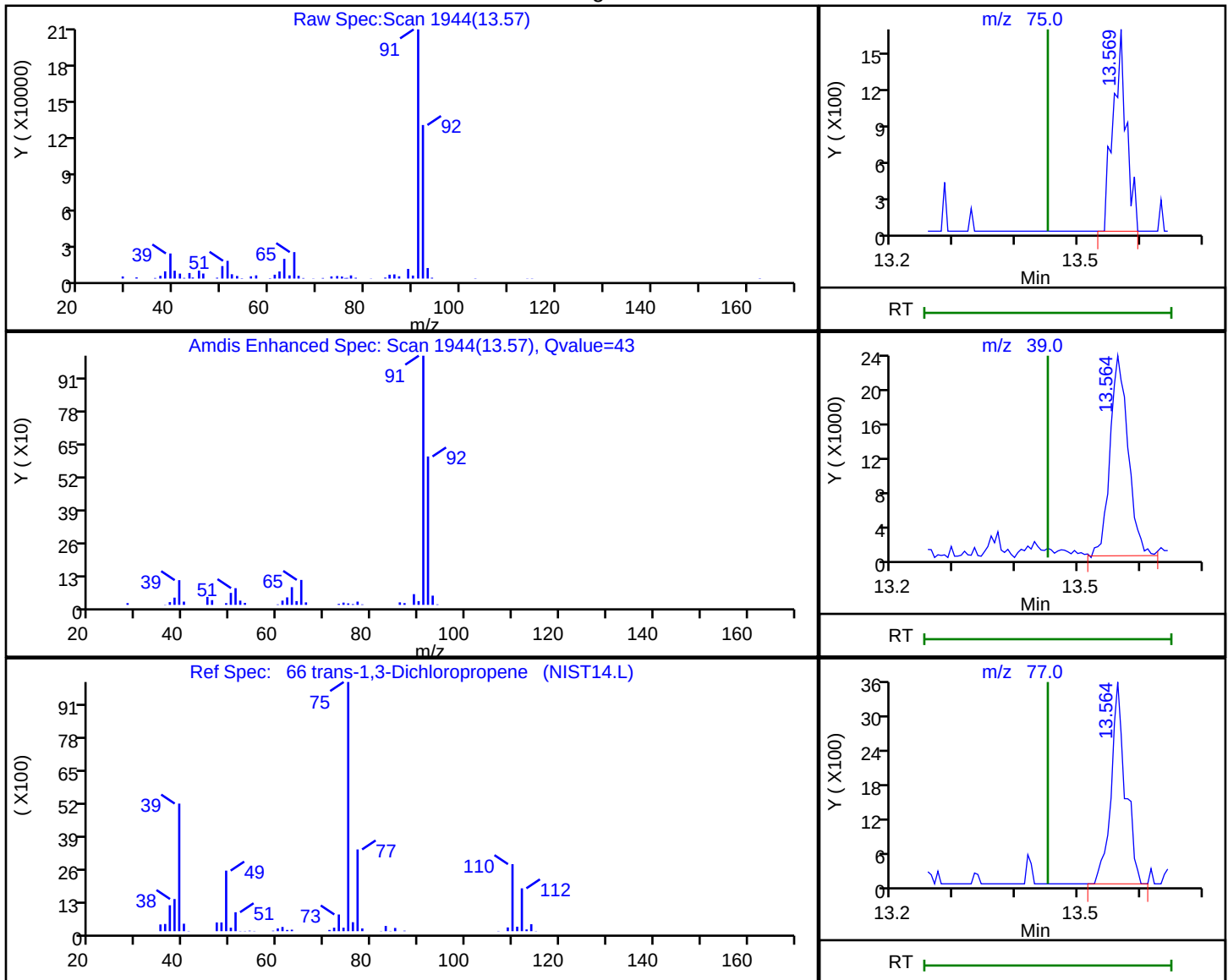
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P105.D
Injection Date: 03-Oct-2019 20:41:30 Instrument ID: MR
Lims ID: 140-16882-A-5 Lab Sample ID: 140-16882-5
Client ID: SS-05
Operator ID: ALS Bottle#: 5 Worklist Smp#: 13
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
13.57	75.00	2506	0.016304
13.56	39.00	48271	
13.56	77.00	5640	

Reviewer: tajh, 04-Oct-2019 11:00:59

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-06 Lab Sample ID: 140-16882-6
 Matrix: Air Lab File ID: RJ07p105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:14
 Sample wt/vol: 120 (mL) Date Analyzed: 10/07/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 147.17
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		49	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		49	
79-00-5	1,1,2-Trichloroethane	133.41	ND		49	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		49	
75-34-3	1,1-Dichloroethane	98.96	ND		49	
75-35-4	1,1-Dichloroethene	96.94	ND		25	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		49	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		49	
106-93-4	1,2-Dibromoethane	187.87	ND		49	
95-50-1	1,2-Dichlorobenzene	147.00	ND		49	
107-06-2	1,2-Dichloroethane	98.96	ND	*	49	
78-87-5	1,2-Dichloropropane	112.99	ND		49	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		49	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		49	
541-73-1	1,3-Dichlorobenzene	147.00	ND		49	
106-46-7	1,4-Dichlorobenzene	147.00	ND		49	
123-91-1	1,4-Dioxane	88.11	ND		120	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		120	
78-93-3	2-Butanone	72.11	ND		200	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		120	
71-43-2	Benzene	78.11	ND		49	
100-44-7	Benzyl chloride	126.58	ND		98	
75-27-4	Bromodichloromethane	163.83	ND		49	
75-25-2	Bromoform	252.75	ND		49	
74-83-9	Bromomethane	94.94	ND		49	
56-23-5	Carbon tetrachloride	153.81	ND		20	
108-90-7	Chlorobenzene	112.56	ND		49	
75-00-3	Chloroethane	64.52	ND		49	
67-66-3	Chloroform	119.38	ND		49	
74-87-3	Chloromethane	50.49	ND		120	
156-59-2	cis-1,2-Dichloroethene	96.94	5800		25	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		49	
110-82-7	Cyclohexane	84.16	ND		120	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-06 Lab Sample ID: 140-16882-6
 Matrix: Air Lab File ID: RJ07p105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:14
 Sample wt/vol: 120 (mL) Date Analyzed: 10/07/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 147.17
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		49	
75-71-8	Dichlorodifluoromethane	120.91	ND		49	
64-17-5	Ethanol	46.07	ND		1200	
100-41-4	Ethylbenzene	106.17	ND		49	
87-68-3	Hexachlorobutadiene	260.76	ND		49	
110-54-3	Hexane	86.17	ND		120	
1634-04-4	Methyl tert-butyl ether	88.15	ND		98	
75-09-2	Methylene Chloride	84.93	140		120	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		49	
95-47-6	o-Xylene	106.17	ND		49	
100-42-5	Styrene	104.15	ND		49	
75-65-0	t-Butyl alcohol	74.12	ND		200	
127-18-4	Tetrachloroethene	165.83	ND		49	
108-88-3	Toluene	92.14	ND		74	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		49	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		49	
79-01-6	Trichloroethene	131.39	2000		22	
75-69-4	Trichlorofluoromethane	137.37	ND		49	
75-01-4	Vinyl chloride	62.50	ND		25	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-06 Lab Sample ID: 140-16882-6
 Matrix: Air Lab File ID: RJ07p105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:14
 Sample wt/vol: 120 (mL) Date Analyzed: 10/07/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 147.17
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		270	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		340	
79-00-5	1,1,2-Trichloroethane	133.41	ND		270	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		380	
75-34-3	1,1-Dichloroethane	98.96	ND		200	
75-35-4	1,1-Dichloroethene	96.94	ND		97	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		360	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		240	
106-93-4	1,2-Dibromoethane	187.87	ND		380	
95-50-1	1,2-Dichlorobenzene	147.00	ND		290	
107-06-2	1,2-Dichloroethane	98.96	ND	*	200	
78-87-5	1,2-Dichloropropane	112.99	ND		230	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		340	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		240	
541-73-1	1,3-Dichlorobenzene	147.00	ND		290	
106-46-7	1,4-Dichlorobenzene	147.00	ND		290	
123-91-1	1,4-Dioxane	88.11	ND		440	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		570	
78-93-3	2-Butanone	72.11	ND		580	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		500	
71-43-2	Benzene	78.11	ND		160	
100-44-7	Benzyl chloride	126.58	ND		510	
75-27-4	Bromodichloromethane	163.83	ND		330	
75-25-2	Bromoform	252.75	ND		510	
74-83-9	Bromomethane	94.94	ND		190	
56-23-5	Carbon tetrachloride	153.81	ND		120	
108-90-7	Chlorobenzene	112.56	ND		230	
75-00-3	Chloroethane	64.52	ND		130	
67-66-3	Chloroform	119.38	ND		240	
74-87-3	Chloromethane	50.49	ND		250	
156-59-2	cis-1,2-Dichloroethene	96.94	23000		97	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		220	
110-82-7	Cyclohexane	84.16	ND		420	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: SS-06 Lab Sample ID: 140-16882-6
 Matrix: Air Lab File ID: RJ07p105.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:14
 Sample wt/vol: 120 (mL) Date Analyzed: 10/07/2019 20:41
 Soil Aliquot Vol: _____ Dilution Factor: 147.17
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		420	
75-71-8	Dichlorodifluoromethane	120.91	ND		240	
64-17-5	Ethanol	46.07	ND		2300	
100-41-4	Ethylbenzene	106.17	ND		210	
87-68-3	Hexachlorobutadiene	260.76	ND		520	
110-54-3	Hexane	86.17	ND		430	
1634-04-4	Methyl tert-butyl ether	88.15	ND		350	
75-09-2	Methylene Chloride	84.93	480		430	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		210	
95-47-6	o-Xylene	106.17	ND		210	
100-42-5	Styrene	104.15	ND		210	
75-65-0	t-Butyl alcohol	74.12	ND		590	
127-18-4	Tetrachloroethene	165.83	ND		330	
108-88-3	Toluene	92.14	ND		280	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		190	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		220	
79-01-6	Trichloroethene	131.39	11000		120	
75-69-4	Trichlorofluoromethane	137.37	ND		280	
75-01-4	Vinyl chloride	62.50	ND		63	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	85		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p105.D
 Lims ID: 140-16882-A-6
 Client ID: SS-06
 Sample Type: Client
 Inject. Date: 07-Oct-2019 20:41:30 ALS Bottle#: 5 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 147.1700
 Sample Info: 140-0013263-006
 Misc. Info.: 140-16882-A-6@147.17
 Operator ID: afb Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 08-Oct-2019 11:27:45 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:27:45

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	92	303800	4.00	
* 2 1,4-Difluorobenzene	114	10.760	10.760	0.000	93	1771342	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.559	15.554	0.005	85	1367761	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	94	689216	3.41	
12 Vinyl chloride	62	3.836	3.826	0.010	64	3831	0.0371	
31 Methylene Chloride	84	5.961	5.961	0.000	95	26664	0.2275	
34 trans-1,2-Dichloroethene	96	6.775	6.766	0.005	95	6874	0.0646	
42 cis-1,2-Dichloroethene	96	8.193	8.183	0.005	87	1052554	9.53	
49 Benzene	78	10.189	10.183	0.006	28	3081	0.009019	
58 Trichloroethene	130	11.483	11.466	0.000	96	477674	3.25	

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p105.D

Injection Date: 07-Oct-2019 20:41:30

Instrument ID: MR

Operator ID: afb

Lims ID: 140-16882-A-6

Lab Sample ID: 140-16882-6

Worklist Smp#: 6

Client ID: SS-06

Purge Vol: 500.000 mL

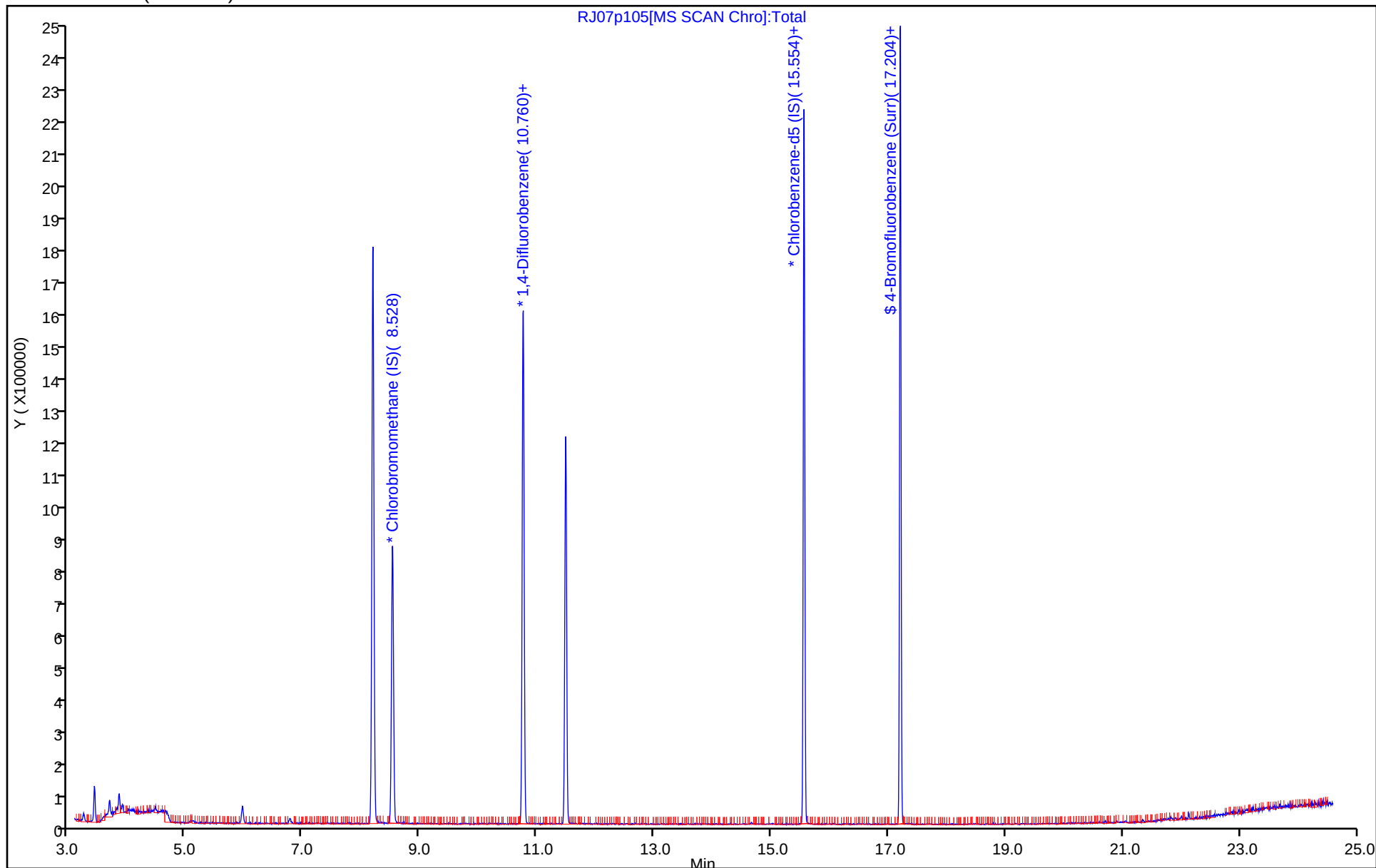
Dil. Factor: 147.1700

ALS Bottle#: 5

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p105.D
Lims ID: 140-16882-A-6
Client ID: SS-06
Sample Type: Client
Inject. Date: 07-Oct-2019 20:41:30 ALS Bottle#: 5 Worklist Smp#: 6
Purge Vol: 500.000 mL Dil. Factor: 147.1700
Sample Info: 140-0013263-006
Misc. Info.: 140-16882-A-6@147.17
Operator ID: afb Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Oct-2019 11:27:45 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:27:45

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.41	85.26

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p105.D

Injection Date: 07-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-6

Lab Sample ID: 140-16882-6

Client ID: SS-06

Operator ID: afb

ALS Bottle#: 5

Worklist Smp#: 6

Purge Vol: 500.000 mL

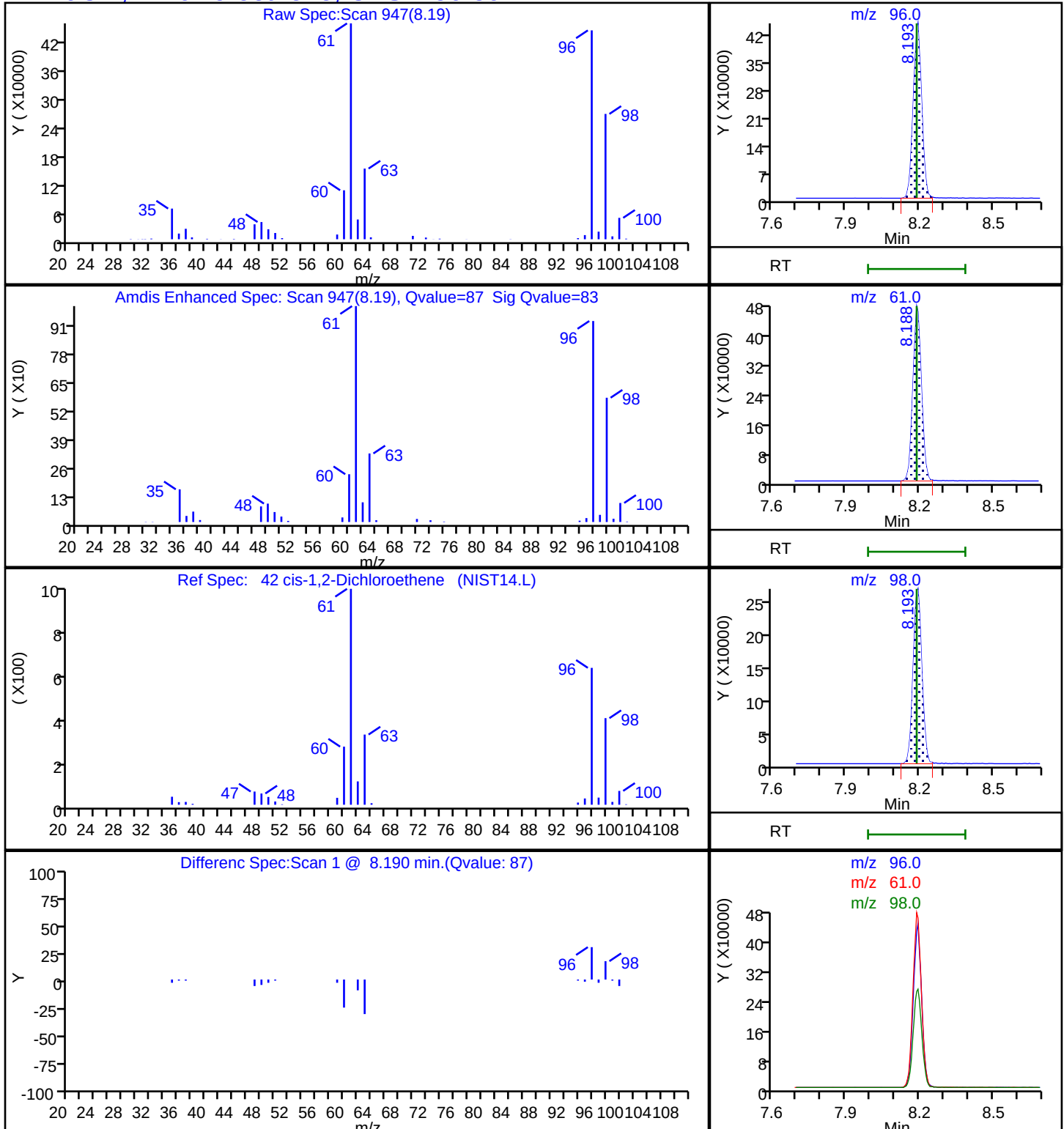
Dil. Factor: 147.1700

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p105.D

Injection Date: 07-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-6

Lab Sample ID: 140-16882-6

Client ID: SS-06

Operator ID: afb

ALS Bottle#: 5

Worklist Smp#: 6

Purge Vol: 500.000 mL

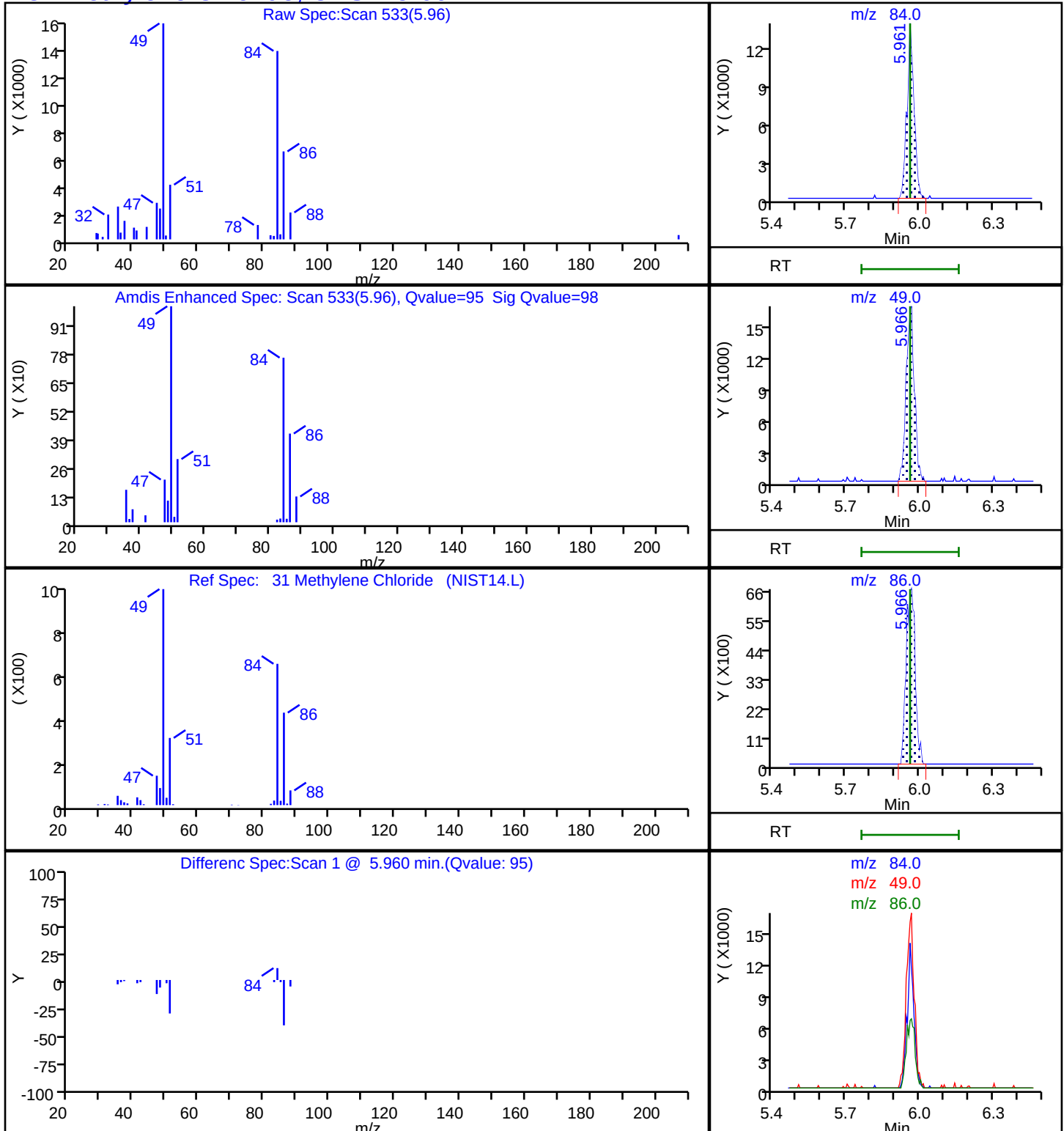
Dil. Factor: 147.1700

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p105.D

Injection Date: 07-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-6

Lab Sample ID: 140-16882-6

Client ID: SS-06

Operator ID: afb

ALS Bottle#: 5

Worklist Smp#: 6

Purge Vol: 500.000 mL

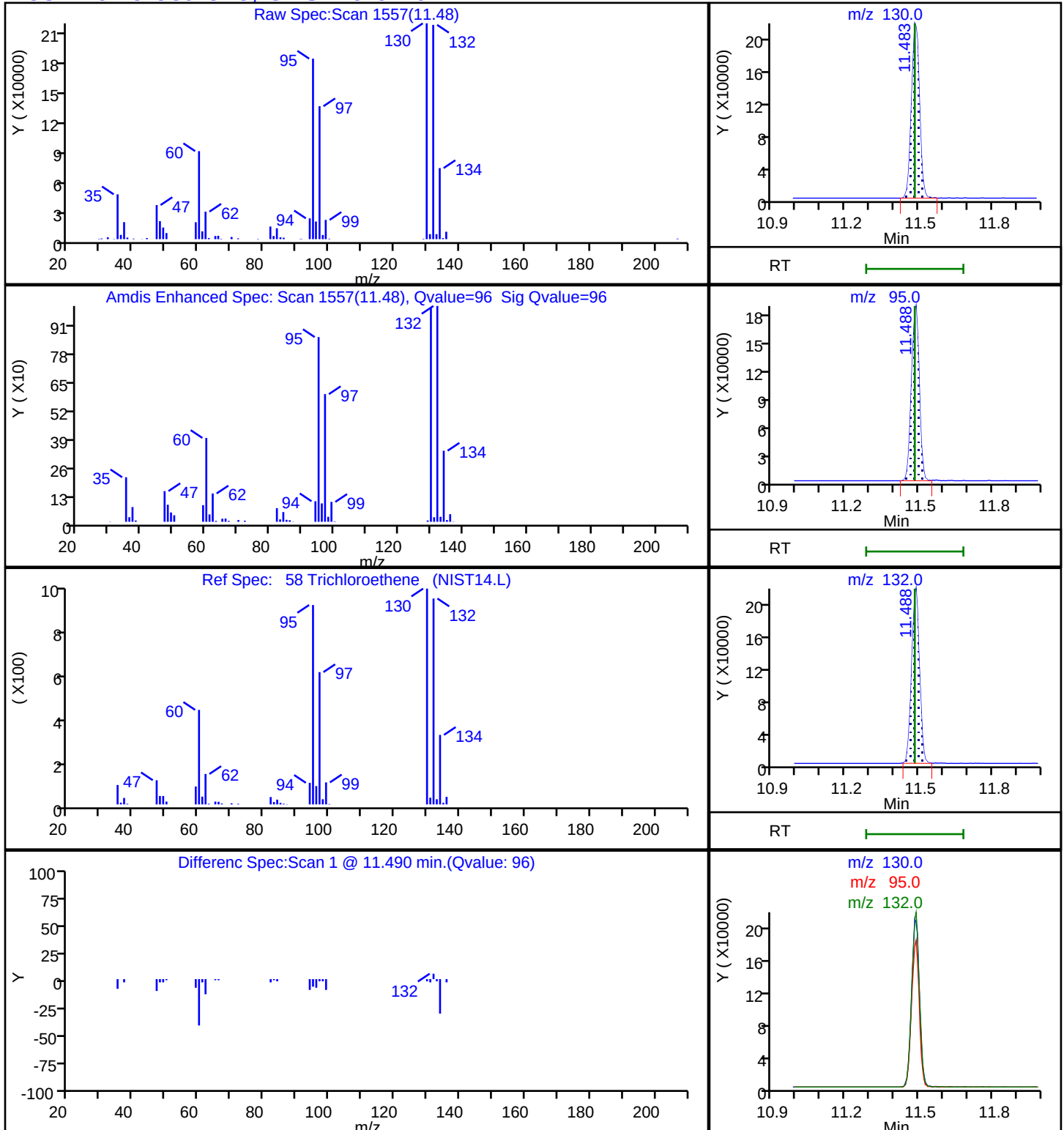
Dil. Factor: 147.1700

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07p105.D

Injection Date: 07-Oct-2019 20:41:30

Instrument ID: MR

Lims ID: 140-16882-A-6

Lab Sample ID: 140-16882-6

Client ID: SS-06

Operator ID: afb

ALS Bottle#:

5

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 147.1700

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

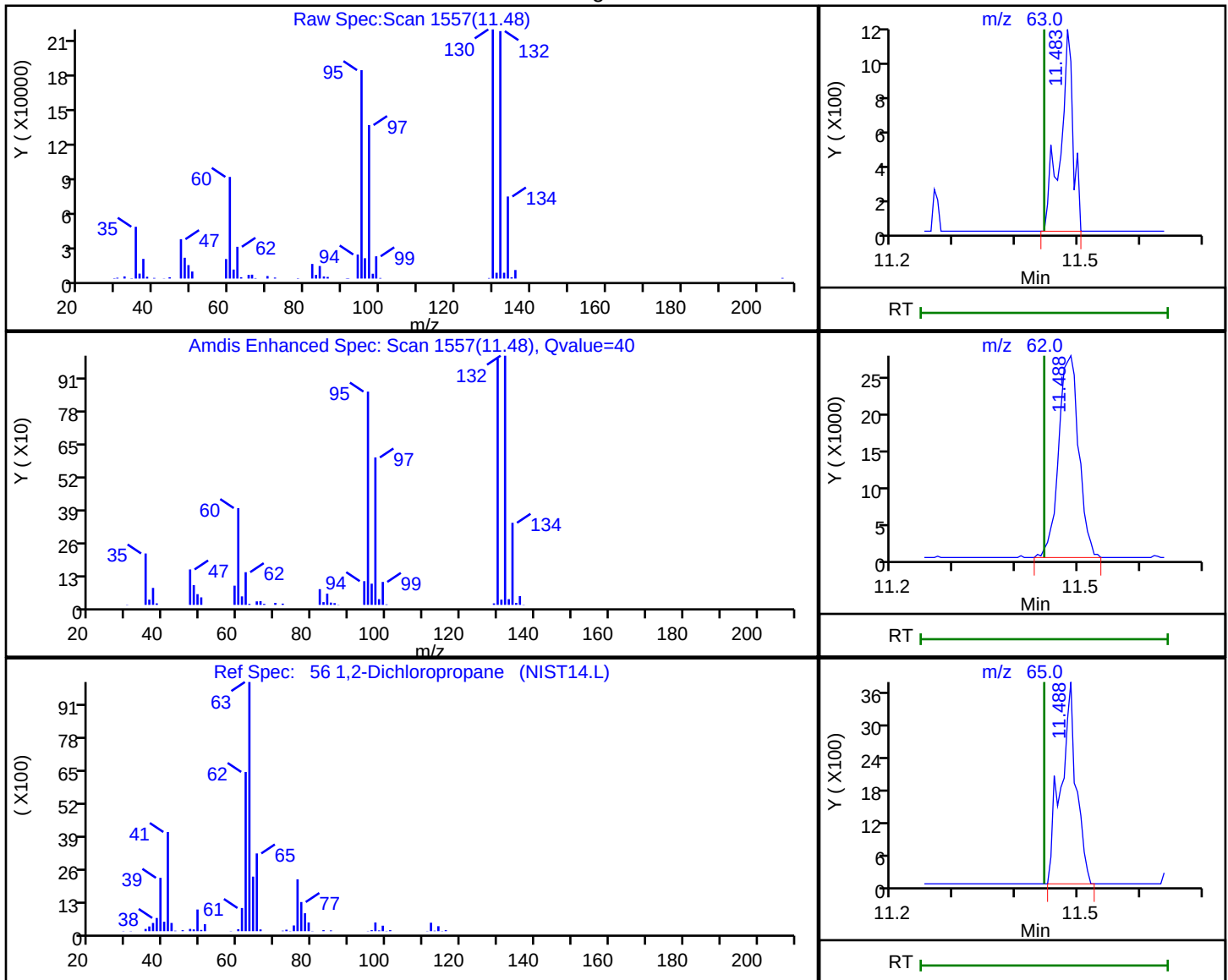
Column: RTX-5 (0.32 mm)

Detector

MS SCAN

56 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
11.48	63.00	1613	0.013103
11.49	62.00	62921	
11.49	65.00	6623	

Reviewer: barlozhetskayaa, 08-Oct-2019 11:26:22

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-01 Lab Sample ID: 140-16882-7
 Matrix: Air Lab File ID: RJ03P107.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:35
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 22:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.24		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.11		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	0.56		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.67		0.080	
100-44-7	Benzyl chloride	126.58	ND	*	0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	0.071		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	0.75		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	0.14		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-01 Lab Sample ID: 140-16882-7
 Matrix: Air Lab File ID: RJ03P107.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:35
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 22:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	0.22		0.080	
64-17-5	Ethanol	46.07	3.2		2.0	
100-41-4	Ethylbenzene	106.17	0.21		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.27		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.46	B	0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.59		0.080	
95-47-6	o-Xylene	106.17	0.24		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	1.4		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	5.6		0.036	
75-69-4	Trichlorofluoromethane	137.37	0.22		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-01 Lab Sample ID: 140-16882-7
 Matrix: Air Lab File ID: RJ03P107.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:35
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 22:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.2		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.53		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.7		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	2.1		0.26	
100-44-7	Benzyl chloride	126.58	ND	*	0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.45		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.5		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	0.57		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-01 Lab Sample ID: 140-16882-7
 Matrix: Air Lab File ID: RJ03P107.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:35
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 22:21
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.1		0.40	
64-17-5	Ethanol	46.07	6.1		3.8	
100-41-4	Ethylbenzene	106.17	0.89		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	0.94		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.6	B	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	2.6		0.35	
95-47-6	o-Xylene	106.17	1.0		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	5.2		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	30		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D
 Lims ID: 140-16882-A-7
 Client ID: AA-01
 Sample Type: Client
 Inject. Date: 03-Oct-2019 22:21:30 ALS Bottle#: 7 Worklist Smp#: 15
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013261-015
 Misc. Info.: 140-16882-a-7
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:03:22

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.517	8.522	-0.005	92	328982	4.00	
* 2 1,4-Difluorobenzene	114	10.755	10.749	0.006	93	1924809	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	86	1493896	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	95	838256	3.80	
8 Dichlorodifluoromethane	85	3.491	3.480	0.011	97	41302	0.2226	
9 Chloromethane	52	3.664	3.658	0.006	100	26516	0.7481	
17 Ethanol	31	4.457	4.440	0.017	99	161840	3.22	
21 Trichlorofluoromethane	101	4.915	4.899	0.016	99	58091	0.2172	
29 2-Methyl-2-propanol	59	5.745	5.697	0.048	66	10149	0.0532	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.772	0.011	95	17137	0.0758	
31 Methylene Chloride	84	5.961	5.950	0.011	93	58106	0.4578	
39 2-Butanone (MEK)	72	7.762	7.746	0.016	95	31270	0.5634	
40 Hexane	56	7.773	7.762	0.011	62	24008	0.2666	
42 cis-1,2-Dichloroethene	96	8.177	8.183	-0.005	82	17081	0.1429	
44 Chloroform	83	8.528	8.528	0.000	28	6421	0.0269	
51 Cyclohexane	69	10.183	10.178	0.005	49	4680	0.0851	
49 Benzene	78	10.183	10.178	0.005	94	249386	0.6718	
52 Carbon tetrachloride	117	10.199	10.205	-0.006	65	17479	0.0712	
55 Isooctane	57	10.965	10.965	0.000	93	62301	0.1080	
58 Trichloroethene	130	11.477	11.477	0.000	97	898839	5.63	
67 Toluene	91	13.570	13.569	0.001	94	508174	1.39	
73 Tetrachloroethene	129	14.729	14.723	0.006	75	2714	0.0185	
76 Ethylbenzene	91	15.894	15.894	0.000	97	101742	0.2055	
77 m-Xylene & p-Xylene	91	16.050	16.050	0.000	96	225110	0.5913	
79 Styrene	104	16.519	16.519	0.000	93	8444	0.0316	
80 o-Xylene	91	16.579	16.578	0.001	99	92608	0.2397	
87 1,3,5-Trimethylbenzene	120	17.959	17.980	-0.021	39	24861	0.1077	a
92 1,2,4-Trimethylbenzene	105	18.417	18.433	-0.016	96	115143	0.2354	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Oct-2019 11:19:17

Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Worklist Smp#: 15

Client ID: AA-01

Purge Vol: 500.000 mL

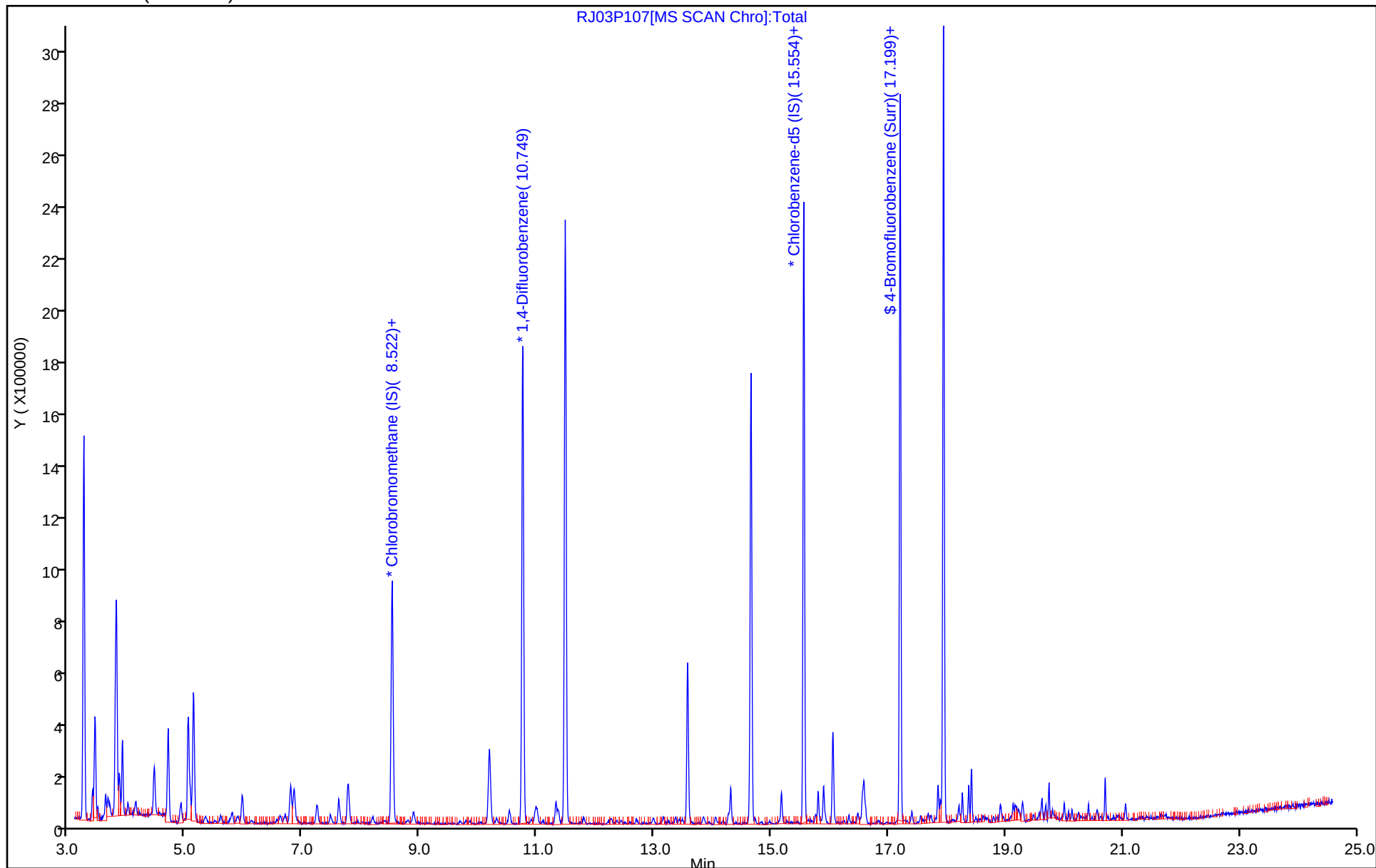
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D
Lims ID: 140-16882-A-7
Client ID: AA-01
Sample Type: Client
Inject. Date: 03-Oct-2019 22:21:30 ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013261-015
Misc. Info.: 140-16882-a-7
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:03:22

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.80	94.94

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

7

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

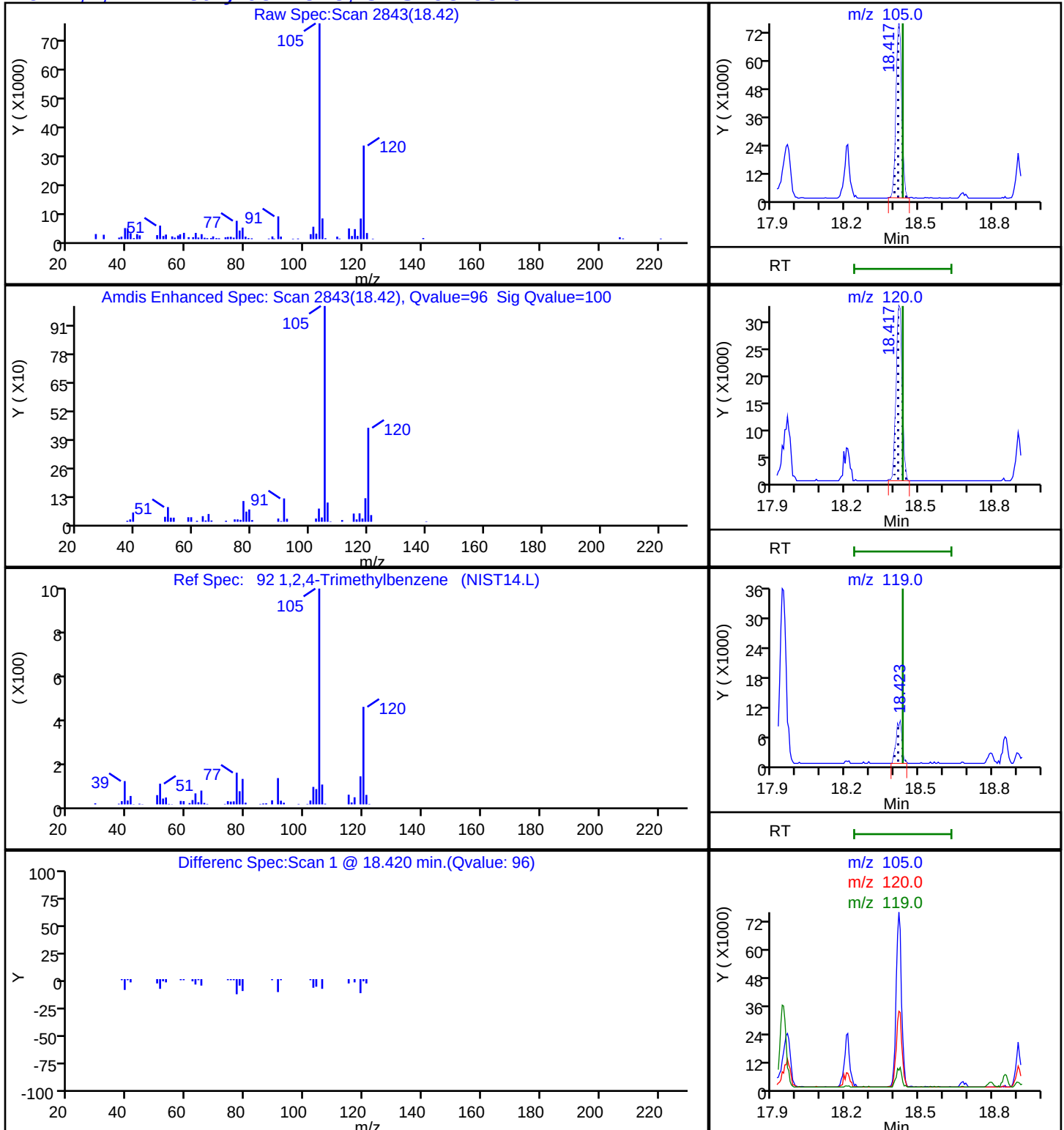
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

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

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

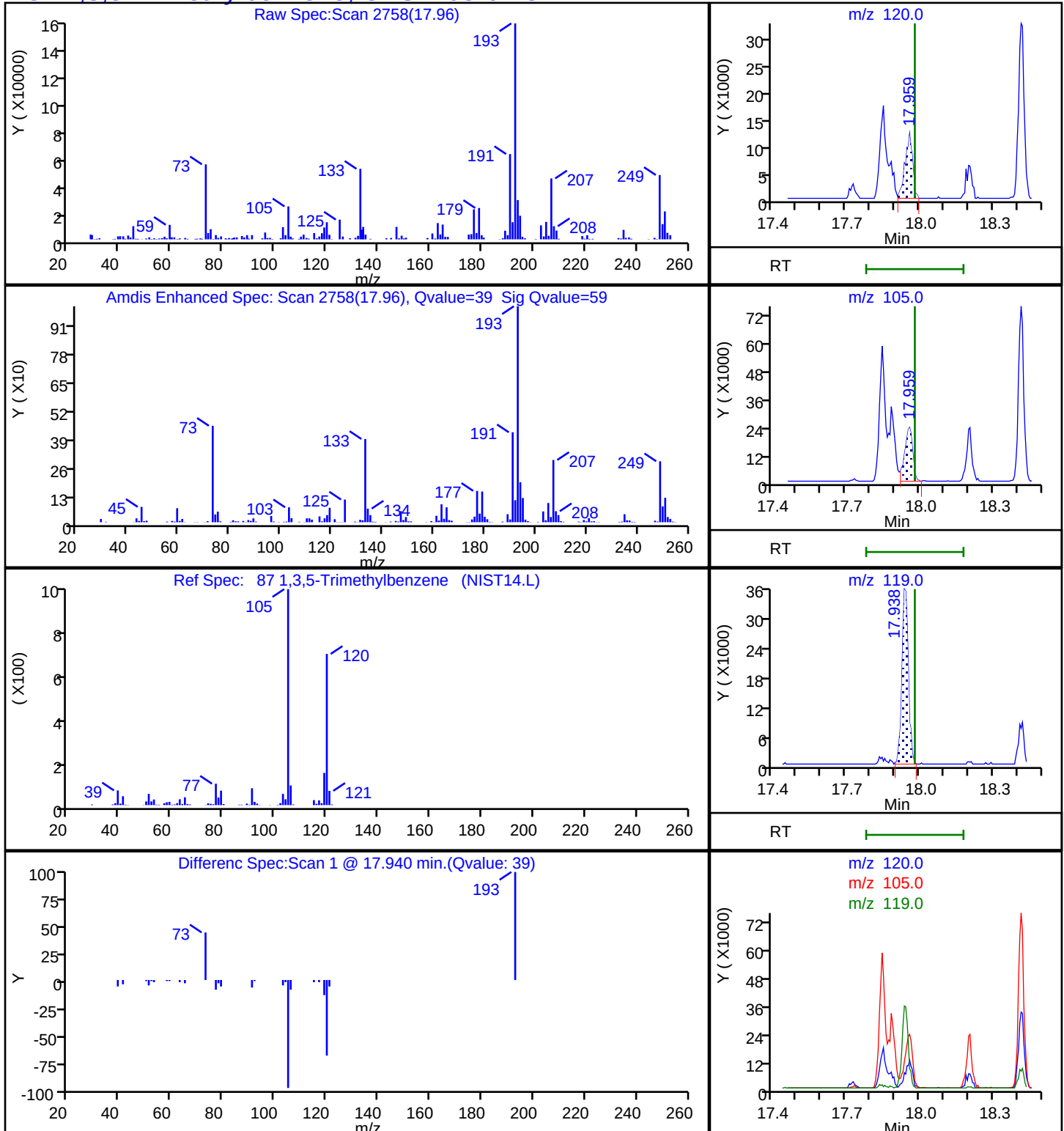
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

87 1,3,5-Trimethylbenzene, CAS: 108-67-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

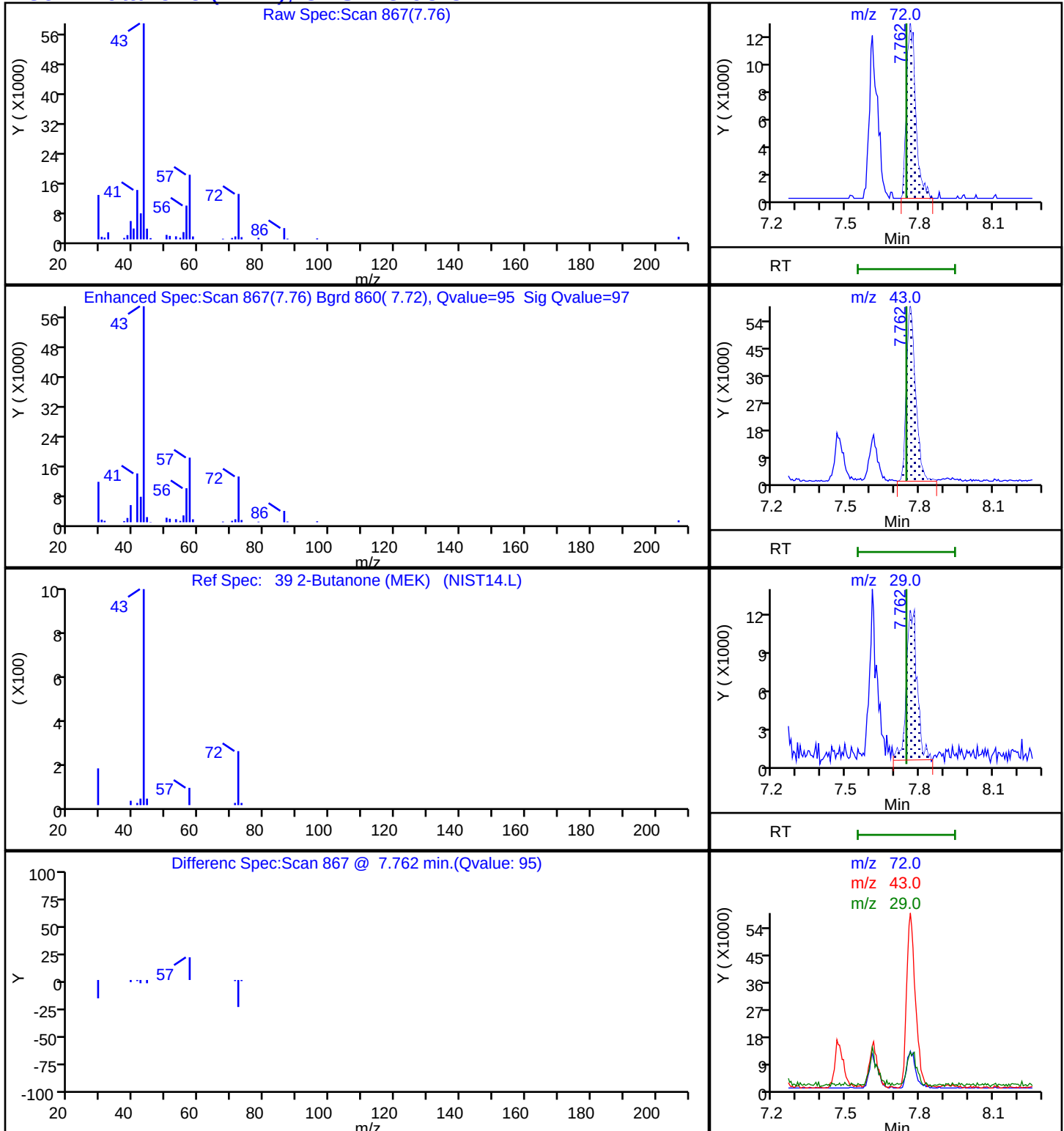
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

39 2-Butanone (MEK), CAS: 78-93-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 15

Purge Vol: 500.000 mL

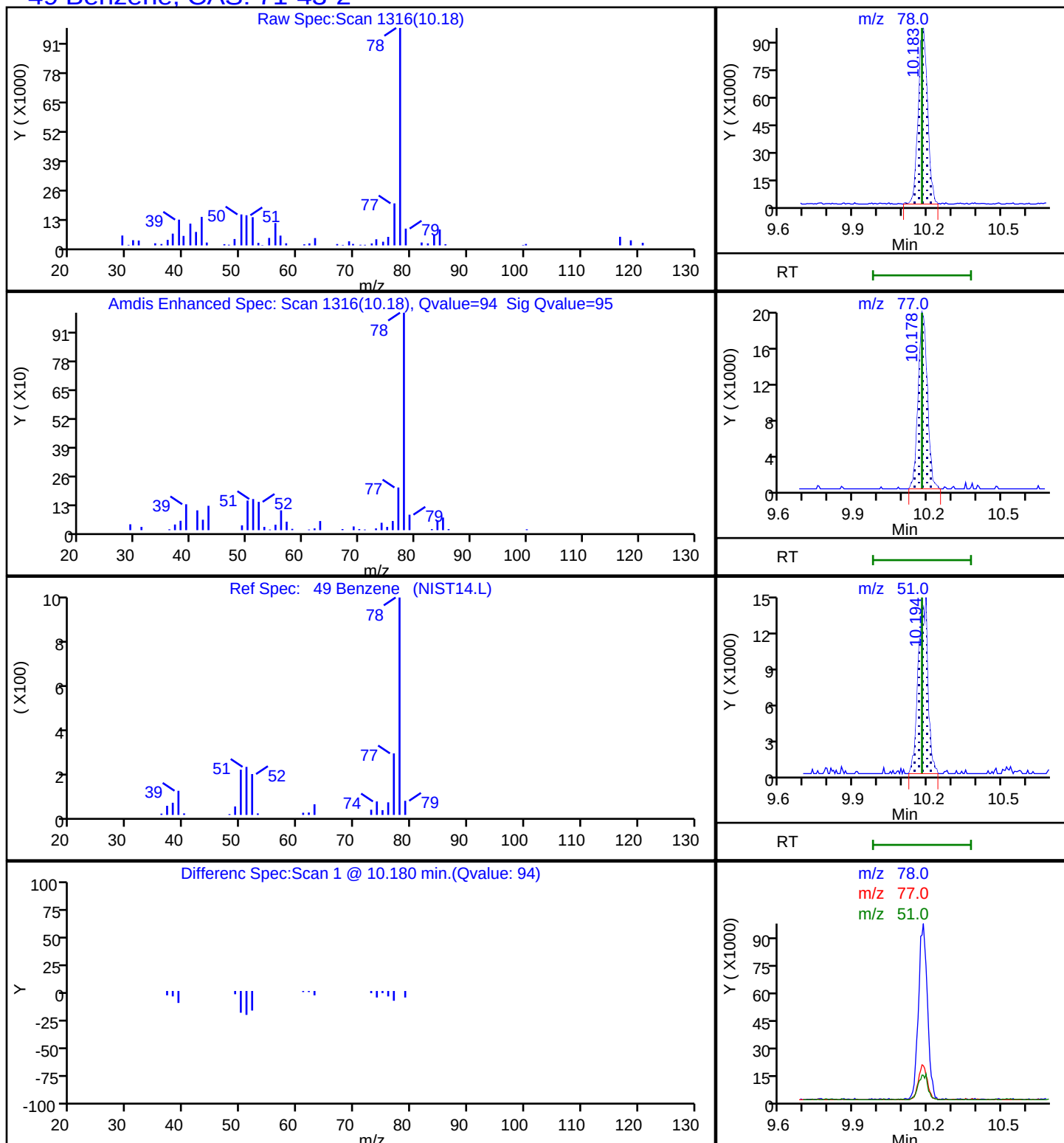
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

7

Worklist Smp#:

15

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

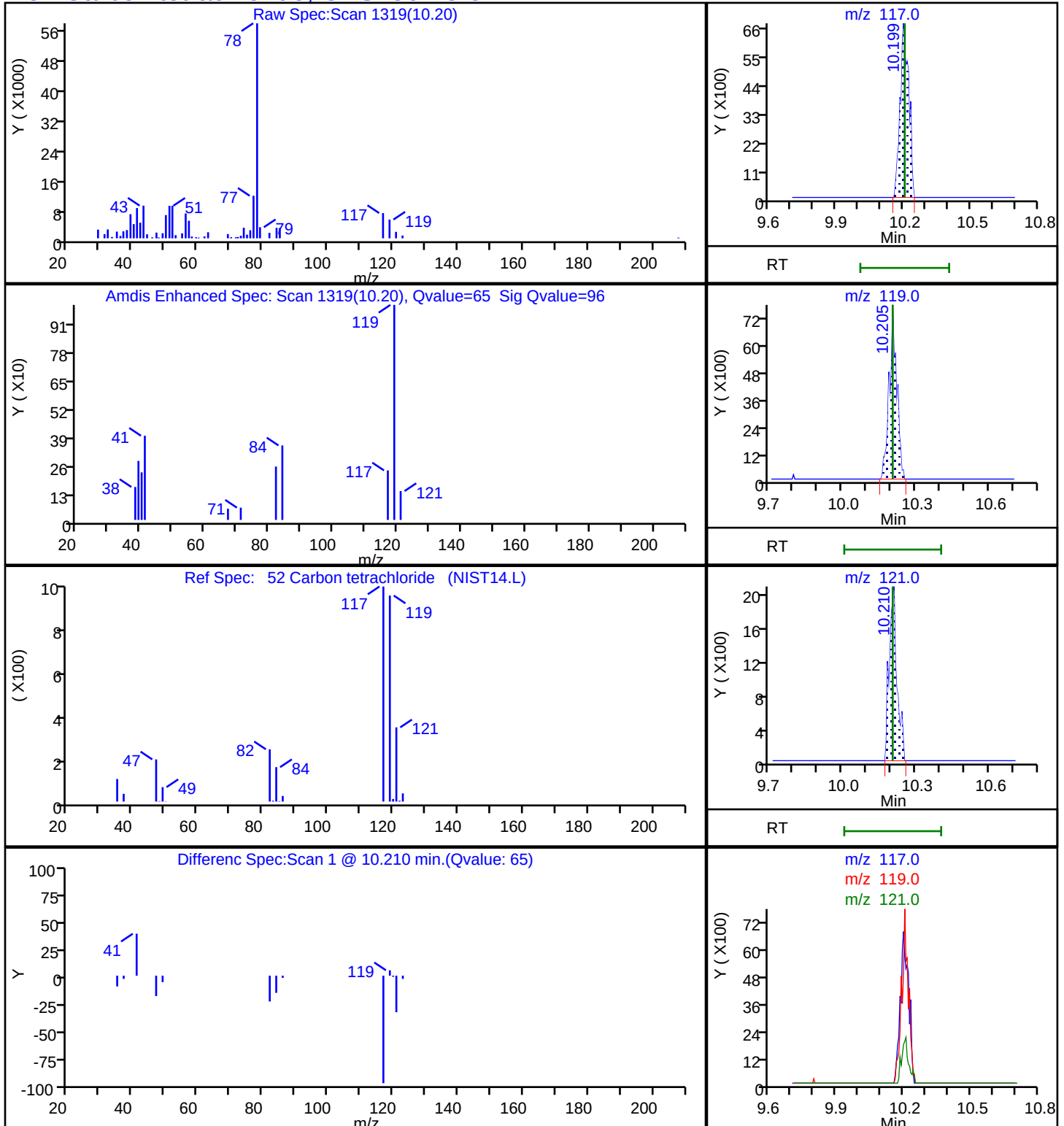
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 15

Purge Vol: 500.000 mL

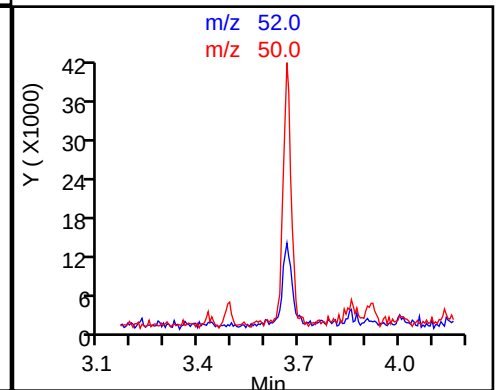
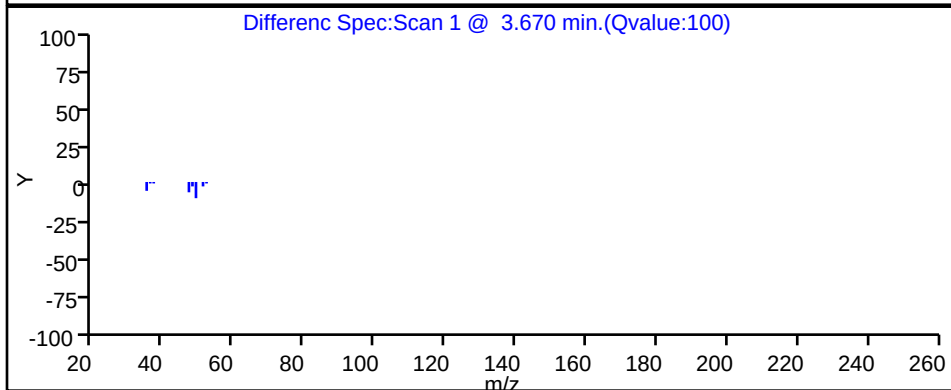
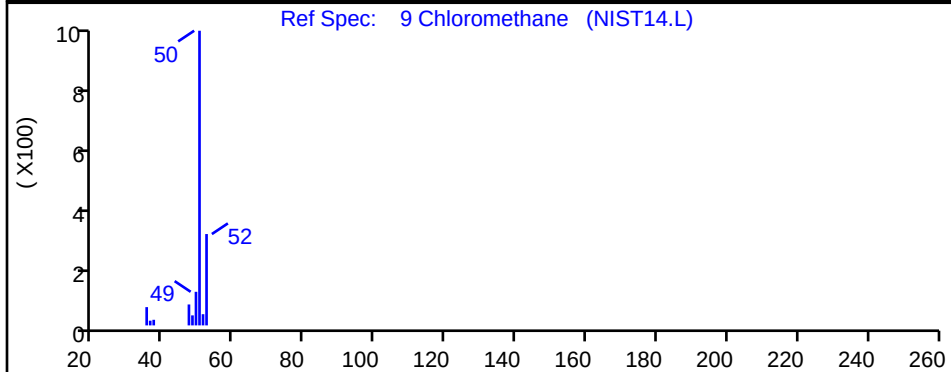
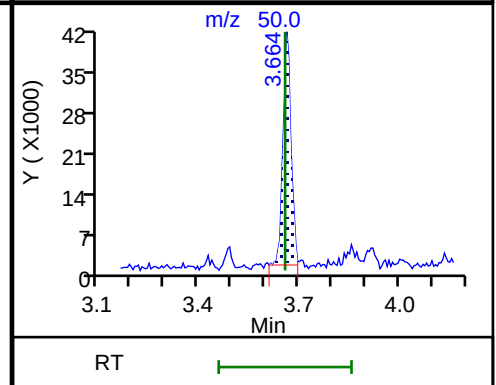
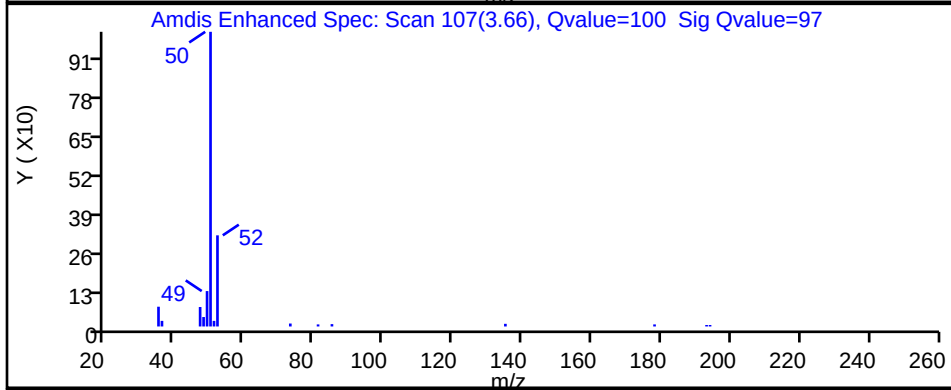
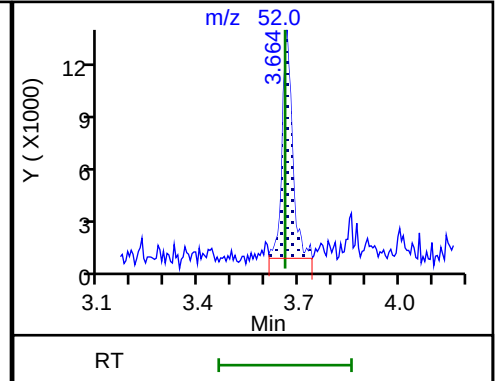
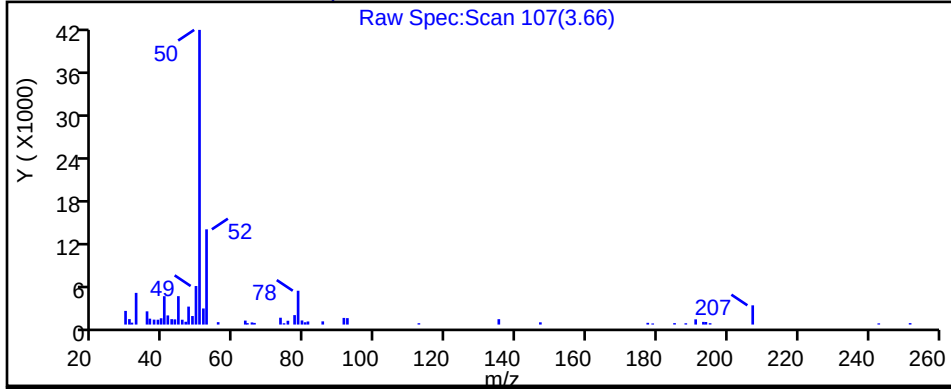
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

7

Worklist Smp#:

15

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

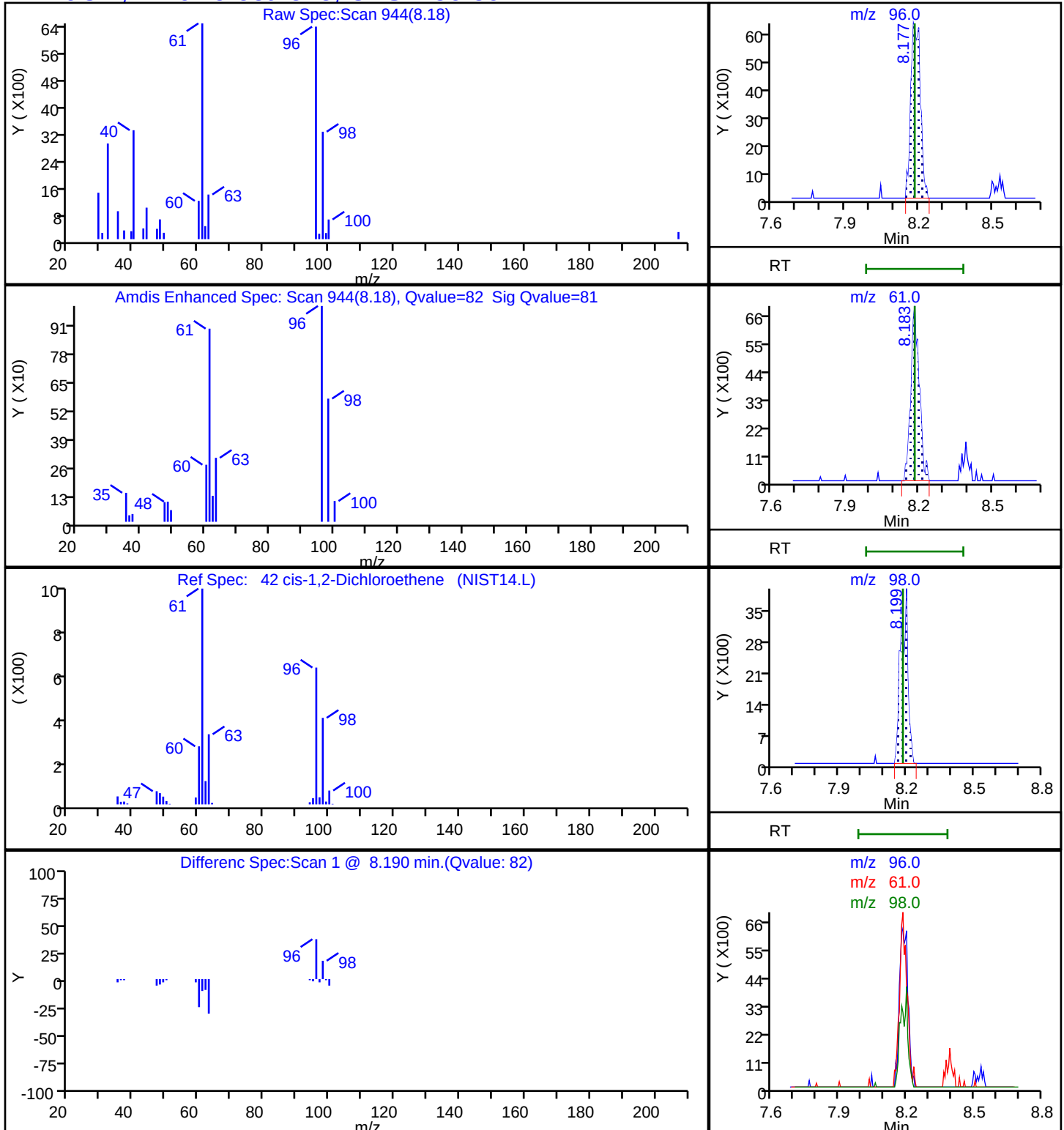
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

7

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

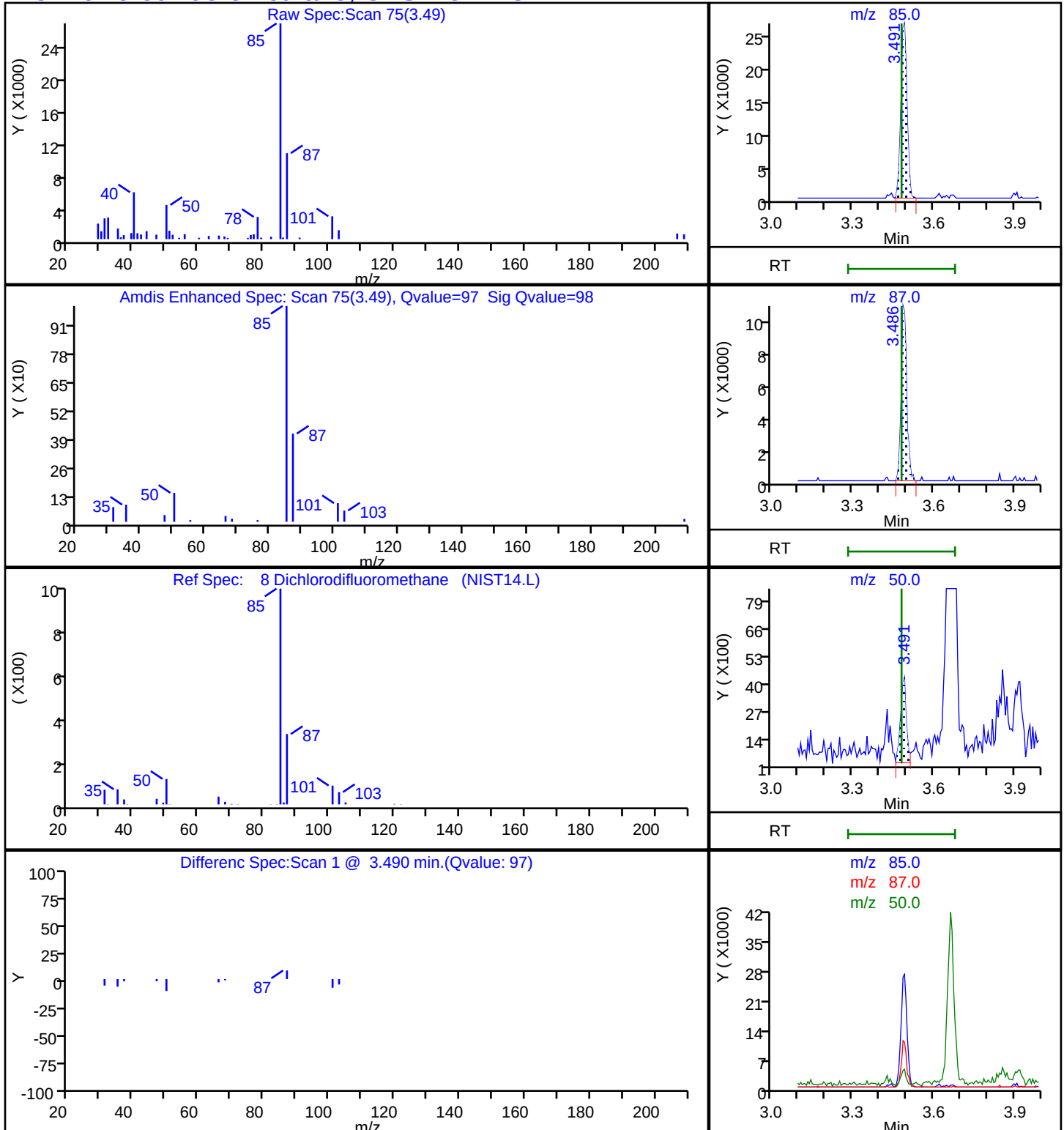
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

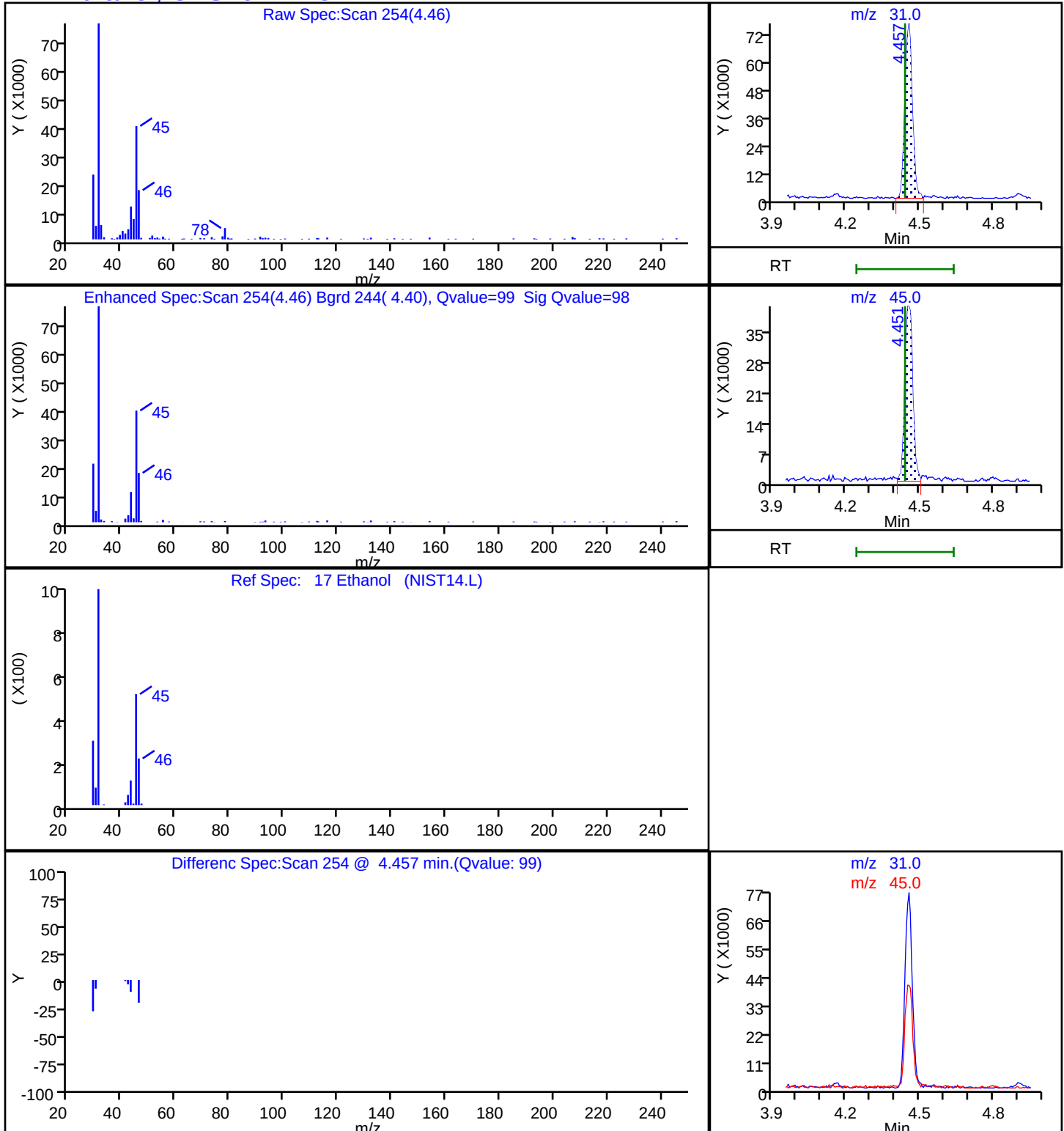
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

7

Worklist Smp#:

15

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

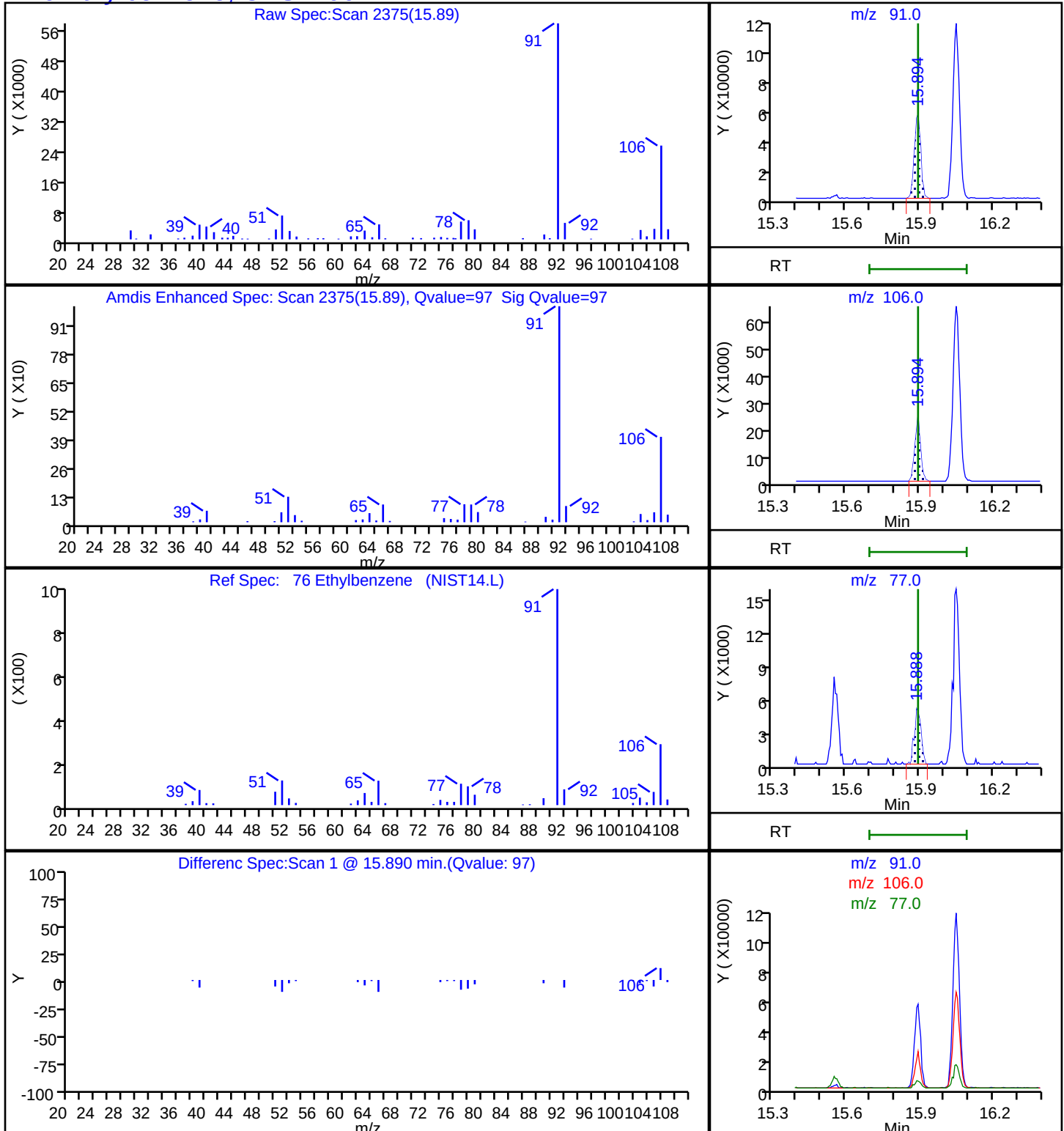
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

76 Ethylbenzene, CAS: 100-41-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 15

Purge Vol: 500.000 mL

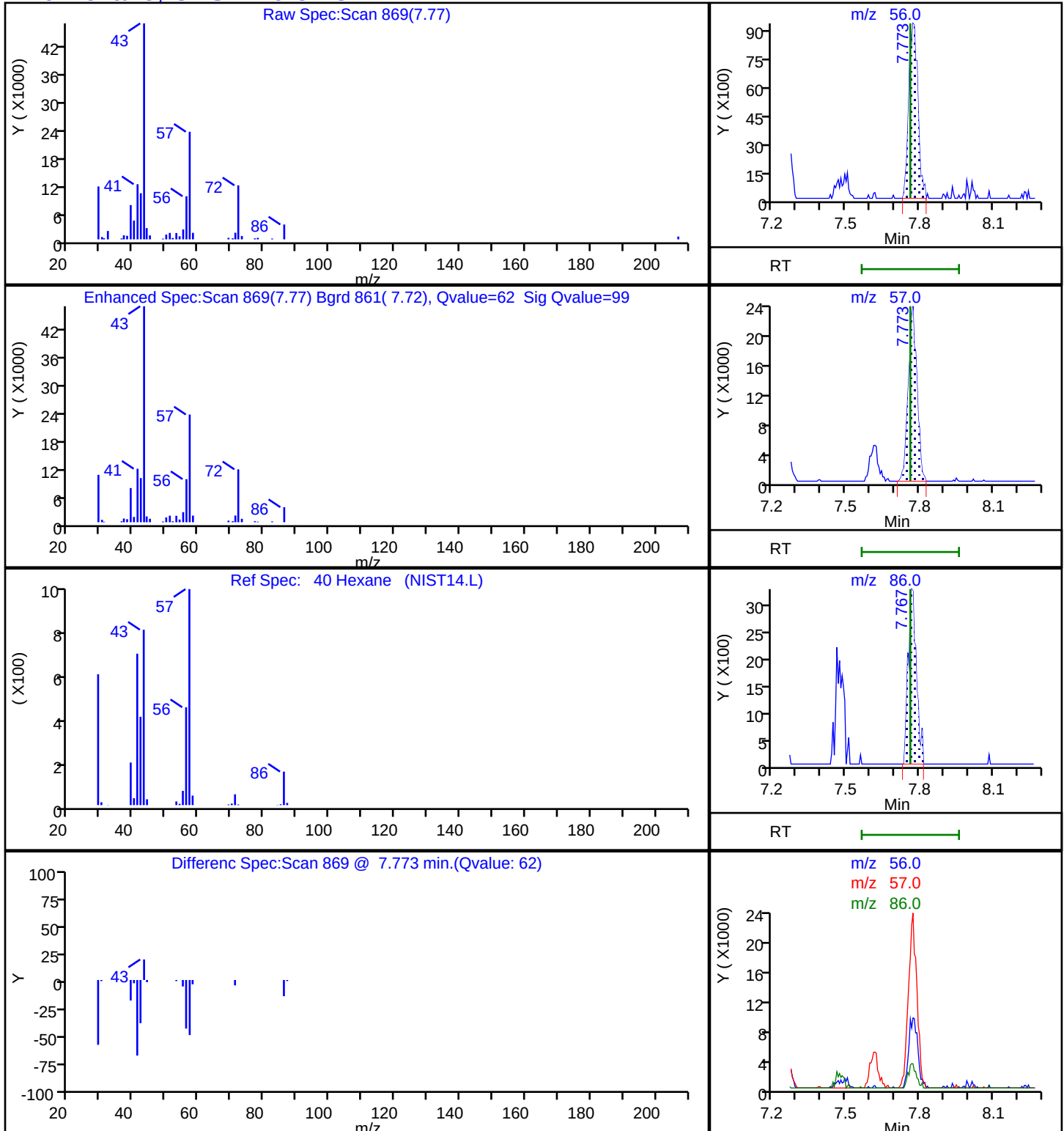
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

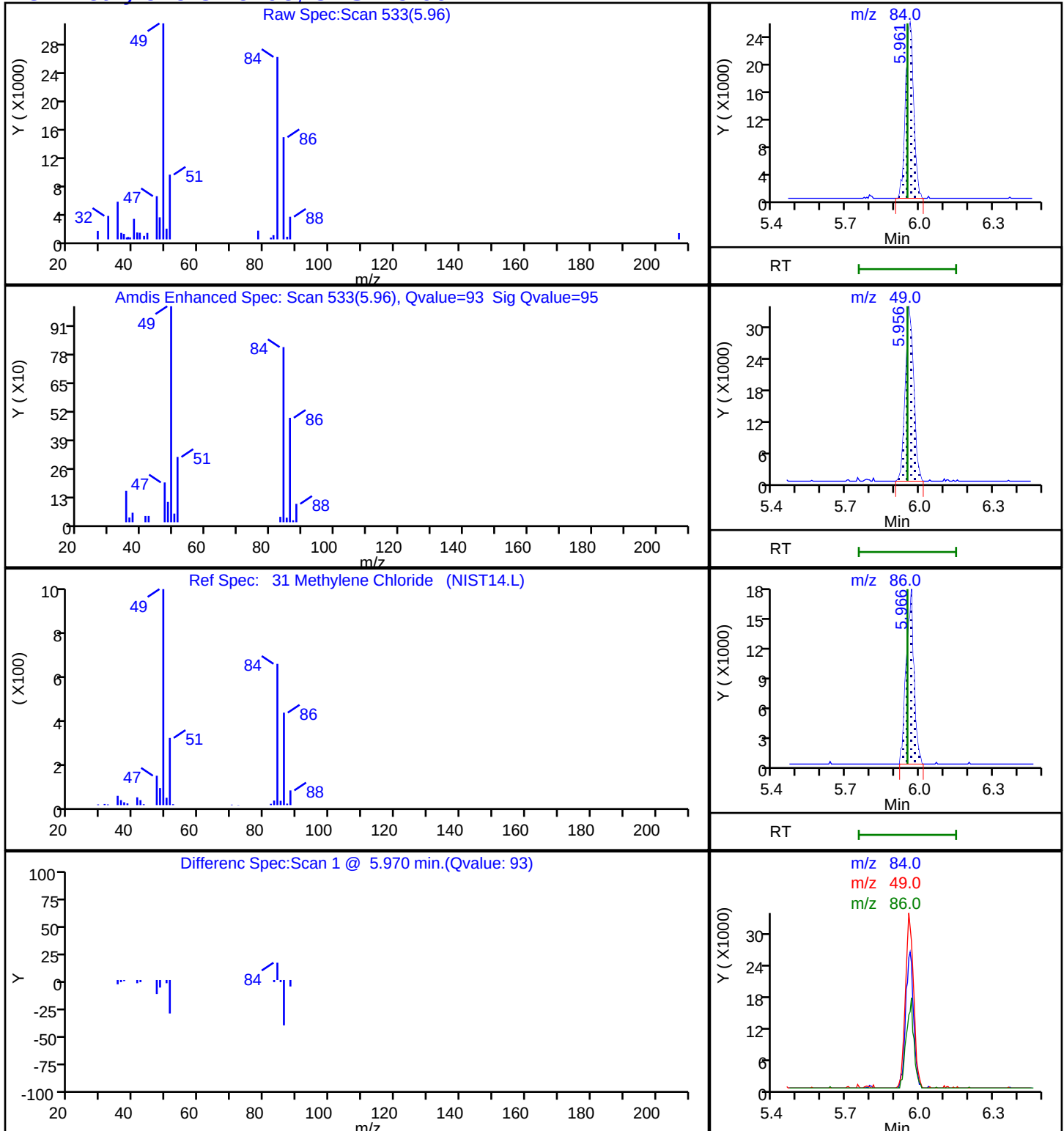
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

7

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

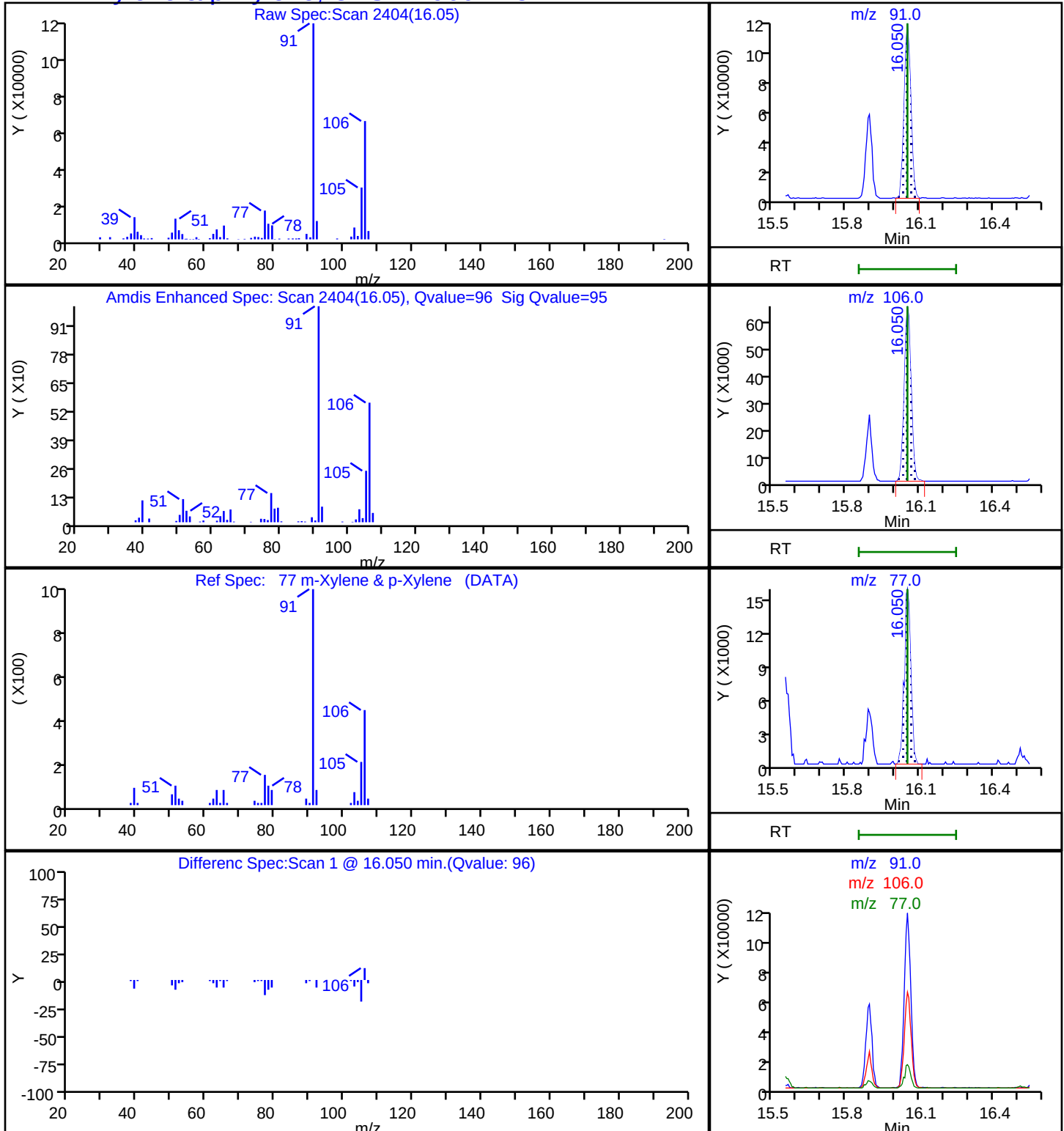
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#: 7

Worklist Smp#: 15

Purge Vol: 500.000 mL

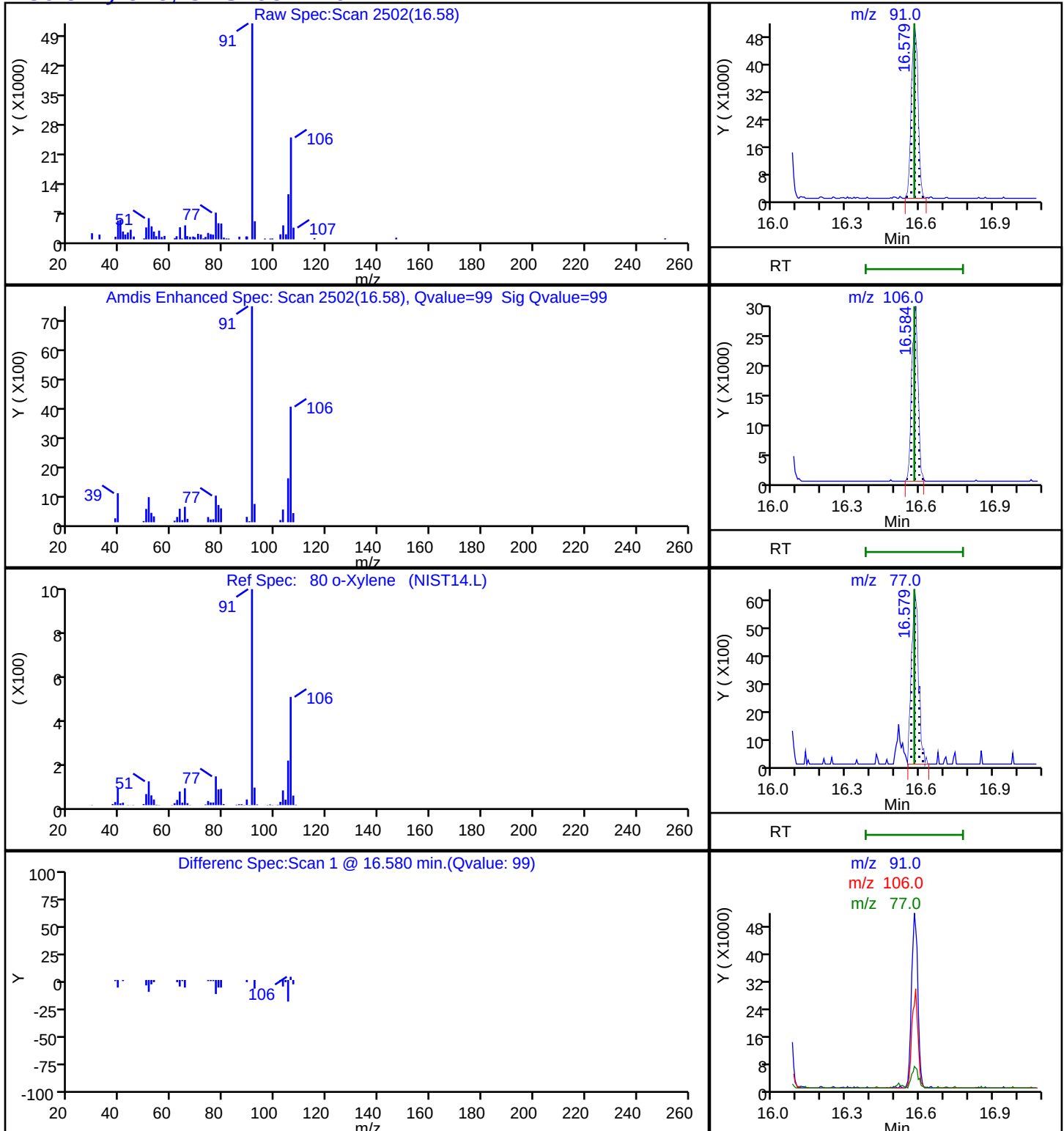
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

80 o-Xylene, CAS: 95-47-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 15

Purge Vol: 500.000 mL

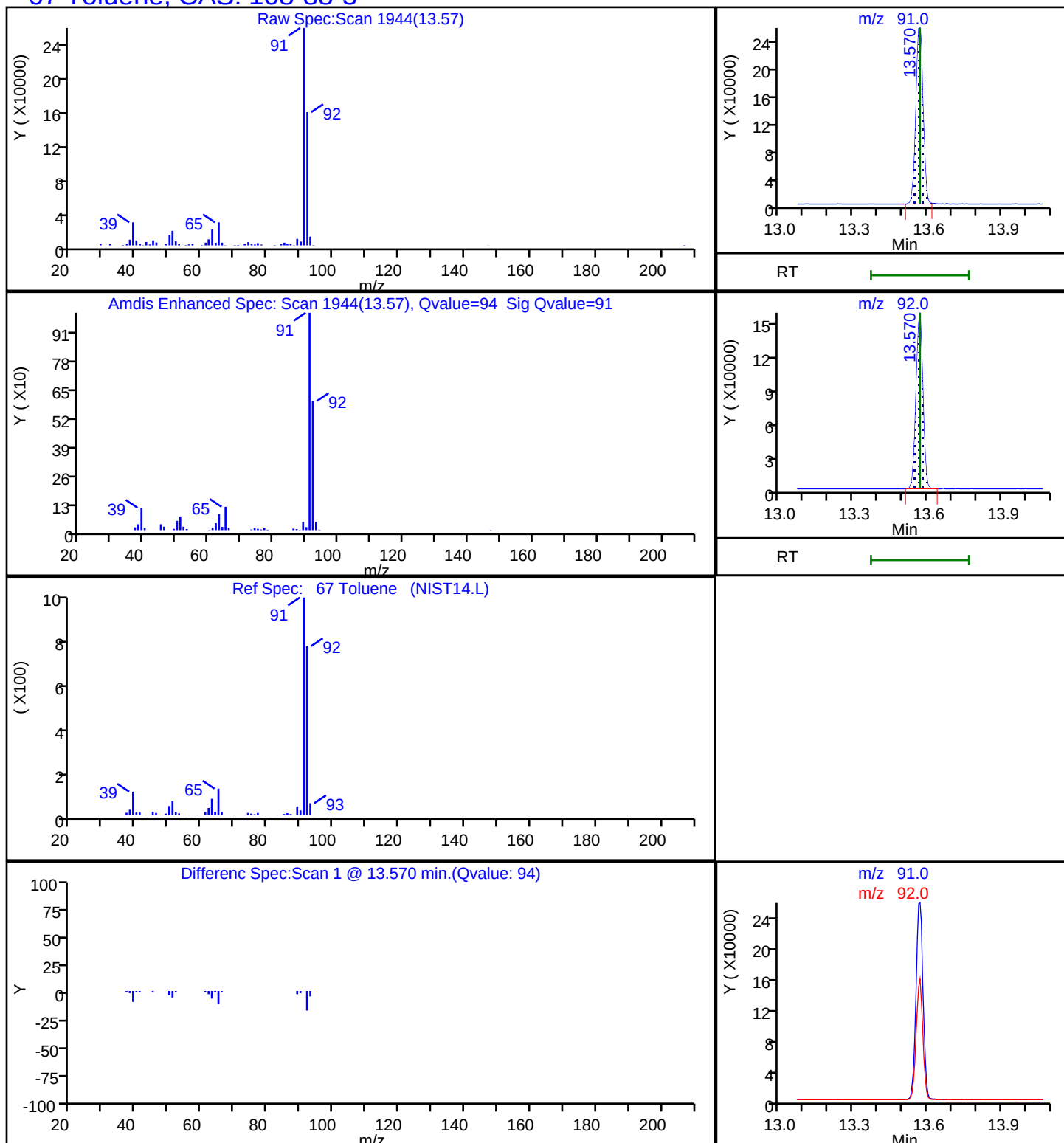
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

67 Toluene, CAS: 108-88-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

Worklist Smp#: 15

Purge Vol: 500.000 mL

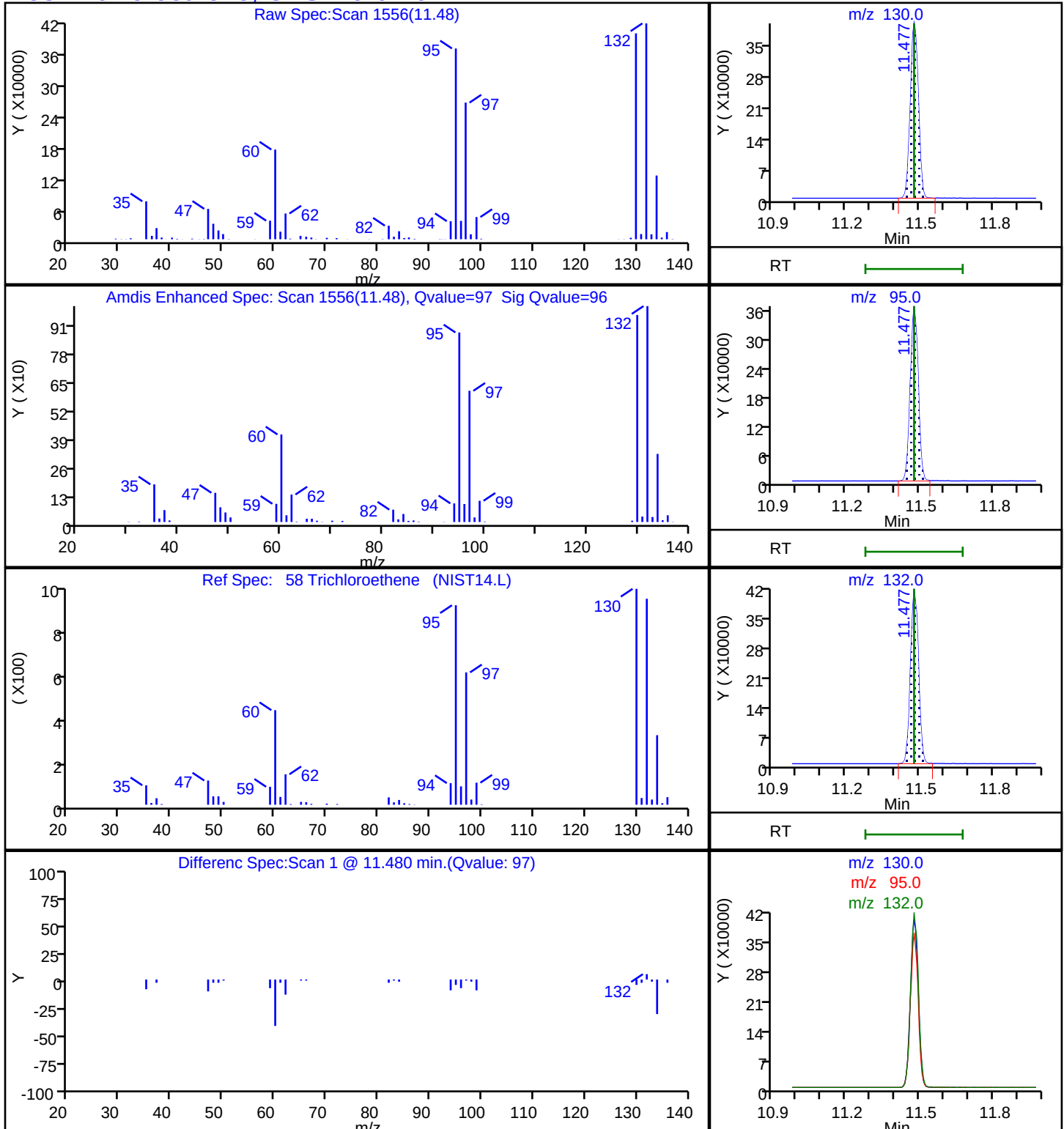
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D

Injection Date: 03-Oct-2019 22:21:30

Instrument ID: MR

Lims ID: 140-16882-A-7

Lab Sample ID: 140-16882-7

Client ID: AA-01

Operator ID:

ALS Bottle#:

7

Worklist Smp#: 15

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

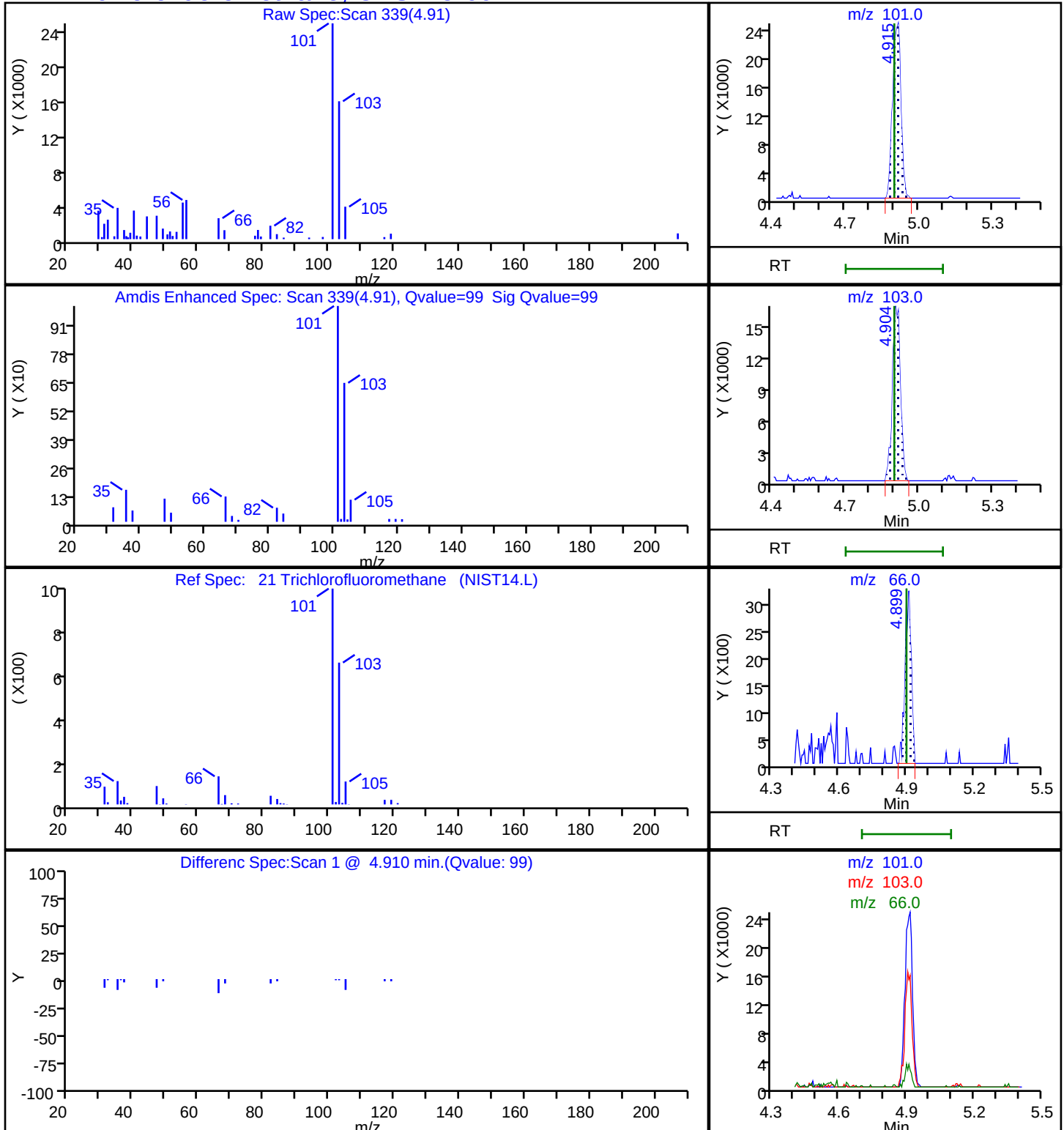
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

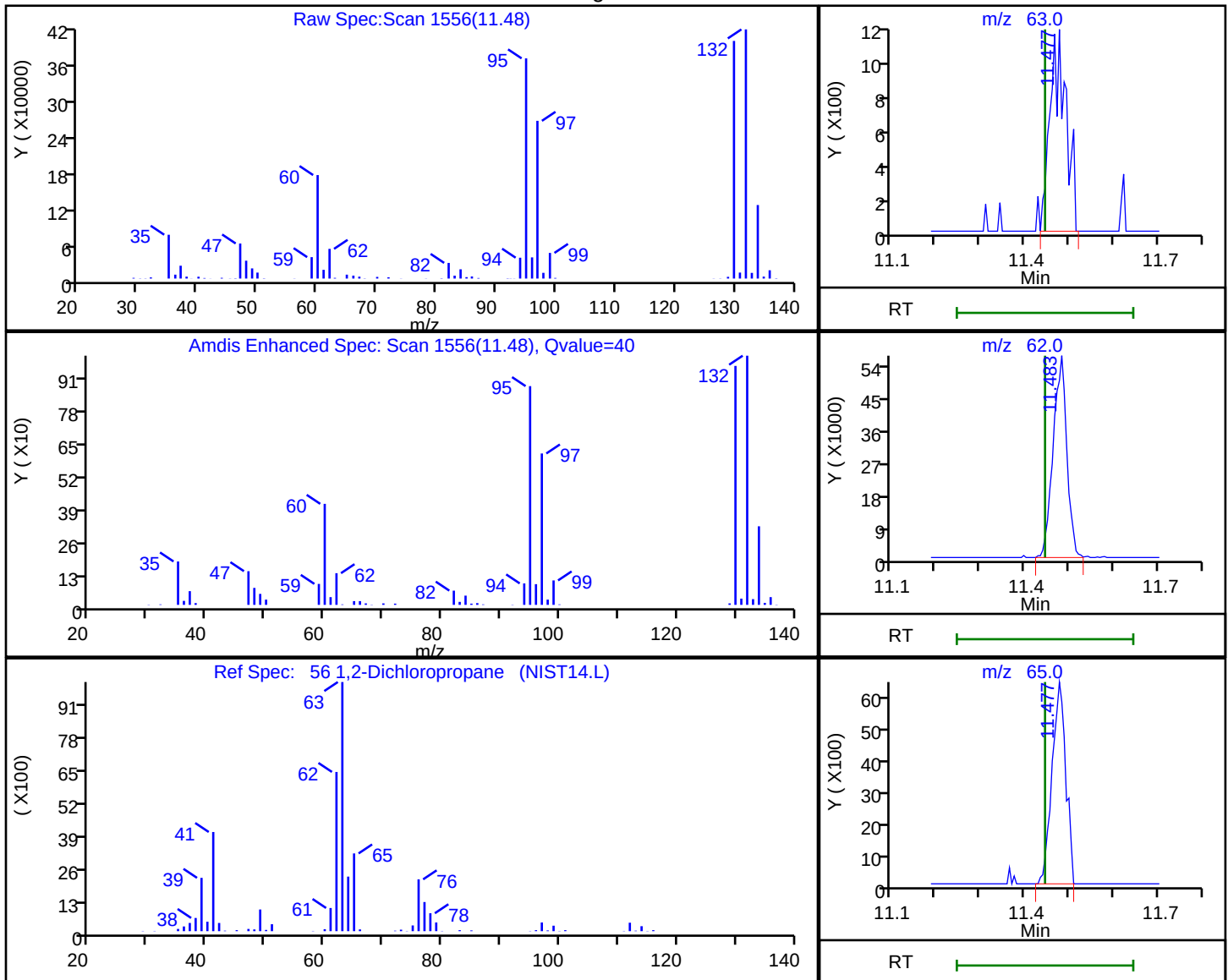
21 Trichlorofluoromethane, CAS: 75-69-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D
Injection Date: 03-Oct-2019 22:21:30 Instrument ID: MR
Lims ID: 140-16882-A-7 Lab Sample ID: 140-16882-7
Client ID: AA-01
Operator ID: ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

56 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
11.48	63.00	2834	0.021187
11.48	62.00	121521	
11.48	65.00	14013	

Reviewer: tajh, 04-Oct-2019 11:02:46

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

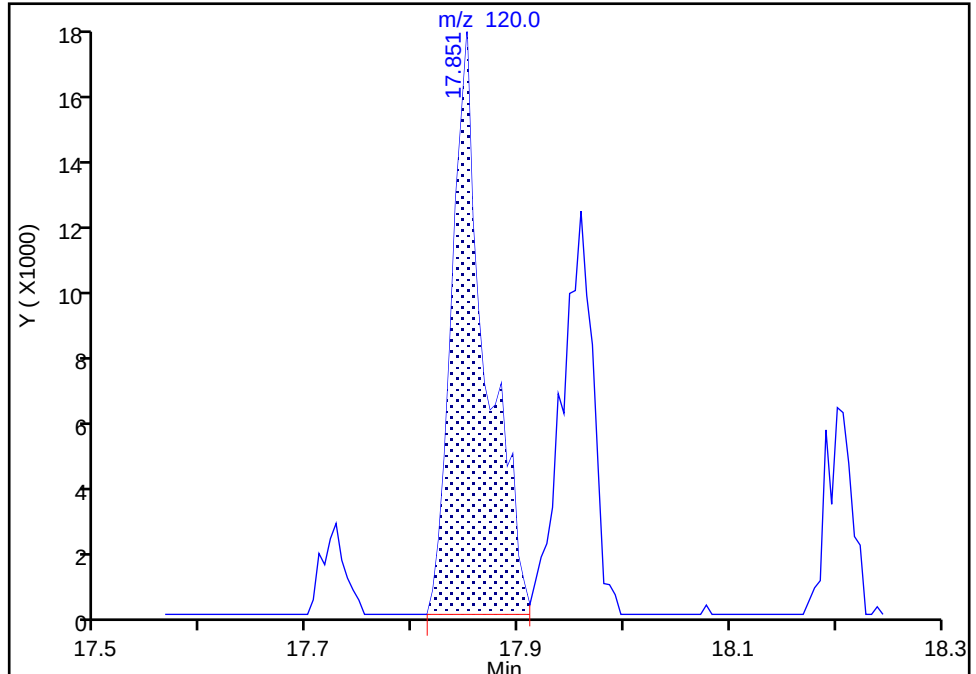
Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D
Injection Date: 03-Oct-2019 22:21:30 Instrument ID: MR
Lims ID: 140-16882-A-7 Lab Sample ID: 140-16882-7
Client ID: AA-01
Operator ID: ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

87 1,3,5-Trimethylbenzene, CAS: 108-67-8

Signal: 1

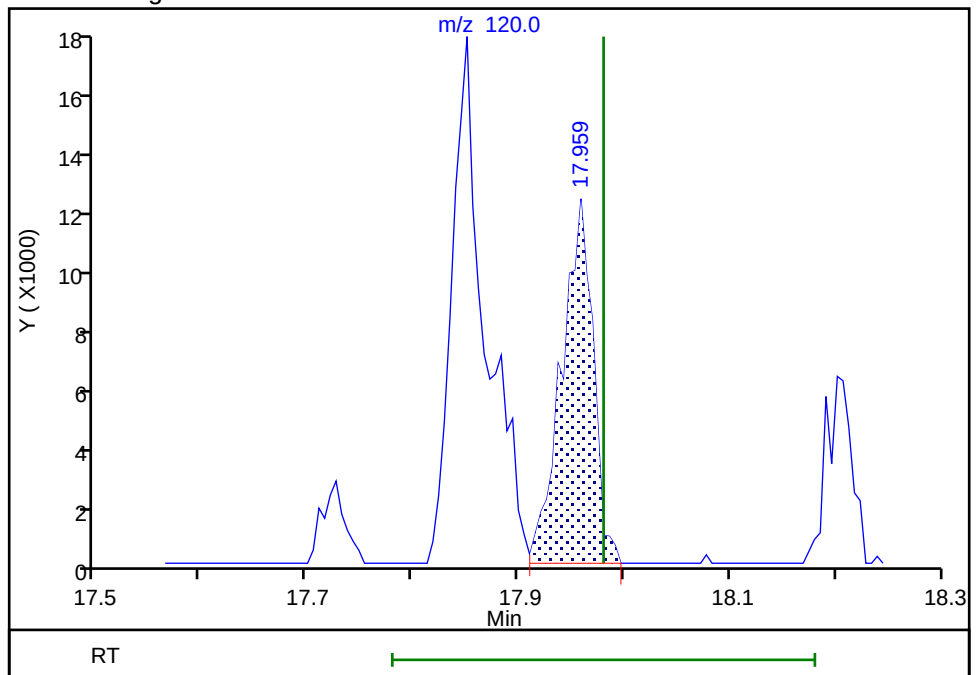
RT: 17.85
Area: 38801
Amount: 0.168128
Amount Units: ppb v/v

Processing Integration Results



RT: 17.96
Area: 24861
Amount: 0.107725
Amount Units: ppb v/v

Manual Integration Results



Reviewer: tajh, 04-Oct-2019 11:02:58
Audit Action: Assigned Compound ID

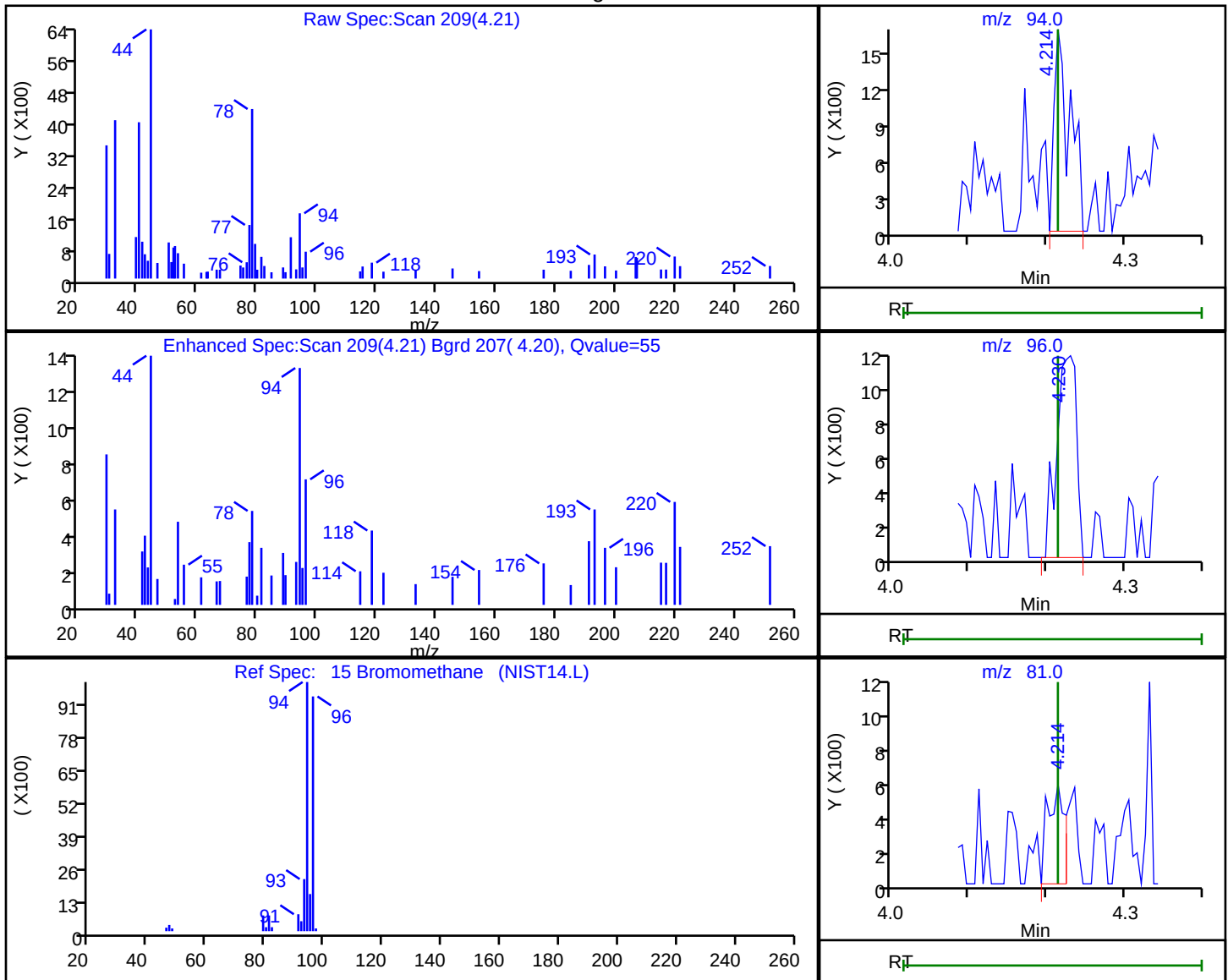
Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D
Injection Date: 03-Oct-2019 22:21:30 Instrument ID: MR
Lims ID: 140-16882-A-7 Lab Sample ID: 140-16882-7
Client ID: AA-01
Operator ID: ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
4.21	94.00	2369	0.021438
4.23	96.00	1997	
4.21	81.00	829	

Reviewer: tajh, 04-Oct-2019 11:02:32

Audit Action: Marked Compound Undetected

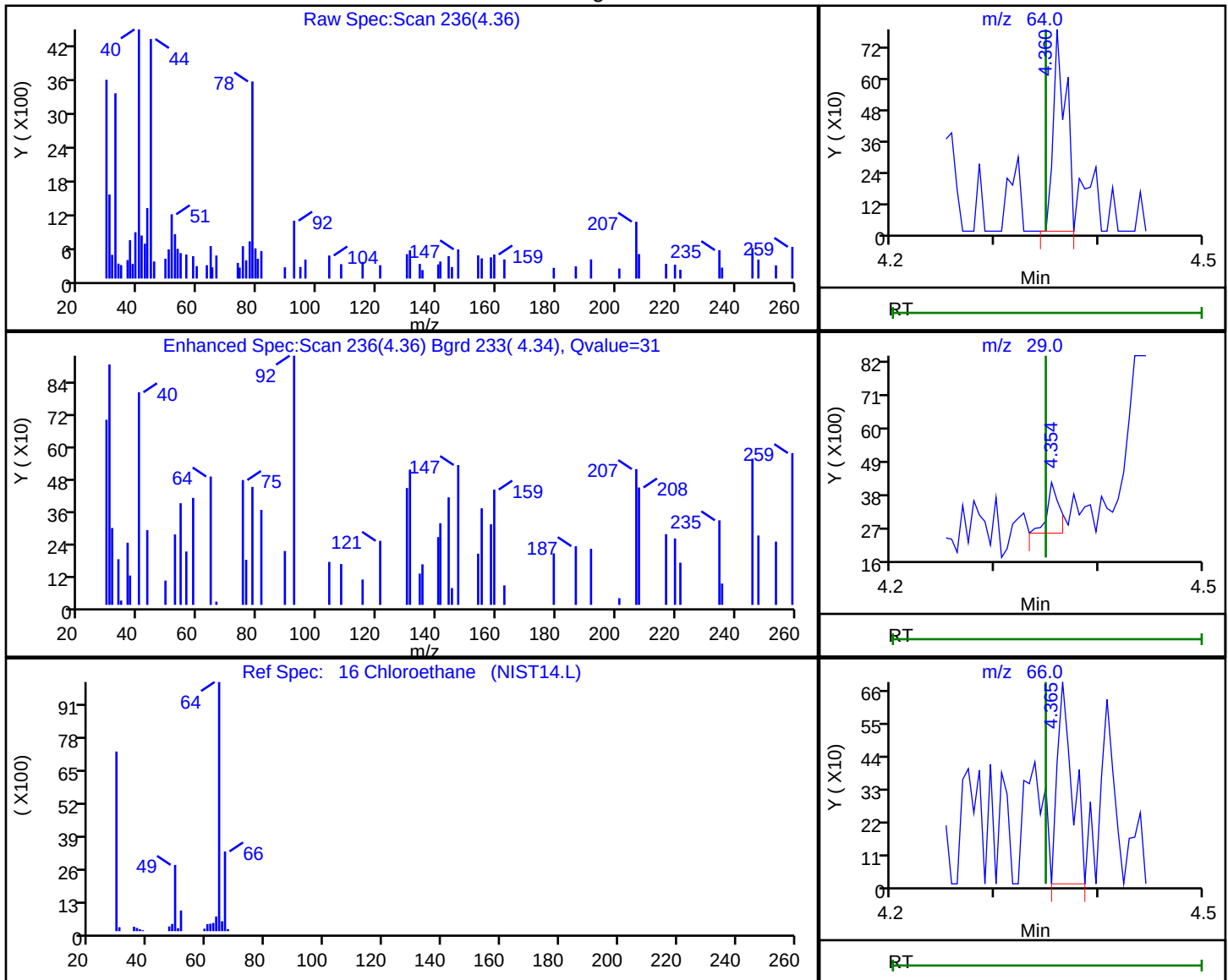
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D
Injection Date: 03-Oct-2019 22:21:30 Instrument ID: MR
Lims ID: 140-16882-A-7 Lab Sample ID: 140-16882-7
Client ID: AA-01
Operator ID: ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

16 Chloroethane, CAS: 75-00-3

Processing Results



RT	Mass	Response	Amount
4.36	64.00	667	0.014301
4.35	29.00	1331	
4.36	66.00	697	

Reviewer: tajh, 04-Oct-2019 11:02:36

Audit Action: Marked Compound Undetected

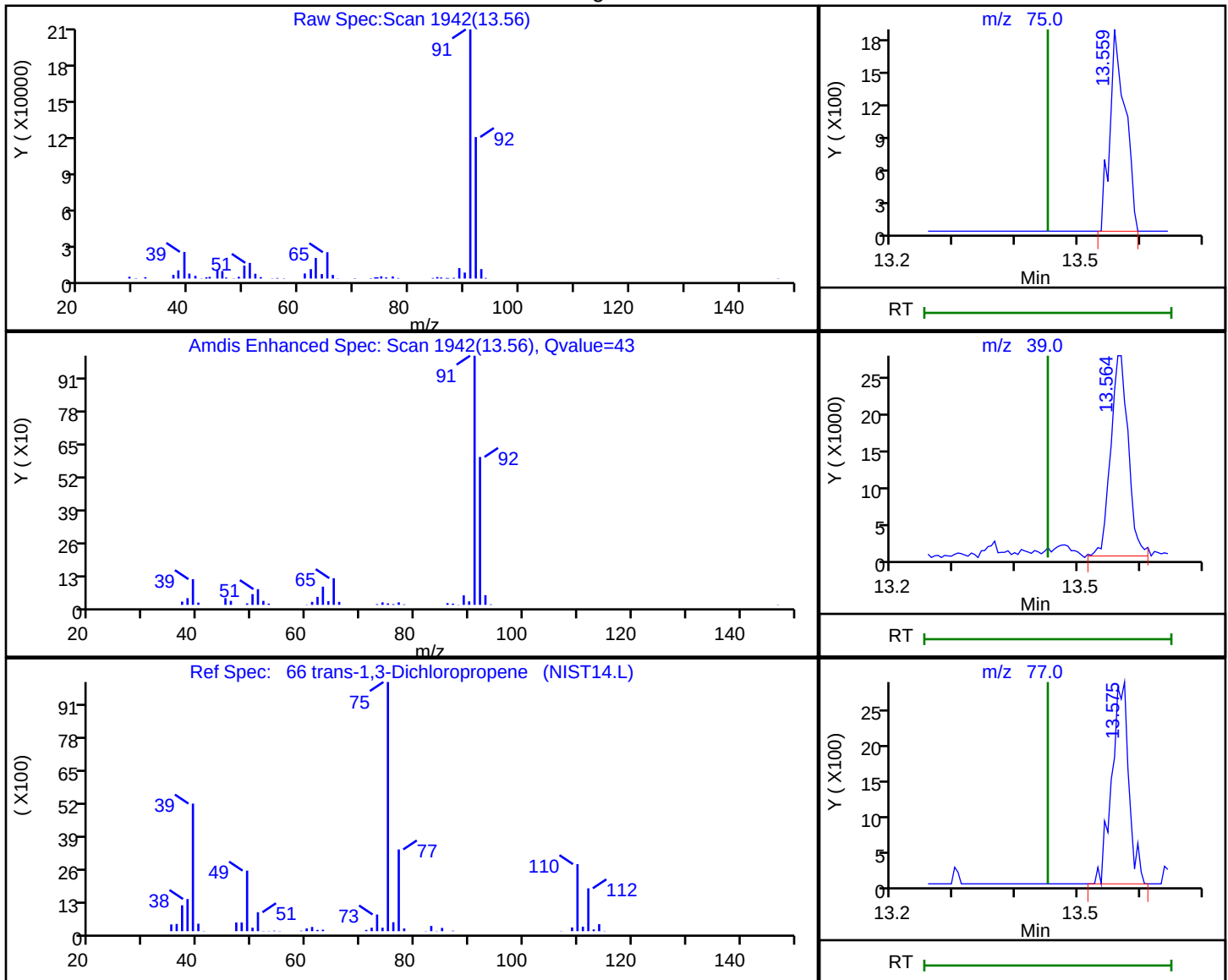
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P107.D
Injection Date: 03-Oct-2019 22:21:30 Instrument ID: MR
Lims ID: 140-16882-A-7 Lab Sample ID: 140-16882-7
Client ID: AA-01
Operator ID: ALS Bottle#: 7 Worklist Smp#: 15
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
13.56	75.00	3285	0.020855
13.56	39.00	53258	
13.58	77.00	5404	

Reviewer: tajh, 04-Oct-2019 11:02:50

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-02 Lab Sample ID: 140-16882-8
 Matrix: Air Lab File ID: RJ03P108.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:19
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 00:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.13		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	0.43		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	0.32		0.080	
100-44-7	Benzyl chloride	126.58	ND	*	0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	0.057		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	0.77		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	0.18		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-02 Lab Sample ID: 140-16882-8
 Matrix: Air Lab File ID: RJ03P108.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:19
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 00:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	0.22		0.080	
64-17-5	Ethanol	46.07	2.6		2.0	
100-41-4	Ethylbenzene	106.17	0.12		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.56	B	0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	0.34		0.080	
95-47-6	o-Xylene	106.17	0.13		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	0.67		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	2.3		0.036	
75-69-4	Trichlorofluoromethane	137.37	0.21		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-02 Lab Sample ID: 140-16882-8
 Matrix: Air Lab File ID: RJ03P108.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:19
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 00:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.63		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	1.3		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	1.0		0.26	
100-44-7	Benzyl chloride	126.58	ND	*	0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.36		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.6		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	0.71		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: AA-02 Lab Sample ID: 140-16882-8
 Matrix: Air Lab File ID: RJ03P108.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:19
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 00:09
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.1		0.40	
64-17-5	Ethanol	46.07	4.9		3.8	
100-41-4	Ethylbenzene	106.17	0.51		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.9	B	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	1.5		0.35	
95-47-6	o-Xylene	106.17	0.56		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	2.5		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	12		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.2		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	95		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D
 Lims ID: 140-16882-A-8
 Client ID: AA-02
 Sample Type: Client
 Inject. Date: 04-Oct-2019 00:09:30 ALS Bottle#: 8 Worklist Smp#: 17
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013261-017
 Misc. Info.: 140-16882-a-8
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:05:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.517	8.522	-0.005	90	395616	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.749	0.000	93	2315356	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1769041	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	96	989726	3.79	
8 Dichlorodifluoromethane	85	3.491	3.480	0.011	99	48032	0.2152	
9 Chloromethane	52	3.664	3.658	0.006	99	32909	0.7721	
16 Chloroethane	64	4.359	4.349	0.010	33	1996	0.0356	
17 Ethanol	31	4.456	4.440	0.016	98	157695	2.61	
21 Trichlorofluoromethane	101	4.904	4.899	0.005	98	66901	0.2080	
29 2-Methyl-2-propanol	59	5.740	5.697	0.043	70	9444	0.0412	
30 1,1,2-Trichloro-1,2,2-trif	101	5.772	5.772	0.000	90	19714	0.0725	
31 Methylene Chloride	84	5.961	5.950	0.011	93	85327	0.5590	
39 2-Butanone (MEK)	72	7.767	7.746	0.021	95	28854	0.4323	
40 Hexane	56	7.773	7.762	0.011	58	20478	0.1891	
42 cis-1,2-Dichloroethene	96	8.193	8.183	0.011	89	25859	0.1798	
44 Chloroform	83	8.533	8.528	0.005	27	7102	0.0248	
48 1,2-Dichloroethane	62	9.682	9.682	0.000	19	2148	0.0118	
51 Cyclohexane	69	10.183	10.178	0.005	53	4083	0.0617	
49 Benzene	78	10.178	10.178	0.000	95	143508	0.3214	
52 Carbon tetrachloride	117	10.205	10.205	0.000	83	16942	0.0574	
55 Isooctane	57	10.965	10.965	0.000	93	46313	0.0667	
58 Trichloroethene	130	11.472	11.477	-0.005	97	440418	2.29	
67 Toluene	91	13.570	13.569	0.001	94	290031	0.6708	
73 Tetrachloroethene	129	14.724	14.723	0.001	76	2033	0.0117	
76 Ethylbenzene	91	15.894	15.894	0.000	99	69351	0.1183	
77 m-Xylene & p-Xylene	91	16.050	16.050	0.000	96	151555	0.3362	
80 o-Xylene	91	16.584	16.578	0.006	99	58850	0.1286	
87 1,3,5-Trimethylbenzene	120	17.954	17.980	-0.026	90	12070	0.0442	
92 1,2,4-Trimethylbenzene	105	18.417	18.433	-0.016	97	74249	0.1282	

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Oct-2019 11:19:29

Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Worklist Smp#: 17

Client ID: AA-02

Purge Vol: 500.000 mL

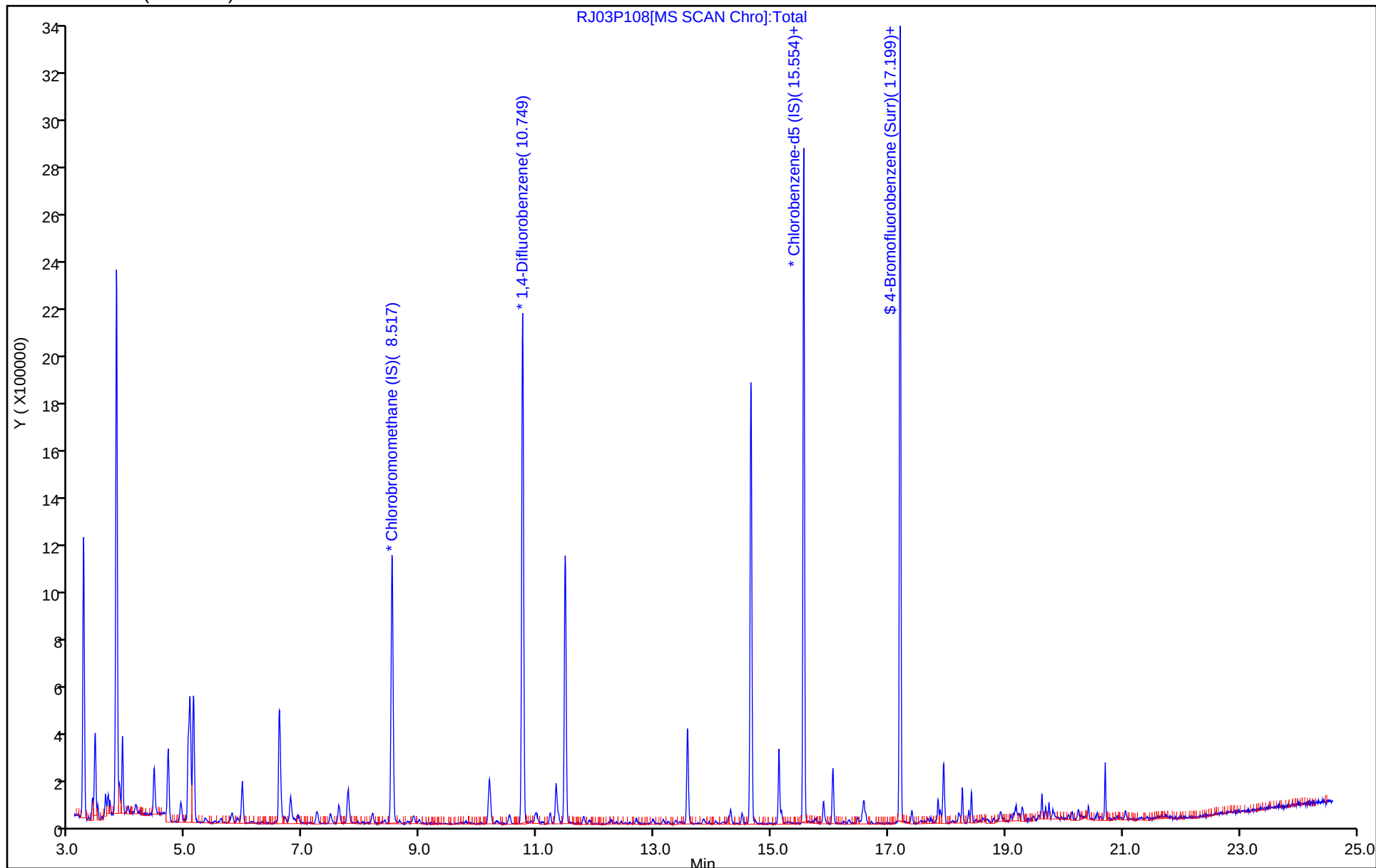
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D
Lims ID: 140-16882-A-8
Client ID: AA-02
Sample Type: Client
Inject. Date: 04-Oct-2019 00:09:30 ALS Bottle#: 8 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013261-017
Misc. Info.: 140-16882-a-8
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:05:05

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.79	94.66

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

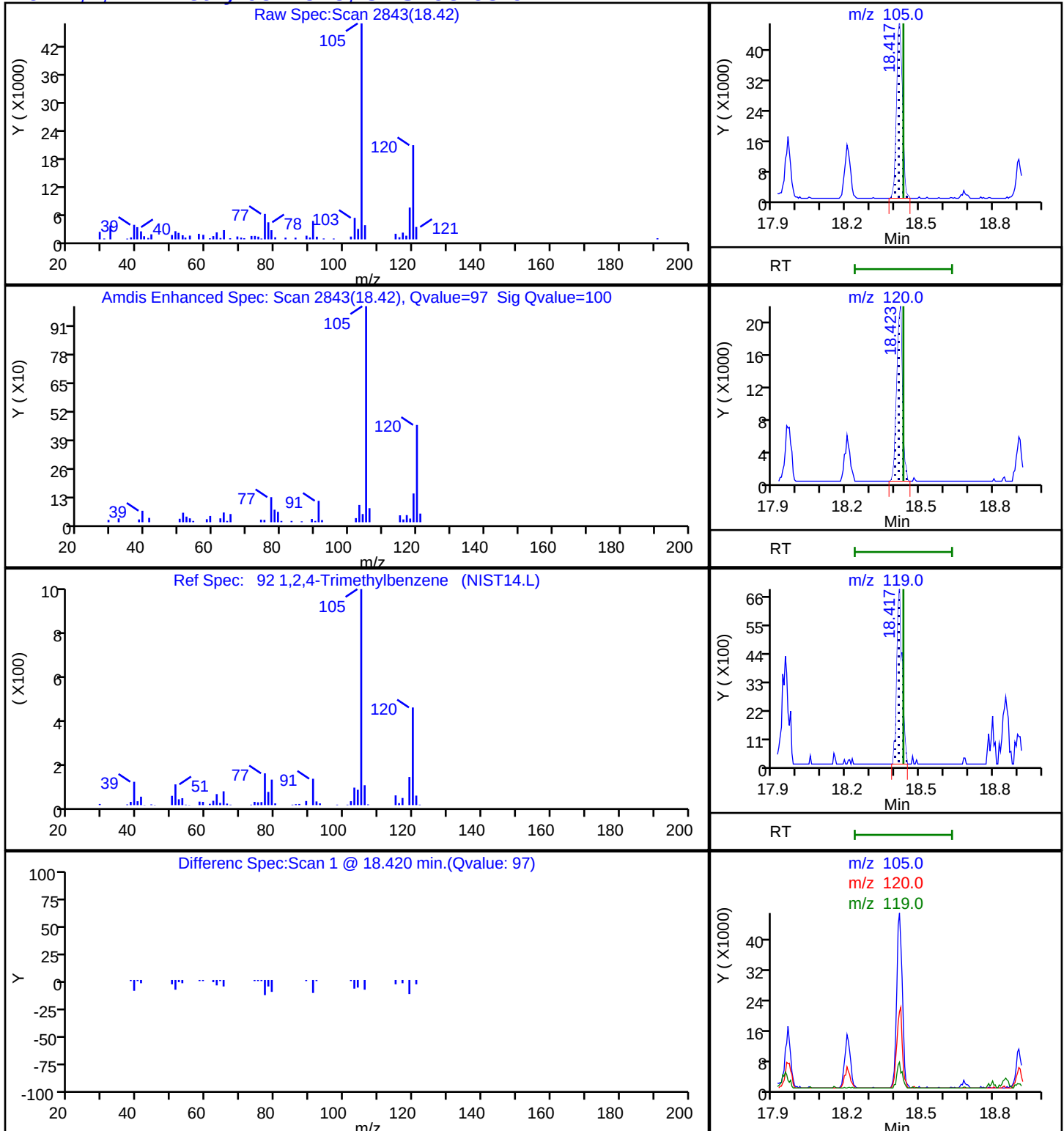
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

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

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

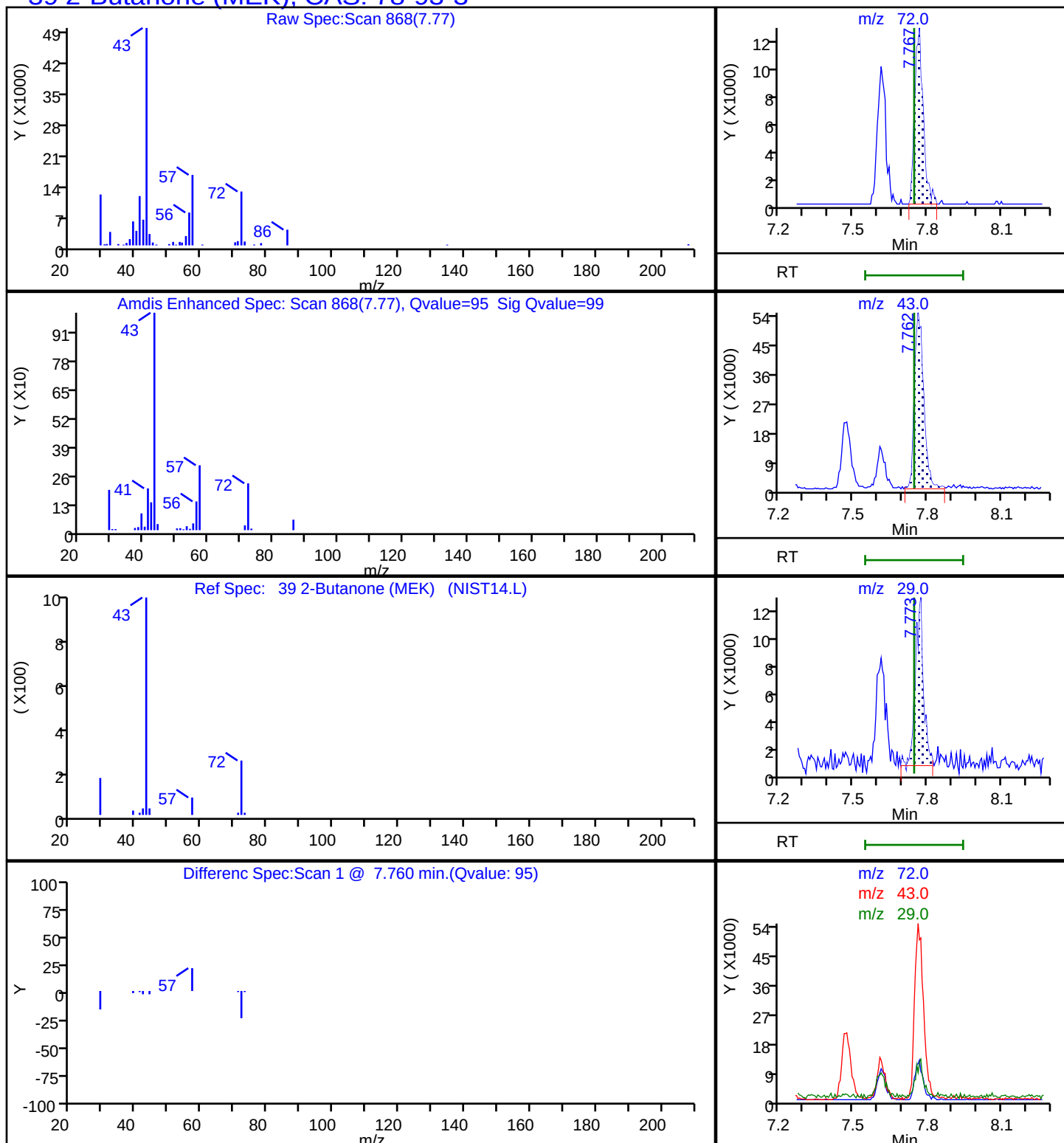
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

39 2-Butanone (MEK), CAS: 78-93-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

Worklist Smp#: 17

Purge Vol: 500.000 mL

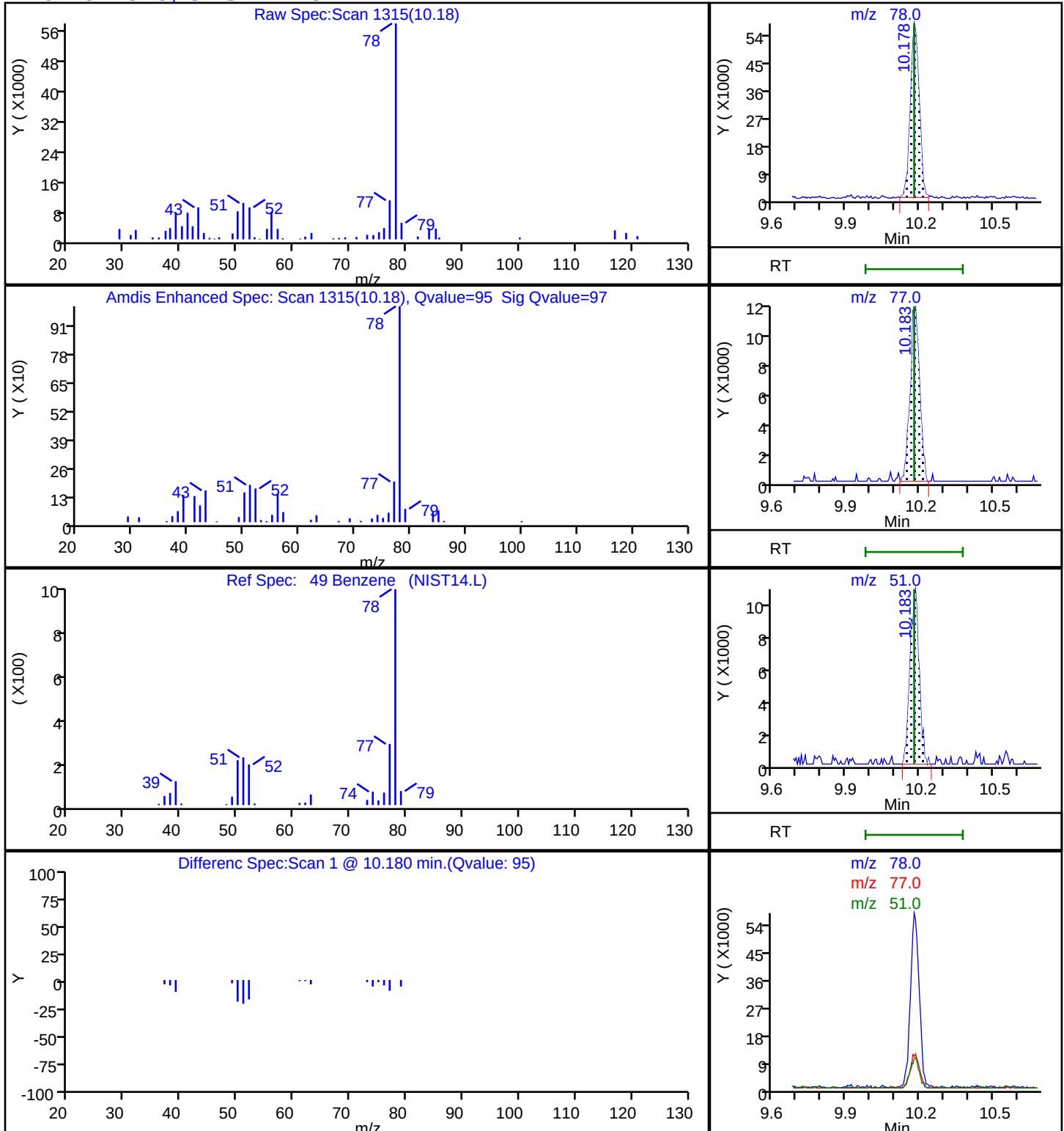
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

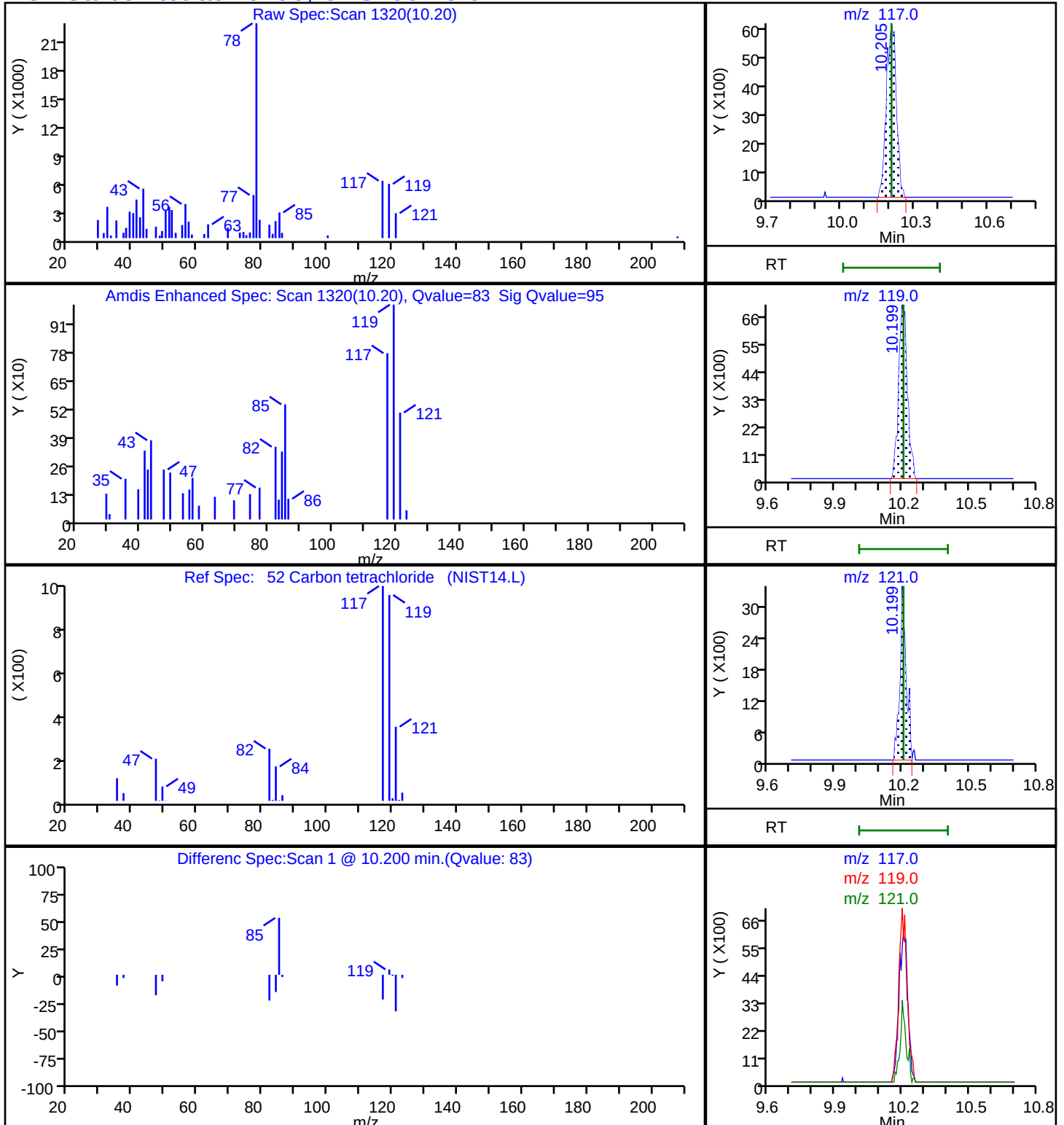
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

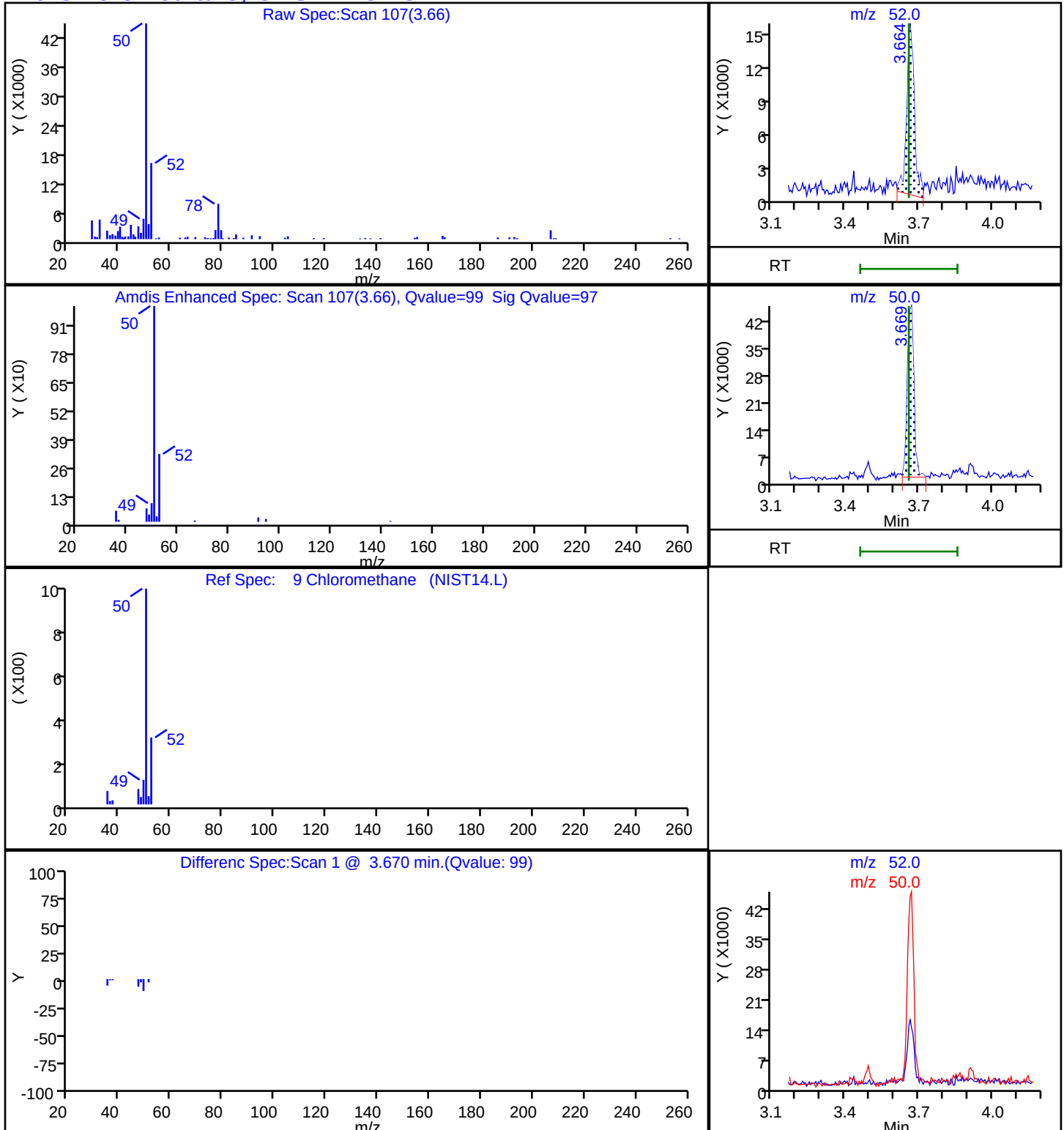
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

9 Chloromethane, CAS: 74-87-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

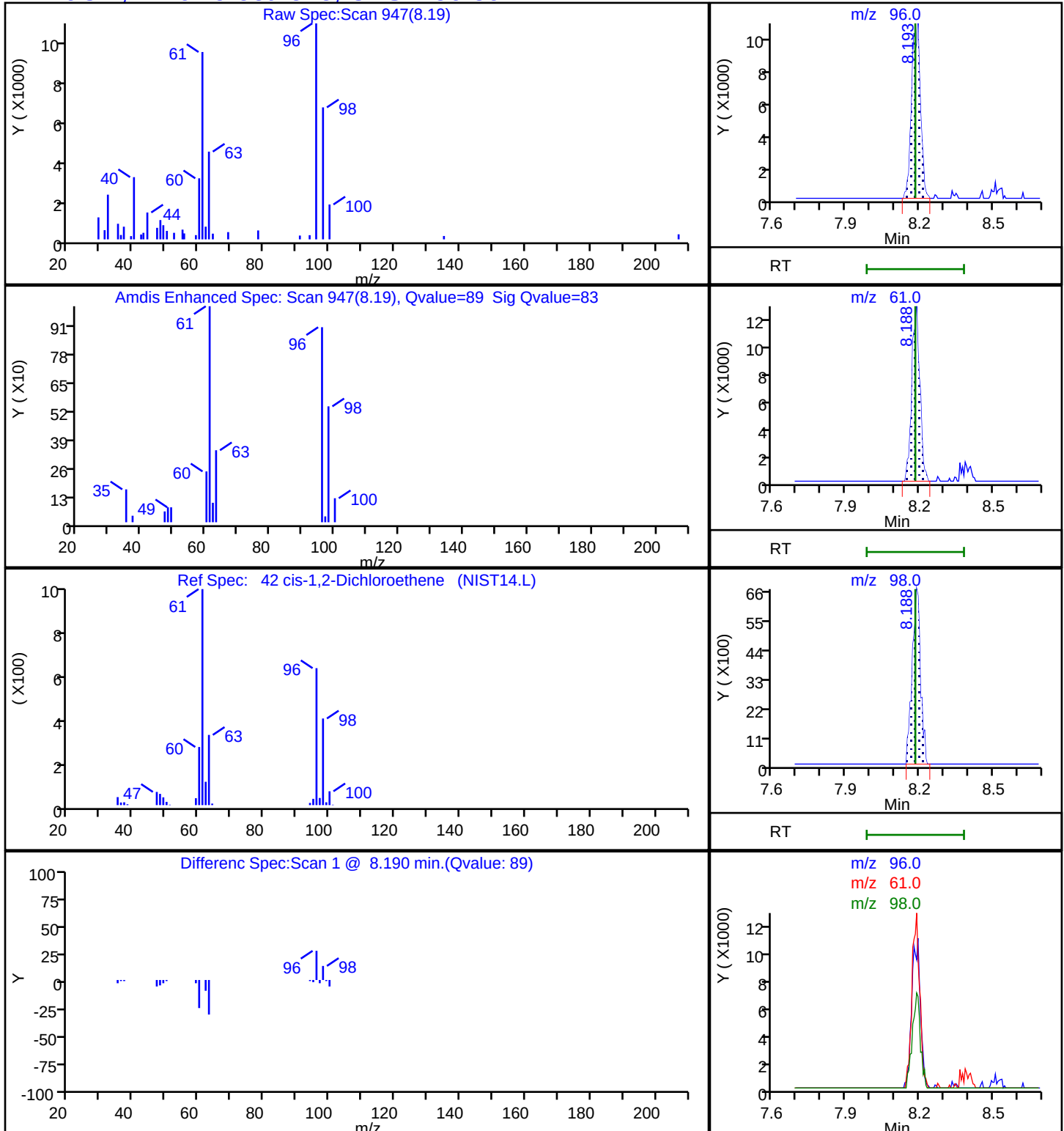
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

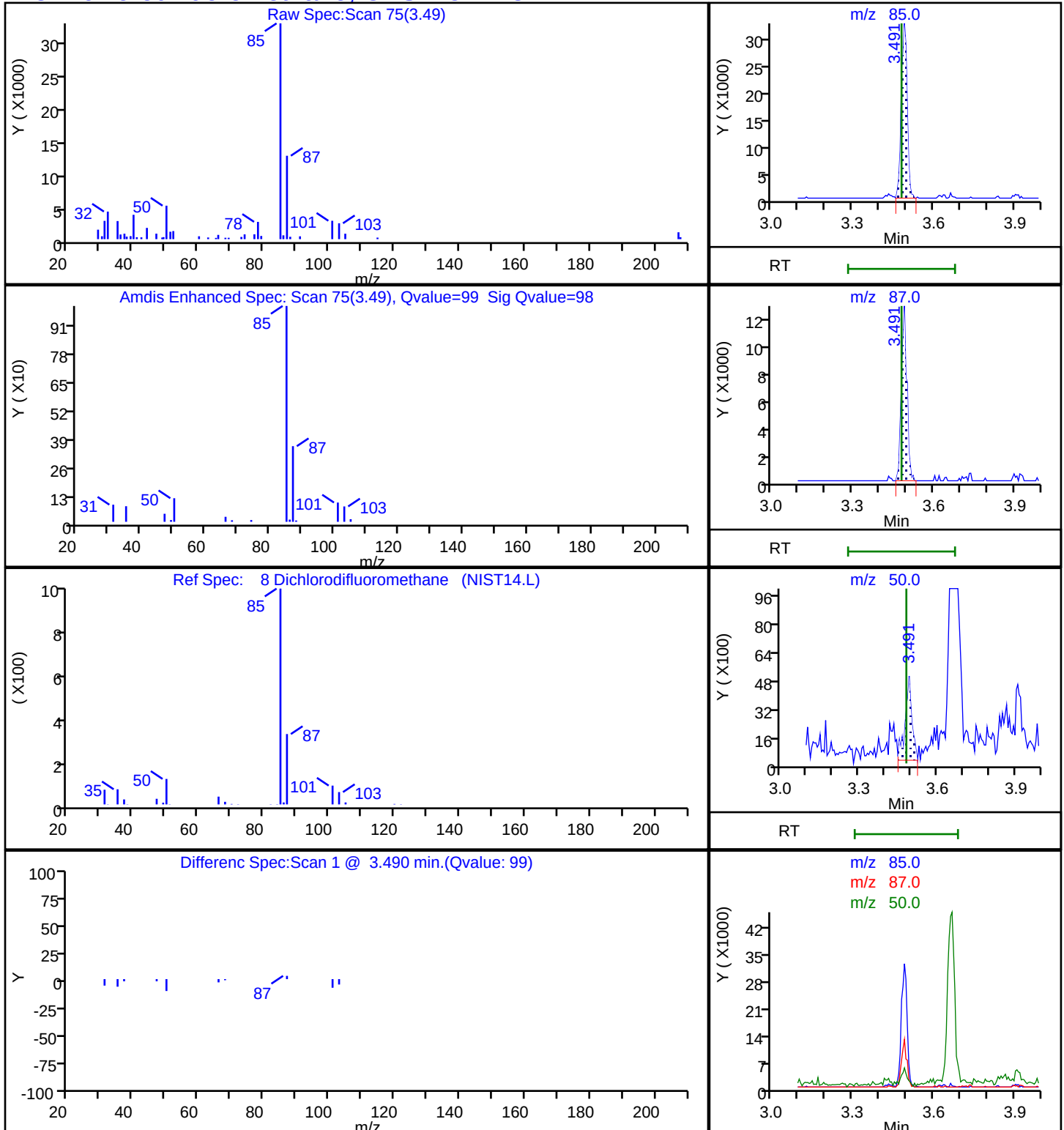
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

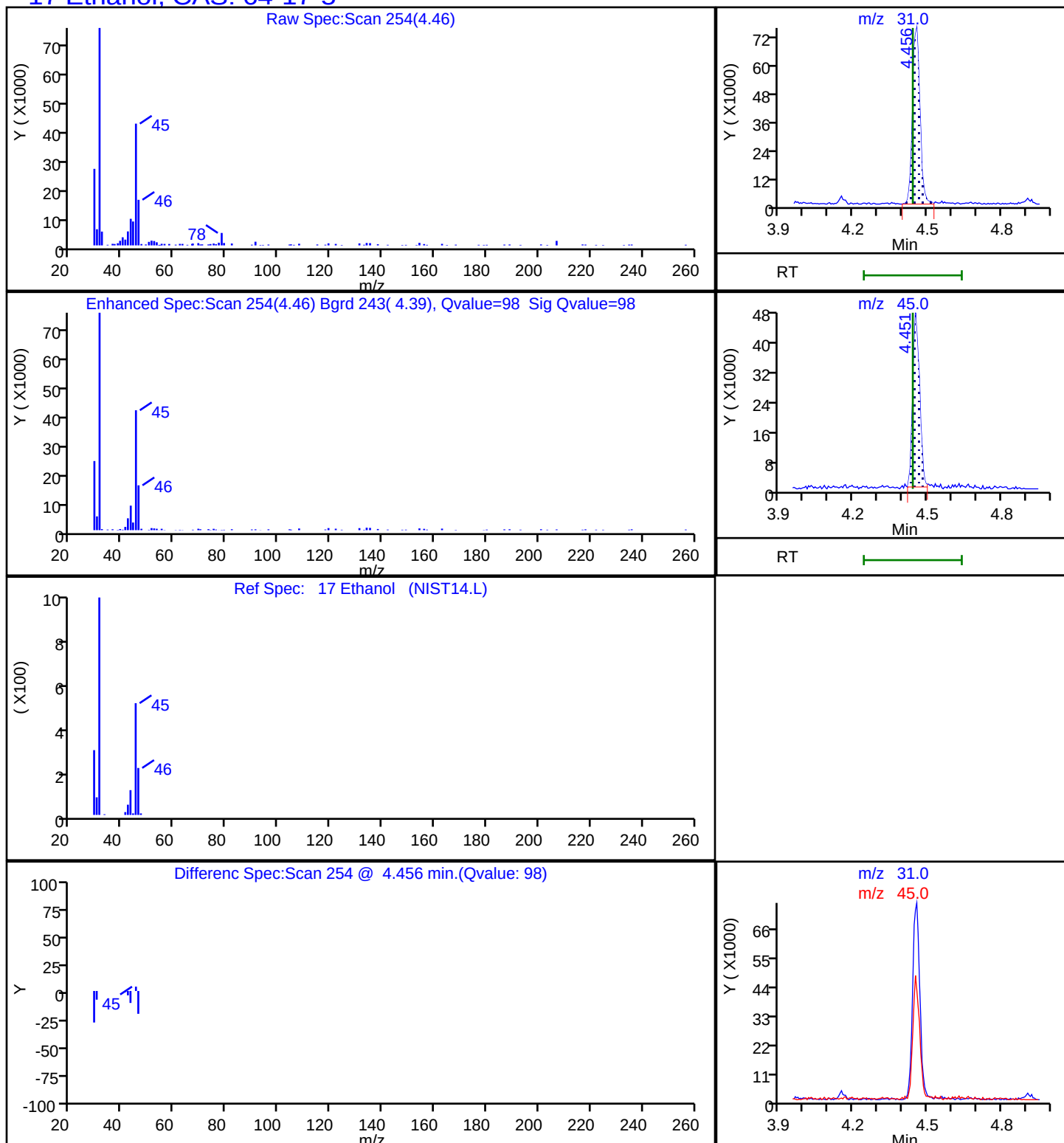
Method: MR TO15

Limit Group: MSA TO14A 15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

17 Ethanol, CAS: 64-17-5



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

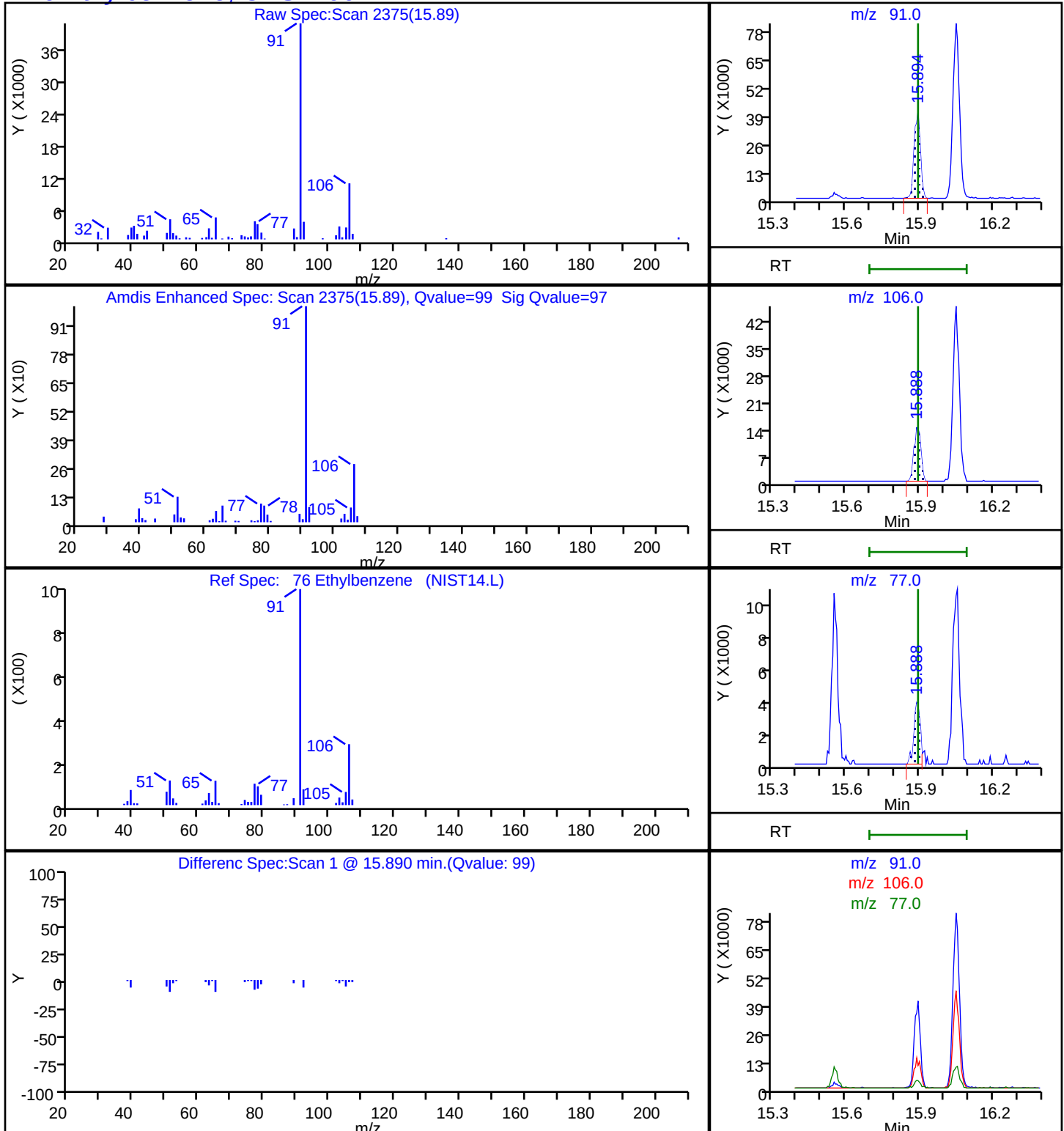
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

76 Ethylbenzene, CAS: 100-41-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

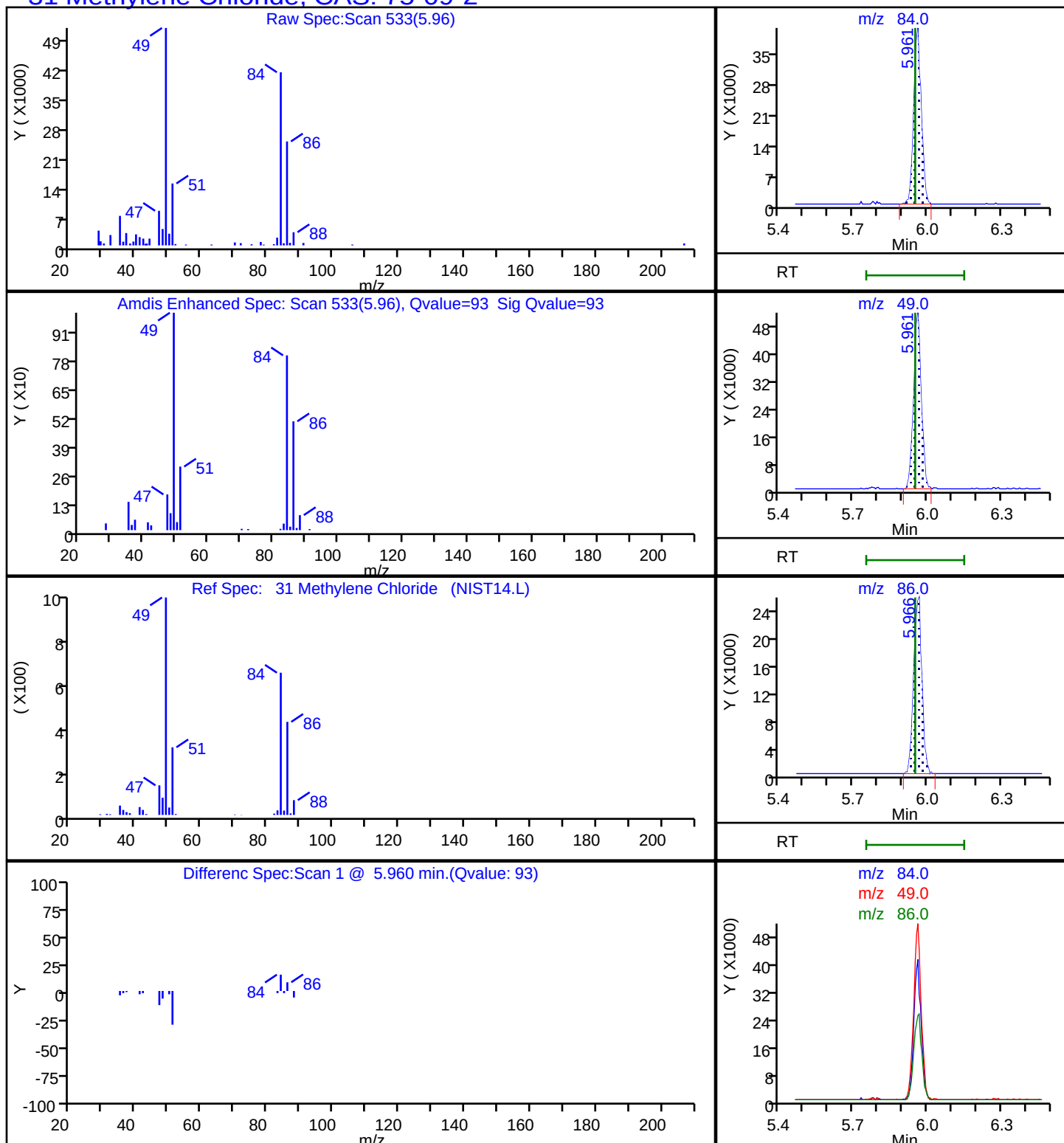
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

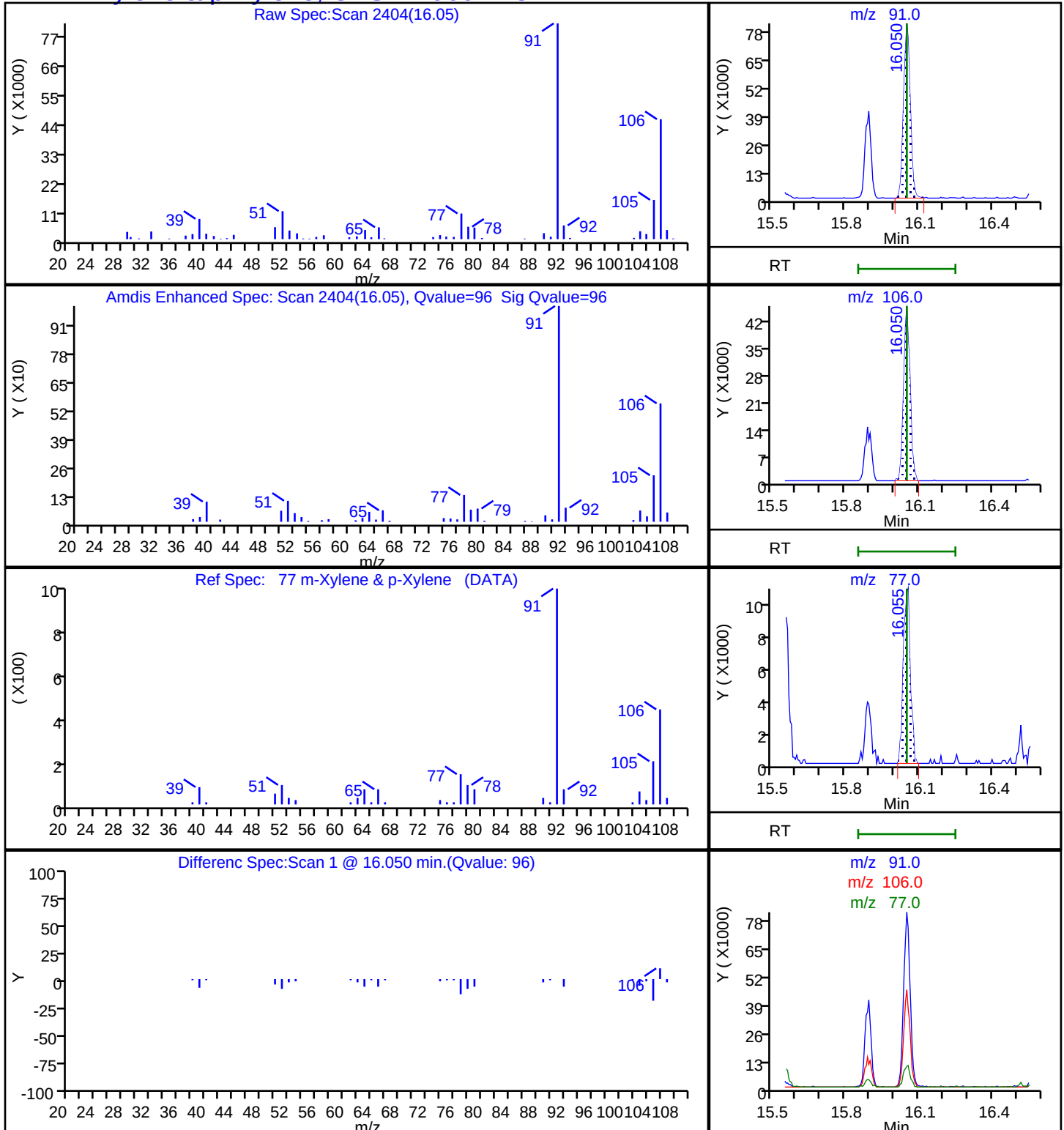
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MR_TO15

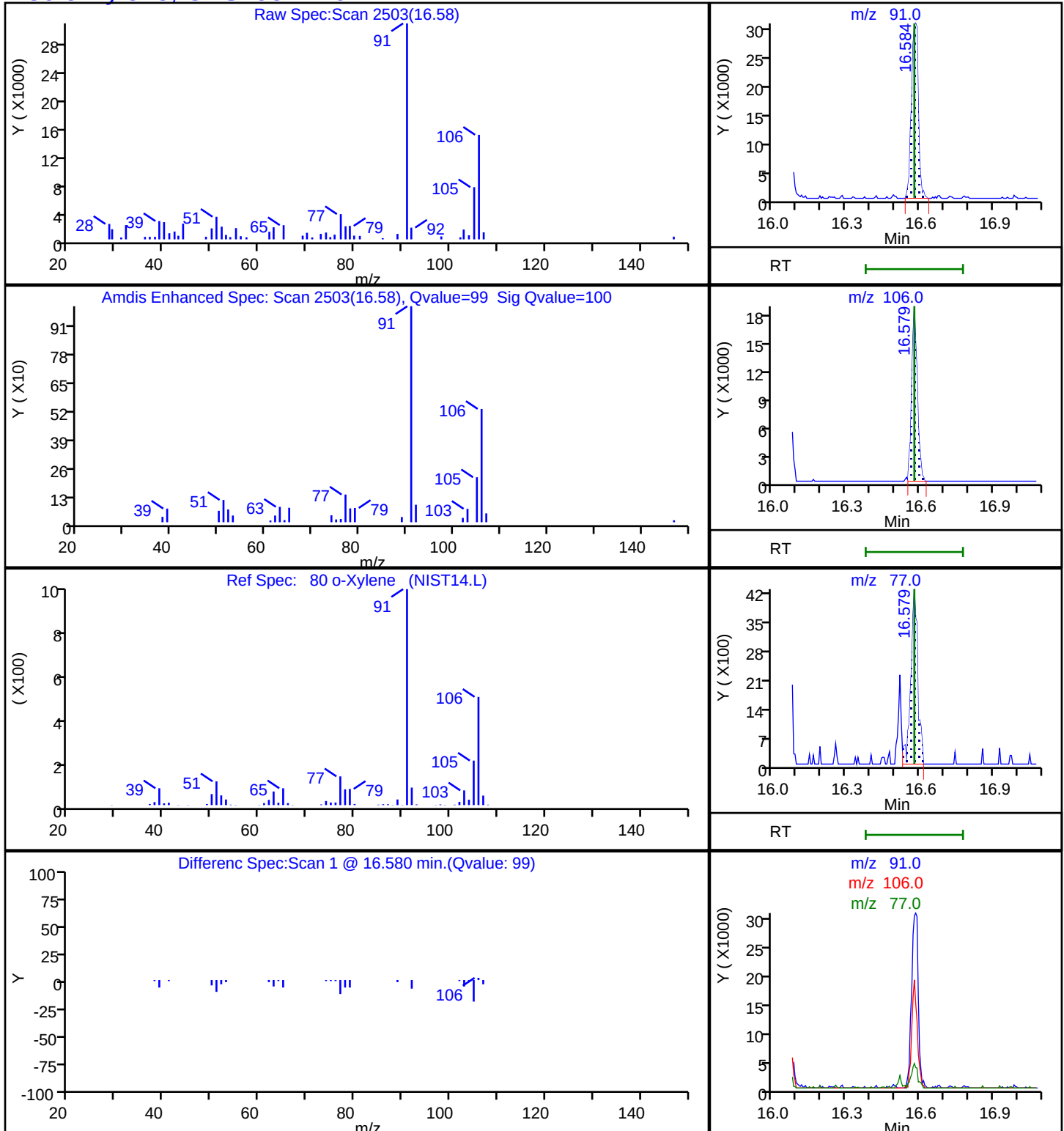
Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

80 o-Xylene, CAS: 95-47-6



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

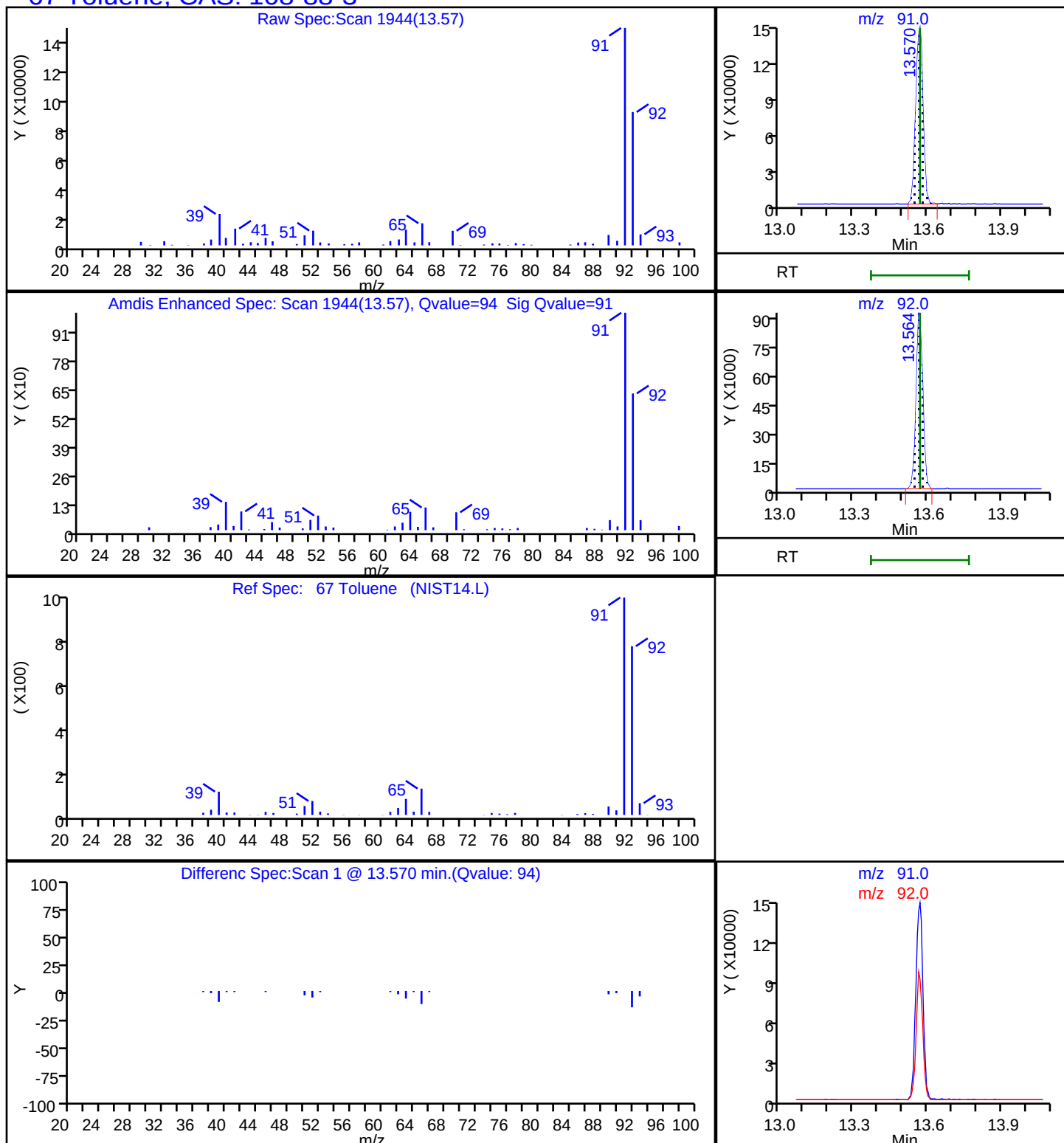
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

67 Toluene, CAS: 108-88-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#:

8

Worklist Smp#: 17

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

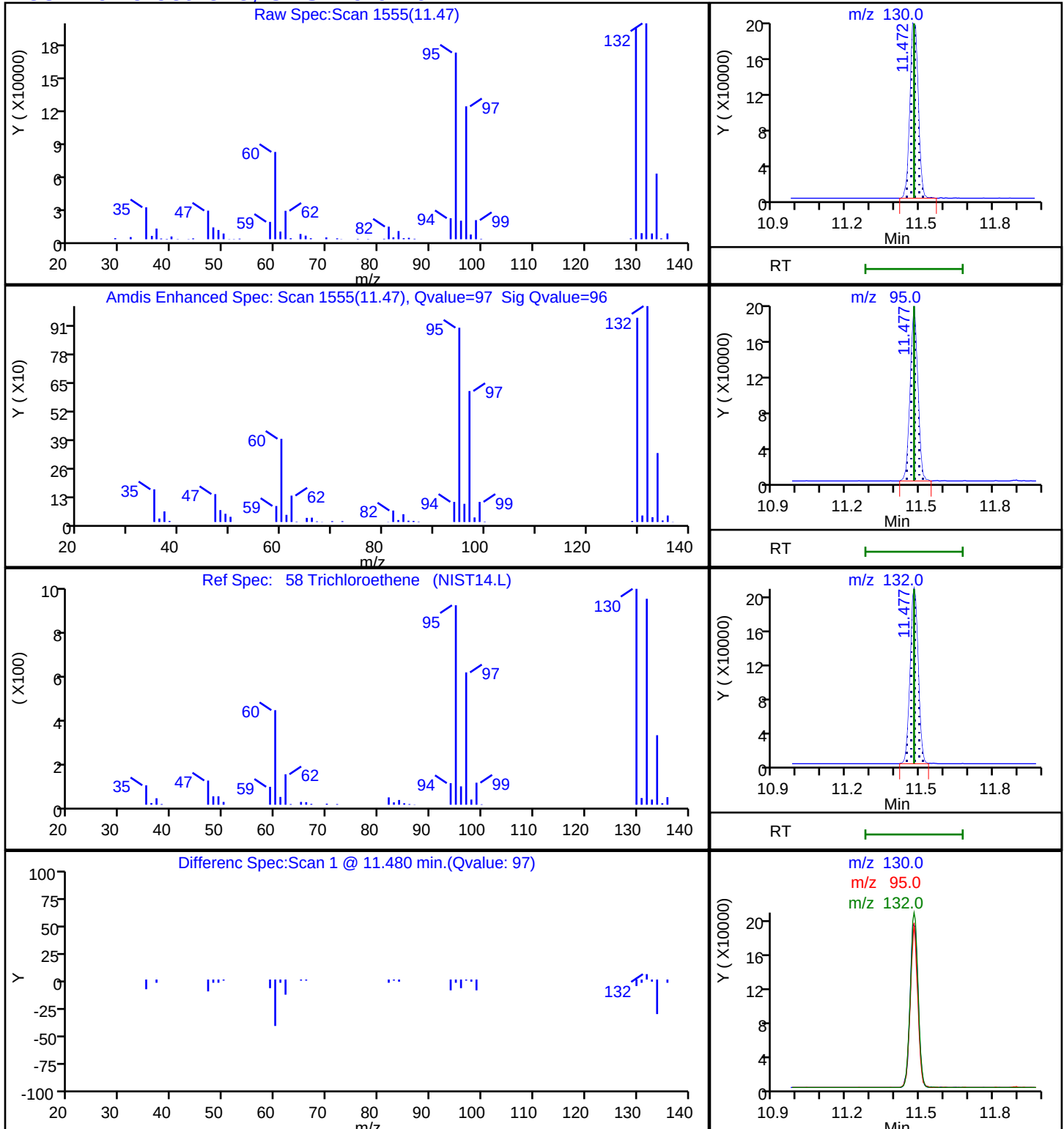
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D

Injection Date: 04-Oct-2019 00:09:30

Instrument ID: MR

Lims ID: 140-16882-A-8

Lab Sample ID: 140-16882-8

Client ID: AA-02

Operator ID:

ALS Bottle#: 8

Worklist Smp#: 17

Purge Vol: 500.000 mL

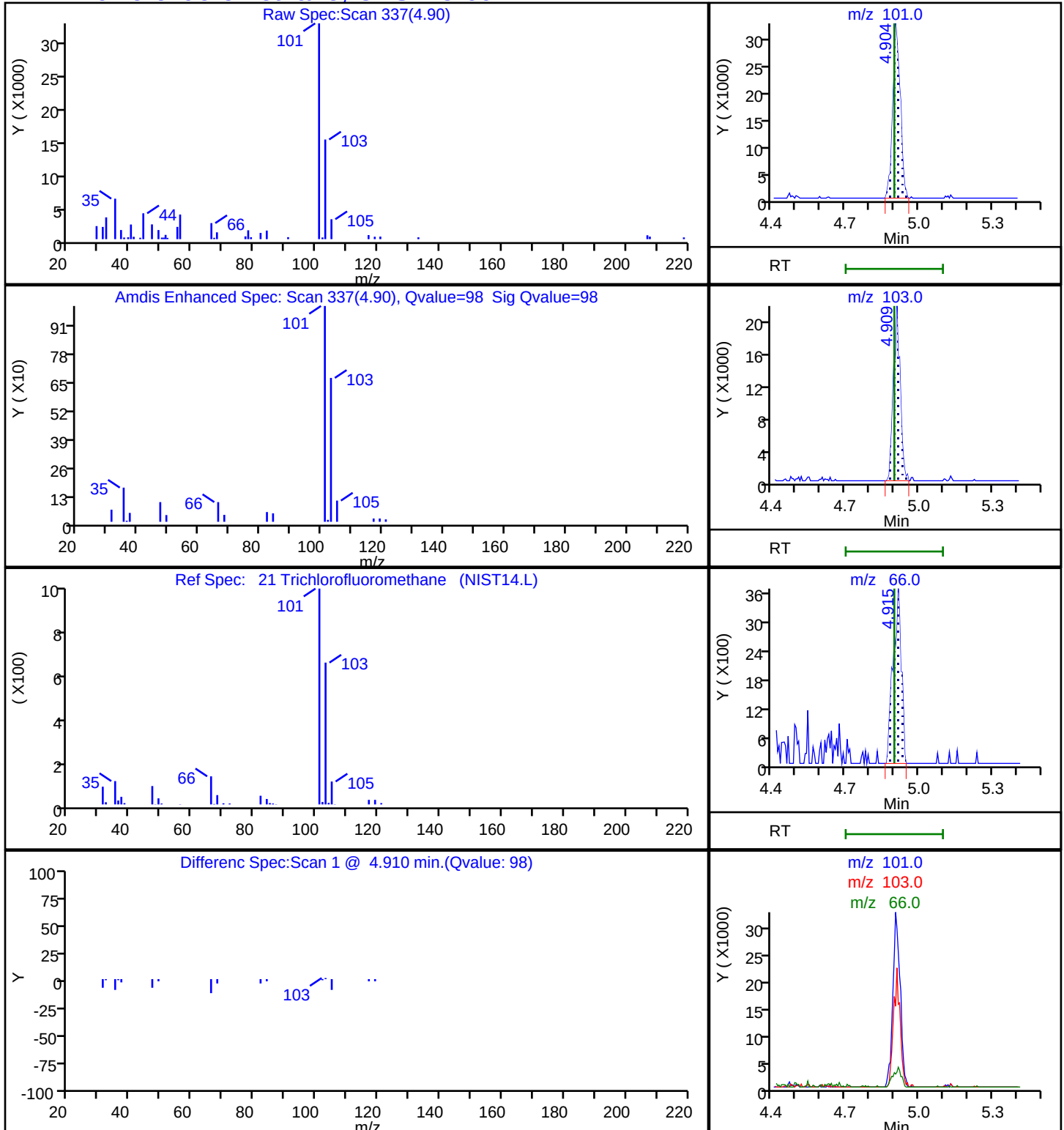
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

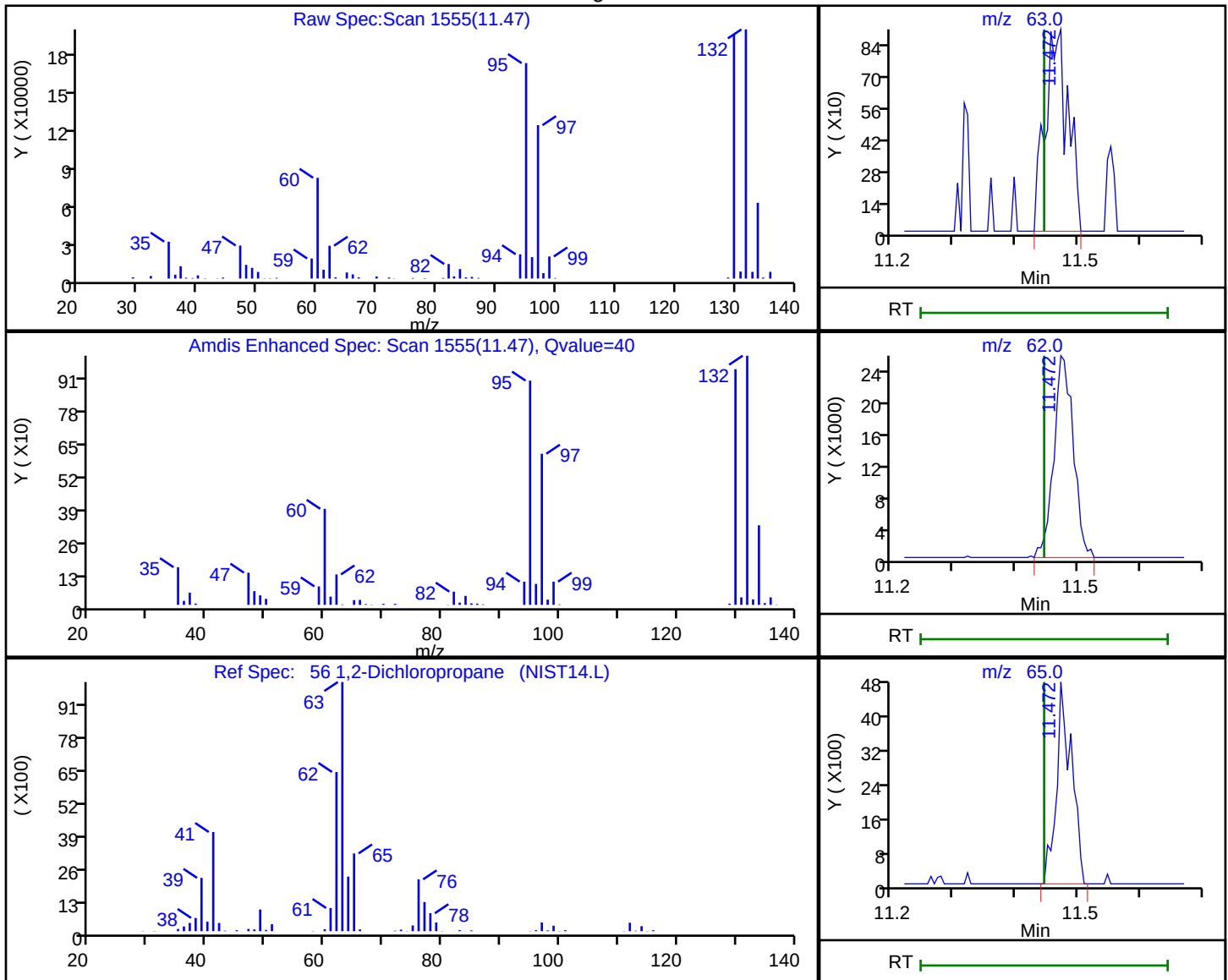
21 Trichlorofluoromethane, CAS: 75-69-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D
Injection Date: 04-Oct-2019 00:09:30 Instrument ID: MR
Lims ID: 140-16882-A-8 Lab Sample ID: 140-16882-8
Client ID: AA-02
Operator ID: ALS Bottle#: 8 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector MS SCAN

56 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
11.47	63.00	2323	0.014437
11.47	62.00	56256	
11.47	65.00	8001	

Reviewer: tajh, 04-Oct-2019 11:04:51

Audit Action: Marked Compound Undetected

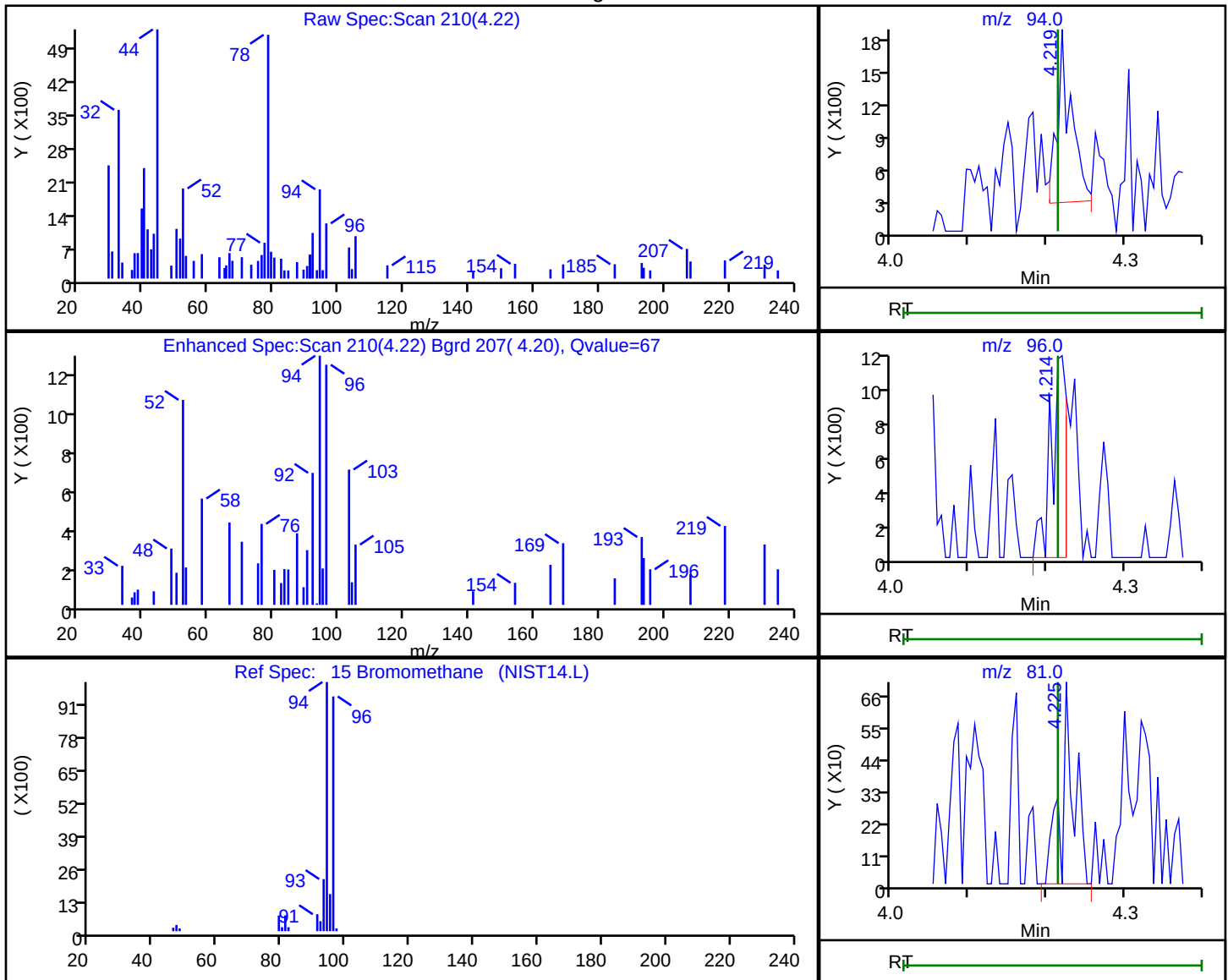
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D
Injection Date: 04-Oct-2019 00:09:30 Instrument ID: MR
Lims ID: 140-16882-A-8 Lab Sample ID: 140-16882-8
Client ID: AA-02
Operator ID: ALS Bottle#: 8 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
4.22	94.00	2024	0.015231
4.21	96.00	1594	
4.22	81.00	826	

Reviewer: tajh, 04-Oct-2019 11:04:39

Audit Action: Marked Compound Undetected

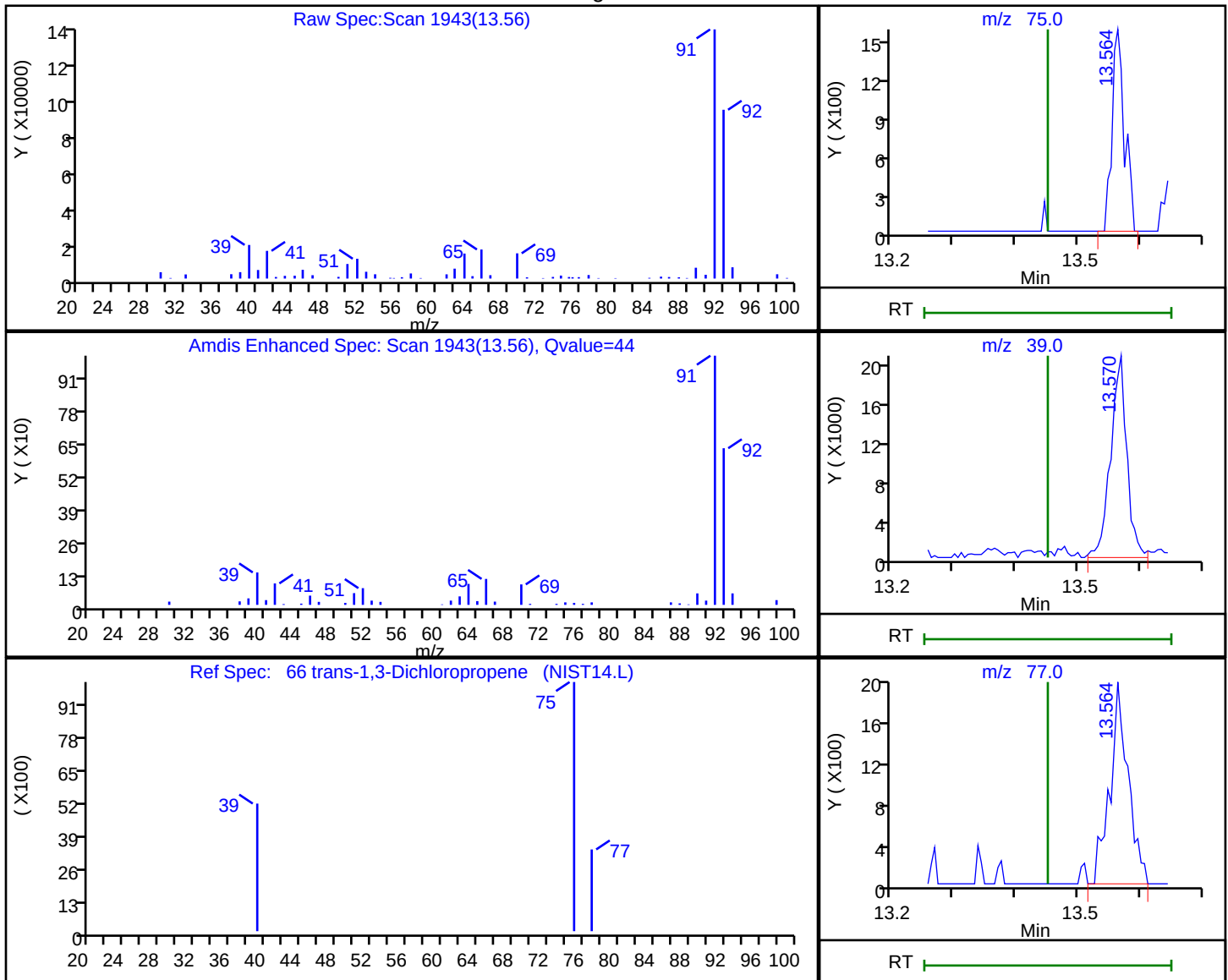
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P108.D
Injection Date: 04-Oct-2019 00:09:30 Instrument ID: MR
Lims ID: 140-16882-A-8 Lab Sample ID: 140-16882-8
Client ID: AA-02
Operator ID: ALS Bottle#: 8 Worklist Smp#: 17
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
13.56	75.00	2190	0.011741
13.57	39.00	37706	
13.56	77.00	3948	

Reviewer: tajh, 04-Oct-2019 11:04:56

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: DUP 0926 Lab Sample ID: 140-16882-9
 Matrix: Air Lab File ID: RJ03P109.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 01:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	0.45		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.12		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	2.4		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	1.1		0.080	
100-44-7	Benzyl chloride	126.58	ND	*	0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	0.063		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	0.62		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	0.10		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: DUP 0926 Lab Sample ID: 140-16882-9
 Matrix: Air Lab File ID: RJ03P109.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 01:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	0.22		0.080	
64-17-5	Ethanol	46.07	30		2.0	
100-41-4	Ethylbenzene	106.17	0.41		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	0.38		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.41	B	0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	1.1		0.080	
95-47-6	o-Xylene	106.17	0.43		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	1.0		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	1.8		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	3.0		0.036	
75-69-4	Trichlorofluoromethane	137.37	0.19		0.080	
75-01-4	Vinyl chloride	62.50	0.046		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: DUP 0926 Lab Sample ID: 140-16882-9
 Matrix: Air Lab File ID: RJ03P109.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 01:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.2		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	0.57		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	7.2		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	3.5		0.26	
100-44-7	Benzyl chloride	126.58	ND	*	0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	0.40		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	1.3		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	0.41		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: DUP 0926 Lab Sample ID: 140-16882-9
 Matrix: Air Lab File ID: RJ03P109.D
 Analysis Method: TO 15 LL Date Collected: 09/27/2019 11:25
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 01:02
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	1.1		0.40	
64-17-5	Ethanol	46.07	57		3.8	
100-41-4	Ethylbenzene	106.17	1.8		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	1.3		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	1.4	B	0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	4.9		0.35	
95-47-6	o-Xylene	106.17	1.9		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	3.2		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	6.8		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	16		0.19	
75-69-4	Trichlorofluoromethane	137.37	1.1		0.45	
75-01-4	Vinyl chloride	62.50	0.12		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	97		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D
 Lims ID: 140-16882-A-9
 Client ID: DUP 0926
 Sample Type: Client
 Inject. Date: 04-Oct-2019 01:02:30 ALS Bottle#: 9 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013261-018
 Misc. Info.: 140-16882-a-9
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:06:38

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	89	429073	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.749	0.000	93	2419194	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1916142	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	97	1101517	3.89	
8 Dichlorodifluoromethane	85	3.486	3.480	0.006	99	52865	0.2184	
9 Chloromethane	52	3.658	3.658	0.000	99	28612	0.6189	
12 Vinyl chloride	62	3.820	3.820	0.000	93	6646	0.0456	
15 Bromomethane	94	4.214	4.214	0.000	63	6894	0.0478	
16 Chloroethane	64	4.343	4.349	-0.006	28	2298	0.0378	
17 Ethanol	31	4.451	4.440	0.011	98	1985874	30.2	
21 Trichlorofluoromethane	101	4.899	4.899	0.000	98	66390	0.1903	
29 2-Methyl-2-propanol	59	5.707	5.697	0.010	95	260317	1.05	
30 1,1,2-Trichloro-1,2,2-trif	101	5.778	5.772	0.006	78	22389	0.0759	
31 Methylene Chloride	84	5.961	5.950	0.011	94	67127	0.4055	
36 Methyl tert-butyl ether	73	6.915	6.888	0.027	68	21711	0.0601	
39 2-Butanone (MEK)	72	7.746	7.746	0.000	98	176541	2.44	
40 Hexane	56	7.773	7.762	0.011	76	44269	0.3769	
42 cis-1,2-Dichloroethene	96	8.188	8.183	0.006	87	16010	0.1027	
44 Chloroform	83	8.533	8.528	0.005	28	11988	0.0386	
48 1,2-Dichloroethane	62	9.682	9.682	0.000	50	2166	0.0114	
51 Cyclohexane	69	10.183	10.178	0.005	63	11444	0.1656	
49 Benzene	78	10.178	10.178	0.000	94	511586	1.10	
52 Carbon tetrachloride	117	10.194	10.205	-0.011	94	19505	0.0632	
55 Isooctane	57	10.970	10.965	0.005	94	105151	0.1450	
58 Trichloroethene	130	11.477	11.477	0.000	96	601481	3.00	
61 1,4-Dioxane	88	11.742	11.725	0.017	68	10414	0.1540	
64 4-Methyl-2-pentanone (MIBK	43	12.685	12.680	0.005	98	39077	0.1024	
67 Toluene	91	13.564	13.569	-0.005	95	845814	1.81	
73 Tetrachloroethene	129	14.713	14.723	-0.010	89	3500	0.0186	
76 Ethylbenzene	91	15.894	15.894	0.000	96	259836	0.4091	
77 m-Xylene & p-Xylene	91	16.050	16.050	0.000	95	552859	1.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
79 Styrene	104	16.519	16.519	0.000	85	10183	0.0297	
80 o-Xylene	91	16.579	16.578	0.000	99	213743	0.4313	
87 1,3,5-Trimethylbenzene	120	17.959	17.980	-0.021	92	34499	0.1165	
92 1,2,4-Trimethylbenzene	105	18.417	18.433	-0.016	97	280694	0.4473	

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Oct-2019 11:19:36

Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Worklist Smp#: 18

Client ID: DUP 0926

Purge Vol: 500.000 mL

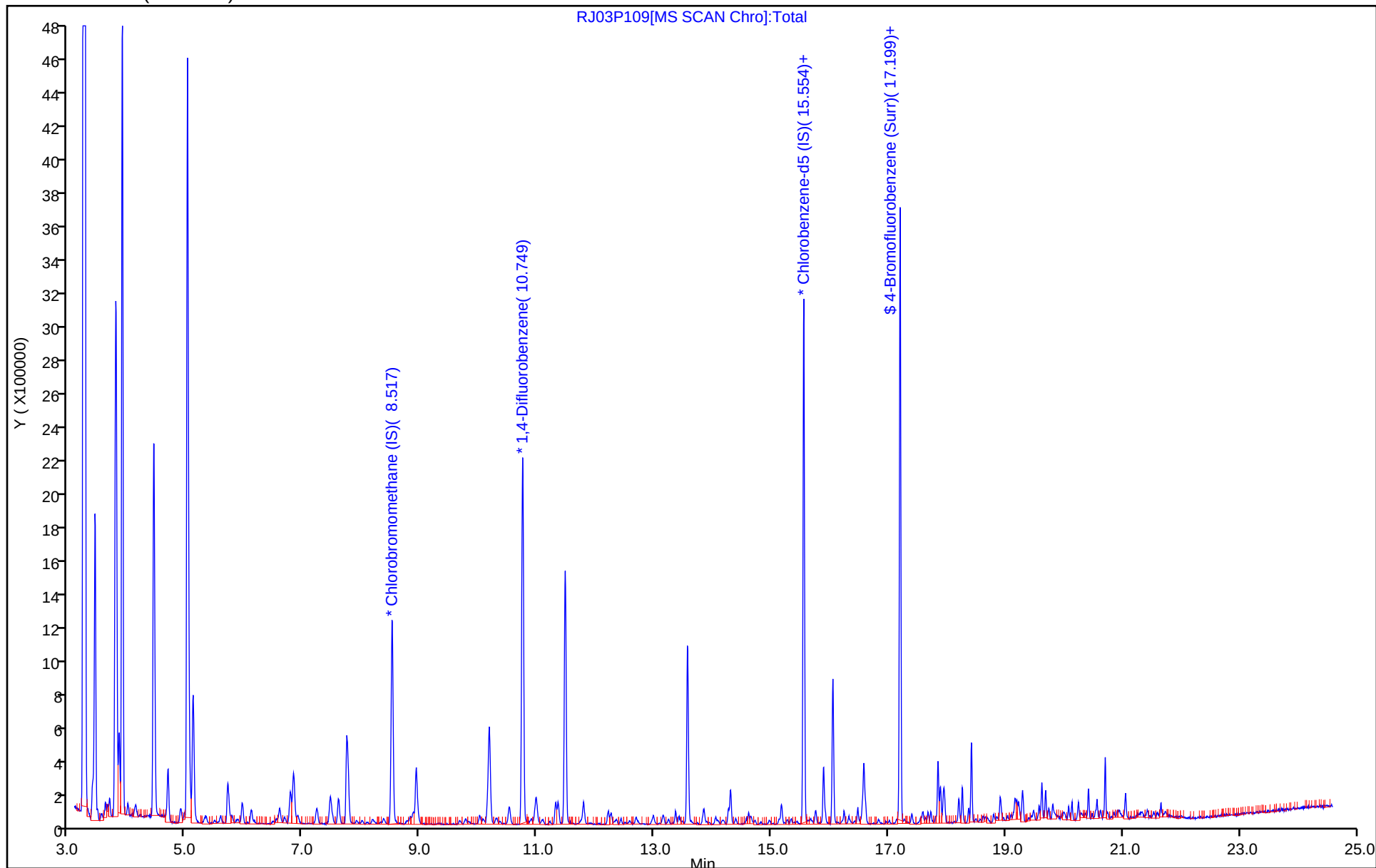
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D
Lims ID: 140-16882-A-9
Client ID: DUP 0926
Sample Type: Client
Inject. Date: 04-Oct-2019 01:02:30 ALS Bottle#: 9 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013261-018
Misc. Info.: 140-16882-a-9
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:06:38

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.89	97.26

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

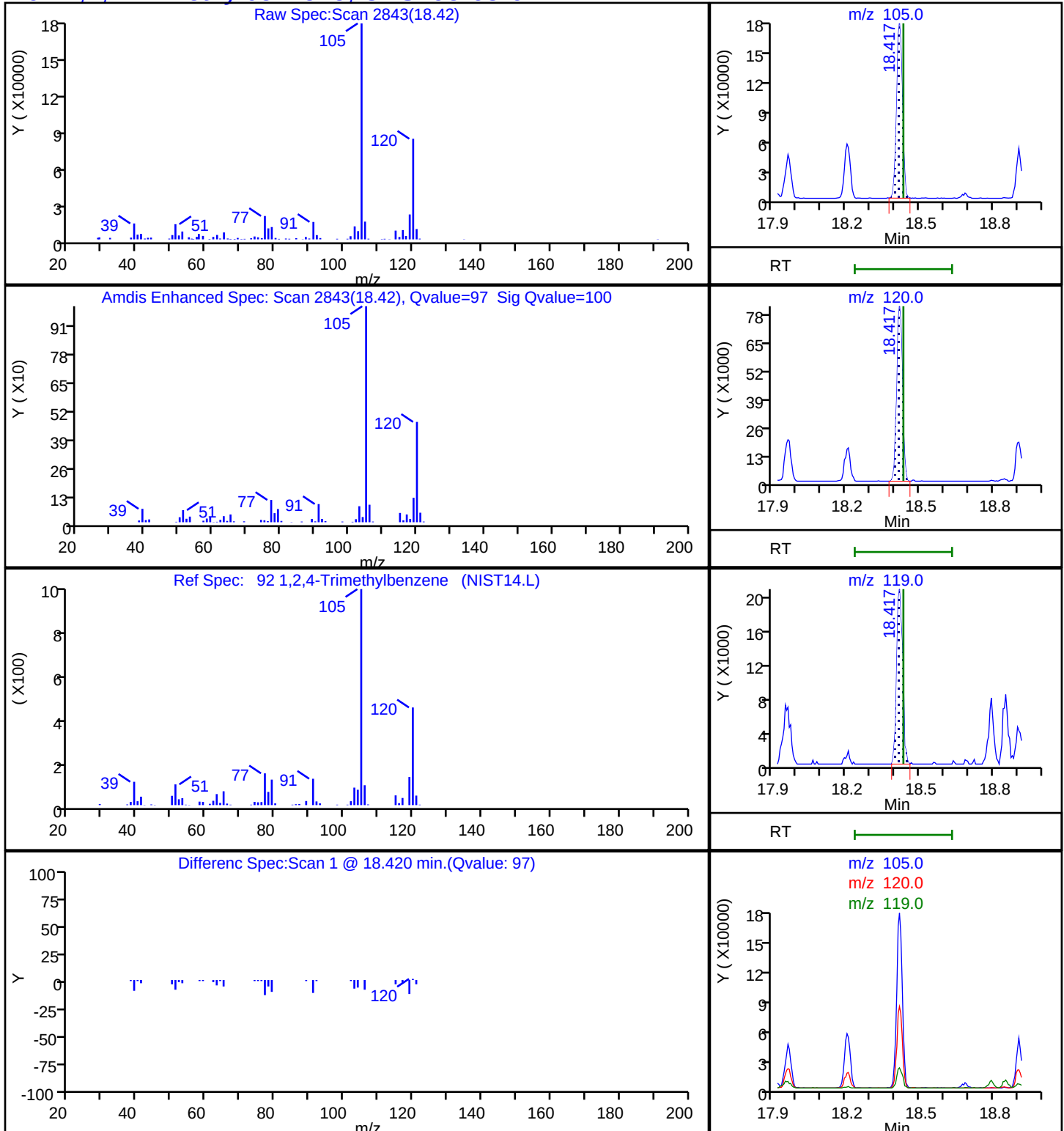
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

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

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

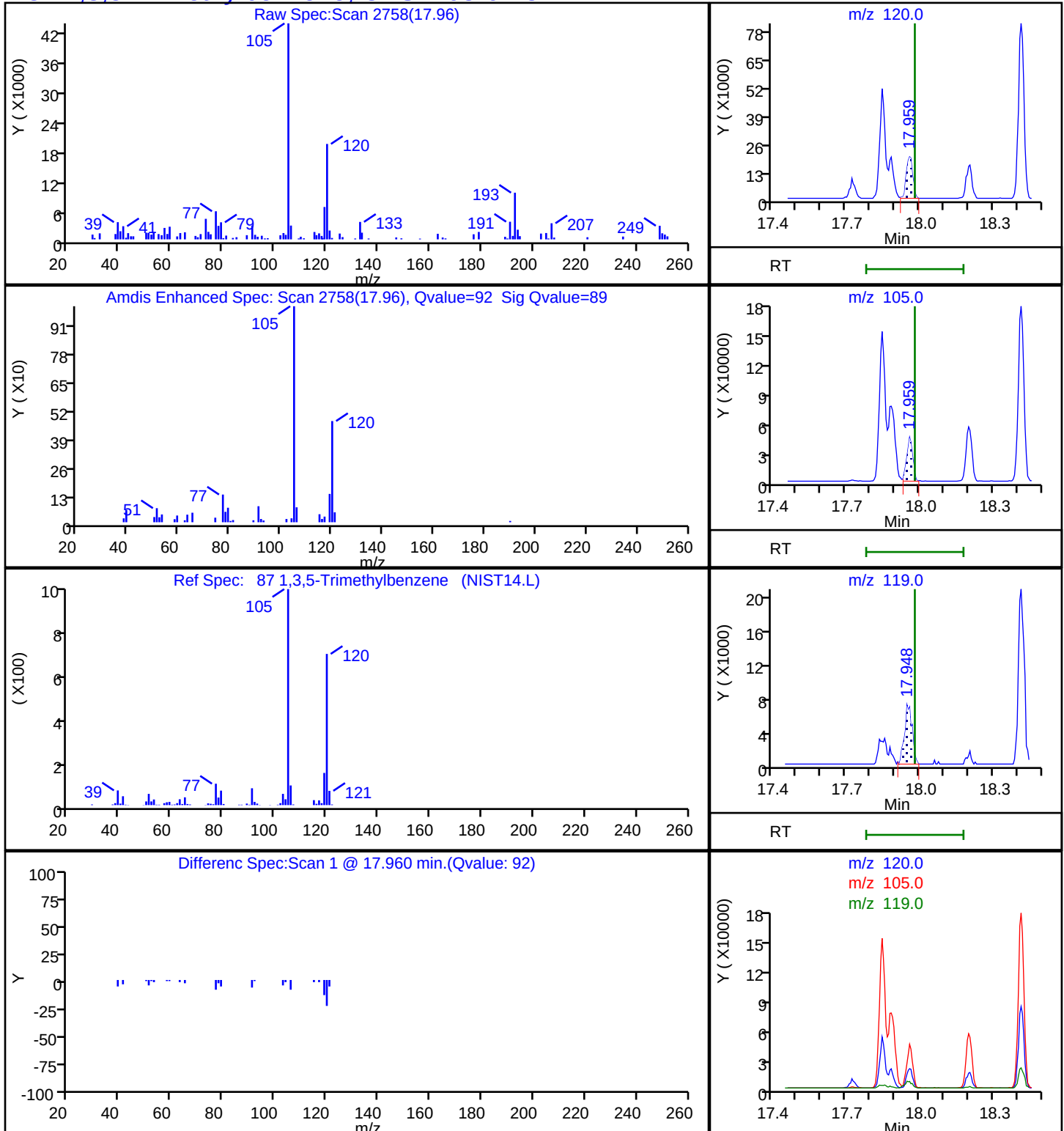
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

87 1,3,5-Trimethylbenzene, CAS: 108-67-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

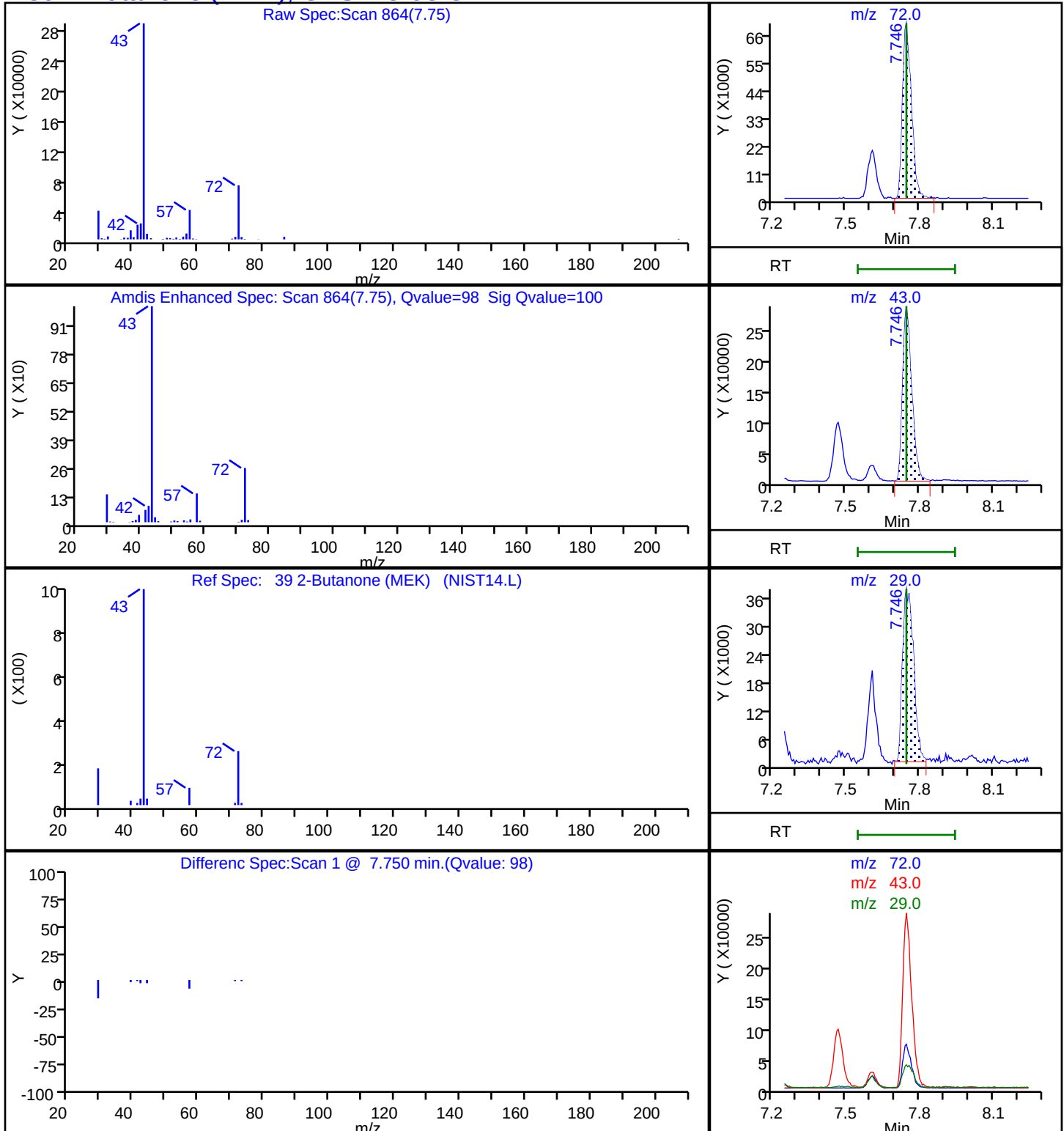
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

39 2-Butanone (MEK), CAS: 78-93-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

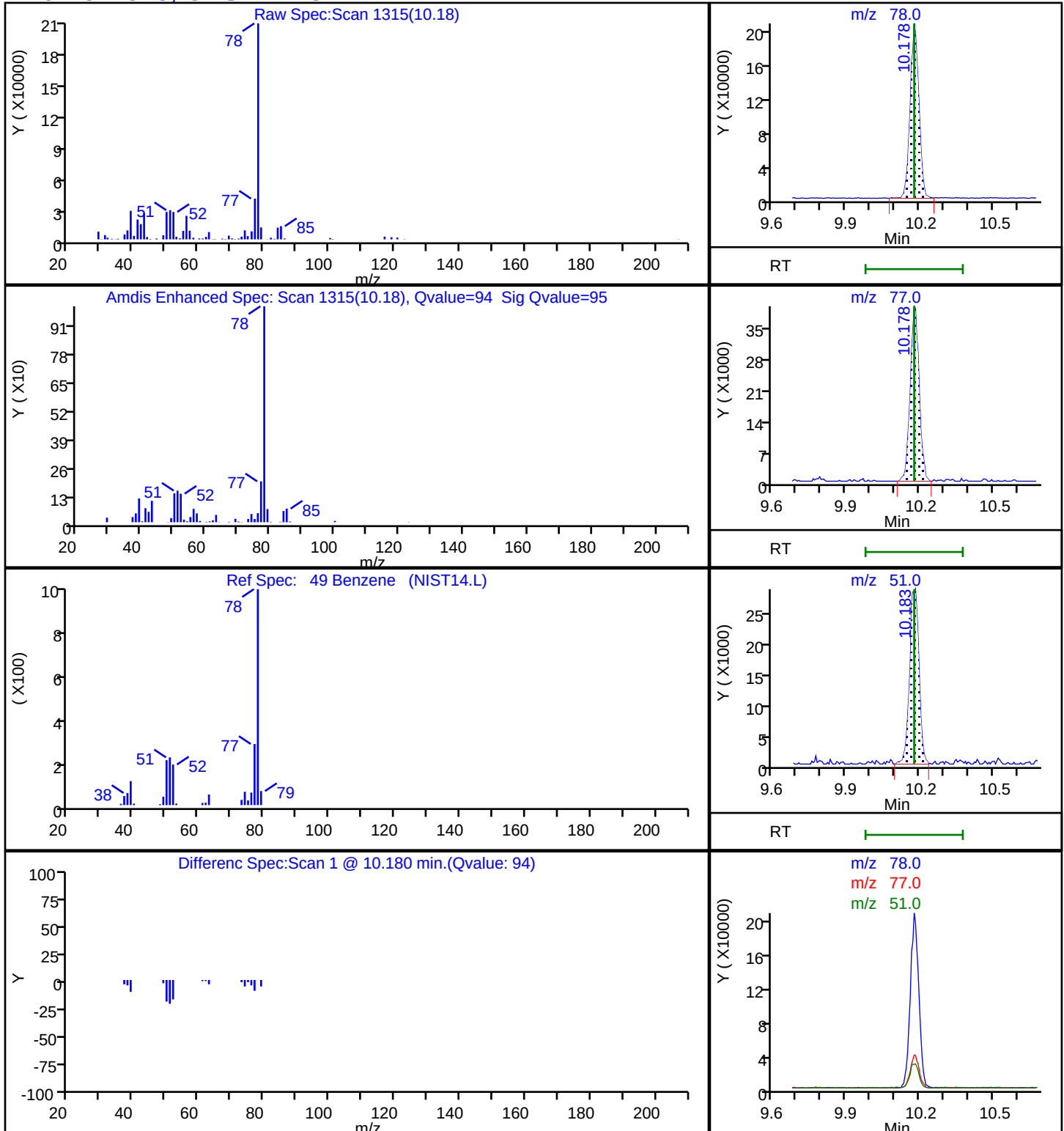
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

49 Benzene, CAS: 71-43-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

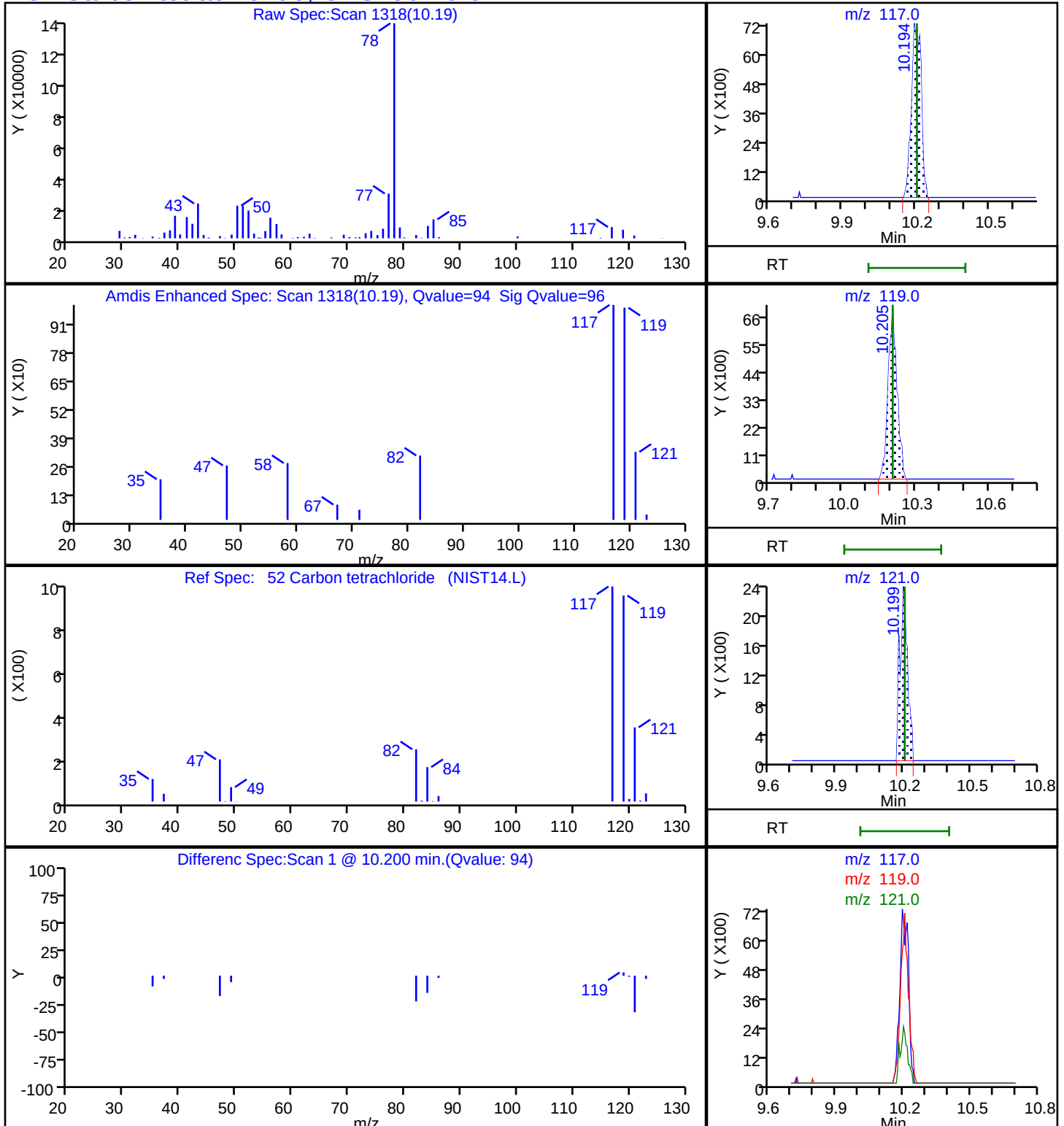
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

52 Carbon tetrachloride, CAS: 56-23-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

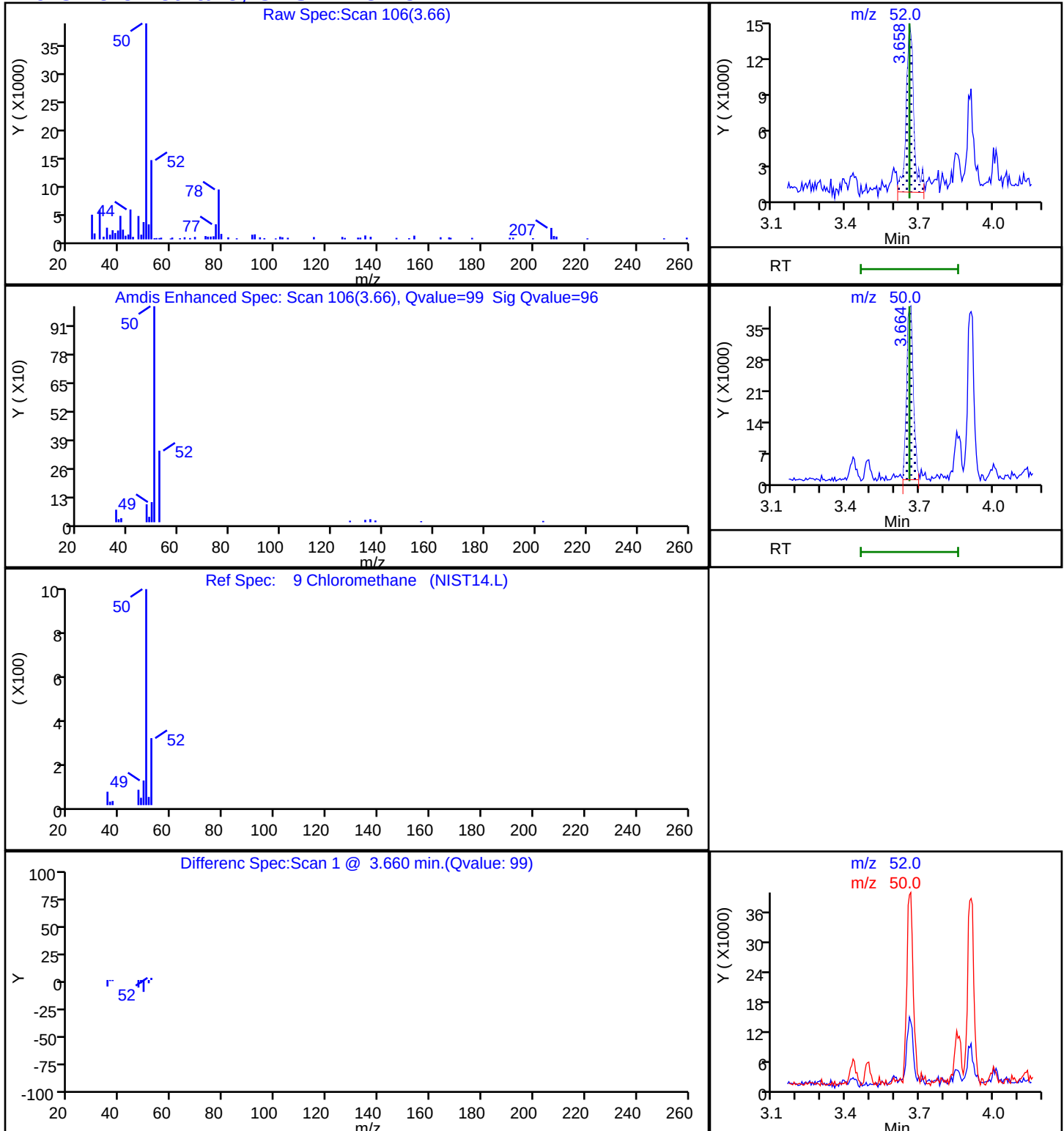
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

9 Chloromethane, CAS: 74-87-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

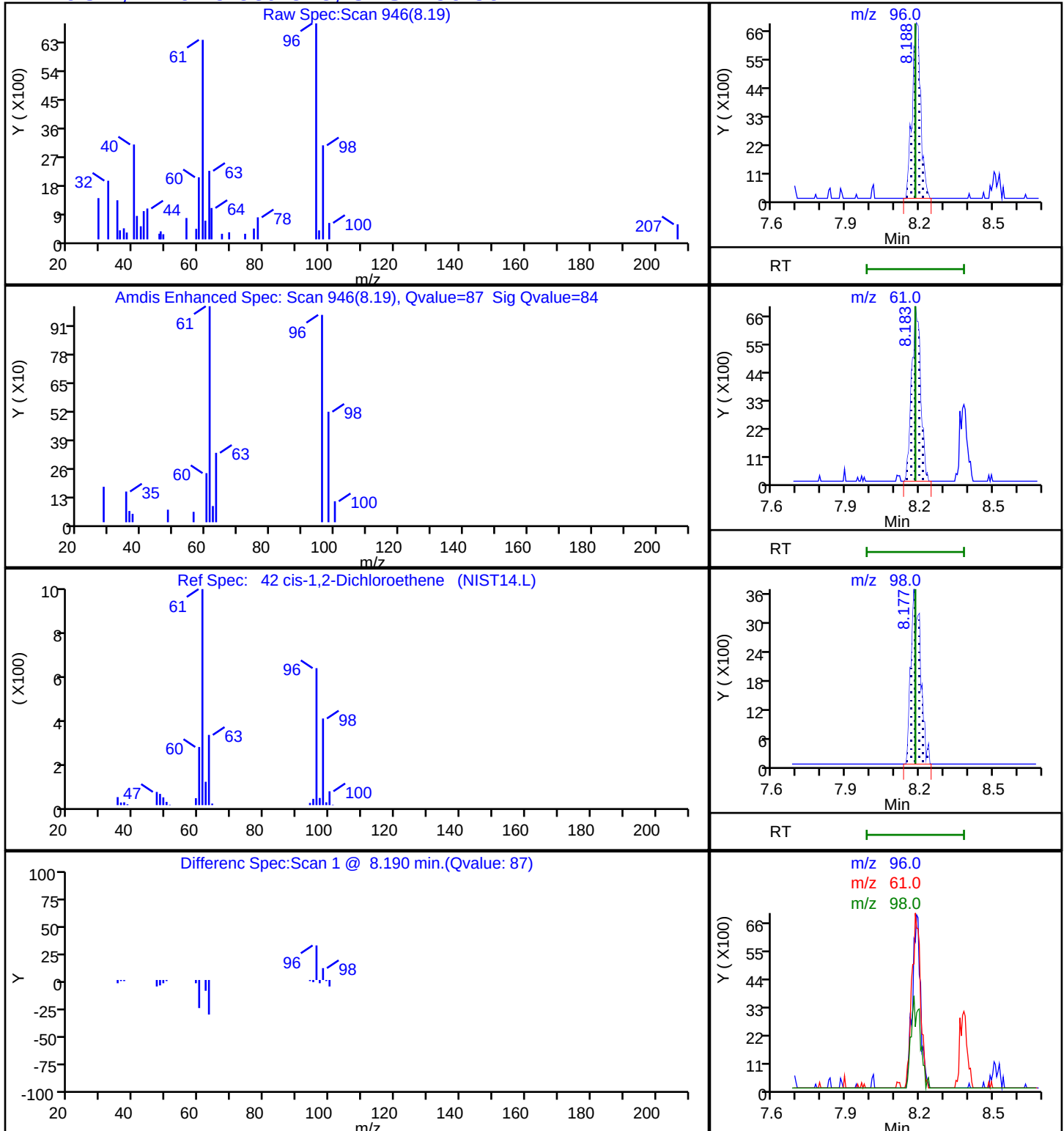
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

42 cis-1,2-Dichloroethene, CAS: 156-59-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

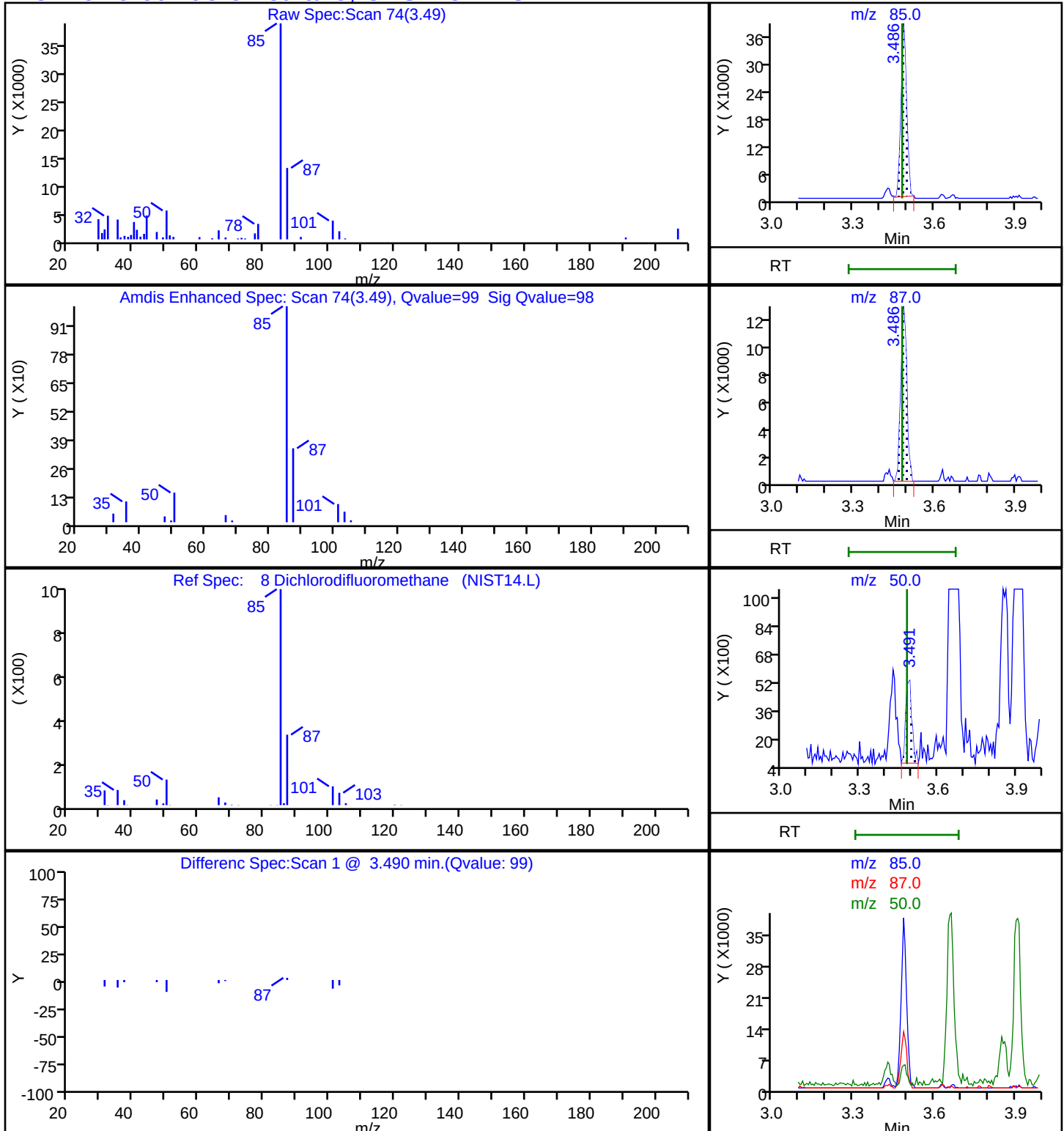
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

8 Dichlorodifluoromethane, CAS: 75-71-8

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

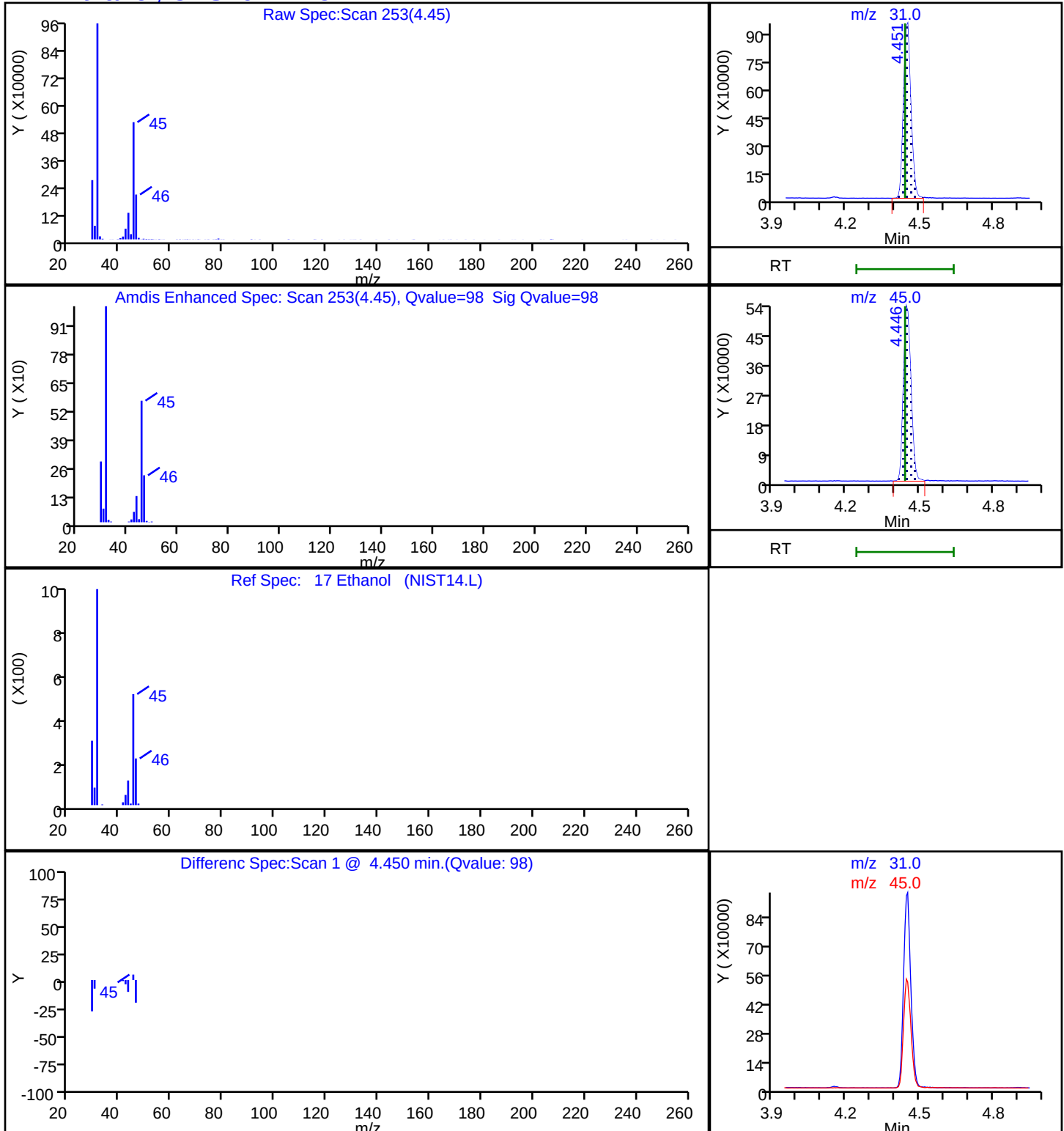
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

17 Ethanol, CAS: 64-17-5

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

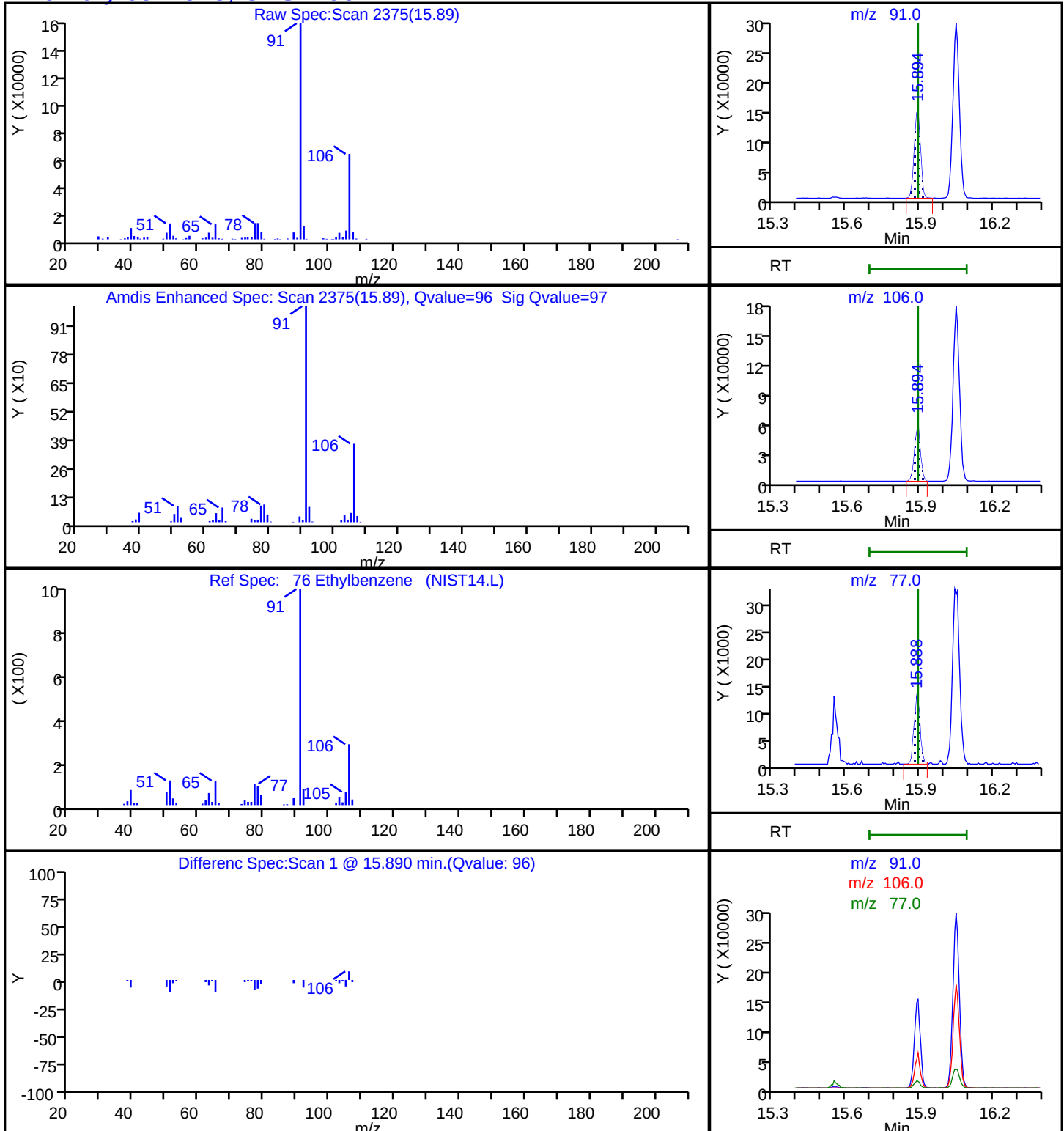
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

76 Ethylbenzene, CAS: 100-41-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

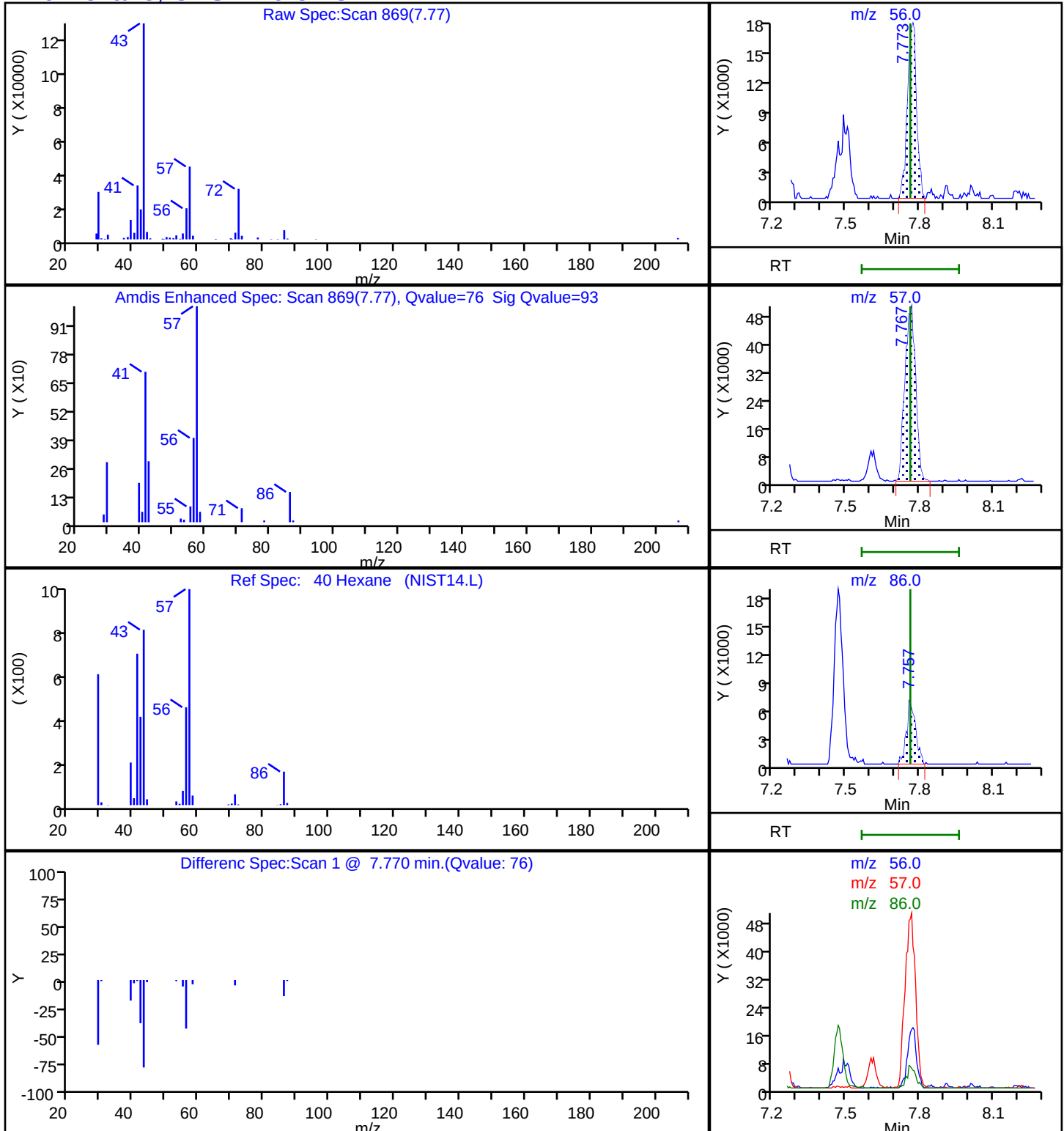
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

40 Hexane, CAS: 110-54-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

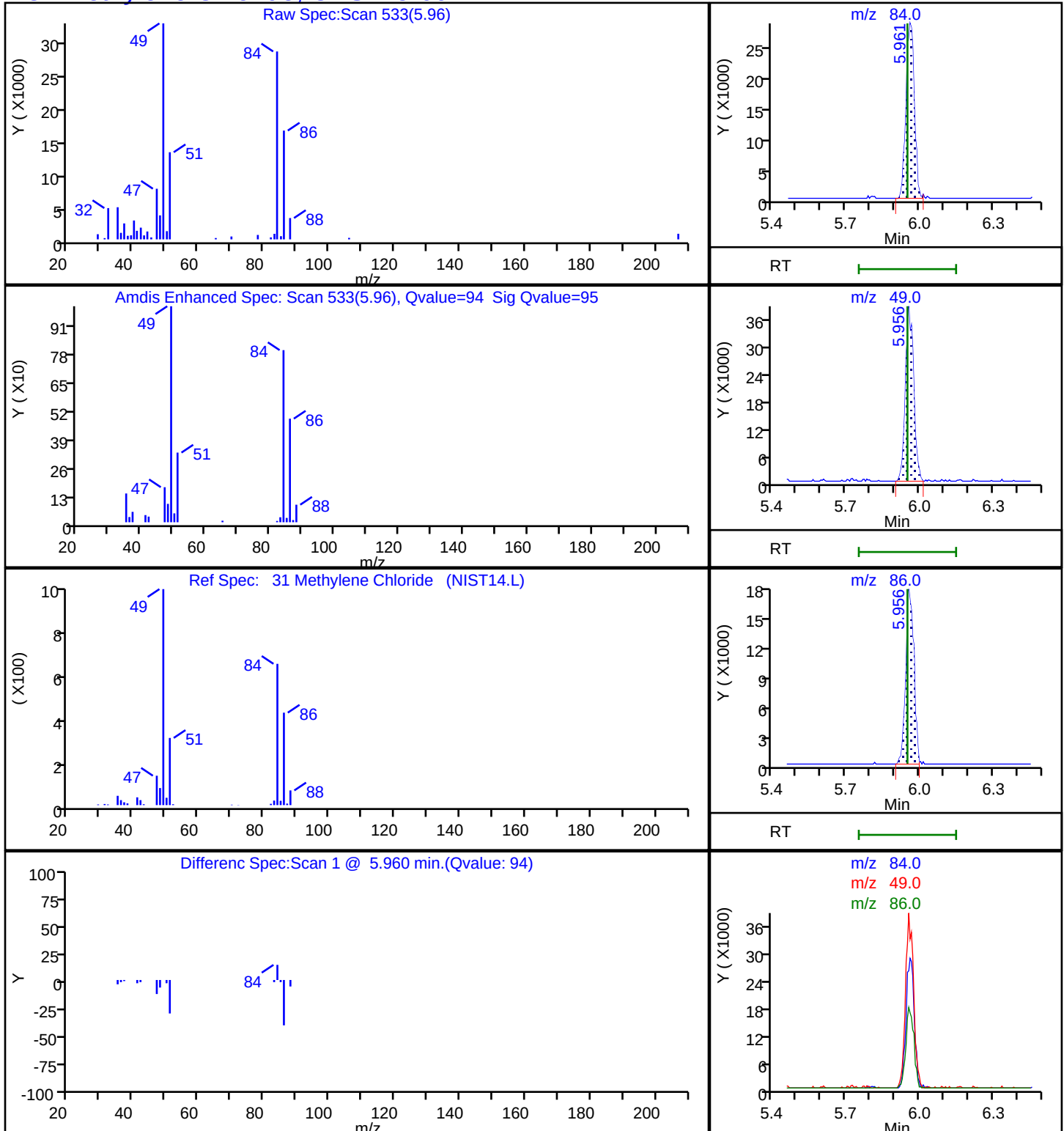
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

31 Methylene Chloride, CAS: 75-09-2

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

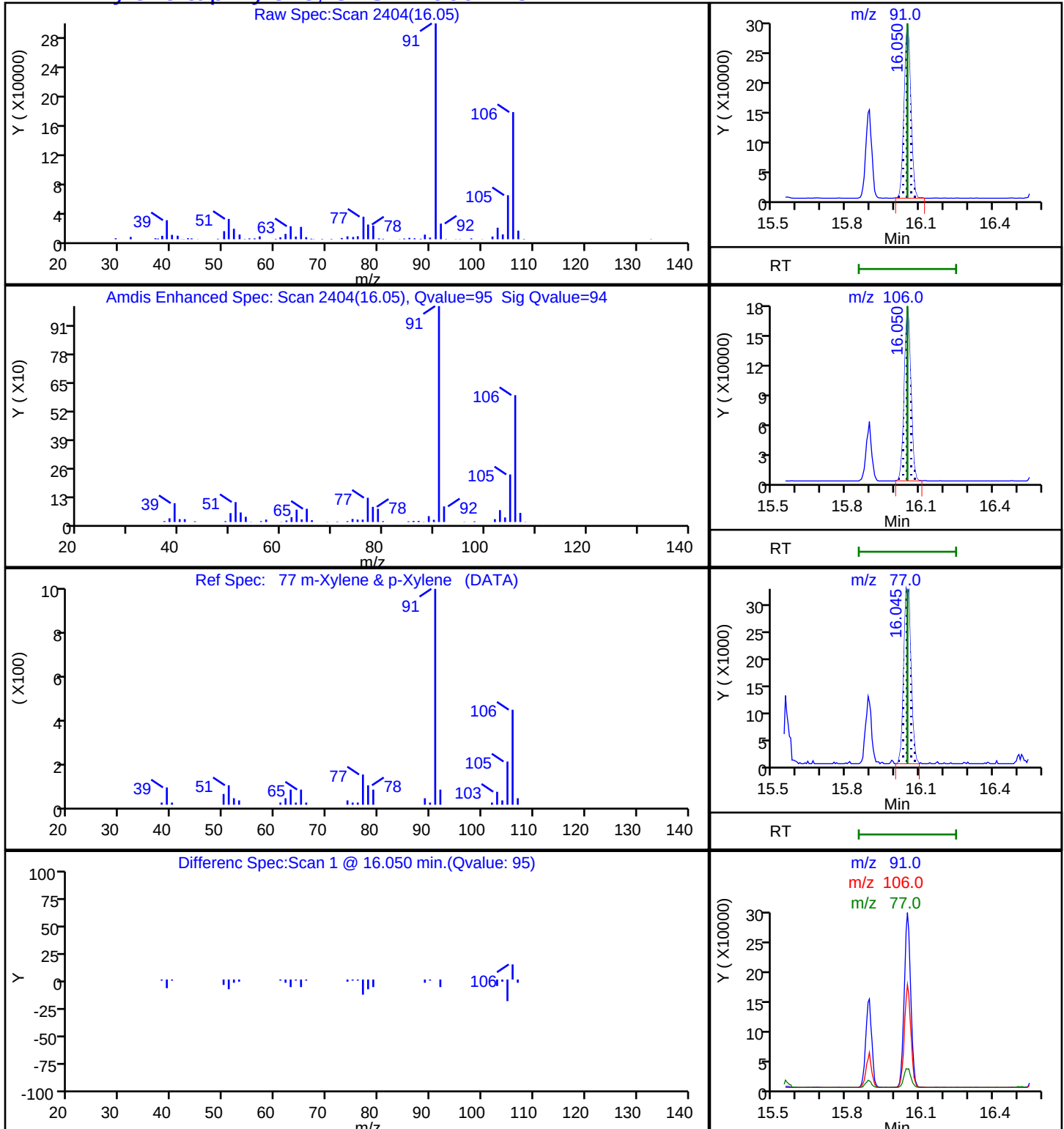
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

77 m-Xylene & p-Xylene, CAS: 179601-23-1

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

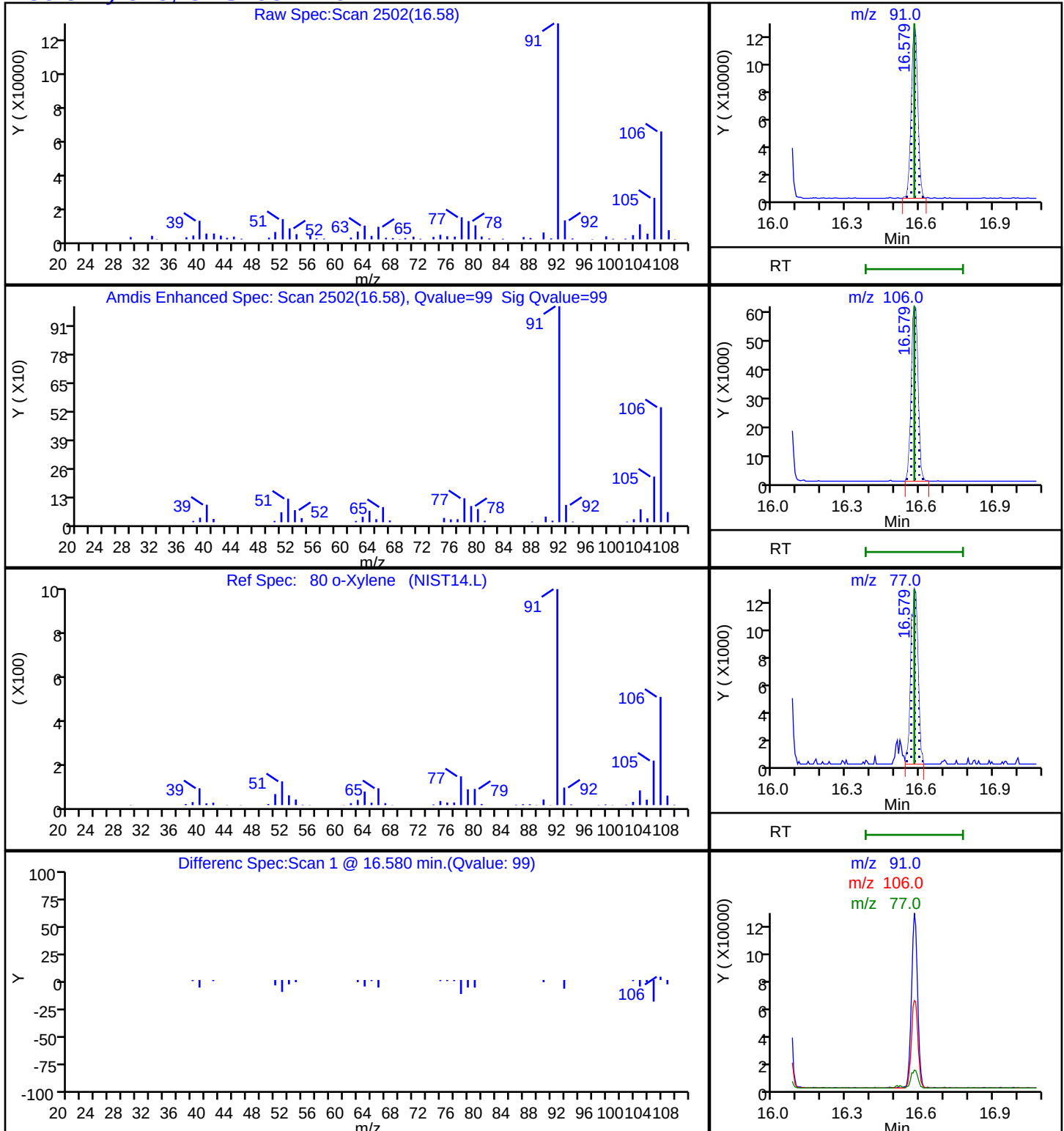
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

80 o-Xylene, CAS: 95-47-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

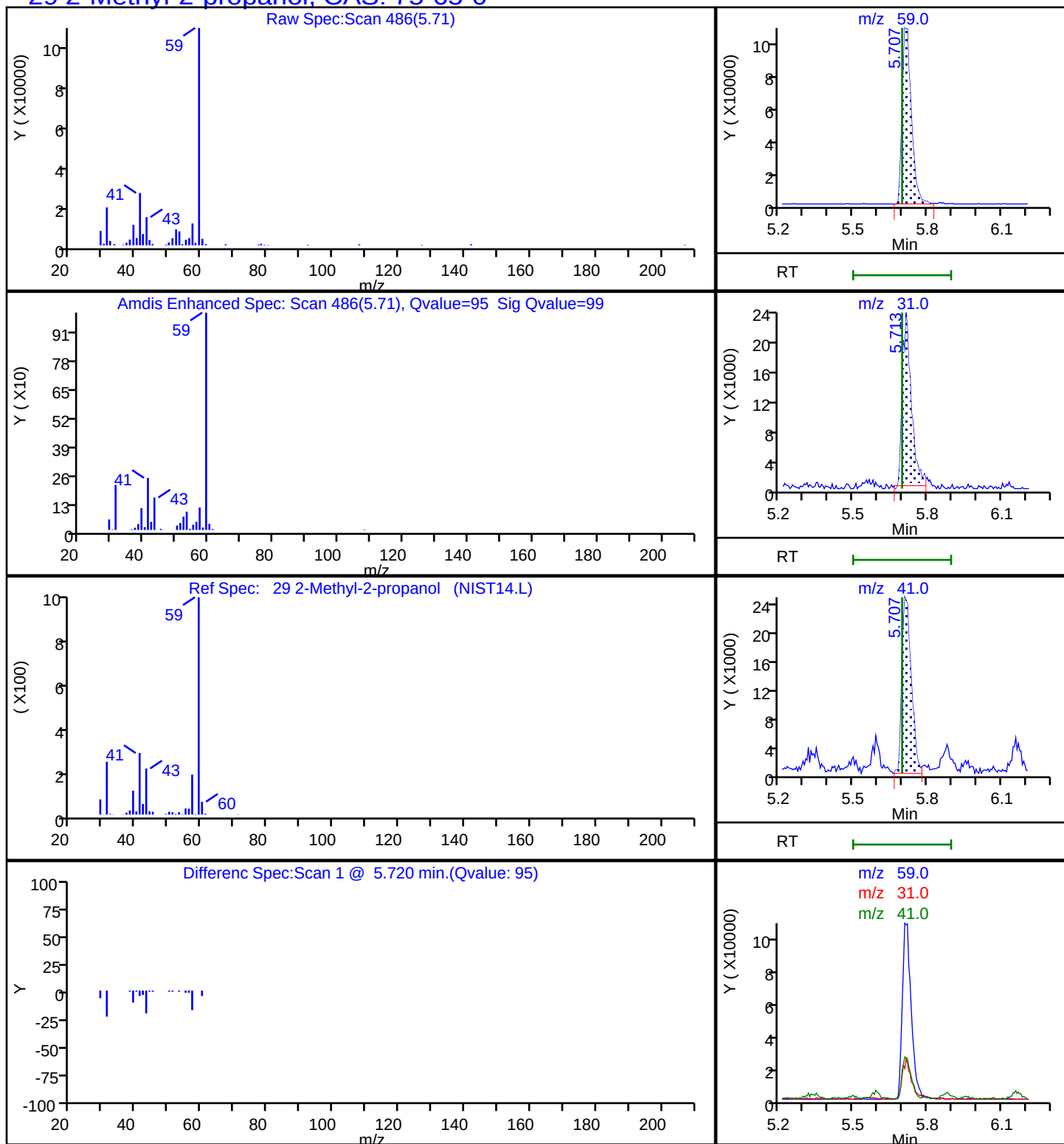
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

29 2-Methyl-2-propanol, CAS: 75-65-0

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

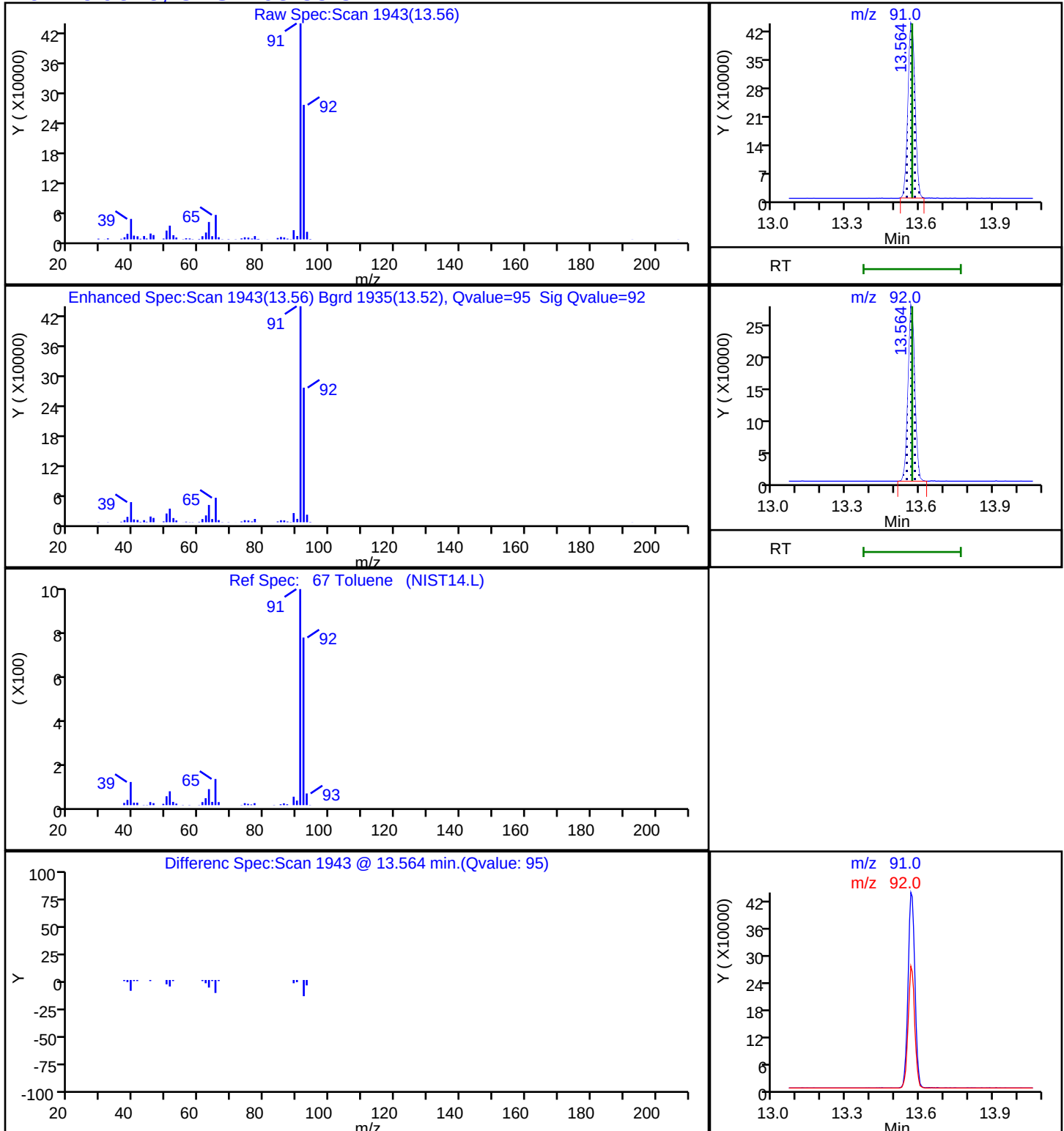
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

67 Toluene, CAS: 108-88-3

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

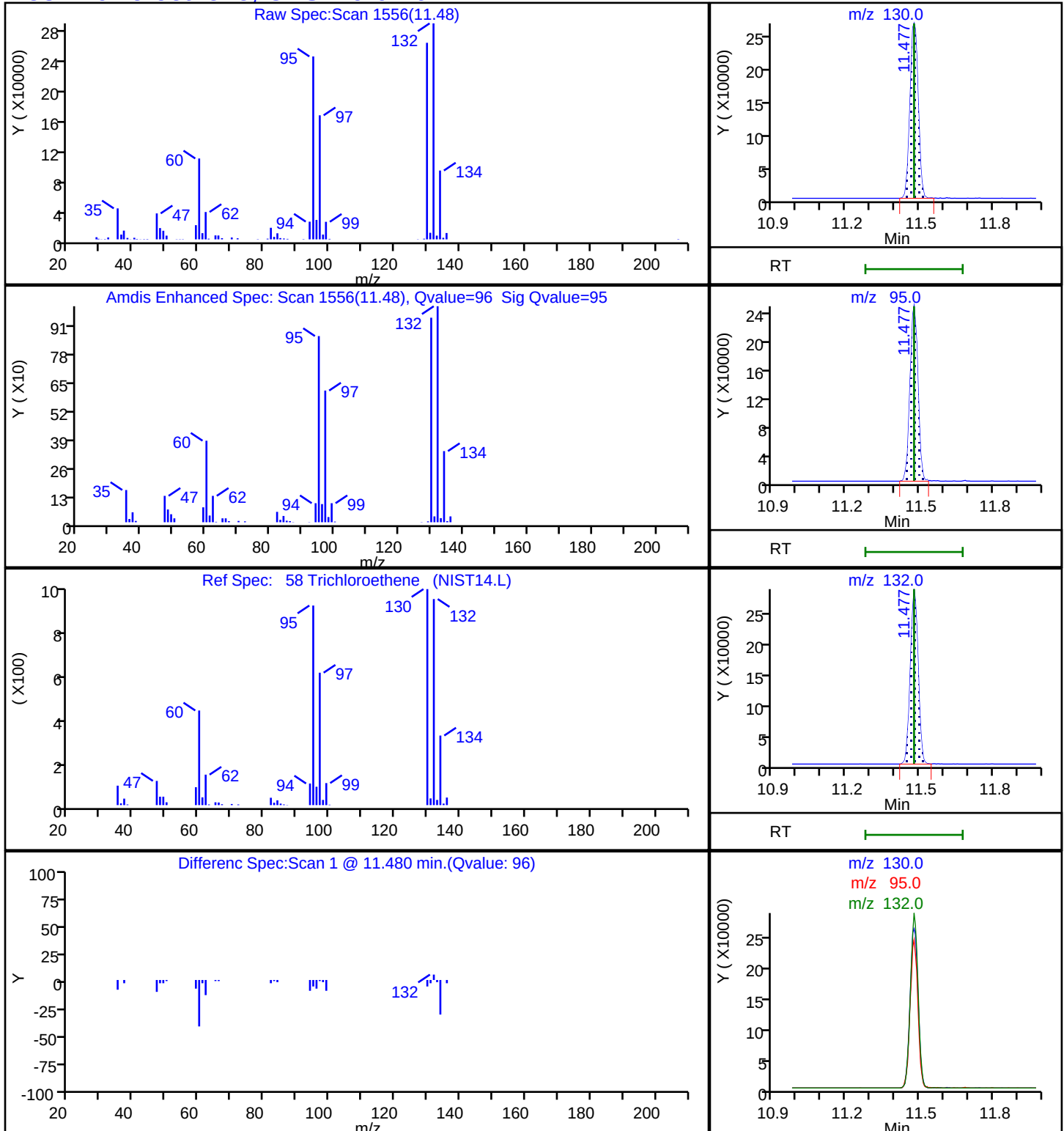
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

58 Trichloroethene, CAS: 79-01-6

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#:

Worklist Smp#: 18

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

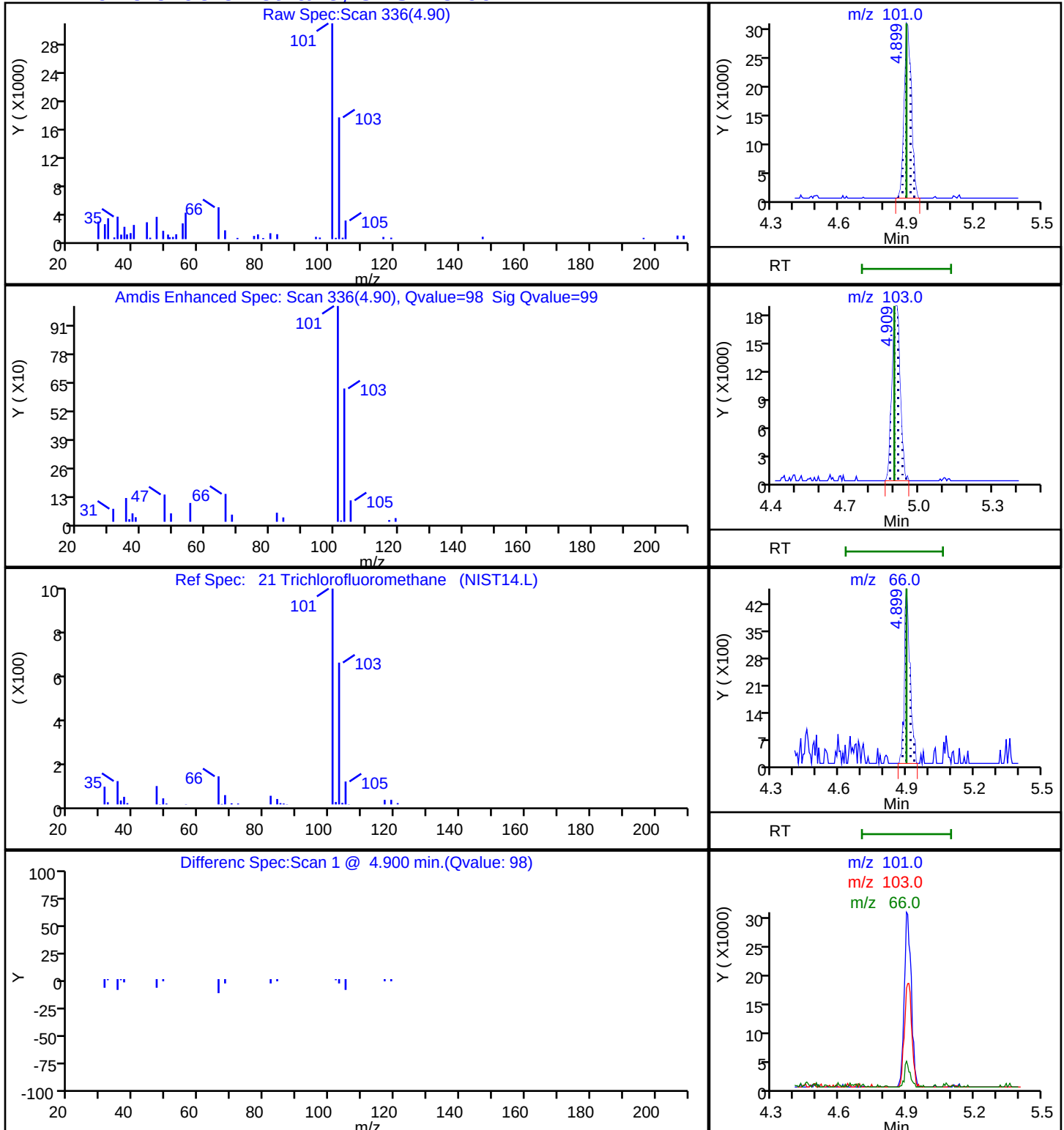
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

21 Trichlorofluoromethane, CAS: 75-69-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D

Injection Date: 04-Oct-2019 01:02:30

Instrument ID: MR

Lims ID: 140-16882-A-9

Lab Sample ID: 140-16882-9

Client ID: DUP 0926

Operator ID:

ALS Bottle#: 9

Worklist Smp#: 18

Purge Vol: 500.000 mL

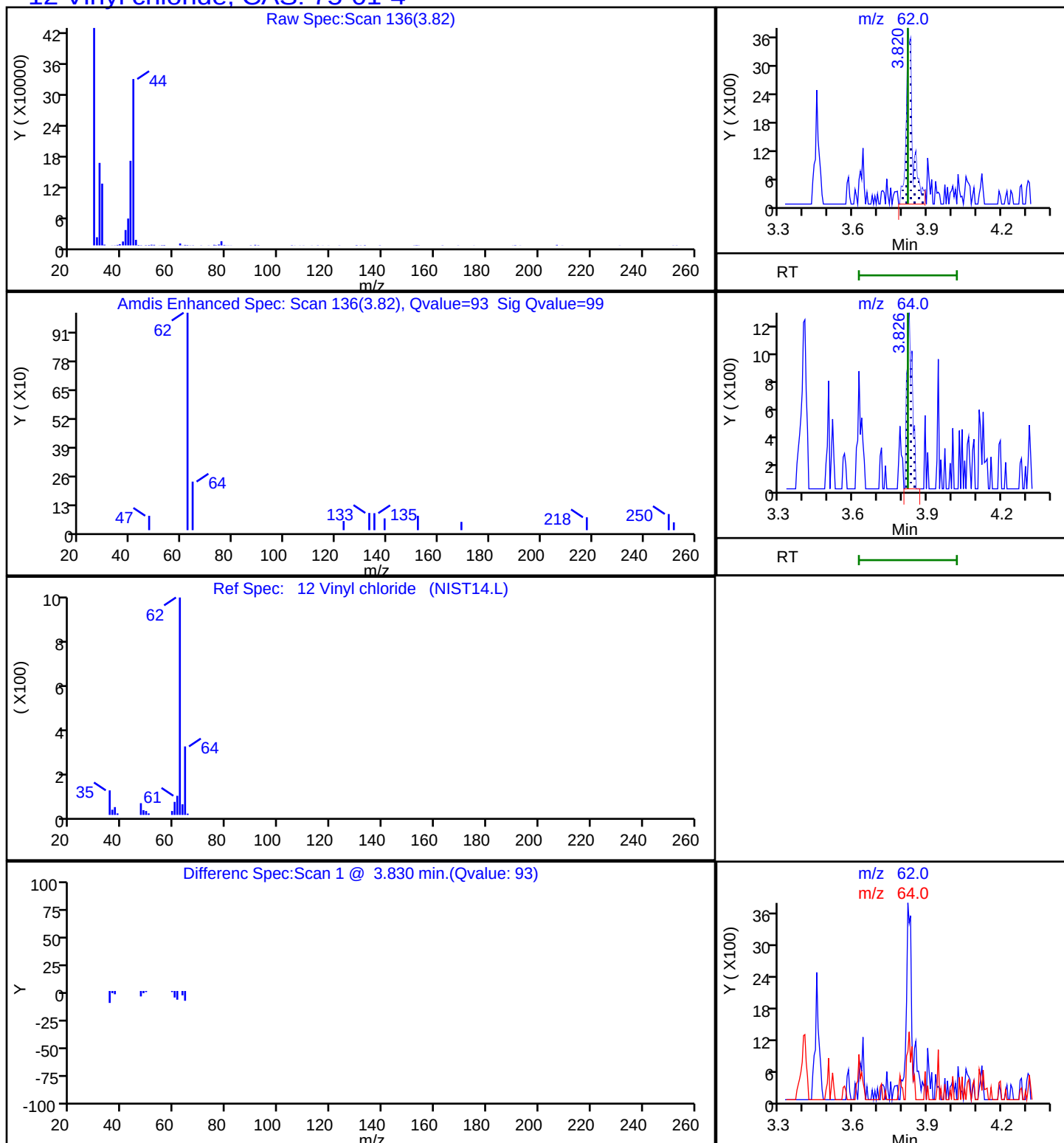
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector: MS SCAN

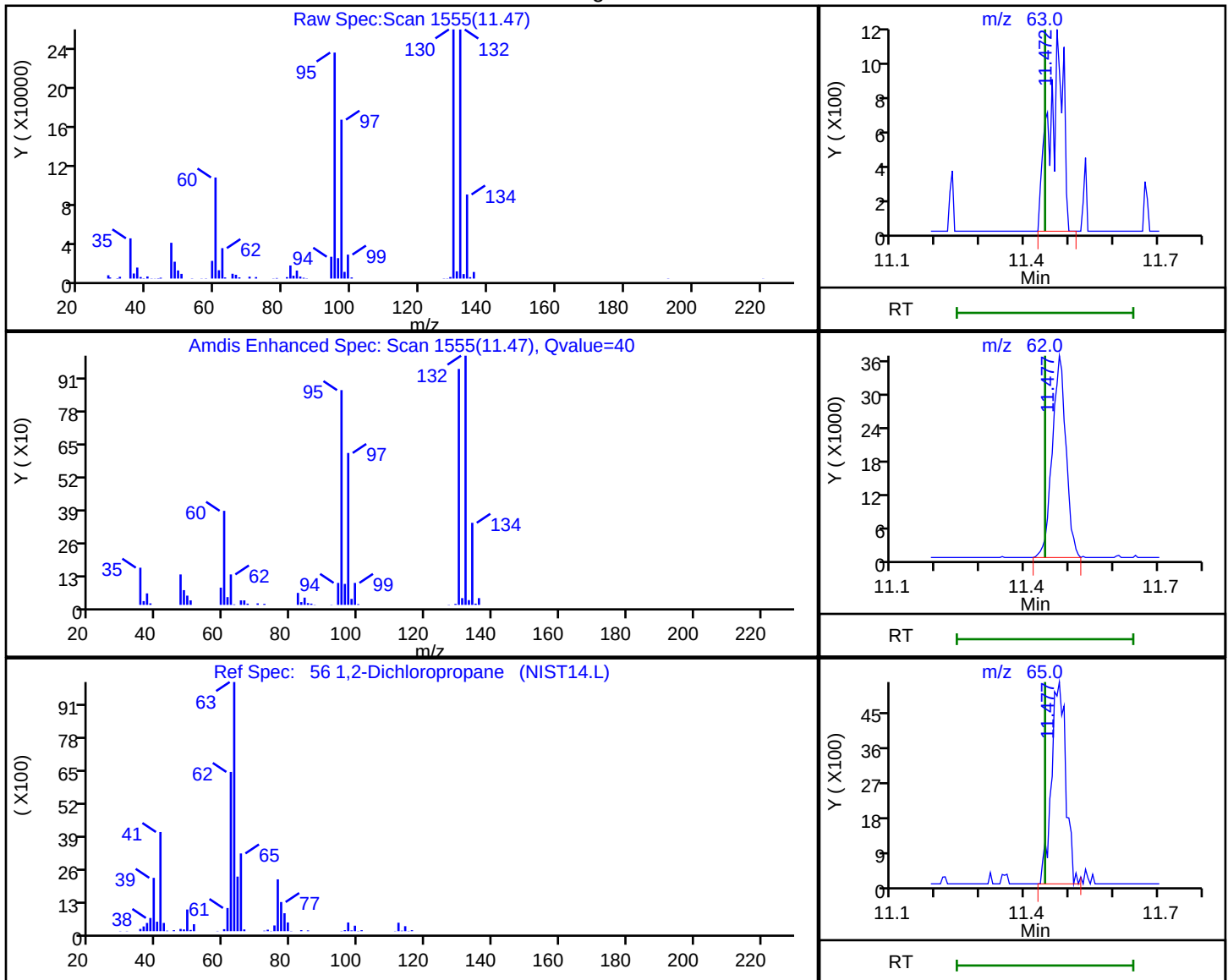
12 Vinyl chloride, CAS: 75-01-4

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D
Injection Date: 04-Oct-2019 01:02:30 Instrument ID: MR
Lims ID: 140-16882-A-9 Lab Sample ID: 140-16882-9
Client ID: DUP 0926
Operator ID: ALS Bottle#: 9 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

56 1,2-Dichloropropane, CAS: 78-87-5

Processing Results



RT	Mass	Response	Amount
11.47	63.00	2407	0.014317
11.48	62.00	78485	
11.48	65.00	11934	

Reviewer: tajh, 04-Oct-2019 11:05:33

Audit Action: Marked Compound Undetected

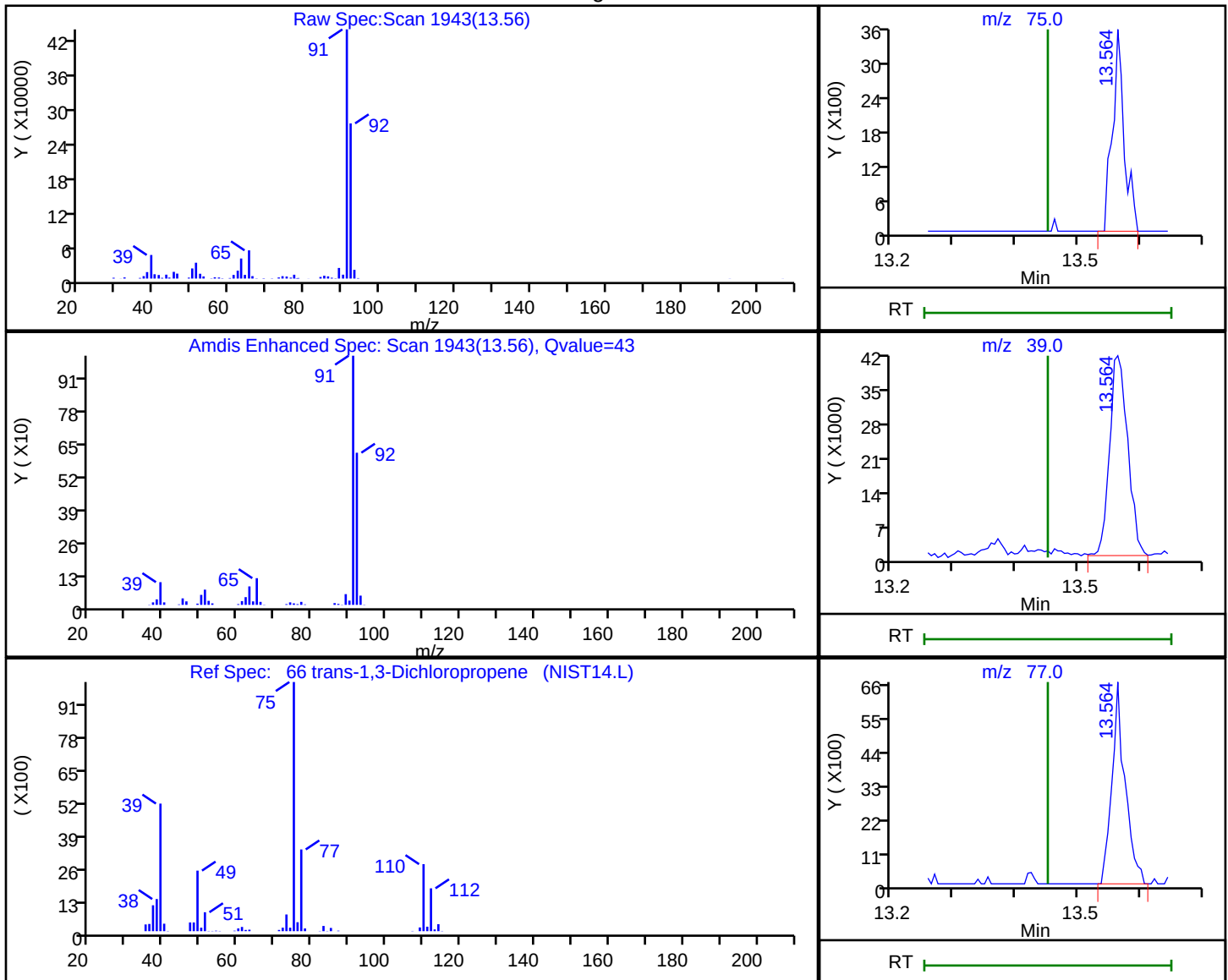
Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RJ03P109.D
Injection Date: 04-Oct-2019 01:02:30 Instrument ID: MR
Lims ID: 140-16882-A-9 Lab Sample ID: 140-16882-9
Client ID: DUP 0926
Operator ID: ALS Bottle#: 9 Worklist Smp#: 18
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Column: RTX-5 (0.32 mm) Detector: MS SCAN

66 trans-1,3-Dichloropropene, CAS: 10061-02-6

Processing Results



RT	Mass	Response	Amount
13.56	75.00	4674	0.023134
13.56	39.00	83381	
13.56	77.00	9869	

Reviewer: tajh, 04-Oct-2019 11:05:39

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-33257/7	RI03IC01.D
Level 2	IC 140-33257/8	RI03IC02.D
Level 3	IC 140-33257/9	RI03IC03.D
Level 4	IC 140-33257/10	RI03IC04.D
Level 5	IC 140-33257/11	RI03IC05.D
Level 6	IC 140-33257/12	RI03IC06.D
Level 7	ICIS 140-33257/23	RI03IC07R.D
Level 8	IC 140-33257/14	RI03IC08.D
Level 9	IC 140-33257/2	RI03IC09.D
Level 10	IC 140-33257/4	RI03IC10.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Chlorodifluoromethane	+++++ 2.7260	+++++ 2.6680	2.5843 2.5009	3.1164 2.3259	3.0059 2.3069	Ave		2.6543				11.0		30.0			
Propene	+++++ 1.9442	+++++ 1.6367	+++++ 1.4437	+++++ 1.2575	+++++ 1.2209	Ave		1.5006				19.9		30.0			
Dichlorodifluoromethane	+++++ 2.2785	+++++ 2.1933	2.4600 2.0613	2.5803 2.0814	2.5119 1.8830	Ave		2.2562				10.9		30.0			
Chloromethane	+++++ 0.5554	+++++ 0.4767	+++++ 0.4326	0.3883 0.3434	0.4816 0.3386	Ave		0.4310				18.5		30.0			
1,2-Dichlorotetrafluoroethane	+++++ 2.0704	+++++ 1.6453	2.1437 1.5512	2.1811 1.3073	2.1242 +++++	Ave		1.8605				18.9		30.0			
Vinyl chloride	1.7291 1.2883	1.6251 1.5737	1.6212 1.1646	1.3532 1.0197	1.3998 0.8114	Ave		1.3586				21.7		30.0			
1,3-Butadiene	+++++ 1.0156	+++++ 1.1823	+++++ 1.0162	1.2794 0.7642	1.2388 0.6544	Ave		1.0216				23.3		30.0			
Butane	+++++ 1.8934	+++++ 2.2335	2.4101 1.8806	2.5004 1.4508	2.2121 1.2365	Ave		1.9772				22.8		30.0			
Bromomethane	+++++ 1.2859	+++++ 1.4808	1.9045 1.1757	1.5746 1.0547	1.4408 0.8315	Ave		1.3436				24.7		30.0			
Chloroethane	+++++ 0.5130	+++++ 0.6525	0.7561 0.4710	0.5613 0.4310	0.5850 +++++	Ave		0.5671				19.6		30.0			
Ethanol	+++++ 0.6058	+++++ 0.6726	+++++ 0.5847	0.6715 0.5590	0.6550 0.5356	Ave		0.6120				9.1		30.0			
Vinyl bromide	+++++ 1.1611	1.2192 1.1781	1.0641 1.1689	1.1263 1.1369	1.1332 1.0430	Ave		1.1368				4.9		30.0			
2-Methylbutane	+++++ 1.5253	+++++ 1.6120	1.7274 1.5439	1.5192 1.4120	1.6922 1.3512	Ave		1.5479				8.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Trichlorofluoromethane	++++ 3.3282	3.3774 3.3203	3.0491 3.2570	3.3050 3.1386	3.4667 3.0258	Ave		3.2520				4.6		30.0			
Acrolein	++++ 0.3645	++++ 0.3873	++++ 0.4333	++++ 0.3449	0.4416 0.3410	Ave		0.3855				11.3		30.0			
Acetonitrile	++++ 0.6425	++++ 0.6542	++++ 0.6025	0.4649 0.5769	0.5491 0.5355	Ave		0.5751				11.4		30.0			
Acetone	++++ 0.6576	++++ 0.6345	++++ 0.5939	++++ 0.5462	0.8838 0.5119	Ave		0.6380				20.7		30.0			
Pentane	++++ 0.2223	++++ 0.2394	++++ 0.2318	0.2204 0.2239	0.2420 0.2223	Ave		0.2289				3.9		30.0			
Isopropyl alcohol	2.0445 1.8052	1.9846 1.9795	1.9329 1.7719	1.8817 1.7209	1.8939 1.6692	Ave		1.8684				6.6		30.0			
Ethyl ether	++++ 1.5177	++++ 1.6254	1.6032 1.5133	1.7440 1.4199	1.6884 1.3733	Ave		1.5607				8.2		30.0			
1,1-Dichloroethene	++++ 1.2768	1.3859 1.2885	1.2342 1.3283	1.3969 1.2458	1.3854 1.1635	Ave		1.3006				6.2		30.0			
Acrylonitrile	++++ 0.9656	++++ 1.0127	++++ 0.9799	0.9002 0.9252	1.0388 0.8895	Ave		0.9589				5.9		30.0			
t-Butyl alcohol	++++ 2.2589	++++ 2.4248	2.6173 2.2857	2.3278 2.1550	2.3602 2.1201	Ave		2.3187				6.8		30.0			
1,1,2-Trichlorotrifluoroethane	++++ 2.6175	++++ 2.7892	2.7427 2.6846	3.0147 2.6294	2.9235 2.5912	Ave		2.7491				5.6		30.0			
Methylene Chloride	++++ 1.3354	++++ 1.2126	++++ 1.1602	2.6564 1.1104	1.7848 ++++	Ave		1.5433				38.7	*	30.0			
3-Chloropropene	++++ 1.2873	++++ 1.3056	1.3978 1.1673	1.3442 1.1350	1.4259 1.1393	Ave		1.2753				9.1		30.0			
Carbon disulfide	++++ 3.4529	++++ 3.5063	3.4533 3.4547	3.3067 3.3496	3.6966 3.1287	Ave		3.4186				4.8		30.0			
trans-1,2-Dichloroethene	++++ 1.3377	1.4290 1.4552	1.3966 1.4046	1.4119 1.3783	1.4326 1.3593	Ave		1.4006				2.7		30.0			
2-Methylpentane	++++ 3.2013	3.5636 3.4610	3.3036 3.3080	3.3865 2.9713	3.5514 3.0086	Ave		3.3061				6.5		30.0			
Methyl tert-butyl ether	++++ 3.3757	++++ 3.4980	3.2509 3.4526	3.3858 3.2852	3.6039 3.1045	Ave		3.3696				4.6		30.0			
1,1-Dichloroethane	++++ 2.3751	2.5086 2.4366	2.3878 2.3574	2.6268 2.2552	2.5766 2.1291	Ave		2.4059				6.4		30.0			
Vinyl acetate	++++ 3.8272	++++ 4.0947	3.6725 3.8070	3.4480 3.7636	3.9587 3.7530	Ave		3.7906				5.0		30.0			
2-Butanone	++++ 0.6406	++++ 0.6920	++++ 0.6145	0.8285 0.6299	0.6904 0.6279	Ave		0.6748				11.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Hexane	++++ 1.0578	++++ 1.1373	1.1561 1.0624	1.0809 1.0023	1.2326 1.0306	Ave		1.0950				6.9		30.0			
cis-1,2-Dichloroethene	++++ 1.3435	1.2993 1.5183	1.4238 1.4577	1.6617 1.4469	1.5505 1.3823	Ave		1.4538				7.6		30.0			
Ethyl acetate	++++ 3.4335	3.6328 3.6172	3.4839 3.4462	3.6366 3.2360	3.6466 3.1830	Ave		3.4795				5.0		30.0			
Chloroform	++++ 2.8766	3.3067 2.9575	2.8469 2.8373	2.8829 2.6787	3.0078 2.6848	Ave		2.8977				6.5		30.0			
Tetrahydrofuran	++++ 1.6509	++++ 1.7784	1.8287 1.7135	1.8905 1.5948	1.7994 1.5531	Ave		1.7262				6.9		30.0			
1,1,1-Trichloroethane	3.1493 2.9120	2.7773 3.0058	2.9223 2.8040	3.0377 2.9352	2.9169	Ave		2.9618				4.3		30.0			
1,2-Dichloroethane	0.2772 0.3249	0.3255 0.3104	0.3283 0.3135	0.3510 0.2972	0.3094 0.3136	Ave		0.3151				6.2		30.0			
1-Butanol	++++ 0.1107	++++ 0.1129	++++ 0.1075	++++ 0.1038	0.1111 0.1181	Ave		0.1107				4.4		30.0			
Cyclohexane	++++ 0.1108	++++ 0.1126	++++ 0.1137	0.1250 0.1081	0.1068 0.1228	Ave		0.1143				6.2		30.0			
Benzene	0.8148 0.7633	0.7768 0.7472	0.8289 0.7582	0.7659 0.7154	0.7351 0.8087	Ave		0.7714				4.7		30.0			
Carbon tetrachloride	0.4284 0.5464	0.4512 0.5598	0.4562 0.5438	0.4715 0.5486	0.4674 0.6278	Ave		0.5101				12.5		30.0			
2,3-Dimethylpentane	++++ 0.1674	++++ 0.1604	0.1567 0.1638	0.1353 0.1587	0.1485 0.1690	Ave		0.1575				7.0		30.0			
Thiophene	++++ 0.4125	++++ 0.4015	0.3879 0.3931	0.3945 0.4035	0.3859 0.4239	Ave		0.4003				3.2		30.0			
2,2,4-Trimethylpentane	++++ 1.2152	++++ 1.2029	1.2047 1.2281	1.2110 1.1081	1.1994 1.2202	Ave		1.1987				3.2		30.0			
Heptane	++++ 0.2567	++++ 0.2633	0.2564 0.2627	0.2576 0.2467	0.2297 0.2668	Ave		0.2550				4.7		30.0			
1,2-Dichloropropane	++++ 0.2875	++++ 0.2853	0.2886 0.2742	0.2668 0.2610	0.2744 0.2861	Ave		0.2780				3.8		30.0			
Trichloroethene	0.3443 0.3307	0.3294 0.3414	0.3054 0.3496	0.2980 0.3375	0.3176 0.3660	Ave		0.3320				6.2		30.0			
Dibromomethane	++++ 0.2929	0.3072 0.3004	0.2903 0.3027	0.2794 0.2903	0.2834 0.3143	Ave		0.2957				3.8		30.0			
Bromodichloromethane	++++ 0.5006	++++ 0.5142	0.4580 0.5123	0.4424 0.5019	0.4411 0.5546	Ave		0.4906				8.1		30.0			
1,4-Dioxane	++++ 0.1152	++++ 0.1173	++++ 0.1199	0.0955 0.1120	0.1043 0.1186	Ave		0.1118				8.0		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Methyl methacrylate	++++ 0.3384	++++ 0.3460	++++ 0.3548	0.3136 0.3373	0.3141 0.3787	Ave		0.3404				6.7		30.0			
Methylcyclohexane	++++ 0.4108	++++ 0.4335	0.4149 0.4351	0.4105 0.4196	0.4068 0.4495	Ave		0.4226				3.6		30.0			
4-Methyl-2-pentanone (MIBK)	++++ 0.6415	++++ 0.6570	0.5895 0.6473	0.5935 0.6201	0.6100 0.6877	Ave		0.6308				5.3		30.0			
cis-1,3-Dichloropropene	++++ 0.3946	0.3260 0.4246	0.3207 0.3972	0.3823 0.4089	0.3656 0.4479	Ave		0.3853				11.0		30.0			
trans-1,3-Dichloropropene	++++ 0.4033	0.3798 0.4680	0.3772 0.4433	0.3949 0.4700	0.3892 0.4703	Ave		0.4218				9.6		30.0			
Toluene	0.9562 0.9189	0.9026 1.0574	0.9539 1.0300	0.9146 1.0514	0.9898 1.0020	Ave		0.9777				5.8		30.0			
1,1,2-Trichloroethane	0.3388 0.2793	0.3166 0.3263	0.2823 0.3184	0.2886 0.3143	0.2927 0.3012	Ave		0.3059				6.5		30.0			
2-Hexanone	++++ 0.3140	++++ 0.3662	0.2945 0.3604	0.3113 0.3634	0.3152 0.3599	Ave		0.3356				8.8		30.0			
C8 Range	++++ 2.6253	++++ 2.7699	++++ 2.6896	2.7491 2.5049	2.6475 2.7844	Ave		2.6815				3.7		30.0			
Octane	++++ 0.2855	++++ 0.3380	0.2430 0.3146	0.2799 0.3324	0.2893 0.3385	Ave		0.3027				11.3		30.0			
Dibromochloromethane	++++ 0.5738	++++ 0.6863	0.4237 0.6666	0.4750 0.7579	0.5177 0.7947	Ave		0.6120				22.1		30.0			
1,2-Dibromoethane	++++ 0.5404	0.4995 0.6364	0.4875 0.6071	0.5154 0.6400	0.5458 0.6582	Ave		0.5700				11.6		30.0			
Tetrachloroethene	0.4005 0.3534	0.3815 0.4068	0.3673 0.3984	0.3877 0.4361	0.3741 0.4304	Ave		0.3936				6.7		30.0			
Chlorobenzene	0.8304 0.7683	0.7277 0.8883	0.7903 0.8599	0.7645 0.9287	0.8042 0.9197	Ave		0.8282				8.3		30.0			
Ethylbenzene	1.2805 1.2363	1.2724 1.4718	1.1953 1.3918	1.2874 1.4464	1.2489 1.4273	Ave		1.3258				7.5		30.0			
m-Xylene & p-Xylene	0.9455 0.9833	0.9495 1.1219	0.9686 1.1134	0.9707 1.1476	0.9742 ++++	Ave		1.0194				8.1		30.0			
Nonane	0.5919 0.6341	0.6105 0.7288	0.5577 0.7162	0.6265 0.7258	0.6303 0.6954	Ave		0.6517				9.3		30.0			
Bromoform	++++ 0.5845	++++ 0.7183	0.4066 0.7053	0.4255 ++++	0.5158 ++++	Ave		0.5593				24.0		30.0			
Styrene	++++ 0.6801	++++ 0.7967	0.5210 0.8121	0.5315 0.8848	0.6132 0.8801	Ave		0.7149				20.8		30.0			
o-Xylene	1.0478 0.9975	0.9320 1.0711	0.9431 1.0951	1.0039 1.1021	1.0321 1.1197	Ave		1.0345				6.3		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
1,1,2,2-Tetrachloroethane	0.6895 0.7678	0.6522 0.7971	0.6792 0.8315	0.7130 0.8513	0.7531 0.8668	Ave		0.7601				10.0		30.0			
1,2,3-Trichloropropane	++++ 0.2154	0.2596 0.2394	0.2135 0.2552	0.2351 0.2558	0.2255 0.2547	Ave		0.2394				7.6		30.0			
Isopropylbenzene	1.5102 1.5033	1.4056 1.6590	1.4118 1.6352	1.4167 1.6748	1.5710 ++++	Ave		1.5319				7.1		30.0			
Propylbenzene	++++ 0.3955	0.3562 0.4385	0.3841 0.4413	0.3703 0.4723	0.4092 ++++	Ave		0.4084				9.7		30.0			
2-Chlorotoluene	++++ 0.3661	0.3747 0.4076	0.3340 0.4108	0.3773 0.4367	0.3875 ++++	Ave		0.3869				8.1		30.0			
4-Ethyltoluene	++++ 1.4994	++++ 1.6944	1.3559 1.7289	1.3397 1.7395	1.5426 ++++	Ave		1.5572				10.9		30.0			
1,3,5-Trimethylbenzene	++++ 0.5864	++++ 0.6547	0.5372 0.6390	0.5500 0.6738	0.5916 0.7107	Ave		0.6179				9.9		30.0			
Alpha Methyl Styrene	++++ 0.5224	++++ 0.6349	++++ 0.6612	0.4050 0.7336	0.4511 0.7891	Ave		0.5996				24.1		30.0			
Decane	++++ 0.8374	++++ 0.9465	++++ 0.9426	0.8014 0.9125	0.8459 0.9096	Ave		0.8851				6.4		30.0			
tert-Butylbenzene	++++ 1.2746	++++ 1.4997	1.2146 1.4649	1.2480 1.6001	1.3155 1.5569	Ave		1.3968				10.8		30.0			
1,2,4-Trimethylbenzene	1.2028 1.2553	1.1447 1.4812	1.1638 1.4659	1.2236 1.5654	1.2861 ++++	Ave		1.3099				11.8		30.0			
sec-Butylbenzene	++++ 1.8690	++++ 2.2054	1.7755 2.2283	1.8000 2.3529	1.9751 ++++	Ave		2.0295				11.4		30.0			
1,3-Dichlorobenzene	++++ 0.8984	++++ 1.0244	0.9172 1.0444	0.9105 1.1397	0.9240 1.0821	Ave		0.9926				9.3		30.0			
Benzyl chloride	++++ 0.8980	++++ 1.1805	0.7853 1.0109	0.7742 ++++	0.8369 ++++	Ave		0.9143				17.1		30.0			
1,4-Dichlorobenzene	0.9320 0.9020	0.8097 1.0419	0.9008 0.9990	0.8499 1.1436	0.9042 1.1157	Ave		0.9599				11.6		30.0			
4-Isopropyltoluene	1.2738 1.5148	1.2821 1.7152	1.3632 1.6510	1.4649 1.7846	1.5176 ++++	Ave		1.5075				12.2		30.0			
1,2,3-Trimethylbenzene	1.1397 1.2760	1.1040 1.4204	1.2047 1.4129	1.2732 1.4633	1.2567 ++++	Ave		1.2834				9.8		30.0			
Indane	++++ 1.1644	++++ 1.3331	1.1191 1.3630	1.1504 1.5135	1.1552 1.3466	Ave		1.2682				11.1		30.0			
1,2-Dichlorobenzene	0.9716 0.8829	0.8386 0.9926	0.8219 0.9879	0.8992 1.1198	0.8924 0.9970	Ave		0.9404				9.6		30.0			
Indene	++++ 0.9756	++++ 1.1838	++++ 1.1752	0.8020 1.3866	0.9174 1.2488	Ave		1.0985				18.8		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10		B	M1	M2								
Butylbenzene	1.5405 1.5136	1.4542 1.7535	1.5116 1.7283	1.5236 1.8209	1.5176 ++++	Ave		1.5960				8.3		30.0			
Undecane	++++ 0.9944	++++ 1.1367	++++ 1.1008	0.9856 1.1400	0.9832 1.1336	Ave		1.0677				7.1		30.0			
1,2-Dibromo-3-Chloropropane	++++ 0.4053	++++ 0.4840	0.2499 0.4850	0.3113 ++++	0.3288 ++++	Ave		0.3774				25.6		30.0			
1,2,4,5-Tetramethylbenzene	++++ 1.4176	++++ 1.6182	1.2965 1.4778	1.3345 1.7614	1.3349 ++++	Ave		1.4630				11.7		30.0			
Dodecane	++++ 0.9887	++++ 1.1112	++++ 1.1554	++++ 1.1970	0.9210 1.1713	Ave		1.0908				10.2		30.0			
1,2,4-Trichlorobenzene	0.8334 0.8256	0.7767 0.9382	0.7824 0.8703	0.8445 1.1053	0.7977 1.1092	Ave		0.8883				14.0		30.0			
Naphthalene	2.0153 1.7387	1.6688 1.9345	1.6648 1.7128	1.6791 2.1275	1.5832 ++++	Ave		1.7916				10.4		30.0			
Hexachlorobutadiene	0.6778 0.7081	0.7782 0.8206	0.7176 0.8078	0.7780 0.9153	0.7040 0.8414	Ave		0.7749				9.6		30.0			
1,2,3-Trichlorobenzene	1.0622 0.7905	0.7736 0.9168	0.8319 0.8354	0.8725 1.0918	0.7797 1.0720	Ave		0.9026				14.1		30.0			
2-Methylnaphthalene	++++ 0.7436	++++ 0.8342	++++ 0.4785	++++ 0.8163	++++ 0.8021	Ave		0.7349				20.0		50.0			
1-Methylnaphthalene	++++ 0.7392	++++ 0.7597	++++ 0.4609	++++ 0.7235	++++ 0.6914	Ave		0.6749				18.1		50.0			
4-Bromofluorobenzene (Surr)	0.5765 0.5768	0.5739 0.6155	0.5703 0.6054	0.5863 0.6287	0.5784 0.5987	Ave		0.5911				3.4		30.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-33257/7	RI03IC01.D
Level 2	IC 140-33257/8	RI03IC02.D
Level 3	IC 140-33257/9	RI03IC03.D
Level 4	IC 140-33257/10	RI03IC04.D
Level 5	IC 140-33257/11	RI03IC05.D
Level 6	IC 140-33257/12	RI03IC06.D
Level 7	ICIS 140-33257/23	RI03IC07R.D
Level 8	IC 140-33257/14	RI03IC08.D
Level 9	IC 140-33257/2	RI03IC09.D
Level 10	IC 140-33257/4	RI03IC10.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Chlorodifluoromethane	CBM	Ave	+++++ 219441	+++++ 494961	16054 1018776	37407 2348774	88870 4724731	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Propene	CBM	Ave	+++++ 156506	+++++ 303639	+++++ 588113	+++++ 1269857	+++++ 2500503	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
Dichlorodifluoromethane	CBM	Ave	+++++ 183416	+++++ 406890	15282 839671	30972 2101908	74265 3856645	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloromethane	CBM	Ave	+++++ 44708	+++++ 88443	+++++ 176223	4661 346832	14239 693560	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorotetrafluoroethane	CBM	Ave	+++++ 166670	+++++ 305222	13317 631884	26181 1320196	62802 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Vinyl chloride	CBM	Ave	3313 103708	5237 291942	10071 474399	16243 1029765	41385 1661803	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,3-Butadiene	CBM	Ave	+++++ 81755	+++++ 219332	+++++ 413950	15357 771748	36625 1340227	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Butane	CBM	Ave	+++++ 152419	+++++ 414338	14972 766058	30013 1465050	65401 2532410	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromomethane	CBM	Ave	+++++ 103516	+++++ 274719	11831 478925	18901 1065063	42598 1702886	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroethane	CBM	Ave	+++++ 41293	+++++ 121039	4697 191853	6737 435262	17294 +++++	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Ethanol	CBM	Ave	+++++ 243829	+++++ 623885	+++++ 1190978	40300 2822321	96824 5484760	+++++ 5.00	+++++ 10.0	+++++ 20.0	0.800 40.0	2.00 80.0
Vinyl bromide	CBM	Ave	+++++ 93465	3929 218556	6610 476165	13519 1148135	33504 2136147	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylbutane	CBM	Ave	+++++ 122786	+++++ 299043	10731 628901	18236 1425882	50031 2767410	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichlorofluoromethane	CBM	Ave	+++++ 267920	10884 615965	18941 1326757	39671 3169467	102492 6197158	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Acrolein	CBM	Ave	+++++ 29346	+++++ 71857	+++++ 176527	+++++ 348337	13055 698308	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Acetonitrile	CBM	Ave	+++++ 51720	+++++ 121363	+++++ 245426	+++++ 582616	5580 1096753	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 0.160	0.400 16.0
Acetone	CBM	Ave	+++++ 158806	+++++ 353148	+++++ 725820	+++++ 1654698	78390 3145268	+++++ 3.00	+++++ 6.00	+++++ 12.0	+++++ 24.0	1.20 48.0
Pentane	CBM	Ave	+++++ 17893	+++++ 44407	+++++ 94410	+++++ 226085	2645 455388	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 0.160	0.400 16.0
Isopropyl alcohol	CBM	Ave	+++++ 435961	+++++ 1101651	+++++ 2165369	+++++ 5213569	67760 10255859	0.0600 3.00	0.120 6.00	0.240 12.0	0.480 24.0	1.20 48.0
Ethyl ether	CBM	Ave	+++++ 122175	+++++ 301541	+++++ 616460	+++++ 1433907	49916 2812660	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethene	CBM	Ave	+++++ 102785	+++++ 239031	+++++ 541093	+++++ 1258021	40958 2383041	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Acrylonitrile	CBM	Ave	+++++ 77731	+++++ 187864	+++++ 399181	+++++ 934361	10806 1821857	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
t-Butyl alcohol	CBM	Ave	+++++ 181842	+++++ 449829	+++++ 931101	+++++ 2176270	69778 4342222	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichlorotrifluoroethane	CBM	Ave	+++++ 210707	+++++ 517442	+++++ 1093608	+++++ 2655319	36187 5307039	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methylene Chloride	CBM	Ave	+++++ 107501	+++++ 224958	+++++ 472620	+++++ 1121306	31886 +++++	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 +++++
3-Chloropropene	CBM	Ave	+++++ 103629	+++++ 242216	+++++ 475507	+++++ 1146190	16135 2333432	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon disulfide	CBM	Ave	+++++ 277961	+++++ 650466	+++++ 1407313	+++++ 3382615	109289 6407900	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,2-Dichloroethene	CBM	Ave	+++++ 107685	+++++ 269961	+++++ 572169	+++++ 1391908	16947 2783877	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylpentane	CBM	Ave	+++++ 257703	+++++ 642069	+++++ 1347528	+++++ 3000565	40649 6161875	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Methyl tert-butyl ether	CBM	Ave	+++++ 271742	+++++ 648935	+++++ 1406422	+++++ 3317514	20195 6358374	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1-Dichloroethane	CBM	Ave	+++++ 191196	+++++ 452018	+++++ 960313	+++++ 2277375	76177 4360528	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Vinyl acetate	CBM	Ave	+++++ 308087	+++++ 759618	+++++ 1550812	+++++ 3800716	41387 7686543	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Butanone	CBM	Ave	+++++ 51572	+++++ 128379	+++++ 250304	+++++ 636144	9945 1285975	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Hexane	CBM	Ave	+++++ 85156	+++++ 210994	+++++ 432765	+++++ 1012153	12975 2110781	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
cis-1,2-Dichloroethene	CBM	Ave	+++++ 108153	+++++ 281658	+++++ 593822	+++++ 1461188	19946 2831075	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
Ethyl acetate	CBM	Ave	+++++ 276396	11707 671035	21642 1403825	43652 3267852	107812 6519087	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chloroform	CBM	Ave	+++++ 231564	10656 548666	17685 1155781	34605 2705091	88925 5498611	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrahydrofuran	CBM	Ave	+++++ 132901	+++++ 329928	11360 698015	22692 1610482	53198 3180934	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,1-Trichloroethane	CBM	Ave	6034 234415	8950 557623	19617 1142217	35077 2964078	89808 5973969	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloroethane	DFBZ	Ave	3073 146276	5862 341855	11614 716206	24357 1682455	54501 3298299	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1-Butanol	DFBZ	Ave	+++++ 49826	+++++ 124400	+++++ 245687	+++++ 587477	19570 1242418	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	0.400 16.0
Cyclohexane	DFBZ	Ave	+++++ 49894	+++++ 124018	+++++ 259810	8676 611764	18817 1291544	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Benzene	DFBZ	Ave	9034 343664	13990 822928	29324 1732232	53145 4049317	129476 8504918	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Carbon tetrachloride	DFBZ	Ave	4750 246027	8126 616542	16140 1242435	32718 3105309	82320 6601975	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,3-Dimethylpentane	DFBZ	Ave	+++++ 75390	+++++ 176630	5543 374263	9391 898330	26163 1777213	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Thiophene	DFBZ	Ave	+++++ 185736	+++++ 442182	13723 898134	27373 2283966	67963 4458082	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2,2,4-Trimethylpentane	DFBZ	Ave	+++++ 547133	+++++ 1324872	42620 2805646	84031 6272565	211257 12833072	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Heptane	DFBZ	Ave	+++++ 115588	+++++ 290028	9072 600275	17873 1396634	40457 2805393	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichloropropane	DFBZ	Ave	+++++ 129462	+++++ 314183	10210 626326	18516 1477336	48324 3008646	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Trichloroethene	DFBZ	Ave	3817 148885	5933 376006	10806 798633	20676 1910661	55942 3849636	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromomethane	DFBZ	Ave	+++++ 131893	5532 330920	10271 691506	19384 1643327	49916 3305615	+++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromodichloromethane	DFBZ	Ave	+++++ 225379	+++++ 566326	16203 1170432	30697 2840812	77686 5832457	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,4-Dioxane	DFBZ	Ave	+++++ 51868	+++++ 129226	+++++ 273917	6626 633790	18371 1247808	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methyl methacrylate	DFBZ	Ave	+++++ 152368	+++++ 381120	+++++ 810493	21764 1909381	55330 3983049	+++++ 1.00	+++++ 2.00	+++++ 4.00	0.160 8.00	0.400 16.0
Methylcyclohexane	DFBZ	Ave	+++++ 184946	+++++ 477484	14678 993926	28483 2375366	71644 4727152	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Methyl-2-pentanone (MIBK)	DFBZ	Ave	+++++ 288813	+++++ 723671	20857 1478879	41180 3510335	107444 7232492	+++++ 1.00	+++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
cis-1,3-Dichloropropene	DFBZ	Ave	++++ 177650	5872 467682	11346 907449	26525 2314593	64389 4710253	++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
trans-1,3-Dichloropropene	CBZd 5	Ave	++++ 159588	5834 426975	11139 838028	22630 2144122	56564 4441543	++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Toluene	CBZd 5	Ave	8499 363606	13865 964843	28166 1947337	52417 4796384	143846 9463414	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2-Trichloroethane	CBZd 5	Ave	3011 110540	4864 297744	8335 602007	16538 1433844	42543 2844825	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Hexanone	CBZd 5	Ave	++++ 124236	++++ 334091	8696 681395	17840 1657957	45806 3399102	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
C8 Range	DFBZ	Ave	++++ 1182032	++++ 3050806	++++ 6144751	190756 14179004	466318 29283193	++++ 1.00	++++ 2.00	++++ 4.00	0.160 8.00	0.400 16.0
Octane	CBZd 5	Ave	++++ 112993	++++ 308402	7174 594761	16040 1516549	42048 3196625	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Dibromochloromethane	CBZd 5	Ave	++++ 227075	++++ 626193	12512 1260220	27226 3457683	75235 7505025	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dibromoethane	CBZd 5	Ave	++++ 213842	7673 580652	14394 1147731	29539 2919521	79328 6216264	++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Tetrachloroethene	CBZd 5	Ave	3560 139836	5861 371188	10846 753130	22221 1989330	54373 4065061	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Chlorobenzene	CBZd 5	Ave	7381 304012	11179 810531	23336 1625792	43813 4236877	116875 8686236	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Ethylbenzene	CBZd 5	Ave	11381 489233	19545 1342943	35296 2631374	73785 6598286	181497 13479819	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
m-Xylene & p-Xylene	CBZd 5	Ave	16808 778233	29171 2047299	57204 4209823	111265 10470526	283166 ++++	0.0400 2.00	0.0800 4.00	0.160 8.00	0.320 16.0	0.800 ++++
Nonane	CBZd 5	Ave	5261 250934	9378 664979	16468 1353990	35904 3311198	91602 6567091	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Bromoform	CBZd 5	Ave	++++ 231275	++++ 655431	12006 1333496	24384 ++++	74964 ++++	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 ++++	0.400 ++++
Styrene	CBZd 5	Ave	++++ 269110	++++ 726918	15385 1535403	30460 4036484	89120 8312171	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
o-Xylene	CBZd 5	Ave	9313 394718	14317 977284	27849 2070387	57536 5027892	149999 10574999	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,1,2,2-Tetrachloroethane	CBZd 5	Ave	6128 303835	10018 727258	20054 1572025	40863 3883559	109448 8186594	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichloropropane	CBZd 5	Ave	++++ 85244	3987 218447	6305 482487	13476 1166777	32774 2405567	++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Isopropylbenzene	CBZd 5	Ave	13423 594874	21592 1513692	41687 3091481	81194 7640100	228313 ++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
Propylbenzene	CBZd 5	Ave	++++ 156505	5471 400140	11343 834225	21220 2154443	59470 ++++	++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 ++++

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
2-Chlorotoluene	CBZd 5	Ave	++++ 144883	5756 371923	9862 776733	21624 1992363	56318 ++++	++++ 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
4-Ethyltoluene	CBZd 5	Ave	++++ 593308	++++ 1546060	40037 3268553	76782 7935354	224183 ++++	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
1,3,5-Trimethylbenzene	CBZd 5	Ave	++++ 232045	++++ 597390	15863 1208158	31521 3073985	85979 6711519	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Alpha Methyl Styrene	CBZd 5	Ave	++++ 206714	++++ 579320	++++ 1249980	23210 3346770	65556 7451929	++++ 1.00	++++ 2.00	++++ 4.00	0.160 8.00	0.400 16.0
Decane	CBZd 5	Ave	++++ 331365	++++ 863597	++++ 1782051	45930 4162906	122940 8590182	++++ 1.00	++++ 2.00	++++ 4.00	0.160 8.00	0.400 16.0
tert-Butylbenzene	CBZd 5	Ave	++++ 504364	++++ 1368395	35865 2769458	71523 7299538	191186 14703312	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,4-Trimethylbenzene	CBZd 5	Ave	10691 496740	17584 1351477	34364 2771424	70127 7141354	186908 ++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
sec-Butylbenzene	CBZd 5	Ave	++++ 739600	++++ 2012250	52428 4212854	103163 10733538	287037 ++++	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
1,3-Dichlorobenzene	CBZd 5	Ave	++++ 355492	++++ 934677	27082 1974523	52180 5199306	134286 10219340	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Benzyl chloride	CBZd 5	Ave	++++ 355341	++++ 1077107	23187 1911127	44372 ++++	121625 ++++	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 ++++	0.400 ++++
1,4-Dichlorobenzene	CBZd 5	Ave	8284 356925	12438 950700	26600 1888678	48709 5217028	131413 10536468	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
4-Isopropyltoluene	CBZd 5	Ave	11322 599428	19695 1565012	40253 3121329	83958 8141205	220551 ++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
1,2,3-Trimethylbenzene	CBZd 5	Ave	10130 504915	16958 1296053	35572 2671168	72971 6675523	182641 ++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
Indane	CBZd 5	Ave	++++ 460776	++++ 1216324	33045 2576919	65933 6904704	167879 12717942	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2-Dichlorobenzene	CBZd 5	Ave	8636 349367	12882 905677	24269 1867790	51537 5108636	129699 9415816	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Indene	CBZd 5	Ave	++++ 386043	++++ 1080114	++++ 2221880	45967 6325607	133321 11794325	++++ 1.00	++++ 2.00	++++ 4.00	0.160 8.00	0.400 16.0
Butylbenzene	CBZd 5	Ave	13692 598930	22338 1599950	44636 3267502	87320 8307001	220549 ++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
Undecane	CBZd 5	Ave	++++ 393485	++++ 1037149	++++ 2081162	56488 5200472	142886 10705948	++++ 1.00	++++ 2.00	++++ 4.00	0.160 8.00	0.400 16.0
1,2-Dibromo-3-Chloropropane	CBZd 5	Ave	++++ 160389	++++ 441614	7380 916988	17844 ++++	47784 ++++	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 ++++	0.400 ++++
1,2,4,5-Tetramethylbenzene	CBZd 5	Ave	++++ 560939	++++ 1476473	38284 2793851	76485 8035274	194002 ++++	++++ 1.00	++++ 2.00	0.0800 4.00	0.160 8.00	0.400 ++++
Dodecane	CBZd 5	Ave	++++ 391221	++++ 1013886	++++ 2184461	++++ 5460527	133853 11061506	++++ 1.00	++++ 2.00	++++ 4.00	++++ 8.00	0.400 16.0

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (PPB V/V)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5 LVL 10
1,2,4-Trichlorobenzene	CBZd 5	Ave	7407 326688	11931 856029	23104 1645400	48402 5042191	115933 10475148	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
Naphthalene	CBZd 5	Ave	17912 688030	25635 1765089	49158 3238137	96234 9705570	230088 +++++	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 +++++
Hexachlorobutadiene	CBZd 5	Ave	6024 280210	11954 748771	21188 1527206	44590 4175503	102309 7946181	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
1,2,3-Trichlorobenzene	CBZd 5	Ave	9441 312804	11884 836533	24564 1579413	50004 4980903	113317 10123830	0.0200 1.00	0.0400 2.00	0.0800 4.00	0.160 8.00	0.400 16.0
2-Methylnaphthalene	CBZd 5	Ave	+++++ 294266	+++++ 761167	+++++ 904624	+++++ 3724073	+++++ 7575277	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
1-Methylnaphthalene	CBZd 5	Ave	+++++ 292533	+++++ 693175	+++++ 871340	+++++ 3300680	+++++ 6530127	+++++ 1.00	+++++ 2.00	+++++ 4.00	+++++ 8.00	+++++ 16.0
4-Bromofluorobenzene (Surr)	CBZd 5	Ave	1024776 912943	881623 1123246	841925 1144637	840097 1433981	840618 1413499	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00	4.00 4.00

Curve Type Legend:

Ave = Average ISTD

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 140-33257/7	RI03IC01.D
Level 2	IC 140-33257/8	RI03IC02.D
Level 3	IC 140-33257/9	RI03IC03.D
Level 4	IC 140-33257/10	RI03IC04.D
Level 5	IC 140-33257/11	RI03IC05.D
Level 6	IC 140-33257/12	RI03IC06.D
Level 7	ICIS 140-33257/23	RI03IC07R.D
Level 8	IC 140-33257/14	RI03IC08.D
Level 9	IC 140-33257/2	RI03IC09.D
Level 10	IC 140-33257/4	RI03IC10.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Chlorodifluoromethane	+++++	+++++	-2.6						50			
Propene	+++++	+++++	+++++	+++++	+++++	29.6						50
Dichlorodifluoromethane	+++++	+++++	9.0						50			
Chloromethane	+++++	+++++	+++++	-9.9						50		
1,2-Dichlorotetrafluoroethane	+++++	+++++	15.2	+++++					50			
Vinyl chloride	27.3						50					
1,3-Butadiene	+++++	+++++	+++++	25.2						50		
Butane	+++++	+++++	21.9						50			
Bromomethane	+++++	+++++	41.8						50			
Chloroethane	+++++	+++++	33.3	+++++					50			
Ethanol	+++++	+++++	+++++	9.7						50		
Vinyl bromide	+++++	7.3						50				
2-Methylbutane	+++++	+++++	11.6						50			
Trichlorofluoromethane	+++++	3.9						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 # LVL 9 #	LVL 4 # LVL 10 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3 LVL 9	LVL 4 LVL 10	LVL 5	LVL 6
Acrolein	+++++	+++++	+++++	+++++	14.6						50	
Acetonitrile	+++++	+++++	+++++	-19.2						50		
Acetone	+++++	+++++	+++++	+++++	38.5						80	
Pentane	+++++	+++++	+++++	-3.7						50		
Isopropyl alcohol	9.4						50					
Ethyl ether	+++++	+++++	2.7						50			
1,1-Dichloroethene	+++++	6.6						50				
Acrylonitrile	+++++	+++++	+++++	-6.1						50		
t-Butyl alcohol	+++++	+++++	12.9						50			
1,1,2-Trichlorotrifluoroethane	+++++	+++++	-0.2						50			
Methylene Chloride	+++++	+++++	+++++	72.1 +++++						80		
3-Chloropropene	+++++	+++++	9.6						50			
Carbon disulfide	+++++	+++++	1.0						50			
trans-1,2-Dichloroethene	+++++	2.0						50				
2-Methylpentane	+++++	7.8						50				
Methyl tert-butyl ether	+++++	+++++	-3.5						50			
1,1-Dichloroethane	+++++	4.3						50				
Vinyl acetate	+++++	+++++	-3.1						50			
2-Butanone	+++++	+++++	+++++	22.8						50		
Hexane	+++++	+++++	5.6						50			
cis-1,2-Dichloroethene	+++++	-10.6						50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #	LVL 9 #	LVL 10 #			LVL 7	LVL 8	LVL 9	LVL 10		
Ethyl acetate	+++++	4.4						50				
Chloroform	+++++	14.1						50				
Tetrahydrofuran	+++++	+++++	5.9						50			
1,1,1-Trichloroethane	6.3						50					
1,2-Dichloroethane	-12.0						50					
1-Butanol	+++++	+++++	+++++	+++++	0.4						50	
Cyclohexane	+++++	+++++	+++++	9.4						50		
Benzene	5.6						50					
Carbon tetrachloride	-16.0						50					
2,3-Dimethylpentane	+++++	+++++	-0.5						50			
Thiophene	+++++	+++++	-3.1						50			
2,2,4-Trimethylpentane	+++++	+++++	0.5						50			
Heptane	+++++	+++++	0.6						50			
1,2-Dichloropropane	+++++	+++++	3.8						50			
Trichloroethene	3.7						50					
Dibromomethane	+++++	3.9						50				
Bromodichloromethane	+++++	+++++	-6.6						50			
1,4-Dioxane	+++++	+++++	+++++	-14.6						50		
Methyl methacrylate	+++++	+++++	+++++	-7.9						50		
Methylcyclohexane	+++++	+++++	-1.8						50			
4-Methyl-2-pentanone (MIBK)	+++++	+++++	-6.5						50			

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #	LVL 9 #	LVL 10 #			LVL 7	LVL 8	LVL 9	LVL 10		
cis-1,3-Dichloropropene	+++++	-15.4						50				
trans-1,3-Dichloropropene	+++++	-10.0						50				
Toluene	-2.2						50					
1,1,2-Trichloroethane	10.8						50					
2-Hexanone	+++++	+++++	-12.2						50			
Octane	+++++	+++++	-19.7						50			
Dibromochloromethane	+++++	+++++	-30.8						50			
1,2-Dibromoethane	+++++	-12.4						50				
Tetrachloroethene	1.8						50					
Chlorobenzene	0.3						50					
Ethylbenzene	-3.4						50					
m-Xylene & p-Xylene	-7.2			+++++			50					
Nonane	-9.2						50					
Bromoform	+++++	+++++	-27.3						50			
Styrene	+++++	+++++	+++++	-27.1					50			
o-Xylene	1.3						50					
1,1,2,2-Tetrachloroethane	-9.3						50					
1,2,3-Trichloropropane	+++++	8.4						50				
Isopropylbenzene	-1.4			+++++			50					
Propylbenzene	+++++	-12.8		+++++				50				
2-Chlorotoluene	+++++	-3.1		+++++				50				

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #	LVL 9 #	LVL 10 #			LVL 7	LVL 8	LVL 9	LVL 10		
4-Ethyltoluene	+++++	+++++	-12.9	+++++					50			
1,3,5-Trimethylbenzene	+++++	+++++	-13.1						50			
Alpha Methyl Styrene	+++++	+++++	+++++	-32.5						50		
Decane	+++++	+++++	+++++	-9.5						50		
tert-Butylbenzene	+++++	+++++	-13.0						50			
1,2,4-Trimethylbenzene	-8.2			+++++			50					
sec-Butylbenzene	+++++	+++++	-12.5	+++++					50			
1,3-Dichlorobenzene	+++++	+++++	-7.6						50			
Benzyl chloride	+++++	+++++	-14.1	+++++					50			
1,4-Dichlorobenzene	-2.9						50					
4-Isopropyltoluene	-15.5			+++++			50					
1,2,3-Trimethylbenzene	-11.2			+++++			50					
Indane	+++++	+++++	-11.8						50			
1,2-Dichlorobenzene	3.3						50					
Indene	+++++	+++++	+++++	-27.0						50		
Butylbenzene	-3.5			+++++			50					
Undecane	+++++	+++++	+++++	-7.7						50		
1,2-Dibromo-3-Chloropropane	+++++	+++++	-33.8	+++++					50			
1,2,4,5-Tetramethylbenzene	+++++	+++++	-11.4	+++++					50			
Dodecane	+++++	+++++	+++++	+++++	-15.6						50	
1,2,4-Trichlorobenzene	-6.2						50					

FORM VI
AIR - GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1 Analy Batch No.: 33257

SDG No.: _____

Instrument ID: MR GC Column: RTX-5 ID: 0.32 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/03/2019 10:26 Calibration End Date: 09/04/2019 09:04 Calibration ID: 2118

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 #	LVL 2 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6
	LVL 7 #	LVL 8 #	LVL 9 #	LVL 10 #			LVL 7	LVL 8	LVL 9	LVL 10		
Naphthalene	12.5			+++++			80					
Hexachlorobutadiene	-12.5						50					
1,2,3-Trichlorobenzene	17.7						50					
2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	1.2						80
1-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	9.5						80

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC09.D
 Lims ID: IC L9
 Client ID:
 Sample Type: IC Calib Level: 9
 Inject. Date: 03-Sep-2019 10:26:30 ALS Bottle#: 8 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-002
 Misc. Info.: 245075
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:33:43 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 14:51:21

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.539	8.537	0.002	92	504925	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.771	10.770	0.001	93	2830280	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.568	0.002	85	2280964	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	98	1433981	4.00	4.25	
6 Chlorodifluoromethane	51	3.427	3.428	-0.001	97	2348774	8.00	7.01	
7 Propene	41	3.437	3.433	0.004	99	1269857	8.00	6.70	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	99	2101908	8.00	7.38	
9 Chloromethane	52	3.664	3.661	0.003	100	346832	8.00	6.38	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	85	1320196	8.00	5.62	
11 Acetaldehyde	44	3.809	3.811	-0.002	99	1942954	40.0	29.3	
12 Vinyl chloride	62	3.826	3.823	0.003	99	1029765	8.00	6.00	
13 Butadiene	54	3.912	3.909	0.003	70	771748	8.00	5.98	
14 Butane	43	3.912	3.909	0.003	84	1465050	8.00	5.87	
15 Bromomethane	94	4.225	4.221	0.004	96	1065063	8.00	6.28	
16 Chloroethane	64	4.359	4.357	0.002	95	435262	8.00	6.08	
17 Ethanol	31	4.462	4.461	0.001	96	2822321	40.0	36.5	
18 Vinyl bromide	106	4.651	4.649	0.002	98	1148135	8.00	8.00	
19 2-Methylbutane	43	4.694	4.695	-0.001	94	1425882	8.00	7.30	
21 Trichlorofluoromethane	101	4.910	4.911	-0.001	99	3169467	8.00	7.72	
20 Acrolein	56	4.926	4.929	-0.003	95	348337	8.00	7.16	
24 Acetonitrile	40	4.996	5.002	-0.006	99	582616	8.00	8.03	
22 Acetone	58	5.039	5.050	-0.011	98	1654698	24.0	20.5	
25 Pentane	72	5.131	5.133	-0.002	71	226085	8.00	7.83	
23 Isopropyl alcohol	45	5.131	5.142	-0.011	83	5213569	24.0	22.1	
26 Ethyl ether	31	5.298	5.312	-0.014	94	1433907	8.00	7.28	
27 1,1-Dichloroethene	96	5.616	5.615	0.001	99	1258021	8.00	7.66	
28 Acrylonitrile	53	5.729	5.728	0.001	95	934361	8.00	7.72	
29 2-Methyl-2-propanol	59	5.718	5.745	-0.027	96	2176270	8.00	7.44	
30 1,1,2-Trichloro-1,2,2-trif	101	5.794	5.792	0.002	95	2655319	8.00	7.65	
32 3-Chloro-1-propene	39	5.983	5.964	0.019	96	1146190	8.00	7.12	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.972	5.969	0.003	98	1121306	8.00	5.76	
33 Carbon disulfide	76	6.128	6.125	0.003	99	3382615	8.00	7.84	
34 trans-1,2-Dichloroethene	96	6.781	6.779	0.002	97	1391908	8.00	7.87	
35 2-Methylpentane	43	6.797	6.795	0.002	95	3000565	8.00	7.19	
36 Methyl tert-butyl ether	73	6.905	6.927	-0.022	97	3317514	8.00	7.80	
37 1,1-Dichloroethane	63	7.212	7.208	0.004	99	2277375	8.00	7.50	
38 Vinyl acetate	43	7.315	7.318	-0.003	100	3800716	8.00	7.94	
39 2-Butanone (MEK)	72	7.767	7.782	-0.015	96	636144	8.00	7.47	
40 Hexane	56	7.784	7.785	-0.001	84	1012153	8.00	7.32	
41 Isopropyl ether	45	7.945	7.963	-0.018	98	4678822	8.00	7.39	
42 cis-1,2-Dichloroethene	96	8.204	8.203	0.001	91	1461188	8.00	7.96	
43 Ethyl acetate	43	8.393	8.402	-0.009	99	3267852	8.00	7.44	
44 Chloroform	83	8.555	8.549	0.006	96	2705091	8.00	7.40	
45 Tert-butyl ethyl ether	59	8.630	8.649	-0.019	95	4012888	8.00	7.78	
46 Tetrahydrofuran	42	8.948	8.968	-0.020	96	1610482	8.00	7.39	
47 1,1,1-Trichloroethane	97	9.590	9.586	0.004	94	2964078	8.00	7.93	
48 1,2-Dichloroethane	62	9.709	9.701	0.008	96	1682455	8.00	7.55	
50 n-Butanol	31	10.151	10.176	-0.025	82	587477	8.00	7.50	
49 Benzene	78	10.205	10.199	0.006	96	4049317	8.00	7.42	
51 Cyclohexane	69	10.199	10.200	-0.001	95	611764	8.00	7.57	
52 Carbon tetrachloride	117	10.221	10.222	-0.001	96	3105309	8.00	8.60	
53 2,3-Dimethylpentane	71	10.323	10.324	-0.001	92	898330	8.00	8.06	
54 Thiophene	84	10.485	10.482	0.003	96	2283966	8.00	8.06	
55 Isooctane	57	10.987	10.986	0.001	99	6272565	8.00	7.40	
57 n-Heptane	71	11.375	11.378	-0.003	93	1396634	8.00	7.74	
56 1,2-Dichloropropane	63	11.467	11.464	0.003	90	1477336	8.00	7.51	
58 Trichloroethene	130	11.499	11.496	0.003	95	1910661	8.00	8.13	
59 Dibromomethane	93	11.591	11.587	0.004	92	1643327	8.00	7.86	
60 Dichlorobromomethane	83	11.736	11.735	0.001	98	2840812	8.00	8.18	
61 1,4-Dioxane	88	11.742	11.759	-0.017	87	633790	8.00	8.01	
62 Methyl methacrylate	41	11.833	11.836	-0.003	94	1909381	8.00	7.93	
63 Methylcyclohexane	83	12.281	12.276	0.005	96	2375366	8.00	7.94	
64 4-Methyl-2-pentanone (MIBK)	43	12.696	12.705	-0.009	98	3510335	8.00	7.86	
65 cis-1,3-Dichloropropene	75	12.761	12.759	0.002	95	2314593	8.00	8.49	
66 trans-1,3-Dichloropropene	75	13.467	13.467	0.000	99	2144122	8.00	8.91	
67 Toluene	91	13.586	13.584	0.002	93	4796384	8.00	8.60	
68 1,1,2-Trichloroethane	83	13.667	13.665	0.002	96	1433844	8.00	8.22	
69 2-Hexanone	58	14.044	14.055	-0.011	91	1657957	8.00	8.66	
71 n-Octane	85	14.281	14.283	-0.002	95	1516549	8.00	8.79	
70 Chlorodibromomethane	129	14.373	14.370	0.003	97	3457683	8.00	9.91	
72 Ethylene Dibromide	107	14.664	14.664	0.000	98	2919521	8.00	8.98	
73 Tetrachloroethene	129	14.734	14.736	-0.002	98	1989330	8.00	8.86	
74 Chlorobenzene	112	15.619	15.615	0.004	96	4236877	8.00	8.97	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	97	5019244	8.00	7.86	
76 Ethylbenzene	91	15.905	15.904	0.001	97	6598286	8.00	8.73	
77 m-Xylene & p-Xylene	91	16.066	16.067	-0.001	96	10470526	16.0	18.0	
81 n-Nonane	57	16.487	16.488	-0.001	94	3311198	8.00	8.91	
78 Bromoform	173	16.519	16.519	0.000	98	4142191	8.00	13.0	
79 Styrene	104	16.535	16.535	0.000	98	4036484	8.00	9.90	
80 o-Xylene	91	16.595	16.595	0.000	99	5027892	8.00	8.52	
82 1,1,2,2-Tetrachloroethane	83	16.918	16.923	-0.005	99	3883559	8.00	8.96	
83 1,2,3-Trichloropropane	110	17.085	17.085	0.000	96	1166777	8.00	8.55	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.187	0.001	95	7640100	8.00	8.75	
85 N-Propylbenzene	120	17.749	17.749	0.000	100	2154443	8.00	9.25	
86 2-Chlorotoluene	126	17.792	17.789	0.003	96	1992363	8.00	9.03	
88 4-Ethyltoluene	105	17.905	17.907	-0.002	100	7935354	8.00	8.94	
87 1,3,5-Trimethylbenzene	120	17.981	17.983	-0.002	93	3073985	8.00	8.72	
89 Alpha Methyl Styrene	118	18.223	18.225	-0.002	91	3346770	8.00	9.79	
90 n-Decane	57	18.283	18.286	-0.003	90	4162906	8.00	8.25	
91 tert-Butylbenzene	119	18.423	18.425	-0.002	95	7299538	8.00	9.16	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	96	7141354	8.00	9.56	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	10733538	8.00	9.27	
93 1,3-Dichlorobenzene	146	18.719	18.720	-0.001	97	5199306	8.00	9.19	
96 Benzyl chloride	91	18.800	18.798	0.002	99	6053316	8.00	11.6	
95 1,4-Dichlorobenzene	146	18.811	18.811	0.000	97	5217028	8.00	9.53	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	97	8141205	8.00	9.47	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	98	6675523	8.00	9.12	
99 Butylcyclohexane	83	18.984	18.983	0.001	95	4967219	8.00	8.53	
101 2,3-Dihydroindene	117	19.183	19.180	0.003	94	6904704	8.00	9.55	
100 1,2-Dichlorobenzene	146	19.183	19.182	0.001	85	5108636	8.00	9.53	
102 Indene	116	19.313	19.315	-0.002	91	6325607	8.00	10.1	
103 n-Butylbenzene	91	19.318	19.320	-0.002	98	8307001	8.00	9.13	
104 Undecane	57	19.636	19.638	-0.002	96	5200472	8.00	8.54	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.801	-0.003	95	2765964	8.00	12.9	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	98	8035274	8.00	9.63	
107 Dodecane	57	20.715	20.713	0.002	95	5460527	8.00	8.78	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	94	5042191	8.00	9.95	
109 Naphthalene	128	21.060	21.060	0.000	99	9705570	8.00	9.50	
110 Hexachlorobutadiene	225	21.281	21.283	-0.002	94	4175503	8.00	9.45	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	96	4980903	8.00	9.68	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	98	3724073	8.00	8.89	
113 1-Methylnaphthalene	142	22.144	22.143	0.001	97	3300680	8.00	8.58	
A 115 C8 Range	1	14.279	(14.238-14.335)		0	14179004	8.00	7.47	
S 116 Xylenes, Total	100				0		24.0	26.5	
S 117 1,2-Dichloroethene, Total	1				0		16.0	15.8	

Reagents:

40L9DQP_00012

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:33:46

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC09.D

Injection Date: 03-Sep-2019 10:26:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L9

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

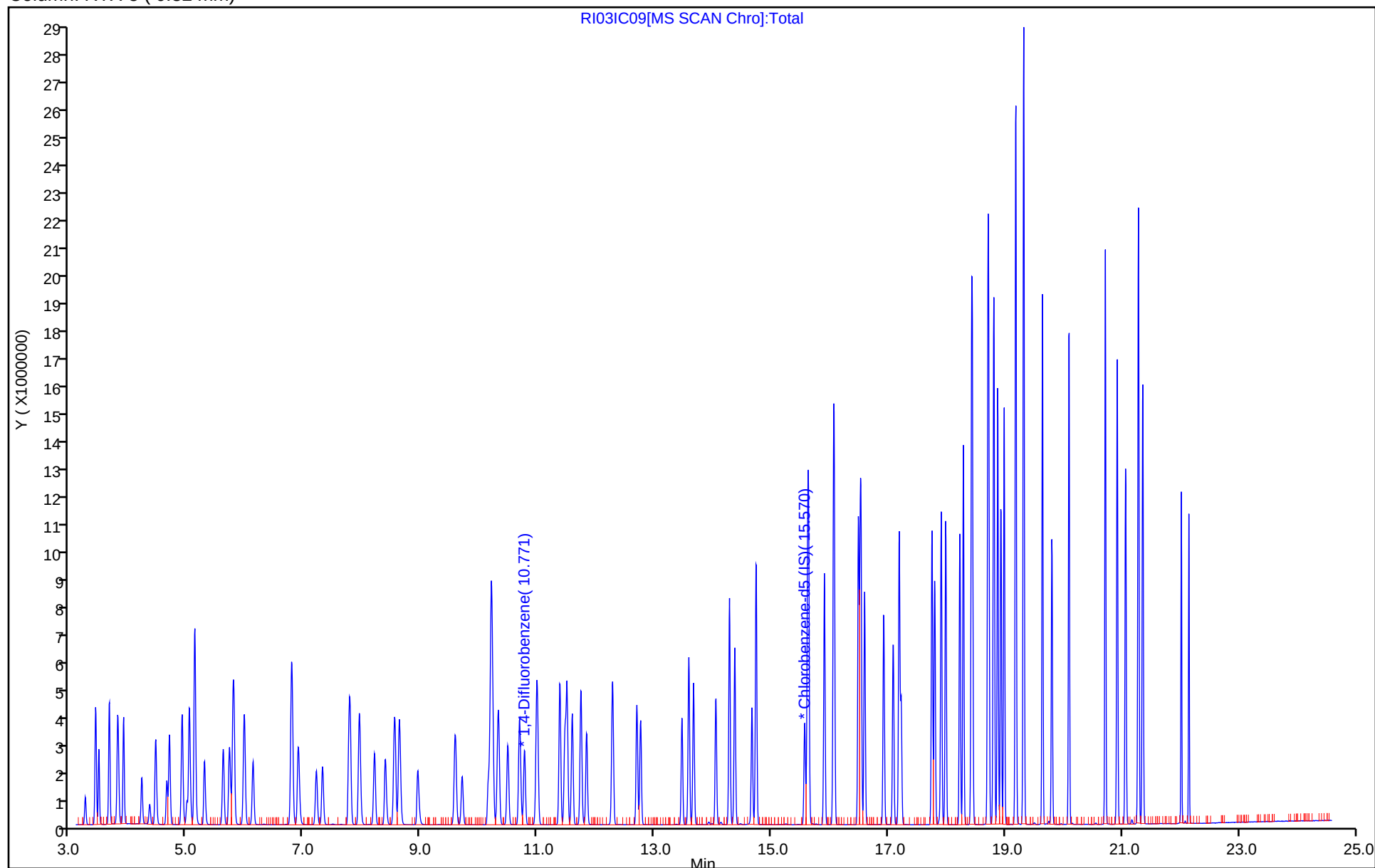
Dil. Factor: 1.0000

ALS Bottle#: 8

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC09.D

Injection Date: 03-Sep-2019 10:26:30

Instrument ID: MR

Lims ID: IC L9

Client ID:

Operator ID: HMT

ALS Bottle#: 8

Worklist Smp#: 2

Purge Vol: 500.000 mL

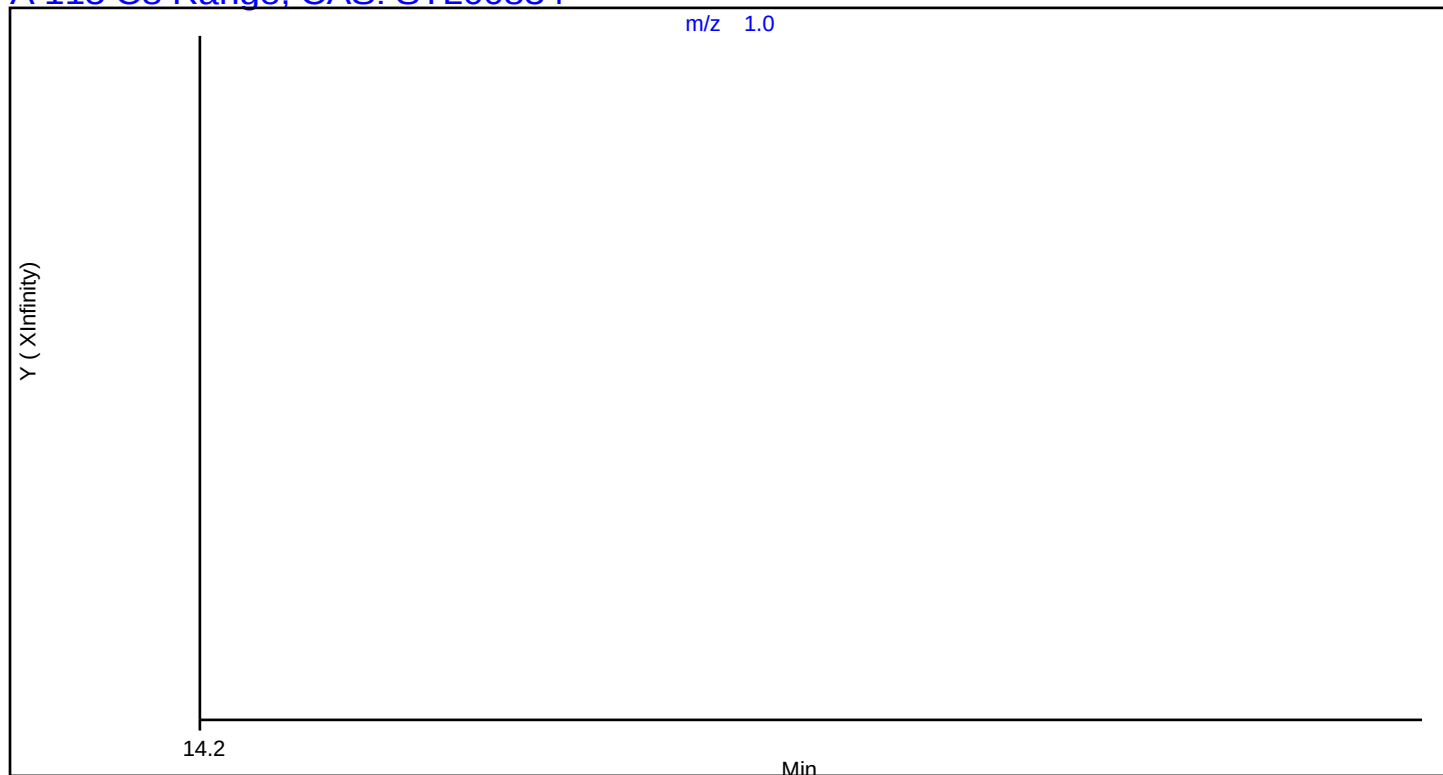
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 115 C8 Range, CAS: STL00834](#)

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC10.D
 Lims ID: IC 10
 Client ID:
 Sample Type: IC Calib Level: 10
 Inject. Date: 03-Sep-2019 12:02:30 ALS Bottle#: 9 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-004
 Misc. Info.: 245074
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:33:54 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 17:20:28

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.549	8.537	0.012	95	512022	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.782	10.770	0.012	94	2629211	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.568	0.002	85	2361044	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	96	1413499	4.00	4.05	
6 Chlorodifluoromethane	51	3.426	3.428	-0.002	97	4724731	16.0	13.9	
7 Propene	41	3.432	3.433	-0.001	99	2500503	16.0	13.0	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	99	3856645	16.0	13.4	
9 Chloromethane	52	3.658	3.661	-0.003	100	693560	16.0	12.6	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	92	2492992	16.0	10.5	
11 Acetaldehyde	44	3.809	3.811	-0.002	100	3138649	80.0	46.7	
12 Vinyl chloride	62	3.825	3.823	0.002	99	1661803	16.0	9.56	
13 Butadiene	54	3.906	3.909	-0.003	70	1340227	16.0	10.2	
14 Butane	43	3.906	3.909	-0.003	84	2532410	16.0	10.0	
15 Bromomethane	94	4.219	4.221	-0.002	95	1702886	16.0	9.90	
16 Chloroethane	64	4.359	4.357	0.002	90	729119	16.0	10.0	
17 Ethanol	31	4.473	4.461	0.012	97	5484760	80.0	70.0	
18 Vinyl bromide	106	4.650	4.649	0.001	99	2136147	16.0	14.7	
19 2-Methylbutane	43	4.694	4.695	-0.001	93	2767410	16.0	14.0	
21 Trichlorofluoromethane	101	4.915	4.911	0.004	99	6197158	16.0	14.9	
20 Acrolein	56	4.931	4.929	0.002	95	698308	16.0	14.2	
24 Acetonitrile	40	5.006	5.002	0.004	98	1096753	16.0	14.9	
22 Acetone	58	5.044	5.050	-0.006	98	3145268	48.0	38.5	
25 Pentane	72	5.130	5.133	-0.003	97	455388	16.0	15.5	
23 Isopropyl alcohol	45	5.141	5.142	-0.001	98	10255859	48.0	42.9	
26 Ethyl ether	31	5.298	5.312	-0.014	93	2812660	16.0	14.1	
27 1,1-Dichloroethene	96	5.621	5.615	0.006	99	2383041	16.0	14.3	
28 Acrylonitrile	53	5.740	5.728	0.012	94	1821857	16.0	14.8	
29 2-Methyl-2-propanol	59	5.729	5.745	-0.016	96	4342222	16.0	14.6	
30 1,1,2-Trichloro-1,2,2-trif	101	5.794	5.792	0.002	96	5307039	16.0	15.1	
32 3-Chloro-1-propene	39	5.988	5.964	0.024	95	2333432	16.0	14.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.977	5.969	0.008	98	2166319	16.0	11.0	
33 Carbon disulfide	76	6.128	6.125	0.003	100	6407900	16.0	14.6	
34 trans-1,2-Dichloroethene	96	6.786	6.779	0.007	98	2783877	16.0	15.5	
35 2-Methylpentane	43	6.797	6.795	0.002	95	6161875	16.0	14.6	
36 Methyl tert-butyl ether	73	6.904	6.927	-0.023	97	6358374	16.0	14.7	
37 1,1-Dichloroethane	63	7.217	7.208	0.009	100	4360528	16.0	14.2	
38 Vinyl acetate	43	7.325	7.318	0.007	100	7686543	16.0	15.8	
39 2-Butanone (MEK)	72	7.773	7.782	-0.009	96	1285975	16.0	14.9	
40 Hexane	56	7.794	7.785	0.009	84	2110781	16.0	15.1	
41 Isopropyl ether	45	7.951	7.963	-0.012	98	9477981	16.0	14.8	
42 cis-1,2-Dichloroethene	96	8.215	8.203	0.012	91	2831075	16.0	15.2	
43 Ethyl acetate	43	8.398	8.402	-0.004	98	6519087	16.0	14.6	
44 Chloroform	83	8.565	8.549	0.016	97	5498611	16.0	14.8	
45 Tert-butyl ethyl ether	59	8.641	8.649	-0.008	95	8124559	16.0	15.5	
46 Tetrahydrofuran	42	8.948	8.968	-0.020	95	3180934	16.0	14.4	
47 1,1,1-Trichloroethane	97	9.595	9.586	0.009	95	5973969	16.0	15.8	
48 1,2-Dichloroethane	62	9.714	9.701	0.013	96	3298299	16.0	15.9	
50 n-Butanol	31	10.156	10.176	-0.020	86	1242418	16.0	17.1	
49 Benzene	78	10.210	10.199	0.011	96	8504918	16.0	16.8	
51 Cyclohexane	69	10.205	10.200	0.005	93	1291544	16.0	17.2	
52 Carbon tetrachloride	117	10.232	10.222	0.010	97	6601975	16.0	19.7	
53 2,3-Dimethylpentane	71	10.334	10.324	0.010	92	1777213	16.0	17.2	
54 Thiophene	84	10.496	10.482	0.014	96	4458082	16.0	16.9	
55 Isooctane	57	10.997	10.986	0.011	99	12833072	16.0	16.3	
57 n-Heptane	71	11.386	11.378	0.008	93	2805393	16.0	16.7	
56 1,2-Dichloropropane	63	11.472	11.464	0.008	90	3008646	16.0	16.5	
58 Trichloroethene	130	11.504	11.496	0.008	96	3849636	16.0	17.6	
59 Dibromomethane	93	11.596	11.587	0.009	92	3305615	16.0	17.0	
60 Dichlorobromomethane	83	11.741	11.735	0.006	99	5832457	16.0	18.1	
61 1,4-Dioxane	88	11.747	11.759	-0.012	87	1247808	16.0	17.0	
62 Methyl methacrylate	41	11.838	11.836	0.002	93	3983049	16.0	17.8	
63 Methylcyclohexane	83	12.286	12.276	0.010	95	4727152	16.0	17.0	
64 4-Methyl-2-pentanone (MIBK)	43	12.701	12.705	-0.004	98	7232492	16.0	17.4	
65 cis-1,3-Dichloropropene	75	12.766	12.759	0.007	95	4710253	16.0	18.6	
66 trans-1,3-Dichloropropene	75	13.472	13.467	0.005	99	4441543	16.0	17.8	
67 Toluene	91	13.591	13.584	0.007	94	9463414	16.0	16.4	
68 1,1,2-Trichloroethane	83	13.672	13.665	0.007	95	2844825	16.0	15.8	
69 2-Hexanone	58	14.049	14.055	-0.006	91	3399102	16.0	17.2	
71 n-Octane	85	14.287	14.283	0.004	95	3196625	16.0	17.9	
70 Chlorodibromomethane	129	14.378	14.370	0.008	97	7505025	16.0	20.8	
72 Ethylene Dibromide	107	14.669	14.664	0.005	98	6216264	16.0	18.5	
73 Tetrachloroethene	129	14.740	14.736	0.004	98	4065061	16.0	17.5	
74 Chlorobenzene	112	15.619	15.615	0.004	96	8686236	16.0	17.8	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	96	10019065	16.0	15.1	
76 Ethylbenzene	91	15.910	15.904	0.006	97	13479819	16.0	17.2	
77 m-Xylene & p-Xylene	91	16.066	16.067	-0.001	93	19401940	32.0	32.2	e
81 n-Nonane	57	16.492	16.488	0.004	92	6567091	16.0	17.1	
78 Bromoform	173	16.519	16.519	0.000	97	8457732	16.0	25.6	
79 Styrene	104	16.535	16.535	0.000	98	8312171	16.0	19.7	
80 o-Xylene	91	16.600	16.595	0.005	99	10574999	16.0	17.3	
82 1,1,2,2-Tetrachloroethane	83	16.924	16.923	0.001	99	8186594	16.0	18.2	
83 1,2,3-Trichloropropane	110	17.085	17.085	0.000	96	2405567	16.0	17.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.187	0.001	96	15600596	16.0	17.3	e
85 N-Propylbenzene	120	17.743	17.749	-0.006	97	4706259	16.0	19.5	e
86 2-Chlorotoluene	126	17.743	17.789	-0.046	96	3057385	16.0	13.4	e
88 4-Ethyltoluene	105	17.905	17.907	-0.002	97	15674889	16.0	17.1	e
87 1,3,5-Trimethylbenzene	120	17.986	17.983	0.003	94	6711519	16.0	18.4	
89 Alpha Methyl Styrene	118	18.223	18.225	-0.002	91	7451929	16.0	21.1	
90 n-Decane	57	18.288	18.286	0.002	91	8590182	16.0	16.4	
91 tert-Butylbenzene	119	18.428	18.425	0.003	94	14703312	16.0	17.8	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	95	13988235	16.0	18.1	e
94 sec-Butylbenzene	105	18.698	18.703	-0.005	97	16935248	16.0	14.1	e
93 1,3-Dichlorobenzene	146	18.725	18.720	0.005	98	10219340	16.0	17.4	
96 Benzyl chloride	91	18.800	18.798	0.002	99	12638085	16.0	23.4	
95 1,4-Dichlorobenzene	146	18.816	18.811	0.005	96	10536468	16.0	18.6	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	89	14552055	16.0	16.4	e
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	97	13486782	16.0	17.8	e
99 Butylcyclohexane	83	18.983	18.983	0.000	94	10280341	16.0	17.0	
101 2,3-Dihydroindene	117	19.183	19.180	0.003	94	12717942	16.0	17.0	
100 1,2-Dichlorobenzene	146	19.183	19.182	0.001	83	9415816	16.0	17.0	
102 Indene	116	19.312	19.315	-0.003	91	11794325	16.0	18.2	
103 n-Butylbenzene	91	19.318	19.320	-0.002	98	14429567	16.0	15.3	e
104 Undecane	57	19.641	19.638	0.003	96	10705948	16.0	17.0	
105 1,2-Dibromo-3-Chloropropan	157	19.803	19.801	0.002	94	6313108	16.0	28.3	
106 1,2,4,5-Tetramethylbenzene	119	20.089	20.093	-0.004	96	13934904	16.0	16.1	e
107 Dodecane	57	20.714	20.713	0.001	95	11061506	16.0	17.2	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	94	10475148	16.0	20.0	
109 Naphthalene	128	21.054	21.060	-0.006	99	16171061	16.0	15.3	e
110 Hexachlorobutadiene	225	21.286	21.283	0.003	92	7946181	16.0	17.4	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	96	10123830	16.0	19.0	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	98	7575277	16.0	17.5	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	98	6530127	16.0	16.4	
A 115 C8 Range	1	14.279	(14.238-14.335)		0	29283193	16.0	16.6	
S 116 Xylenes, Total	100				0		48.0	49.6	
S 117 1,2-Dichloroethene, Total	1				0		32.0	30.7	

QC Flag Legend

Processing Flags

e - Potential Peak Saturated

Reagents:

40L10DQP_00012

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:33:56

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC10.D

Injection Date: 03-Sep-2019 12:02:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC 10

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

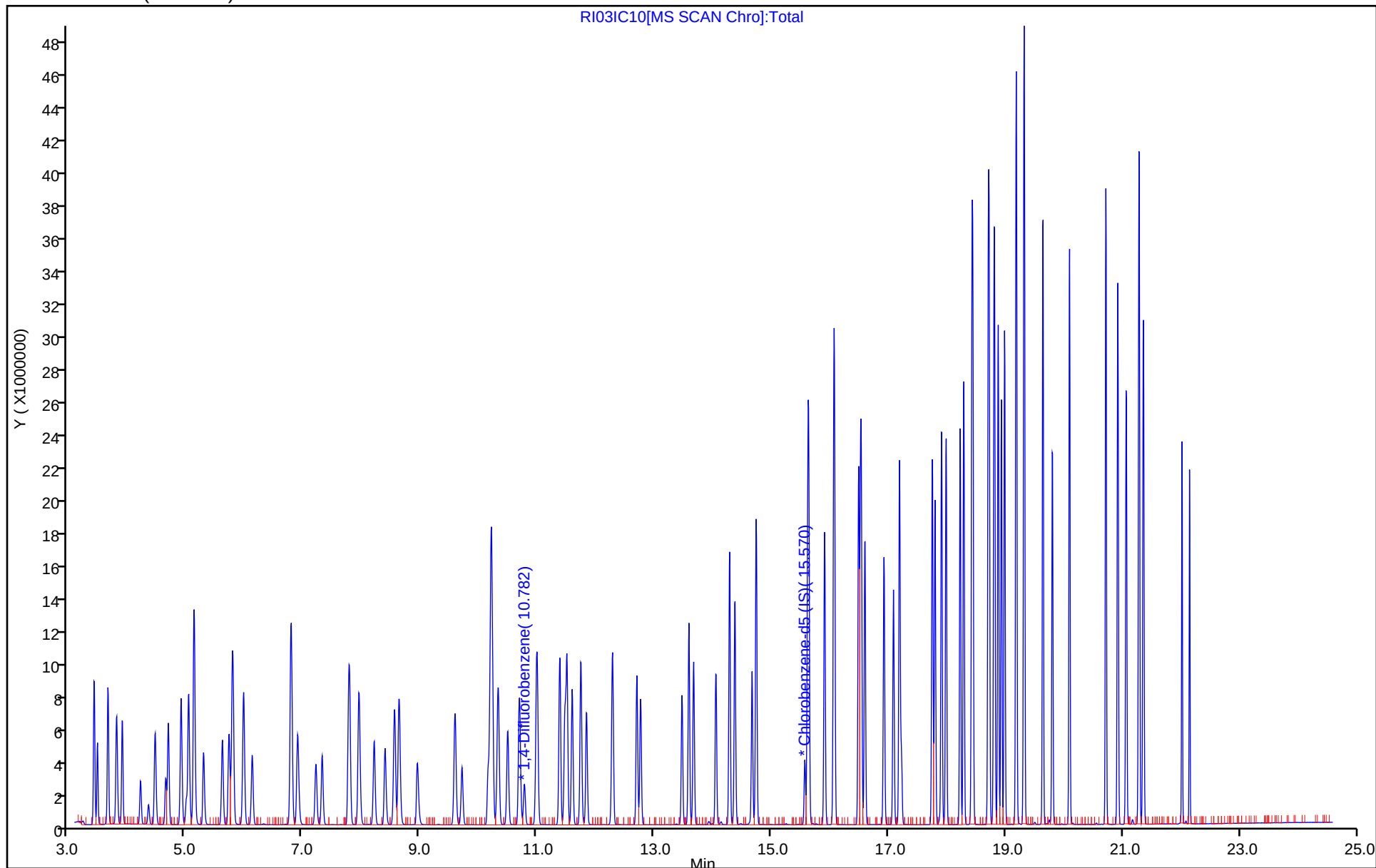
Dil. Factor: 1.0000

ALS Bottle#: 9

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Report Date: 04-Sep-2019 17:33:56

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC10.D

Injection Date: 03-Sep-2019 12:02:30

Instrument ID: MR

Lims ID: IC 10

Client ID:

Operator ID: HMT

ALS Bottle#: 9

Worklist Smp#: 4

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

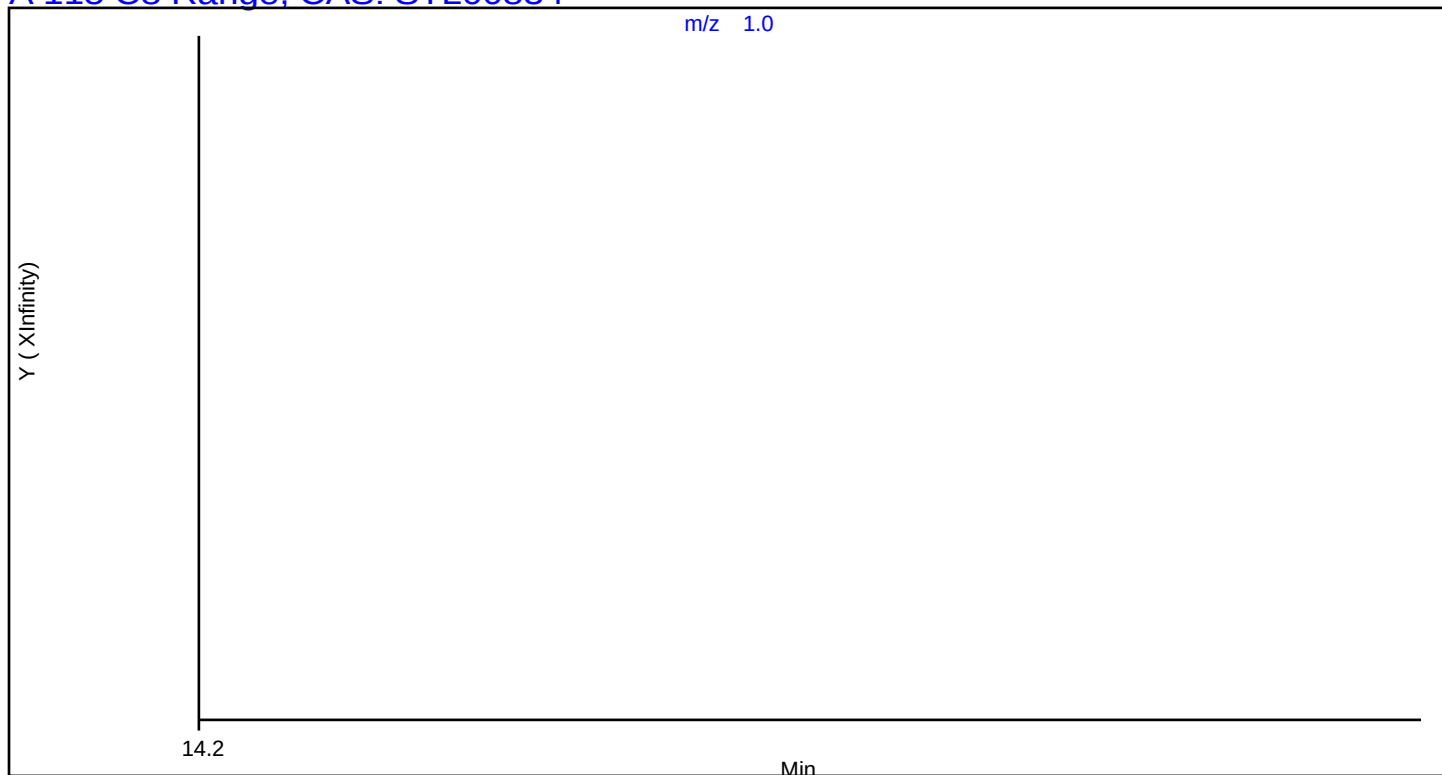
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 115 C8 Range, CAS: STL00834](#)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC01.D
 Lims ID: IC L1
 Client ID:
 Sample Type: IC Calib Level: 1
 Inject. Date: 03-Sep-2019 14:26:30 ALS Bottle#: 1 Worklist Smp#: 7
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-007
 Misc. Info.: 245276
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:34:04 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 14:52:02

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.533	8.537	-0.004	94	383199	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.771	10.770	0.001	94	2217357	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.568	0.002	87	1777627	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	96	1024776	4.00	3.90	
6 Chlorodifluoromethane	51	3.432	3.428	0.004	40	6123	0.0200	0.0241	
7 Propene	41	3.432	3.433	-0.001	99	49459	0.0200	0.3440	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	73	6535	0.0200	0.0302	
9 Chloromethane	52	3.658	3.661	-0.003	28	366	0.0200	0.008865	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.674	3.669	0.005	88	7333	0.0200	0.0411	
11 Acetaldehyde	44	3.804	3.811	-0.007	96	17172	0.1000	0.3416	
12 Vinyl chloride	62	3.815	3.823	-0.008	36	3313	0.0200	0.0255	
13 Butadiene	54	3.906	3.909	-0.003	58	3104	0.0200	0.0317	
14 Butane	43	3.901	3.909	-0.008	73	6848	0.0200	0.0362	
15 Bromomethane	94	4.219	4.221	-0.002	71	5052	0.0200	0.0392	
16 Chloroethane	64	4.370	4.357	0.013	44	1617	0.0200	0.0298	
17 Ethanol	31	4.467	4.461	0.006	96	8207	0.1000	0.1400	
18 Vinyl bromide	106	4.645	4.649	-0.004	55	2289	0.0200	0.0210	
19 2-Methylbutane	43	4.704	4.695	0.009	53	3866	0.0200	0.0261	
21 Trichlorofluoromethane	101	4.909	4.911	-0.002	95	7793	0.0200	0.0250	
20 Acrolein	56	4.926	4.929	-0.003	45	2951	0.0200	0.0799	
24 Acetonitrile	40	5.060	5.002	0.058	22	1057	0.0200	0.0192	
22 Acetone	58	5.060	5.050	0.010	99	9882	0.0600	0.1617	
25 Pentane	72	5.136	5.133	0.003	60	89	0.0200	0.004059	
23 Isopropyl alcohol	45	5.157	5.142	0.015	90	11752	0.0600	0.0657	
26 Ethyl ether	31	5.330	5.312	0.018	78	3599	0.0200	0.0241	
27 1,1-Dichloroethene	96	5.610	5.615	-0.005	45	3361	0.0200	0.0270	
28 Acrylonitrile	53	5.729	5.728	0.001	1	1010	0.0200	0.0110	
29 2-Methyl-2-propanol	59	5.794	5.745	0.049	87	5915	0.0200	0.0266	
30 1,1,2-Trichloro-1,2,2-trif	101	5.788	5.792	-0.004	91	4891	0.0200	0.0186	
32 3-Chloro-1-propene	39	5.788	5.964	-0.176	44	1699	0.0200	0.0139	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.966	5.969	-0.003	98	23402	0.0200	0.1583	
33 Carbon disulfide	76	6.123	6.125	-0.002	81	6047	0.0200	0.0185	
34 trans-1,2-Dichloroethene	96	6.780	6.779	0.001	93	2990	0.0200	0.0223	
35 2-Methylpentane	43	6.797	6.795	0.002	80	6401	0.0200	0.0202	
36 Methyl tert-butyl ether	73	6.980	6.927	0.053	48	5269	0.0200	0.0163	
37 1,1-Dichloroethane	63	7.212	7.208	0.004	5	2998	0.0200	0.0130	
38 Vinyl acetate	43	7.331	7.318	0.013	86	6805	0.0200	0.0187	
39 2-Butanone (MEK)	72	7.805	7.782	0.023	86	1214	0.0200	0.0188	
40 Hexane	56	7.789	7.785	0.004	76	1509	0.0200	0.0144	
41 Isopropyl ether	45	7.994	7.963	0.031	87	8113	0.0200	0.0169	
42 cis-1,2-Dichloroethene	96	8.209	8.203	0.006	35	2870	0.0200	0.0206	
43 Ethyl acetate	43	8.420	8.402	0.018	67	4019	0.0200	0.0121	
44 Chloroform	83	8.555	8.549	0.006	27	6419	0.0200	0.0231	
45 Tert-butyl ethyl ether	59	8.684	8.649	0.035	92	8242	0.0200	0.0211	
46 Tetrahydrofuran	42	8.959	8.968	-0.009	1	52	0.0200	0.000314	
47 1,1,1-Trichloroethane	97	9.590	9.586	0.004	55	6034	0.0200	0.0213	
48 1,2-Dichloroethane	62	9.703	9.701	0.002	28	3073	0.0200	0.0176	
50 n-Butanol	31	10.199	10.176	0.023	57	1655	0.0200	0.0270	
49 Benzene	78	10.194	10.199	-0.005	92	9034	0.0200	0.0211	
51 Cyclohexane	69	10.205	10.200	0.005	50	1112	0.0200	0.0176	
52 Carbon tetrachloride	117	10.226	10.222	0.004	60	4750	0.0200	0.0168	
53 2,3-Dimethylpentane	71	10.334	10.324	0.010	74	1829	0.0200	0.0210	
54 Thiophene	84	10.490	10.482	0.008	33	4671	0.0200	0.0210	
55 Isooctane	57	10.987	10.986	0.001	93	13486	0.0200	0.0203	
57 n-Heptane	71	11.375	11.378	-0.003	93	3097	0.0200	0.0219	
56 1,2-Dichloropropane	63	11.466	11.464	0.002	38	3104	0.0200	0.0201	
58 Trichloroethene	130	11.493	11.496	-0.003	47	3817	0.0200	0.0207	
59 Dibromomethane	93	11.590	11.587	0.003	83	4028	0.0200	0.0246	
60 Dichlorobromomethane	83	11.736	11.735	0.001	60	4749	0.0200	0.0175	
61 1,4-Dioxane	88	11.785	11.759	0.026	40	1347	0.0200	0.0217	
62 Methyl methacrylate	41	11.844	11.836	0.008	22	4352	0.0200	0.0231	
63 Methylcyclohexane	83	12.275	12.276	-0.001	90	4250	0.0200	0.0181	
64 4-Methyl-2-pentanone (MIBK)	43	12.728	12.705	0.023	69	5760	0.0200	0.0165	
65 cis-1,3-Dichloropropene	75	12.761	12.759	0.002	85	4546	0.0200	0.0213	
66 trans-1,3-Dichloropropene	75	13.472	13.467	0.005	64	3523	0.0200	0.0188	
67 Toluene	91	13.586	13.584	0.002	96	8499	0.0200	0.0196	
68 1,1,2-Trichloroethane	83	13.672	13.665	0.007	87	3011	0.0200	0.0222	
69 2-Hexanone	58	14.076	14.055	0.021	85	2966	0.0200	0.0199	
71 n-Octane	85	14.292	14.283	0.009	95	2562	0.0200	0.0190	
70 Chlorodibromomethane	129	14.368	14.370	-0.002	92	3574	0.0200	0.0131	
72 Ethylene Dibromide	107	14.670	14.664	0.006	49	4375	0.0200	0.0173	
73 Tetrachloroethene	129	14.745	14.736	0.009	87	3560	0.0200	0.0204	
74 Chlorobenzene	112	15.613	15.615	-0.002	89	7381	0.0200	0.0201	
75 2,3-Dimethylheptane	43	15.629	15.634	-0.005	95	10890	0.0200	0.0219	
76 Ethylbenzene	91	15.899	15.904	-0.005	97	11381	0.0200	0.0193	
77 m-Xylene & p-Xylene	91	16.066	16.067	-0.001	96	16808	0.0400	0.0371	
81 n-Nonane	57	16.492	16.488	0.004	95	5261	0.0200	0.0182	
78 Bromoform	173	16.514	16.519	-0.005	85	3714	0.0200	0.0149	
79 Styrene	104	16.535	16.535	0.000	51	4313	0.0200	0.0136	
80 o-Xylene	91	16.595	16.595	0.000	96	9313	0.0200	0.0203	
82 1,1,2,2-Tetrachloroethane	83	16.918	16.923	-0.005	96	6128	0.0200	0.0181	
83 1,2,3-Trichloropropane	110	17.085	17.085	0.000	85	2596	0.0200	0.0244	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.182	17.187	-0.005	46	13423	0.0200	0.0197	
85 N-Propylbenzene	120	17.754	17.749	0.005	98	3141	0.0200	0.0173	
86 2-Chlorotoluene	126	17.792	17.789	0.003	94	3567	0.0200	0.0207	
88 4-Ethyltoluene	105	17.910	17.907	0.003	97	11987	0.0200	0.0173	
87 1,3,5-Trimethylbenzene	120	17.980	17.983	-0.003	94	4837	0.0200	0.0176	
89 Alpha Methyl Styrene	118	18.223	18.225	-0.002	91	3539	0.0200	0.0133	
90 n-Decane	57	18.288	18.286	0.002	91	5892	0.0200	0.0150	
91 tert-Butylbenzene	119	18.417	18.425	-0.008	83	10010	0.0200	0.0161	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	94	10691	0.0200	0.0184	
94 sec-Butylbenzene	105	18.698	18.703	-0.005	96	14564	0.0200	0.0161	
93 1,3-Dichlorobenzene	146	18.714	18.720	-0.006	92	7543	0.0200	0.0171	
96 Benzyl chloride	91	18.800	18.798	0.002	80	6940	0.0200	0.0171	
95 1,4-Dichlorobenzene	146	18.805	18.811	-0.006	93	8284	0.0200	0.0194	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	95	11322	0.0200	0.0169	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	97	10130	0.0200	0.0178	
99 Butylcyclohexane	83	18.983	18.983	0.000	91	7654	0.0200	0.0169	
101 2,3-Dihydroindene	117	19.183	19.180	0.003	90	8965	0.0200	0.0159	
100 1,2-Dichlorobenzene	146	19.183	19.182	0.001	84	8636	0.0200	0.0207	
102 Indene	116	19.318	19.315	0.003	87	7668	0.0200	0.0157	
103 n-Butylbenzene	91	19.323	19.320	0.003	97	13692	0.0200	0.0193	
104 Undecane	57	19.641	19.638	0.003	88	6270	0.0200	0.0132	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.801	-0.003	81	2639	0.0200	0.0157	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	99	10743	0.0200	0.0165	
107 Dodecane	57	20.709	20.713	-0.004	89	5914	0.0200	0.0122	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	85	7407	0.0200	0.0188	
109 Naphthalene	128	21.059	21.060	-0.001	98	17912	0.0200	0.0225	
110 Hexachlorobutadiene	225	21.281	21.283	-0.002	81	6024	0.0200	0.0175	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	90	9441	0.0200	0.0235	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	93	13005	0.0200	0.0398	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	96	15695	0.0200	0.0523	
A 115 C8 Range	1	14.274	(14.249-14.314)		0	30047	0.0200	0.0202	
S 116 Xylenes, Total	100				0		0.0600	0.0574	
S 117 1,2-Dichloroethene, Total	1				0		0.0400	0.0429	

Reagents:

40L1-3DQP_00016

Amount Added: 50.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC01.D

Injection Date: 03-Sep-2019 14:26:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L1

Worklist Smp#: 7

Client ID:

Purge Vol: 500.000 mL

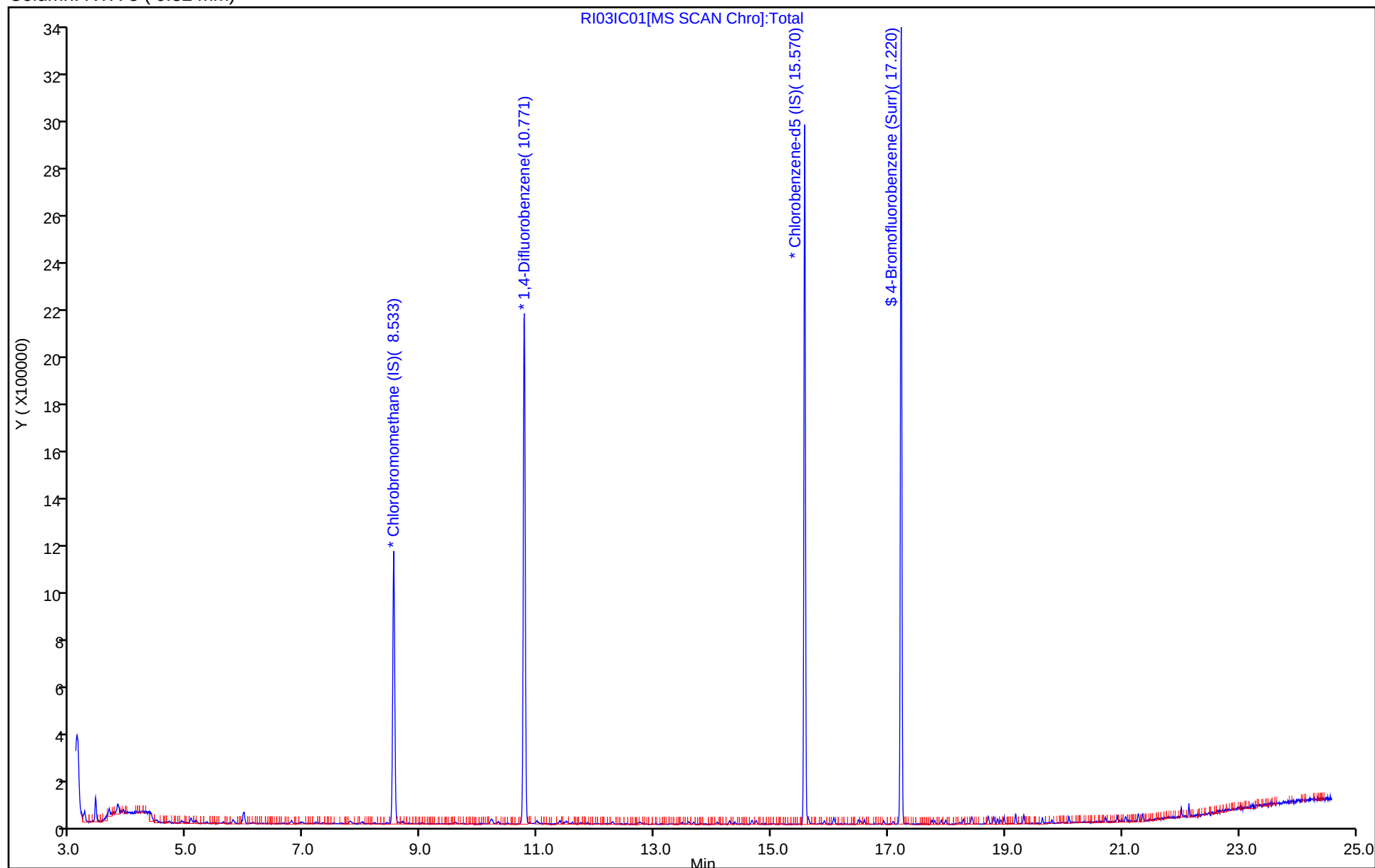
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC01.D

Injection Date: 03-Sep-2019 14:26:30

Instrument ID: MR

Lims ID: IC L1

Client ID:

Operator ID: HMT

ALS Bottle#: 1

Worklist Smp#: 7

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

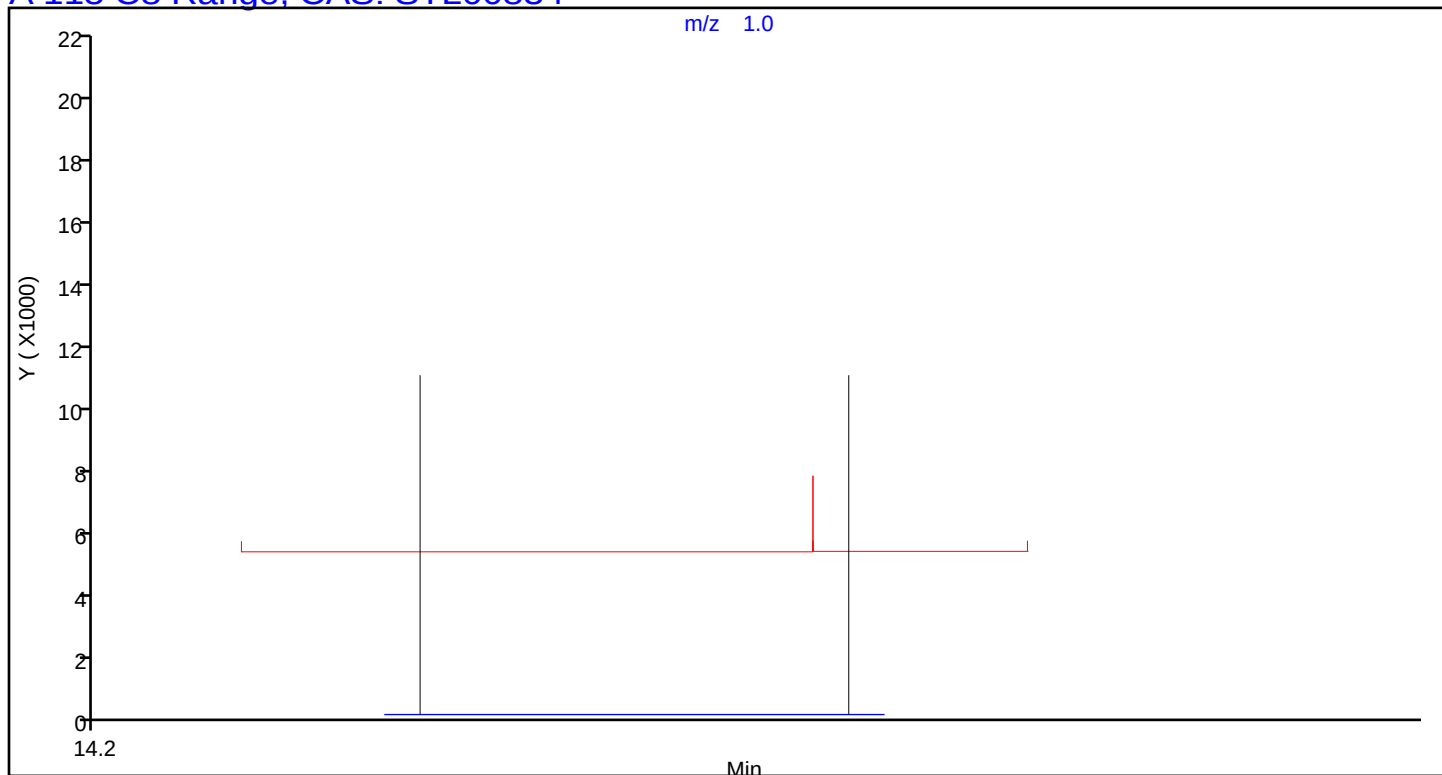
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

A 115 C8 Range, CAS: STL00834



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC02.D
 Lims ID: IC L2
 Client ID:
 Sample Type: IC Calib Level: 2
 Inject. Date: 03-Sep-2019 15:13:30 ALS Bottle#: 1 Worklist Smp#: 8
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-008
 Misc. Info.: 245276
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:34:12 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 14:52:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.533	8.537	-0.004	95	322255	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.766	10.770	-0.004	94	1800958	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.568	0.002	87	1536108	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	95	881623	4.00	3.88	
6 Chlorodifluoromethane	51	3.427	3.428	-0.001	47	10237	0.0400	0.0479	
7 Propene	41	3.427	3.433	-0.006	99	49766	0.0400	0.4116	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	96	8523	0.0400	0.0469	
9 Chloromethane	52	3.664	3.661	0.003	81	3197	0.0400	0.0921	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.664	3.669	-0.005	89	10647	0.0400	0.0710	
11 Acetaldehyde	44	3.809	3.811	-0.002	98	31541	0.2000	0.7462	
12 Vinyl chloride	62	3.820	3.823	-0.003	39	5237	0.0400	0.0478	
13 Butadiene	54	3.906	3.909	-0.003	57	3417	0.0400	0.0415	
14 Butane	43	3.912	3.909	0.003	76	6359	0.0400	0.0399	
15 Bromomethane	94	4.225	4.221	0.004	79	6593	0.0400	0.0609	
16 Chloroethane	64	4.349	4.357	-0.008	16	1348	0.0400	0.0295	
17 Ethanol	31	4.467	4.461	0.006	96	12783	0.2000	0.2593	
18 Vinyl bromide	106	4.651	4.649	0.002	76	3929	0.0400	0.0429	
19 2-Methylbutane	43	4.694	4.695	-0.001	90	7344	0.0400	0.0589	
21 Trichlorofluoromethane	101	4.909	4.911	-0.002	97	10884	0.0400	0.0415	
20 Acrolein	56	4.931	4.929	0.002	39	3432	0.0400	0.1105	
24 Acetonitrile	40	4.990	5.002	-0.012	83	3811	0.0400	0.0823	
22 Acetone	58	5.071	5.050	0.021	97	17079	0.1200	0.3323	
25 Pentane	72	5.131	5.133	-0.002	45	747	0.0400	0.0405	
23 Isopropyl alcohol	45	5.163	5.142	0.021	97	19186	0.1200	0.1275	
26 Ethyl ether	31	5.335	5.312	0.023	77	5336	0.0400	0.0424	
27 1,1-Dichloroethene	96	5.621	5.615	0.006	92	4466	0.0400	0.0426	
28 Acrylonitrile	53	5.729	5.728	0.001	54	2352	0.0400	0.0304	
29 2-Methyl-2-propanol	59	5.772	5.745	0.027	92	9651	0.0400	0.0517	
30 1,1,2-Trichloro-1,2,2-trif	101	5.794	5.792	0.002	90	8314	0.0400	0.0375	
32 3-Chloro-1-propene	39	5.993	5.964	0.029	48	6738	0.0400	0.0656	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.966	5.969	-0.003	96	21473	0.0400	0.1727	
33 Carbon disulfide	76	6.128	6.125	0.003	72	11605	0.0400	0.0421	
34 trans-1,2-Dichloroethene	96	6.786	6.779	0.007	67	4605	0.0400	0.0408	
35 2-Methylpentane	43	6.797	6.795	0.002	95	11484	0.0400	0.0431	
36 Methyl tert-butyl ether	73	6.953	6.927	0.026	73	10797	0.0400	0.0398	
37 1,1-Dichloroethane	63	7.201	7.208	-0.007	95	8084	0.0400	0.0417	
38 Vinyl acetate	43	7.314	7.318	-0.004	94	9791	0.0400	0.0321	
39 2-Butanone (MEK)	72	7.811	7.782	0.029	92	2931	0.0400	0.0539	
40 Hexane	56	7.794	7.785	0.009	64	3675	0.0400	0.0417	
41 Isopropyl ether	45	7.988	7.963	0.025	97	17054	0.0400	0.0422	
42 cis-1,2-Dichloroethene	96	8.199	8.203	-0.004	57	4187	0.0400	0.0357	
43 Ethyl acetate	43	8.420	8.402	0.018	97	11707	0.0400	0.0418	
44 Chloroform	83	8.549	8.549	0.000	28	10656	0.0400	0.0456	
45 Tert-butyl ethyl ether	59	8.668	8.649	0.019	93	12204	0.0400	0.0371	
46 Tetrahydrofuran	42	9.008	8.968	0.040	76	6384	0.0400	0.0459	
47 1,1,1-Trichloroethane	97	9.585	9.586	-0.001	95	8950	0.0400	0.0375	
48 1,2-Dichloroethane	62	9.703	9.701	0.002	91	5862	0.0400	0.0413	
50 n-Butanol	31	10.199	10.176	0.023	60	3164	0.0400	0.0635	
49 Benzene	78	10.194	10.199	-0.005	94	13990	0.0400	0.0403	
51 Cyclohexane	69	10.205	10.200	0.005	76	1898	0.0400	0.0369	
52 Carbon tetrachloride	117	10.221	10.222	-0.001	73	8126	0.0400	0.0354	
53 2,3-Dimethylpentane	71	10.318	10.324	-0.006	90	2943	0.0400	0.0415	
54 Thiophene	84	10.474	10.482	-0.008	88	6228	0.0400	0.0346	
55 Isooctane	57	10.992	10.986	0.006	95	20863	0.0400	0.0387	
57 n-Heptane	71	11.391	11.378	0.013	91	4989	0.0400	0.0435	
56 1,2-Dichloropropane	63	11.472	11.464	0.008	63	4881	0.0400	0.0390	
58 Trichloroethene	130	11.488	11.496	-0.008	87	5933	0.0400	0.0397	
59 Dibromomethane	93	11.596	11.587	0.009	91	5532	0.0400	0.0416	
60 Dichlorobromomethane	83	11.742	11.735	0.007	94	7632	0.0400	0.0346	
61 1,4-Dioxane	88	11.779	11.759	0.020	10	1634	0.0400	0.0325	
62 Methyl methacrylate	41	11.849	11.836	0.013	86	5569	0.0400	0.0363	
63 Methylcyclohexane	83	12.265	12.276	-0.011	87	7957	0.0400	0.0418	
64 4-Methyl-2-pentanone (MIBK)	43	12.712	12.705	0.007	96	9739	0.0400	0.0343	
65 cis-1,3-Dichloropropene	75	12.755	12.759	-0.004	69	5872	0.0400	0.0338	
66 trans-1,3-Dichloropropene	75	13.473	13.467	0.006	93	5834	0.0400	0.0360	
67 Toluene	91	13.586	13.584	0.002	90	13865	0.0400	0.0369	
68 1,1,2-Trichloroethane	83	13.667	13.665	0.002	85	4864	0.0400	0.0414	
69 2-Hexanone	58	14.066	14.055	0.011	90	4578	0.0400	0.0355	
71 n-Octane	85	14.287	14.283	0.004	92	5174	0.0400	0.0445	
70 Chlorodibromomethane	129	14.368	14.370	-0.002	92	6152	0.0400	0.0262	
72 Ethylene Dibromide	107	14.664	14.664	0.000	56	7673	0.0400	0.0351	
73 Tetrachloroethene	129	14.740	14.736	0.004	92	5861	0.0400	0.0388	
74 Chlorobenzene	112	15.613	15.615	-0.002	92	11179	0.0400	0.0351	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	91	15671	0.0400	0.0364	
76 Ethylbenzene	91	15.904	15.904	0.000	97	19545	0.0400	0.0384	
77 m-Xylene & p-Xylene	91	16.072	16.067	0.005	98	29171	0.0800	0.0745	
81 n-Nonane	57	16.487	16.488	-0.001	91	9378	0.0400	0.0375	
78 Bromoform	173	16.519	16.519	0.000	70	5964	0.0400	0.0278	
79 Styrene	104	16.541	16.535	0.006	88	6981	0.0400	0.0254	
80 o-Xylene	91	16.595	16.595	0.000	98	14317	0.0400	0.0360	
82 1,1,1,2,2-Tetrachloroethane	83	16.929	16.923	0.006	95	10018	0.0400	0.0343	
83 1,2,3-Trichloropropane	110	17.080	17.085	-0.005	93	3987	0.0400	0.0434	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.187	0.001	93	21592	0.0400	0.0367	
85 N-Propylbenzene	120	17.743	17.749	-0.006	98	5471	0.0400	0.0349	
86 2-Chlorotoluene	126	17.792	17.789	0.003	97	5756	0.0400	0.0387	
88 4-Ethyltoluene	105	17.900	17.907	-0.007	98	19621	0.0400	0.0328	
87 1,3,5-Trimethylbenzene	120	17.981	17.983	-0.002	97	7721	0.0400	0.0325	
89 Alpha Methyl Styrene	118	18.218	18.225	-0.007	87	4965	0.0400	0.0216	
90 n-Decane	57	18.288	18.286	0.002	89	10205	0.0400	0.0300	
91 tert-Butylbenzene	119	18.423	18.425	-0.002	93	17123	0.0400	0.0319	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	95	17584	0.0400	0.0350	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	24562	0.0400	0.0315	
93 1,3-Dichlorobenzene	146	18.719	18.720	-0.001	95	13285	0.0400	0.0349	
96 Benzyl chloride	91	18.795	18.798	-0.003	89	10770	0.0400	0.0307	
95 1,4-Dichlorobenzene	146	18.806	18.811	-0.005	92	12438	0.0400	0.0337	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	98	19695	0.0400	0.0340	
98 1,2,3-Trimethylbenzene	105	18.930	18.926	0.004	97	16958	0.0400	0.0344	
99 Butylcyclohexane	83	18.984	18.983	0.001	91	13824	0.0400	0.0352	
101 2,3-Dihydroindene	117	19.178	19.180	-0.002	89	14958	0.0400	0.0307	
100 1,2-Dichlorobenzene	146	19.183	19.182	0.001	87	12882	0.0400	0.0357	
102 Indene	116	19.312	19.315	-0.003	76	12109	0.0400	0.0287	
103 n-Butylbenzene	91	19.323	19.320	0.003	98	22338	0.0400	0.0364	
104 Undecane	57	19.636	19.638	-0.002	92	12555	0.0400	0.0306	
105 1,2-Dibromo-3-Chloropropan	157	19.803	19.801	0.002	84	4430	0.0400	0.0306	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	95	19336	0.0400	0.0344	
107 Dodecane	57	20.709	20.713	-0.004	88	9377	0.0400	0.0224	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	91	11931	0.0400	0.0350	
109 Naphthalene	128	21.060	21.060	0.000	98	25635	0.0400	0.0373	
110 Hexachlorobutadiene	225	21.286	21.283	0.003	91	11954	0.0400	0.0402	
111 1,2,3-Trichlorobenzene	180	21.351	21.355	-0.004	92	11884	0.0400	0.0343	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	97	11611	0.0400	0.0411	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	97	13945	0.0400	0.0538	
A 115 C8 Range	1	14.274	(14.249-14.314)		0	51184	0.0400	0.0424	
S 116 Xylenes, Total	100				0		0.1200	0.1106	
S 117 1,2-Dichloroethene, Total	1				0		0.0800	0.0766	

Reagents:

40L1-3DQP_00016

Amount Added: 100.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC02.D

Injection Date: 03-Sep-2019 15:13:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L2

Worklist Smp#: 8

Client ID:

Purge Vol: 500.000 mL

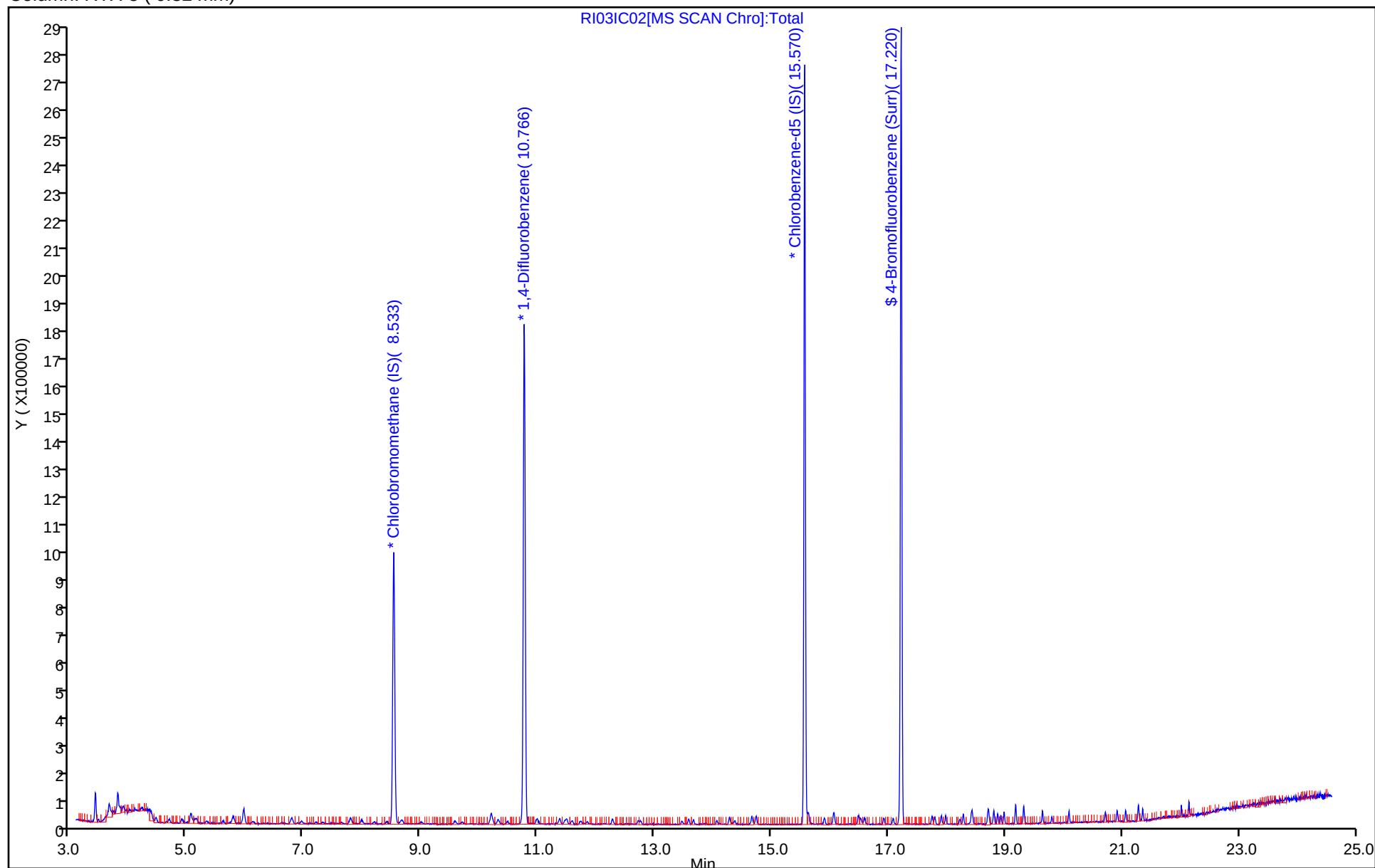
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Report Date: 04-Sep-2019 17:34:14

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC02.D

Injection Date: 03-Sep-2019 15:13:30

Instrument ID: MR

Lims ID: IC L2

Client ID:

Operator ID: HMT

ALS Bottle#: 1

Worklist Smp#: 8

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

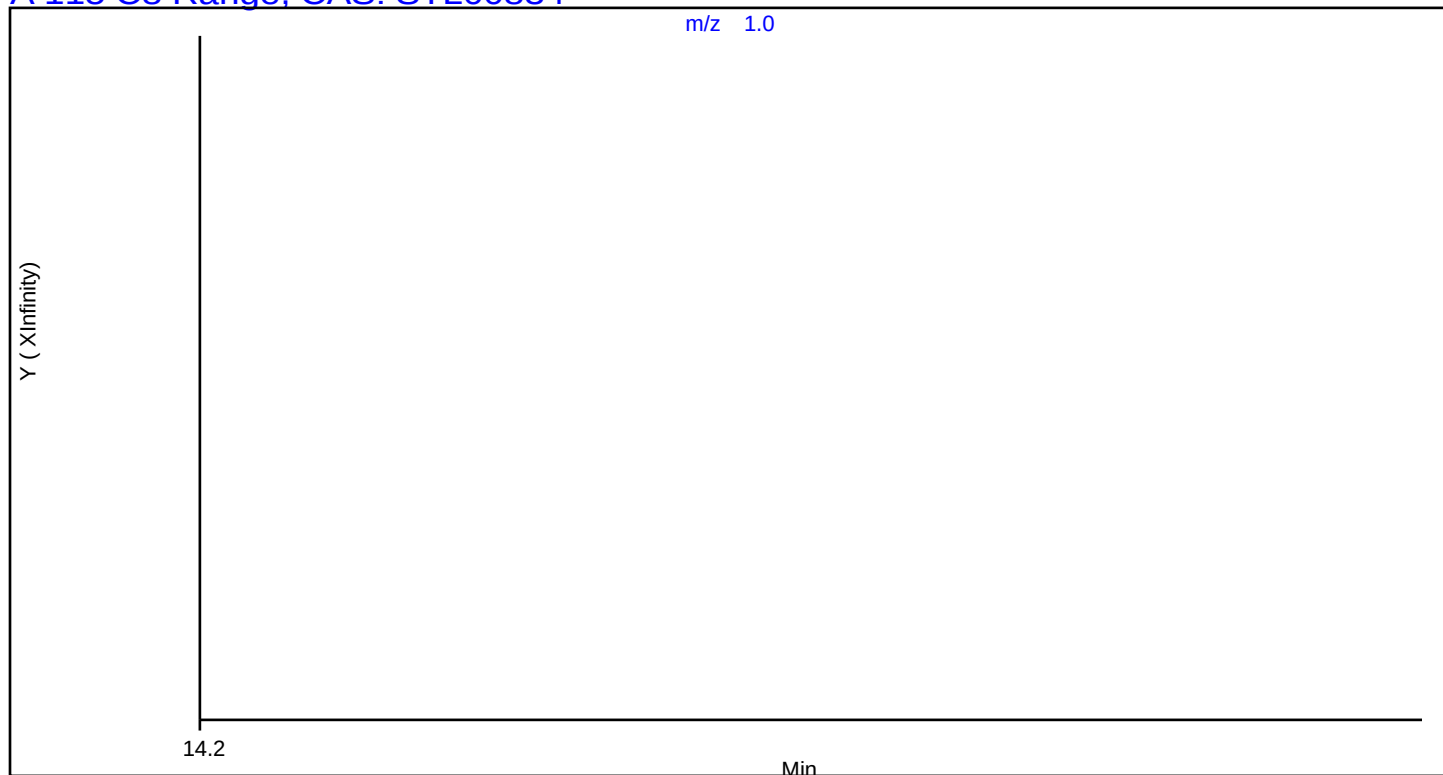
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 115 C8 Range, CAS: STL00834](#)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC03.D
 Lims ID: IC L3
 Client ID:
 Sample Type: IC Calib Level: 3
 Inject. Date: 03-Sep-2019 16:02:30 ALS Bottle#: 1 Worklist Smp#: 9
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-009
 Misc. Info.: 245276
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:34:20 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 14:52:32

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.538	8.537	0.001	95	310604	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.771	10.770	0.001	94	1768898	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.568	0.002	87	1476402	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	95	841925	4.00	3.86	
6 Chlorodifluoromethane	51	3.426	3.428	-0.002	83	16054	0.0800	0.0779	
7 Propene	41	3.437	3.433	0.004	96	49558	0.0800	0.4253	
8 Dichlorodifluoromethane	85	3.491	3.486	0.005	97	15282	0.0800	0.0872	
9 Chloromethane	52	3.658	3.661	-0.003	89	5315	0.0800	0.1588	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	82	13317	0.0800	0.0922	
11 Acetaldehyde	44	3.815	3.811	0.004	98	59817	0.4000	1.47	
12 Vinyl chloride	62	3.826	3.823	0.003	99	10071	0.0800	0.0955	
13 Butadiene	54	3.912	3.909	0.003	61	7411	0.0800	0.0934	
14 Butane	43	3.917	3.909	0.008	87	14972	0.0800	0.0975	
15 Bromomethane	94	4.225	4.221	0.004	93	11831	0.0800	0.1134	
16 Chloroethane	64	4.365	4.357	0.008	83	4697	0.0800	0.1067	
17 Ethanol	31	4.467	4.461	0.006	96	24741	0.4000	0.5206	
18 Vinyl bromide	106	4.656	4.649	0.007	95	6610	0.0800	0.0749	
19 2-Methylbutane	43	4.699	4.695	0.004	94	10731	0.0800	0.0893	
21 Trichlorofluoromethane	101	4.915	4.911	0.004	96	18941	0.0800	0.0750	
20 Acrolein	56	4.942	4.929	0.013	58	6559	0.0800	0.2191	
24 Acetonitrile	40	5.001	5.002	-0.001	41	7033	0.0800	0.1575	
22 Acetone	58	5.060	5.050	0.010	98	29377	0.2400	0.5930	
25 Pentane	72	5.130	5.133	-0.003	85	904	0.0800	0.0509	
23 Isopropyl alcohol	45	5.157	5.142	0.015	95	36022	0.2400	0.2483	
26 Ethyl ether	31	5.330	5.312	0.018	91	9959	0.0800	0.0822	
27 1,1-Dichloroethene	96	5.616	5.615	0.001	96	7667	0.0800	0.0759	
28 Acrylonitrile	53	5.729	5.728	0.001	50	4051	0.0800	0.0544	
29 2-Methyl-2-propanol	59	5.761	5.745	0.016	95	16259	0.0800	0.0903	
30 1,1,2-Trichloro-1,2,2-trif	101	5.799	5.792	0.007	87	17038	0.0800	0.0798	
32 3-Chloro-1-propene	39	5.988	5.964	0.024	88	8683	0.0800	0.0877	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.961	5.969	-0.008	96	23197	0.0800	0.1936	
33 Carbon disulfide	76	6.128	6.125	0.003	98	21452	0.0800	0.0808	
34 trans-1,2-Dichloroethene	96	6.775	6.779	-0.004	97	8676	0.0800	0.0798	
35 2-Methylpentane	43	6.802	6.795	0.007	93	20522	0.0800	0.0799	
36 Methyl tert-butyl ether	73	6.948	6.927	0.021	95	20195	0.0800	0.0772	
37 1,1-Dichloroethane	63	7.207	7.208	-0.001	98	14833	0.0800	0.0794	
38 Vinyl acetate	43	7.320	7.318	0.002	99	22814	0.0800	0.0775	
39 2-Butanone (MEK)	72	7.794	7.782	0.012	92	6508	0.0800	0.1242	
40 Hexane	56	7.778	7.785	-0.007	63	7182	0.0800	0.0845	
41 Isopropyl ether	45	7.978	7.963	0.015	97	30227	0.0800	0.0776	
42 cis-1,2-Dichloroethene	96	8.193	8.203	-0.010	95	8845	0.0800	0.0784	
43 Ethyl acetate	43	8.409	8.402	0.007	99	21642	0.0800	0.0801	
44 Chloroform	83	8.544	8.549	-0.005	29	17685	0.0800	0.0786	
45 Tert-butyl ethyl ether	59	8.673	8.649	0.024	95	25668	0.0800	0.0809	
46 Tetrahydrofuran	42	8.997	8.968	0.029	92	11360	0.0800	0.0848	
47 1,1,1-Trichloroethane	97	9.579	9.586	-0.007	91	19617	0.0800	0.0853	
48 1,2-Dichloroethane	62	9.703	9.701	0.002	96	11614	0.0800	0.0833	
50 n-Butanol	31	10.194	10.176	0.018	67	3934	0.0800	0.0804	
49 Benzene	78	10.194	10.199	-0.005	95	29324	0.0800	0.0860	
51 Cyclohexane	69	10.210	10.200	0.010	74	4317	0.0800	0.0854	
52 Carbon tetrachloride	117	10.215	10.222	-0.007	82	16140	0.0800	0.0715	
53 2,3-Dimethylpentane	71	10.318	10.324	-0.006	88	5543	0.0800	0.0796	
54 Thiophene	84	10.469	10.482	-0.013	95	13723	0.0800	0.0775	
55 Isooctane	57	10.981	10.986	-0.005	98	42620	0.0800	0.0804	
57 n-Heptane	71	11.386	11.378	0.008	94	9072	0.0800	0.0804	
56 1,2-Dichloropropane	63	11.467	11.464	0.002	78	10210	0.0800	0.0831	
58 Trichloroethene	130	11.499	11.496	0.003	89	10806	0.0800	0.0736	
59 Dibromomethane	93	11.580	11.587	-0.007	95	10271	0.0800	0.0786	
60 Dichlorobromomethane	83	11.742	11.735	0.007	94	16203	0.0800	0.0747	
61 1,4-Dioxane	88	11.774	11.759	0.015	51	3216	0.0800	0.0650	
62 Methyl methacrylate	41	11.844	11.836	0.008	91	10330	0.0800	0.0686	
63 Methylcyclohexane	83	12.270	12.276	-0.006	87	14678	0.0800	0.0785	
64 4-Methyl-2-pentanone (MIBK)	43	12.712	12.705	0.007	96	20857	0.0800	0.0748	
65 cis-1,3-Dichloropropene	75	12.755	12.759	-0.004	95	11346	0.0800	0.0666	
66 trans-1,3-Dichloropropene	75	13.462	13.467	-0.005	97	11139	0.0800	0.0716	
67 Toluene	91	13.580	13.584	-0.004	89	28166	0.0800	0.0781	
68 1,1,2-Trichloroethane	83	13.661	13.665	-0.004	95	8335	0.0800	0.0738	
69 2-Hexanone	58	14.066	14.055	0.011	90	8696	0.0800	0.0702	
71 n-Octane	85	14.281	14.283	-0.002	94	7174	0.0800	0.0642	
70 Chlorodibromomethane	129	14.373	14.370	0.003	96	12512	0.0800	0.0554	
72 Ethylene Dibromide	107	14.664	14.664	0.000	57	14394	0.0800	0.0684	
73 Tetrachloroethene	129	14.740	14.736	0.004	96	10846	0.0800	0.0747	
74 Chlorobenzene	112	15.613	15.615	-0.002	97	23336	0.0800	0.0763	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	95	33015	0.0800	0.0798	
76 Ethylbenzene	91	15.910	15.904	0.006	98	35296	0.0800	0.0721	
77 m-Xylene & p-Xylene	91	16.072	16.067	0.005	97	57204	0.1600	0.1520	
81 n-Nonane	57	16.487	16.488	-0.001	93	16468	0.0800	0.0685	
78 Bromoform	173	16.525	16.519	0.006	93	12006	0.0800	0.0582	
79 Styrene	104	16.535	16.535	0.000	95	15385	0.0800	0.0583	
80 o-Xylene	91	16.595	16.595	0.000	97	27849	0.0800	0.0729	
82 1,1,2,2-Tetrachloroethane	83	16.924	16.923	0.001	97	20054	0.0800	0.0715	
83 1,2,3-Trichloropropane	110	17.085	17.085	0.000	90	6305	0.0800	0.0714	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.182	17.187	-0.005	89	41687	0.0800	0.0737	
85 N-Propylbenzene	120	17.749	17.749	0.000	99	11343	0.0800	0.0752	
86 2-Chlorotoluene	126	17.792	17.789	0.003	97	9862	0.0800	0.0691	
88 4-Ethyltoluene	105	17.905	17.907	-0.002	99	40037	0.0800	0.0697	
87 1,3,5-Trimethylbenzene	120	17.980	17.983	-0.003	92	15863	0.0800	0.0696	
89 Alpha Methyl Styrene	118	18.229	18.225	0.004	83	9778	0.0800	0.0442	
90 n-Decane	57	18.288	18.286	0.002	88	22136	0.0800	0.0678	
91 tert-Butylbenzene	119	18.428	18.425	0.003	94	35865	0.0800	0.0696	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	95	34364	0.0800	0.0711	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	52428	0.0800	0.0700	
93 1,3-Dichlorobenzene	146	18.714	18.720	-0.006	95	27082	0.0800	0.0739	
96 Benzyl chloride	91	18.800	18.798	0.002	90	23187	0.0800	0.0687	
95 1,4-Dichlorobenzene	146	18.811	18.811	0.000	92	26600	0.0800	0.0751	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	97	40253	0.0800	0.0723	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	99	35572	0.0800	0.0751	
99 Butylcyclohexane	83	18.983	18.983	0.000	94	28053	0.0800	0.0744	
101 2,3-Dihydroindene	117	19.178	19.180	-0.002	94	33045	0.0800	0.0706	
100 1,2-Dichlorobenzene	146	19.183	19.182	0.001	85	24269	0.0800	0.0699	
102 Indene	116	19.312	19.315	-0.003	73	23565	0.0800	0.0581	
103 n-Butylbenzene	91	19.318	19.320	-0.002	97	44636	0.0800	0.0758	
104 Undecane	57	19.636	19.638	-0.002	95	27334	0.0800	0.0694	
105 1,2-Dibromo-3-Chloropropan	157	19.803	19.801	0.002	83	7380	0.0800	0.0530	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	97	38284	0.0800	0.0709	
107 Dodecane	57	20.714	20.713	0.001	91	21867	0.0800	0.0543	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	93	23104	0.0800	0.0705	
109 Naphthalene	128	21.060	21.060	0.000	99	49158	0.0800	0.0743	
110 Hexachlorobutadiene	225	21.286	21.283	0.003	92	21188	0.0800	0.0741	
111 1,2,3-Trichlorobenzene	180	21.351	21.355	-0.004	93	24564	0.0800	0.0737	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	99	20349	0.0800	0.0750	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	98	26341	0.0800	0.1057	
A 115 C8 Range	1	14.281	(14.249-14.314)		0	92513	0.0800	0.0780	
S 116 Xylenes, Total	100				0		0.2400	0.2250	
S 117 1,2-Dichloroethene, Total	1				0		0.1600	0.1581	

Reagents:

40L1-3DQP_00016

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:34:22

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC03.D

Injection Date: 03-Sep-2019 16:02:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L3

Worklist Smp#: 9

Client ID:

Purge Vol: 500.000 mL

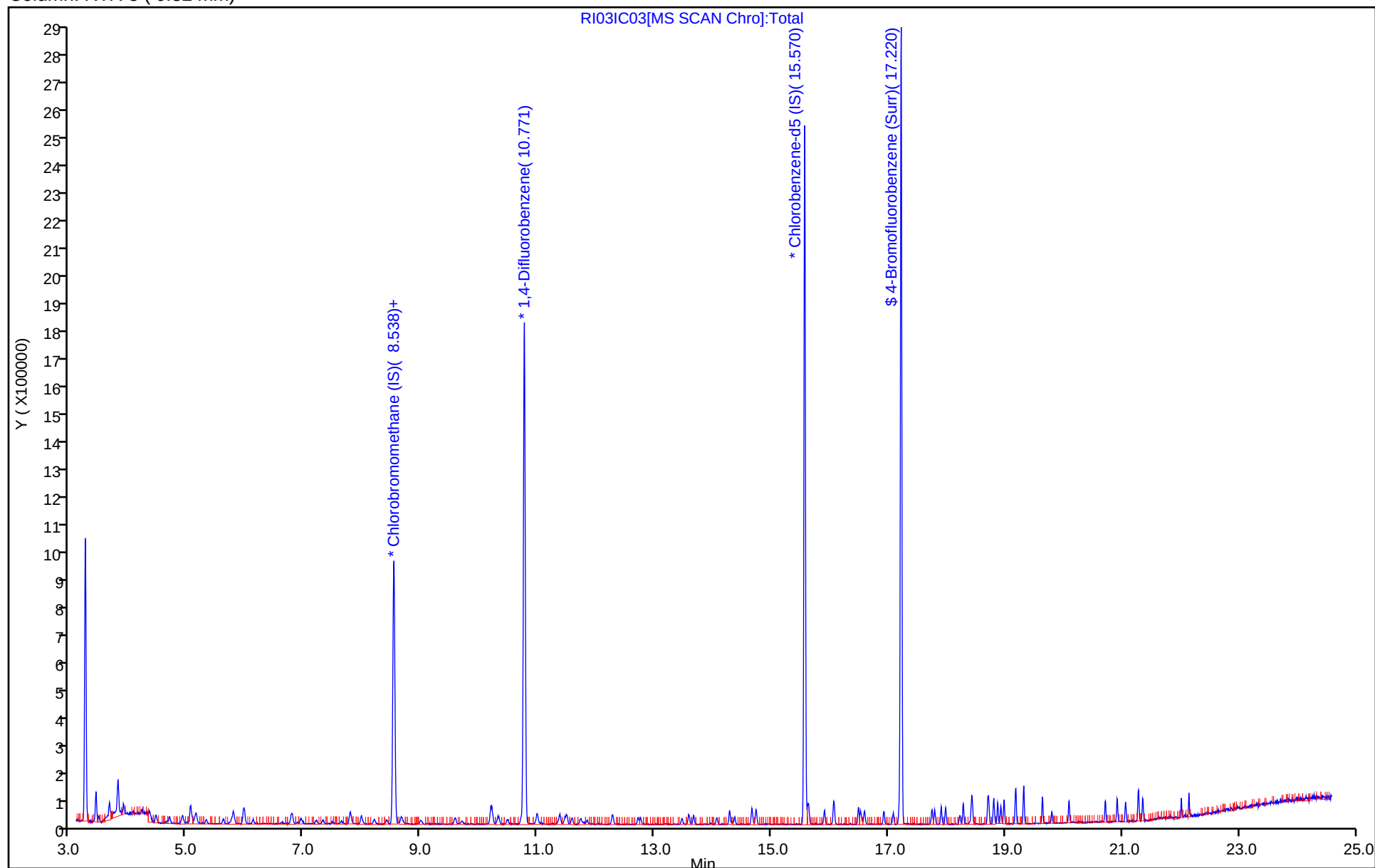
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Report Date: 04-Sep-2019 17:34:22

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC03.D

Injection Date: 03-Sep-2019 16:02:30

Instrument ID: MR

Lims ID: IC L3

Client ID:

Operator ID: HMT

ALS Bottle#: 1

Worklist Smp#: 9

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

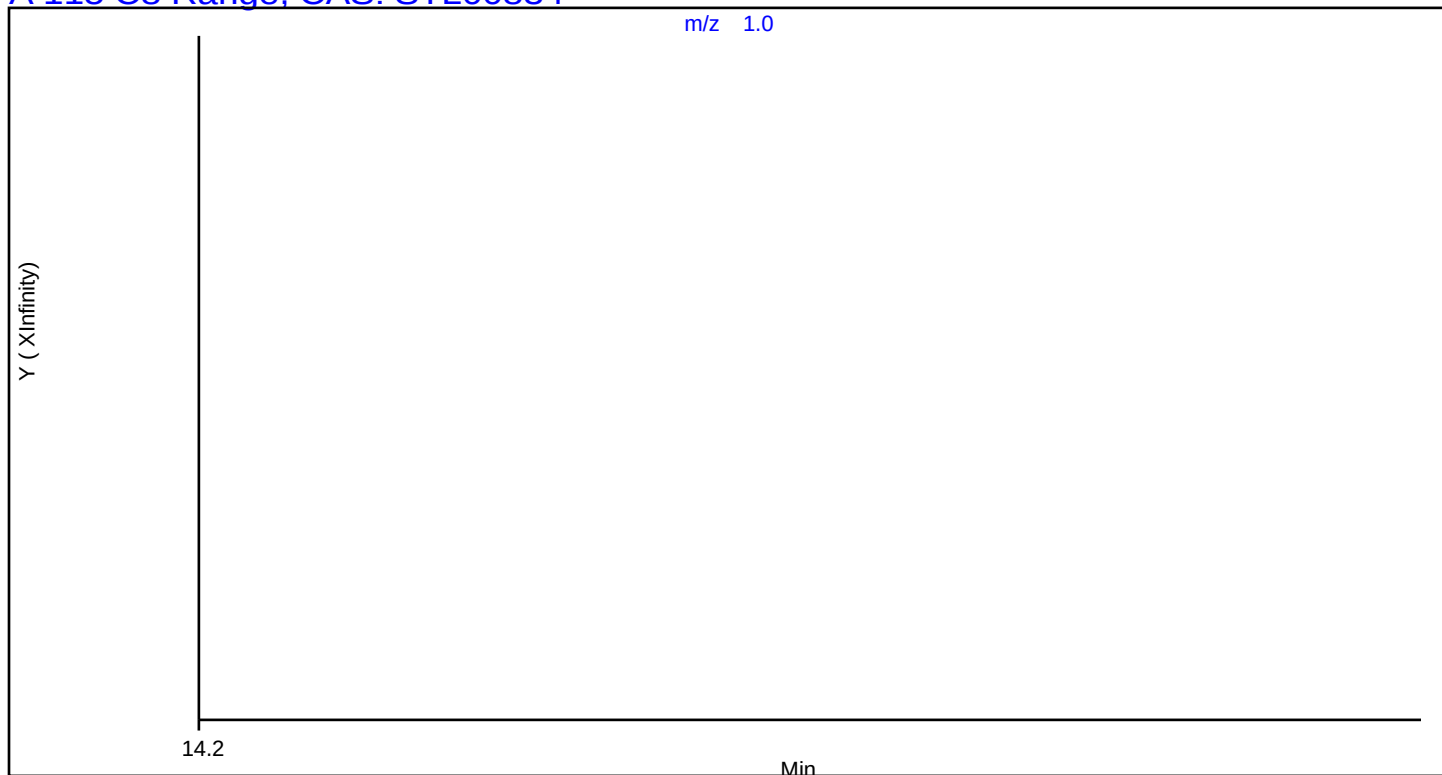
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 115 C8 Range, CAS: STL00834](#)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC04.D
 Lims ID: IC L4
 Client ID:
 Sample Type: IC Calib Level: 4
 Inject. Date: 03-Sep-2019 16:51:30 ALS Bottle#: 2 Worklist Smp#: 10
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-010
 Misc. Info.: 245275
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:34:28 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 14:52:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.538	8.537	0.001	96	300084	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.766	10.770	-0.004	94	1734738	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.568	0.002	87	1432801	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.220	-0.005	96	840097	4.00	3.97	
6 Chlorodifluoromethane	51	3.432	3.428	0.004	67	37407	0.1600	0.1879	
7 Propene	41	3.432	3.433	-0.001	98	62431	0.1600	0.5546	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	97	30972	0.1600	0.1830	
9 Chloromethane	52	3.664	3.661	0.003	77	4661	0.1600	0.1442	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.664	3.669	-0.005	85	26181	0.1600	0.1876	
11 Acetaldehyde	44	3.815	3.811	0.004	99	64870	0.8000	1.65	
12 Vinyl chloride	62	3.826	3.823	0.003	53	16243	0.1600	0.1594	
13 Butadiene	54	3.912	3.909	0.003	69	15357	0.1600	0.2004	
14 Butane	43	3.912	3.909	0.003	83	30013	0.1600	0.2023	
15 Bromomethane	94	4.225	4.221	0.004	97	18901	0.1600	0.1875	
16 Chloroethane	64	4.349	4.357	-0.008	77	6737	0.1600	0.1584	
17 Ethanol	31	4.456	4.461	-0.005	97	40300	0.8000	0.8777	
18 Vinyl bromide	106	4.651	4.649	0.002	92	13519	0.1600	0.1585	
19 2-Methylbutane	43	4.699	4.695	0.004	86	18236	0.1600	0.1570	
21 Trichlorofluoromethane	101	4.915	4.911	0.004	97	39671	0.1600	0.1626	
20 Acrolein	56	4.931	4.929	0.002	94	6278	0.1600	0.2171	
24 Acetonitrile	40	4.996	5.002	-0.006	71	5580	0.1600	0.1293	
22 Acetone	58	5.055	5.050	0.005	100	42477	0.4800	0.8875	
25 Pentane	72	5.141	5.133	0.008	95	2645	0.1600	0.1541	
23 Isopropyl alcohol	45	5.147	5.142	0.005	93	67760	0.4800	0.4834	
26 Ethyl ether	31	5.319	5.312	0.007	89	20934	0.1600	0.1788	
27 1,1-Dichloroethene	96	5.610	5.615	-0.005	99	16768	0.1600	0.1719	
28 Acrylonitrile	53	5.729	5.728	0.001	89	10806	0.1600	0.1502	
29 2-Methyl-2-propanol	59	5.756	5.745	0.011	97	27942	0.1600	0.1606	
30 1,1,2-Trichloro-1,2,2-trif	101	5.788	5.792	-0.004	95	36187	0.1600	0.1755	
32 3-Chloro-1-propene	39	5.982	5.964	0.018	78	16135	0.1600	0.1686	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.972	5.969	0.003	97	31886	0.1600	0.2754	
33 Carbon disulfide	76	6.123	6.125	-0.002	99	39691	0.1600	0.1548	
34 trans-1,2-Dichloroethene	96	6.775	6.779	-0.004	96	16947	0.1600	0.1613	
35 2-Methylpentane	43	6.797	6.795	0.002	95	40649	0.1600	0.1639	
36 Methyl tert-butyl ether	73	6.937	6.927	0.010	95	40641	0.1600	0.1608	
37 1,1-Dichloroethane	63	7.207	7.208	-0.001	99	31531	0.1600	0.1747	
38 Vinyl acetate	43	7.320	7.318	0.002	99	41387	0.1600	0.1455	
39 2-Butanone (MEK)	72	7.789	7.782	0.007	89	9945	0.1600	0.1964	
40 Hexane	56	7.773	7.785	-0.012	66	12975	0.1600	0.1579	
41 Isopropyl ether	45	7.972	7.963	0.009	97	63993	0.1600	0.1700	
42 cis-1,2-Dichloroethene	96	8.210	8.203	0.007	85	19946	0.1600	0.1829	
43 Ethyl acetate	43	8.409	8.402	0.007	97	43652	0.1600	0.1672	
44 Chloroform	83	8.538	8.549	-0.011	30	34605	0.1600	0.1592	
45 Tert-butyl ethyl ether	59	8.652	8.649	0.003	96	49243	0.1600	0.1607	
46 Tetrahydrofuran	42	8.991	8.968	0.023	96	22692	0.1600	0.1752	
47 1,1,1-Trichloroethane	97	9.585	9.586	-0.001	93	35077	0.1600	0.1579	
48 1,2-Dichloroethane	62	9.698	9.701	-0.003	95	24357	0.1600	0.1782	
50 n-Butanol	31	10.189	10.176	0.013	56	6856	0.1600	0.1428	
49 Benzene	78	10.205	10.199	0.006	95	53145	0.1600	0.1589	
51 Cyclohexane	69	10.199	10.200	-0.001	72	8676	0.1600	0.1751	
52 Carbon tetrachloride	117	10.226	10.222	0.004	95	32718	0.1600	0.1479	
53 2,3-Dimethylpentane	71	10.318	10.324	-0.006	90	9391	0.1600	0.1375	
54 Thiophene	84	10.485	10.482	0.003	96	27373	0.1600	0.1577	
55 Isooctane	57	10.987	10.986	0.001	97	84031	0.1600	0.1616	
57 n-Heptane	71	11.380	11.378	0.002	93	17873	0.1600	0.1616	
56 1,2-Dichloropropane	63	11.456	11.464	-0.008	85	18516	0.1600	0.1536	
58 Trichloroethene	130	11.499	11.496	0.003	91	20676	0.1600	0.1436	
59 Dibromomethane	93	11.580	11.587	-0.007	91	19384	0.1600	0.1512	
60 Dichlorobromomethane	83	11.731	11.735	-0.004	96	30697	0.1600	0.1443	
61 1,4-Dioxane	88	11.768	11.759	0.009	90	6626	0.1600	0.1366	
62 Methyl methacrylate	41	11.833	11.836	-0.003	88	21764	0.1600	0.1474	
63 Methylcyclohexane	83	12.275	12.276	-0.001	94	28483	0.1600	0.1554	
64 4-Methyl-2-pentanone (MIBK)	43	12.707	12.705	0.002	96	41180	0.1600	0.1505	
65 cis-1,3-Dichloropropene	75	12.761	12.759	0.002	98	26525	0.1600	0.1587	
66 trans-1,3-Dichloropropene	75	13.467	13.467	0.000	96	22630	0.1600	0.1498	
67 Toluene	91	13.586	13.584	0.002	93	52417	0.1600	0.1497	
68 1,1,2-Trichloroethane	83	13.661	13.665	-0.004	95	16538	0.1600	0.1510	
69 2-Hexanone	58	14.055	14.055	0.000	92	17840	0.1600	0.1484	
71 n-Octane	85	14.281	14.283	-0.002	96	16040	0.1600	0.1480	
70 Chlorodibromomethane	129	14.368	14.370	-0.002	96	27226	0.1600	0.1242	
72 Ethylene Dibromide	107	14.664	14.664	0.000	26	29539	0.1600	0.1447	
73 Tetrachloroethene	129	14.734	14.736	-0.002	92	22221	0.1600	0.1576	
74 Chlorobenzene	112	15.619	15.615	0.004	95	43813	0.1600	0.1477	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	94	63126	0.1600	0.1573	
76 Ethylbenzene	91	15.904	15.904	0.000	97	73785	0.1600	0.1554	
77 m-Xylene & p-Xylene	91	16.066	16.067	-0.001	97	111265	0.3200	0.3047	
81 n-Nonane	57	16.487	16.488	-0.001	88	35904	0.1600	0.1538	
78 Bromoform	173	16.519	16.519	0.000	92	24384	0.1600	0.1217	
79 Styrene	104	16.530	16.535	-0.005	98	30460	0.1600	0.1189	
80 o-Xylene	91	16.595	16.595	0.000	97	57536	0.1600	0.1553	
82 1,1,2,2-Tetrachloroethane	83	16.924	16.923	0.001	97	40863	0.1600	0.1501	
83 1,2,3-Trichloropropane	110	17.085	17.085	0.000	94	13476	0.1600	0.1572	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.182	17.187	-0.005	95	81194	0.1600	0.1480	
85 N-Propylbenzene	120	17.749	17.749	0.000	99	21220	0.1600	0.1450	
86 2-Chlorotoluene	126	17.797	17.789	0.008	96	21624	0.1600	0.1560	
88 4-Ethyltoluene	105	17.905	17.907	-0.002	99	76782	0.1600	0.1377	
87 1,3,5-Trimethylbenzene	120	17.981	17.983	-0.003	91	31521	0.1600	0.1424	
89 Alpha Methyl Styrene	118	18.229	18.225	0.004	93	23210	0.1600	0.1081	
90 n-Decane	57	18.282	18.286	-0.004	85	45930	0.1600	0.1449	
91 tert-Butylbenzene	119	18.423	18.425	-0.002	93	71523	0.1600	0.1430	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	96	70127	0.1600	0.1495	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	103163	0.1600	0.1419	
93 1,3-Dichlorobenzene	146	18.719	18.720	-0.001	96	52180	0.1600	0.1468	
96 Benzyl chloride	91	18.795	18.798	-0.003	98	44372	0.1600	0.1355	
95 1,4-Dichlorobenzene	146	18.811	18.811	0.000	94	48709	0.1600	0.1417	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	97	83958	0.1600	0.1555	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	98	72971	0.1600	0.1587	
99 Butylcyclohexane	83	18.983	18.983	0.000	94	57227	0.1600	0.1564	
101 2,3-Dihydroindene	117	19.178	19.180	-0.002	91	65933	0.1600	0.1451	
100 1,2-Dichlorobenzene	146	19.178	19.182	-0.004	87	51537	0.1600	0.1530	
102 Indene	116	19.318	19.315	0.003	66	45967	0.1600	0.1168	
103 n-Butylbenzene	91	19.318	19.320	-0.002	97	87320	0.1600	0.1527	
104 Undecane	57	19.636	19.638	-0.002	90	56488	0.1600	0.1477	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.801	-0.003	88	17844	0.1600	0.1320	
106 1,2,4,5-Tetramethylbenzene	119	20.089	20.093	-0.004	98	76485	0.1600	0.1460	
107 Dodecane	57	20.714	20.713	0.001	90	49510	0.1600	0.1267	
108 1,2,4-Trichlorobenzene	180	20.914	20.919	-0.005	93	48402	0.1600	0.1521	
109 Naphthalene	128	21.060	21.060	0.000	99	96234	0.1600	0.1500	
110 Hexachlorobutadiene	225	21.281	21.283	-0.002	93	44590	0.1600	0.1607	
111 1,2,3-Trichlorobenzene	180	21.351	21.355	-0.004	95	50004	0.1600	0.1547	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	96	26264	0.1600	0.0998	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	97	35910	0.1600	0.1485	
A 115 C8 Range	1	14.287	(14.249-14.324)		0	190756	0.1600	0.1640	
S 116 Xylenes, Total	100				0		0.4800	0.4600	
S 117 1,2-Dichloroethene, Total	1				0		0.3200	0.3442	

Reagents:

40L4DQP_00012

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:34:30

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC04.D

Injection Date: 03-Sep-2019 16:51:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L4

Worklist Smp#: 10

Client ID:

Purge Vol: 500.000 mL

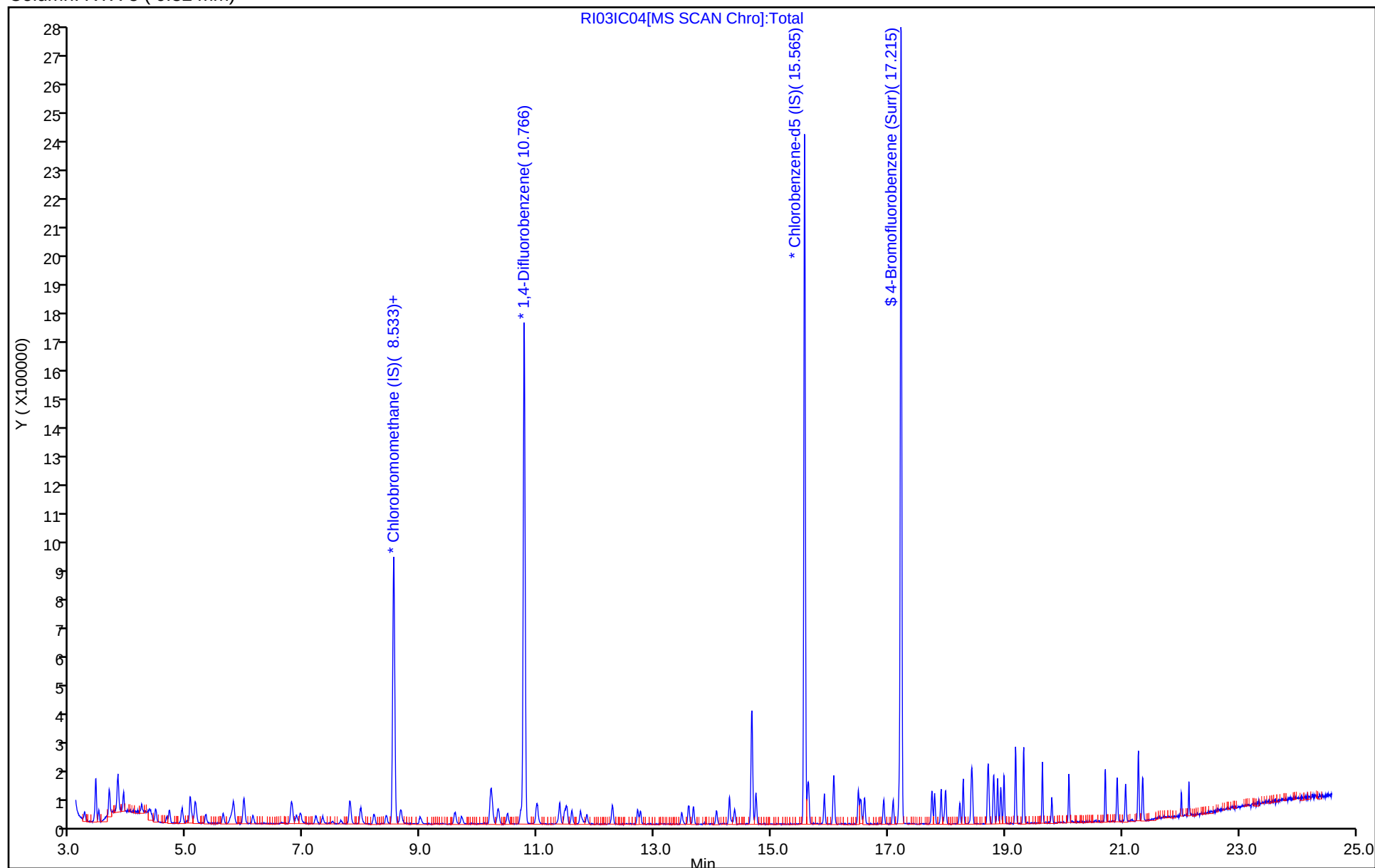
Dil. Factor: 1.0000

ALS Bottle#: 2

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Report Date: 04-Sep-2019 17:34:30

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC04.D

Injection Date: 03-Sep-2019 16:51:30

Instrument ID: MR

Lims ID: IC L4

Client ID:

Operator ID: HMT

ALS Bottle#:

2

Worklist Smp#:

10

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

Limit Group:

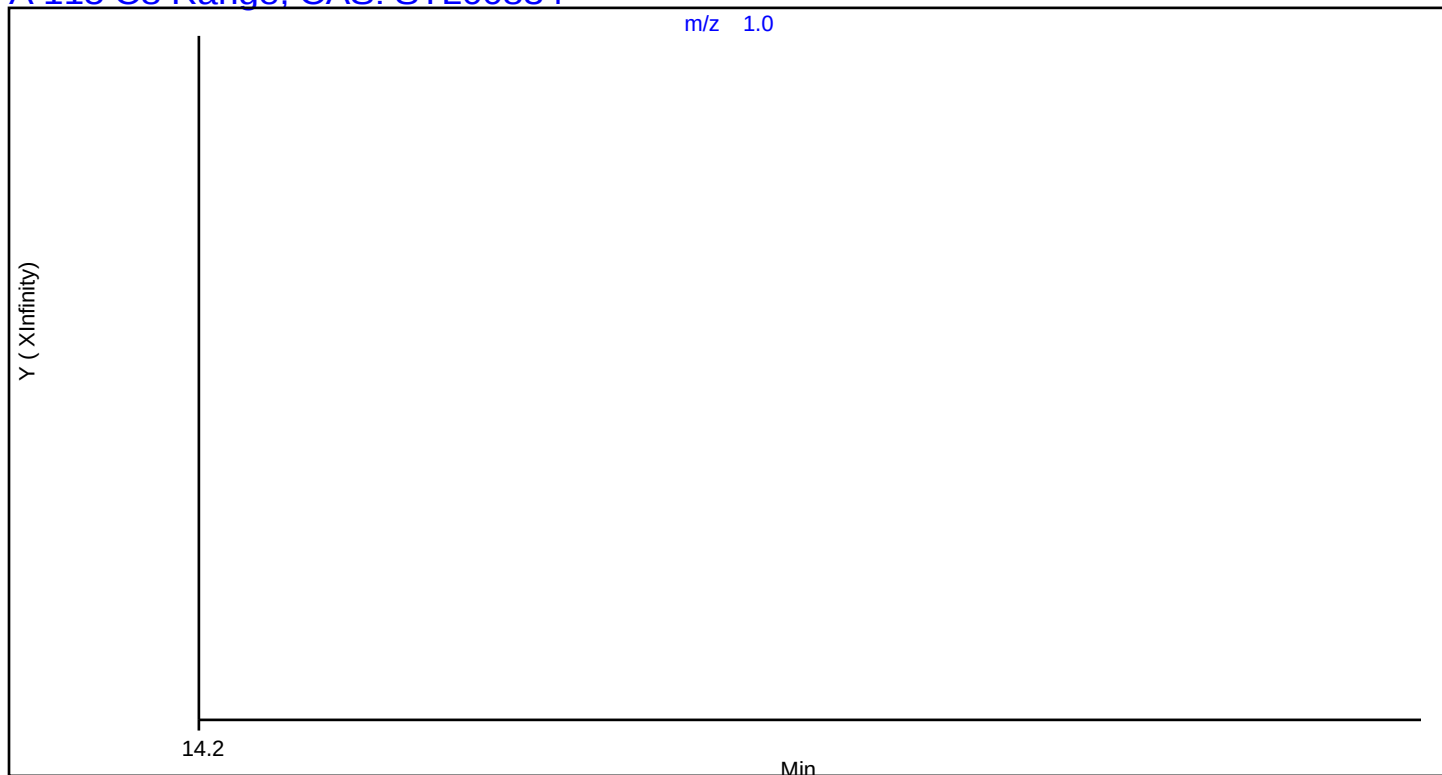
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

[A 115 C8 Range, CAS: STL00834](#)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC05.D
 Lims ID: IC L5
 Client ID:
 Sample Type: IC Calib Level: 5
 Inject. Date: 03-Sep-2019 17:39:30 ALS Bottle#: 3 Worklist Smp#: 11
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-011
 Misc. Info.: 245274
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:34:37 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 14:01:00

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.533	8.537	-0.004	98	295648	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.771	10.770	0.001	94	1761355	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.568	-0.003	87	1453308	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.220	-0.005	95	840618	4.00	3.91	
6 Chlorodifluoromethane	51	3.426	3.428	-0.002	96	88870	0.4000	0.4530	
7 Propene	41	3.437	3.433	0.004	99	87404	0.4000	0.7880	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	98	74265	0.4000	0.4453	
9 Chloromethane	52	3.658	3.661	-0.003	84	14239	0.4000	0.4470	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	87	62802	0.4000	0.4567	
11 Acetaldehyde	44	3.815	3.811	0.004	99	114953	2.00	2.96	
12 Vinyl chloride	62	3.820	3.823	-0.003	98	41385	0.4000	0.4121	
13 Butadiene	54	3.906	3.909	-0.003	70	36625	0.4000	0.4851	
14 Butane	43	3.906	3.909	-0.003	83	65401	0.4000	0.4475	
15 Bromomethane	94	4.219	4.221	-0.002	94	42598	0.4000	0.4290	
16 Chloroethane	64	4.354	4.357	-0.003	89	17294	0.4000	0.4126	
17 Ethanol	31	4.456	4.461	-0.005	97	96824	2.00	2.14	
18 Vinyl bromide	106	4.645	4.649	-0.004	97	33504	0.4000	0.3988	
19 2-Methylbutane	43	4.694	4.695	-0.001	94	50031	0.4000	0.4373	
21 Trichlorofluoromethane	101	4.909	4.911	-0.002	97	102492	0.4000	0.4264	
20 Acrolein	56	4.926	4.929	-0.003	93	13055	0.4000	0.4582	
24 Acetonitrile	40	4.990	5.002	-0.012	96	16233	0.4000	0.3819	
22 Acetone	58	5.044	5.050	-0.006	99	78390	1.20	1.66	
25 Pentane	72	5.130	5.133	-0.003	73	7156	0.4000	0.4230	
23 Isopropyl alcohol	45	5.141	5.142	-0.001	89	167975	1.20	1.22	
26 Ethyl ether	31	5.308	5.312	-0.004	92	49916	0.4000	0.4327	
27 1,1-Dichloroethene	96	5.616	5.615	0.001	99	40958	0.4000	0.4261	
28 Acrylonitrile	53	5.729	5.728	0.001	95	30713	0.4000	0.4334	
29 2-Methyl-2-propanol	59	5.745	5.745	0.000	95	69778	0.4000	0.4071	
30 1,1,2-Trichloro-1,2,2-trif	101	5.794	5.792	0.002	93	86433	0.4000	0.4254	
32 3-Chloro-1-propene	39	5.982	5.964	0.018	97	42156	0.4000	0.4472	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.972	5.969	0.003	97	52768	0.4000	0.4626	
33 Carbon disulfide	76	6.128	6.125	0.003	99	109289	0.4000	0.4325	
34 trans-1,2-Dichloroethene	96	6.781	6.779	0.002	97	42354	0.4000	0.4091	
35 2-Methylpentane	43	6.791	6.795	-0.004	96	104996	0.4000	0.4297	
36 Methyl tert-butyl ether	73	6.921	6.927	-0.006	97	106549	0.4000	0.4278	
37 1,1-Dichloroethane	63	7.207	7.208	-0.001	98	76177	0.4000	0.4284	
38 Vinyl acetate	43	7.314	7.318	-0.004	100	117037	0.4000	0.4177	
39 2-Butanone (MEK)	72	7.789	7.782	0.007	88	20411	0.4000	0.4092	
40 Hexane	56	7.784	7.785	-0.001	67	36443	0.4000	0.4503	
41 Isopropyl ether	45	7.961	7.963	-0.002	98	155958	0.4000	0.4205	
42 cis-1,2-Dichloroethene	96	8.199	8.203	-0.004	92	45839	0.4000	0.4266	
43 Ethyl acetate	43	8.398	8.402	-0.004	97	107812	0.4000	0.4192	
44 Chloroform	83	8.538	8.549	-0.011	36	88925	0.4000	0.4152	
45 Tert-butyl ethyl ether	59	8.641	8.649	-0.008	95	126910	0.4000	0.4204	
46 Tetrahydrofuran	42	8.970	8.968	0.002	93	53198	0.4000	0.4170	
47 1,1,1-Trichloroethane	97	9.590	9.586	0.004	97	89808	0.4000	0.4102	
48 1,2-Dichloroethane	62	9.692	9.701	-0.009	96	54501	0.4000	0.3928	
50 n-Butanol	31	10.183	10.176	0.007	82	19570	0.4000	0.4015	
49 Benzene	78	10.199	10.199	0.000	95	129476	0.4000	0.3812	
51 Cyclohexane	69	10.189	10.200	-0.012	77	18817	0.4000	0.3740	
52 Carbon tetrachloride	117	10.221	10.222	-0.001	96	82320	0.4000	0.3665	
53 2,3-Dimethylpentane	71	10.329	10.324	0.005	89	26163	0.4000	0.3773	
54 Thiophene	84	10.480	10.482	-0.002	93	67963	0.4000	0.3855	
55 Isooctane	57	10.981	10.986	-0.005	97	211257	0.4000	0.4002	
57 n-Heptane	71	11.364	11.378	-0.014	94	40457	0.4000	0.3603	
56 1,2-Dichloropropane	63	11.461	11.464	-0.003	87	48324	0.4000	0.3948	
58 Trichloroethene	130	11.493	11.496	-0.003	95	55942	0.4000	0.3827	
59 Dibromomethane	93	11.585	11.587	-0.002	96	49916	0.4000	0.3834	
60 Dichlorobromomethane	83	11.731	11.735	-0.004	97	77686	0.4000	0.3596	
61 1,4-Dioxane	88	11.763	11.759	0.004	77	18371	0.4000	0.3731	
62 Methyl methacrylate	41	11.833	11.836	-0.003	92	55330	0.4000	0.3691	
63 Methylcyclohexane	83	12.281	12.276	0.005	92	71644	0.4000	0.3850	
64 4-Methyl-2-pentanone (MIBK)	43	12.707	12.705	0.002	98	107444	0.4000	0.3868	
65 cis-1,3-Dichloropropene	75	12.761	12.759	0.002	99	64389	0.4000	0.3795	
66 trans-1,3-Dichloropropene	75	13.467	13.467	0.000	97	56564	0.4000	0.3691	
67 Toluene	91	13.586	13.584	0.002	92	143846	0.4000	0.4050	
68 1,1,2-Trichloroethane	83	13.661	13.665	-0.004	96	42543	0.4000	0.3828	
69 2-Hexanone	58	14.055	14.055	0.000	91	45806	0.4000	0.3757	
71 n-Octane	85	14.276	14.283	-0.007	96	42048	0.4000	0.3824	
70 Chlorodibromomethane	129	14.368	14.370	-0.002	97	75235	0.4000	0.3384	
72 Ethylene Dibromide	107	14.664	14.664	0.000	96	79328	0.4000	0.3830	
73 Tetrachloroethene	129	14.734	14.736	-0.002	94	54373	0.4000	0.3802	
74 Chlorobenzene	112	15.613	15.615	-0.002	95	116875	0.4000	0.3884	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	95	160394	0.4000	0.3940	
76 Ethylbenzene	91	15.904	15.904	0.000	98	181497	0.4000	0.3768	
77 m-Xylene & p-Xylene	91	16.072	16.067	0.005	97	283166	0.8000	0.7645	
81 n-Nonane	57	16.487	16.488	-0.001	93	91602	0.4000	0.3869	
78 Bromoform	173	16.519	16.519	0.000	95	74964	0.4000	0.3689	
79 Styrene	104	16.535	16.535	0.000	99	89120	0.4000	0.3431	
80 o-Xylene	91	16.595	16.595	0.000	99	149999	0.4000	0.3991	
82 1,1,2,2-Tetrachloroethane	83	16.918	16.923	-0.005	98	109448	0.4000	0.3963	
83 1,2,3-Trichloropropane	110	17.080	17.085	-0.005	94	32774	0.4000	0.3769	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.182	17.187	-0.005	95	228313	0.4000	0.4102	
85 N-Propylbenzene	120	17.749	17.749	0.000	99	59470	0.4000	0.4008	
86 2-Chlorotoluene	126	17.792	17.789	0.003	98	56318	0.4000	0.4007	
88 4-Ethyltoluene	105	17.905	17.907	-0.002	100	224183	0.4000	0.3962	
87 1,3,5-Trimethylbenzene	120	17.975	17.983	-0.008	92	85979	0.4000	0.3830	
89 Alpha Methyl Styrene	118	18.223	18.225	-0.002	91	65556	0.4000	0.3009	
90 n-Decane	57	18.282	18.286	-0.004	87	122940	0.4000	0.3823	
91 tert-Butylbenzene	119	18.423	18.425	-0.002	93	191186	0.4000	0.3767	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	96	186908	0.4000	0.3927	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	287037	0.4000	0.3893	
93 1,3-Dichlorobenzene	146	18.719	18.720	-0.001	96	134286	0.4000	0.3724	
96 Benzyl chloride	91	18.795	18.798	-0.003	97	121625	0.4000	0.3661	
95 1,4-Dichlorobenzene	146	18.811	18.811	0.000	95	131413	0.4000	0.3768	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	97	220551	0.4000	0.4027	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	99	182641	0.4000	0.3917	
99 Butylcyclohexane	83	18.983	18.983	0.000	92	144694	0.4000	0.3898	
101 2,3-Dihydroindene	117	19.178	19.180	-0.002	94	167879	0.4000	0.3644	
100 1,2-Dichlorobenzene	146	19.178	19.182	-0.004	84	129699	0.4000	0.3796	
102 Indene	116	19.312	19.315	-0.003	91	133321	0.4000	0.3340	
103 n-Butylbenzene	91	19.318	19.320	-0.002	98	220549	0.4000	0.3803	
104 Undecane	57	19.636	19.638	-0.002	93	142886	0.4000	0.3683	
105 1,2-Dibromo-3-Chloropropan	157	19.803	19.801	0.002	91	47784	0.4000	0.3485	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	98	194002	0.4000	0.3650	
107 Dodecane	57	20.714	20.713	0.001	92	133853	0.4000	0.3378	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	92	115933	0.4000	0.3592	
109 Naphthalene	128	21.060	21.060	0.000	99	230088	0.4000	0.3535	
110 Hexachlorobutadiene	225	21.281	21.283	-0.002	94	102309	0.4000	0.3634	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	95	113317	0.4000	0.3455	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	99	73998	0.4000	0.2771	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	99	78290	0.4000	0.3193	
A 115 C8 Range	1	14.281	(14.244-14.319)		0	466318	0.4000	0.3949	
S 116 Xylenes, Total	100				0		1.20	1.16	
S 117 1,2-Dichloroethene, Total	1				0		0.8000	0.8357	

Reagents:

40L5DQP_00012

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC05.D

Injection Date: 03-Sep-2019 17:39:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L5

Worklist Smp#: 11

Client ID:

Purge Vol: 500.000 mL

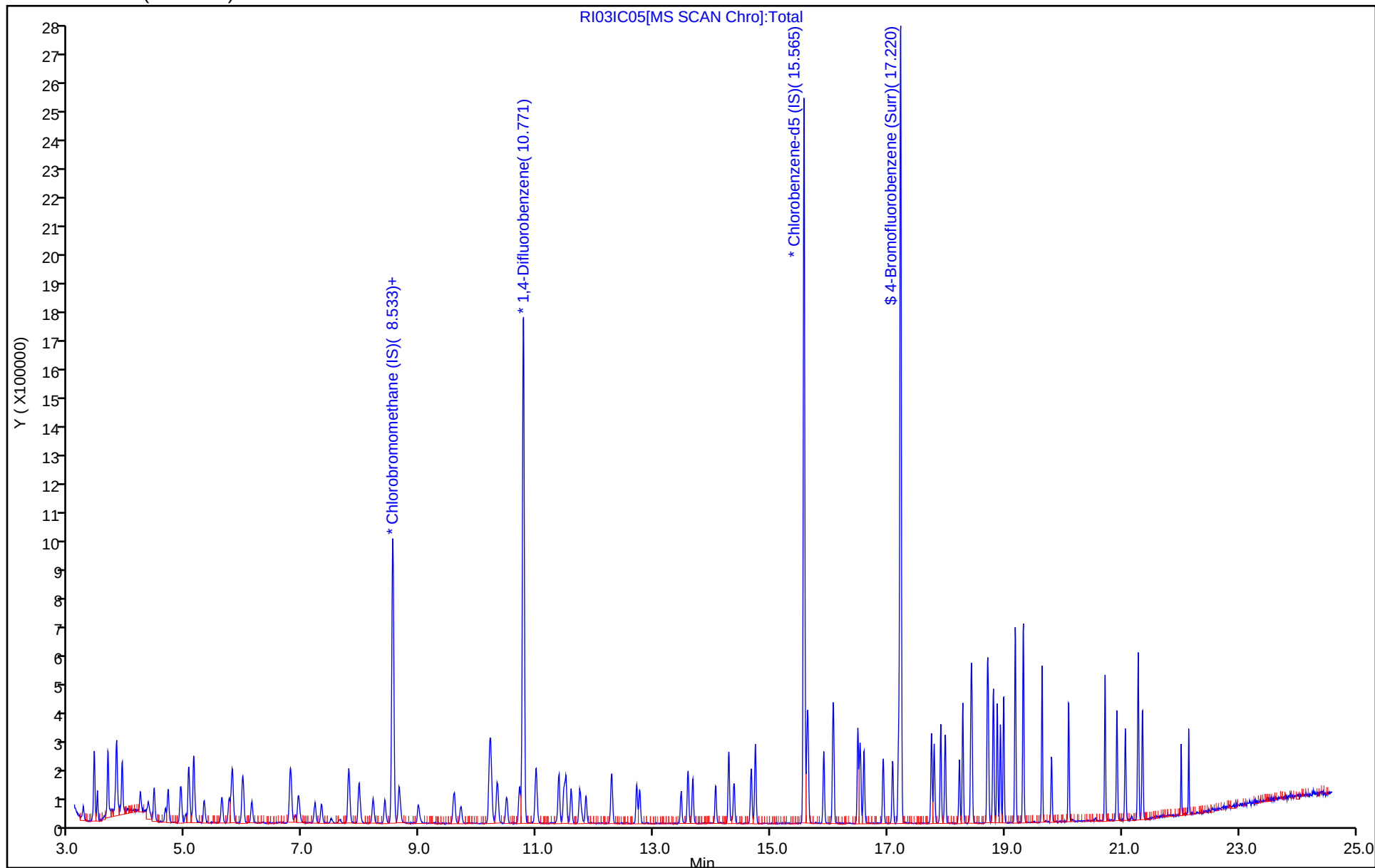
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Report Date: 04-Sep-2019 17:34:39

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC05.D

Injection Date: 03-Sep-2019 17:39:30

Instrument ID: MR

Lims ID: IC L5

Client ID:

Operator ID: HMT

ALS Bottle#:

3

Worklist Smp#:

11

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

Limit Group:

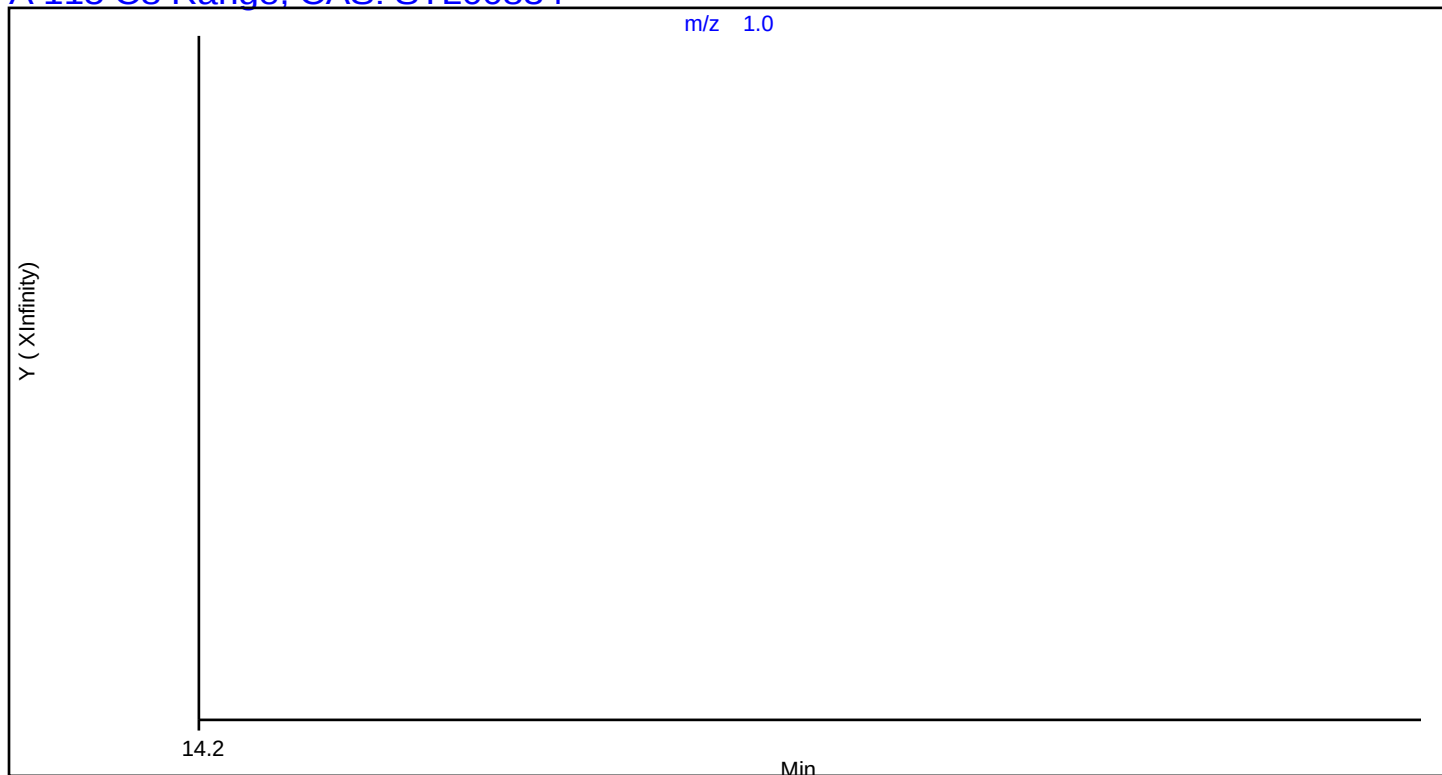
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

[A 115 C8 Range, CAS: STL00834](#)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC06.D
 Lims ID: IC L6
 Client ID:
 Sample Type: IC Calib Level: 6
 Inject. Date: 03-Sep-2019 18:27:30 ALS Bottle#: 5 Worklist Smp#: 12
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-012
 Misc. Info.: 245273
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:34:45 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 17:32:47

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.528	8.537	-0.009	97	322001	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.766	10.770	-0.004	94	1800992	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.568	-0.003	87	1582837	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.220	-0.005	95	912943	4.00	3.90	
6 Chlorodifluoromethane	51	3.421	3.428	-0.007	97	219441	1.00	1.03	
7 Propene	41	3.427	3.433	-0.006	98	156506	1.00	1.30	
8 Dichlorodifluoromethane	85	3.480	3.486	-0.006	99	183416	1.00	1.01	
9 Chloromethane	52	3.653	3.661	-0.008	90	44708	1.00	1.29	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.664	3.669	-0.005	87	166670	1.00	1.11	
11 Acetaldehyde	44	3.809	3.811	-0.002	99	239506	5.00	5.67	
12 Vinyl chloride	62	3.820	3.823	-0.003	99	103708	1.00	0.9482	
13 Butadiene	54	3.901	3.909	-0.008	69	81755	1.00	0.99	
14 Butane	43	3.901	3.909	-0.008	84	152419	1.00	0.9576	
15 Bromomethane	94	4.214	4.221	-0.007	97	103516	1.00	0.9571	
16 Chloroethane	64	4.343	4.357	-0.014	94	41293	1.00	0.9045	
17 Ethanol	31	4.446	4.461	-0.015	98	243829	5.00	4.95	
18 Vinyl bromide	106	4.640	4.649	-0.009	98	93465	1.00	1.02	
19 2-Methylbutane	43	4.683	4.695	-0.012	94	122786	1.00	0.9854	
21 Trichlorofluoromethane	101	4.904	4.911	-0.007	98	267920	1.00	1.02	
20 Acrolein	56	4.926	4.929	-0.003	93	29346	1.00	0.9458	
24 Acetonitrile	40	4.985	5.002	-0.017	97	51720	1.00	1.12	
22 Acetone	58	5.039	5.050	-0.011	99	158806	3.00	3.09	
25 Pentane	72	5.125	5.133	-0.008	72	17893	1.00	0.9712	
23 Isopropyl alcohol	45	5.120	5.142	-0.022	84	435961	3.00	2.90	
26 Ethyl ether	31	5.298	5.312	-0.014	91	122175	1.00	0.9725	
27 1,1-Dichloroethene	96	5.605	5.615	-0.010	98	102785	1.00	0.9817	
28 Acrylonitrile	53	5.718	5.728	-0.010	62	77731	1.00	1.01	
29 2-Methyl-2-propanol	59	5.724	5.745	-0.021	95	181842	1.00	0.9742	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.792	-0.009	95	210707	1.00	0.9521	
32 3-Chloro-1-propene	39	5.977	5.964	0.013	95	103629	1.00	1.01	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.966	5.969	-0.003	97	107501	1.00	0.8653	
33 Carbon disulfide	76	6.117	6.125	-0.008	99	277961	1.00	1.01	
34 trans-1,2-Dichloroethene	96	6.770	6.779	-0.009	98	107685	1.00	0.9551	
35 2-Methylpentane	43	6.791	6.795	-0.004	96	257703	1.00	0.9683	
36 Methyl tert-butyl ether	73	6.905	6.927	-0.022	96	271742	1.00	1.00	
37 1,1-Dichloroethane	63	7.201	7.208	-0.007	99	191196	1.00	0.9872	
38 Vinyl acetate	43	7.309	7.318	-0.009	100	308087	1.00	1.01	
39 2-Butanone (MEK)	72	7.767	7.782	-0.015	88	51572	1.00	0.9493	
40 Hexane	56	7.784	7.785	-0.001	78	85156	1.00	0.9660	
41 Isopropyl ether	45	7.945	7.963	-0.018	97	395302	1.00	0.9787	
42 cis-1,2-Dichloroethene	96	8.193	8.203	-0.010	93	108153	1.00	0.9241	
43 Ethyl acetate	43	8.393	8.402	-0.009	98	276396	1.00	0.9868	
44 Chloroform	83	8.544	8.549	-0.005	97	231564	1.00	0.99	
45 Tert-butyl ethyl ether	59	8.636	8.649	-0.013	96	326220	1.00	0.99	
46 Tetrahydrofuran	42	8.954	8.968	-0.014	96	132901	1.00	0.9564	
47 1,1,1-Trichloroethane	97	9.579	9.586	-0.007	95	234415	1.00	0.9832	
48 1,2-Dichloroethane	62	9.692	9.701	-0.009	96	146276	1.00	1.03	
50 n-Butanol	31	10.167	10.176	-0.009	83	49826	1.00	1.00	
49 Benzene	78	10.194	10.199	-0.005	96	343664	1.00	0.9894	
51 Cyclohexane	69	10.199	10.200	-0.001	68	49894	1.00	0.9698	
52 Carbon tetrachloride	117	10.221	10.222	-0.001	95	246027	1.00	1.07	
53 2,3-Dimethylpentane	71	10.323	10.324	-0.001	91	75390	1.00	1.06	
54 Thiophene	84	10.474	10.482	-0.008	96	185736	1.00	1.03	
55 Isooctane	57	10.981	10.986	-0.005	98	547133	1.00	1.01	
57 n-Heptane	71	11.370	11.378	-0.008	93	115588	1.00	1.01	
56 1,2-Dichloropropane	63	11.456	11.464	-0.008	89	129462	1.00	1.03	
58 Trichloroethene	130	11.494	11.496	-0.002	95	148885	1.00	1.00	
59 Dibromomethane	93	11.585	11.587	-0.002	92	131893	1.00	0.99	
60 Dichlorobromomethane	83	11.731	11.735	-0.004	97	225379	1.00	1.02	
61 1,4-Dioxane	88	11.752	11.759	-0.007	92	51868	1.00	1.03	
62 Methyl methacrylate	41	11.828	11.836	-0.008	93	152368	1.00	0.99	
63 Methylcyclohexane	83	12.275	12.276	-0.001	93	184946	1.00	0.9721	
64 4-Methyl-2-pentanone (MIBK)	43	12.696	12.705	-0.009	98	288813	1.00	1.02	
65 cis-1,3-Dichloropropene	75	12.755	12.759	-0.004	97	177650	1.00	1.02	
66 trans-1,3-Dichloropropene	75	13.462	13.467	-0.005	97	159588	1.00	0.9562	
67 Toluene	91	13.580	13.584	-0.004	94	363606	1.00	0.9398	
68 1,1,2-Trichloroethane	83	13.661	13.665	-0.004	94	110540	1.00	0.9133	
69 2-Hexanone	58	14.050	14.055	-0.005	91	124236	1.00	0.9355	
71 n-Octane	85	14.281	14.283	-0.002	96	112993	1.00	0.9435	
70 Chlorodibromomethane	129	14.368	14.370	-0.002	98	227075	1.00	0.9377	
72 Ethylene Dibromide	107	14.659	14.664	-0.005	98	213842	1.00	0.9480	
73 Tetrachloroethene	129	14.734	14.736	-0.002	95	139836	1.00	0.8977	
74 Chlorobenzene	112	15.613	15.615	-0.002	94	304012	1.00	0.9276	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	95	423354	1.00	0.9548	
76 Ethylbenzene	91	15.905	15.904	0.000	98	489233	1.00	0.9325	
77 m-Xylene & p-Xylene	91	16.066	16.067	-0.001	97	778233	2.00	1.93	
81 n-Nonane	57	16.487	16.488	-0.001	96	250934	1.00	0.9730	
78 Bromoform	173	16.519	16.519	0.000	95	231275	1.00	1.04	
79 Styrene	104	16.530	16.535	-0.005	99	269110	1.00	0.9512	
80 o-Xylene	91	16.595	16.595	0.000	98	394718	1.00	0.9643	
82 1,1,2,2-Tetrachloroethane	83	16.918	16.923	-0.005	98	303835	1.00	1.01	
83 1,2,3-Trichloropropane	110	17.080	17.085	-0.005	94	85244	1.00	0.9000	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.182	17.187	-0.005	93	594874	1.00	0.9813	
85 N-Propylbenzene	120	17.743	17.749	-0.006	99	156505	1.00	0.9684	
86 2-Chlorotoluene	126	17.792	17.789	0.003	97	144883	1.00	0.9464	
88 4-Ethyltoluene	105	17.905	17.907	-0.002	100	593308	1.00	0.9629	
87 1,3,5-Trimethylbenzene	120	17.981	17.983	-0.002	93	232045	1.00	0.9490	
89 Alpha Methyl Styrene	118	18.223	18.225	-0.002	90	206714	1.00	0.8712	
90 n-Decane	57	18.283	18.286	-0.003	88	331365	1.00	0.9461	
91 tert-Butylbenzene	119	18.423	18.425	-0.002	94	504364	1.00	0.9125	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	96	496740	1.00	0.9584	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	739600	1.00	0.9210	
93 1,3-Dichlorobenzene	146	18.719	18.720	-0.001	97	355492	1.00	0.9051	
96 Benzyl chloride	91	18.795	18.798	-0.003	98	355341	1.00	0.9822	
95 1,4-Dichlorobenzene	146	18.806	18.811	-0.005	95	356925	1.00	0.9397	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	97	599428	1.00	1.00	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	98	504915	1.00	0.99	
99 Butylcyclohexane	83	18.978	18.983	-0.005	94	395896	1.00	0.9793	
101 2,3-Dihydroindene	117	19.178	19.180	-0.002	93	460776	1.00	0.9182	
100 1,2-Dichlorobenzene	146	19.178	19.182	-0.004	84	349367	1.00	0.9388	
102 Indene	116	19.312	19.315	-0.003	90	386043	1.00	0.8881	
103 n-Butylbenzene	91	19.318	19.320	-0.002	97	598930	1.00	0.9484	
104 Undecane	57	19.636	19.638	-0.002	93	393485	1.00	0.9313	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.801	-0.003	92	160389	1.00	1.07	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	98	560939	1.00	0.9690	
107 Dodecane	57	20.715	20.713	0.001	93	391221	1.00	0.9064	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	94	326688	1.00	0.9294	
109 Naphthalene	128	21.060	21.060	0.000	99	688030	1.00	0.9705	
110 Hexachlorobutadiene	225	21.281	21.283	-0.002	94	280210	1.00	0.9139	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	95	312804	1.00	0.8757	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	98	294266	1.00	1.01	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	98	292533	1.00	1.10	
A 115 C8 Range	1	14.281	(14.233-14.319)		0	1182032	1.00	0.9790	
S 116 Xylenes, Total	100				0		3.00	2.89	
S 117 1,2-Dichloroethene, Total	1				0		2.00	1.88	

Reagents:

40L6DQP_00012

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:34:47

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC06.D

Injection Date: 03-Sep-2019 18:27:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L6

Worklist Smp#: 12

Client ID:

Purge Vol: 500.000 mL

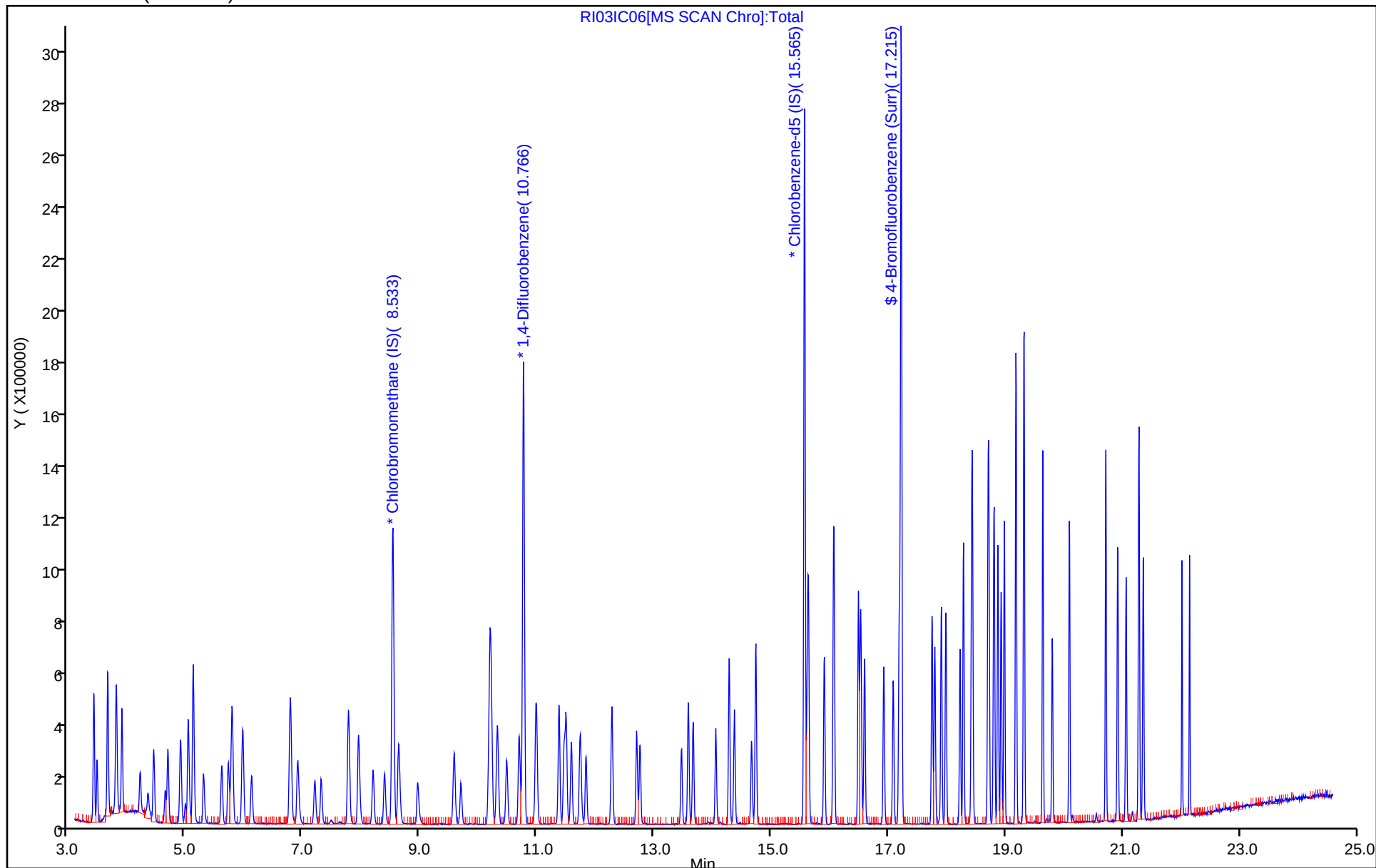
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC06.D

Injection Date: 03-Sep-2019 18:27:30

Instrument ID: MR

Lims ID: IC L6

Client ID:

Operator ID: HMT

ALS Bottle#: 5

Worklist Smp#: 12

Purge Vol: 500.000 mL

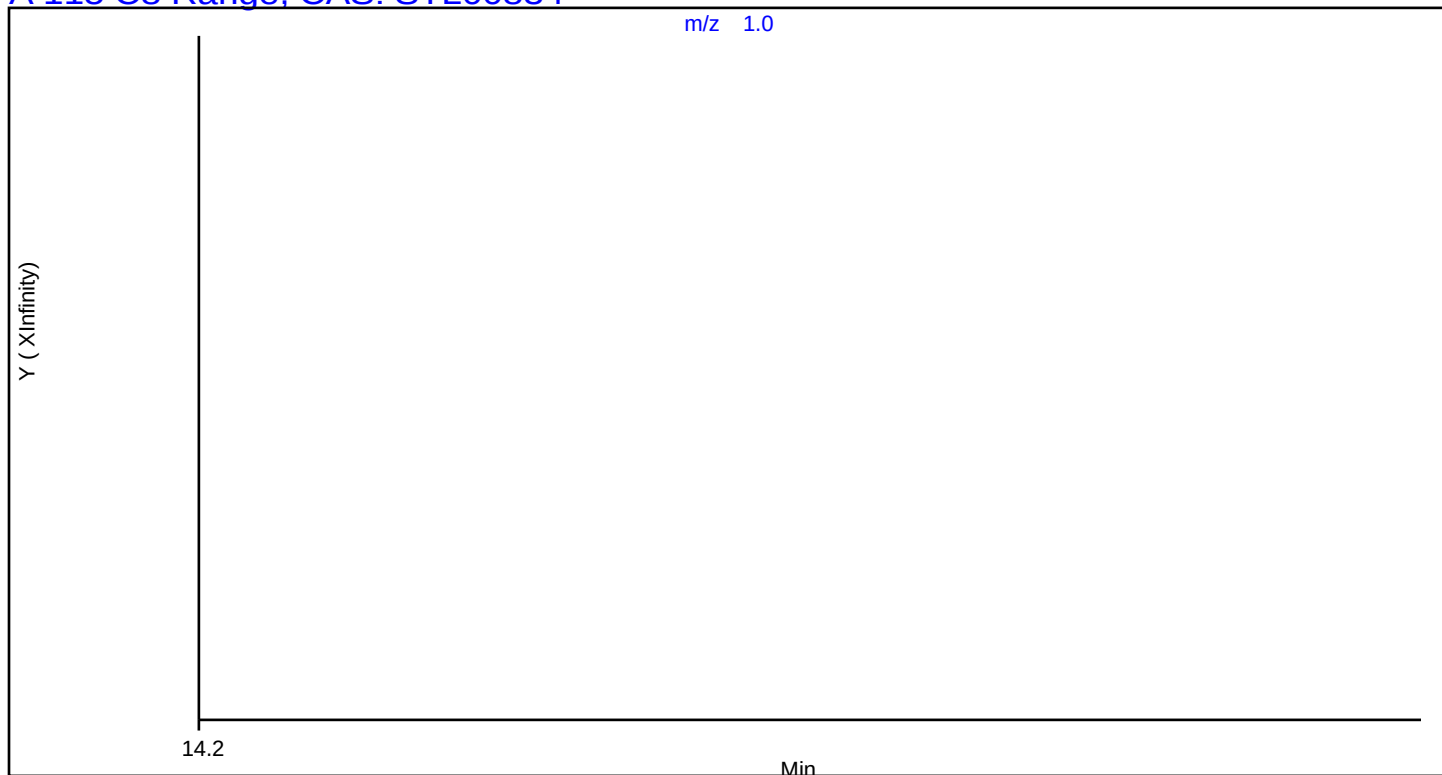
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 115 C8 Range, CAS: STL00834](#)

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC08.D
 Lims ID: IC L8
 Client ID:
 Sample Type: IC Calib Level: 8
 Inject. Date: 03-Sep-2019 20:02:30 ALS Bottle#: 7 Worklist Smp#: 14
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-014
 Misc. Info.: 245076
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:34:55 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 14:54:09

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.544	8.537	0.007	96	407356	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.776	10.770	0.006	94	2284606	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.570	15.568	0.002	87	1890582	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	95	1144637	4.00	4.10	
6 Chlorodifluoromethane	51	3.427	3.428	-0.001	97	1018776	4.00	3.77	
7 Propene	41	3.432	3.433	-0.001	99	588113	4.00	3.85	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	99	839671	4.00	3.65	
9 Chloromethane	52	3.664	3.661	0.003	100	176223	4.00	4.02	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	86	631884	4.00	3.34	
11 Acetaldehyde	44	3.809	3.811	-0.002	99	913585	20.0	17.1	
12 Vinyl chloride	62	3.826	3.823	0.003	99	474399	4.00	3.43	
13 Butadiene	54	3.912	3.909	0.003	68	413950	4.00	3.98	
14 Butane	43	3.912	3.909	0.003	85	766058	4.00	3.80	
15 Bromomethane	94	4.219	4.221	-0.002	96	478925	4.00	3.50	
16 Chloroethane	64	4.359	4.357	0.002	95	191853	4.00	3.32	
17 Ethanol	31	4.456	4.461	-0.005	98	1190978	20.0	19.1	
18 Vinyl bromide	106	4.651	4.649	0.002	98	476165	4.00	4.11	
19 2-Methylbutane	43	4.694	4.695	-0.001	95	628901	4.00	3.99	
21 Trichlorofluoromethane	101	4.909	4.911	-0.002	99	1326757	4.00	4.01	
20 Acrolein	56	4.926	4.929	-0.003	96	176527	4.00	4.50	
24 Acetonitrile	40	4.996	5.002	-0.006	98	245426	4.00	4.19	
22 Acetone	58	5.039	5.050	-0.011	98	725820	12.0	11.2	
25 Pentane	72	5.136	5.133	0.003	72	94410	4.00	4.05	
23 Isopropyl alcohol	45	5.131	5.142	-0.011	82	2165369	12.0	11.4	
26 Ethyl ether	31	5.298	5.312	-0.014	94	616460	4.00	3.88	
27 1,1-Dichloroethene	96	5.621	5.615	0.006	99	541093	4.00	4.09	
28 Acrylonitrile	53	5.729	5.728	0.001	95	399181	4.00	4.09	
29 2-Methyl-2-propanol	59	5.724	5.745	-0.021	95	931101	4.00	3.94	
30 1,1,2-Trichloro-1,2,2-trif	101	5.794	5.792	0.002	95	1093608	4.00	3.91	
32 3-Chloro-1-propene	39	5.983	5.964	0.018	96	475507	4.00	3.66	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.972	5.969	0.003	97	472620	4.00	3.01	
33 Carbon disulfide	76	6.128	6.125	0.003	100	1407313	4.00	4.04	
34 trans-1,2-Dichloroethene	96	6.781	6.779	0.002	98	572169	4.00	4.01	
35 2-Methylpentane	43	6.791	6.795	-0.004	95	1347528	4.00	4.00	
36 Methyl tert-butyl ether	73	6.910	6.927	-0.017	97	1406422	4.00	4.10	
37 1,1-Dichloroethane	63	7.212	7.208	0.004	100	960313	4.00	3.92	
38 Vinyl acetate	43	7.320	7.318	0.002	100	1550812	4.00	4.02	
39 2-Butanone (MEK)	72	7.767	7.782	-0.015	96	250304	4.00	3.64	
40 Hexane	56	7.789	7.785	0.004	81	432765	4.00	3.88	
41 Isopropyl ether	45	7.951	7.963	-0.012	97	2023462	4.00	3.96	
42 cis-1,2-Dichloroethene	96	8.210	8.203	0.007	93	593822	4.00	4.01	
43 Ethyl acetate	43	8.393	8.402	-0.009	98	1403825	4.00	3.96	
44 Chloroform	83	8.555	8.549	0.006	97	1155781	4.00	3.92	
45 Tert-butyl ethyl ether	59	8.636	8.649	-0.013	96	1648802	4.00	3.96	
46 Tetrahydrofuran	42	8.959	8.968	-0.009	95	698015	4.00	3.97	
47 1,1,1-Trichloroethane	97	9.590	9.586	0.004	94	1142217	4.00	3.79	
48 1,2-Dichloroethane	62	9.703	9.701	0.002	96	716206	4.00	3.98	
50 n-Butanol	31	10.156	10.176	-0.020	85	245687	4.00	3.89	
49 Benzene	78	10.205	10.199	0.006	96	1732232	4.00	3.93	
51 Cyclohexane	69	10.205	10.200	0.005	83	259810	4.00	3.98	
52 Carbon tetrachloride	117	10.226	10.222	0.004	95	1242435	4.00	4.26	
53 2,3-Dimethylpentane	71	10.323	10.324	-0.001	93	374263	4.00	4.16	
54 Thiophene	84	10.485	10.482	0.003	96	898134	4.00	3.93	
55 Isooctane	57	10.987	10.986	0.001	98	2805646	4.00	4.10	
57 n-Heptane	71	11.380	11.378	0.002	94	600275	4.00	4.12	
56 1,2-Dichloropropane	63	11.467	11.464	0.003	89	626326	4.00	3.94	
58 Trichloroethene	130	11.499	11.496	0.003	96	798633	4.00	4.21	
59 Dibromomethane	93	11.591	11.587	0.004	93	691506	4.00	4.09	
60 Dichlorobromomethane	83	11.736	11.735	0.001	98	1170432	4.00	4.18	
61 1,4-Dioxane	88	11.747	11.759	-0.012	89	273917	4.00	4.29	
62 Methyl methacrylate	41	11.833	11.836	-0.003	92	810493	4.00	4.17	
63 Methylcyclohexane	83	12.281	12.276	0.005	93	993926	4.00	4.12	
64 4-Methyl-2-pentanone (MIBK)	43	12.696	12.705	-0.009	98	1478879	4.00	4.10	
65 cis-1,3-Dichloropropene	75	12.761	12.759	0.002	96	907449	4.00	4.12	
66 trans-1,3-Dichloropropene	75	13.467	13.467	0.000	99	838028	4.00	4.20	
67 Toluene	91	13.586	13.584	0.002	93	1947337	4.00	4.21	
68 1,1,2-Trichloroethane	83	13.667	13.665	0.002	96	602007	4.00	4.16	
69 2-Hexanone	58	14.050	14.055	-0.005	91	681395	4.00	4.30	
71 n-Octane	85	14.281	14.283	-0.002	97	594761	4.00	4.16	
70 Chlorodibromomethane	129	14.373	14.370	0.003	98	1260220	4.00	4.36	
72 Ethylene Dibromide	107	14.664	14.664	0.000	98	1147731	4.00	4.26	
73 Tetrachloroethene	129	14.734	14.736	-0.002	97	753130	4.00	4.05	
74 Chlorobenzene	112	15.619	15.615	0.004	95	1625792	4.00	4.15	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	96	2253286	4.00	4.25	
76 Ethylbenzene	91	15.904	15.904	0.000	98	2631374	4.00	4.20	
77 m-Xylene & p-Xylene	91	16.066	16.067	-0.001	97	4209823	8.00	8.74	
81 n-Nonane	57	16.487	16.488	-0.001	95	1353990	4.00	4.40	
78 Bromoform	173	16.514	16.519	-0.005	96	1333496	4.00	5.04	
79 Styrene	104	16.535	16.535	0.000	99	1535403	4.00	4.54	
80 o-Xylene	91	16.595	16.595	0.000	99	2070387	4.00	4.23	
82 1,1,2,2-Tetrachloroethane	83	16.924	16.923	0.001	99	1572025	4.00	4.38	
83 1,2,3-Trichloropropane	110	17.085	17.085	0.000	96	482487	4.00	4.26	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.187	0.001	96	3091481	4.00	4.27	
85 N-Propylbenzene	120	17.749	17.749	0.000	99	834225	4.00	4.32	
86 2-Chlorotoluene	126	17.792	17.789	0.003	97	776733	4.00	4.25	
88 4-Ethyltoluene	105	17.905	17.907	-0.002	100	3268553	4.00	4.44	
87 1,3,5-Trimethylbenzene	120	17.986	17.983	0.003	92	1208158	4.00	4.14	
89 Alpha Methyl Styrene	118	18.223	18.225	-0.002	90	1249980	4.00	4.41	
90 n-Decane	57	18.283	18.286	-0.004	89	1782051	4.00	4.26	
91 tert-Butylbenzene	119	18.428	18.425	0.003	93	2769458	4.00	4.19	
92 1,2,4-Trimethylbenzene	105	18.439	18.440	-0.001	96	2771424	4.00	4.48	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	4212854	4.00	4.39	
93 1,3-Dichlorobenzene	146	18.719	18.720	-0.001	97	1974523	4.00	4.21	
96 Benzyl chloride	91	18.795	18.798	-0.003	98	1911127	4.00	4.42	
95 1,4-Dichlorobenzene	146	18.811	18.811	0.000	96	1888678	4.00	4.16	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	97	3121329	4.00	4.38	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	99	2671168	4.00	4.40	
99 Butylcyclohexane	83	18.984	18.983	0.001	93	2007247	4.00	4.16	
101 2,3-Dihydroindene	117	19.178	19.180	-0.002	93	2576919	4.00	4.30	
100 1,2-Dichlorobenzene	146	19.183	19.182	0.001	85	1867790	4.00	4.20	
102 Indene	116	19.312	19.315	-0.003	92	2221880	4.00	4.28	
103 n-Butylbenzene	91	19.318	19.320	-0.002	98	3267502	4.00	4.33	
104 Undecane	57	19.636	19.638	-0.002	95	2081162	4.00	4.12	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.801	-0.003	95	916988	4.00	5.14	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	98	2793851	4.00	4.04	
107 Dodecane	57	20.714	20.713	0.001	94	2184461	4.00	4.24	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	93	1645400	4.00	3.92	
109 Naphthalene	128	21.060	21.060	0.000	99	3238137	4.00	3.82	
110 Hexachlorobutadiene	225	21.281	21.283	-0.002	95	1527206	4.00	4.17	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	96	1579413	4.00	3.70	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	99	904624	4.00	2.60	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	98	871340	4.00	2.73	
A 115 C8 Range	1	14.281	(14.227-14.335)		0	6144751	4.00	4.01	
S 116 Xylenes, Total	100				0		12.0	13.0	
S 117 1,2-Dichloroethene, Total	1				0		8.00	8.02	

Reagents:

40L8DQP_00012

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:34:57

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC08.D

Injection Date: 03-Sep-2019 20:02:30

Instrument ID: MR

Operator ID: HMT

Lims ID: IC L8

Worklist Smp#: 14

Client ID:

Purge Vol: 500.000 mL

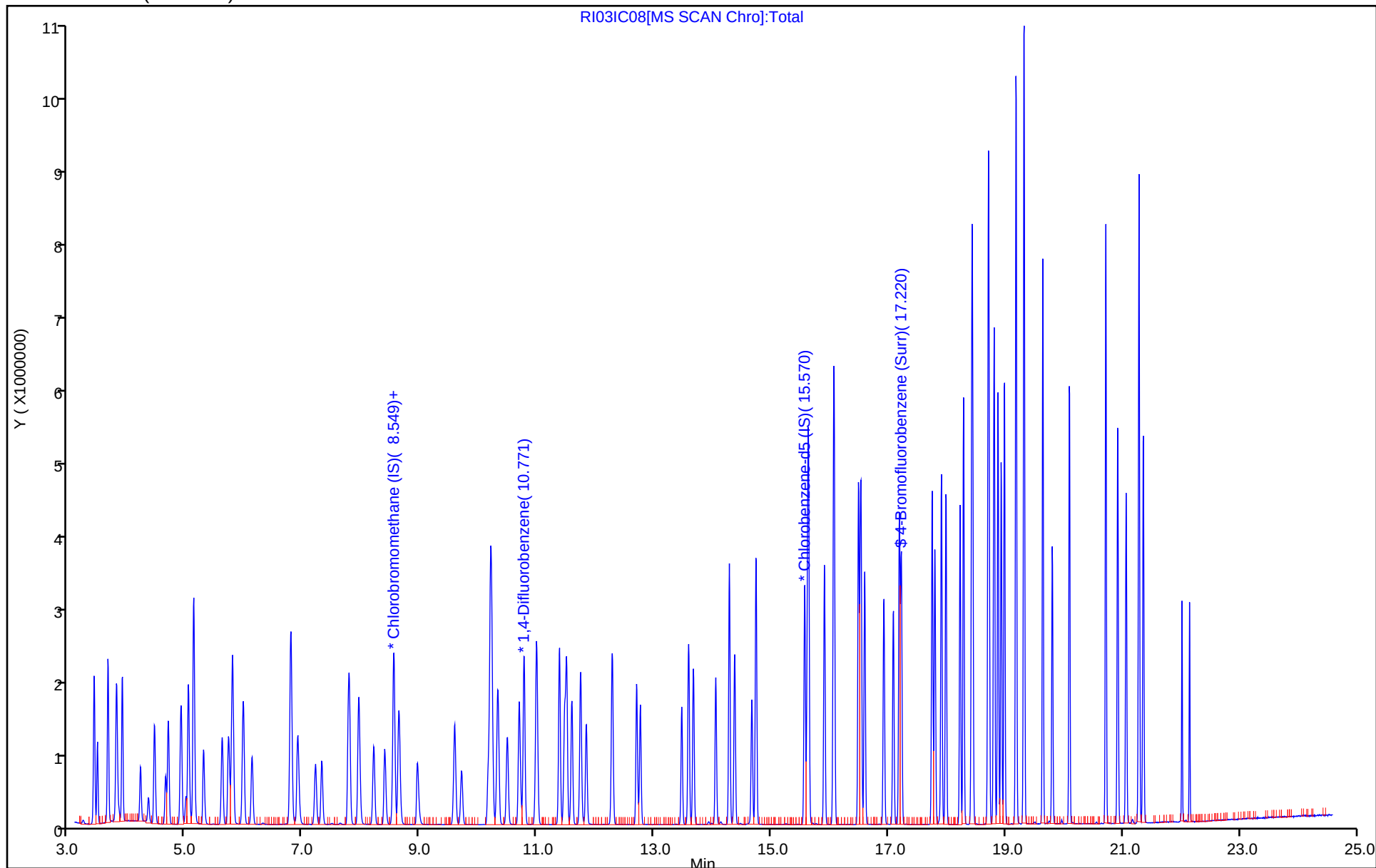
Dil. Factor: 1.0000

ALS Bottle#: 7

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Report Date: 04-Sep-2019 17:34:57

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC08.D

Injection Date: 03-Sep-2019 20:02:30

Instrument ID: MR

Lims ID: IC L8

Client ID:

Operator ID: HMT

ALS Bottle#:

7

Worklist Smp#:

14

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

Limit Group:

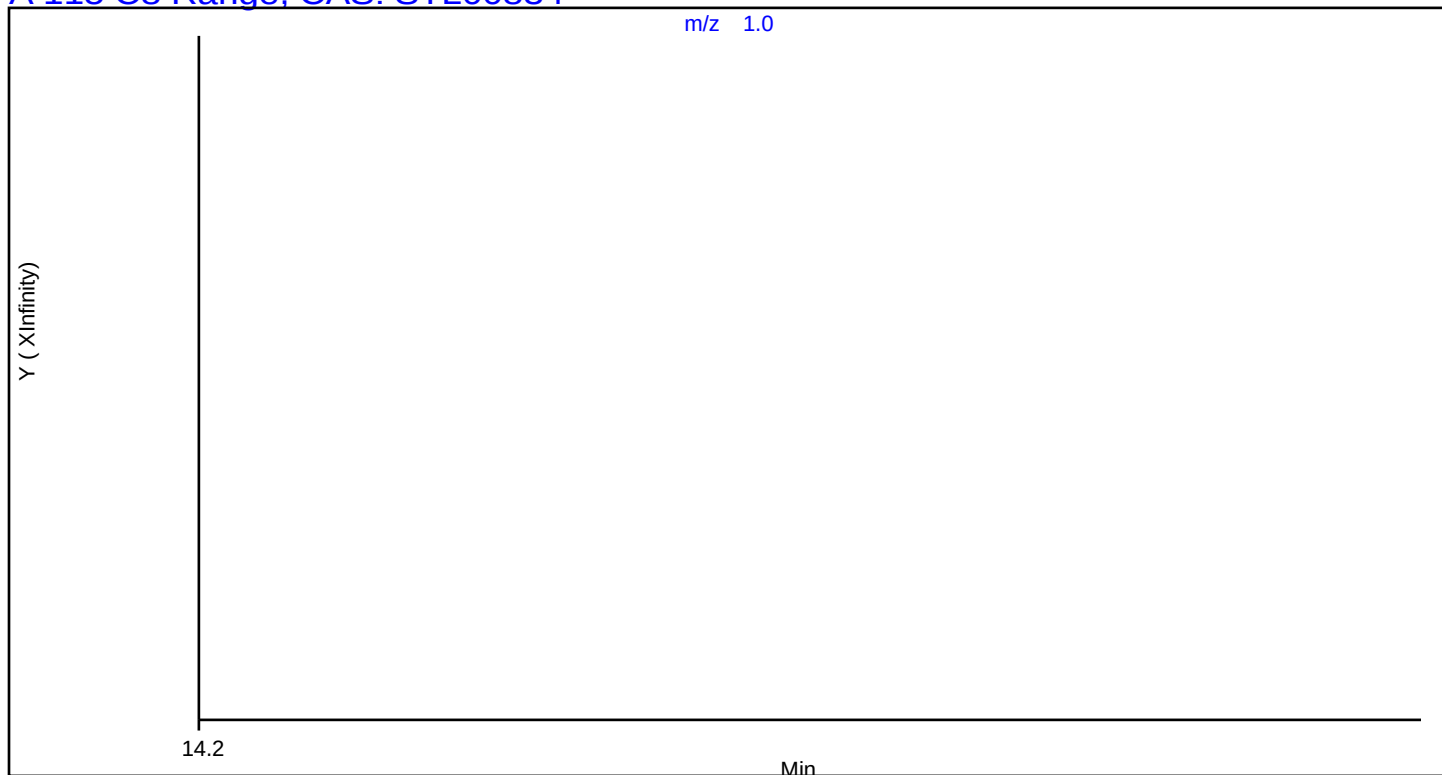
MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

[A 115 C8 Range, CAS: STL00834](#)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Lims ID: ICIS L7
 Client ID:
 Sample Type: ICIS Calib Level: 7
 Inject. Date: 04-Sep-2019 09:04:30 ALS Bottle#: 6 Worklist Smp#: 23
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info:
 Misc. Info.: 245077
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:35:03 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: tajh

Date: 04-Sep-2019 13:49:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.533	8.537	-0.004	97	371029	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.765	10.770	-0.005	94	2202831	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.568	-0.003	87	1824871	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.231	17.220	0.011	96	1123246	4.00	4.17	
6 Chlorodifluoromethane	51	3.432	3.428	0.004	97	494961	2.00	2.01	
7 Propene	41	3.437	3.433	0.004	99	303639	2.00	2.18	
8 Dichlorodifluoromethane	85	3.491	3.486	0.005	99	406890	2.00	1.94	
9 Chloromethane	52	3.664	3.661	0.003	95	88443	2.00	2.21	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.674	3.669	0.005	84	305222	2.00	1.77	
11 Acetaldehyde	44	3.815	3.811	0.004	98	589441	10.0	12.1	
12 Vinyl chloride	62	3.831	3.823	0.008	99	291942	2.00	2.32	
13 Butadiene	54	3.917	3.909	0.008	68	219332	2.00	2.31	
14 Butane	43	3.912	3.909	0.003	85	414338	2.00	2.26	
15 Bromomethane	94	4.224	4.221	0.003	94	274719	2.00	2.20	
16 Chloroethane	64	4.359	4.357	0.002	98	121039	2.00	2.30	
17 Ethanol	31	4.462	4.461	0.001	97	623885	10.0	11.0	
18 Vinyl bromide	106	4.650	4.649	0.001	97	218556	2.00	2.07	
19 2-Methylbutane	43	4.699	4.695	0.004	94	299043	2.00	2.08	
21 Trichlorofluoromethane	101	4.915	4.911	0.004	99	615965	2.00	2.04	
20 Acrolein	56	4.925	4.929	-0.004	96	71857	2.00	2.01	
24 Acetonitrile	40	4.996	5.002	-0.006	99	121363	2.00	2.28	
22 Acetone	58	5.044	5.050	-0.006	99	353148	6.00	5.97	
25 Pentane	72	5.136	5.133	0.003	74	44407	2.00	2.09	
23 Isopropyl alcohol	45	5.130	5.142	-0.012	89	1101651	6.00	6.36	
26 Ethyl ether	31	5.303	5.312	-0.009	93	301541	2.00	2.08	
27 1,1-Dichloroethene	96	5.616	5.615	0.001	98	239031	2.00	1.98	
28 Acrylonitrile	53	5.724	5.728	-0.004	60	187864	2.00	2.11	
29 2-Methyl-2-propanol	59	5.724	5.745	-0.021	95	449829	2.00	2.09	
30 1,1,2-Trichloro-1,2,2-trif	101	5.788	5.792	-0.004	97	517442	2.00	2.03	
32 3-Chloro-1-propene	39	5.977	5.964	0.013	94	242216	2.00	2.05	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.966	5.969	-0.003	97	224958	2.00	1.57	
33 Carbon disulfide	76	6.123	6.125	-0.002	99	650466	2.00	2.05	
34 trans-1,2-Dichloroethene	96	6.775	6.779	-0.004	97	269961	2.00	2.08	
35 2-Methylpentane	43	6.791	6.795	-0.004	96	642069	2.00	2.09	
36 Methyl tert-butyl ether	73	6.904	6.927	-0.023	97	648935	2.00	2.08	
37 1,1-Dichloroethane	63	7.201	7.208	-0.007	99	452018	2.00	2.03	
38 Vinyl acetate	43	7.309	7.318	-0.009	100	759618	2.00	2.16	
39 2-Butanone (MEK)	72	7.762	7.782	-0.020	95	128379	2.00	2.05	
40 Hexane	56	7.778	7.785	-0.007	77	210994	2.00	2.08	
41 Isopropyl ether	45	7.945	7.963	-0.018	98	974715	2.00	2.09	
42 cis-1,2-Dichloroethene	96	8.199	8.203	-0.004	93	281658	2.00	2.09	
43 Ethyl acetate	43	8.387	8.402	-0.015	98	671035	2.00	2.08	
44 Chloroform	83	8.544	8.549	-0.005	96	548666	2.00	2.04	
45 Tert-butyl ethyl ether	59	8.630	8.649	-0.019	96	816412	2.00	2.16	
46 Tetrahydrofuran	42	8.948	8.968	-0.020	95	329928	2.00	2.06	
47 1,1,1-Trichloroethane	97	9.579	9.586	-0.007	95	557623	2.00	2.03	
48 1,2-Dichloroethane	62	9.692	9.701	-0.009	95	341855	2.00	1.97	
50 n-Butanol	31	10.161	10.176	-0.015	85	124400	2.00	2.04	
49 Benzene	78	10.194	10.199	-0.005	96	822928	2.00	1.94	
51 Cyclohexane	69	10.188	10.200	-0.012	72	124018	2.00	1.97	
52 Carbon tetrachloride	117	10.215	10.222	-0.007	96	616542	2.00	2.19	
53 2,3-Dimethylpentane	71	10.318	10.324	-0.006	92	176630	2.00	2.04	
54 Thiophene	84	10.480	10.482	-0.002	95	442182	2.00	2.01	
55 Isooctane	57	10.981	10.986	-0.005	98	1324872	2.00	2.01	
57 n-Heptane	71	11.369	11.378	-0.009	94	290028	2.00	2.07	
56 1,2-Dichloropropane	63	11.456	11.464	-0.008	88	314183	2.00	2.05	
58 Trichloroethene	130	11.493	11.496	-0.003	95	376006	2.00	2.06	
59 Dibromomethane	93	11.580	11.587	-0.007	94	330920	2.00	2.03	
60 Dichlorobromomethane	83	11.725	11.735	-0.010	98	566326	2.00	2.10	
61 1,4-Dioxane	88	11.736	11.759	-0.023	92	129226	2.00	2.10	
62 Methyl methacrylate	41	11.828	11.836	-0.008	93	381120	2.00	2.03	
63 Methylcyclohexane	83	12.270	12.276	-0.006	95	477484	2.00	2.05	
64 4-Methyl-2-pentanone (MIBK)	43	12.691	12.705	-0.015	98	723671	2.00	2.08	
65 cis-1,3-Dichloropropene	75	12.755	12.759	-0.004	96	467682	2.00	2.20	
66 trans-1,3-Dichloropropene	75	13.462	13.467	-0.005	98	426975	2.00	2.22	
67 Toluene	91	13.575	13.584	-0.009	93	964843	2.00	2.16	
68 1,1,2-Trichloroethane	83	13.661	13.665	-0.004	96	297744	2.00	2.13	
69 2-Hexanone	58	14.044	14.055	-0.011	91	334091	2.00	2.18	
71 n-Octane	85	14.281	14.283	-0.002	96	308402	2.00	2.23	
70 Chlorodibromomethane	129	14.368	14.370	-0.002	96	626193	2.00	2.24	
72 Ethylene Dibromide	107	14.659	14.664	-0.005	97	580652	2.00	2.23	
73 Tetrachloroethene	129	14.729	14.736	-0.007	96	371188	2.00	2.07	
74 Chlorobenzene	112	15.613	15.615	-0.002	94	810531	2.00	2.15	
75 2,3-Dimethylheptane	43	15.629	15.634	-0.005	96	1107768	2.00	2.17	
76 Ethylbenzene	91	15.899	15.904	-0.005	98	1342943	2.00	2.22	
77 m-Xylene & p-Xylene	91	16.061	16.067	-0.006	97	2047299	4.00	4.40	
81 n-Nonane	57	16.487	16.488	-0.001	95	664979	2.00	2.24	
78 Bromoform	173	16.519	16.519	0.000	97	655431	2.00	2.57	
79 Styrene	104	16.535	16.535	0.000	99	726918	2.00	2.23	
80 o-Xylene	91	16.595	16.595	0.000	99	977284	2.00	2.07	
82 1,1,2,2-Tetrachloroethane	83	16.934	16.923	0.011	99	727258	2.00	2.10	
83 1,2,3-Trichloropropane	110	17.101	17.085	0.016	96	218447	2.00	2.00	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.204	17.187	0.017	95	1513692	2.00	2.17	
85 N-Propylbenzene	120	17.765	17.749	0.016	99	400140	2.00	2.15	
86 2-Chlorotoluene	126	17.808	17.789	0.019	97	371923	2.00	2.11	
88 4-Ethyltoluene	105	17.921	17.907	0.014	100	1546060	2.00	2.18	
87 1,3,5-Trimethylbenzene	120	17.997	17.983	0.014	93	597390	2.00	2.12	
89 Alpha Methyl Styrene	118	18.239	18.225	0.014	90	579320	2.00	2.12	
90 n-Decane	57	18.293	18.286	0.007	89	863597	2.00	2.14	
91 tert-Butylbenzene	119	18.439	18.425	0.014	92	1368395	2.00	2.15	
92 1,2,4-Trimethylbenzene	105	18.450	18.440	0.010	96	1351477	2.00	2.26	
94 sec-Butylbenzene	105	18.714	18.703	0.011	99	2012250	2.00	2.17	
93 1,3-Dichlorobenzene	146	18.730	18.720	0.010	98	934677	2.00	2.06	
96 Benzyl chloride	91	18.805	18.798	0.007	99	1077107	2.00	2.58	
95 1,4-Dichlorobenzene	146	18.822	18.811	0.011	96	950700	2.00	2.17	
97 4-Isopropyltoluene	119	18.881	18.871	0.010	97	1565012	2.00	2.28	
98 1,2,3-Trimethylbenzene	105	18.935	18.926	0.009	98	1296053	2.00	2.21	
99 Butylcyclohexane	83	18.989	18.983	0.006	94	1013362	2.00	2.17	
101 2,3-Dihydroindene	117	19.188	19.180	0.008	94	1216324	2.00	2.10	
100 1,2-Dichlorobenzene	146	19.188	19.182	0.006	87	905677	2.00	2.11	
102 Indene	116	19.323	19.315	0.008	90	1080114	2.00	2.16	
103 n-Butylbenzene	91	19.329	19.320	0.008	98	1599950	2.00	2.20	
104 Undecane	57	19.641	19.638	0.003	95	1037149	2.00	2.13	
105 1,2-Dibromo-3-Chloropropan	157	19.808	19.801	0.007	94	441614	2.00	2.56	
106 1,2,4,5-Tetramethylbenzene	119	20.094	20.093	0.001	98	1476473	2.00	2.21	
107 Dodecane	57	20.714	20.713	0.001	94	1013886	2.00	2.04	
108 1,2,4-Trichlorobenzene	180	20.919	20.919	0.000	94	856029	2.00	2.11	
109 Naphthalene	128	21.065	21.060	0.005	99	1765089	2.00	2.16	
110 Hexachlorobutadiene	225	21.286	21.283	0.003	95	748771	2.00	2.12	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	95	836533	2.00	2.03	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	98	761167	2.00	2.27	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	98	693175	2.00	2.25	
A 115 C8 Range	1	14.276	(14.233-14.319)		0	3050806	2.00	2.07	
S 116 Xylenes, Total	100				0		6.00	6.47	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.17	

Reagents:

40L7DQP_00012

Amount Added: 200.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:35:05

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D

Injection Date: 04-Sep-2019 09:04:30

Instrument ID: MR

Operator ID: HMT

Lims ID: ICIS L7

Worklist Smp#: 23

Client ID:

Purge Vol: 500.000 mL

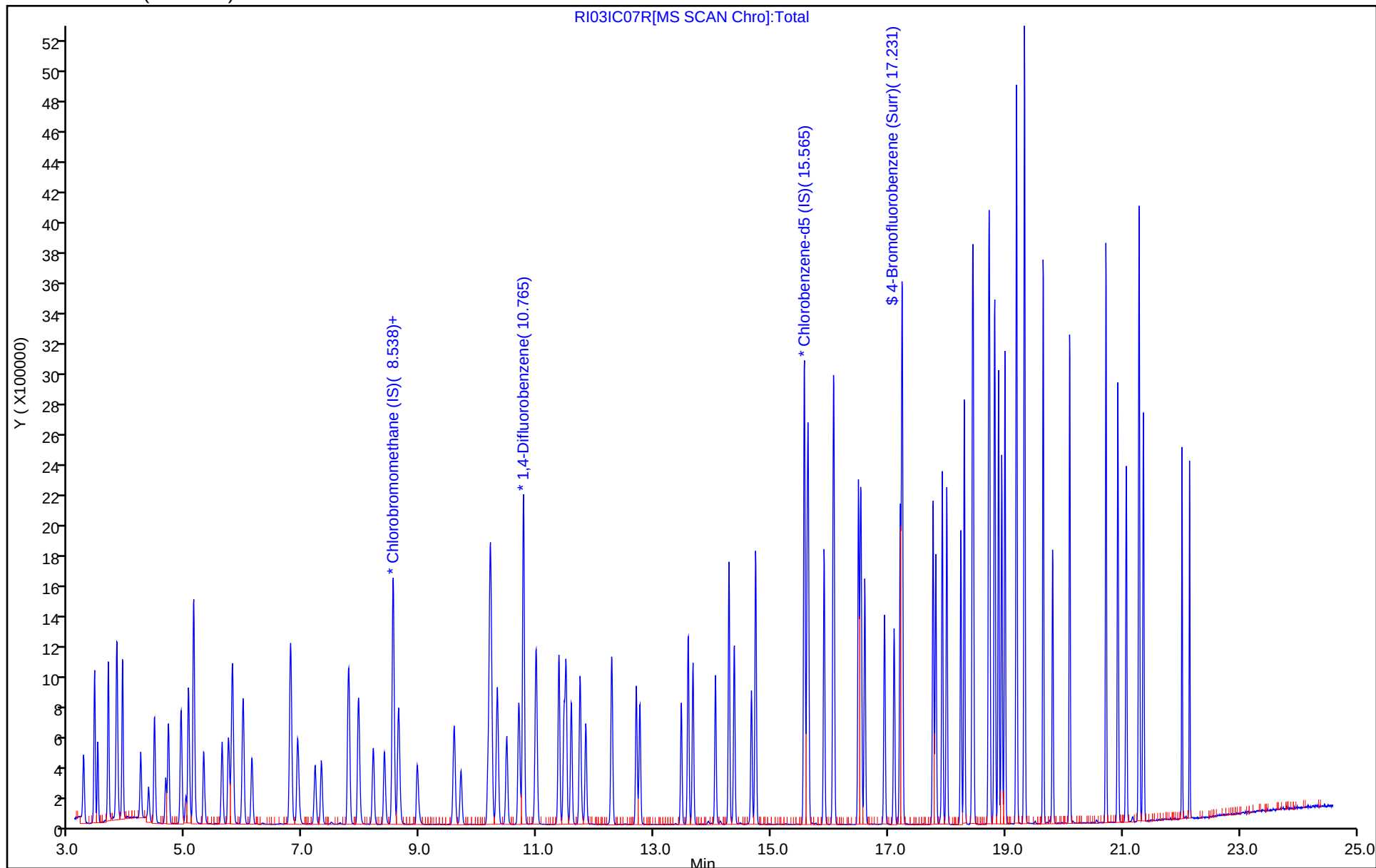
Dil. Factor: 1.0000

ALS Bottle#: 6

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Report Date: 04-Sep-2019 17:35:05

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D

Injection Date: 04-Sep-2019 09:04:30

Instrument ID: MR

Lims ID: ICIS L7

Client ID:

Operator ID: HMT

ALS Bottle#: 6

Worklist Smp#: 23

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

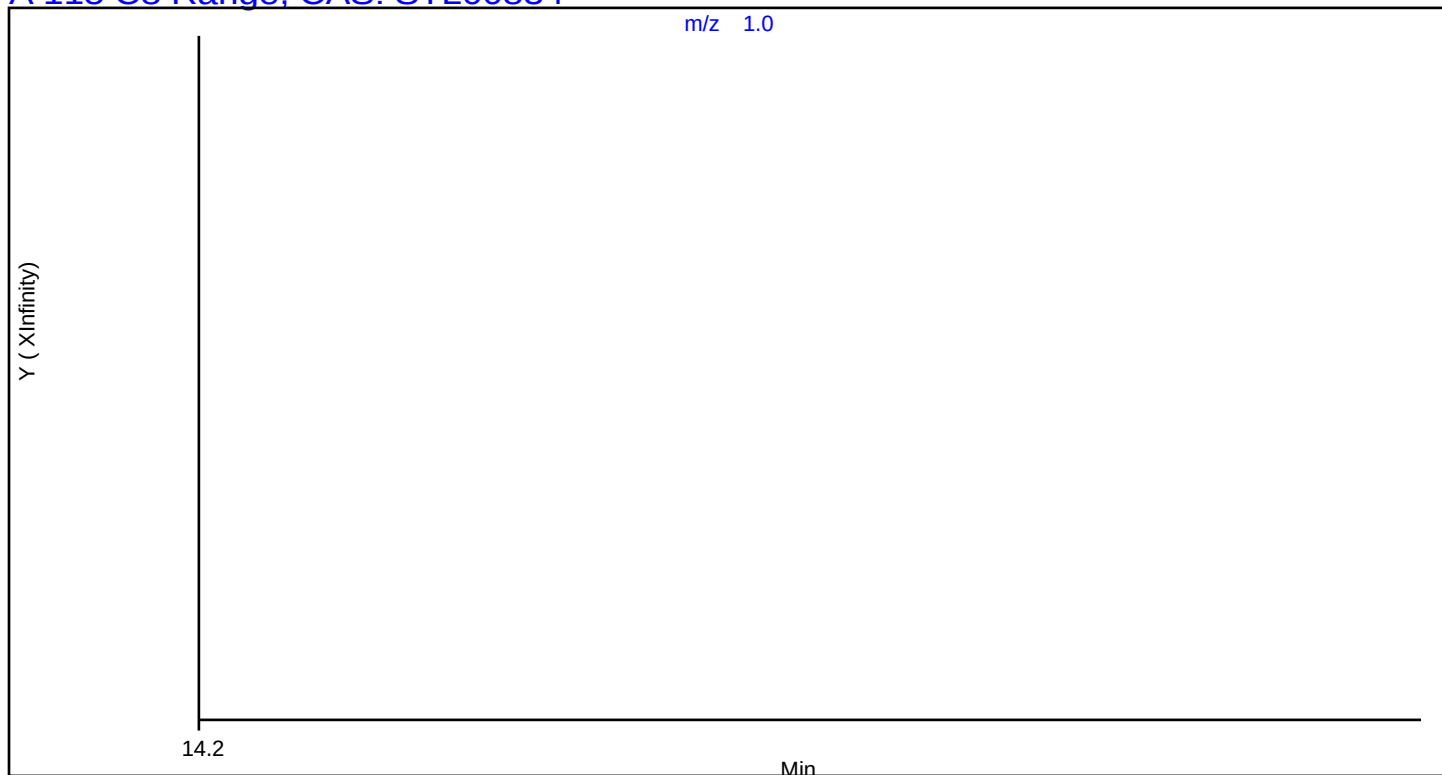
Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector MS SCAN

[A 115 C8 Range, CAS: STL00834](#)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: ICV 140-33257/18 Calibration Date: 09/03/2019 23:14
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RI03ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.654	2.732		2.06	2.00	2.9	35.0
Propene	Ave	1.501	1.699		2.26	2.00	13.2	35.0
Dichlorodifluoromethane	Ave	2.256	2.760		2.45	2.00	22.3	35.0
Chloromethane	Ave	0.4310	0.3773		1.75	2.00	-12.4	35.0
1,2-Dichlorotetrafluoroethane	Ave	1.860	2.270		2.44	2.00	22.0	35.0
Acetaldehyde	Ave	0.5247	0.3531		6.73	10.0	-32.7	35.0
Vinyl chloride	Ave	1.359	0.9812		1.44	2.00	-27.8	35.0
1,3-Butadiene	Ave	1.022	0.7543		1.48	2.00	-26.2	35.0
Butane	Ave	1.977	1.415		1.43	2.00	-28.4	35.0
Bromomethane	Ave	1.344	0.9665		1.44	2.00	-28.1	35.0
Chloroethane	Ave	0.5671	0.4065		1.43	2.00	-28.3	35.0
Ethanol	Ave	0.6120	0.4984		8.14	10.0	-18.6	35.0
Vinyl bromide	Ave	1.137	1.219		2.15	2.00	7.3	35.0
2-Methylbutane	Ave	1.548	1.534		1.98	2.00	-0.9	35.0
Trichlorofluoromethane	Ave	3.252	3.201		1.97	2.00	-1.6	35.0
Acrolein	Ave	0.3855	0.4188		2.17	2.00	8.6	35.0
Acetonitrile	Ave	0.5751	0.5773		2.01	2.00	0.4	35.0
Acetone	Ave	0.6380	0.7053		2.21	2.00	10.6	35.0
Isopropyl alcohol	Ave	1.868	2.287		2.45	2.00	22.4	35.0
Pentane	Ave	0.2289	0.2400		2.10	2.00	4.9	35.0
Ethyl ether	Ave	1.561	1.593		2.04	2.00	2.1	35.0
1,1-Dichloroethene	Ave	1.301	1.293		1.99	2.00	-0.6	35.0
t-Butyl alcohol	Ave	2.319	2.427		2.09	2.00	4.6	35.0
Acrylonitrile	Ave	0.9589	1.005		2.10	2.00	4.8	35.0
1,1,2-Trichlorotrifluoroethane	Ave	2.749	2.703		1.97	2.00	-1.7	35.0
Methylene Chloride	Ave	1.543	1.252		1.62	2.00	-18.9	35.0
3-Chloropropene	Ave	1.275	1.271		1.99	2.00	-0.4	35.0
Carbon disulfide	Ave	3.419	3.454		2.02	2.00	1.0	35.0
trans-1,2-Dichloroethene	Ave	1.401	1.393		1.99	2.00	-0.5	35.0
2-Methylpentane	Ave	3.306	3.047		1.84	2.00	-7.9	35.0
Methyl tert-butyl ether	Ave	3.370	3.639		2.16	2.00	8.0	35.0
1,1-Dichloroethane	Ave	2.406	2.463		2.05	2.00	2.4	35.0
Vinyl acetate	Ave	3.791	4.194		2.21	2.00	10.6	35.0
2-Butanone	Ave	0.6748	0.6866		2.03	2.00	1.7	35.0
Hexane	Ave	1.095	1.086		1.98	2.00	-0.8	35.0
Isopropyl ether	Ave	5.017	5.309		2.12	2.00	5.8	35.0
cis-1,2-Dichloroethene	Ave	1.454	1.556		2.14	2.00	7.1	35.0
Ethyl acetate	Ave	3.480	3.357		1.93	2.00	-3.5	35.0
Chloroform	Ave	2.898	2.853		1.97	2.00	-1.6	35.0
Tert-butyl ethyl ether	Ave	4.084	4.068		1.99	2.00	-0.4	35.0

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Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: ICV 140-33257/18 Calibration Date: 09/03/2019 23:14
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RI03ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.726	1.770		2.05	2.00	2.6	35.0
1,1,1-Trichloroethane	Ave	2.962	2.890		1.95	2.00	-2.4	35.0
1,2-Dichloroethane	Ave	0.3151	0.2985		1.89	2.00	-5.3	35.0
1-Butanol	Ave	0.1107	0.1186		2.14	2.00	7.1	35.0
Benzene	Ave	0.7714	0.7541		1.96	2.00	-2.2	35.0
Cyclohexane	Ave	0.1143	0.1058		1.85	2.00	-7.5	35.0
Carbon tetrachloride	Ave	0.5101	0.5533		2.17	2.00	8.5	35.0
2,3-Dimethylpentane	Ave	0.1575	0.1596		2.03	2.00	1.3	35.0
Thiophene	Ave	0.4003	0.3973		1.98	2.00	-0.8	35.0
2,2,4-Trimethylpentane	Ave	1.199	1.190		1.99	2.00	-0.7	35.0
Heptane	Ave	0.2550	0.2538		1.99	2.00	-0.5	35.0
1,2-Dichloropropane	Ave	0.2780	0.2746		1.98	2.00	-1.2	35.0
Trichloroethene	Ave	0.3320	0.3339		2.01	2.00	0.6	35.0
Dibromomethane	Ave	0.2957	0.2899		1.96	2.00	-1.9	35.0
Bromodichloromethane	Ave	0.4906	0.4819		1.96	2.00	-1.8	35.0
1,4-Dioxane	Ave	0.1118	0.1164		2.08	2.00	4.1	35.0
Methyl methacrylate	Ave	0.3404	0.3414		2.01	2.00	0.3	35.0
Methylcyclohexane	Ave	0.4226	0.5207		2.46	2.00	23.2	35.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6308	0.6336		2.01	2.00	0.4	35.0
cis-1,3-Dichloropropene	Ave	0.3853	0.4115		2.14	2.00	6.8	35.0
trans-1,3-Dichloropropene	Ave	0.4218	0.4365		2.07	2.00	3.5	35.0
Toluene	Ave	0.9777	0.9801		2.01	2.00	0.3	35.0
1,1,2-Trichloroethane	Ave	0.3059	0.2919		1.91	2.00	-4.6	35.0
2-Hexanone	Ave	0.3356	0.3387		2.02	2.00	0.9	35.0
Octane	Ave	0.3027	0.3198		2.11	2.00	5.7	35.0
Dibromochloromethane	Ave	0.6120	0.6302		2.06	2.00	3.0	35.0
1,2-Dibromoethane	Ave	0.5700	0.5866		2.06	2.00	2.9	35.0
Tetrachloroethene	Ave	0.3936	0.3980		2.02	2.00	1.1	35.0
Chlorobenzene	Ave	0.8282	0.8745		2.11	2.00	5.6	35.0
2,3-Dimethylheptane	Ave	1.121	0.9897		1.77	2.00	-11.7	35.0
Ethylbenzene	Ave	1.326	1.366		2.06	2.00	3.0	35.0
m-Xylene & p-Xylene	Ave	1.019	1.100		4.31	4.00	7.9	35.0
Nonane	Ave	0.6517	0.7107		2.18	2.00	9.0	35.0
Bromoform	Ave	0.5593	0.6738		2.41	2.00	20.5	35.0
Styrene	Ave	0.7149	0.7951		2.22	2.00	11.2	35.0
o-Xylene	Ave	1.034	1.046		2.02	2.00	1.1	35.0
1,1,2,2-Tetrachloroethane	Ave	0.7601	0.7895		2.08	2.00	3.9	35.0
1,2,3-Trichloropropane	Ave	0.2394	0.2468		2.06	2.00	3.1	35.0
Isopropylbenzene	Ave	1.532	1.677		2.19	2.00	9.5	35.0
Propylbenzene	Ave	0.4084	0.4371		2.14	2.00	7.0	35.0
2-Chlorotoluene	Ave	0.3869	0.4052		2.10	2.00	4.8	35.0

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 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RI03ICV.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.557	1.535		1.97	2.00	-1.4	35.0
1,3,5-Trimethylbenzene	Ave	0.6179	0.7185		2.33	2.00	16.3	35.0
Alpha Methyl Styrene	Ave	0.5996	0.5702		1.90	2.00	-4.9	35.0
Decane	Ave	0.8851	0.8755		1.98	2.00	-1.1	35.0
tert-Butylbenzene	Ave	1.397	1.438		2.06	2.00	3.0	35.0
1,2,4-Trimethylbenzene	Ave	1.310	1.413		2.16	2.00	7.9	35.0
sec-Butylbenzene	Ave	2.029	2.108		2.08	2.00	3.9	35.0
1,3-Dichlorobenzene	Ave	0.9926	0.9918		2.00	2.00	-0.0	35.0
Benzyl chloride	Ave	0.9143	1.133		2.48	2.00	23.9	35.0
1,4-Dichlorobenzene	Ave	0.9599	0.9877		2.06	2.00	2.9	35.0
4-Isopropyltoluene	Ave	1.507	1.570		2.08	2.00	4.1	35.0
1,2,3-Trimethylbenzene	Ave	1.283	0.9702		1.51	2.00	-24.4	35.0
Butylcyclohexane	Ave	1.022	0.9653		1.89	2.00	-5.5	35.0
1,2-Dichlorobenzene	Ave	0.9404	0.9869		2.10	2.00	4.9	35.0
Indane	Ave	1.268	1.314		2.07	2.00	3.6	35.0
Indene	Ave	1.098	0.9838		1.79	2.00	-10.4	35.0
Butylbenzene	Ave	1.596	1.641		2.06	2.00	2.8	35.0
Undecane	Ave	1.068	0.9949		1.86	2.00	-6.8	35.0
1,2-Dibromo-3-Chloropropane	Ave	0.3774	0.3741		1.98	2.00	-0.9	35.0
1,2,4,5-Tetramethylbenzene	Ave	1.463	1.380		1.89	2.00	-5.7	35.0
Dodecane	Ave	1.091	0.9112		1.67	2.00	-16.5	35.0
1,2,4-Trichlorobenzene	Ave	0.8883	0.8582		1.93	2.00	-3.4	35.0
Naphthalene	Ave	1.792	1.752		1.96	2.00	-2.2	35.0
Hexachlorobutadiene	Ave	0.7749	0.7587		1.96	2.00	-2.1	35.0
1,2,3-Trichlorobenzene	Ave	0.9026	0.8675		1.92	2.00	-3.9	35.0
2-Methylnaphthalene	Ave	0.7349	0.6386		1.74	2.00	-13.1	50.0
1-Methylnaphthalene	Ave	0.6749	0.5762		1.71	2.00	-14.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5911	0.5775		3.91	4.00	-2.3	35.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03ICV.D
 Lims ID: ICV
 Client ID:
 Sample Type: ICV
 Inject. Date: 03-Sep-2019 23:14:30 ALS Bottle#: 14 Worklist Smp#: 18
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012931-016
 Misc. Info.: S98
 Operator ID: HMT Instrument ID: MR
 Sublist:
 Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 17:40:33 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: RT Order ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0302

First Level Reviewer: wilestd

Date: 04-Sep-2019 14:13:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.533	8.537	-0.004	95	487104	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.766	10.770	-0.004	93	2786219	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.568	-0.003	85	2417964	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.220	-0.005	96	1396394	4.00	3.91	
6 Chlorodifluoromethane	51	3.416	3.428	-0.012	97	665323	2.00	2.06	
7 Propene	41	3.421	3.433	-0.012	97	413807	2.00	2.26	
8 Dichlorodifluoromethane	85	3.475	3.486	-0.011	99	672148	2.00	2.45	
9 Chloromethane	52	3.653	3.661	-0.008	100	91896	2.00	1.75	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.658	3.669	-0.011	92	552858	2.00	2.44	
11 Acetaldehyde	44	3.804	3.811	-0.007	99	429996	10.0	6.73	
12 Vinyl chloride	62	3.815	3.823	-0.008	99	238960	2.00	1.44	
13 Butadiene	54	3.901	3.909	-0.008	70	183715	2.00	1.48	
14 Butane	43	3.901	3.909	-0.008	84	344684	2.00	1.43	
15 Bromomethane	94	4.214	4.221	-0.007	95	235399	2.00	1.44	
16 Chloroethane	64	4.343	4.357	-0.014	97	99012	2.00	1.43	
17 Ethanol	31	4.446	4.461	-0.015	96	606976	10.0	8.14	
18 Vinyl bromide	106	4.640	4.649	-0.009	98	296995	2.00	2.15	
19 2-Methylbutane	43	4.688	4.695	-0.007	92	373695	2.00	1.98	
21 Trichlorofluoromethane	101	4.904	4.911	-0.007	99	779708	2.00	1.97	
20 Acrolein	56	4.915	4.929	-0.014	96	101991	2.00	2.17	
24 Acetonitrile	40	4.985	5.002	-0.017	99	140600	2.00	2.01	
22 Acetone	58	5.039	5.050	-0.011	98	171786	2.00	2.21	
25 Pentane	72	5.125	5.133	-0.008	96	58449	2.00	2.10	
23 Isopropyl alcohol	45	5.120	5.142	-0.022	57	556913	2.00	2.45	
26 Ethyl ether	31	5.292	5.312	-0.020	94	387936	2.00	2.04	
27 1,1-Dichloroethene	96	5.605	5.615	-0.010	99	314926	2.00	1.99	
28 Acrylonitrile	53	5.718	5.728	-0.010	98	244845	2.00	2.10	
29 2-Methyl-2-propanol	59	5.713	5.745	-0.032	95	590985	2.00	2.09	
30 1,1,2-Trichloro-1,2,2-trif	101	5.788	5.792	-0.004	95	658349	2.00	1.97	
32 3-Chloro-1-propene	39	5.972	5.964	0.008	94	309446	2.00	1.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
31 Methylene Chloride	84	5.961	5.969	-0.008	98	305021	2.00	1.62	
33 Carbon disulfide	76	6.123	6.125	-0.002	99	841334	2.00	2.02	
34 trans-1,2-Dichloroethene	96	6.775	6.779	-0.004	98	339348	2.00	1.99	
35 2-Methylpentane	43	6.786	6.795	-0.009	95	741984	2.00	1.84	
36 Methyl tert-butyl ether	73	6.905	6.927	-0.022	97	886199	2.00	2.16	
37 1,1-Dichloroethane	63	7.201	7.208	-0.007	99	599900	2.00	2.05	
38 Vinyl acetate	43	7.309	7.318	-0.009	100	1021435	2.00	2.21	
39 2-Butanone (MEK)	72	7.762	7.782	-0.020	97	167215	2.00	2.03	
40 Hexane	56	7.784	7.785	-0.001	81	264570	2.00	1.98	
41 Isopropyl ether	45	7.945	7.963	-0.018	99	1292979	2.00	2.12	
42 cis-1,2-Dichloroethene	96	8.199	8.203	-0.004	92	379084	2.00	2.14	
43 Ethyl acetate	43	8.387	8.402	-0.015	98	817609	2.00	1.93	
44 Chloroform	83	8.544	8.549	-0.005	94	694731	2.00	1.97	
45 Tert-butyl ethyl ether	59	8.630	8.649	-0.019	95	990828	2.00	1.99	
46 Tetrahydrofuran	42	8.948	8.968	-0.020	96	431175	2.00	2.05	
47 1,1,1-Trichloroethane	97	9.579	9.586	-0.007	95	703869	2.00	1.95	
48 1,2-Dichloroethane	62	9.698	9.701	-0.003	95	415771	2.00	1.89	
50 n-Butanol	31	10.156	10.176	-0.020	85	165163	2.00	2.14	
49 Benzene	78	10.199	10.199	0.000	96	1050500	2.00	1.96	
51 Cyclohexane	69	10.199	10.200	-0.001	78	147325	2.00	1.85	
52 Carbon tetrachloride	117	10.221	10.222	-0.001	95	770798	2.00	2.17	
53 2,3-Dimethylpentane	71	10.323	10.324	-0.001	93	222336	2.00	2.03	
54 Thiophene	84	10.480	10.482	-0.002	96	553518	2.00	1.98	
55 Isooctane	57	10.981	10.986	-0.005	98	1657413	2.00	1.99	
57 n-Heptane	71	11.375	11.378	-0.003	94	353567	2.00	1.99	
56 1,2-Dichloropropane	63	11.461	11.464	-0.003	91	382586	2.00	1.98	
58 Trichloroethene	130	11.499	11.496	0.003	97	465209	2.00	2.01	
59 Dibromomethane	93	11.580	11.587	-0.007	92	403892	2.00	1.96	
60 Dichlorobromomethane	83	11.731	11.735	-0.004	98	671356	2.00	1.96	
61 1,4-Dioxane	88	11.747	11.759	-0.012	91	162220	2.00	2.08	
62 Methyl methacrylate	41	11.833	11.836	-0.003	92	475620	2.00	2.01	
63 Methylcyclohexane	83	12.275	12.276	-0.001	94	725366	2.00	2.46	
64 4-Methyl-2-pentanone (MIBK)	43	12.696	12.705	-0.009	98	882651	2.00	2.01	
65 cis-1,3-Dichloropropene	75	12.755	12.759	-0.004	96	573285	2.00	2.14	
66 trans-1,3-Dichloropropene	75	13.462	13.467	-0.005	99	527739	2.00	2.07	
67 Toluene	91	13.580	13.584	-0.004	94	1184965	2.00	2.01	
68 1,1,2-Trichloroethane	83	13.661	13.665	-0.004	96	352895	2.00	1.91	
69 2-Hexanone	58	14.049	14.055	-0.006	90	409519	2.00	2.02	
71 n-Octane	85	14.281	14.283	-0.002	95	386605	2.00	2.11	
70 Chlorodibromomethane	129	14.368	14.370	-0.002	98	761861	2.00	2.06	
72 Ethylene Dibromide	107	14.664	14.664	0.000	98	709124	2.00	2.06	
73 Tetrachloroethene	129	14.734	14.736	-0.002	97	481215	2.00	2.02	
74 Chlorobenzene	112	15.613	15.615	-0.002	97	1057290	2.00	2.11	
75 2,3-Dimethylheptane	43	15.635	15.634	0.001	97	1196491	2.00	1.77	
76 Ethylbenzene	91	15.904	15.904	0.000	98	1651398	2.00	2.06	
77 m-Xylene & p-Xylene	91	16.066	16.067	-0.001	96	2658947	4.00	4.31	
81 n-Nonane	57	16.487	16.488	-0.001	94	859191	2.00	2.18	
78 Bromoform	173	16.514	16.519	-0.005	97	814612	2.00	2.41	
79 Styrene	104	16.530	16.535	-0.005	100	961242	2.00	2.22	
80 o-Xylene	91	16.589	16.595	-0.006	99	1264728	2.00	2.02	
82 1,1,2,2-Tetrachloroethane	83	16.918	16.923	-0.005	99	954479	2.00	2.08	
83 1,2,3-Trichloropropane	110	17.080	17.085	-0.005	96	298332	2.00	2.06	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.182	17.187	-0.005	94	2027212	2.00	2.19	
85 N-Propylbenzene	120	17.749	17.749	0.000	99	528427	2.00	2.14	
86 2-Chlorotoluene	126	17.792	17.789	0.003	97	489927	2.00	2.10	
88 4-Ethyltoluene	105	17.905	17.907	-0.002	100	1855796	2.00	1.97	
87 1,3,5-Trimethylbenzene	120	17.981	17.983	-0.002	93	868605	2.00	2.33	
89 Alpha Methyl Styrene	118	18.223	18.225	-0.002	90	689322	2.00	1.90	
90 n-Decane	57	18.282	18.286	-0.004	88	1058480	2.00	1.98	
91 tert-Butylbenzene	119	18.423	18.425	-0.002	95	1738756	2.00	2.06	
92 1,2,4-Trimethylbenzene	105	18.433	18.440	-0.007	97	1708749	2.00	2.16	
94 sec-Butylbenzene	105	18.703	18.703	0.000	99	2548640	2.00	2.08	
93 1,3-Dichlorobenzene	146	18.714	18.720	-0.006	97	1199012	2.00	2.00	
96 Benzyl chloride	91	18.795	18.798	-0.003	99	1369312	2.00	2.48	
95 1,4-Dichlorobenzene	146	18.806	18.811	-0.005	96	1194099	2.00	2.06	
97 4-Isopropyltoluene	119	18.870	18.871	-0.001	97	1897958	2.00	2.08	
98 1,2,3-Trimethylbenzene	105	18.924	18.926	-0.002	98	1172985	2.00	1.51	
99 Butylcyclohexane	83	18.978	18.983	-0.005	94	1166971	2.00	1.89	
101 2,3-Dihydroindene	117	19.178	19.180	-0.002	94	1589081	2.00	2.07	
100 1,2-Dichlorobenzene	146	19.178	19.182	-0.004	84	1193116	2.00	2.10	
102 Indene	116	19.312	19.315	-0.003	90	1189391	2.00	1.79	
103 n-Butylbenzene	91	19.318	19.320	-0.002	97	1984272	2.00	2.06	
104 Undecane	57	19.636	19.638	-0.002	96	1202812	2.00	1.86	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.801	-0.003	95	452311	2.00	1.98	
106 1,2,4,5-Tetramethylbenzene	119	20.089	20.093	-0.004	98	1668110	2.00	1.89	
107 Dodecane	57	20.714	20.713	0.001	94	1101670	2.00	1.67	
108 1,2,4-Trichlorobenzene	180	20.914	20.919	-0.005	93	1037594	2.00	1.93	
109 Naphthalene	128	21.060	21.060	0.000	99	2118031	2.00	1.96	
110 Hexachlorobutadiene	225	21.281	21.283	-0.002	96	917213	2.00	1.96	
111 1,2,3-Trichlorobenzene	180	21.356	21.355	0.001	96	1048759	2.00	1.92	
112 2-Methylnaphthalene	142	22.014	22.014	0.000	98	772072	2.00	1.74	
113 1-Methylnaphthalene	142	22.143	22.143	0.000	98	696658	2.00	1.71	
A 115 C8 Range	1	14.281	(14.233-14.319)		0	3787954	2.00	2.03	
S 116 Xylenes, Total	100				0		6.00	6.34	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.13	

Reagents:

40CV101S_00098

Amount Added: 100.00

Units: mL

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Sep-2019 17:40:38

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03ICV.D

Injection Date: 03-Sep-2019 23:14:30

Instrument ID: MR

Operator ID: HMT

Lims ID: ICV

Worklist Smp#: 18

Client ID:

Purge Vol: 500.000 mL

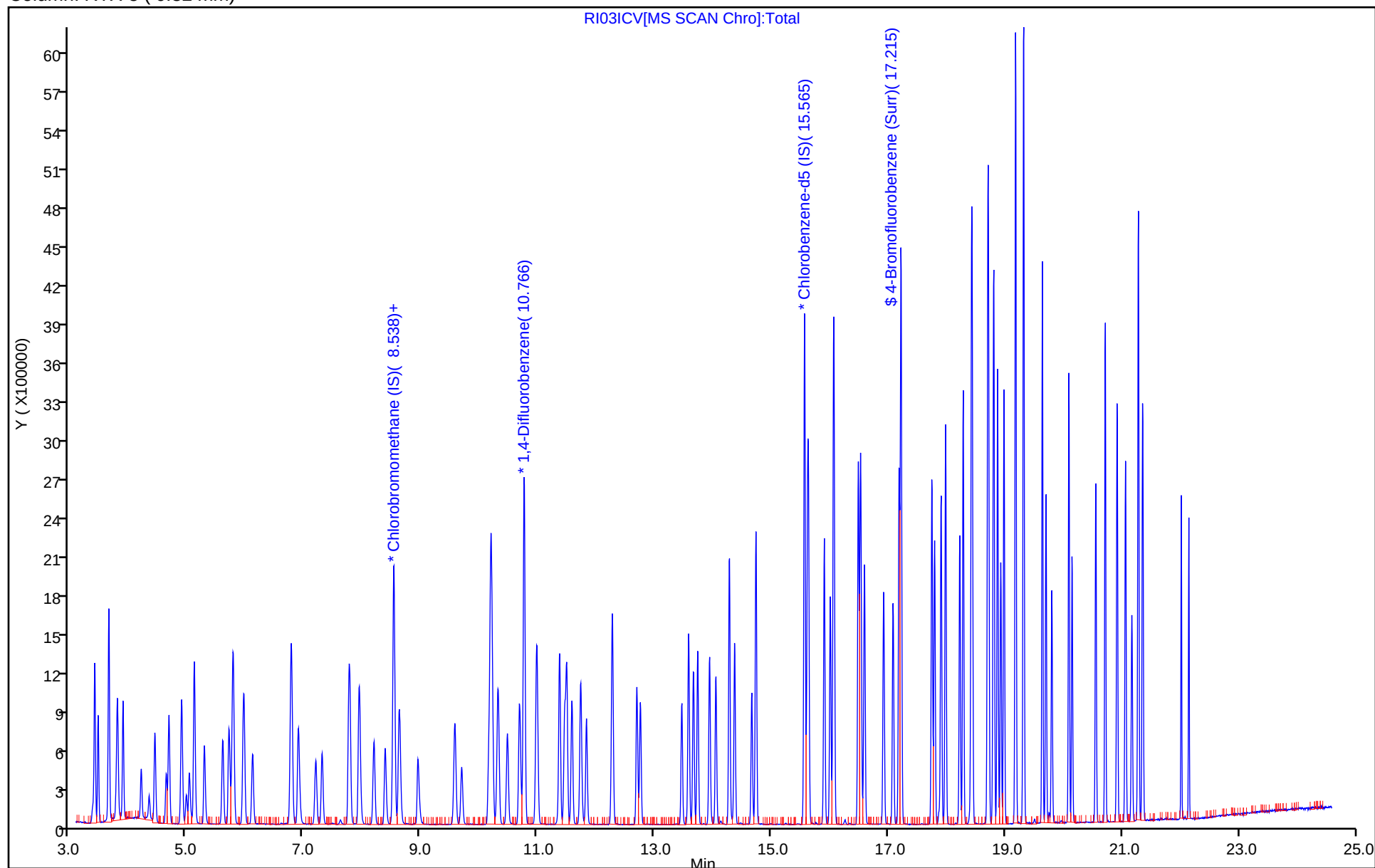
Dil. Factor: 1.0000

ALS Bottle#: 14

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34104/2 Calibration Date: 10/03/2019 09:54
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.654	2.376		1.79	2.00	-10.5	30.0
Propene	Ave	1.501	1.390		1.85	2.00	-7.4	30.0
Dichlorodifluoromethane	Ave	2.256	2.633		2.33	2.00	16.7	30.0
Chloromethane	Ave	0.4310	0.4225		1.96	2.00	-2.0	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.860	2.379		2.56	2.00	27.9	30.0
Acetaldehyde	Ave	0.5247	0.5919		11.3	10.0	12.8	30.0
Vinyl chloride	Ave	1.359	1.401		2.06	2.00	3.1	30.0
1,3-Butadiene	Ave	1.022	1.036		2.03	2.00	1.4	30.0
Butane	Ave	1.977	1.981		2.00	2.00	0.2	30.0
Bromomethane	Ave	1.344	1.287		1.92	2.00	-4.2	30.0
Chloroethane	Ave	0.5671	0.4910		1.73	2.00	-13.4	30.0
Ethanol	Ave	0.6120	0.5898		9.64	10.0	-3.6	30.0
Vinyl bromide	Ave	1.137	1.168		2.06	2.00	2.8	30.0
2-Methylbutane	Ave	1.548	1.250		1.61	2.00	-19.3	30.0
Trichlorofluoromethane	Ave	3.252	3.102		1.91	2.00	-4.6	30.0
Acrolein	Ave	0.3855	0.4153		2.16	2.00	7.8	30.0
Acetonitrile	Ave	0.5751	0.4658		1.62	2.00	-19.0	30.0
Acetone	Ave	0.6380	0.5749		5.41	6.00	-9.9	30.0
Isopropyl alcohol	Ave	1.868	1.581		5.08	6.00	-15.4	30.0
Pentane	Ave	0.2289	0.2181		1.91	2.00	-4.7	30.0
Ethyl ether	Ave	1.561	1.028		1.32	2.00	-34.2*	30.0
1,1-Dichloroethene	Ave	1.301	1.373		2.11	2.00	5.5	30.0
t-Butyl alcohol	Ave	2.319	2.074		1.79	2.00	-10.6	30.0
Acrylonitrile	Ave	0.9589	0.9276		1.93	2.00	-3.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.749	2.835		2.06	2.00	3.1	30.0
Methylene Chloride	Ave	1.543	1.324		1.72	2.00	-14.2	30.0
3-Chloropropene	Ave	1.275	1.073		1.68	2.00	-15.9	30.0
Carbon disulfide	Ave	3.419	3.692		2.16	2.00	8.0	30.0
trans-1,2-Dichloroethene	Ave	1.401	1.387		1.98	2.00	-0.9	30.0
2-Methylpentane	Ave	3.306	2.510		1.52	2.00	-24.1	30.0
Methyl tert-butyl ether	Ave	3.370	2.953		1.75	2.00	-12.4	30.0
1,1-Dichloroethane	Ave	2.406	2.144		1.78	2.00	-10.9	30.0
Vinyl acetate	Ave	3.791	2.920		1.54	2.00	-23.0	30.0
2-Butanone	Ave	0.6748	0.5737		1.70	2.00	-15.0	30.0
Hexane	Ave	1.095	0.8949		1.63	2.00	-18.3	30.0
Isopropyl ether	Ave	5.017	3.742		1.49	2.00	-25.4	30.0
cis-1,2-Dichloroethene	Ave	1.454	1.464		2.01	2.00	0.7	30.0
Ethyl acetate	Ave	3.480	2.581		1.48	2.00	-25.8	30.0
Chloroform	Ave	2.898	2.482		1.71	2.00	-14.4	30.0
Tert-butyl ethyl ether	Ave	4.084	3.319		1.63	2.00	-18.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34104/2 Calibration Date: 10/03/2019 09:54
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.726	1.271		1.47	2.00	-26.3	30.0
1,1,1-Trichloroethane	Ave	2.962	2.551		1.72	2.00	-13.9	30.0
1,2-Dichloroethane	Ave	0.3151	0.2554		1.62	2.00	-18.9	30.0
1-Butanol	Ave	0.1107	0.0691		1.25	2.00	-37.5*	30.0
Benzene	Ave	0.7714	0.6553		1.70	2.00	-15.1	30.0
Cyclohexane	Ave	0.1143	0.0883		1.55	2.00	-22.7	30.0
Carbon tetrachloride	Ave	0.5101	0.4798		1.88	2.00	-5.9	30.0
2,3-Dimethylpentane	Ave	0.1575	0.1479		1.88	2.00	-6.1	30.0
Thiophene	Ave	0.4003	0.3721		1.86	2.00	-7.1	30.0
2,2,4-Trimethylpentane	Ave	1.199	0.9737		1.62	2.00	-18.8	30.0
Heptane	Ave	0.2550	0.2126		1.67	2.00	-16.6	30.0
1,2-Dichloropropane	Ave	0.2780	0.2420		1.74	2.00	-12.9	30.0
Trichloroethene	Ave	0.3320	0.3010		1.81	2.00	-9.3	30.0
Dibromomethane	Ave	0.2957	0.2844		1.92	2.00	-3.8	30.0
Bromodichloromethane	Ave	0.4906	0.4215		1.72	2.00	-14.1	30.0
1,4-Dioxane	Ave	0.1118	0.1185		2.12	2.00	5.9	30.0
Methyl methacrylate	Ave	0.3404	0.2396		1.41	2.00	-29.6	30.0
Methylcyclohexane	Ave	0.4226	0.3810		1.80	2.00	-9.8	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6308	0.4675		1.48	2.00	-25.9	30.0
cis-1,3-Dichloropropene	Ave	0.3853	0.3584		1.86	2.00	-7.0	30.0
trans-1,3-Dichloropropene	Ave	0.4218	0.3874		1.84	2.00	-8.1	30.0
Toluene	Ave	0.9777	0.9588		1.96	2.00	-1.9	30.0
1,1,2-Trichloroethane	Ave	0.3059	0.3052		2.00	2.00	-0.2	30.0
2-Hexanone	Ave	0.3356	0.2972		1.77	2.00	-11.4	30.0
Octane	Ave	0.3027	0.2862		1.89	2.00	-5.4	30.0
Dibromochloromethane	Ave	0.6120	0.5634		1.84	2.00	-7.9	30.0
1,2-Dibromoethane	Ave	0.5700	0.5707		2.00	2.00	0.1	30.0
Tetrachloroethene	Ave	0.3936	0.3626		1.84	2.00	-7.9	30.0
Chlorobenzene	Ave	0.8282	0.8437		2.04	2.00	1.9	30.0
2,3-Dimethylheptane	Ave	1.121	0.8987		1.60	2.00	-19.8	30.0
Ethylbenzene	Ave	1.326	1.283		1.94	2.00	-3.2	30.0
m-Xylene & p-Xylene	Ave	1.019	0.999		3.92	4.00	-2.0	30.0
Nonane	Ave	0.6517	0.5943		1.82	2.00	-8.8	30.0
Bromoform	Ave	0.5593	0.4532		1.62	2.00	-19.0	30.0
Styrene	Ave	0.7149	0.7870		2.20	2.00	10.1	30.0
o-Xylene	Ave	1.034	1.051		2.03	2.00	1.6	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7601	0.9266		2.44	2.00	21.9	30.0
1,2,3-Trichloropropane	Ave	0.2394	0.2631		2.20	2.00	9.9	30.0
Isopropylbenzene	Ave	1.532	1.667		2.18	2.00	8.8	30.0
Propylbenzene	Ave	0.4084	0.4908		2.40	2.00	20.2	30.0
2-Chlorotoluene	Ave	0.3869	0.4639		2.40	2.00	19.9	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34104/2 Calibration Date: 10/03/2019 09:54
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ03.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.557	1.762		2.26	2.00	13.2	30.0
1,3,5-Trimethylbenzene	Ave	0.6179	0.6902		2.23	2.00	11.7	30.0
Alpha Methyl Styrene	Ave	0.5996	0.7164		2.39	2.00	19.5	30.0
Decane	Ave	0.8851	0.8983		2.03	2.00	1.5	30.0
tert-Butylbenzene	Ave	1.397	1.553		2.22	2.00	11.2	30.0
1,2,4-Trimethylbenzene	Ave	1.310	1.524		2.33	2.00	16.4	30.0
sec-Butylbenzene	Ave	2.029	2.295		2.26	2.00	13.1	30.0
1,3-Dichlorobenzene	Ave	0.9926	1.174		2.37	2.00	18.3	30.0
Benzyl chloride	Ave	0.9143	1.195		2.61	2.00	30.7*	30.0
1,4-Dichlorobenzene	Ave	0.9599	1.189		2.48	2.00	23.9	30.0
4-Isopropyltoluene	Ave	1.507	1.856		2.46	2.00	23.1	30.0
1,2,3-Trimethylbenzene	Ave	1.283	1.594		2.48	2.00	24.2	30.0
Butylcyclohexane	Ave	1.022	1.234		2.42	2.00	20.8	30.0
1,2-Dichlorobenzene	Ave	0.9404	1.181		2.51	2.00	25.5	30.0
Indane	Ave	1.268	1.521		2.40	2.00	19.9	30.0
Indene	Ave	1.098	1.368		2.49	2.00	24.5	30.0
Butylbenzene	Ave	1.596	1.951		2.45	2.00	22.3	30.0
Undecane	Ave	1.068	1.106		2.07	2.00	3.6	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3774	0.4391		2.33	2.00	16.4	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.463	1.822		2.49	2.00	24.5	30.0
Dodecane	Ave	1.091	1.033		1.89	2.00	-5.3	30.0
1,2,4-Trichlorobenzene	Ave	0.8883	1.141		2.57	2.00	28.4	30.0
Naphthalene	Ave	1.792	2.325		2.60	2.00	29.8	30.0
Hexachlorobutadiene	Ave	0.7749	0.8949		2.31	2.00	15.5	30.0
1,2,3-Trichlorobenzene	Ave	0.9026	1.022		2.27	2.00	13.3	30.0
2-Methylnaphthalene	Ave	0.7349	0.2796			2.00	-62.0*	50.0
1-Methylnaphthalene	Ave	0.6749	0.2589			2.00	-61.6*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5911	0.6272		4.24	4.00	6.1	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RCCVJ03.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 03-Oct-2019 09:54:30 ALS Bottle#: 15 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013261-002
 Misc. Info.: P96
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:17:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	91	317552	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.749	0.000	93	1834746	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1448340	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.215	0.000	96	908349	4.00	4.24	
6 Chlorodifluoromethane	51	3.421	3.421	0.000	97	377262	2.00	1.79	
7 Propene	41	3.432	3.432	0.000	97	220699	2.00	1.85	
8 Dichlorodifluoromethane	85	3.480	3.480	0.000	100	418016	2.00	2.33	
9 Chloromethane	52	3.658	3.658	0.000	98	67086	2.00	1.96	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.664	3.664	0.000	88	377717	2.00	2.56	
11 Acetaldehyde	44	3.804	3.804	0.000	99	469880	10.0	11.3	
12 Vinyl chloride	62	3.820	3.820	0.000	99	222386	2.00	2.06	
13 Butadiene	54	3.901	3.901	0.000	69	164533	2.00	2.03	
14 Butane	43	3.901	3.901	0.000	85	314570	2.00	2.00	
15 Bromomethane	94	4.214	4.214	0.000	94	204410	2.00	1.92	
16 Chloroethane	64	4.349	4.349	0.000	94	77955	2.00	1.73	
17 Ethanol	31	4.440	4.440	0.000	98	468223	10.0	9.64	
18 Vinyl bromide	106	4.640	4.640	0.000	97	185457	2.00	2.06	
19 2-Methylbutane	43	4.683	4.683	0.000	89	198397	2.00	1.61	
21 Trichlorofluoromethane	101	4.899	4.899	0.000	97	492470	2.00	1.91	
20 Acrolein	56	4.909	4.909	0.000	27	65946	2.00	2.16	
24 Acetonitrile	40	4.985	4.985	0.000	100	73954	2.00	1.62	
22 Acetone	58	5.023	5.023	0.000	96	273823	6.00	5.41	
23 Isopropyl alcohol	45	5.103	5.103	0.000	92	753231	6.00	5.08	
25 Pentane	72	5.120	5.120	0.000	96	34635	2.00	1.91	
26 Ethyl ether	31	5.287	5.287	0.000	89	163162	2.00	1.32	
27 1,1-Dichloroethene	96	5.600	5.600	0.000	96	217937	2.00	2.11	
29 2-Methyl-2-propanol	59	5.697	5.697	0.000	94	329242	2.00	1.79	
28 Acrylonitrile	53	5.707	5.707	0.000	95	147282	2.00	1.93	
30 1,1,2-Trichloro-1,2,2-trif	101	5.772	5.772	0.000	97	450092	2.00	2.06	
31 Methylene Chloride	84	5.950	5.950	0.000	95	210265	2.00	1.72	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.961	5.961	0.000	96	170312	2.00	1.68	
33 Carbon disulfide	76	6.106	6.106	0.000	100	586263	2.00	2.16	
34 trans-1,2-Dichloroethene	96	6.759	6.759	0.000	94	220300	2.00	1.98	
35 2-Methylpentane	43	6.780	6.780	0.000	94	398488	2.00	1.52	
36 Methyl tert-butyl ether	73	6.888	6.888	0.000	96	468789	2.00	1.75	
37 1,1-Dichloroethane	63	7.185	7.185	0.000	100	340348	2.00	1.78	
38 Vinyl acetate	43	7.293	7.293	0.000	99	463638	2.00	1.54	
39 2-Butanone (MEK)	72	7.746	7.746	0.000	97	91095	2.00	1.70	
40 Hexane	56	7.762	7.762	0.000	93	142086	2.00	1.63	
41 Isopropyl ether	45	7.929	7.929	0.000	95	594081	2.00	1.49	
42 cis-1,2-Dichloroethene	96	8.183	8.183	0.000	85	232434	2.00	2.01	
43 Ethyl acetate	43	8.371	8.371	0.000	99	409763	2.00	1.48	
44 Chloroform	83	8.528	8.528	0.000	96	394021	2.00	1.71	
45 Tert-butyl ethyl ether	59	8.614	8.614	0.000	95	526949	2.00	1.63	
46 Tetrahydrofuran	42	8.937	8.937	0.000	95	201877	2.00	1.47	
47 1,1,1-Trichloroethane	97	9.563	9.563	0.000	94	405110	2.00	1.72	
48 1,2-Dichloroethane	62	9.682	9.682	0.000	95	234305	2.00	1.62	
50 n-Butanol	31	10.140	10.140	0.000	79	63422	2.00	1.25	
51 Cyclohexane	69	10.178	10.178	0.000	63	80998	2.00	1.55	
49 Benzene	78	10.178	10.178	0.000	94	601145	2.00	1.70	
52 Carbon tetrachloride	117	10.205	10.205	0.000	96	440187	2.00	1.88	
53 2,3-Dimethylpentane	71	10.302	10.302	0.000	90	135692	2.00	1.88	
54 Thiophene	84	10.458	10.458	0.000	93	341339	2.00	1.86	
55 Isooctane	57	10.965	10.965	0.000	98	893203	2.00	1.62	
57 n-Heptane	71	11.359	11.359	0.000	90	195028	2.00	1.67	
56 1,2-Dichloropropane	63	11.445	11.445	0.000	91	222031	2.00	1.74	
58 Trichloroethene	130	11.477	11.477	0.000	95	276088	2.00	1.81	
59 Dibromomethane	93	11.569	11.569	0.000	93	260932	2.00	1.92	
60 Dichlorobromomethane	83	11.715	11.715	0.000	98	386695	2.00	1.72	
61 1,4-Dioxane	88	11.725	11.725	0.000	39	108689	2.00	2.12	
62 Methyl methacrylate	41	11.817	11.817	0.000	96	219824	2.00	1.41	
63 Methylcyclohexane	83	12.259	12.259	0.000	95	349517	2.00	1.80	
64 4-Methyl-2-pentanone (MIBK)	43	12.680	12.680	0.000	96	428892	2.00	1.48	
65 cis-1,3-Dichloropropene	75	12.739	12.739	0.000	94	328746	2.00	1.86	
66 trans-1,3-Dichloropropene	75	13.451	13.451	0.000	97	280555	2.00	1.84	
67 Toluene	91	13.569	13.569	0.000	93	694333	2.00	1.96	
68 1,1,2-Trichloroethane	83	13.650	13.650	0.000	95	221042	2.00	2.00	
69 2-Hexanone	58	14.033	14.033	0.000	93	215239	2.00	1.77	
71 n-Octane	85	14.270	14.270	0.000	91	207259	2.00	1.89	
70 Chlorodibromomethane	129	14.357	14.357	0.000	97	408020	2.00	1.84	
72 Ethylene Dibromide	107	14.648	14.648	0.000	97	413252	2.00	2.00	
73 Tetrachloroethene	129	14.723	14.723	0.000	95	262562	2.00	1.84	
74 Chlorobenzene	112	15.602	15.602	0.000	98	610947	2.00	2.04	
75 2,3-Dimethylheptane	43	15.624	15.624	0.000	95	650794	2.00	1.60	
76 Ethylbenzene	91	15.894	15.894	0.000	97	929017	2.00	1.94	
77 m-Xylene & p-Xylene	91	16.050	16.050	0.000	96	1446405	4.00	3.92	
81 n-Nonane	57	16.476	16.476	0.000	91	430396	2.00	1.82	
78 Bromoform	173	16.508	16.508	0.000	95	328167	2.00	1.62	
79 Styrene	104	16.519	16.519	0.000	97	569942	2.00	2.20	
80 o-Xylene	91	16.578	16.578	0.000	99	761027	2.00	2.03	
82 1,1,2,2-Tetrachloroethane	83	16.913	16.913	0.000	99	670990	2.00	2.44	
83 1,2,3-Trichloropropane	110	17.080	17.080	0.000	96	190508	2.00	2.20	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.182	17.182	0.000	94	1207090	2.00	2.18	
85 N-Propylbenzene	120	17.743	17.743	0.000	100	355409	2.00	2.40	
86 2-Chlorotoluene	126	17.792	17.792	0.000	96	335923	2.00	2.40	
88 4-Ethyltoluene	105	17.900	17.900	0.000	100	1276216	2.00	2.26	
87 1,3,5-Trimethylbenzene	120	17.980	17.980	0.000	93	499795	2.00	2.23	
89 Alpha Methyl Styrene	118	18.223	18.223	0.000	93	518812	2.00	2.39	
90 n-Decane	57	18.282	18.282	0.000	91	650497	2.00	2.03	
91 tert-Butylbenzene	119	18.423	18.423	0.000	95	1124857	2.00	2.22	
92 1,2,4-Trimethylbenzene	105	18.433	18.433	0.000	96	1103679	2.00	2.33	
94 sec-Butylbenzene	105	18.698	18.698	0.000	99	1661873	2.00	2.26	
93 1,3-Dichlorobenzene	146	18.714	18.714	0.000	95	850022	2.00	2.37	
96 Benzyl chloride	91	18.795	18.795	0.000	99	865366	2.00	2.61	
95 1,4-Dichlorobenzene	146	18.805	18.805	0.000	98	861182	2.00	2.48	
97 4-Isopropyltoluene	119	18.870	18.870	0.000	97	1344349	2.00	2.46	
98 1,2,3-Trimethylbenzene	105	18.924	18.924	0.000	97	1154500	2.00	2.48	
99 Butylcyclohexane	83	18.978	18.978	0.000	98	893700	2.00	2.42	
100 1,2-Dichlorobenzene	146	19.178	19.178	0.000	85	854901	2.00	2.51	
101 2,3-Dihydroindene	117	19.178	19.178	0.000	94	1101160	2.00	2.40	
102 Indene	116	19.307	19.307	0.000	92	990355	2.00	2.49	
103 n-Butylbenzene	91	19.312	19.312	0.000	98	1412928	2.00	2.45	
104 Undecane	57	19.636	19.636	0.000	95	801233	2.00	2.07	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.798	0.000	94	317992	2.00	2.33	
106 1,2,4,5-Tetramethylbenzene	119	20.089	20.089	0.000	98	1319277	2.00	2.49	
107 Dodecane	57	20.709	20.709	0.000	96	747813	2.00	1.89	
108 1,2,4-Trichlorobenzene	180	20.909	20.909	0.000	93	826066	2.00	2.57	
109 Naphthalene	128	21.054	21.054	0.000	100	1683778	2.00	2.60	
110 Hexachlorobutadiene	225	21.275	21.275	0.000	94	648079	2.00	2.31	
111 1,2,3-Trichlorobenzene	180	21.345	21.345	0.000	96	740438	2.00	2.27	
112 2-Methylnaphthalene	142	22.009	22.009	0.000	98	202460	2.00	0.7608	
113 1-Methylnaphthalene	142	22.138	22.138	0.000	96	187481	2.00	0.7672	
A 115 C8 Range	1	14.265	(14.222-14.308)		0	1853216	2.00	1.51	
S 116 Xylenes, Total	100				0		6.00	5.95	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.00	

Reagents:

40CV101P_00096

Amount Added: 100.00

Units: ml

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 04-Oct-2019 11:18:10

Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RCCVJ03.D

Injection Date: 03-Oct-2019 09:54:30

Instrument ID: MR

Operator ID: HMT

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

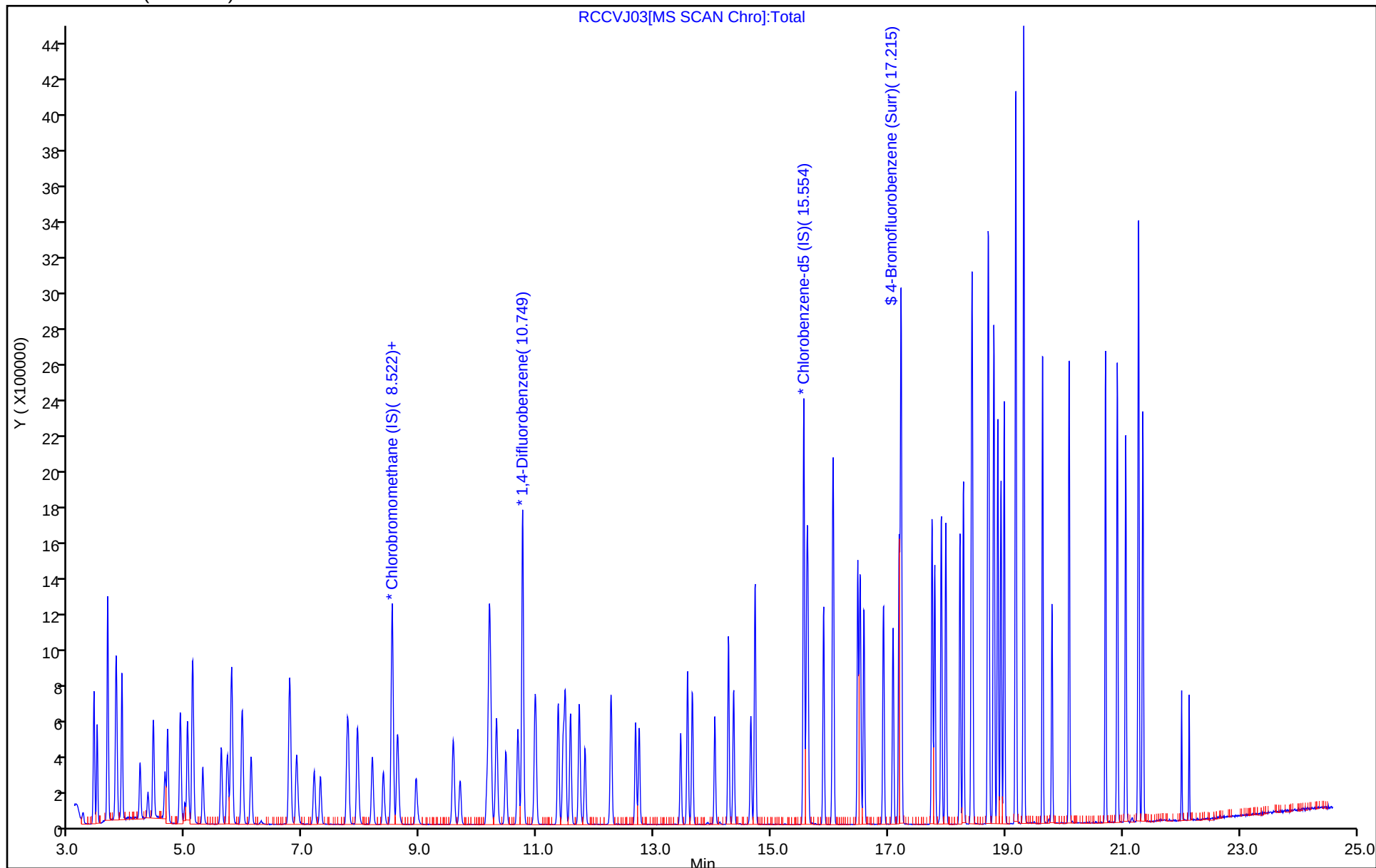
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34105/2 Calibration Date: 10/04/2019 10:37
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ01A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.654	2.291		1.73	2.00	-13.7	30.0
Propene	Ave	1.501	1.389		1.85	2.00	-7.5	30.0
Dichlorodifluoromethane	Ave	2.256	2.515		2.23	2.00	11.5	30.0
Chloromethane	Ave	0.4310	0.4670		2.17	2.00	8.4	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.860	2.637		2.84	2.00	41.8*	30.0
Acetaldehyde	Ave	0.5247	0.5560		10.6	10.0	6.0	30.0
Vinyl chloride	Ave	1.359	1.472		2.17	2.00	8.4	30.0
1,3-Butadiene	Ave	1.022	1.094		2.14	2.00	7.1	30.0
Butane	Ave	1.977	2.030		2.05	2.00	2.6	30.0
Bromomethane	Ave	1.344	1.387		2.06	2.00	3.2	30.0
Chloroethane	Ave	0.5671	0.5663		2.00	2.00	-0.1	30.0
Ethanol	Ave	0.6120	0.5797		9.47	10.0	-5.3	30.0
Vinyl bromide	Ave	1.137	1.367		2.40	2.00	20.2	30.0
2-Methylbutane	Ave	1.548	1.368		1.77	2.00	-11.6	30.0
Trichlorofluoromethane	Ave	3.252	3.004		1.85	2.00	-7.6	30.0
Acrolein	Ave	0.3855	0.4326		2.24	2.00	12.2	30.0
Acetonitrile	Ave	0.5751	0.5249		1.83	2.00	-8.7	30.0
Acetone	Ave	0.6380	0.5880		5.53	6.00	-7.8	30.0
Isopropyl alcohol	Ave	1.868	1.708		5.48	6.00	-8.6	30.0
Pentane	Ave	0.2289	0.2503		2.19	2.00	9.3	30.0
Ethyl ether	Ave	1.561	1.089		1.40	2.00	-30.2*	30.0
1,1-Dichloroethene	Ave	1.301	1.355		2.08	2.00	4.2	30.0
t-Butyl alcohol	Ave	2.319	2.144		1.85	2.00	-7.5	30.0
Acrylonitrile	Ave	0.9589	0.9181		1.91	2.00	-4.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.749	2.875		2.09	2.00	4.6	30.0
Methylene Chloride	Ave	1.543	1.369		1.77	2.00	-11.3	30.0
3-Chloropropene	Ave	1.275	1.094		1.72	2.00	-14.2	30.0
Carbon disulfide	Ave	3.419	3.697		2.16	2.00	8.1	30.0
trans-1,2-Dichloroethene	Ave	1.401	1.473		2.10	2.00	5.2	30.0
2-Methylpentane	Ave	3.306	2.764		1.67	2.00	-16.4	30.0
Methyl tert-butyl ether	Ave	3.370	3.205		1.90	2.00	-4.9	30.0
1,1-Dichloroethane	Ave	2.406	2.243		1.86	2.00	-6.8	30.0
Vinyl acetate	Ave	3.791	3.173		1.67	2.00	-16.3	30.0
2-Butanone	Ave	0.6748	0.6422		1.90	2.00	-4.8	30.0
Hexane	Ave	1.095	0.9790		1.79	2.00	-10.6	30.0
Isopropyl ether	Ave	5.017	4.131		1.65	2.00	-17.7	30.0
cis-1,2-Dichloroethene	Ave	1.454	1.567		2.16	2.00	7.8	30.0
Ethyl acetate	Ave	3.480	2.865		1.65	2.00	-17.7	30.0
Chloroform	Ave	2.898	2.619		1.81	2.00	-9.6	30.0
Tert-butyl ethyl ether	Ave	4.084	3.647		1.79	2.00	-10.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34105/2 Calibration Date: 10/04/2019 10:37
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ01A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.726	1.436		1.66	2.00	-16.8	30.0
1,1,1-Trichloroethane	Ave	2.962	2.693		1.82	2.00	-9.1	30.0
1,2-Dichloroethane	Ave	0.3151	0.2556		1.62	2.00	-18.9	30.0
1-Butanol	Ave	0.1107	0.0714		1.29	2.00	-35.5*	30.0
Benzene	Ave	0.7714	0.7197		1.87	2.00	-6.7	30.0
Cyclohexane	Ave	0.1143	0.1024		1.79	2.00	-10.4	30.0
Carbon tetrachloride	Ave	0.5101	0.4738		1.86	2.00	-7.1	30.0
2,3-Dimethylpentane	Ave	0.1575	0.1597		2.03	2.00	1.4	30.0
Thiophene	Ave	0.4003	0.4053		2.02	2.00	1.2	30.0
2,2,4-Trimethylpentane	Ave	1.199	1.050		1.75	2.00	-12.4	30.0
Heptane	Ave	0.2550	0.2387		1.87	2.00	-6.4	30.0
1,2-Dichloropropane	Ave	0.2780	0.2614		1.88	2.00	-6.0	30.0
Trichloroethene	Ave	0.3320	0.3258		1.96	2.00	-1.9	30.0
Dibromomethane	Ave	0.2957	0.2917		1.97	2.00	-1.3	30.0
Bromodichloromethane	Ave	0.4906	0.4295		1.75	2.00	-12.5	30.0
1,4-Dioxane	Ave	0.1118	0.1226		2.19	2.00	9.6	30.0
Methyl methacrylate	Ave	0.3404	0.2575		1.51	2.00	-24.4	30.0
Methylcyclohexane	Ave	0.4226	0.4156		1.97	2.00	-1.6	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6308	0.4932		1.56	2.00	-21.8	30.0
cis-1,3-Dichloropropene	Ave	0.3853	0.3739		1.94	2.00	-3.0	30.0
trans-1,3-Dichloropropene	Ave	0.4218	0.4030		1.91	2.00	-4.5	30.0
Toluene	Ave	0.9777	1.032		2.11	2.00	5.6	30.0
1,1,2-Trichloroethane	Ave	0.3059	0.3168		2.07	2.00	3.6	30.0
2-Hexanone	Ave	0.3356	0.3242		1.93	2.00	-3.4	30.0
Octane	Ave	0.3027	0.3159		2.09	2.00	4.4	30.0
Dibromochloromethane	Ave	0.6120	0.5532		1.81	2.00	-9.6	30.0
1,2-Dibromoethane	Ave	0.5700	0.5940		2.08	2.00	4.2	30.0
Tetrachloroethene	Ave	0.3936	0.3851		1.96	2.00	-2.2	30.0
Chlorobenzene	Ave	0.8282	0.8757		2.11	2.00	5.7	30.0
2,3-Dimethylheptane	Ave	1.121	0.9151		1.63	2.00	-18.3	30.0
Ethylbenzene	Ave	1.326	1.353		2.04	2.00	2.1	30.0
m-Xylene & p-Xylene	Ave	1.019	1.040		4.08	4.00	2.0	30.0
Nonane	Ave	0.6517	0.6088		1.87	2.00	-6.6	30.0
Bromoform	Ave	0.5593	0.4280		1.53	2.00	-23.5	30.0
Styrene	Ave	0.7149	0.7870		2.20	2.00	10.1	30.0
o-Xylene	Ave	1.034	1.083		2.09	2.00	4.7	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7601	0.8803		2.32	2.00	15.8	30.0
1,2,3-Trichloropropane	Ave	0.2394	0.2367		1.98	2.00	-1.1	30.0
Isopropylbenzene	Ave	1.532	1.656		2.16	2.00	8.1	30.0
Propylbenzene	Ave	0.4084	0.4735		2.32	2.00	15.9	30.0
2-Chlorotoluene	Ave	0.3869	0.4438		2.29	2.00	14.7	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34105/2 Calibration Date: 10/04/2019 10:37
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ01A.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.557	1.730		2.22	2.00	11.1	30.0
1,3,5-Trimethylbenzene	Ave	0.6179	0.6966		2.25	2.00	12.7	30.0
Alpha Methyl Styrene	Ave	0.5996	0.6699		2.23	2.00	11.7	30.0
Decane	Ave	0.8851	0.8910		2.01	2.00	0.7	30.0
tert-Butylbenzene	Ave	1.397	1.456		2.09	2.00	4.3	30.0
1,2,4-Trimethylbenzene	Ave	1.310	1.438		2.20	2.00	9.8	30.0
sec-Butylbenzene	Ave	2.029	2.195		2.16	2.00	8.2	30.0
1,3-Dichlorobenzene	Ave	0.9926	1.089		2.19	2.00	9.7	30.0
Benzyl chloride	Ave	0.9143	1.178		2.58	2.00	28.9	30.0
1,4-Dichlorobenzene	Ave	0.9599	1.115		2.32	2.00	16.1	30.0
4-Isopropyltoluene	Ave	1.507	1.766		2.34	2.00	17.2	30.0
1,2,3-Trimethylbenzene	Ave	1.283	1.507		2.35	2.00	17.4	30.0
Butylcyclohexane	Ave	1.022	1.198		2.35	2.00	17.3	30.0
1,2-Dichlorobenzene	Ave	0.9404	1.098		2.33	2.00	16.7	30.0
Indane	Ave	1.268	1.408		2.22	2.00	11.0	30.0
Indene	Ave	1.098	1.239		2.26	2.00	12.8	30.0
Butylbenzene	Ave	1.596	1.762		2.21	2.00	10.4	30.0
Undecane	Ave	1.068	1.045		1.96	2.00	-2.1	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3774	0.3896		2.06	2.00	3.2	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.463	1.668		2.28	2.00	14.0	30.0
Dodecane	Ave	1.091	0.9625		1.76	2.00	-11.8	30.0
1,2,4-Trichlorobenzene	Ave	0.8883	1.004		2.26	2.00	13.1	30.0
Naphthalene	Ave	1.792	2.083		2.33	2.00	16.3	30.0
Hexachlorobutadiene	Ave	0.7749	0.8114		2.09	2.00	4.7	30.0
1,2,3-Trichlorobenzene	Ave	0.9026	0.9249		2.05	2.00	2.5	30.0
2-Methylnaphthalene	Ave	0.7349	0.3023			2.00	-58.9*	50.0
1-Methylnaphthalene	Ave	0.6749	0.2729			2.00	-59.6*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5911	0.5812		3.93	4.00	-1.7	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RCCVJ01A.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 04-Oct-2019 10:37:30 ALS Bottle#: 15 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013262-002
 Misc. Info.: P96
 Operator ID: HMT Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Oct-2019 16:57:57 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 16:57:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.528	8.528	0.000	90	480658	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.760	10.760	0.000	92	2844405	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.560	0.000	84	2265315	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	96	1316506	4.00	3.93	
6 Chlorodifluoromethane	51	3.427	3.427	0.000	97	550692	2.00	1.73	
7 Propene	41	3.437	3.437	0.000	97	333713	2.00	1.85	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	99	604423	2.00	2.23	
9 Chloromethane	52	3.659	3.659	0.000	69	112228	2.00	2.17	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	87	633804	2.00	2.84	
11 Acetaldehyde	44	3.810	3.810	0.000	96	668139	10.0	10.6	
12 Vinyl chloride	62	3.826	3.826	0.000	99	353875	2.00	2.17	
13 Butadiene	54	3.912	3.912	0.000	69	262911	2.00	2.14	
14 Butane	43	3.912	3.912	0.000	85	487750	2.00	2.05	
15 Bromomethane	94	4.219	4.219	0.000	97	333391	2.00	2.06	
16 Chloroethane	64	4.354	4.354	0.000	96	136101	2.00	2.00	
17 Ethanol	31	4.446	4.446	0.000	97	696642	10.0	9.47	
18 Vinyl bromide	106	4.645	4.645	0.000	98	328503	2.00	2.40	
19 2-Methylbutane	43	4.688	4.688	0.000	91	328700	2.00	1.77	
21 Trichlorofluoromethane	101	4.904	4.904	0.000	98	721932	2.00	1.85	
20 Acrolein	56	4.920	4.920	0.000	90	103974	2.00	2.24	
24 Acetonitrile	40	4.985	4.985	0.000	100	126149	2.00	1.83	
22 Acetone	58	5.028	5.028	0.000	96	423928	6.00	5.53	
23 Isopropyl alcohol	45	5.109	5.109	0.000	94	1231117	6.00	5.48	
25 Pentane	72	5.131	5.131	0.000	97	60144	2.00	2.19	
26 Ethyl ether	31	5.292	5.292	0.000	95	261709	2.00	1.40	
27 1,1-Dichloroethene	96	5.605	5.605	0.000	96	325714	2.00	2.08	
29 2-Methyl-2-propanol	59	5.702	5.702	0.000	95	515353	2.00	1.85	
28 Acrylonitrile	53	5.713	5.713	0.000	96	220635	2.00	1.91	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.783	0.000	97	691008	2.00	2.09	
31 Methylene Chloride	84	5.961	5.961	0.000	93	328972	2.00	1.77	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.972	5.972	0.000	95	262894	2.00	1.72	
33 Carbon disulfide	76	6.117	6.117	0.000	99	888455	2.00	2.16	
34 trans-1,2-Dichloroethene	96	6.770	6.770	0.000	95	354058	2.00	2.10	
35 2-Methylpentane	43	6.786	6.786	0.000	94	664301	2.00	1.67	
36 Methyl tert-butyl ether	73	6.894	6.894	0.000	97	770331	2.00	1.90	
37 1,1-Dichloroethane	63	7.196	7.196	0.000	99	539130	2.00	1.86	
38 Vinyl acetate	43	7.298	7.298	0.000	100	762539	2.00	1.67	
39 2-Butanone (MEK)	72	7.751	7.751	0.000	97	154327	2.00	1.90	
40 Hexane	56	7.773	7.773	0.000	90	235275	2.00	1.79	
41 Isopropyl ether	45	7.935	7.935	0.000	97	992852	2.00	1.65	
42 cis-1,2-Dichloroethene	96	8.194	8.194	0.000	87	376647	2.00	2.16	
43 Ethyl acetate	43	8.377	8.377	0.000	100	688458	2.00	1.65	
44 Chloroform	83	8.539	8.539	0.000	96	629331	2.00	1.81	
45 Tert-butyl ethyl ether	59	8.620	8.620	0.000	93	876514	2.00	1.79	
46 Tetrahydrofuran	42	8.932	8.932	0.000	95	345015	2.00	1.66	
47 1,1,1-Trichloroethane	97	9.569	9.569	0.000	95	647242	2.00	1.82	
48 1,2-Dichloroethane	62	9.693	9.693	0.000	96	363455	2.00	1.62	
50 n-Butanol	31	10.151	10.151	0.000	79	101562	2.00	1.29	
51 Cyclohexane	69	10.189	10.189	0.000	66	145688	2.00	1.79	
49 Benzene	78	10.189	10.189	0.000	94	1023595	2.00	1.87	
52 Carbon tetrachloride	117	10.210	10.210	0.000	95	673807	2.00	1.86	
53 2,3-Dimethylpentane	71	10.318	10.318	0.000	91	227152	2.00	2.03	
54 Thiophene	84	10.469	10.469	0.000	93	576473	2.00	2.02	
55 Isooctane	57	10.976	10.976	0.000	99	1493057	2.00	1.75	
57 n-Heptane	71	11.364	11.364	0.000	89	339438	2.00	1.87	
56 1,2-Dichloropropane	63	11.451	11.451	0.000	94	371773	2.00	1.88	
58 Trichloroethene	130	11.488	11.488	0.000	95	463356	2.00	1.96	
59 Dibromomethane	93	11.575	11.575	0.000	92	414904	2.00	1.97	
60 Dichlorobromomethane	83	11.726	11.726	0.000	99	610821	2.00	1.75	
61 1,4-Dioxane	88	11.736	11.736	0.000	40	174310	2.00	2.19	
62 Methyl methacrylate	41	11.823	11.823	0.000	97	366228	2.00	1.51	
63 Methylcyclohexane	83	12.265	12.265	0.000	95	591130	2.00	1.97	
64 4-Methyl-2-pentanone (MIBK)	43	12.685	12.685	0.000	96	701431	2.00	1.56	
65 cis-1,3-Dichloropropene	75	12.745	12.745	0.000	93	531805	2.00	1.94	
66 trans-1,3-Dichloropropene	75	13.456	13.456	0.000	97	456428	2.00	1.91	
67 Toluene	91	13.575	13.575	0.000	93	1168997	2.00	2.11	
68 1,1,2-Trichloroethane	83	13.656	13.656	0.000	94	358837	2.00	2.07	
69 2-Hexanone	58	14.039	14.039	0.000	93	367178	2.00	1.93	
71 n-Octane	85	14.271	14.271	0.000	92	357817	2.00	2.09	
70 Chlorodibromomethane	129	14.362	14.362	0.000	97	626558	2.00	1.81	
72 Ethylene Dibromide	107	14.654	14.654	0.000	98	672842	2.00	2.08	
73 Tetrachloroethene	129	14.729	14.729	0.000	95	436225	2.00	1.96	
74 Chlorobenzene	112	15.603	15.603	0.000	97	991819	2.00	2.11	
75 2,3-Dimethylheptane	43	15.624	15.624	0.000	94	1036525	2.00	1.63	
76 Ethylbenzene	91	15.894	15.894	0.000	97	1532664	2.00	2.04	
77 m-Xylene & p-Xylene	91	16.056	16.056	0.000	96	2356403	4.00	4.08	
81 n-Nonane	57	16.476	16.476	0.000	92	689509	2.00	1.87	
78 Bromoform	173	16.509	16.509	0.000	96	484752	2.00	1.53	
79 Styrene	104	16.525	16.525	0.000	97	891430	2.00	2.20	
80 o-Xylene	91	16.584	16.584	0.000	99	1226499	2.00	2.09	
82 1,1,1,2,2-Tetrachloroethane	83	16.918	16.918	0.000	98	997035	2.00	2.32	
83 1,2,3-Trichloropropane	110	17.086	17.086	0.000	97	268124	2.00	1.98	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.188	17.188	0.000	94	1876214	2.00	2.16	
85 N-Propylbenzene	120	17.749	17.749	0.000	100	536362	2.00	2.32	
86 2-Chlorotoluene	126	17.797	17.797	0.000	96	502660	2.00	2.29	
88 4-Ethyltoluene	105	17.905	17.905	0.000	99	1959299	2.00	2.22	
87 1,3,5-Trimethylbenzene	120	17.981	17.981	0.000	93	789056	2.00	2.25	
89 Alpha Methyl Styrene	118	18.223	18.223	0.000	92	758796	2.00	2.23	
90 n-Decane	57	18.283	18.283	0.000	91	1009189	2.00	2.01	
91 tert-Butylbenzene	119	18.423	18.423	0.000	95	1649631	2.00	2.09	
92 1,2,4-Trimethylbenzene	105	18.439	18.439	0.000	95	1628551	2.00	2.20	
94 sec-Butylbenzene	105	18.698	18.698	0.000	100	2486451	2.00	2.16	
93 1,3-Dichlorobenzene	146	18.719	18.719	0.000	96	1233342	2.00	2.19	
96 Benzyl chloride	91	18.795	18.795	0.000	99	1334480	2.00	2.58	
95 1,4-Dichlorobenzene	146	18.806	18.806	0.000	97	1262613	2.00	2.32	
97 4-Isopropyltoluene	119	18.870	18.870	0.000	97	2000531	2.00	2.34	
98 1,2,3-Trimethylbenzene	105	18.924	18.924	0.000	97	1706437	2.00	2.35	
99 Butylcyclohexane	83	18.978	18.978	0.000	98	1357463	2.00	2.35	
100 1,2-Dichlorobenzene	146	19.178	19.178	0.000	85	1243149	2.00	2.33	
101 2,3-Dihydroindene	117	19.178	19.178	0.000	94	1594435	2.00	2.22	
102 Indene	116	19.313	19.313	0.000	91	1403081	2.00	2.26	
103 n-Butylbenzene	91	19.318	19.318	0.000	97	1995447	2.00	2.21	
104 Undecane	57	19.636	19.636	0.000	96	1184059	2.00	1.96	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.798	0.000	94	441249	2.00	2.06	
106 1,2,4,5-Tetramethylbenzene	119	20.089	20.089	0.000	98	1889018	2.00	2.28	
107 Dodecane	57	20.709	20.709	0.000	97	1090188	2.00	1.76	
108 1,2,4-Trichlorobenzene	180	20.909	20.909	0.000	93	1137582	2.00	2.26	
109 Naphthalene	128	21.054	21.054	0.000	100	2359178	2.00	2.33	
110 Hexachlorobutadiene	225	21.275	21.275	0.000	95	919065	2.00	2.09	
111 1,2,3-Trichlorobenzene	180	21.351	21.351	0.000	96	1047616	2.00	2.05	
112 2-Methylnaphthalene	142	22.009	22.009	0.000	98	342418	2.00	0.8227	
113 1-Methylnaphthalene	142	22.138	22.138	0.000	99	309081	2.00	0.8086	
A 115 C8 Range	1	14.271	(14.222-14.319)		0	3043902	2.00	1.60	
S 116 Xylenes, Total	100				0		6.00	6.18	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.26	

Reagents:

40CV101P_00096

Amount Added: 100.00

Units: ml

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 06-Oct-2019 16:57:58

Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RCCVJ01A.D

Injection Date: 04-Oct-2019 10:37:30

Instrument ID: MR

Operator ID: HMT

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

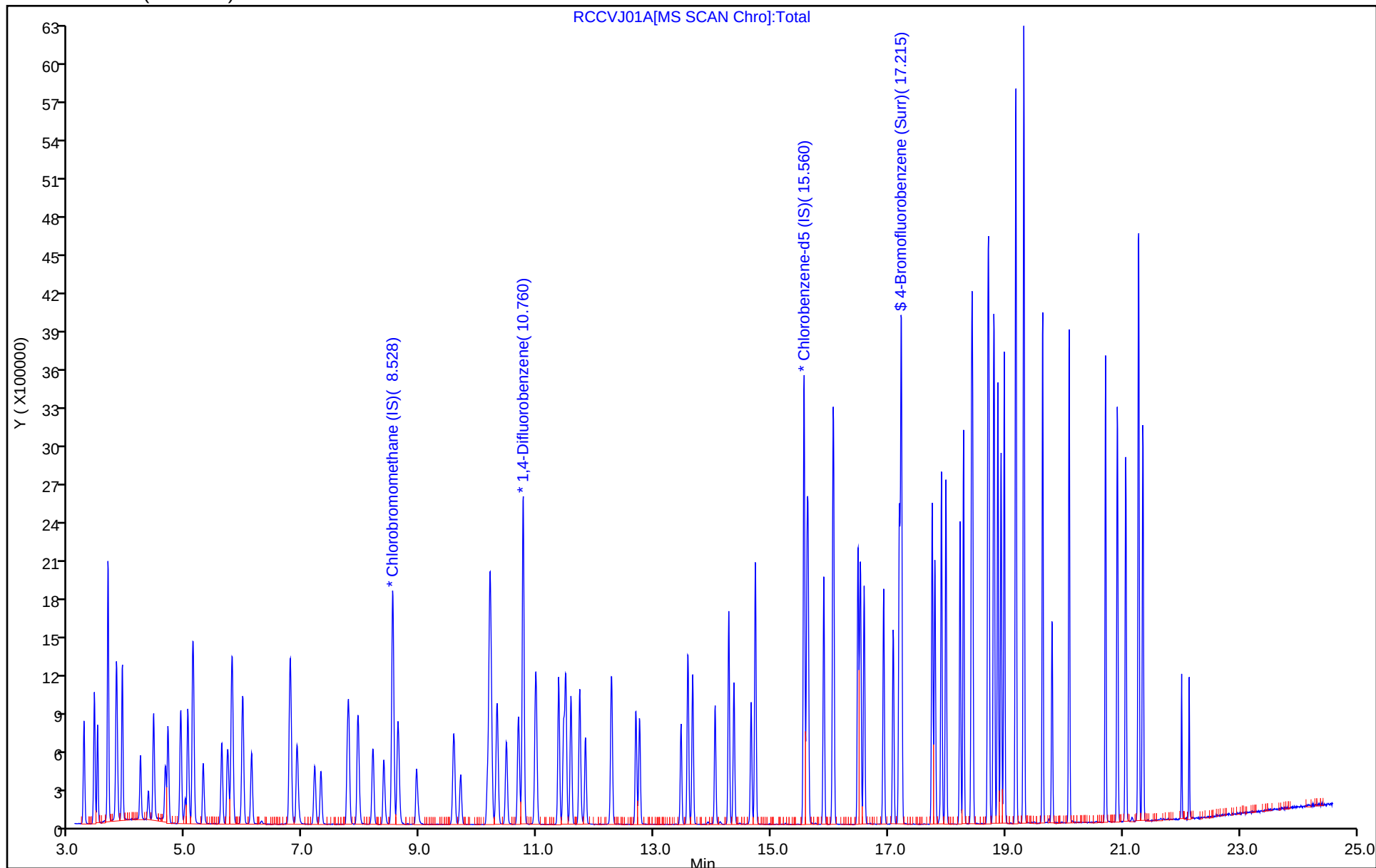
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34106/2 Calibration Date: 10/07/2019 15:52
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ07d.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Chlorodifluoromethane	Ave	2.654	1.896		1.43	2.00	-28.6	30.0
Propene	Ave	1.501	1.191		1.59	2.00	-20.6	30.0
Dichlorodifluoromethane	Ave	2.256	2.012		1.78	2.00	-10.8	30.0
Chloromethane	Ave	0.4310	0.3528		1.64	2.00	-18.1	30.0
1,2-Dichlorotetrafluoroethane	Ave	1.860	2.192		2.36	2.00	17.8	30.0
Acetaldehyde	Ave	0.5247	0.4728		9.01	10.0	-9.9	30.0
Vinyl chloride	Ave	1.359	1.163		1.71	2.00	-14.4	30.0
1,3-Butadiene	Ave	1.022	0.8643		1.69	2.00	-15.4	30.0
Butane	Ave	1.977	1.664		1.68	2.00	-15.8	30.0
Bromomethane	Ave	1.344	1.075		1.60	2.00	-20.0	30.0
Chloroethane	Ave	0.5671	0.4311		1.52	2.00	-24.0	30.0
Ethanol	Ave	0.6120	0.3926		6.42	10.0	-35.8*	30.0
Vinyl bromide	Ave	1.137	1.007		1.77	2.00	-11.4	30.0
2-Methylbutane	Ave	1.548	1.061		1.37	2.00	-31.5*	30.0
Trichlorofluoromethane	Ave	3.252	2.392		1.47	2.00	-26.5	30.0
Acrolein	Ave	0.3855	0.3437		1.78	2.00	-10.8	30.0
Acetonitrile	Ave	0.5751	0.4116		1.43	2.00	-28.4	30.0
Acetone	Ave	0.6380	0.4332		4.07	6.00	-32.1*	30.0
Isopropyl alcohol	Ave	1.868	1.154		3.71	6.00	-38.2*	30.0
Pentane	Ave	0.2289	0.1867		1.63	2.00	-18.4	30.0
Ethyl ether	Ave	1.561	1.054		1.35	2.00	-32.5*	30.0
1,1-Dichloroethene	Ave	1.301	1.094		1.68	2.00	-15.9	30.0
t-Butyl alcohol	Ave	2.319	1.466		1.26	2.00	-36.8*	30.0
Acrylonitrile	Ave	0.9589	0.7352		1.53	2.00	-23.3	30.0
1,1,2-Trichlorotrifluoroethane	Ave	2.749	2.267		1.65	2.00	-17.5	30.0
Methylene Chloride	Ave	1.543	1.081		1.40	2.00	-30.0	30.0
3-Chloropropene	Ave	1.275	0.7199		1.13	2.00	-43.5*	30.0
Carbon disulfide	Ave	3.419	2.855		1.67	2.00	-16.5	30.0
trans-1,2-Dichloroethene	Ave	1.401	1.226		1.75	2.00	-12.5	30.0
2-Methylpentane	Ave	3.306	2.263		1.37	2.00	-31.6*	30.0
Methyl tert-butyl ether	Ave	3.370	2.476		1.47	2.00	-26.5	30.0
1,1-Dichloroethane	Ave	2.406	1.726		1.44	2.00	-28.2	30.0
Vinyl acetate	Ave	3.791	2.578		1.36	2.00	-32.0*	30.0
2-Butanone	Ave	0.6748	0.5059		1.50	2.00	-25.0	30.0
Hexane	Ave	1.095	0.7805		1.43	2.00	-28.7	30.0
Isopropyl ether	Ave	5.017	3.417		1.36	2.00	-31.9*	30.0
cis-1,2-Dichloroethene	Ave	1.454	1.233		1.70	2.00	-15.2	30.0
Ethyl acetate	Ave	3.480	2.344		1.35	2.00	-32.6*	30.0
Chloroform	Ave	2.898	2.199		1.52	2.00	-24.1	30.0
Tert-butyl ethyl ether	Ave	4.084	2.936		1.44	2.00	-28.1	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34106/2 Calibration Date: 10/07/2019 15:52
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ07d.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Tetrahydrofuran	Ave	1.726	1.188		1.38	2.00	-31.2*	30.0
1,1,1-Trichloroethane	Ave	2.962	2.132		1.44	2.00	-28.0	30.0
1,2-Dichloroethane	Ave	0.3151	0.2134		1.35	2.00	-32.3*	30.0
1-Butanol	Ave	0.1107	0.0601		1.08	2.00	-45.8*	30.0
Benzene	Ave	0.7714	0.6119		1.59	2.00	-20.7	30.0
Cyclohexane	Ave	0.1143	0.0858		1.50	2.00	-24.9	30.0
Carbon tetrachloride	Ave	0.5101	0.4114		1.61	2.00	-19.4	30.0
2,3-Dimethylpentane	Ave	0.1575	0.1242		1.58	2.00	-21.1	30.0
Thiophene	Ave	0.4003	0.3269		1.63	2.00	-18.4	30.0
2,2,4-Trimethylpentane	Ave	1.199	0.8887		1.48	2.00	-25.9	30.0
Heptane	Ave	0.2550	0.1982		1.55	2.00	-22.3	30.0
1,2-Dichloropropane	Ave	0.2780	0.2104		1.51	2.00	-24.3	30.0
Trichloroethene	Ave	0.3320	0.2857		1.72	2.00	-13.9	30.0
Dibromomethane	Ave	0.2957	0.2424		1.64	2.00	-18.0	30.0
Bromodichloromethane	Ave	0.4906	0.3810		1.55	2.00	-22.3	30.0
1,4-Dioxane	Ave	0.1118	0.0762		1.36	2.00	-31.9*	30.0
Methyl methacrylate	Ave	0.3404	0.2270		1.33	2.00	-33.3*	30.0
Methylcyclohexane	Ave	0.4226	0.3501		1.66	2.00	-17.1	30.0
4-Methyl-2-pentanone (MIBK)	Ave	0.6308	0.4285		1.36	2.00	-32.1*	30.0
cis-1,3-Dichloropropene	Ave	0.3853	0.3032		1.57	2.00	-21.3	30.0
trans-1,3-Dichloropropene	Ave	0.4218	0.3288		1.56	2.00	-22.1	30.0
Toluene	Ave	0.9777	0.8532		1.75	2.00	-12.7	30.0
1,1,2-Trichloroethane	Ave	0.3059	0.2602		1.70	2.00	-14.9	30.0
2-Hexanone	Ave	0.3356	0.2545		1.52	2.00	-24.2	30.0
Octane	Ave	0.3027	0.2559		1.69	2.00	-15.5	30.0
Dibromochloromethane	Ave	0.6120	0.5313		1.74	2.00	-13.2	30.0
1,2-Dibromoethane	Ave	0.5700	0.5142		1.80	2.00	-9.8	30.0
Tetrachloroethene	Ave	0.3936	0.3316		1.68	2.00	-15.8	30.0
Chlorobenzene	Ave	0.8282	0.7407		1.79	2.00	-10.6	30.0
2,3-Dimethylheptane	Ave	1.121	0.8032		1.43	2.00	-28.3	30.0
Ethylbenzene	Ave	1.326	1.122		1.69	2.00	-15.4	30.0
m-Xylene & p-Xylene	Ave	1.019	0.8641		3.39	4.00	-15.2	30.0
Nonane	Ave	0.6517	0.5120		1.57	2.00	-21.4	30.0
Bromoform	Ave	0.5593	0.5960		2.13	2.00	6.6	30.0
Styrene	Ave	0.7149	0.6726		1.88	2.00	-5.9	30.0
o-Xylene	Ave	1.034	0.8450		1.63	2.00	-18.3	30.0
1,1,2,2-Tetrachloroethane	Ave	0.7601	0.6590		1.73	2.00	-13.3	30.0
1,2,3-Trichloropropane	Ave	0.2394	0.1809		1.51	2.00	-24.4	30.0
Isopropylbenzene	Ave	1.532	1.262		1.65	2.00	-17.6	30.0
Propylbenzene	Ave	0.4084	0.3566		1.75	2.00	-12.7	30.0
2-Chlorotoluene	Ave	0.3869	0.3490		1.80	2.00	-9.8	30.0

FORM VII
AIR - GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Lab Sample ID: CCVIS 140-34106/2 Calibration Date: 10/07/2019 15:52
 Instrument ID: MR Calib Start Date: 09/03/2019 10:26
 GC Column: RTX-5 ID: 0.32 (mm) Calib End Date: 09/04/2019 09:04
 Lab File ID: RCCVJ07d.D Conc. Units: ppb v/v Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
4-Ethyltoluene	Ave	1.557	1.275		1.64	2.00	-18.1	30.0
1,3,5-Trimethylbenzene	Ave	0.6179	0.5310		1.72	2.00	-14.1	30.0
Alpha Methyl Styrene	Ave	0.5996	0.5139		1.71	2.00	-14.3	30.0
Decane	Ave	0.8851	0.6453		1.46	2.00	-27.1	30.0
tert-Butylbenzene	Ave	1.397	1.138		1.63	2.00	-18.5	30.0
1,2,4-Trimethylbenzene	Ave	1.310	1.074		1.64	2.00	-18.0	30.0
sec-Butylbenzene	Ave	2.029	1.668		1.64	2.00	-17.8	30.0
1,3-Dichlorobenzene	Ave	0.9926	0.8710		1.75	2.00	-12.3	30.0
Benzyl chloride	Ave	0.9143	0.8416		1.84	2.00	-8.0	30.0
1,4-Dichlorobenzene	Ave	0.9599	0.8608		1.79	2.00	-10.3	30.0
4-Isopropyltoluene	Ave	1.507	1.289		1.71	2.00	-14.5	30.0
1,2,3-Trimethylbenzene	Ave	1.283	1.034		1.61	2.00	-19.4	30.0
Butylcyclohexane	Ave	1.022	0.8313		1.63	2.00	-18.6	30.0
1,2-Dichlorobenzene	Ave	0.9404	0.8361		1.78	2.00	-11.1	30.0
Indane	Ave	1.268	1.064		1.68	2.00	-16.1	30.0
Indene	Ave	1.098	0.9377		1.71	2.00	-14.6	30.0
Butylbenzene	Ave	1.596	1.291		1.62	2.00	-19.1	30.0
Undecane	Ave	1.068	0.7361		1.38	2.00	-31.1*	30.0
1,2-Dibromo-3-Chloropropane	Ave	0.3774	0.3745		1.98	2.00	-0.8	30.0
1,2,4,5-Tetramethylbenzene	Ave	1.463	1.172		1.60	2.00	-19.9	30.0
Dodecane	Ave	1.091	0.5980		1.10	2.00	-45.2*	30.0
1,2,4-Trichlorobenzene	Ave	0.8883	0.7454		1.68	2.00	-16.1	30.0
Naphthalene	Ave	1.792	1.374		1.53	2.00	-23.3	30.0
Hexachlorobutadiene	Ave	0.7749	0.6505		1.68	2.00	-16.1	30.0
1,2,3-Trichlorobenzene	Ave	0.9026	0.6879		1.52	2.00	-23.8	30.0
2-Methylnaphthalene	Ave	0.7349	0.2402			2.00	-67.3*	50.0
1-Methylnaphthalene	Ave	0.6749	0.2282			2.00	-66.2*	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5911	0.5414		3.66	4.00	-8.4	30.0

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RCCVJ07d.D
 Lims ID: CCVIS
 Client ID:
 Sample Type: CCVIS
 Inject. Date: 07-Oct-2019 15:52:30 ALS Bottle#: 5 Worklist Smp#: 2
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013263-002
 Misc. Info.: p99
 Operator ID: afb Instrument ID: MR
 Sublist: chrom-MR_TO15*sub16
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 08-Oct-2019 11:22:58 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:22:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	90	409525	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.760	10.760	0.000	93	2342962	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	84	1896667	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.215	0.000	95	1026757	4.00	3.66	
6 Chlorodifluoromethane	51	3.427	3.427	0.000	97	388252	2.00	1.43	
7 Propene	41	3.437	3.437	0.000	97	243859	2.00	1.59	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	100	412027	2.00	1.78	
9 Chloromethane	52	3.664	3.664	0.000	63	72248	2.00	1.64	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	83	448815	2.00	2.36	
11 Acetaldehyde	44	3.809	3.809	0.000	99	484024	10.0	9.01	
12 Vinyl chloride	62	3.826	3.826	0.000	98	238068	2.00	1.71	
13 Butadiene	54	3.906	3.906	0.000	68	176977	2.00	1.69	
14 Butane	43	3.912	3.912	0.000	85	340811	2.00	1.68	
15 Bromomethane	94	4.219	4.219	0.000	95	220075	2.00	1.60	
16 Chloroethane	64	4.354	4.354	0.000	90	88269	2.00	1.52	
17 Ethanol	31	4.440	4.440	0.000	98	401982	10.0	6.42	
18 Vinyl bromide	106	4.645	4.645	0.000	95	206262	2.00	1.77	
19 2-Methylbutane	43	4.694	4.694	0.000	92	217267	2.00	1.37	
21 Trichlorofluoromethane	101	4.904	4.904	0.000	98	489733	2.00	1.47	
20 Acrolein	56	4.915	4.915	0.000	33	70371	2.00	1.78	
24 Acetonitrile	40	4.980	4.980	0.000	98	84289	2.00	1.43	
22 Acetone	58	5.033	5.033	0.000	97	266133	6.00	4.07	
23 Isopropyl alcohol	45	5.109	5.109	0.000	93	708831	6.00	3.71	
25 Pentane	72	5.120	5.120	0.000	96	38220	2.00	1.63	
26 Ethyl ether	31	5.287	5.287	0.000	96	215739	2.00	1.35	
27 1,1-Dichloroethene	96	5.610	5.610	0.000	96	223973	2.00	1.68	
29 2-Methyl-2-propanol	59	5.702	5.702	0.000	96	300228	2.00	1.26	
28 Acrylonitrile	53	5.718	5.718	0.000	97	150548	2.00	1.53	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.783	0.000	96	464261	2.00	1.65	
31 Methylene Chloride	84	5.961	5.961	0.000	96	221320	2.00	1.40	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
32 3-Chloro-1-propene	39	5.972	5.972	0.000	96	147415	2.00	1.13	
33 Carbon disulfide	76	6.117	6.117	0.000	100	584528	2.00	1.67	
34 trans-1,2-Dichloroethene	96	6.770	6.770	0.000	92	251025	2.00	1.75	
35 2-Methylpentane	43	6.786	6.786	0.000	95	463313	2.00	1.37	
36 Methyl tert-butyl ether	73	6.894	6.894	0.000	97	506938	2.00	1.47	
37 1,1-Dichloroethane	63	7.196	7.196	0.000	99	353478	2.00	1.44	
38 Vinyl acetate	43	7.298	7.298	0.000	100	527891	2.00	1.36	
39 2-Butanone (MEK)	72	7.746	7.746	0.000	98	103585	2.00	1.50	
40 Hexane	56	7.778	7.778	0.000	93	159817	2.00	1.43	
41 Isopropyl ether	45	7.929	7.929	0.000	96	699739	2.00	1.36	
42 cis-1,2-Dichloroethene	96	8.188	8.188	0.000	87	252545	2.00	1.70	
43 Ethyl acetate	43	8.371	8.371	0.000	99	480004	2.00	1.35	
44 Chloroform	83	8.533	8.533	0.000	96	450315	2.00	1.52	
45 Tert-butyl ethyl ether	59	8.614	8.614	0.000	94	601169	2.00	1.44	
46 Tetrahydrofuran	42	8.932	8.932	0.000	95	243165	2.00	1.38	
47 1,1,1-Trichloroethane	97	9.568	9.568	0.000	95	436461	2.00	1.44	
48 1,2-Dichloroethane	62	9.687	9.687	0.000	95	249954	2.00	1.35	
50 n-Butanol	31	10.151	10.151	0.000	84	70348	2.00	1.08	
51 Cyclohexane	69	10.183	10.183	0.000	66	100497	2.00	1.50	
49 Benzene	78	10.183	10.183	0.000	94	716838	2.00	1.59	
52 Carbon tetrachloride	117	10.205	10.205	0.000	94	481917	2.00	1.61	
53 2,3-Dimethylpentane	71	10.313	10.313	0.000	92	145537	2.00	1.58	
54 Thiophene	84	10.474	10.474	0.000	94	382919	2.00	1.63	
55 Isooctane	57	10.970	10.970	0.000	99	1041094	2.00	1.48	
57 n-Heptane	71	11.359	11.359	0.000	92	232141	2.00	1.55	
56 1,2-Dichloropropane	63	11.445	11.445	0.000	91	246425	2.00	1.51	
58 Trichloroethene	130	11.483	11.483	0.000	96	334732	2.00	1.72	
59 Dibromomethane	93	11.574	11.574	0.000	91	283924	2.00	1.64	
60 Dichlorobromomethane	83	11.720	11.720	0.000	98	446376	2.00	1.55	
61 1,4-Dioxane	88	11.731	11.731	0.000	84	89258	2.00	1.36	
62 Methyl methacrylate	41	11.817	11.817	0.000	94	265957	2.00	1.33	
63 Methylcyclohexane	83	12.259	12.259	0.000	95	410167	2.00	1.66	
64 4-Methyl-2-pentanone (MIBK)	43	12.685	12.685	0.000	97	502015	2.00	1.36	
65 cis-1,3-Dichloropropene	75	12.745	12.745	0.000	95	355221	2.00	1.57	
66 trans-1,3-Dichloropropene	75	13.451	13.451	0.000	98	311767	2.00	1.56	
67 Toluene	91	13.570	13.570	0.000	95	809109	2.00	1.75	
68 1,1,2-Trichloroethane	83	13.651	13.651	0.000	95	246760	2.00	1.70	
69 2-Hexanone	58	14.033	14.033	0.000	93	241368	2.00	1.52	
71 n-Octane	85	14.271	14.271	0.000	95	242645	2.00	1.69	
70 Chlorodibromomethane	129	14.357	14.357	0.000	96	503811	2.00	1.74	
72 Ethylene Dibromide	107	14.648	14.648	0.000	97	487635	2.00	1.80	
73 Tetrachloroethene	129	14.724	14.724	0.000	93	314449	2.00	1.68	
74 Chlorobenzene	112	15.603	15.603	0.000	97	702463	2.00	1.79	
75 2,3-Dimethylheptane	43	15.624	15.624	0.000	95	761726	2.00	1.43	
76 Ethylbenzene	91	15.894	15.894	0.000	97	1063990	2.00	1.69	
77 m-Xylene & p-Xylene	91	16.056	16.056	0.000	95	1638977	4.00	3.39	
81 n-Nonane	57	16.476	16.476	0.000	91	485540	2.00	1.57	
78 Bromoform	173	16.503	16.503	0.000	96	565209	2.00	2.13	
79 Styrene	104	16.519	16.519	0.000	96	637845	2.00	1.88	
80 o-Xylene	91	16.584	16.584	0.000	98	801328	2.00	1.63	
82 1,1,2,2-Tetrachloroethane	83	16.913	16.913	0.000	98	624952	2.00	1.73	
83 1,2,3-Trichloropropane	110	17.080	17.080	0.000	95	171515	2.00	1.51	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
84 Isopropylbenzene	105	17.183	17.183	0.000	95	1196529	2.00	1.65	
85 N-Propylbenzene	120	17.749	17.749	0.000	100	338132	2.00	1.75	
86 2-Chlorotoluene	126	17.792	17.792	0.000	95	330925	2.00	1.80	
88 4-Ethyltoluene	105	17.905	17.905	0.000	99	1208818	2.00	1.64	
87 1,3,5-Trimethylbenzene	120	17.981	17.981	0.000	94	503548	2.00	1.72	
89 Alpha Methyl Styrene	118	18.223	18.223	0.000	94	487350	2.00	1.71	
90 n-Decane	57	18.283	18.283	0.000	91	611990	2.00	1.46	
91 tert-Butylbenzene	119	18.423	18.423	0.000	97	1079502	2.00	1.63	
92 1,2,4-Trimethylbenzene	105	18.434	18.434	0.000	95	1018251	2.00	1.64	
94 sec-Butylbenzene	105	18.698	18.698	0.000	99	1581583	2.00	1.64	
93 1,3-Dichlorobenzene	146	18.714	18.714	0.000	95	825979	2.00	1.75	
96 Benzyl chloride	91	18.795	18.795	0.000	99	798081	2.00	1.84	
95 1,4-Dichlorobenzene	146	18.806	18.806	0.000	98	816289	2.00	1.79	
97 4-Isopropyltoluene	119	18.865	18.865	0.000	97	1222432	2.00	1.71	
98 1,2,3-Trimethylbenzene	105	18.919	18.919	0.000	97	980628	2.00	1.61	
99 Butylcyclohexane	83	18.978	18.978	0.000	96	788299	2.00	1.63	
101 2,3-Dihydroindene	117	19.172	19.172	0.000	94	1009093	2.00	1.68	
100 1,2-Dichlorobenzene	146	19.172	19.172	0.000	85	792919	2.00	1.78	
102 Indene	116	19.307	19.307	0.000	96	889205	2.00	1.71	
103 n-Butylbenzene	91	19.312	19.312	0.000	97	1224444	2.00	1.62	
104 Undecane	57	19.631	19.631	0.000	96	698073	2.00	1.38	
105 1,2-Dibromo-3-Chloropropan	157	19.792	19.792	0.000	93	355116	2.00	1.98	
106 1,2,4,5-Tetramethylbenzene	119	20.084	20.084	0.000	99	1111253	2.00	1.60	
107 Dodecane	57	20.704	20.704	0.000	94	567142	2.00	1.10	
108 1,2,4-Trichlorobenzene	180	20.909	20.909	0.000	93	706892	2.00	1.68	
109 Naphthalene	128	21.054	21.054	0.000	100	1303000	2.00	1.53	
110 Hexachlorobutadiene	225	21.275	21.275	0.000	95	616892	2.00	1.68	
111 1,2,3-Trichlorobenzene	180	21.345	21.345	0.000	95	652356	2.00	1.52	
112 2-Methylnaphthalene	142	22.009	22.009	0.000	99	227799	2.00	0.6537	
113 1-Methylnaphthalene	142	22.138	22.138	0.000	98	216423	2.00	0.6763	
A 115 C8 Range	1	14.265	(14.217-14.335)		0	2211198	2.00	1.41	
S 116 Xylenes, Total	100				0		6.00	5.02	
S 117 1,2-Dichloroethene, Total	1				0		4.00	3.45	

Reagents:

40CV101P_00097

Amount Added: 100.00

Units: ml

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 08-Oct-2019 11:23:00

Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RCCVJ07d.D

Injection Date: 07-Oct-2019 15:52:30

Instrument ID: MR

Operator ID: afb

Lims ID: CCVIS

Worklist Smp#: 2

Client ID:

Purge Vol: 500.000 mL

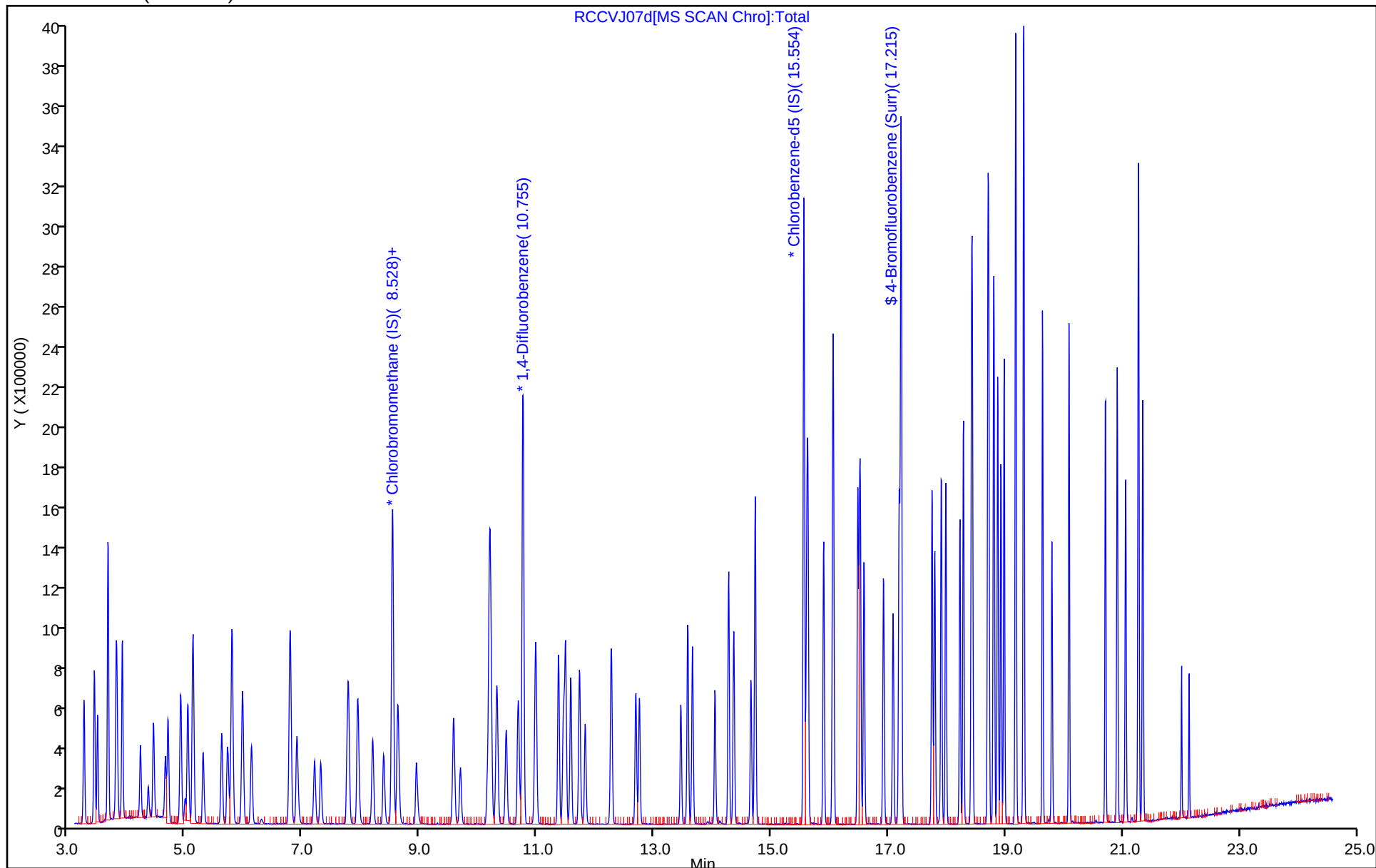
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RBFBIO3IC.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Sep-2019 09:57:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0012931-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Sep-2019 17:33:36 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0302

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	6.118	6.118	0.000	0	1258439	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00003

Amount Added: 40.00

Units: mL

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RBFBIO3IC.D

Injection Date: 03-Sep-2019 09:57:30

Instrument ID: MR

Lims ID: BFB

Client ID:

Operator ID: HMT

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

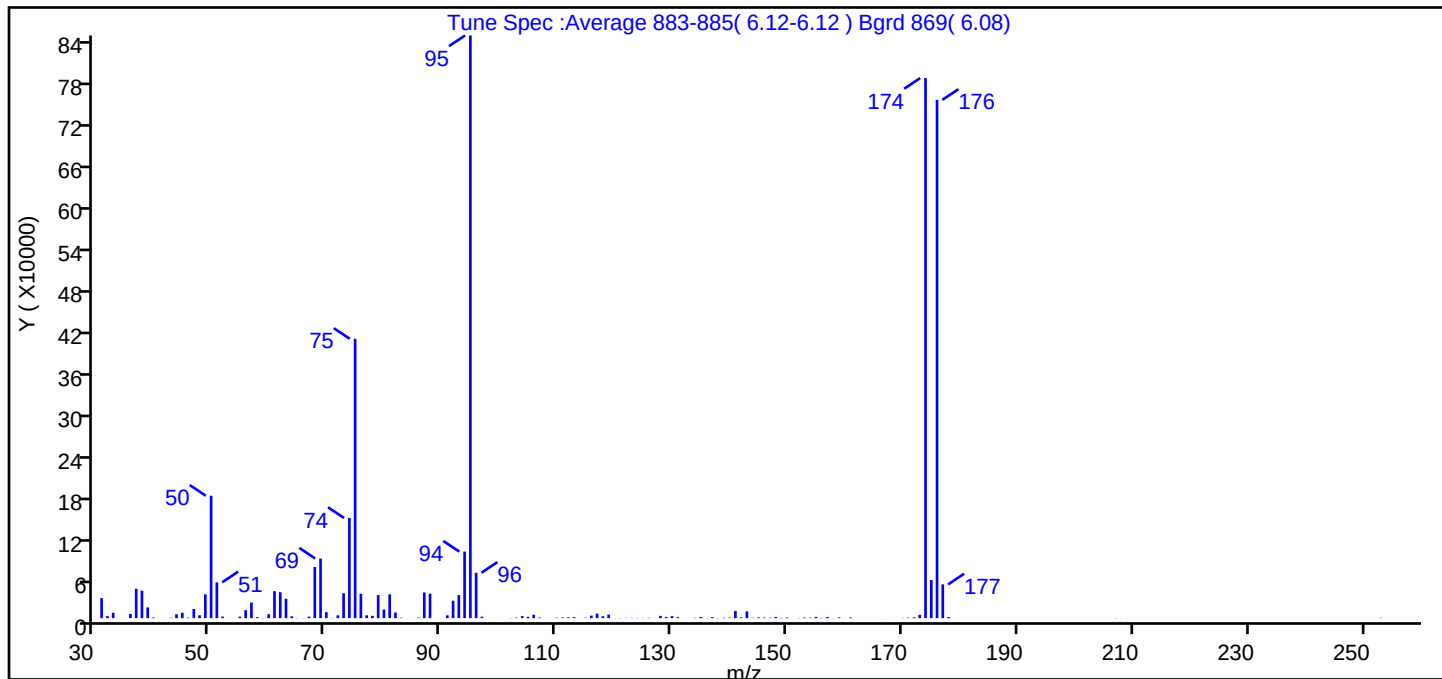
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	21.0
75	30 to 60% of m/z 95	47.9
96	5 to 9% of m/z 95	7.8
173	Less than 2% of m/z 174	0.6 (0.6)
174	50 to 120% of m/z 95	92.7
175	5 to 9% of m/z 174	6.5 (7.1)
176	Greater than 95% but less than 101% of m/z 174	88.9 (96.0)
177	5 to 9% of m/z 176	5.8 (6.5)

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RBFBIO3IC.D\MR_TO15.rslt\spectra.d
Injection Date: 03-Sep-2019 09:57:30
Spectrum: Tune Spec :Average 883-885(6.12-6.12) Bgrd 869(6.08)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y
30.00	12	69.00	86720	111.00	1055	147.00	627
31.00	29176	70.00	8634	112.00	1128	148.00	1759
32.00	2911	71.00	261	113.00	1439	149.00	272
33.00	7757	72.00	4132	115.00	654	150.00	1009
34.00	98	73.00	36256	116.00	3621	151.00	60
36.00	6050	74.00	145728	117.00	6599	152.00	281
37.00	42800	75.00	406400	118.00	2850	153.00	990
38.00	39880	76.00	35384	119.00	5234	154.00	697
39.00	15650	77.00	4139	120.00	198	155.00	1872
40.00	951	78.00	3378	121.00	235	156.00	379
42.00	145	79.00	33600	122.00	351	157.00	1712
43.00	608	80.00	12462	123.00	323	158.00	211
44.00	5623	81.00	34584	124.00	336	159.00	1215
45.00	7855	82.00	8300	125.00	258	161.00	1029
46.00	684	83.00	703	126.00	447	167.00	169
47.00	13270	86.00	825	127.00	34	168.00	45
48.00	4173	87.00	37312	128.00	3278	169.00	113
49.00	34592	88.00	35496	129.00	1588	170.00	345
50.00	178112	91.00	4102	130.00	2953	171.00	690
51.00	52136	92.00	25424	131.00	1379	172.00	1203
52.00	2230	93.00	33552	132.00	42	173.00	4795
55.00	2263	94.00	96832	133.00	30	174.00	785792
56.00	11626	95.00	847808	134.00	451	175.00	55528
57.00	22760	96.00	66064	135.00	1715	176.00	754112
58.00	1519	97.00	2092	136.00	177	177.00	49112
59.00	247	99.00	113	137.00	1562	178.00	1653
60.00	5743	102.00	224	138.00	149	180.00	165
61.00	39264	103.00	729	139.00	562	207.00	247
62.00	37784	104.00	3019	140.00	728	208.00	126
63.00	28200	105.00	1957	141.00	10450	209.00	128
64.00	2715	106.00	4977	142.00	1123	215.00	97
65.00	374	107.00	912	143.00	9826	253.00	446
66.00	189	108.00	64	144.00	529		

Report Date: 04-Sep-2019 17:33:37

Chrom Revision: 2.3 22-Aug-2019 12:55:36

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RBFBIO3IC.D\MR_TO15.rslt\spectra.d

Injection Date: 03-Sep-2019 09:57:30

Spectrum: Tune Spec :Average 883-885(6.12-6.12) Bgrd 869(6.08)

Base Peak: 95.00

Minimum % Base Peak: 0

Number of Points: 137

m/z	Y	m/z	Y	m/z	Y	m/z	Y
67.00	2315	109.00	64	145.00	1144		
68.00	74432	110.00	747	146.00	946		

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RBFBIO3IC.D

Injection Date: 03-Sep-2019 09:57:30

Instrument ID: MR

Operator ID: HMT

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

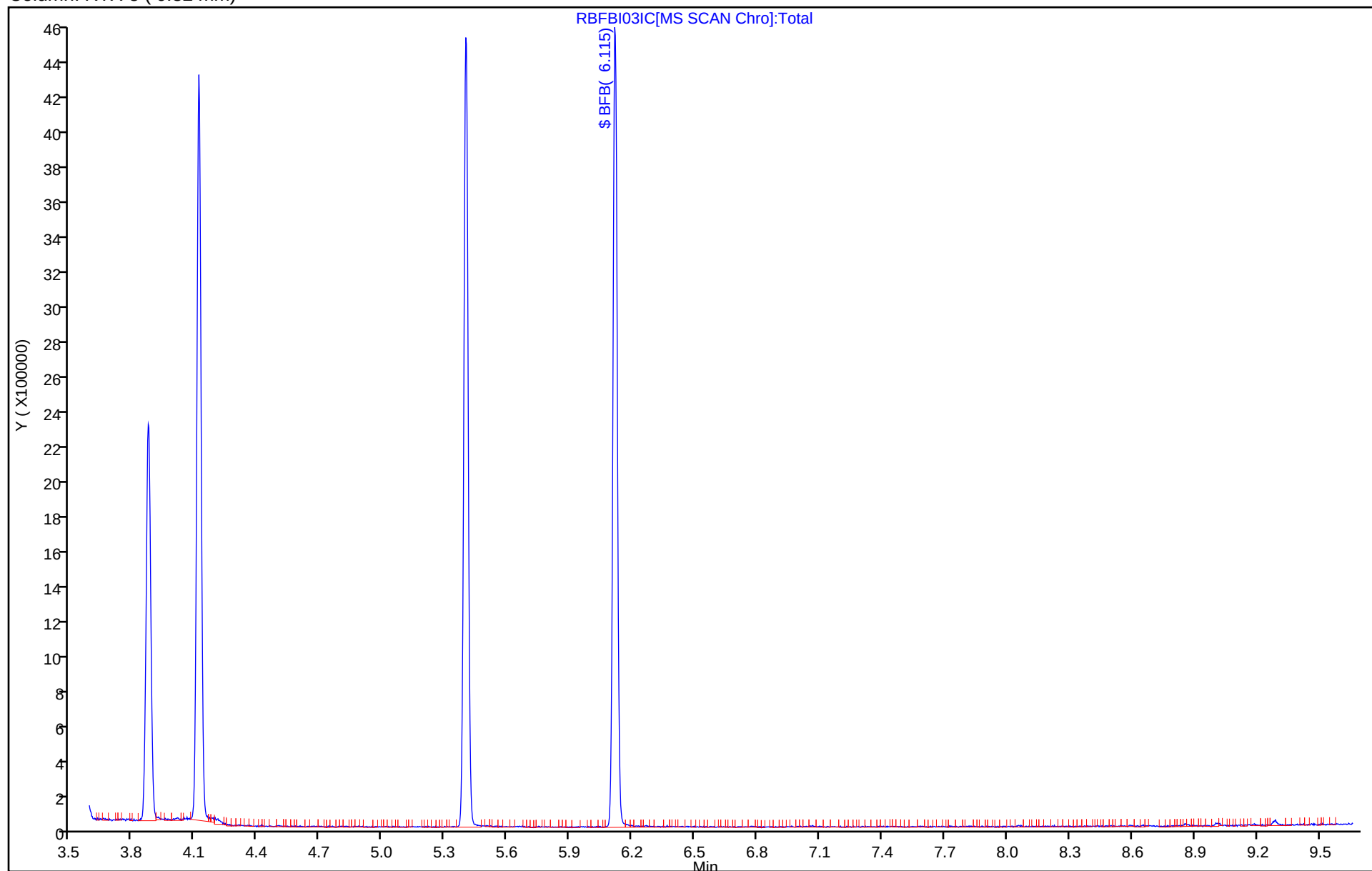
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RBFBJ03.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 03-Oct-2019 09:26:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0013261-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:05 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	6.107	6.107	0.000	0	773037	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00003

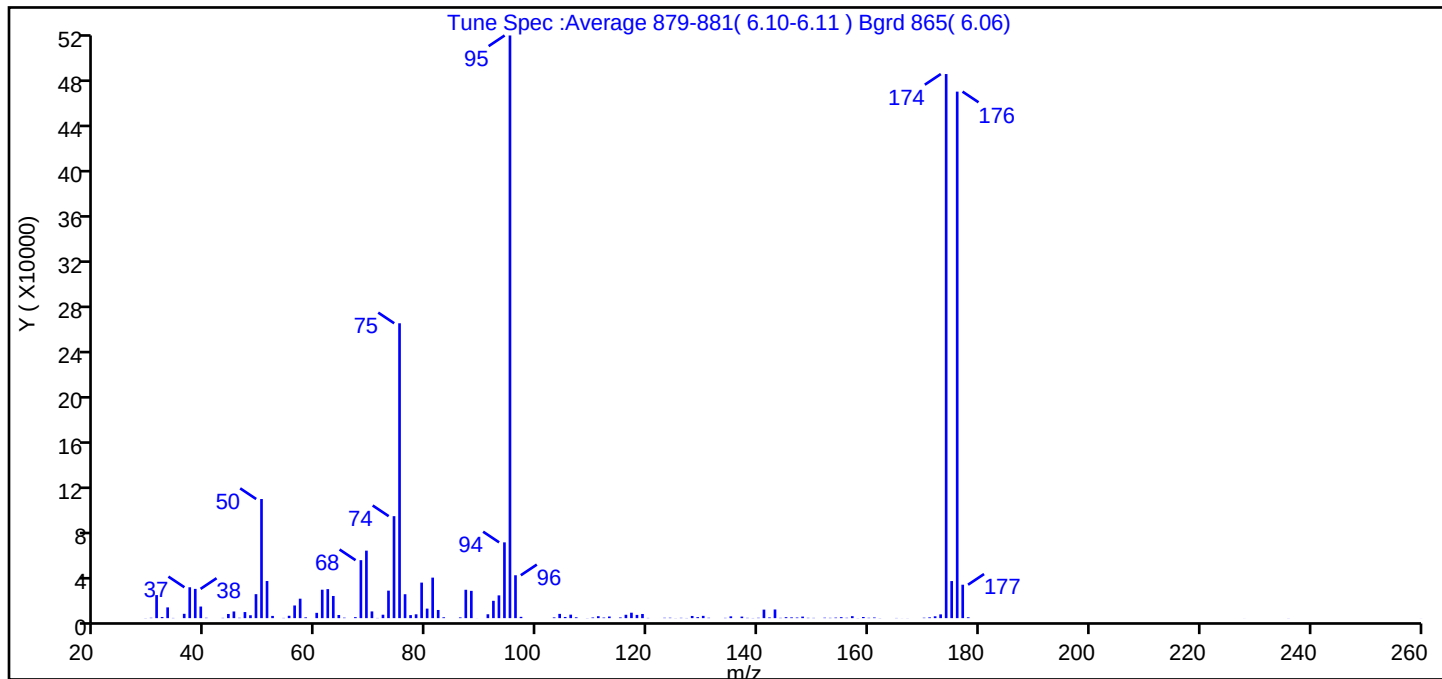
Amount Added: 40.00

Units: mL

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RBFBJ03.D
Injection Date: 03-Oct-2019 09:26:30 Instrument ID: MR
Lims ID: BFB
Client ID:
Operator ID: HMT ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Method: MR_TO15 Limit Group: MSA TO14A_15 Routine ICAL
Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.4
75	30 to 60% of m/z 95	50.6
96	5 to 9% of m/z 95	7.4
173	Less than 2% of m/z 174	0.6 (0.7)
174	50 to 120% of m/z 95	93.4
175	5 to 9% of m/z 174	6.4 (6.8)
176	Greater than 95% but less than 101% of m/z 174	90.4 (96.8)
177	5 to 9% of m/z 176	5.7 (6.3)

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RBFBJ03.D\MR_TO15.rslt\spectra.d
Injection Date: 03-Oct-2019 09:26:30
Spectrum: Tune Spec :Average 879-881(6.10-6.11) Bgrd 865(6.06)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 127

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	111	67.00	888	107.00	758	146.00	686
30.00	346	68.00	51480	109.00	112	147.00	570
31.00	20488	69.00	59936	110.00	588	148.00	1378
32.00	983	70.00	5968	111.00	1715	149.00	285
33.00	9547	71.00	179	112.00	524	150.00	234
34.00	186	72.00	3044	113.00	1440	152.00	395
36.00	3845	73.00	24408	115.00	617	153.00	275
37.00	27416	74.00	90552	116.00	2989	154.00	483
38.00	25984	75.00	261824	117.00	4825	155.00	866
39.00	10297	76.00	21240	118.00	2887	156.00	330
40.00	334	77.00	2701	119.00	3698	157.00	1745
43.00	248	78.00	3403	120.00	197	158.00	100
44.00	3706	79.00	31560	123.00	321	159.00	1007
45.00	5928	80.00	8468	124.00	367	160.00	305
46.00	323	81.00	35976	125.00	95	161.00	576
47.00	5410	82.00	7250	126.00	283	162.00	111
48.00	2573	83.00	754	127.00	147	165.00	169
49.00	21296	86.00	664	128.00	1925	166.00	45
50.00	105776	87.00	25192	129.00	889	167.00	73
51.00	32968	88.00	24232	130.00	2024	170.00	380
52.00	1980	89.00	43	131.00	331	171.00	700
54.00	201	91.00	3440	134.00	252	172.00	1633
55.00	2095	92.00	15399	135.00	1592	173.00	3354
56.00	11243	93.00	20216	137.00	1380	174.00	483136
57.00	17272	94.00	67296	138.00	263	175.00	32936
58.00	695	95.00	517376	139.00	148	176.00	467520
60.00	4710	96.00	38080	140.00	321	177.00	29680
61.00	25240	97.00	1158	141.00	7568	178.00	751
62.00	25768	103.00	654	142.00	627	228.00	38
63.00	19688	104.00	3784	143.00	7696	236.00	74
64.00	2802	105.00	1043	144.00	261	260.00	41
65.00	416	106.00	3104	145.00	855		

Report Date: 04-Oct-2019 11:18:05

Chrom Revision: 2.3 17-Sep-2019 16:19:08

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RBFBJ03.D

Injection Date: 03-Oct-2019 09:26:30

Instrument ID: MR

Operator ID: HMT

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

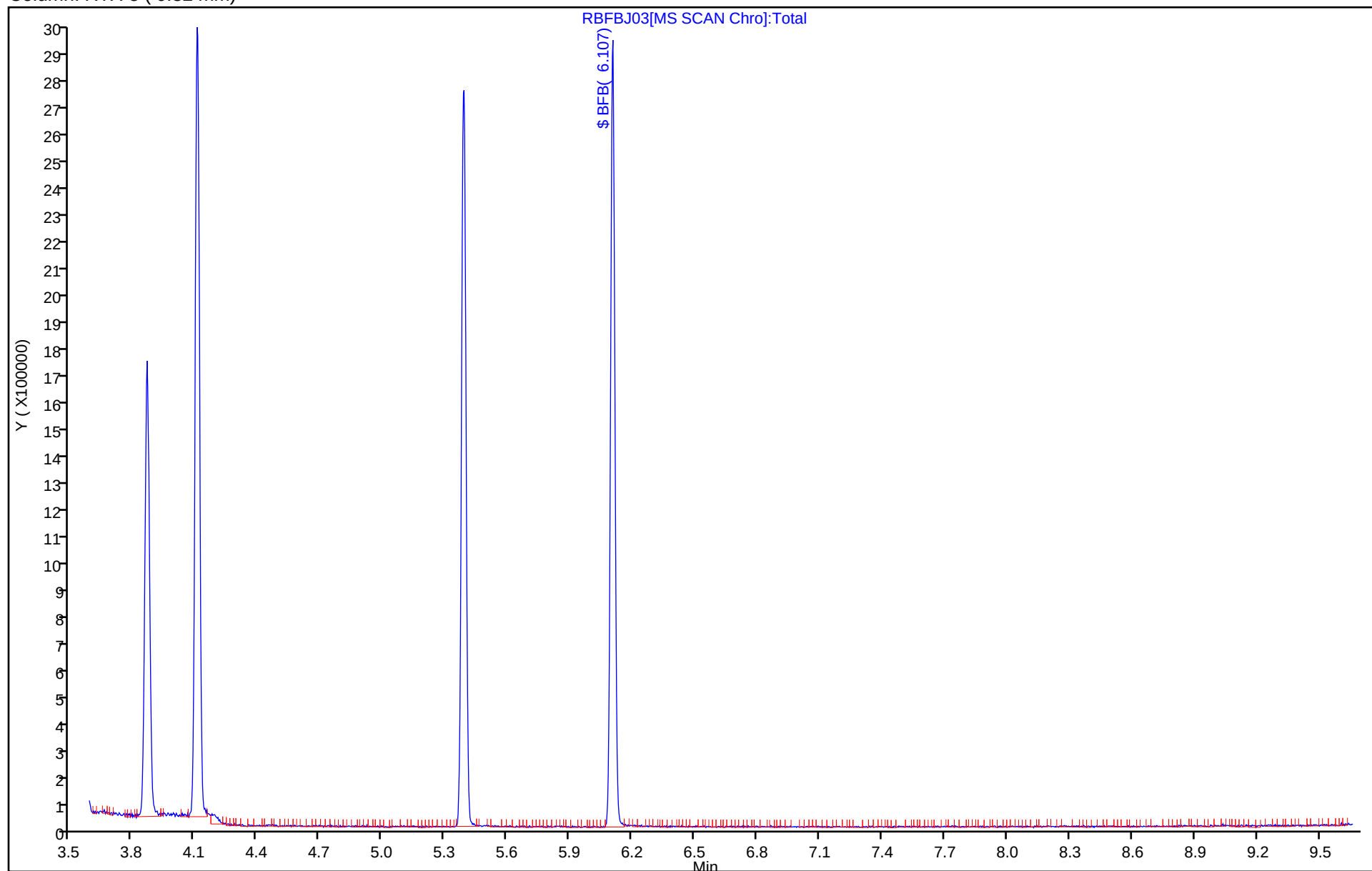
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RBFBJ01A.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 04-Oct-2019 10:09:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0013262-001
Misc. Info.: BFB
Operator ID: HMT Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Oct-2019 16:55:24 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 16:55:24

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	6.107	6.107	0.000	0	1166720	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00003

Amount Added: 40.00

Units: mL

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RBFBJ01A.D

Injection Date: 04-Oct-2019 10:09:30

Instrument ID: MR

Lims ID: BFB

Client ID:

Operator ID: HMT

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

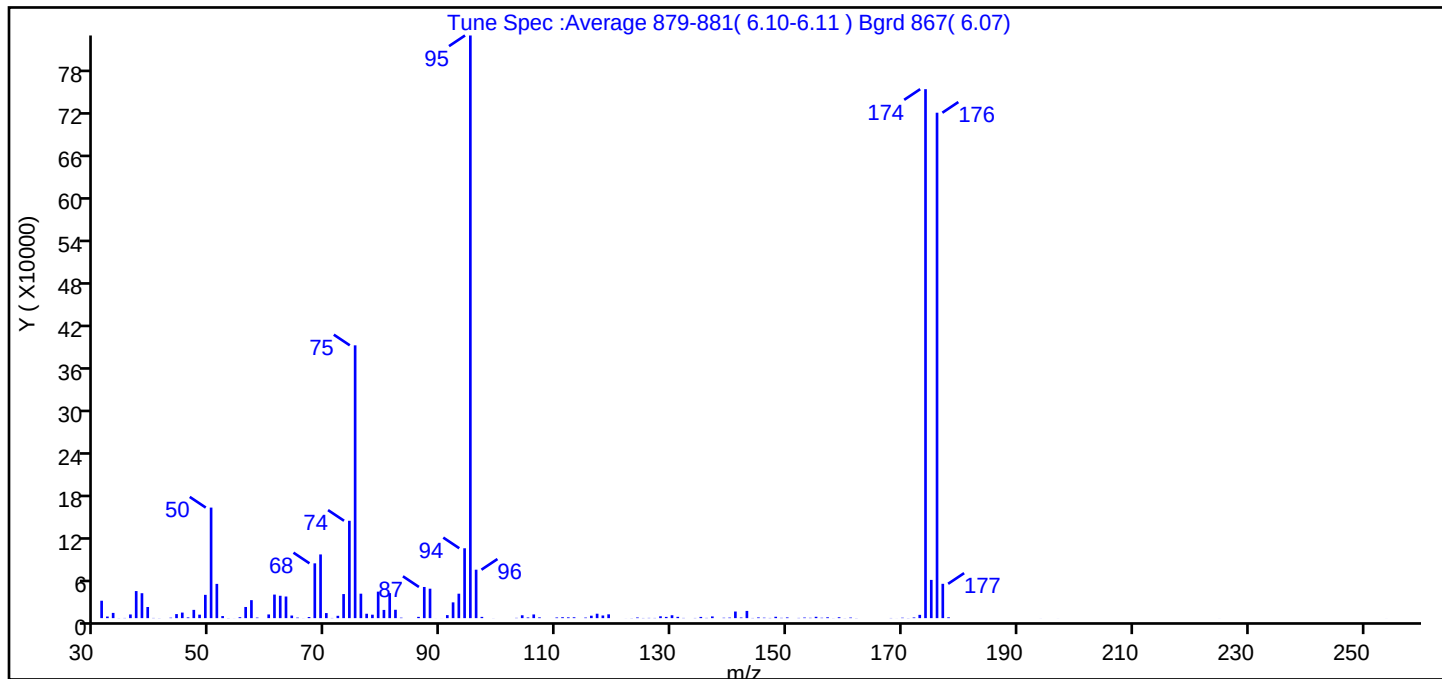
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	19.0
75	30 to 60% of m/z 95	46.8
96	5 to 9% of m/z 95	8.3
173	Less than 2% of m/z 174	0.6 (0.6)
174	50 to 120% of m/z 95	90.8
175	5 to 9% of m/z 174	6.6 (7.2)
176	Greater than 95% but less than 101% of m/z 174	86.7 (95.5)
177	5 to 9% of m/z 176	5.9 (6.8)

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RBFB01A.D\MR_TO15.rslt\spectra.d
Injection Date: 04-Oct-2019 10:09:30
Spectrum: Tune Spec :Average 879-881(6.10-6.11) Bgrd 867(6.07)
Base Peak: 95.00
Minimum % Base Peak: 0
Number of Points: 131

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	24536	66.00	82	105.00	969	145.00	1021
32.00	2252	67.00	1566	106.00	5207	146.00	639
33.00	7385	68.00	77160	107.00	1082	147.00	286
34.00	136	69.00	89696	110.00	964	148.00	1931
35.00	281	70.00	7147	111.00	1315	149.00	418
36.00	5182	71.00	264	112.00	1130	150.00	1010
37.00	38120	72.00	3298	113.00	1229	152.00	326
38.00	35096	73.00	33896	115.00	818	153.00	841
39.00	15689	74.00	137088	116.00	3458	154.00	468
40.00	290	75.00	384064	117.00	6241	155.00	1905
41.00	150	76.00	34440	118.00	3765	156.00	542
43.00	636	77.00	6187	119.00	5370	157.00	1224
44.00	5708	78.00	4859	122.00	66	158.00	112
45.00	7831	79.00	37312	123.00	165	159.00	1272
46.00	1028	80.00	11583	124.00	954	160.00	127
47.00	11644	81.00	35240	125.00	252	161.00	830
48.00	4876	82.00	11798	126.00	342	162.00	165
49.00	32792	83.00	658	127.00	292	168.00	240
50.00	155648	86.00	1787	128.00	2611	169.00	55
51.00	48232	87.00	43880	129.00	1756	170.00	605
52.00	2931	88.00	41456	130.00	4097	171.00	172
53.00	176	89.00	36	131.00	1828	172.00	984
54.00	77	90.00	45	132.00	312	173.00	4627
55.00	1312	91.00	4260	134.00	269	174.00	744704
56.00	15718	92.00	22216	135.00	1729	175.00	53840
57.00	25336	93.00	34432	136.00	339	176.00	711552
58.00	816	94.00	98384	137.00	2415	177.00	48344
60.00	5213	95.00	820288	139.00	560	178.00	1117
61.00	33168	96.00	68192	140.00	762	194.00	59
62.00	31496	97.00	1776	141.00	9326	197.00	43
63.00	30448	99.00	98	142.00	888	225.00	40
64.00	3683	103.00	386	143.00	10176	254.00	40
65.00	779	104.00	4052	144.00	265		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
31.00	24536	66.00	82	105.00	969	145.00	1021
32.00	2252	67.00	1566	106.00	5207	146.00	639
33.00	7385	68.00	77160	107.00	1082	147.00	286
34.00	136	69.00	89696	110.00	964	148.00	1931
35.00	281	70.00	7147	111.00	1315	149.00	418
36.00	5182	71.00	264	112.00	1130	150.00	1010
37.00	38120	72.00	3298	113.00	1229	152.00	326
38.00	35096	73.00	33896	115.00	818	153.00	841
39.00	15689	74.00	137088	116.00	3458	154.00	468
40.00	290	75.00	384064	117.00	6241	155.00	1905
41.00	150	76.00	34440	118.00	3765	156.00	542
43.00	636	77.00	6187	119.00	5370	157.00	1224
44.00	5708	78.00	4859	122.00	66	158.00	112
45.00	7831	79.00	37312	123.00	165	159.00	1272
46.00	1028	80.00	11583	124.00	954	160.00	127
47.00	11644	81.00	35240	125.00	252	161.00	830
48.00	4876	82.00	11798	126.00	342	162.00	165
49.00	32792	83.00	658	127.00	292	168.00	240
50.00	155648	86.00	1787	128.00	2611	169.00	55
51.00	48232	87.00	43880	129.00	1756	170.00	605
52.00	2931	88.00	41456	130.00	4097	171.00	172
53.00	176	89.00	36	131.00	1828	172.00	984
54.00	77	90.00	45	132.00	312	173.00	4627
55.00	1312	91.00	4260	134.00	269	174.00	744704
56.00	15718	92.00	22216	135.00	1729	175.00	53840
57.00	25336	93.00	34432	136.00	339	176.00	711552
58.00	816	94.00	98384	137.00	2415	177.00	48344
60.00	5213	95.00	820288	139.00	560	178.00	1117
61.00	33168	96.00	68192	140.00	762	194.00	59
62.00	31496	97.00	1776	141.00	9326	197.00	43
63.00	30448	99.00	98	142.00	888	225.00	40
64.00	3683	103.00	386	143.00	10176	254.00	40
65.00	779	104.00	4052	144.00	265		

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RBFBJ01A.D

Injection Date: 04-Oct-2019 10:09:30

Instrument ID: MR

Operator ID: HMT

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

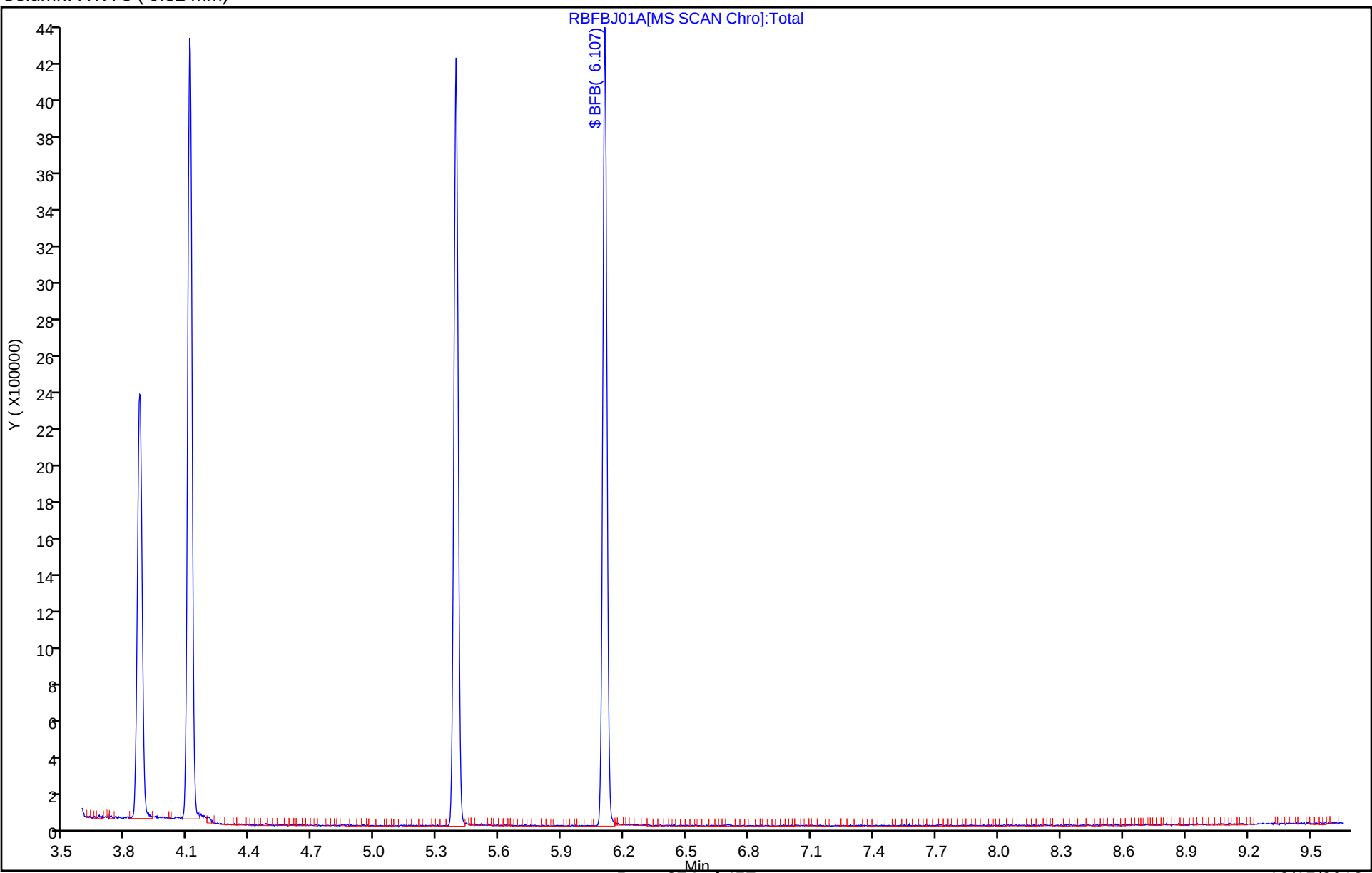
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RBFBJ07d.D
Lims ID: BFB
Client ID:
Sample Type: BFB
Inject. Date: 07-Oct-2019 15:24:30 ALS Bottle#: 16 Worklist Smp#: 1
Injection Vol: 500.0 mL Dil. Factor: 1.0000
Sample Info: 140-0013263-001
Misc. Info.: BFB
Operator ID: afb Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Oct-2019 10:58:34 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 10:58:34

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags

\$ 5 BFB	95	6.104	6.104	0.000	0	1004836	NR	NR	

QC Flag Legend

Processing Flags

NR - Missing Quant Standard

Reagents:

40MXSUR_00003

Amount Added: 40.00

Units: mL

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RBFBJ07d.D

Injection Date: 07-Oct-2019 15:24:30

Instrument ID: MR

Lims ID: BFB

Client ID:

Operator ID: afb

ALS Bottle#: 16

Worklist Smp#: 1

Injection Vol: 500.0 mL

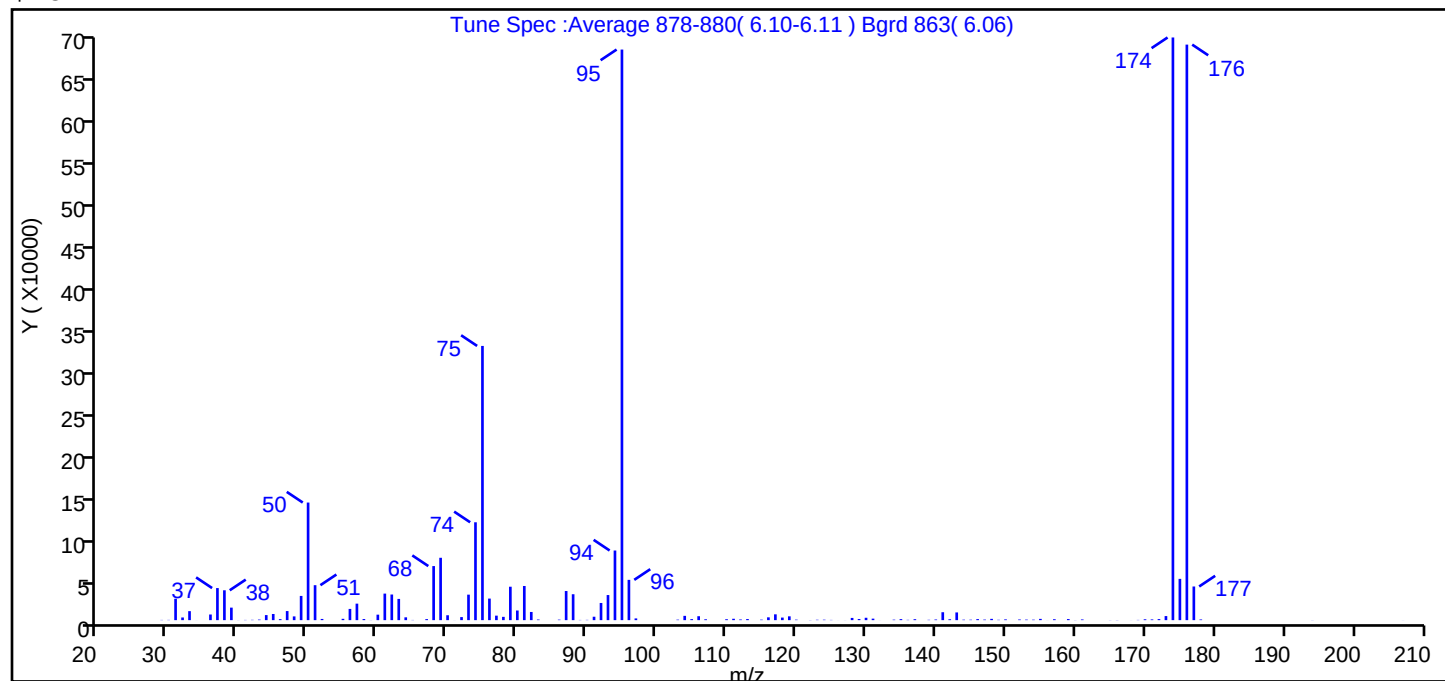
Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Tune Method: BFB Method 8260

\$ 5 BFB



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base peak, 100% relative abundance	100.0
50	15 to 40% of m/z 95	20.6
75	30 to 60% of m/z 95	48.1
96	5 to 9% of m/z 95	7.1
173	Less than 2% of m/z 174	0.7 (0.7)
174	50 to 120% of m/z 95	102.1
175	5 to 9% of m/z 174	7.2 (7.1)
176	Greater than 95% but less than 101% of m/z 174	100.9 (98.8)
177	5 to 9% of m/z 176	5.9 (5.8)

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RBFBJ07d.D\MR_TO15.rsl\spectra.d
Injection Date: 07-Oct-2019 15:24:30
Spectrum: Tune Spec :Average 878-880(6.10-6.11) Bgrd 863(6.06)
Base Peak: 174.00
Minimum % Base Peak: 0
Number of Points: 129

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	264	65.00	236	106.00	4686	145.00	535
30.00	304	67.00	1228	107.00	1035	146.00	1233
31.00	25512	68.00	64472	110.00	1093	147.00	661
32.00	3182	69.00	74360	111.00	1642	148.00	1541
33.00	10722	70.00	5839	112.00	803	149.00	409
34.00	35	71.00	59	113.00	1290	150.00	906
36.00	6729	72.00	3642	115.00	590	152.00	785
37.00	38248	73.00	30400	116.00	3352	153.00	649
38.00	35608	74.00	116696	117.00	6938	154.00	566
39.00	14937	75.00	326976	118.00	3063	155.00	1504
40.00	83	76.00	25704	119.00	4553	156.00	41
41.00	263	77.00	5363	120.00	594	157.00	1093
42.00	375	78.00	3924	122.00	161	159.00	1267
43.00	688	79.00	39856	123.00	469	160.00	122
44.00	6020	80.00	11499	124.00	541	161.00	820
45.00	7337	81.00	40720	125.00	274	165.00	127
46.00	1172	82.00	9751	126.00	35	166.00	168
47.00	10822	83.00	736	127.00	65	168.00	54
48.00	4462	86.00	614	128.00	2645	169.00	278
49.00	28872	87.00	34728	129.00	1334	170.00	1019
50.00	140224	88.00	30896	130.00	2831	171.00	856
51.00	41680	89.00	243	131.00	1784	172.00	1254
52.00	1428	90.00	323	132.00	43	173.00	4862
55.00	1573	91.00	4073	134.00	584	174.00	694784
56.00	13374	92.00	20472	135.00	1213	175.00	49208
57.00	19672	93.00	29920	136.00	351	176.00	686272
58.00	1308	94.00	83024	137.00	1127	177.00	40128
59.00	107	95.00	680384	139.00	405	178.00	806
60.00	6538	96.00	48040	140.00	766	194.00	111
61.00	31648	97.00	2053	141.00	9444	207.00	57
62.00	30568	103.00	593	142.00	1046		
63.00	25304	104.00	5114	143.00	9193		
64.00	3363	105.00	1214	144.00	565		

m/z	Y	m/z	Y	m/z	Y	m/z	Y
29.00	264	65.00	236	106.00	4686	145.00	535
30.00	304	67.00	1228	107.00	1035	146.00	1233
31.00	25512	68.00	64472	110.00	1093	147.00	661
32.00	3182	69.00	74360	111.00	1642	148.00	1541
33.00	10722	70.00	5839	112.00	803	149.00	409
34.00	35	71.00	59	113.00	1290	150.00	906
36.00	6729	72.00	3642	115.00	590	152.00	785
37.00	38248	73.00	30400	116.00	3352	153.00	649
38.00	35608	74.00	116696	117.00	6938	154.00	566
39.00	14937	75.00	326976	118.00	3063	155.00	1504
40.00	83	76.00	25704	119.00	4553	156.00	41
41.00	263	77.00	5363	120.00	594	157.00	1093
42.00	375	78.00	3924	122.00	161	159.00	1267
43.00	688	79.00	39856	123.00	469	160.00	122
44.00	6020	80.00	11499	124.00	541	161.00	820
45.00	7337	81.00	40720	125.00	274	165.00	127
46.00	1172	82.00	9751	126.00	35	166.00	168
47.00	10822	83.00	736	127.00	65	168.00	54
48.00	4462	86.00	614	128.00	2645	169.00	278
49.00	28872	87.00	34728	129.00	1334	170.00	1019
50.00	140224	88.00	30896	130.00	2831	171.00	856
51.00	41680	89.00	243	131.00	1784	172.00	1254
52.00	1428	90.00	323	132.00	43	173.00	4862
55.00	1573	91.00	4073	134.00	584	174.00	694784
56.00	13374	92.00	20472	135.00	1213	175.00	49208
57.00	19672	93.00	29920	136.00	351	176.00	686272
58.00	1308	94.00	83024	137.00	1127	177.00	40128
59.00	107	95.00	680384	139.00	405	178.00	806
60.00	6538	96.00	48040	140.00	766	194.00	111
61.00	31648	97.00	2053	141.00	9444	207.00	57
62.00	30568	103.00	593	142.00	1046		
63.00	25304	104.00	5114	143.00	9193		
64.00	3363	105.00	1214	144.00	565		

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RBFBJ07d.D

Injection Date: 07-Oct-2019 15:24:30

Instrument ID: MR

Operator ID: afb

Lims ID: BFB

Worklist Smp#: 1

Client ID:

Injection Vol: 500.0 mL

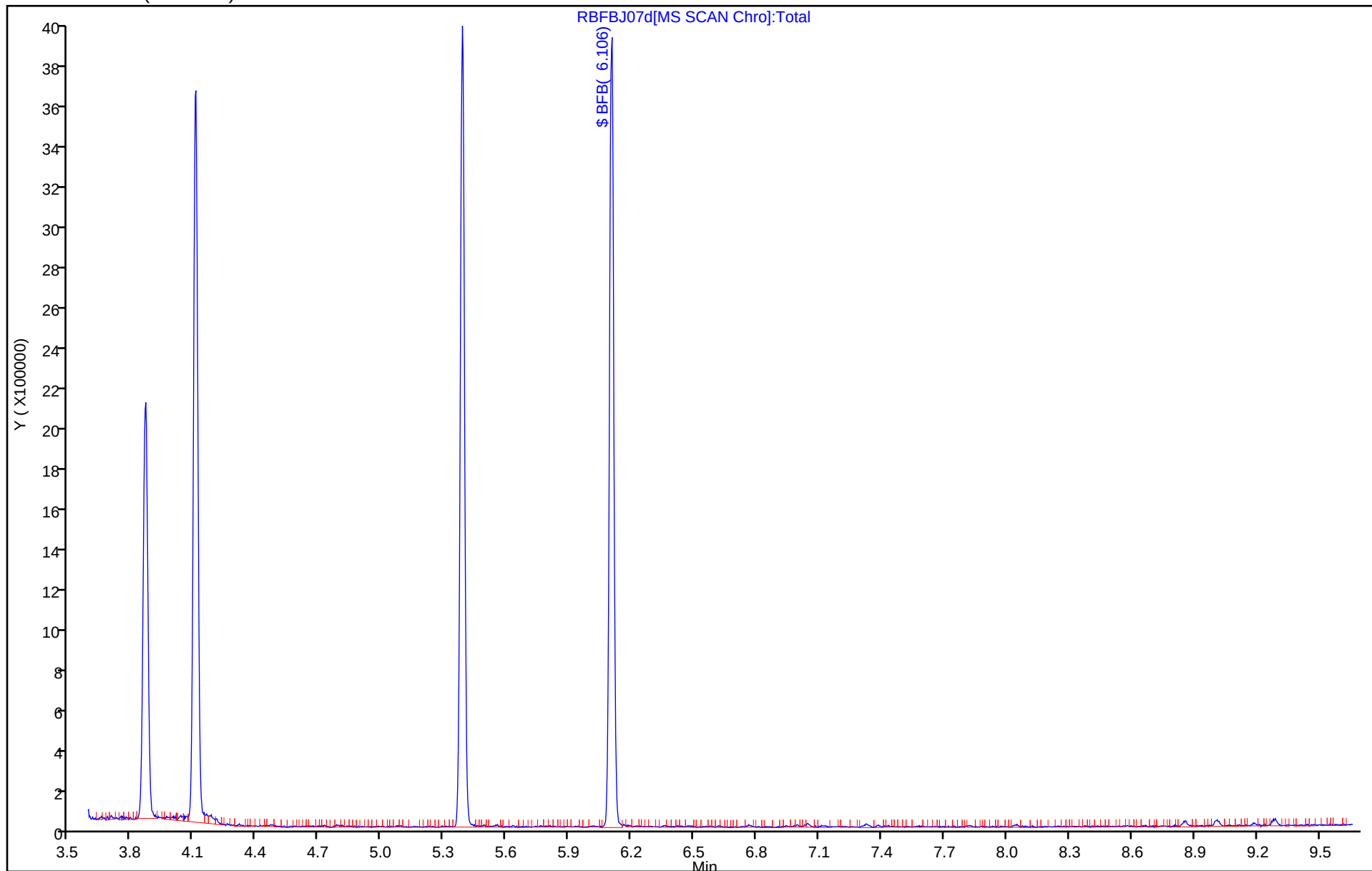
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34104/5
 Matrix: Air Lab File ID: R500BJ03.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 13:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	ND		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	ND		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	ND		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34104/5
 Matrix: Air Lab File ID: R500BJ03.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 13:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	
64-17-5	Ethanol	46.07	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	0.208		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.080	
95-47-6	o-Xylene	106.17	ND		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	ND		0.036	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34104/5
 Matrix: Air Lab File ID: R500BJ03.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 13:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	ND		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34104/5
 Matrix: Air Lab File ID: R500BJ03.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 13:07
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	0.724		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\R500BJ03.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 03-Oct-2019 13:07:30 ALS Bottle#: 16 Worklist Smp#: 5
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013261-005
 Misc. Info.: 500ML BLK
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 09:48:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.517	8.522	-0.005	89	355321	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.749	0.000	93	1932990	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1453188	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.215	0.000	96	839842	4.00	3.91	
7 Propene	41	3.432	3.432	0.000	97	46980		0.3524	7
31 Methylene Chloride	84	5.955	5.950	0.005	90	28583		0.2085	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\R500BJ03.D

Injection Date: 03-Oct-2019 13:07:30

Instrument ID: MR

Operator ID:

Lims ID: MB

Worklist Smp#: 5

Client ID:

Purge Vol: 500.000 mL

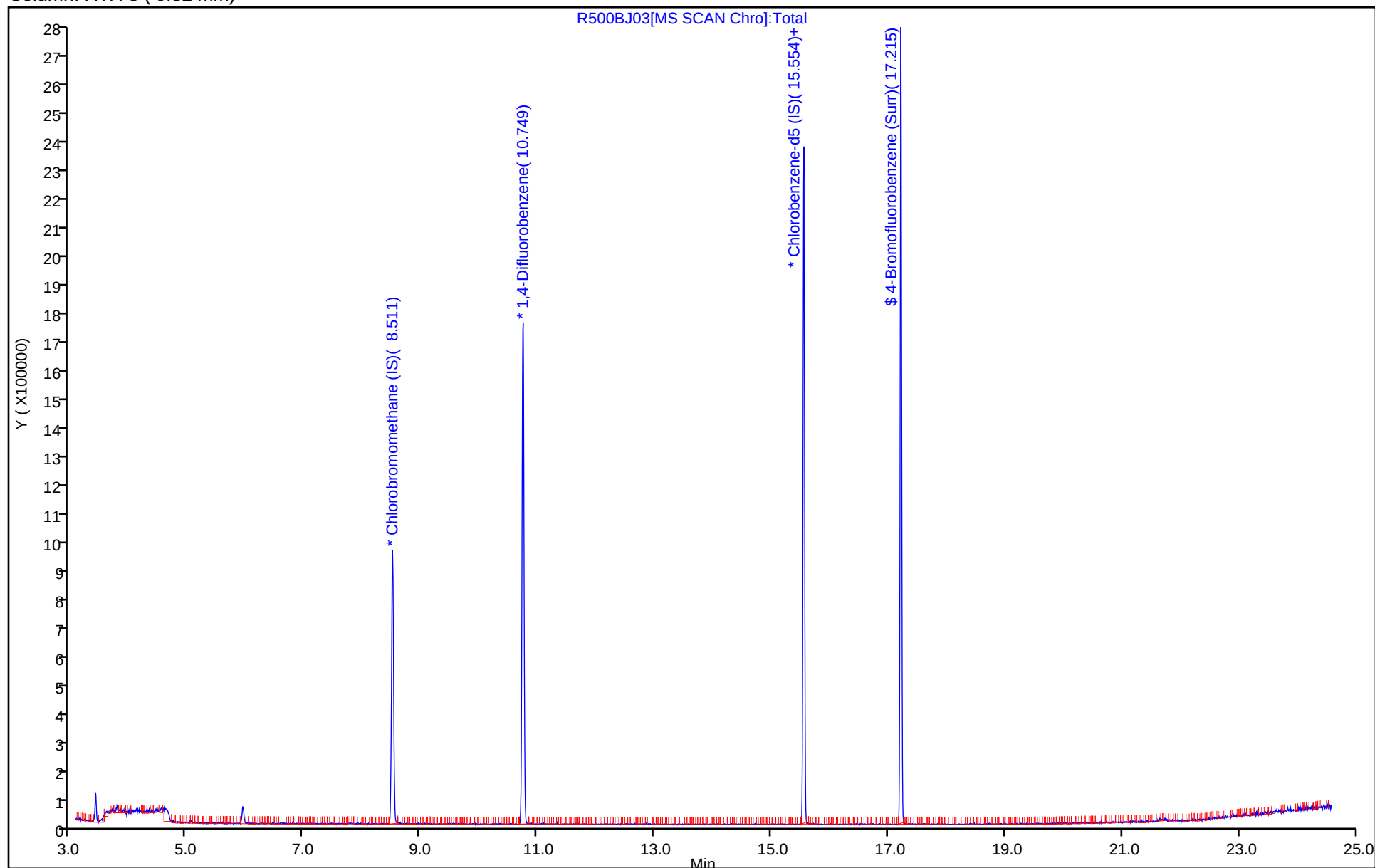
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\R500BJ03.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 03-Oct-2019 13:07:30 ALS Bottle#: 16 Worklist Smp#: 5
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013261-005
Misc. Info.: 500ML BLK
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 09:48:03

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.91	97.78

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\R500BJ03.D

Injection Date: 03-Oct-2019 13:07:30

Instrument ID: MR

Lims ID: MB

Client ID:

Operator ID:

ALS Bottle#:

16

Worklist Smp#:

5

Purge Vol: 500.000 mL

Dil. Factor:

1.0000

Method: MR_TO15

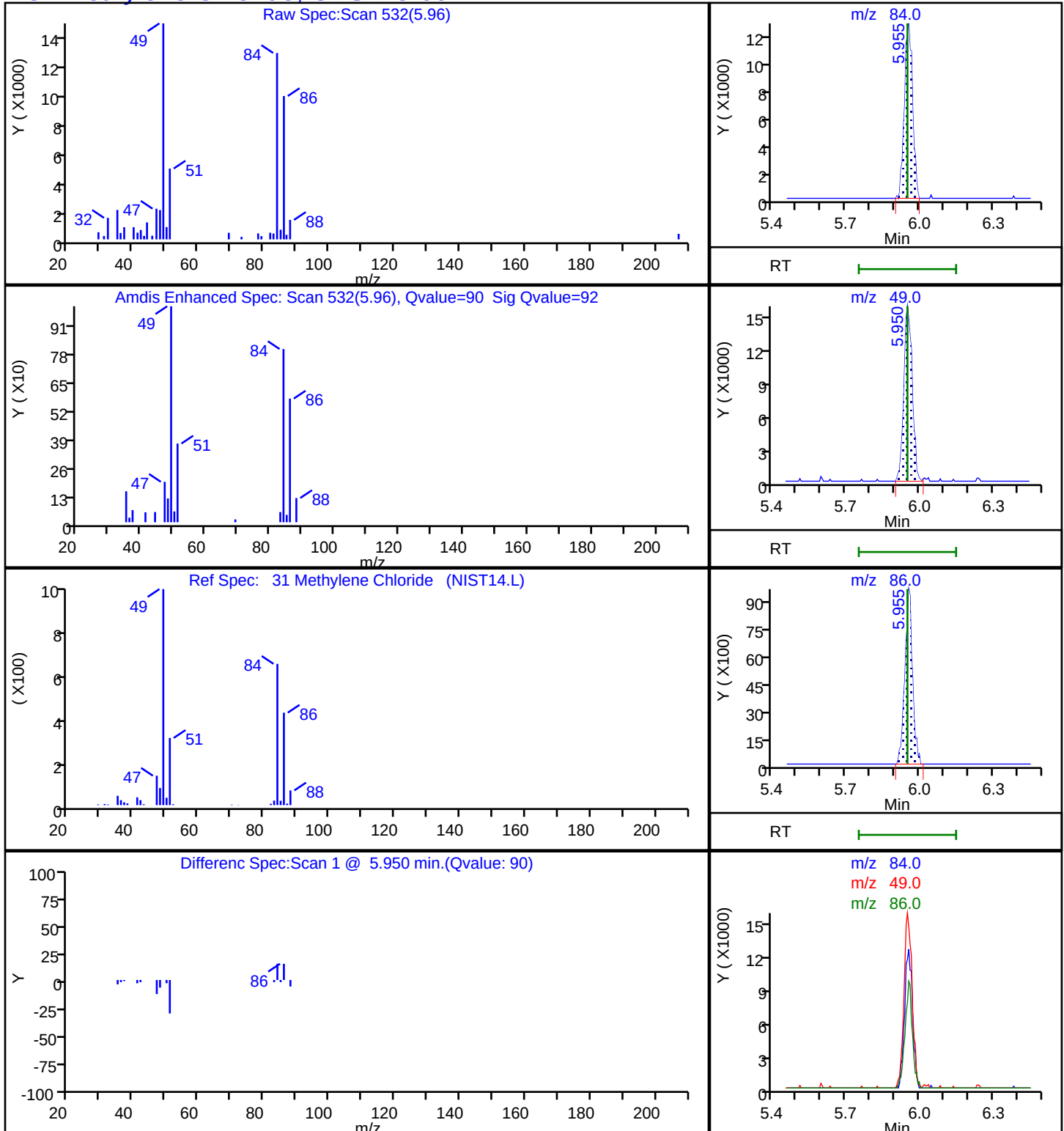
Limit Group:

MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)

Detector

MS SCAN

31 Methylene Chloride, CAS: 75-09-2

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34105/4
 Matrix: Air Lab File ID: R500BJ04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 12:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	ND		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	ND		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	ND		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34105/4
 Matrix: Air Lab File ID: R500BJ04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 12:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	
64-17-5	Ethanol	46.07	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.080	
95-47-6	o-Xylene	106.17	ND		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	ND		0.036	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34105/4
 Matrix: Air Lab File ID: R500BJ04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 12:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	ND		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34105/4
 Matrix: Air Lab File ID: R500BJ04.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 12:04
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	89		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\R500BJ04.D
 Lims ID: mb
 Client ID:
 Sample Type: MB
 Inject. Date: 04-Oct-2019 12:04:30 ALS Bottle#: 16 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013262-004
 Misc. Info.: 500ML BLK
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Oct-2019 16:59:04 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 16:59:04

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.528	-0.006	89	476393	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.755	10.760	-0.005	92	2747577	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.559	15.560	-0.001	85	2102088	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.220	-0.005	96	1102716	4.00	3.55	
7 Propene	41	3.427	3.437	-0.010	96	56668		0.3171	7
23 Isopropyl alcohol	45	5.158	5.158	0.049	42	3142		0.0141	7a
31 Methylene Chloride	84	5.961	5.961	0.000	91	36653		0.1994	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Review Flags

a - User Assigned ID

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\R500BJ04.D

Injection Date: 04-Oct-2019 12:04:30

Instrument ID: MR

Operator ID:

Lims ID: mb

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

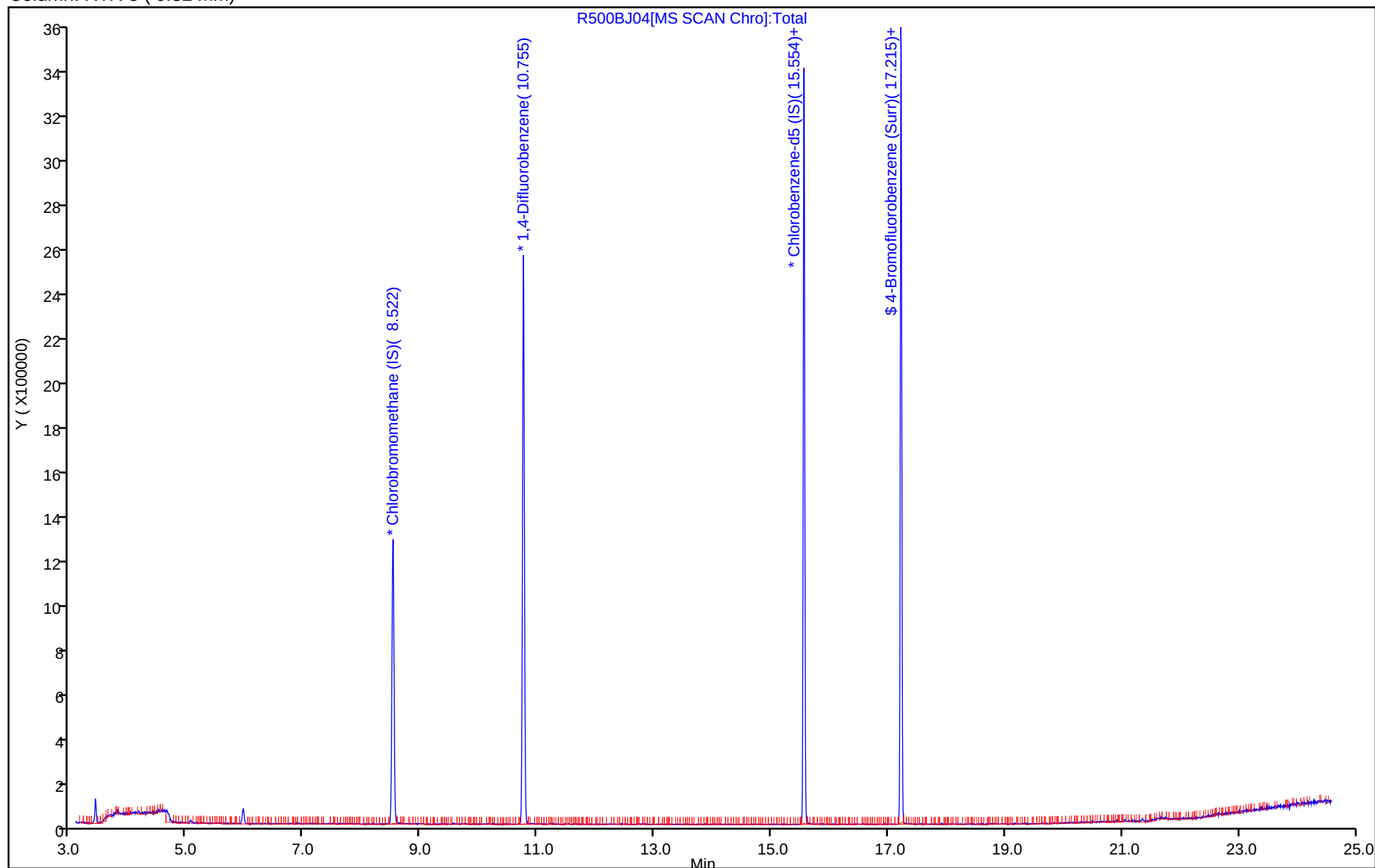
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\R500BJ04.D
Lims ID: mb
Client ID:
Sample Type: MB
Inject. Date: 04-Oct-2019 12:04:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013262-004
Misc. Info.: 500ML BLK
Operator ID: Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Oct-2019 16:59:04 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 16:59:04

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.55	88.75

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34106/4
 Matrix: Air Lab File ID: RJ07mb500.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/07/2019 19:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.080	
75-34-3	1,1-Dichloroethane	98.96	ND		0.080	
75-35-4	1,1-Dichloroethene	96.94	ND		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.080	
106-93-4	1,2-Dibromoethane	187.87	ND		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.080	
107-06-2	1,2-Dichloroethane	98.96	ND		0.080	
78-87-5	1,2-Dichloropropane	112.99	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.080	
123-91-1	1,4-Dioxane	88.11	ND		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.20	
78-93-3	2-Butanone	72.11	ND		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.20	
71-43-2	Benzene	78.11	ND		0.080	
100-44-7	Benzyl chloride	126.58	ND		0.16	
75-27-4	Bromodichloromethane	163.83	ND		0.080	
75-25-2	Bromoform	252.75	ND		0.080	
74-83-9	Bromomethane	94.94	ND		0.080	
56-23-5	Carbon tetrachloride	153.81	ND		0.032	
108-90-7	Chlorobenzene	112.56	ND		0.080	
75-00-3	Chloroethane	64.52	ND		0.080	
67-66-3	Chloroform	119.38	ND		0.080	
74-87-3	Chloromethane	50.49	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.080	
110-82-7	Cyclohexane	84.16	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34106/4
 Matrix: Air Lab File ID: RJ07mb500.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/07/2019 19:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.080	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.080	
64-17-5	Ethanol	46.07	ND		2.0	
100-41-4	Ethylbenzene	106.17	ND		0.080	
87-68-3	Hexachlorobutadiene	260.76	ND		0.080	
110-54-3	Hexane	86.17	ND		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.16	
75-09-2	Methylene Chloride	84.93	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.080	
95-47-6	o-Xylene	106.17	ND		0.080	
100-42-5	Styrene	104.15	ND		0.080	
75-65-0	t-Butyl alcohol	74.12	ND		0.32	
127-18-4	Tetrachloroethene	165.83	ND		0.080	
108-88-3	Toluene	92.14	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.080	
79-01-6	Trichloroethene	131.39	ND		0.036	
75-69-4	Trichlorofluoromethane	137.37	ND		0.080	
75-01-4	Vinyl chloride	62.50	ND		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34106/4
 Matrix: Air Lab File ID: RJ07mb500.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/07/2019 19:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	ND		0.44	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	ND		0.55	
79-00-5	1,1,2-Trichloroethane	133.41	ND		0.44	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	ND		0.61	
75-34-3	1,1-Dichloroethane	98.96	ND		0.32	
75-35-4	1,1-Dichloroethene	96.94	ND		0.16	
120-82-1	1,2,4-Trichlorobenzene	181.45	ND		0.59	
95-63-6	1,2,4-Trimethylbenzene	120.20	ND		0.39	
106-93-4	1,2-Dibromoethane	187.87	ND		0.61	
95-50-1	1,2-Dichlorobenzene	147.00	ND		0.48	
107-06-2	1,2-Dichloroethane	98.96	ND		0.32	
78-87-5	1,2-Dichloropropane	112.99	ND		0.37	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	ND		0.56	
108-67-8	1,3,5-Trimethylbenzene	120.20	ND		0.39	
541-73-1	1,3-Dichlorobenzene	147.00	ND		0.48	
106-46-7	1,4-Dichlorobenzene	147.00	ND		0.48	
123-91-1	1,4-Dioxane	88.11	ND		0.72	
540-84-1	2,2,4-Trimethylpentane	114.23	ND		0.93	
78-93-3	2-Butanone	72.11	ND		0.94	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	ND		0.82	
71-43-2	Benzene	78.11	ND		0.26	
100-44-7	Benzyl chloride	126.58	ND		0.83	
75-27-4	Bromodichloromethane	163.83	ND		0.54	
75-25-2	Bromoform	252.75	ND		0.83	
74-83-9	Bromomethane	94.94	ND		0.31	
56-23-5	Carbon tetrachloride	153.81	ND		0.20	
108-90-7	Chlorobenzene	112.56	ND		0.37	
75-00-3	Chloroethane	64.52	ND		0.21	
67-66-3	Chloroform	119.38	ND		0.39	
74-87-3	Chloromethane	50.49	ND		0.41	
156-59-2	cis-1,2-Dichloroethene	96.94	ND		0.16	
10061-01-5	cis-1,3-Dichloropropene	110.97	ND		0.36	
110-82-7	Cyclohexane	84.16	ND		0.69	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 140-34106/4
 Matrix: Air Lab File ID: RJ07mb500.D
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/07/2019 19:05
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ug/m3

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	ND		0.68	
75-71-8	Dichlorodifluoromethane	120.91	ND		0.40	
64-17-5	Ethanol	46.07	ND		3.8	
100-41-4	Ethylbenzene	106.17	ND		0.35	
87-68-3	Hexachlorobutadiene	260.76	ND		0.85	
110-54-3	Hexane	86.17	ND		0.70	
1634-04-4	Methyl tert-butyl ether	88.15	ND		0.58	
75-09-2	Methylene Chloride	84.93	ND		0.69	
179601-23-1	m-Xylene & p-Xylene	106.17	ND		0.35	
95-47-6	o-Xylene	106.17	ND		0.35	
100-42-5	Styrene	104.15	ND		0.34	
75-65-0	t-Butyl alcohol	74.12	ND		0.97	
127-18-4	Tetrachloroethene	165.83	ND		0.54	
108-88-3	Toluene	92.14	ND		0.45	
156-60-5	trans-1,2-Dichloroethene	96.94	ND		0.32	
10061-02-6	trans-1,3-Dichloropropene	110.97	ND		0.36	
79-01-6	Trichloroethene	131.39	ND		0.19	
75-69-4	Trichlorofluoromethane	137.37	ND		0.45	
75-01-4	Vinyl chloride	62.50	ND		0.10	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	88		60-140

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07mb500.D
 Lims ID: MB
 Client ID:
 Sample Type: MB
 Inject. Date: 07-Oct-2019 19:05:30 ALS Bottle#: 16 Worklist Smp#: 4
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013263-004
 Misc. Info.: mb500
 Operator ID: afb Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 08-Oct-2019 11:23:53 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:23:53

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.517	8.522	-0.005	89	415459	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.744	10.760	-0.016	93	2358718	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1846238	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.199	17.215	-0.016	94	960153	4.00	3.52	
7 Propene	41	3.427	3.437	-0.010	97	54744		0.3512	7
31 Methylene Chloride	84	5.950	5.961	-0.011	96	30511		0.1903	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07mb500.D

Injection Date: 07-Oct-2019 19:05:30

Instrument ID: MR

Operator ID: afb

Lims ID: MB

Worklist Smp#: 4

Client ID:

Purge Vol: 500.000 mL

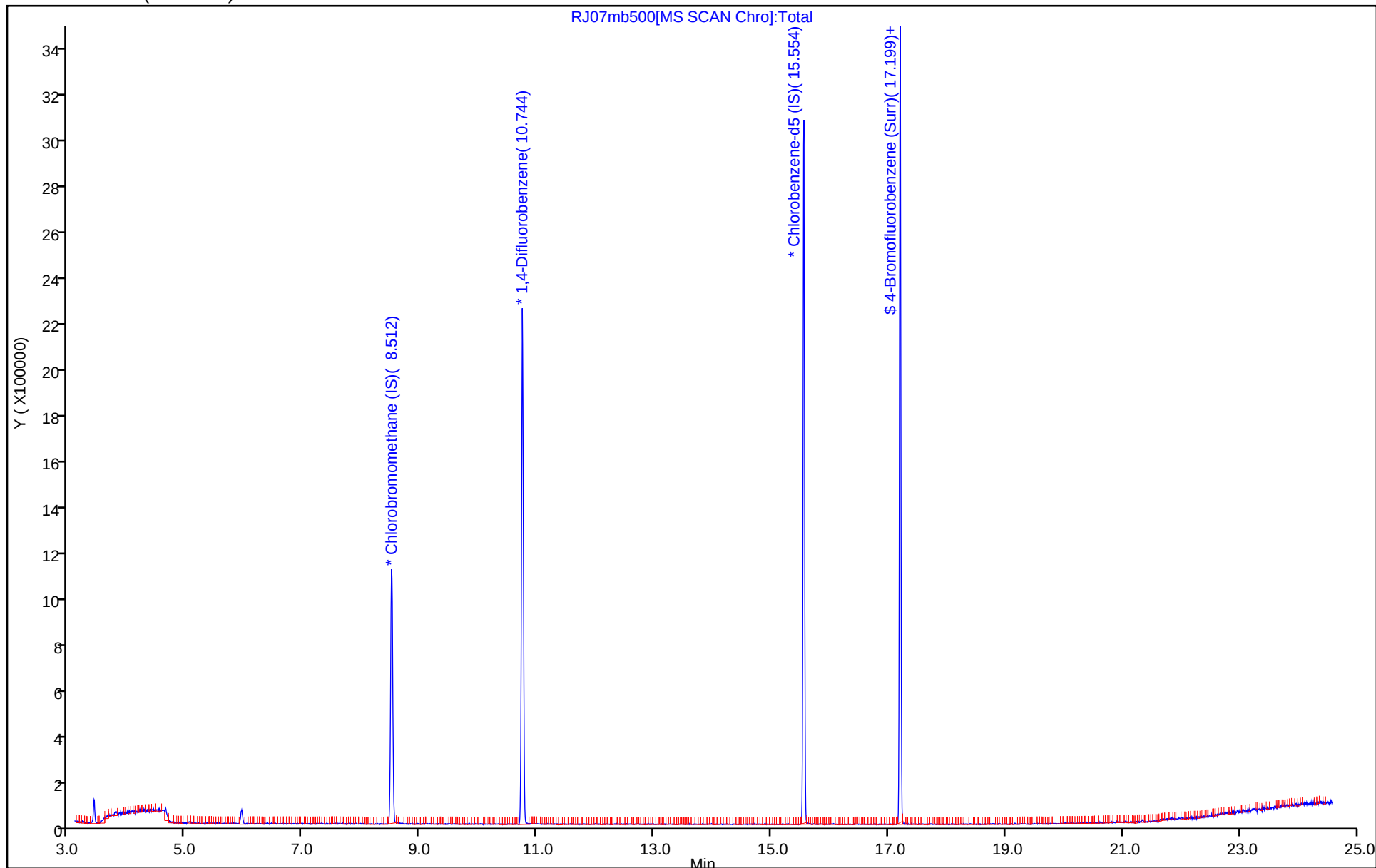
Dil. Factor: 1.0000

ALS Bottle#: 16

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RJ07mb500.D
Lims ID: MB
Client ID:
Sample Type: MB
Inject. Date: 07-Oct-2019 19:05:30 ALS Bottle#: 16 Worklist Smp#: 4
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013263-004
Misc. Info.: mb500
Operator ID: afb Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Oct-2019 11:23:53 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:23:53

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.52	87.99

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-34104/1002
 Matrix: Air Lab File ID: RCCVJ03-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 09:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.72		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.44		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	2.00		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.06		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.78		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.11		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	2.57		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.33		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.00		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	2.51		0.080	
107-06-2	1,2-Dichloroethane	98.96	1.62		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.74		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.56		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	2.23		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	2.37		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	2.48		0.080	
123-91-1	1,4-Dioxane	88.11	2.12		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.62		0.20	
78-93-3	2-Butanone	72.11	1.70		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.48		0.20	
71-43-2	Benzene	78.11	1.70		0.080	
100-44-7	Benzyl chloride	126.58	2.61		0.16	
75-27-4	Bromodichloromethane	163.83	1.72		0.080	
75-25-2	Bromoform	252.75	1.62		0.080	
74-83-9	Bromomethane	94.94	1.92		0.080	
56-23-5	Carbon tetrachloride	153.81	1.88		0.032	
108-90-7	Chlorobenzene	112.56	2.04		0.080	
75-00-3	Chloroethane	64.52	1.73		0.080	
67-66-3	Chloroform	119.38	1.71		0.080	
74-87-3	Chloromethane	50.49	1.96		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	2.01		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.86		0.080	
110-82-7	Cyclohexane	84.16	1.55		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-34104/1002
 Matrix: Air Lab File ID: RCCVJ03-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/03/2019 09:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34104 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	1.84		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.33		0.080	
64-17-5	Ethanol	46.07	9.64		2.0	
100-41-4	Ethylbenzene	106.17	1.94		0.080	
87-68-3	Hexachlorobutadiene	260.76	2.31		0.080	
110-54-3	Hexane	86.17	1.63		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.75		0.16	
75-09-2	Methylene Chloride	84.93	1.72		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	3.92		0.080	
95-47-6	o-Xylene	106.17	2.03		0.080	
100-42-5	Styrene	104.15	2.20		0.080	
75-65-0	t-Butyl alcohol	74.12	1.79		0.32	
127-18-4	Tetrachloroethene	165.83	1.84		0.080	
108-88-3	Toluene	92.14	1.96		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	1.98		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.84		0.080	
79-01-6	Trichloroethene	131.39	1.81		0.036	
75-69-4	Trichlorofluoromethane	137.37	1.91		0.080	
75-01-4	Vinyl chloride	62.50	2.06		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	106		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RCCVJ03-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 03-Oct-2019 09:54:30 ALS Bottle#: 15 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013261-002
 Misc. Info.: P96
 Operator ID: HMT Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:17:26

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	91	317552	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.749	10.749	0.000	93	1834746	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	85	1448340	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.215	0.000	96	908349	4.00	4.24	
6 Chlorodifluoromethane	51	3.421	3.421	0.000	97	377262	2.00	1.79	
7 Propene	41	3.432	3.432	0.000	97	220699	2.00	1.85	
8 Dichlorodifluoromethane	85	3.480	3.480	0.000	100	418016	2.00	2.33	
9 Chloromethane	52	3.658	3.658	0.000	98	67086	2.00	1.96	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.664	3.664	0.000	88	377717	2.00	2.56	
11 Acetaldehyde	44	3.804	3.804	0.000	99	469880	10.0	11.3	
12 Vinyl chloride	62	3.820	3.820	0.000	99	222386	2.00	2.06	
13 Butadiene	54	3.901	3.901	0.000	69	164533	2.00	2.03	
14 Butane	43	3.901	3.901	0.000	85	314570	2.00	2.00	
15 Bromomethane	94	4.214	4.214	0.000	94	204410	2.00	1.92	
16 Chloroethane	64	4.349	4.349	0.000	94	77955	2.00	1.73	
17 Ethanol	31	4.440	4.440	0.000	98	468223	10.0	9.64	
18 Vinyl bromide	106	4.640	4.640	0.000	97	185457	2.00	2.06	
19 2-Methylbutane	43	4.683	4.683	0.000	89	198397	2.00	1.61	
21 Trichlorofluoromethane	101	4.899	4.899	0.000	97	492470	2.00	1.91	
20 Acrolein	56	4.909	4.909	0.000	27	65946	2.00	2.16	
24 Acetonitrile	40	4.985	4.985	0.000	100	73954	2.00	1.62	
22 Acetone	58	5.023	5.023	0.000	96	273823	6.00	5.41	
23 Isopropyl alcohol	45	5.103	5.103	0.000	92	753231	6.00	5.08	
25 Pentane	72	5.120	5.120	0.000	96	34635	2.00	1.91	
26 Ethyl ether	31	5.287	5.287	0.000	89	163162	2.00	1.32	
27 1,1-Dichloroethene	96	5.600	5.600	0.000	96	217937	2.00	2.11	
29 2-Methyl-2-propanol	59	5.697	5.697	0.000	94	329242	2.00	1.79	
28 Acrylonitrile	53	5.707	5.707	0.000	95	147282	2.00	1.93	
30 1,1,2-Trichloro-1,2,2-trif	101	5.772	5.772	0.000	97	450092	2.00	2.06	
31 Methylene Chloride	84	5.950	5.950	0.000	95	210265	2.00	1.72	
32 3-Chloro-1-propene	39	5.961	5.961	0.000	96	170312	2.00	1.68	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.106	6.106	0.000	100	586263	2.00	2.16	
34 trans-1,2-Dichloroethene	96	6.759	6.759	0.000	94	220300	2.00	1.98	
35 2-Methylpentane	43	6.780	6.780	0.000	94	398488	2.00	1.52	
36 Methyl tert-butyl ether	73	6.888	6.888	0.000	96	468789	2.00	1.75	
37 1,1-Dichloroethane	63	7.185	7.185	0.000	100	340348	2.00	1.78	
38 Vinyl acetate	43	7.293	7.293	0.000	99	463638	2.00	1.54	
39 2-Butanone (MEK)	72	7.746	7.746	0.000	97	91095	2.00	1.70	
40 Hexane	56	7.762	7.762	0.000	93	142086	2.00	1.63	
41 Isopropyl ether	45	7.929	7.929	0.000	95	594081	2.00	1.49	
42 cis-1,2-Dichloroethene	96	8.183	8.183	0.000	85	232434	2.00	2.01	
43 Ethyl acetate	43	8.371	8.371	0.000	99	409763	2.00	1.48	
44 Chloroform	83	8.528	8.528	0.000	96	394021	2.00	1.71	
45 Tert-butyl ethyl ether	59	8.614	8.614	0.000	95	526949	2.00	1.63	
46 Tetrahydrofuran	42	8.937	8.937	0.000	95	201877	2.00	1.47	
47 1,1,1-Trichloroethane	97	9.563	9.563	0.000	94	405110	2.00	1.72	
48 1,2-Dichloroethane	62	9.682	9.682	0.000	95	234305	2.00	1.62	
50 n-Butanol	31	10.140	10.140	0.000	79	63422	2.00	1.25	
51 Cyclohexane	69	10.178	10.178	0.000	63	80998	2.00	1.55	
49 Benzene	78	10.178	10.178	0.000	94	601145	2.00	1.70	
52 Carbon tetrachloride	117	10.205	10.205	0.000	96	440187	2.00	1.88	
53 2,3-Dimethylpentane	71	10.302	10.302	0.000	90	135692	2.00	1.88	
54 Thiophene	84	10.458	10.458	0.000	93	341339	2.00	1.86	
55 Isooctane	57	10.965	10.965	0.000	98	893203	2.00	1.62	
57 n-Heptane	71	11.359	11.359	0.000	90	195028	2.00	1.67	
56 1,2-Dichloropropane	63	11.445	11.445	0.000	91	222031	2.00	1.74	
58 Trichloroethene	130	11.477	11.477	0.000	95	276088	2.00	1.81	
59 Dibromomethane	93	11.569	11.569	0.000	93	260932	2.00	1.92	
60 Dichlorobromomethane	83	11.715	11.715	0.000	98	386695	2.00	1.72	
61 1,4-Dioxane	88	11.725	11.725	0.000	39	108689	2.00	2.12	
62 Methyl methacrylate	41	11.817	11.817	0.000	96	219824	2.00	1.41	
63 Methylcyclohexane	83	12.259	12.259	0.000	95	349517	2.00	1.80	
64 4-Methyl-2-pentanone (MIBK)	43	12.680	12.680	0.000	96	428892	2.00	1.48	
65 cis-1,3-Dichloropropene	75	12.739	12.739	0.000	94	328746	2.00	1.86	
66 trans-1,3-Dichloropropene	75	13.451	13.451	0.000	97	280555	2.00	1.84	
67 Toluene	91	13.569	13.569	0.000	93	694333	2.00	1.96	
68 1,1,2-Trichloroethane	83	13.650	13.650	0.000	95	221042	2.00	2.00	
69 2-Hexanone	58	14.033	14.033	0.000	93	215239	2.00	1.77	
71 n-Octane	85	14.270	14.270	0.000	91	207259	2.00	1.89	
70 Chlorodibromomethane	129	14.357	14.357	0.000	97	408020	2.00	1.84	
72 Ethylene Dibromide	107	14.648	14.648	0.000	97	413252	2.00	2.00	
73 Tetrachloroethene	129	14.723	14.723	0.000	95	262562	2.00	1.84	
74 Chlorobenzene	112	15.602	15.602	0.000	98	610947	2.00	2.04	
75 2,3-Dimethylheptane	43	15.624	15.624	0.000	95	650794	2.00	1.60	
76 Ethylbenzene	91	15.894	15.894	0.000	97	929017	2.00	1.94	
77 m-Xylene & p-Xylene	91	16.050	16.050	0.000	96	1446405	4.00	3.92	
81 n-Nonane	57	16.476	16.476	0.000	91	430396	2.00	1.82	
78 Bromoform	173	16.508	16.508	0.000	95	328167	2.00	1.62	
79 Styrene	104	16.519	16.519	0.000	97	569942	2.00	2.20	
80 o-Xylene	91	16.578	16.578	0.000	99	761027	2.00	2.03	
82 1,1,2,2-Tetrachloroethane	83	16.913	16.913	0.000	99	670990	2.00	2.44	
83 1,2,3-Trichloropropane	110	17.080	17.080	0.000	96	190508	2.00	2.20	
84 Isopropylbenzene	105	17.182	17.182	0.000	94	1207090	2.00	2.18	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.743	17.743	0.000	100	355409	2.00	2.40	
86 2-Chlorotoluene	126	17.792	17.792	0.000	96	335923	2.00	2.40	
88 4-Ethyltoluene	105	17.900	17.900	0.000	100	1276216	2.00	2.26	
87 1,3,5-Trimethylbenzene	120	17.980	17.980	0.000	93	499795	2.00	2.23	
89 Alpha Methyl Styrene	118	18.223	18.223	0.000	93	518812	2.00	2.39	
90 n-Decane	57	18.282	18.282	0.000	91	650497	2.00	2.03	
91 tert-Butylbenzene	119	18.423	18.423	0.000	95	1124857	2.00	2.22	
92 1,2,4-Trimethylbenzene	105	18.433	18.433	0.000	96	1103679	2.00	2.33	
94 sec-Butylbenzene	105	18.698	18.698	0.000	99	1661873	2.00	2.26	
93 1,3-Dichlorobenzene	146	18.714	18.714	0.000	95	850022	2.00	2.37	
96 Benzyl chloride	91	18.795	18.795	0.000	99	865366	2.00	2.61	
95 1,4-Dichlorobenzene	146	18.805	18.805	0.000	98	861182	2.00	2.48	
97 4-Isopropyltoluene	119	18.870	18.870	0.000	97	1344349	2.00	2.46	
98 1,2,3-Trimethylbenzene	105	18.924	18.924	0.000	97	1154500	2.00	2.48	
99 Butylcyclohexane	83	18.978	18.978	0.000	98	893700	2.00	2.42	
100 1,2-Dichlorobenzene	146	19.178	19.178	0.000	85	854901	2.00	2.51	
101 2,3-Dihydroindene	117	19.178	19.178	0.000	94	1101160	2.00	2.40	
102 Indene	116	19.307	19.307	0.000	92	990355	2.00	2.49	
103 n-Butylbenzene	91	19.312	19.312	0.000	98	1412928	2.00	2.45	
104 Undecane	57	19.636	19.636	0.000	95	801233	2.00	2.07	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.798	0.000	94	317992	2.00	2.33	
106 1,2,4,5-Tetramethylbenzene	119	20.089	20.089	0.000	98	1319277	2.00	2.49	
107 Dodecane	57	20.709	20.709	0.000	96	747813	2.00	1.89	
108 1,2,4-Trichlorobenzene	180	20.909	20.909	0.000	93	826066	2.00	2.57	
109 Naphthalene	128	21.054	21.054	0.000	100	1683778	2.00	2.60	
110 Hexachlorobutadiene	225	21.275	21.275	0.000	94	648079	2.00	2.31	
111 1,2,3-Trichlorobenzene	180	21.345	21.345	0.000	96	740438	2.00	2.27	
112 2-Methylnaphthalene	142	22.009	22.009	0.000	98	202460	2.00	0.7608	
113 1-Methylnaphthalene	142	22.138	22.138	0.000	96	187481	2.00	0.7672	
A 115 C8 Range	1	14.265	(14.222-14.308)		0	1853216	2.00	1.51	
S 116 Xylenes, Total	100				0		6.00	5.95	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.00	

Reagents:

40CV101P_00096

Amount Added: 100.00

Units: ml

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Laboratories

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RCCVJ03-LCS.d

Injection Date: 03-Oct-2019 09:54:30

Instrument ID: MR

Operator ID: HMT

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

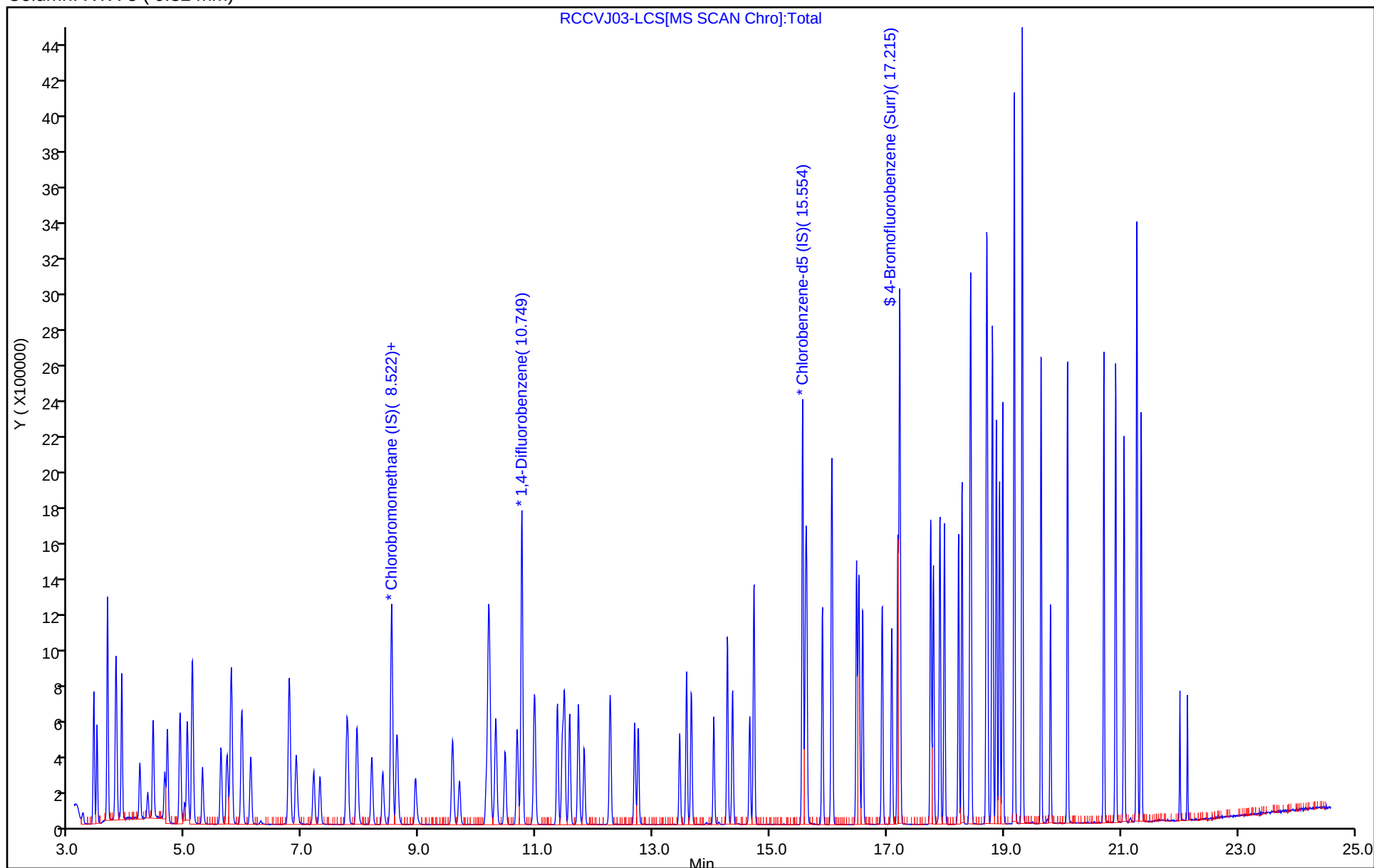
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\RCCVJ03-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 03-Oct-2019 09:54:30 ALS Bottle#: 15 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013261-002
Misc. Info.: P96
Operator ID: HMT Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13261.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 04-Oct-2019 11:18:08 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0331

First Level Reviewer: tajh

Date: 04-Oct-2019 11:17:26

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	4.24	106.11

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-34105/1002
 Matrix: Air Lab File ID: RCCVJ01A-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 10:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.82		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	2.32		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	2.07		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	2.09		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.86		0.080	
75-35-4	1,1-Dichloroethene	96.94	2.08		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	2.26		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	2.20		0.080	
106-93-4	1,2-Dibromoethane	187.87	2.08		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	2.33		0.080	
107-06-2	1,2-Dichloroethane	98.96	1.62		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.88		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.84		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	2.25		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	2.19		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	2.32		0.080	
123-91-1	1,4-Dioxane	88.11	2.19		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.75		0.20	
78-93-3	2-Butanone	72.11	1.90		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.56		0.20	
71-43-2	Benzene	78.11	1.87		0.080	
100-44-7	Benzyl chloride	126.58	2.58		0.16	
75-27-4	Bromodichloromethane	163.83	1.75		0.080	
75-25-2	Bromoform	252.75	1.53		0.080	
74-83-9	Bromomethane	94.94	2.06		0.080	
56-23-5	Carbon tetrachloride	153.81	1.86		0.032	
108-90-7	Chlorobenzene	112.56	2.11		0.080	
75-00-3	Chloroethane	64.52	2.00		0.080	
67-66-3	Chloroform	119.38	1.81		0.080	
74-87-3	Chloromethane	50.49	2.17		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	2.16		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.94		0.080	
110-82-7	Cyclohexane	84.16	1.79		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-34105/1002
 Matrix: Air Lab File ID: RCCVJ01A-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/04/2019 10:37
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34105 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	1.81		0.080	
75-71-8	Dichlorodifluoromethane	120.91	2.23		0.080	
64-17-5	Ethanol	46.07	9.47		2.0	
100-41-4	Ethylbenzene	106.17	2.04		0.080	
87-68-3	Hexachlorobutadiene	260.76	2.09		0.080	
110-54-3	Hexane	86.17	1.79		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.90		0.16	
75-09-2	Methylene Chloride	84.93	1.77		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	4.08		0.080	
95-47-6	o-Xylene	106.17	2.09		0.080	
100-42-5	Styrene	104.15	2.20		0.080	
75-65-0	t-Butyl alcohol	74.12	1.85		0.32	
127-18-4	Tetrachloroethene	165.83	1.96		0.080	
108-88-3	Toluene	92.14	2.11		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	2.10		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.91		0.080	
79-01-6	Trichloroethene	131.39	1.96		0.036	
75-69-4	Trichlorofluoromethane	137.37	1.85		0.080	
75-01-4	Vinyl chloride	62.50	2.17		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	98		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RCCVJ01A-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 04-Oct-2019 10:37:30 ALS Bottle#: 15 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013262-002
 Misc. Info.: P96
 Operator ID: HMT Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 06-Oct-2019 16:57:57 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last Ical File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 16:57:57

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.528	8.528	0.000	90	480658	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.760	10.760	0.000	92	2844405	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.560	15.560	0.000	84	2265315	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.220	17.220	0.000	96	1316506	4.00	3.93	
6 Chlorodifluoromethane	51	3.427	3.427	0.000	97	550692	2.00	1.73	
7 Propene	41	3.437	3.437	0.000	97	333713	2.00	1.85	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	99	604423	2.00	2.23	
9 Chloromethane	52	3.659	3.659	0.000	69	112228	2.00	2.17	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	87	633804	2.00	2.84	
11 Acetaldehyde	44	3.810	3.810	0.000	96	668139	10.0	10.6	
12 Vinyl chloride	62	3.826	3.826	0.000	99	353875	2.00	2.17	
14 Butane	43	3.912	3.912	0.000	85	487750	2.00	2.05	
13 Butadiene	54	3.912	3.912	0.000	69	262911	2.00	2.14	
15 Bromomethane	94	4.219	4.219	0.000	97	333391	2.00	2.06	
16 Chloroethane	64	4.354	4.354	0.000	96	136101	2.00	2.00	
17 Ethanol	31	4.446	4.446	0.000	97	696642	10.0	9.47	
18 Vinyl bromide	106	4.645	4.645	0.000	98	328503	2.00	2.40	
19 2-Methylbutane	43	4.688	4.688	0.000	91	328700	2.00	1.77	
21 Trichlorofluoromethane	101	4.904	4.904	0.000	98	721932	2.00	1.85	
20 Acrolein	56	4.920	4.920	0.000	90	103974	2.00	2.24	
24 Acetonitrile	40	4.985	4.985	0.000	100	126149	2.00	1.83	
22 Acetone	58	5.028	5.028	0.000	96	423928	6.00	5.53	
23 Isopropyl alcohol	45	5.109	5.109	0.000	94	1231117	6.00	5.48	
25 Pentane	72	5.131	5.131	0.000	97	60144	2.00	2.19	
26 Ethyl ether	31	5.292	5.292	0.000	95	261709	2.00	1.40	
27 1,1-Dichloroethene	96	5.605	5.605	0.000	96	325714	2.00	2.08	
29 2-Methyl-2-propanol	59	5.702	5.702	0.000	95	515353	2.00	1.85	
28 Acrylonitrile	53	5.713	5.713	0.000	96	220635	2.00	1.91	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.783	0.000	97	691008	2.00	2.09	
31 Methylene Chloride	84	5.961	5.961	0.000	93	328972	2.00	1.77	
32 3-Chloro-1-propene	39	5.972	5.972	0.000	95	262894	2.00	1.72	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.117	6.117	0.000	99	888455	2.00	2.16	
34 trans-1,2-Dichloroethene	96	6.770	6.770	0.000	95	354058	2.00	2.10	
35 2-Methylpentane	43	6.786	6.786	0.000	94	664301	2.00	1.67	
36 Methyl tert-butyl ether	73	6.894	6.894	0.000	97	770331	2.00	1.90	
37 1,1-Dichloroethane	63	7.196	7.196	0.000	99	539130	2.00	1.86	
38 Vinyl acetate	43	7.298	7.298	0.000	100	762539	2.00	1.67	
39 2-Butanone (MEK)	72	7.751	7.751	0.000	97	154327	2.00	1.90	
40 Hexane	56	7.773	7.773	0.000	90	235275	2.00	1.79	
41 Isopropyl ether	45	7.935	7.935	0.000	97	992852	2.00	1.65	
42 cis-1,2-Dichloroethene	96	8.194	8.194	0.000	87	376647	2.00	2.16	
43 Ethyl acetate	43	8.377	8.377	0.000	100	688458	2.00	1.65	
44 Chloroform	83	8.539	8.539	0.000	96	629331	2.00	1.81	
45 Tert-butyl ethyl ether	59	8.620	8.620	0.000	93	876514	2.00	1.79	
46 Tetrahydrofuran	42	8.932	8.932	0.000	95	345015	2.00	1.66	
47 1,1,1-Trichloroethane	97	9.569	9.569	0.000	95	647242	2.00	1.82	
48 1,2-Dichloroethane	62	9.693	9.693	0.000	96	363455	2.00	1.62	
50 n-Butanol	31	10.151	10.151	0.000	79	101562	2.00	1.29	
51 Cyclohexane	69	10.189	10.189	0.000	66	145688	2.00	1.79	
49 Benzene	78	10.189	10.189	0.000	94	1023595	2.00	1.87	
52 Carbon tetrachloride	117	10.210	10.210	0.000	95	673807	2.00	1.86	
53 2,3-Dimethylpentane	71	10.318	10.318	0.000	91	227152	2.00	2.03	
54 Thiophene	84	10.469	10.469	0.000	93	576473	2.00	2.02	
55 Isooctane	57	10.976	10.976	0.000	99	1493057	2.00	1.75	
57 n-Heptane	71	11.364	11.364	0.000	89	339438	2.00	1.87	
56 1,2-Dichloropropane	63	11.451	11.451	0.000	94	371773	2.00	1.88	
58 Trichloroethene	130	11.488	11.488	0.000	95	463356	2.00	1.96	
59 Dibromomethane	93	11.575	11.575	0.000	92	414904	2.00	1.97	
60 Dichlorobromomethane	83	11.726	11.726	0.000	99	610821	2.00	1.75	
61 1,4-Dioxane	88	11.736	11.736	0.000	40	174310	2.00	2.19	
62 Methyl methacrylate	41	11.823	11.823	0.000	97	366228	2.00	1.51	
63 Methylcyclohexane	83	12.265	12.265	0.000	95	591130	2.00	1.97	
64 4-Methyl-2-pentanone (MIBK)	43	12.685	12.685	0.000	96	701431	2.00	1.56	
65 cis-1,3-Dichloropropene	75	12.745	12.745	0.000	93	531805	2.00	1.94	
66 trans-1,3-Dichloropropene	75	13.456	13.456	0.000	97	456428	2.00	1.91	
67 Toluene	91	13.575	13.575	0.000	93	1168997	2.00	2.11	
68 1,1,2-Trichloroethane	83	13.656	13.656	0.000	94	358837	2.00	2.07	
69 2-Hexanone	58	14.039	14.039	0.000	93	367178	2.00	1.93	
71 n-Octane	85	14.271	14.271	0.000	92	357817	2.00	2.09	
70 Chlorodibromomethane	129	14.362	14.362	0.000	97	626558	2.00	1.81	
72 Ethylene Dibromide	107	14.654	14.654	0.000	98	672842	2.00	2.08	
73 Tetrachloroethene	129	14.729	14.729	0.000	95	436225	2.00	1.96	
74 Chlorobenzene	112	15.603	15.603	0.000	97	991819	2.00	2.11	
75 2,3-Dimethylheptane	43	15.624	15.624	0.000	94	1036525	2.00	1.63	
76 Ethylbenzene	91	15.894	15.894	0.000	97	1532664	2.00	2.04	
77 m-Xylene & p-Xylene	91	16.056	16.056	0.000	96	2356403	4.00	4.08	
81 n-Nonane	57	16.476	16.476	0.000	92	689509	2.00	1.87	
78 Bromoform	173	16.509	16.509	0.000	96	484752	2.00	1.53	
79 Styrene	104	16.525	16.525	0.000	97	891430	2.00	2.20	
80 o-Xylene	91	16.584	16.584	0.000	99	1226499	2.00	2.09	
82 1,1,2,2-Tetrachloroethane	83	16.918	16.918	0.000	98	997035	2.00	2.32	
83 1,2,3-Trichloropropane	110	17.086	17.086	0.000	97	268124	2.00	1.98	
84 Isopropylbenzene	105	17.188	17.188	0.000	94	1876214	2.00	2.16	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.749	17.749	0.000	100	536362	2.00	2.32	
86 2-Chlorotoluene	126	17.797	17.797	0.000	96	502660	2.00	2.29	
88 4-Ethyltoluene	105	17.905	17.905	0.000	99	1959299	2.00	2.22	
87 1,3,5-Trimethylbenzene	120	17.981	17.981	0.000	93	789056	2.00	2.25	
89 Alpha Methyl Styrene	118	18.223	18.223	0.000	92	758796	2.00	2.23	
90 n-Decane	57	18.283	18.283	0.000	91	1009189	2.00	2.01	
91 tert-Butylbenzene	119	18.423	18.423	0.000	95	1649631	2.00	2.09	
92 1,2,4-Trimethylbenzene	105	18.439	18.439	0.000	95	1628551	2.00	2.20	
94 sec-Butylbenzene	105	18.698	18.698	0.000	100	2486451	2.00	2.16	
93 1,3-Dichlorobenzene	146	18.719	18.719	0.000	96	1233342	2.00	2.19	
96 Benzyl chloride	91	18.795	18.795	0.000	99	1334480	2.00	2.58	
95 1,4-Dichlorobenzene	146	18.806	18.806	0.000	97	1262613	2.00	2.32	
97 4-Isopropyltoluene	119	18.870	18.870	0.000	97	2000531	2.00	2.34	
98 1,2,3-Trimethylbenzene	105	18.924	18.924	0.000	97	1706437	2.00	2.35	
99 Butylcyclohexane	83	18.978	18.978	0.000	98	1357463	2.00	2.35	
100 1,2-Dichlorobenzene	146	19.178	19.178	0.000	85	1243149	2.00	2.33	
101 2,3-Dihydroindene	117	19.178	19.178	0.000	94	1594435	2.00	2.22	
102 Indene	116	19.313	19.313	0.000	91	1403081	2.00	2.26	
103 n-Butylbenzene	91	19.318	19.318	0.000	97	1995447	2.00	2.21	
104 Undecane	57	19.636	19.636	0.000	96	1184059	2.00	1.96	
105 1,2-Dibromo-3-Chloropropan	157	19.798	19.798	0.000	94	441249	2.00	2.06	
106 1,2,4,5-Tetramethylbenzene	119	20.089	20.089	0.000	98	1889018	2.00	2.28	
107 Dodecane	57	20.709	20.709	0.000	97	1090188	2.00	1.76	
108 1,2,4-Trichlorobenzene	180	20.909	20.909	0.000	93	1137582	2.00	2.26	
109 Naphthalene	128	21.054	21.054	0.000	100	2359178	2.00	2.33	
110 Hexachlorobutadiene	225	21.275	21.275	0.000	95	919065	2.00	2.09	
111 1,2,3-Trichlorobenzene	180	21.351	21.351	0.000	96	1047616	2.00	2.05	
112 2-Methylnaphthalene	142	22.009	22.009	0.000	98	342418	2.00	0.8227	
113 1-Methylnaphthalene	142	22.138	22.138	0.000	99	309081	2.00	0.8086	
A 115 C8 Range	1	14.271	(14.222-14.319)		0	3043902	2.00	1.60	
S 116 Xylenes, Total	100				0		6.00	6.18	
S 117 1,2-Dichloroethene, Total	1				0		4.00	4.26	

Reagents:

40CV101P_00096

Amount Added: 100.00

Units: ml

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

TestAmerica Laboratories

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RCCVJ01A-LCS.d

Injection Date: 04-Oct-2019 10:37:30

Instrument ID: MR

Operator ID: HMT

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

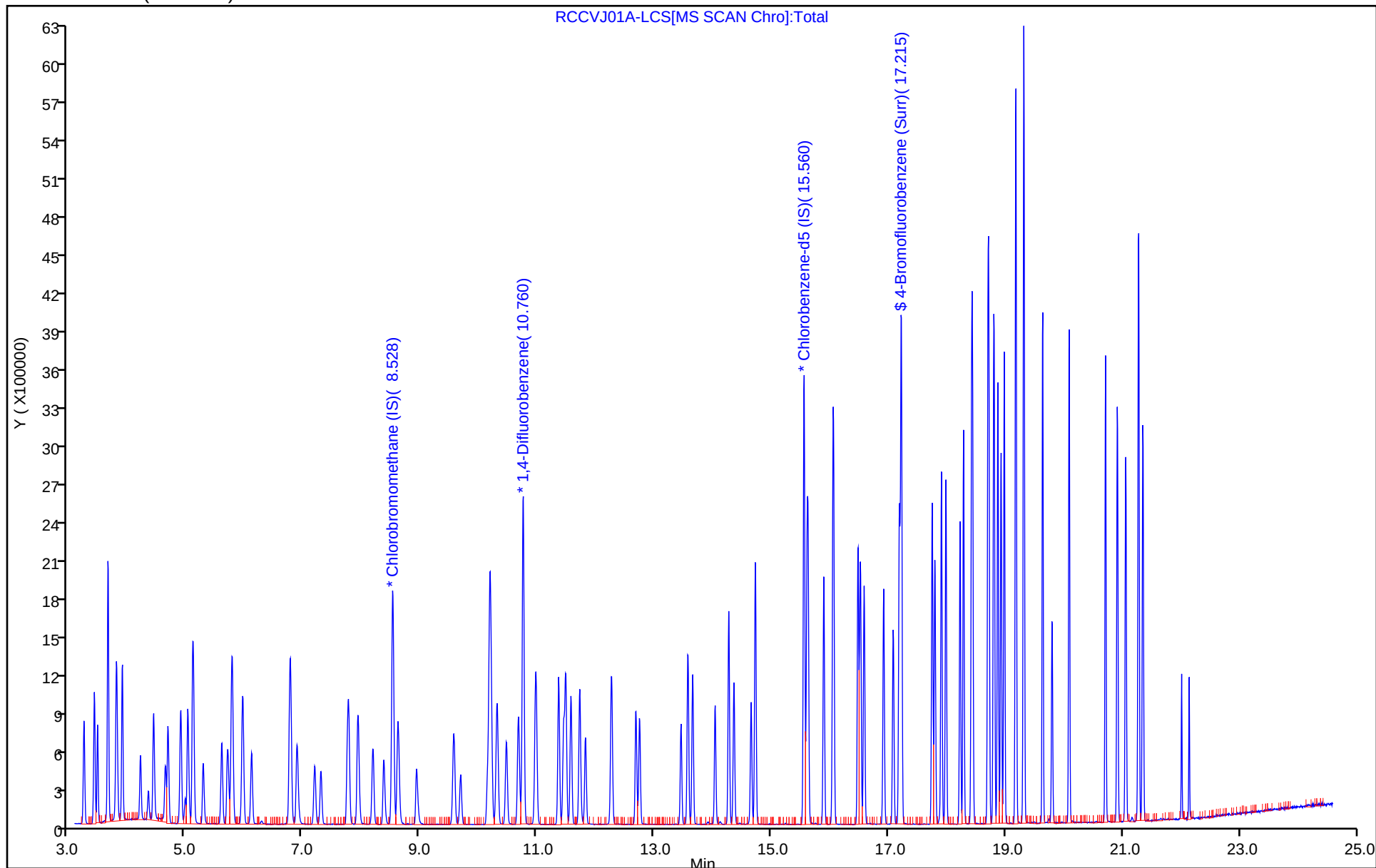
Dil. Factor: 1.0000

ALS Bottle#: 15

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\RCCVJ01A-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 04-Oct-2019 10:37:30 ALS Bottle#: 15 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013262-002
Misc. Info.: P96
Operator ID: HMT Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13262.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 06-Oct-2019 16:57:57 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0317

First Level Reviewer: barlozhetskayaa

Date: 06-Oct-2019 16:57:57

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.93	98.33

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-34106/1002
 Matrix: Air Lab File ID: RCCVJ07d-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/07/2019 15:52
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	133.41	1.44		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	167.85	1.73		0.080	
79-00-5	1,1,2-Trichloroethane	133.41	1.70		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	187.38	1.65		0.080	
75-34-3	1,1-Dichloroethane	98.96	1.44		0.080	
75-35-4	1,1-Dichloroethene	96.94	1.68		0.040	
120-82-1	1,2,4-Trichlorobenzene	181.45	1.68		0.080	
95-63-6	1,2,4-Trimethylbenzene	120.20	1.64		0.080	
106-93-4	1,2-Dibromoethane	187.87	1.80		0.080	
95-50-1	1,2-Dichlorobenzene	147.00	1.78		0.080	
107-06-2	1,2-Dichloroethane	98.96	1.35		0.080	
78-87-5	1,2-Dichloropropane	112.99	1.51		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	170.92	2.36		0.080	
108-67-8	1,3,5-Trimethylbenzene	120.20	1.72		0.080	
541-73-1	1,3-Dichlorobenzene	147.00	1.75		0.080	
106-46-7	1,4-Dichlorobenzene	147.00	1.79		0.080	
123-91-1	1,4-Dioxane	88.11	1.36		0.20	
540-84-1	2,2,4-Trimethylpentane	114.23	1.48		0.20	
78-93-3	2-Butanone	72.11	1.50		0.32	
108-10-1	4-Methyl-2-pentanone (MIBK)	100.16	1.36		0.20	
71-43-2	Benzene	78.11	1.59		0.080	
100-44-7	Benzyl chloride	126.58	1.84		0.16	
75-27-4	Bromodichloromethane	163.83	1.55		0.080	
75-25-2	Bromoform	252.75	2.13		0.080	
74-83-9	Bromomethane	94.94	1.60		0.080	
56-23-5	Carbon tetrachloride	153.81	1.61		0.032	
108-90-7	Chlorobenzene	112.56	1.79		0.080	
75-00-3	Chloroethane	64.52	1.52		0.080	
67-66-3	Chloroform	119.38	1.52		0.080	
74-87-3	Chloromethane	50.49	1.64		0.20	
156-59-2	cis-1,2-Dichloroethene	96.94	1.70		0.040	
10061-01-5	cis-1,3-Dichloropropene	110.97	1.57		0.080	
110-82-7	Cyclohexane	84.16	1.50		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 140-34106/1002
 Matrix: Air Lab File ID: RCCVJ07d-LCS.d
 Analysis Method: TO 15 LL Date Collected: _____
 Sample wt/vol: 500 (mL) Date Analyzed: 10/07/2019 15:52
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 34106 Units: ppb v/v

CAS NO.	COMPOUND NAME	MOLECULAR WEIGHT	RESULT	Q	RL	
124-48-1	Dibromochloromethane	208.29	1.74		0.080	
75-71-8	Dichlorodifluoromethane	120.91	1.78		0.080	
64-17-5	Ethanol	46.07	6.42		2.0	
100-41-4	Ethylbenzene	106.17	1.69		0.080	
87-68-3	Hexachlorobutadiene	260.76	1.68		0.080	
110-54-3	Hexane	86.17	1.43		0.20	
1634-04-4	Methyl tert-butyl ether	88.15	1.47		0.16	
75-09-2	Methylene Chloride	84.93	1.40		0.20	
179601-23-1	m-Xylene & p-Xylene	106.17	3.39		0.080	
95-47-6	o-Xylene	106.17	1.63		0.080	
100-42-5	Styrene	104.15	1.88		0.080	
75-65-0	t-Butyl alcohol	74.12	1.26		0.32	
127-18-4	Tetrachloroethene	165.83	1.68		0.080	
108-88-3	Toluene	92.14	1.75		0.12	
156-60-5	trans-1,2-Dichloroethene	96.94	1.75		0.080	
10061-02-6	trans-1,3-Dichloropropene	110.97	1.56		0.080	
79-01-6	Trichloroethene	131.39	1.72		0.036	
75-69-4	Trichlorofluoromethane	137.37	1.47		0.080	
75-01-4	Vinyl chloride	62.50	1.71		0.040	

CAS NO.	SURROGATE	%REC	Q	LIMITS
460-00-4	4-Bromofluorobenzene (Surr)	92		60-140

TestAmerica Laboratories
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RCCVJ07d-LCS.d
 Lims ID: LCS
 Client ID:
 Sample Type: LCS
 Inject. Date: 07-Oct-2019 15:52:30 ALS Bottle#: 5 Worklist Smp#: 1002
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0013263-002
 Misc. Info.: p99
 Operator ID: afb Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 08-Oct-2019 11:22:58 Calib Date: 04-Sep-2019 09:04:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:22:58

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.522	8.522	0.000	90	409525	4.00	4.00	
* 2 1,4-Difluorobenzene	114	10.760	10.760	0.000	93	2342962	4.00	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.554	15.554	0.000	84	1896667	4.00	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.215	17.215	0.000	95	1026757	4.00	3.66	
6 Chlorodifluoromethane	51	3.427	3.427	0.000	97	388252	2.00	1.43	
7 Propene	41	3.437	3.437	0.000	97	243859	2.00	1.59	
8 Dichlorodifluoromethane	85	3.486	3.486	0.000	100	412027	2.00	1.78	
9 Chloromethane	52	3.664	3.664	0.000	63	72248	2.00	1.64	
10 1,2-Dichloro-1,1,2,2-tetra	135	3.669	3.669	0.000	83	448815	2.00	2.36	
11 Acetaldehyde	44	3.809	3.809	0.000	99	484024	10.0	9.01	
12 Vinyl chloride	62	3.826	3.826	0.000	98	238068	2.00	1.71	
13 Butadiene	54	3.906	3.906	0.000	68	176977	2.00	1.69	
14 Butane	43	3.912	3.912	0.000	85	340811	2.00	1.68	
15 Bromomethane	94	4.219	4.219	0.000	95	220075	2.00	1.60	
16 Chloroethane	64	4.354	4.354	0.000	90	88269	2.00	1.52	
17 Ethanol	31	4.440	4.440	0.000	98	401982	10.0	6.42	
18 Vinyl bromide	106	4.645	4.645	0.000	95	206262	2.00	1.77	
19 2-Methylbutane	43	4.694	4.694	0.000	92	217267	2.00	1.37	
21 Trichlorofluoromethane	101	4.904	4.904	0.000	98	489733	2.00	1.47	
20 Acrolein	56	4.915	4.915	0.000	33	70371	2.00	1.78	
24 Acetonitrile	40	4.980	4.980	0.000	98	84289	2.00	1.43	
22 Acetone	58	5.033	5.033	0.000	97	266133	6.00	4.07	
23 Isopropyl alcohol	45	5.109	5.109	0.000	93	708831	6.00	3.71	
25 Pentane	72	5.120	5.120	0.000	96	38220	2.00	1.63	
26 Ethyl ether	31	5.287	5.287	0.000	96	215739	2.00	1.35	
27 1,1-Dichloroethene	96	5.610	5.610	0.000	96	223973	2.00	1.68	
29 2-Methyl-2-propanol	59	5.702	5.702	0.000	96	300228	2.00	1.26	
28 Acrylonitrile	53	5.718	5.718	0.000	97	150548	2.00	1.53	
30 1,1,2-Trichloro-1,2,2-trif	101	5.783	5.783	0.000	96	464261	2.00	1.65	
31 Methylene Chloride	84	5.961	5.961	0.000	96	221320	2.00	1.40	
32 3-Chloro-1-propene	39	5.972	5.972	0.000	96	147415	2.00	1.13	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
33 Carbon disulfide	76	6.117	6.117	0.000	100	584528	2.00	1.67	
34 trans-1,2-Dichloroethene	96	6.770	6.770	0.000	92	251025	2.00	1.75	
35 2-Methylpentane	43	6.786	6.786	0.000	95	463313	2.00	1.37	
36 Methyl tert-butyl ether	73	6.894	6.894	0.000	97	506938	2.00	1.47	
37 1,1-Dichloroethane	63	7.196	7.196	0.000	99	353478	2.00	1.44	
38 Vinyl acetate	43	7.298	7.298	0.000	100	527891	2.00	1.36	
39 2-Butanone (MEK)	72	7.746	7.746	0.000	98	103585	2.00	1.50	
40 Hexane	56	7.778	7.778	0.000	93	159817	2.00	1.43	
41 Isopropyl ether	45	7.929	7.929	0.000	96	699739	2.00	1.36	
42 cis-1,2-Dichloroethene	96	8.188	8.188	0.000	87	252545	2.00	1.70	
43 Ethyl acetate	43	8.371	8.371	0.000	99	480004	2.00	1.35	
44 Chloroform	83	8.533	8.533	0.000	96	450315	2.00	1.52	
45 Tert-butyl ethyl ether	59	8.614	8.614	0.000	94	601169	2.00	1.44	
46 Tetrahydrofuran	42	8.932	8.932	0.000	95	243165	2.00	1.38	
47 1,1,1-Trichloroethane	97	9.568	9.568	0.000	95	436461	2.00	1.44	
48 1,2-Dichloroethane	62	9.687	9.687	0.000	95	249954	2.00	1.35	
50 n-Butanol	31	10.151	10.151	0.000	84	70348	2.00	1.08	
51 Cyclohexane	69	10.183	10.183	0.000	66	100497	2.00	1.50	
49 Benzene	78	10.183	10.183	0.000	94	716838	2.00	1.59	
52 Carbon tetrachloride	117	10.205	10.205	0.000	94	481917	2.00	1.61	
53 2,3-Dimethylpentane	71	10.313	10.313	0.000	92	145537	2.00	1.58	
54 Thiophene	84	10.474	10.474	0.000	94	382919	2.00	1.63	
55 Isooctane	57	10.970	10.970	0.000	99	1041094	2.00	1.48	
57 n-Heptane	71	11.359	11.359	0.000	92	232141	2.00	1.55	
56 1,2-Dichloropropane	63	11.445	11.445	0.000	91	246425	2.00	1.51	
58 Trichloroethene	130	11.483	11.483	0.000	96	334732	2.00	1.72	
59 Dibromomethane	93	11.574	11.574	0.000	91	283924	2.00	1.64	
60 Dichlorobromomethane	83	11.720	11.720	0.000	98	446376	2.00	1.55	
61 1,4-Dioxane	88	11.731	11.731	0.000	84	89258	2.00	1.36	
62 Methyl methacrylate	41	11.817	11.817	0.000	94	265957	2.00	1.33	
63 Methylcyclohexane	83	12.259	12.259	0.000	95	410167	2.00	1.66	
64 4-Methyl-2-pentanone (MIBK)	43	12.685	12.685	0.000	97	502015	2.00	1.36	
65 cis-1,3-Dichloropropene	75	12.745	12.745	0.000	95	355221	2.00	1.57	
66 trans-1,3-Dichloropropene	75	13.451	13.451	0.000	98	311767	2.00	1.56	
67 Toluene	91	13.570	13.570	0.000	95	809109	2.00	1.75	
68 1,1,2-Trichloroethane	83	13.651	13.651	0.000	95	246760	2.00	1.70	
69 2-Hexanone	58	14.033	14.033	0.000	93	241368	2.00	1.52	
71 n-Octane	85	14.271	14.271	0.000	95	242645	2.00	1.69	
70 Chlorodibromomethane	129	14.357	14.357	0.000	96	503811	2.00	1.74	
72 Ethylene Dibromide	107	14.648	14.648	0.000	97	487635	2.00	1.80	
73 Tetrachloroethene	129	14.724	14.724	0.000	93	314449	2.00	1.68	
74 Chlorobenzene	112	15.603	15.603	0.000	97	702463	2.00	1.79	
75 2,3-Dimethylheptane	43	15.624	15.624	0.000	95	761726	2.00	1.43	
76 Ethylbenzene	91	15.894	15.894	0.000	97	1063990	2.00	1.69	
77 m-Xylene & p-Xylene	91	16.056	16.056	0.000	95	1638977	4.00	3.39	
81 n-Nonane	57	16.476	16.476	0.000	91	485540	2.00	1.57	
78 Bromoform	173	16.503	16.503	0.000	96	565209	2.00	2.13	
79 Styrene	104	16.519	16.519	0.000	96	637845	2.00	1.88	
80 o-Xylene	91	16.584	16.584	0.000	98	801328	2.00	1.63	
82 1,1,2,2-Tetrachloroethane	83	16.913	16.913	0.000	98	624952	2.00	1.73	
83 1,2,3-Trichloropropane	110	17.080	17.080	0.000	95	171515	2.00	1.51	
84 Isopropylbenzene	105	17.183	17.183	0.000	95	1196529	2.00	1.65	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ppb v/v	OnCol Amt ppb v/v	Flags
85 N-Propylbenzene	120	17.749	17.749	0.000	100	338132	2.00	1.75	
86 2-Chlorotoluene	126	17.792	17.792	0.000	95	330925	2.00	1.80	
88 4-Ethyltoluene	105	17.905	17.905	0.000	99	1208818	2.00	1.64	
87 1,3,5-Trimethylbenzene	120	17.981	17.981	0.000	94	503548	2.00	1.72	
89 Alpha Methyl Styrene	118	18.223	18.223	0.000	94	487350	2.00	1.71	
90 n-Decane	57	18.283	18.283	0.000	91	611990	2.00	1.46	
91 tert-Butylbenzene	119	18.423	18.423	0.000	97	1079502	2.00	1.63	
92 1,2,4-Trimethylbenzene	105	18.434	18.434	0.000	95	1018251	2.00	1.64	
94 sec-Butylbenzene	105	18.698	18.698	0.000	99	1581583	2.00	1.64	
93 1,3-Dichlorobenzene	146	18.714	18.714	0.000	95	825979	2.00	1.75	
96 Benzyl chloride	91	18.795	18.795	0.000	99	798081	2.00	1.84	
95 1,4-Dichlorobenzene	146	18.806	18.806	0.000	98	816289	2.00	1.79	
97 4-Isopropyltoluene	119	18.865	18.865	0.000	97	1222432	2.00	1.71	
98 1,2,3-Trimethylbenzene	105	18.919	18.919	0.000	97	980628	2.00	1.61	
99 Butylcyclohexane	83	18.978	18.978	0.000	96	788299	2.00	1.63	
101 2,3-Dihydroindene	117	19.172	19.172	0.000	94	1009093	2.00	1.68	
100 1,2-Dichlorobenzene	146	19.172	19.172	0.000	85	792919	2.00	1.78	
102 Indene	116	19.307	19.307	0.000	96	889205	2.00	1.71	
103 n-Butylbenzene	91	19.312	19.312	0.000	97	1224444	2.00	1.62	
104 Undecane	57	19.631	19.631	0.000	96	698073	2.00	1.38	
105 1,2-Dibromo-3-Chloropropan	157	19.792	19.792	0.000	93	355116	2.00	1.98	
106 1,2,4,5-Tetramethylbenzene	119	20.084	20.084	0.000	99	1111253	2.00	1.60	
107 Dodecane	57	20.704	20.704	0.000	94	567142	2.00	1.10	
108 1,2,4-Trichlorobenzene	180	20.909	20.909	0.000	93	706892	2.00	1.68	
109 Naphthalene	128	21.054	21.054	0.000	100	1303000	2.00	1.53	
110 Hexachlorobutadiene	225	21.275	21.275	0.000	95	616892	2.00	1.68	
111 1,2,3-Trichlorobenzene	180	21.345	21.345	0.000	95	652356	2.00	1.52	
112 2-Methylnaphthalene	142	22.009	22.009	0.000	99	227799	2.00	0.6537	
113 1-Methylnaphthalene	142	22.138	22.138	0.000	98	216423	2.00	0.6763	
A 115 C8 Range	1	14.265	(14.217-14.335)		0	2211198	2.00	1.41	
S 116 Xylenes, Total	100				0		6.00	5.02	
S 117 1,2-Dichloroethene, Total	1				0		4.00	3.45	

Reagents:

40CV101P_00097

Amount Added: 100.00

Units: ml

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Report Date: 08-Oct-2019 11:23:03

Chrom Revision: 2.3 17-Sep-2019 16:19:08

TestAmerica Laboratories

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RCCVJ07d-LCS.d

Injection Date: 07-Oct-2019 15:52:30

Instrument ID: MR

Operator ID: afb

Lims ID: LCS

Worklist Smp#: 1002

Client ID:

Purge Vol: 500.000 mL

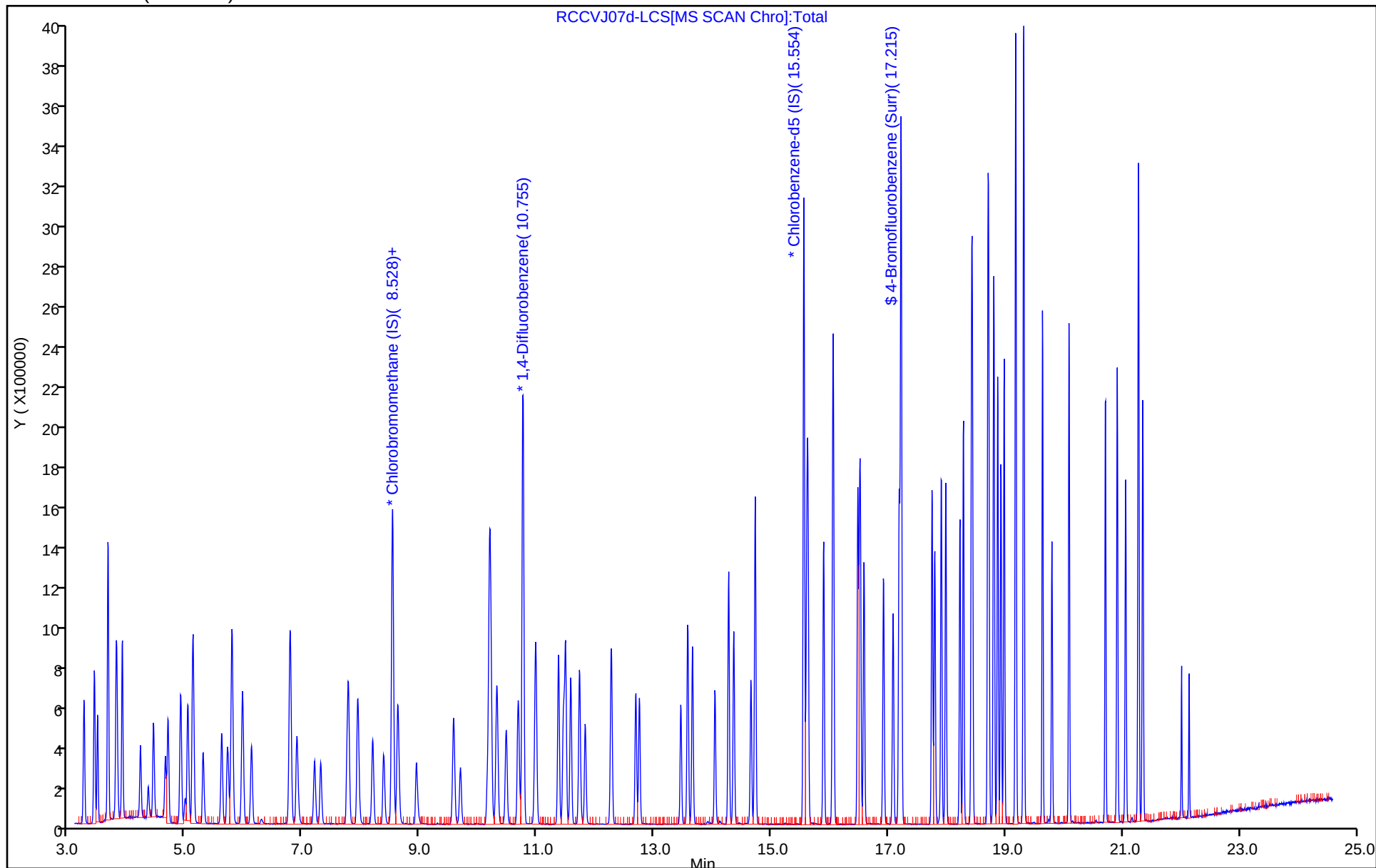
Dil. Factor: 1.0000

ALS Bottle#: 5

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



TestAmerica Laboratories
Recovery Report

Data File: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\RCCVJ07d-LCS.d
Lims ID: LCS
Client ID:
Sample Type: LCS
Inject. Date: 07-Oct-2019 15:52:30 ALS Bottle#: 5 Worklist Smp#: 1002
Purge Vol: 500.000 mL Dil. Factor: 1.0000
Sample Info: 140-0013263-002
Misc. Info.: p99
Operator ID: afb Instrument ID: MR
Method: \\chromna\Knoxville\ChromData\MR\20191002-13263.b\MR_TO15.m
Limit Group: MSA TO14A_15 Routine ICAL
Last Update: 08-Oct-2019 11:22:58 Calib Date: 04-Sep-2019 09:04:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Knoxville\ChromData\MR\20190904-12950.b\RI03IC07R.D
Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
Process Host: CTX0338

First Level Reviewer: barlozhetskayaa

Date: 08-Oct-2019 11:22:58

Compound	Amount Added	Amount Recovered	% Rec.
\$ 4 4-Bromofluorobenzene (Surr)	4.00	3.66	91.59

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1

SDG No.: _____

Instrument ID: MR Start Date: 09/03/2019 09:57Analysis Batch Number: 33257 End Date: 09/04/2019 09:04

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-33257/1		09/03/2019 09:57	1	RBFBI03IC.D	RTX-5 0.32 (mm)
IC 140-33257/2		09/03/2019 10:26	1	RI03IC09.D	RTX-5 0.32 (mm)
IC 140-33257/4		09/03/2019 12:02	1	RI03IC10.D	RTX-5 0.32 (mm)
IC 140-33257/7		09/03/2019 14:26	1	RI03IC01.D	RTX-5 0.32 (mm)
IC 140-33257/8		09/03/2019 15:13	1	RI03IC02.D	RTX-5 0.32 (mm)
140-15873-A-5 MDLV		09/03/2019 15:13	1		RTX-5 0.32 (mm)
IC 140-33257/9		09/03/2019 16:02	1	RI03IC03.D	RTX-5 0.32 (mm)
140-15873-A-6 MDLV		09/03/2019 16:02	1		RTX-5 0.32 (mm)
IC 140-33257/10		09/03/2019 16:51	1	RI03IC04.D	RTX-5 0.32 (mm)
140-15873-A-7 MDLV		09/03/2019 16:51	1		RTX-5 0.32 (mm)
IC 140-33257/11		09/03/2019 17:39	1	RI03IC05.D	RTX-5 0.32 (mm)
140-15873-A-8 MDLV		09/03/2019 17:39	1		RTX-5 0.32 (mm)
IC 140-33257/12		09/03/2019 18:27	1	RI03IC06.D	RTX-5 0.32 (mm)
IC 140-33257/14		09/03/2019 20:02	1	RI03IC08.D	RTX-5 0.32 (mm)
ICV 140-33257/18		09/03/2019 23:14	1	RI03ICV.D	RTX-5 0.32 (mm)
ZZZZZ		09/04/2019 01:44	1		RTX-5 0.32 (mm)
ICIS 140-33257/23		09/04/2019 09:04	1	RI03IC07R.D	RTX-5 0.32 (mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Initial Calibration Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Analysis Date: 9/3/19	Instrument: ML	Chrom WL #: 12950	TALS Batch & Event #	TO14/15: 2118 33257	DOD: 2/21 / 33260	OHIO: 2/10 / 33259
Chrom/Worklist Review				1 st	Comments	2 nd
1. Re-read each Limit Group [method editor-limit groups]				✓		na
2. Verify LODV in Chrom [method editor -> edit -> MDL]				✓		na
3. Are the reagents and init/final volumes correct and first level "unlock/clear"? (Verify reagents & amt. injected at each level) [WL Sample Reagents Tab vs. Entech]				✓		✓
4. Files linked properly to calibration levels? [Sample List- Lab ID vs. Info]				✓		✓
5. Did BFB meet tune criteria? [F8]				✓		✓
6. Were all standards injected within 24 hr of BFB? [F7]				✓		✓
7. High point checked for saturation and point removed if so? [Chrom]				✓	severce removed.	✓
8. If manual integrations performed, are they properly performed, correct, baseline clearly identified, and correct reason given? [Chrom]				na		na
9. RT for each IS ±20 sec avg. RT? [F6 IstdRec]				✓		✓
10. Area for each IS ± 40% avg. area? [F6 IstdRec]				✓		✓
11. Each analyte ± 0.06 RRT of avg. RRT? [F6 - RRT]				✓		✓
12. Elution order checked on isomeric pairs? [Chrom]						
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane				✓		✓
• 2-methyl butane / acrolein				✓		✓
• tric' orofluoromethane / 1,1,2-trichlorotrifluoroethane				✓		✓
• vinyl acetate / hexane				✓		✓
• cis- and trans- isomers				✓		✓
• ethyl benzene / m/p-xylene / o-xylene				✓		✓
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/ sec-butylbenzene/1,2,3-trimethylbenzene				✓		✓
• tert-butylbenzene/4-isopropyltoluene				✓		✓
• 1,3-, 1,4-, and 1,2-dichlorobenzene				✓		✓
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes				na	MLC	na
• 1,2,4- and 1,2,3-trichlorobenzenes				✓		✓
• 2-, and 1-methylnaphthalene				✓		✓
13. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?				✓		✓
MLG Review				TO	DOD	OH
14. Is %RSD for all target analytes ≤ 30%? (with up to 2 compounds with RSD ≤ 40%) 1 & 2 methylnaphthalene ≤ 50% Acetadehyd + MeCl₂ (routine) [F6 Σ]				✓	✓	✓
15. Were at least 5 levels of each compound analyzed? [F6]				✓	✓	✓
16. Is low level std at or <RL and are the remaining points consec.? [F6]				✓	✓	✓
17. At least 6 consec. points used for quad curves; at least 5 consec. points for linear curves? (Note: Ohio does not allow quad) [F6]				✓	✓	na
18. If curves were used, is correlation coefficient ≥ 0.990? [F6]				✓	✓	na
19. Is the intercept less than the RL for each curve? [F6]				✓	✓	na
20. For quadratic: is a tangent's slope to the curve entirely positive or negative and continuous. [Cntrl-C, details]				✓	na	na
21. Is low point RSE ≤ 50 %? MeCl₂ [F6]				✓	✓	✓
22. Is the second source analysis within limits? [F8 - icv]				✓	✓	✓
Analyst/Date: H 9/4/19				2nd Level Reviewer/Date: 090519		
TALS Review				TO	DOD	OH
23. Upload ICAL				✓	na	na
24. Graphics uploaded? [paperclip]				✓	✓	✓
25. All points are in the most recent active calibration event? [Calibration Events - 'Fix ICAL linkage' if needed]				✓	✓	✓
26. Runs linked to BFB? [QC Links]				✓	✓	✓
27. Run Checklist and acknowledge findings [F8]				✓	✓	✓
28. If criteria not met, was a NCM generated?				na	na	na
29. After review in TALS, approve the method in TALS.				na	na	na
30. After verifying TALS is correct, lock method in Chrom <resolve any error issues>				na	na	na
31. Checklist & Entech report scanned, attached & assigned properly?				na	na	na
Analyst/date: H 9/4/19				2nd Level Reviewer/date: 090519		
Comments: OK 8. MeCl₂ (routine)				Comments:		
Bromofn OK 6/4						
Bz Chloride OK 4						
DOD + Ohio						

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1

SDG No.: _____

Instrument ID: MR Start Date: 10/03/2019 09:26Analysis Batch Number: 34104 End Date: 10/04/2019 01:56

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-34104/1		10/03/2019 09:26	1	RBFBJ03.D	RTX-5 0.32 (mm)
CCVIS 140-34104/2		10/03/2019 09:54	1	RCCVJ03.D	RTX-5 0.32 (mm)
LCS 140-34104/1002		10/03/2019 09:54	1	RCCVJ03-LCS.d	RTX-5 0.32 (mm)
ZZZZZ		10/03/2019 12:15	1		RTX-5 0.32 (mm)
MB 140-34104/5		10/03/2019 13:07	1	R500BJ03.D	RTX-5 0.32 (mm)
ZZZZZ		10/03/2019 14:02	1		RTX-5 0.32 (mm)
ZZZZZ		10/03/2019 14:54	1		RTX-5 0.32 (mm)
140-16882-1		10/03/2019 17:18	12.57	RJ03P101.D	RTX-5 0.32 (mm)
ZZZZZ		10/03/2019 19:47	1		RTX-5 0.32 (mm)
140-16882-5		10/03/2019 20:41	1	RJ03P105.D	RTX-5 0.32 (mm)
ZZZZZ		10/03/2019 21:28	147.17		RTX-5 0.32 (mm)
140-16882-7		10/03/2019 22:21	1	RJ03P107.D	RTX-5 0.32 (mm)
ZZZZZ		10/03/2019 23:15	1		RTX-5 0.32 (mm)
140-16882-8		10/04/2019 00:09	1	RJ03P108.D	RTX-5 0.32 (mm)
140-16882-9		10/04/2019 01:02	1	RJ03P109.D	RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 01:56	1		RTX-5 0.32 (mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Page 1 of 2

Instrument/Date	10/3/19	MR	Routine	DOD	OHIO VAP
CCAL Chrom WL #	13261	CCAL Batch #	34104		
ICAL Chrom WL #	12950	ICAL Batch # / Event #	33857, 2118		

Chrom Review	1st	If No, why is data reportable?	2nd
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	/		na
2. Did BFB meet tune criteria? [F8]	/	☐ [Failed TO-14A, but passes TO-15]	/
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICAL File batch #/start/end Cal date/time)? [F8]	/	List Target analytes outside CCV limits: Benz Chloride	/
4. Elution order checked on isomeric pairs? [Chrom]	/		/
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	/		/
• 2-methyl butane / acrolein	/		/
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	/		/
• vinyl acetate / hexane	/		/
• cis- and trans- isomers	/		/
• ethyl benzene / m/p-xylene / o-xylene	/		/
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	/		/
• tert-butylbenzene/4-isopropyltoluene	/		/
• 1,3-, 1,4-, and 1,2-dichlorobenzene	/		/
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	/		ms
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	/		/
• 2-, and 1-methylnaphthalene	/		/
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	N		ms
6. Has the RT been updated to the method?	/		/
Analyst/date	10/4/19	2nd Level Reviewer/date	100719
7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	/	✓ on scale	/
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	/		/
9. Can dilution history verified? [Mgmt Report]	/		/
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). If no, list blank ID: Mech Lab con	/	☐ Method Blank - Report, ND (NCM# _____) ☐ Method Blank - Report, 10X (NCM# _____)	ncm 19979
11. All runs - peaks ID'd correctly and false positives removed?	/		/
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	/		/
13. IS/Surr within limits? List samples and reason (e.g., 1 thru 5): [Batch Results IS & SUR Tab]	/	☐ (1) Surrogate - Matrix (NCM# _____) ☐ (2) Surrogate - High, ND (NCM# _____) ☐ (3) ISTD - RA/RA Concurs (NCM# _____) ☐ (4) Surrogate -RX concur, Report both (NCM# _____) ☐ (5) ISTD - Matrix, DL required (NCM# _____)	/
Sample Reason Sample Reason			
14. Samples outside calibration range scheduled for dilution?	/	☐ ICAL - Range Exceeded; Minimum Dilution	ms
Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? List samples and reason:	/	☐ (1) Reporting Limit - Dilution, Matrix (NCM# _____) ☐ (2) Reporting Limit - Dilution, Non-Target (NCM# _____) ☐ (3) Issues with initial collection volume; see DRC.	/
Sample Reason Sample Reason			
16. RIC inspected for proper integration for TPH?	N		ms
17. Obvious non-TPH peaks excluded?	/		/
18. Individual TPH peak area < octane high point area?	/		/

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Page 2 of 2

TALS Review	1 st	If No, why is data reportable?	2 nd														
19. Graphics uploaded? [open one paperclip]	✓		✓														
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☐ [Failed TO-14A, but passes TO-15] (NCM# _____)	✓														
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] <i>B/c</i> [Chrom-F8] [TALS-Sample Results Tab]	✓	☒ CCV - %D - LCS criteria met (NCM# <i>19925</i>) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# _____)	✓														
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na														
23. Project & sample special instructions verified?	✓		✓														
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	✓	☐ Air Analysis - Air Sample Transfer to Canister (NCM# _____)	✓														
25. Sample analyses done within analytical holding time?	✓	☐ Holding Time - Received w/Insufficient Time (NCM# _____) ☐ Holding Time - Receipt (NCM# _____)	✓														
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☐ Marginal Exceedances - Within ME Limits and Random; Report (NCM# <i>19926</i>) ☐ LCS/LCSD - %R High (NCM# _____) <i>Benz Chloro</i>	✓														
<table border="1"> <thead> <tr> <th>Number of target analytes in LCS</th> <th># marginal exceedances of LCS control limits allowed</th> </tr> </thead> <tbody> <tr> <td>>90</td> <td>5</td> </tr> <tr> <td>71 - 90</td> <td>4</td> </tr> <tr> <td>51 - 70</td> <td>3</td> </tr> <tr> <td>31 - 50</td> <td>2</td> </tr> <tr> <td>11 - 30</td> <td>1</td> </tr> <tr> <td>< 11</td> <td>0</td> </tr> </tbody> </table>	Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed	>90	5	71 - 90	4	51 - 70	3	31 - 50	2	11 - 30	1	< 11	0			
Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed																
>90	5																
71 - 90	4																
51 - 70	3																
31 - 50	2																
11 - 30	1																
< 11	0																
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	✓		✓														
28. Each job has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		✓														
29. Analytes over calibration range set to secondary [Conditions Review Tab]	✓		✓														
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		✓														
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) (If DUP not reported - set to 'Acceptable' for each job)	✓	<i>not 5x RL</i>	✓														
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	500 mL blank ID: <i>5</i> 200 mL blank ID: _____	✓														
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		✓														
34. Correct ICV linked to each MB? [QC Links]	✓		✓														
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		✓														
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		✓														
37. Run Checklist and acknowledge findings [F8]	✓		✓														
38. Runs set to 1 st level review?		Runs set to 2 nd level review?	✓														
39. QC checker run and items addressed?	-na-		✓														
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		✓														

Analyst: <i>JA</i>	Date: <i>10/15</i>	2nd Level Reviewer: <i>[Signature]</i>	Date: <i>10/15/2019</i>
Comments:		Comments:	
<i>Match in BFB above - 19929 NCM</i>			
Example Calculation: <i>16882-1 T4</i>			
On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF			
<i>3.4081 x 2000 x 12.57 = 973.72</i>			

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1

SDG No.: _____

Instrument ID: MR Start Date: 10/04/2019 10:09Analysis Batch Number: 34105 End Date: 10/05/2019 07:32

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-34105/1		10/04/2019 10:09	1	RBFBJ01A.D	RTX-5 0.32 (mm)
CCVIS 140-34105/2		10/04/2019 10:37	1	RCCVJ01A.D	RTX-5 0.32 (mm)
LCS 140-34105/1002		10/04/2019 10:37	1	RCCVJ01A-LCS.d	RTX-5 0.32 (mm)
MB 140-34105/4		10/04/2019 12:04	1	R500BJ04.D	RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 15:23	1		RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 16:10	1		RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 16:57	1		RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 17:44	1		RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 18:33	1		RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 19:21	1		RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 20:09	1		RTX-5 0.32 (mm)
ZZZZZ		10/04/2019 20:57	1		RTX-5 0.32 (mm)
140-16882-3		10/04/2019 22:39	1	RJ04P110.D	RTX-5 0.32 (mm)
140-16882-4		10/04/2019 23:26	1.72	RJ04P201.D	RTX-5 0.32 (mm)
ZZZZZ		10/05/2019 07:32	1		RTX-5 0.32 (mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Page 1 of 2

Instrument/Date	MR 10/4/19		Routine	DOD	OHIO VAP
CCAL Chrom WL #	13262	CCAL Batch #	34105		
ICAL Chrom WL #	12950	ICAL Batch # / Event #	33257, 2118		

Chrom Review	1st	If No, why is data reportable?	2nd		
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na		
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15]	✓		
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICAL File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside GCV limits: 1,2-dichlorotetrafluoroethane	✓		
4. Elution order checked on isomeric pairs? [Chrom]	✓		✓		
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓		
• 2-methyl butane / acrolein	✓		✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓		
• vinyl acetate / hexane	✓		✓		
• cis- and trans- isomers	✓		✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓		
• tert-butylbenzene/4-isopropyltoluene	✓		✓		
• 1,3-, 1,4-, and 1,2-dichlorobenzene	✓		✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	NA		NA		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		✓		
• 2-, and 1-methylnaphthalene	✓		✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	NA		NA		
6. Has the RT been updated to the method?	✓		✓		
Analyst/date	AB 10/6/19		2nd Level Reviewer/date	10/7/19	
7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓	checked on-screen 10/6/19	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓	Lines 22 & 23 flipped w/ 24 & 26 Fixed	✓		
9. Can dilution history verified? [Mgmt Report]	✓		✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). If no, list blank ID:	✓	☐ Method Blank – Report, ND (NCM# _____) ☐ Method Blank – Report, 10X (NCM# _____)	✓		
11. All runs - peaks ID'd correctly and false positives removed?	✓		✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		✓		
13. IS/Surr within limits? List samples and reason (e.g., 1 thru 5): [Batch Results IS & SUR Tab]	✓	☐ (1) Surrogate – Matrix (NCM# _____) ☐ (2) Surrogate – High, ND (NCM# _____) ☐ (3) ISTD – RA/RA Concur (NCM# _____) ☐ (4) Surrogate –RX concur, Report both (NCM# _____) ☐ (5) ISTD – Matrix, DL required (NCM# _____)	✓		
Sample Reason Sample Reason					
14. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL – Range Exceeded; Minimum Dilution	✓		

Chrom Review	1st	If No, why is data reportable?	2nd
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? List samples and reason: Sample Reason Sample Reason	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM# _____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM# _____) ☐ (3) Issues with initial collection volume; see DRC.	✓
16. RIC inspected for proper integration for TPH?	NA		NA
17. Obvious non-TPH peaks excluded?	✓		✓
18. Individual TPH peak area < octane high point area?	✓		✓

Page 2 of 2

[illegible]

AIR - GC/MS VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1

SDG No.: _____

Instrument ID: MR Start Date: 10/07/2019 15:24Analysis Batch Number: 34106 End Date: 10/07/2019 20:41

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 140-34106/1		10/07/2019 15:24	1	RBFBJ07d.D	RTX-5 0.32 (mm)
CCVIS 140-34106/2		10/07/2019 15:52	1	RCCVJ07d.D	RTX-5 0.32 (mm)
LCS 140-34106/1002		10/07/2019 15:52	1	RCCVJ07d-LCS.d	RTX-5 0.32 (mm)
MB 140-34106/4		10/07/2019 19:05	1	RJ07mb500.D	RTX-5 0.32 (mm)
140-16882-2		10/07/2019 19:53	41.12	RJ07p104.D	RTX-5 0.32 (mm)
140-16882-6		10/07/2019 20:41	147.17	RJ07p105.D	RTX-5 0.32 (mm)

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Page 1 of 2

Instrument/Date	MR 10/8/19		Routine	DOD	OHIO VAP
CCAL Chrom WL #	13283	CCAL Batch #	34106		
ICAL Chrom WL #	12950	ICAL Batch # / Event #	33257 2118	/	/

Chrom Review	1 st	If No, why is data reportable?	2 nd		
1. Are the reagents & init/final volumes correct? (Verify reagents & amt. injected) [WL Sample Reagent Tab]	✓		na		
2. Did BFB meet tune criteria? [F8]	✓	☐ [Failed TO-14A, but passes TO-15]			
3. Was the CCAL compared to the most recent & correct ICAL (correct last ICAL File batch #/start/end Cal date/time)? [F8]	✓	List Target analytes outside CCV limits: ethanol, 2-methyl-2-propanol, 12dca 1,4-dioxane, mibk	✓		
4. Elution order checked on isomeric pairs? [Chrom]					
• dichlorodifluoromethane / 1,2-dichlorotetrafluoroethane	✓		✓		
• 2-methyl butane / acrolein	✓		✓		
• trichlorofluoromethane / 1,1,2-trichlorotrifluoroethane	✓		✓		
• vinyl acetate / hexane	✓		✓		
• cis- and trans- isomers	✓		✓		
• ethyl benzene / m/p-xylene / o-xylene	✓		✓		
• n-propylbenzene/4-ethyl toluene/1,3,5-trimethylbenzene/1,2,4-trimethylbenzene/sec-butylbenzene/1,2,3-trimethylbenzene	✓		✓		
• tert-butylbenzene/4-isopropyltoluene	✓		✓		
• 1,3-, 1,4-, and 1,2-dichlorobenzene	✓		✓		
• 1,2-dimethyl-4-ethylbenzene/1,2,4,5-, 1,2,3,5-, and 1,2,3,4-tetramethylbenzenes	na		na		
• 1,2,4-trichlorobenzene/1,2,3-trichlorobenzene	✓		✓		
• 2-, and 1-methylnaphthalene	✓		✓		
5. "Range" analytes & internal standard RIC ID'd correctly, inspected for interferences & proper integration?	na		na		
6. Has the RT been updated to the method?	✓		✓		
Analyst/date	MB 10/8/19		2nd Level Reviewer/date	100819	
7. Has the vol injected been verified vs Entech & corrected if actual amount differs >5%? [WL Sample Info: init amt = sample amt; final amt = 500 mL]	✓	checked on-screen	✓		
8. Do the lab ID, Info 1 and Dilution Factor columns correlate in Chrom? [Sample List - Lab ID vs. Info 1 vs. Dilution]	✓		✓		
9. Can dilution history verified? [Mgmt Report]	✓		✓		
10. Are all analytes present in the system blank < RL? (<1/2 RL for DoD). If no, list blank ID:	✓	☐ Method Blank – Report, ND (NCM# _____) ☐ Method Blank – Report, 10X (NCM# _____)	✓		
11. All runs - peaks ID'd correctly and false positives removed?	✓		✓		
12. If manual integrations performed, are they properly performed, baseline clearly identified, and correct reason given?	✓		✓		
13. IS/Surr within limits? List samples and reason (e.g., 1 thru 5): [Batch Results IS & SUR Tab]	✓	☐ (1) Surrogate – Matrix (NCM# _____) ☐ (2) Surrogate – High, ND (NCM# _____) ☐ (3) ISTD – RA/RA Concur (NCM# _____) ☐ (4) Surrogate – RX concur, Report both (NCM# _____) ☐ (5) ISTD – Matrix, DL required (NCM# _____)	✓		
Sample Reason Sample Reason					
14. Samples outside calibration range scheduled for dilution?	✓	☐ ICAL – Range Exceeded; Minimum Dilution	✓		
Chrom Review	1 st	If No, why is data reportable?	2 nd		
15. For first analysis that is at a dilution, is highest target analyte >20% cal range? List samples and reason:	✓	☐ (1) Reporting Limit – Dilution, Matrix (NCM# _____) ☐ (2) Reporting Limit – Dilution, Non-Target (NCM# _____) ☐ (3) Issues with initial collection volume; see DRC.	✓		
Sample Reason Sample Reason					
16. RIC inspected for proper integration for TPH?	na		na		
17. Obvious non-TPH peaks excluded?	✓		✓		
18. Individual TPH peak area < octane high point area?	✓		✓		

Eurofins/TestAmerica Knoxville GC/MS Air - Batch Data Review Checklist
Methods: TO-14 and TO-15 - KNOX-MS-0001, Rev 20 & KNOX-MS-0023, Rev 4

Page 2 of 2

TALS Review	1 st	If No, why is data reportable?	2 nd														
19. Graphics uploaded? [open one paperclip]	✓		✓														
20. NCM generated if BFB failed TO-14A criteria, but passes TO-15?	✓	☐ [Failed TO-14A, but passes TO-15] (NCM# _____)	✓														
21. Is the %D ≤ 30% for all target analytes? [≤ 50% for 1&2 methylnaphthalene] [Chrom-F8] [TALS-Sample Results Tab]	✓	☐ CCV - %D - LCS criteria met (NCM# <u>20024</u>) ☐ CCV - %D high - outside criteria, samples ND, Sample IDs Included (NCM# _____)	✓														
22. Undiluted volume analyzed meets the method requirement (200 mL vs. 500 mL)?	✓		na														
23. Project & sample special instructions verified?	✓		✓														
24. If samples were Tedlar bags, was the 72 hr HT met? ** Narrate transfer to can.	na	☐ Air Analysis - Air Sample Transfer to Canister (NCM# _____)	na														
25. Sample analyses done within analytical holding time?	✓	☐ Holding Time - Received w/Insufficient Time (NCM# _____) ☐ Holding Time - Receipt (NCM# _____)	✓														
26. Did the LCS meet criteria (70-130% with a limited # allowed 60-140% (see table) provisional analyte limit 60-140% with a limited # allowed 50-150%, and no two consecutive MEs). [Sample Results Tab] Note: No LCS required for OH VAP.	✓	☐ Marginal Exceedances - Within ME Limits and Random; Report (NCM# <u>20025</u>) ☐ LCS/LCSD - %R High (NCM# _____) <u>12 lca</u> (ME)	✓														
<table border="1"> <thead> <tr> <th>Number of target analytes in LCS</th> <th># marginal exceedances of LCS control limits allowed</th> </tr> </thead> <tbody> <tr> <td>>90</td> <td>5</td> </tr> <tr> <td>71 - 90</td> <td>4</td> </tr> <tr> <td>51 - 70</td> <td>3</td> </tr> <tr> <td>31 - 50</td> <td>2</td> </tr> <tr> <td>11 - 30</td> <td>1</td> </tr> <tr> <td><11</td> <td>0</td> </tr> </tbody> </table>	Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed	>90	5	71 - 90	4	51 - 70	3	31 - 50	2	11 - 30	1	<11	0			
Number of target analytes in LCS	# marginal exceedances of LCS control limits allowed																
>90	5																
71 - 90	4																
51 - 70	3																
31 - 50	2																
11 - 30	1																
<11	0																
27. Suffixes assigned properly (DL/RE)? [Sample List Tab]	na		na														
28. Each <u>job</u> has QC created (BFB, CCV, LCS, MB)? [Sample List Tab]	✓		✓														
29. Analytes over calibration range set to secondary [Conditions Review Tab]	na		na														
30. Samples not reported set to 'Acceptable' or 'Rejected'? [Sample Results Tab]	✓		✓														
31. DUP done per 20 samples and are all RPDs within limits? (for target analytes >5x RL, <25% RPD; no criteria for n-butanol) (If DUP not reported - set to 'Acceptable' for each job)	✓		✓														
32. Samples linked to proper blank (200 mL or 500 mL)? [QC links]	✓	500 mL blank ID: <u>4</u> 200 mL blank ID: _____	✓														
33. Samples linked to job's BFB/CCV/LCS/MB? [QC Links]	✓		✓														
34. Correct ICV linked to each MB? [QC Links]	✓		✓														
35. Were all samples/QC analyzed within 24 hr of BFB? [F7]	✓		✓														
36. If criteria were not met, was a NCM generated, and assigned to proper QC & samples? [Also see Conditions Review Tab]	✓		✓														
37. Run Checklist and acknowledge findings [F8]	✓		✓														
38. Runs set to 1 st level review?	✓		✓														
39. QC checker run and items addressed?	-na-	Runs set to 2 nd level review?	✓														
40. Checklist & Entech report scanned, attached & assigned properly?	-na-		✓														

Analyst: <u>[Signature]</u>	Date: <u>10/8/19</u>	2nd Level Reviewer: <u>[Signature]</u>	Date: <u>10/9/19</u>
Comments:		Comments:	

Example Calculation:

On-column ppbv x Final Vol (mL)/Entech Initial Vol (mL) x Canister Dilution Log DF

#2 tar @ 6.67H → 6867 ✓

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1

SDG No.: _____

Batch Number: 34104 Batch Start Date: 10/03/19 09:26 Batch Analyst: Taj, Holly MBatch Method: TO 15 LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00096	40MXISSURP 00004
BFB 140-34104/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-34104/2		TO 15 LL		500 mL	500 mL	1	1	100 mL	40 mL
MB 140-34104/5		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-16882-A-1	SS-01	TO 15 LL	T	22 mL	500 mL	1	1		40 mL
140-16882-A-5	SS-05	TO 15 LL	T	500 mL	500 mL	1	1		40 mL
140-16882-A-7	AA-01	TO 15 LL	T	500 mL	500 mL	1	1		40 mL
140-16882-A-8	AA-02	TO 15 LL	T	500 mL	500 mL	1	1		40 mL
140-16882-A-9	DUP 0926	TO 15 LL	T	500 mL	500 mL	1	1		40 mL
LCS 140-34104/1002		TO 15 LL		500 mL	500 mL	1	1	100 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-34104/1		TO 15 LL		40 mL					
CCVIS 140-34104/2		TO 15 LL							
MB 140-34104/5		TO 15 LL							
140-16882-A-1	SS-01	TO 15 LL	T						
140-16882-A-5	SS-05	TO 15 LL	T						
140-16882-A-7	AA-01	TO 15 LL	T						
140-16882-A-8	AA-02	TO 15 LL	T						
140-16882-A-9	DUP 0926	TO 15 LL	T						
LCS 140-34104/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TO 15 LL

Page 1 of 1

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1

SDG No.: _____

Batch Number: 34105 Batch Start Date: 10/04/19 10:09 Batch Analyst: Barlozhetskaya, Anna FBatch Method: TO 15 LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00096	40MXISSURP 00004
BFB 140-34105/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-34105/2		TO 15 LL		500 mL	500 mL	1	1	100 mL	40 mL
MB 140-34105/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-16882-A-3	SS-03	TO 15 LL	T	500 mL	500 mL	1	1		40 mL
140-16882-A-4	SS-04	TO 15 LL	T	10.6 mL	500 mL	1	1		40 mL
LCS 140-34105/1002		TO 15 LL		500 mL	500 mL	1	1	100 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-34105/1		TO 15 LL		40 mL					
CCVIS 140-34105/2		TO 15 LL							
MB 140-34105/4		TO 15 LL							
140-16882-A-3	SS-03	TO 15 LL	T						
140-16882-A-4	SS-04	TO 15 LL	T						
LCS 140-34105/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TO 15 LL

Page 1 of 1

AIR - GC/MS VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16882-1

SDG No.: _____

Batch Number: 34106 Batch Start Date: 10/07/19 15:24 Batch Analyst: Barlozhetskaya, Anna FBatch Method: TO 15 LL Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	InitialPressure	FinalPressure	40CV101P 00097	40MXISSURP 00004
BFB 140-34106/1		TO 15 LL		500 mL	500 mL	1	1		
CCVIS 140-34106/2		TO 15 LL		500 mL	500 mL	1	1	100 mL	40 mL
MB 140-34106/4		TO 15 LL		500 mL	500 mL	1	1		40 mL
140-16882-A-2	SS-02	TO 15 LL	T	20 mL	500 mL	1	1		40 mL
140-16882-A-6	SS-06	TO 15 LL	T	120 mL	500 mL	1	1		40 mL
LCS 140-34106/1002		TO 15 LL		500 mL	500 mL	1	1	100 mL	40 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	40MXSUR 00003					
BFB 140-34106/1		TO 15 LL		40 mL					
CCVIS 140-34106/2		TO 15 LL							
MB 140-34106/4		TO 15 LL							
140-16882-A-2	SS-02	TO 15 LL	T						
140-16882-A-6	SS-06	TO 15 LL	T						
LCS 140-34106/1002		TO 15 LL							

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

TO 15 LL

Page 1 of 1

Summa Canister Dilution Worksheet

Client: New York State D.E.C.
Project/Site: Frewsburg #0901685

Job No.: 140-16882-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initials
140-16882-1	6	31.6	0.80	4.78	31.6	3.15	18.90		3.96	3.96	g5	10/03/19 9:52	AFB
140-16882-1	6	32.0	1.00	6.00	32.0	3.18	19.06		3.18	12.57	g5	10/03/19 10:17	AFB
140-16882-2	6	33.7	0.86	5.14	33.7	3.29	19.76		3.85	3.85	g5	10/03/19 9:53	AFB
140-16882-2	6	29.4	1.00	6.00	29.4	3.00	18.00		3.00	11.54	g5	10/03/19 10:17	AFB
140-16882-2	6	37.7	1.00	6.00	37.7	3.56	21.39		3.56	41.12	G5	10/03/19 12:11	AFB
140-16882-4	6	5.2	0.79	4.72	5.2	1.35	8.12		1.72	1.72	G5	10/04/19 14:38	AFB
140-16882-6	6	35.1	0.83	5.00	35.1	3.39	20.33		4.07	4.07	g5	10/03/19 9:53	AFB
140-16882-6	6	30.9	1.00	6.00	30.9	3.10	18.61		3.10	12.62	g5	10/03/19 10:19	AFB
140-16882-6	6	37.7	1.00	6.00	37.7	3.56	21.39		3.56	44.98	G5	10/03/19 12:11	AFB
140-16882-6	6	33.4	1.00	6.00	33.4	3.27	19.63		3.27	147.17	G5	10/03/19 12:54	AFB

Formulae:

Preadjusted Volume (L) = (Preadjusted Pressure ("Hg) + 29.92 "Hg * Vol L) / 29.92 "Hg
 Adjusted Volume (L) = (Adjusted Pressure (psig) + 14.7 psig * Vol L) / 14.7 psig
 Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury ("Hg)
 14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16453-1
 SDG No.: _____
 Client Sample ID: 09966 Lab Sample ID: 140-16453-4
 Matrix: Air Lab File ID: H28L16453.D
 Analysis Method: TO 15 LL Date Collected: 08/27/2019 14:25
 Sample wt/vol: 500 (mL) Date Analyzed: 08/29/2019 05:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 33002 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16453-1
 SDG No.: _____
 Client Sample ID: 09966 Lab Sample ID: 140-16453-4
 Matrix: Air Lab File ID: H28L16453.D
 Analysis Method: TO 15 LL Date Collected: 08/27/2019 14:25
 Sample wt/vol: 500 (mL) Date Analyzed: 08/29/2019 05:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 33002 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16453-1
 SDG No.: _____
 Client Sample ID: 09966 Lab Sample ID: 140-16453-4
 Matrix: Air Lab File ID: H28L16453.D
 Analysis Method: TO 15 LL Date Collected: 08/27/2019 14:25
 Sample wt/vol: 500 (mL) Date Analyzed: 08/29/2019 05:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 33002 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		1.0	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16453-1
 SDG No.: _____
 Client Sample ID: 09966 Lab Sample ID: 140-16453-4
 Matrix: Air Lab File ID: H28L16453.D
 Analysis Method: TO 15 LL Date Collected: 08/27/2019 14:25
 Sample wt/vol: 500 (mL) Date Analyzed: 08/29/2019 05:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 33002 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MR\20190826-12865.b\H28L16453.D
 Lims ID: 140-16453-A-4
 Client ID: 09966
 Sample Type: Client
 Inject. Date: 29-Aug-2019 05:57:30 ALS Bottle#: 1 Worklist Smp#: 20
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012865-020
 Misc. Info.: 09966
 Operator ID: Instrument ID: MR
 Method: \\chromna\Knoxville\ChromData\MR\20190826-12865.b\MR_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 29-Aug-2019 17:40:33 Calib Date: 12-Aug-2019 23:20:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MR\20190812-12700.b\RH12IC08.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0330

First Level Reviewer: khachitpongpanits

Date: 29-Aug-2019 17:40:33

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	8.533	8.538	-0.005	97	189824	4.00	
* 2 1,4-Difluorobenzene	114	10.765	10.765	0.000	95	1066391	4.00	
* 3 Chlorobenzene-d5 (IS)	117	15.565	15.570	-0.005	89	883046	4.00	
\$ 4 4-Bromofluorobenzene (Surr	95	17.209	17.219	-0.016	94	508457	3.34	
7 Propene	41	3.437	3.440	-0.006	97	27177	0.3020	7
31 Methylene Chloride	84	5.972	5.968	0.000	92	10676	0.1591	

QC Flag Legend

Processing Flags

7 - Failed Limit of Detection

Reagents:

40MXISSURP_00004

Amount Added: 40.00

Units: mL

Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190826-12865.b\H28L16453.D

Injection Date: 29-Aug-2019 05:57:30

Instrument ID: MR

Operator ID:

Lims ID: 140-16453-A-4

Lab Sample ID: 140-16453-4

Worklist Smp#: 20

Client ID: 09966

Purge Vol: 500.000 mL

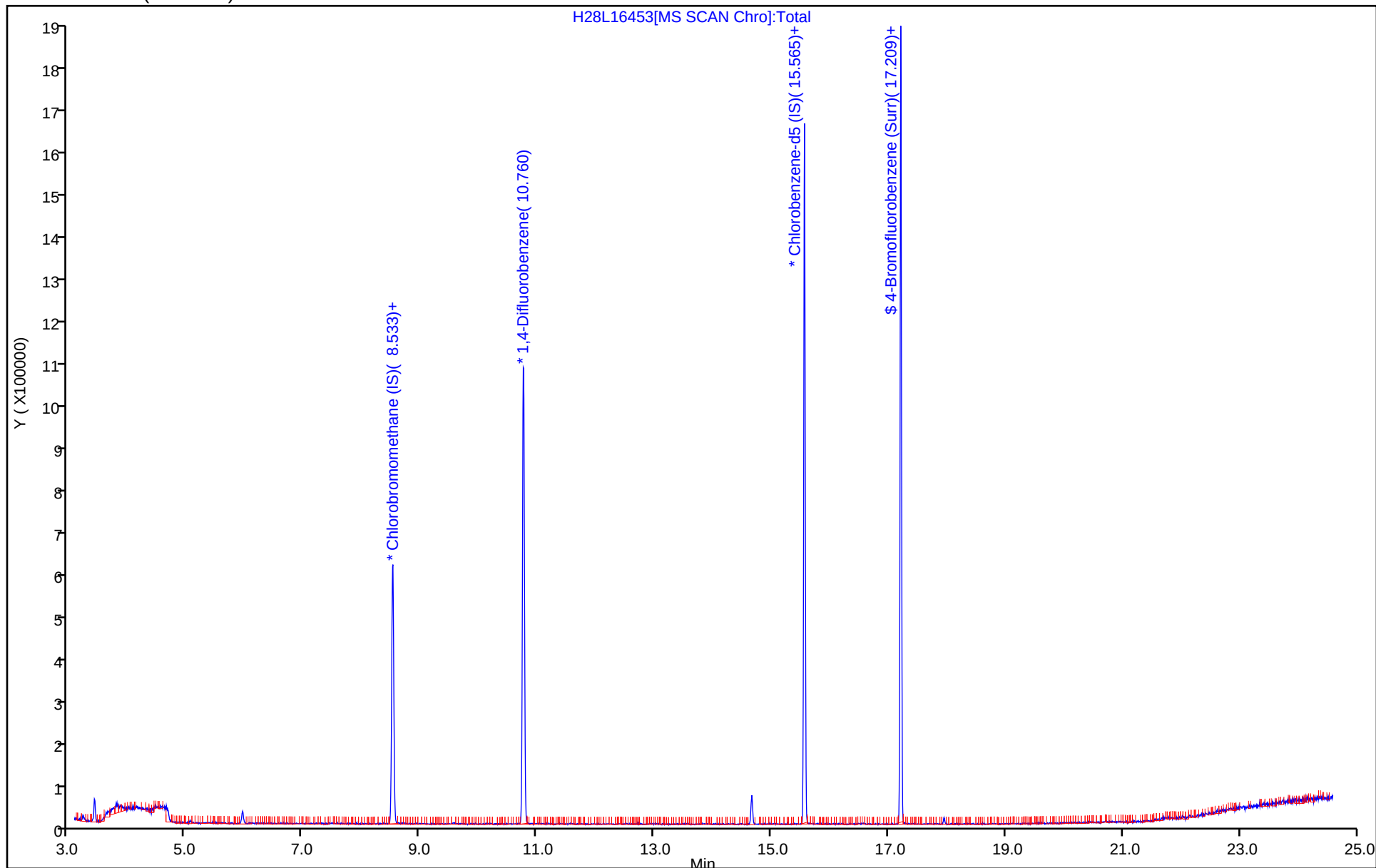
Dil. Factor: 1.0000

ALS Bottle#: 1

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190826-12865.b\H28L16453.D

Injection Date: 29-Aug-2019 05:57:30

Instrument ID: MR

Lims ID: 140-16453-A-4

Lab Sample ID: 140-16453-4

Client ID: 09966

Operator ID:

ALS Bottle#:

1

Worklist Smp#: 20

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

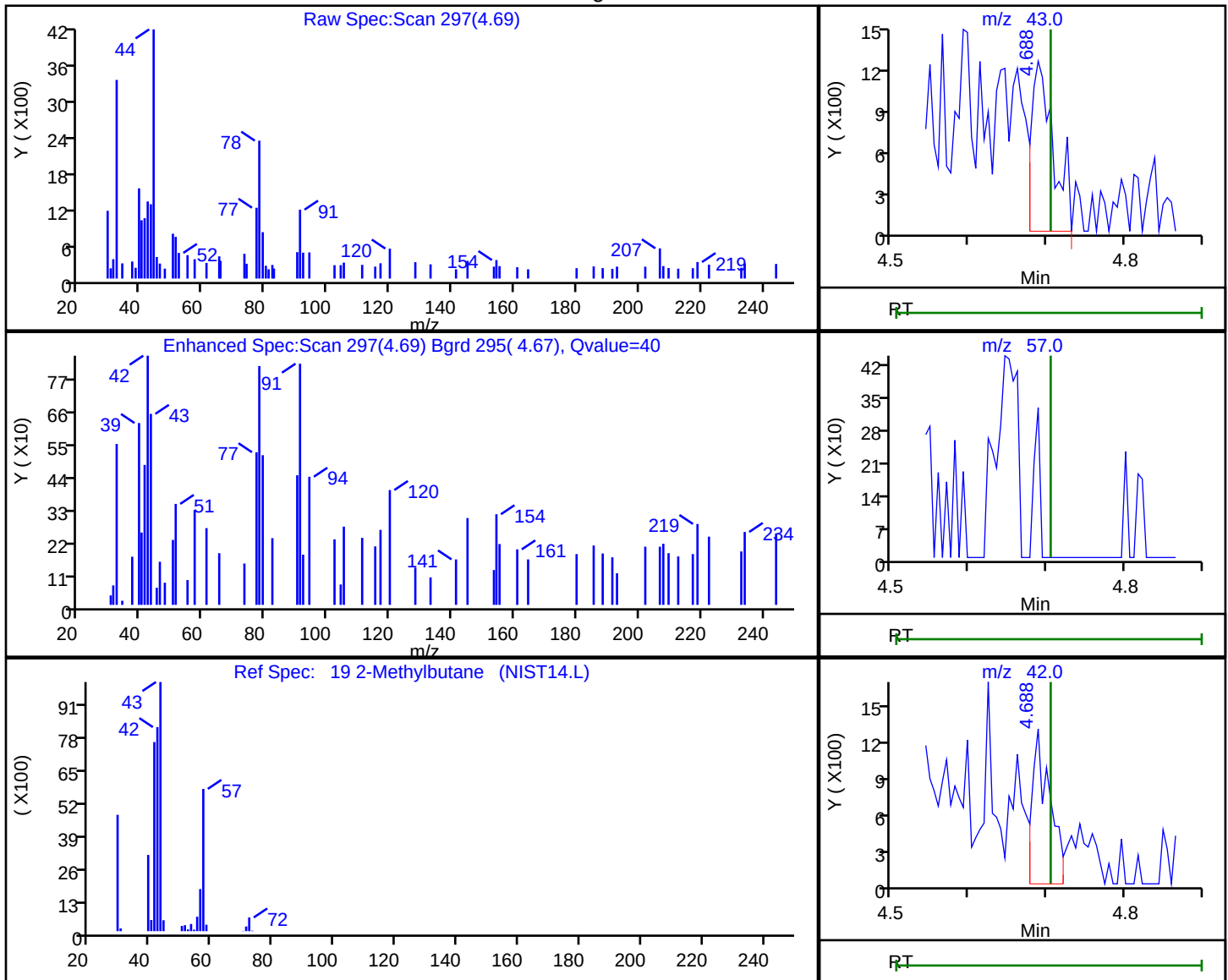
Column: RTX-5 (0.32 mm)

Detector

MS SCAN

19 2-Methylbutane, CAS: 78-78-4

Processing Results



RT	Mass	Response	Amount
4.69	43.00	2393	0.029876
4.70	57.00	0	
4.69	42.00	2013	

Reviewer: khachitpongpanits, 29-Aug-2019 17:40:05

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MR\20190826-12865.b\H28L16453.D

Injection Date: 29-Aug-2019 05:57:30

Instrument ID: MR

Lims ID: 140-16453-A-4

Lab Sample ID: 140-16453-4

Client ID: 09966

Operator ID:

ALS Bottle#:

1

Worklist Smp#: 20

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MR_TO15

Limit Group: MSA TO14A_15 Routine ICAL

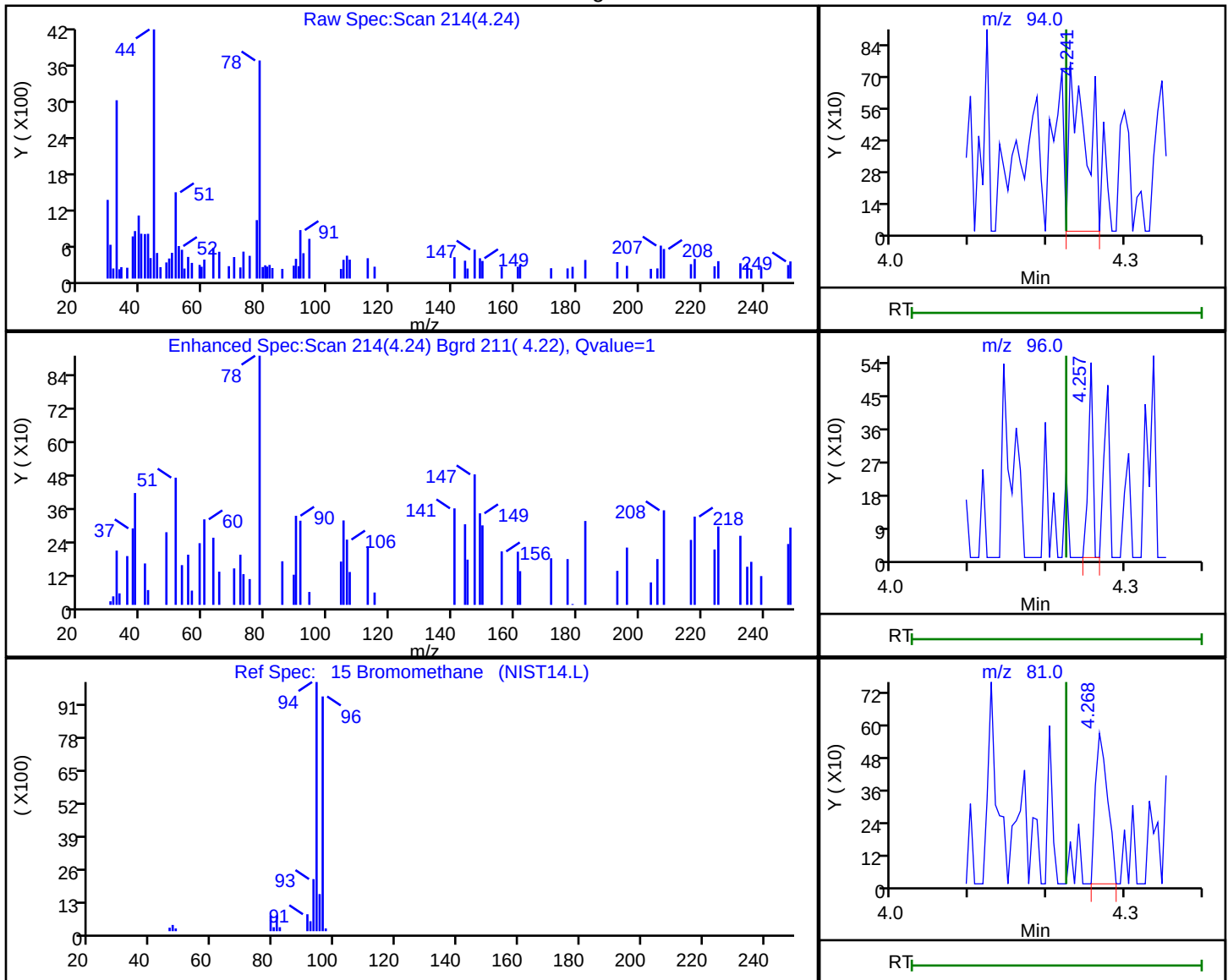
Column: RTX-5 (0.32 mm)

Detector

MS SCAN

15 Bromomethane, CAS: 74-83-9

Processing Results



RT	Mass	Response	Amount
4.24	94.00	1160	0.019593
4.26	96.00	222	
4.27	81.00	615	

Reviewer: khachitpongpanits, 29-Aug-2019 17:40:02

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16490-1
 SDG No.: _____
 Client Sample ID: 12011 Lab Sample ID: 140-16490-4
 Matrix: Air Lab File ID: I03L16490.D
 Analysis Method: TO 15 LL Date Collected: 08/30/2019 16:00
 Sample wt/vol: 500 (mL) Date Analyzed: 09/03/2019 13:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 33154 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	ND		0.080	
79-34-5	1,1,2,2-Tetrachloroethane	ND		0.080	
79-00-5	1,1,2-Trichloroethane	ND		0.080	
76-13-1	1,1,2-Trichlorotrifluoroethane	ND		0.080	
75-34-3	1,1-Dichloroethane	ND		0.080	
75-35-4	1,1-Dichloroethene	ND		0.040	
87-61-6	1,2,3-Trichlorobenzene	ND		0.40	
96-18-4	1,2,3-Trichloropropane	ND		0.20	
526-73-8	1,2,3-Trimethylbenzene	ND		0.080	
95-93-2	1,2,4,5-Tetramethylbenzene	ND		0.080	
120-82-1	1,2,4-Trichlorobenzene	ND		0.080	
95-63-6	1,2,4-Trimethylbenzene	ND		0.080	
96-12-8	1,2-Dibromo-3-Chloropropane	ND		0.16	
106-93-4	1,2-Dibromoethane	ND		0.080	
95-50-1	1,2-Dichlorobenzene	ND		0.080	
107-06-2	1,2-Dichloroethane	ND		0.080	
78-87-5	1,2-Dichloropropane	ND		0.080	
76-14-2	1,2-Dichlorotetrafluoroethane	ND		0.080	
108-67-8	1,3,5-Trimethylbenzene	ND		0.080	
106-99-0	1,3-Butadiene	ND		0.16	
541-73-1	1,3-Dichlorobenzene	ND		0.080	
106-46-7	1,4-Dichlorobenzene	ND		0.080	
123-91-1	1,4-Dioxane	ND		0.20	
71-36-3	1-Butanol	ND		0.80	
90-12-0	1-Methylnaphthalene	ND		1.0	
540-84-1	2,2,4-Trimethylpentane	ND		0.20	
565-59-3	2,3-Dimethylpentane	ND		0.080	
78-93-3	2-Butanone	ND		0.32	
95-49-8	2-Chlorotoluene	ND		0.16	
591-78-6	2-Hexanone	ND		0.20	
78-78-4	2-Methylbutane	ND		0.20	
91-57-6	2-Methylnaphthalene	ND		1.0	
107-83-5	2-Methylpentane	ND		0.080	
107-05-1	3-Chloroprene	ND		0.080	
622-96-8	4-Ethyltoluene	ND		0.16	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		0.20	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16490-1
 SDG No.: _____
 Client Sample ID: 12011 Lab Sample ID: 140-16490-4
 Matrix: Air Lab File ID: I03L16490.D
 Analysis Method: TO 15 LL Date Collected: 08/30/2019 16:00
 Sample wt/vol: 500 (mL) Date Analyzed: 09/03/2019 13:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 33154 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
67-64-1	Acetone	ND		2.0	
75-05-8	Acetonitrile	ND		0.40	
107-02-8	Acrolein	ND		0.40	
107-13-1	Acrylonitrile	ND		0.80	
98-83-9	Alpha Methyl Styrene	ND		0.16	
71-43-2	Benzene	ND		0.080	
100-44-7	Benzyl chloride	ND		0.16	
75-27-4	Bromodichloromethane	ND		0.080	
75-25-2	Bromoform	ND		0.080	
74-83-9	Bromomethane	ND		0.080	
106-97-8	Butane	ND		0.16	
75-15-0	Carbon disulfide	ND		0.20	
56-23-5	Carbon tetrachloride	ND		0.032	
108-90-7	Chlorobenzene	ND		0.080	
75-45-6	Chlorodifluoromethane	ND		0.080	
75-00-3	Chloroethane	ND		0.080	
67-66-3	Chloroform	ND		0.080	
74-87-3	Chloromethane	ND		0.20	
156-59-2	cis-1,2-Dichloroethene	ND		0.040	
10061-01-5	cis-1,3-Dichloropropene	ND		0.080	
98-82-8	Cumene	ND		0.16	
110-82-7	Cyclohexane	ND		0.20	
124-48-1	Dibromochloromethane	ND		0.080	
74-95-3	Dibromomethane	ND		0.16	
75-71-8	Dichlorodifluoromethane	ND		0.080	
64-17-5	Ethanol	ND		2.0	
141-78-6	Ethyl acetate	ND		0.80	
60-29-7	Ethyl ether	ND		0.80	
100-41-4	Ethylbenzene	ND		0.080	
87-68-3	Hexachlorobutadiene	ND		0.080	
110-54-3	Hexane	ND		0.20	
496-11-7	Indane	ND		0.080	
95-13-6	Indene	ND		0.16	
67-63-0	Isopropyl alcohol	ND		0.80	
80-62-6	Methyl methacrylate	ND		0.20	
1634-04-4	Methyl tert-butyl ether	ND		0.16	

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

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16490-1
 SDG No.: _____
 Client Sample ID: 12011 Lab Sample ID: 140-16490-4
 Matrix: Air Lab File ID: I03L16490.D
 Analysis Method: TO 15 LL Date Collected: 08/30/2019 16:00
 Sample wt/vol: 500 (mL) Date Analyzed: 09/03/2019 13:14
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
 % Moisture: _____ Level: (low/med) Low
 Analysis Batch No.: 33154 Units: ppb v/v

CAS NO.	COMPOUND NAME	RESULT	Q	RL	
108-87-2	Methylcyclohexane	ND		0.080	
75-09-2	Methylene Chloride	ND		0.20	
179601-23-1	m-Xylene & p-Xylene	ND		0.080	
91-20-3	Naphthalene	ND		0.20	
104-51-8	n-Butylbenzene	ND		0.16	
124-18-5	n-Decane	ND		0.40	
112-40-3	n-Dodecane	ND		0.40	
142-82-5	n-Heptane	ND		0.20	
111-84-2	n-Nonane	ND		0.20	
111-65-9	n-Octane	ND		0.16	
103-65-1	N-Propylbenzene	ND		0.16	
95-47-6	o-Xylene	ND		0.080	
99-87-6	p-Cymene	ND		0.080	
109-66-0	Pentane	ND		0.40	
115-07-1	Propene	ND		1.0	
135-98-8	sec-Butylbenzene	ND		0.16	
100-42-5	Styrene	ND		0.080	
75-65-0	tert-Butanol	ND		0.32	
98-06-6	tert-Butylbenzene	ND		0.20	
127-18-4	Tetrachloroethene	ND		0.040	
109-99-9	Tetrahydrofuran	ND		0.40	
110-02-1	Thiophene	ND		0.080	
108-88-3	Toluene	ND		0.12	
156-60-5	trans-1,2-Dichloroethene	ND		0.080	
10061-02-6	trans-1,3-Dichloropropene	ND		0.080	
79-01-6	Trichloroethene	ND		0.036	
75-69-4	Trichlorofluoromethane	ND		0.080	
1120-21-4	Undecane	ND		0.40	
108-05-4	Vinyl acetate	ND		0.40	
593-60-2	Vinyl bromide	ND		0.080	
75-01-4	Vinyl chloride	ND		0.040	

FORM I
AIR - GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TARGETED TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Eurofins TestAmerica, Knoxville Job No.: 140-16490-1
SDG No.: _____
Client Sample ID: 12011 Lab Sample ID: 140-16490-4
Matrix: Air Lab File ID: I03L16490.D
Analysis Method: TO 15 LL Date Collected: 08/30/2019 16:00
Sample wt/vol: 500 (mL) Date Analyzed: 09/03/2019 13:14
Soil Aliquot Vol: _____ Dilution Factor: 1
Soil Extract Vol.: _____ GC Column: RTX-5 ID: 0.32 (mm)
% Moisture: _____ Level: (low/med) Low
Analysis Batch No.: 33154 Units: ppb v/v

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
488-23-3	1,2,3,4-Tetramethylbenzene TIC		ND		
527-53-7	1,2,3,5-Tetramethylbenzene TIC		ND		
934-80-5	1,2-Dimethyl-4-Ethylbenzene TIC		ND		
872-55-9	2-Ethylthiophene TIC		ND		
554-14-3	2-Methylthiophene TIC		ND		
616-44-4	3-Methylthiophene TIC		ND		
95-15-8	Benzo(b)thiophene TIC		ND		

Eurofins TestAmerica, Knoxville
Target Compound Quantitation Report

Data File: \\chromna\Knoxville\ChromData\MJ\20190830-12909.b\I03L16490.D
 Lims ID: 140-16490-A-4
 Client ID: 12011
 Sample Type: Client
 Inject. Date: 03-Sep-2019 13:14:30 ALS Bottle#: 3 Worklist Smp#: 6
 Purge Vol: 500.000 mL Dil. Factor: 1.0000
 Sample Info: 140-0012909-006
 Misc. Info.: 12011
 Operator ID: 007126 Instrument ID: MJ
 Method: \\chromna\Knoxville\ChromData\MJ\20190830-12909.b\MJ_TO15.m
 Limit Group: MSA TO14A_15 Routine ICAL
 Last Update: 04-Sep-2019 10:59:36 Calib Date: 20-Jul-2019 06:27:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\chromna\Knoxville\ChromData\MJ\20190719-12415.b\JG19IC08.D
 Column 1 : RTX-5 (0.32 mm) Det: MS SCAN
 Process Host: CTX0339

First Level Reviewer: khachitpongpanits

Date: 04-Sep-2019 11:01:54

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ppb v/v	Flags
* 1 Chlorobromomethane (IS)	128	9.722	9.715	0.007	93	295538	4.00	
* 2 1,4-Difluorobenzene	114	11.831	11.829	0.002	95	1520150	4.00	
* 3 Chlorobenzene-d5 (IS)	117	16.447	16.445	0.002	89	1238093	4.00	
\$ 8 4-Bromofluorobenzene (Surr	95	18.044	18.043	0.001	95	798134	3.51	
20 Propene	41	4.176	4.164	0.012	99	19660	0.3361	
44 Methylene Chloride	84	7.065	7.058	0.007	96	21038	0.1892	

Reagents:

40MXISSURP_00004 Amount Added: 40.00 Units: mL Run Reagent

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MJ\20190830-12909.b\I03L16490.D

Injection Date: 03-Sep-2019 13:14:30

Instrument ID: MJ

Operator ID: 007126

Lims ID: 140-16490-A-4

Lab Sample ID: 140-16490-4

Worklist Smp#: 6

Client ID: 12011

Purge Vol: 500.000 mL

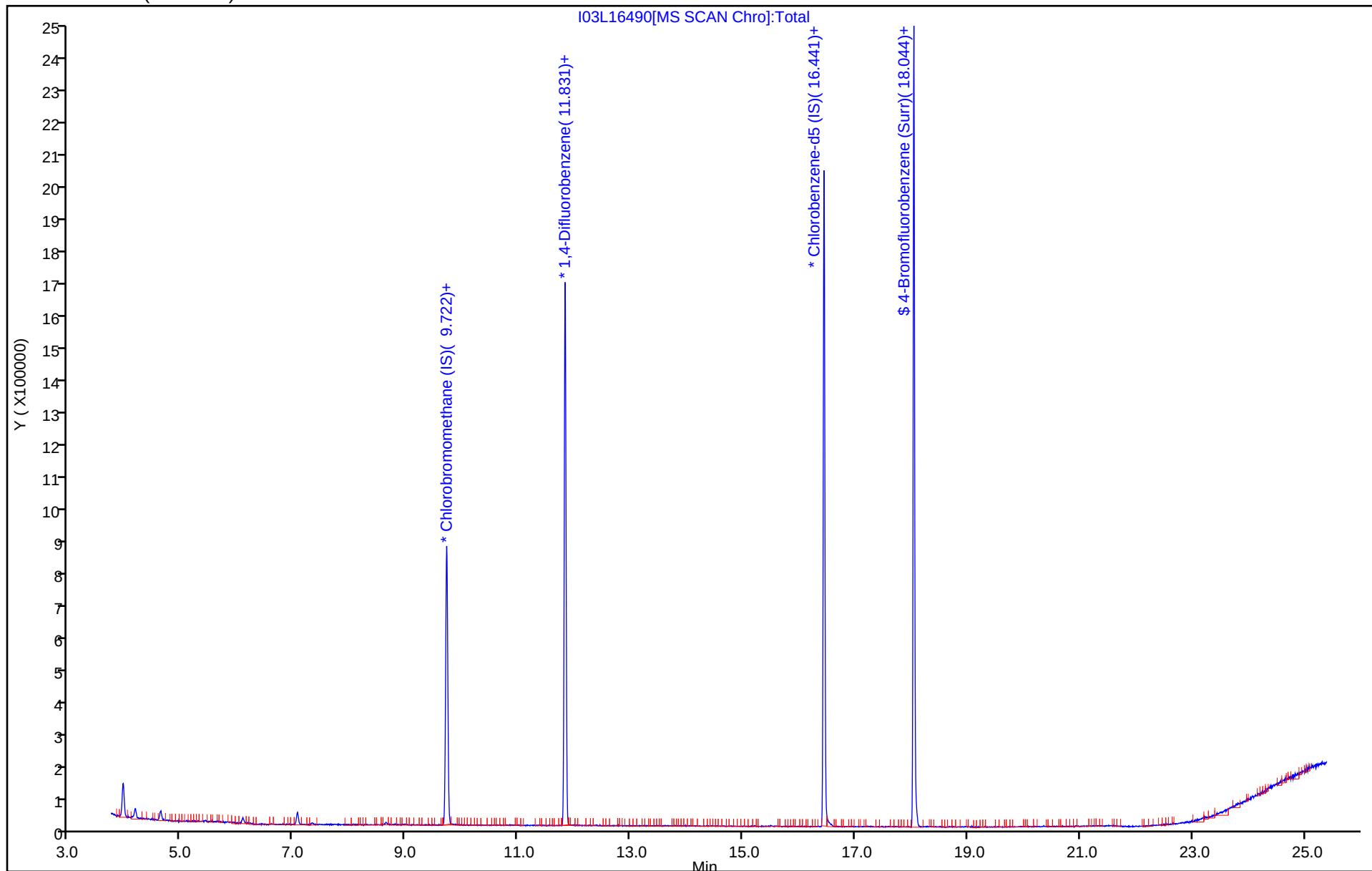
Dil. Factor: 1.0000

ALS Bottle#: 3

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

Column: RTX-5 (0.32 mm)



Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MJ\20190830-12909.b\I03L16490.D

Injection Date: 03-Sep-2019 13:14:30

Instrument ID: MJ

Lims ID: 140-16490-A-4

Lab Sample ID: 140-16490-4

Client ID: 12011

Operator ID: 007126

ALS Bottle#:

3

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

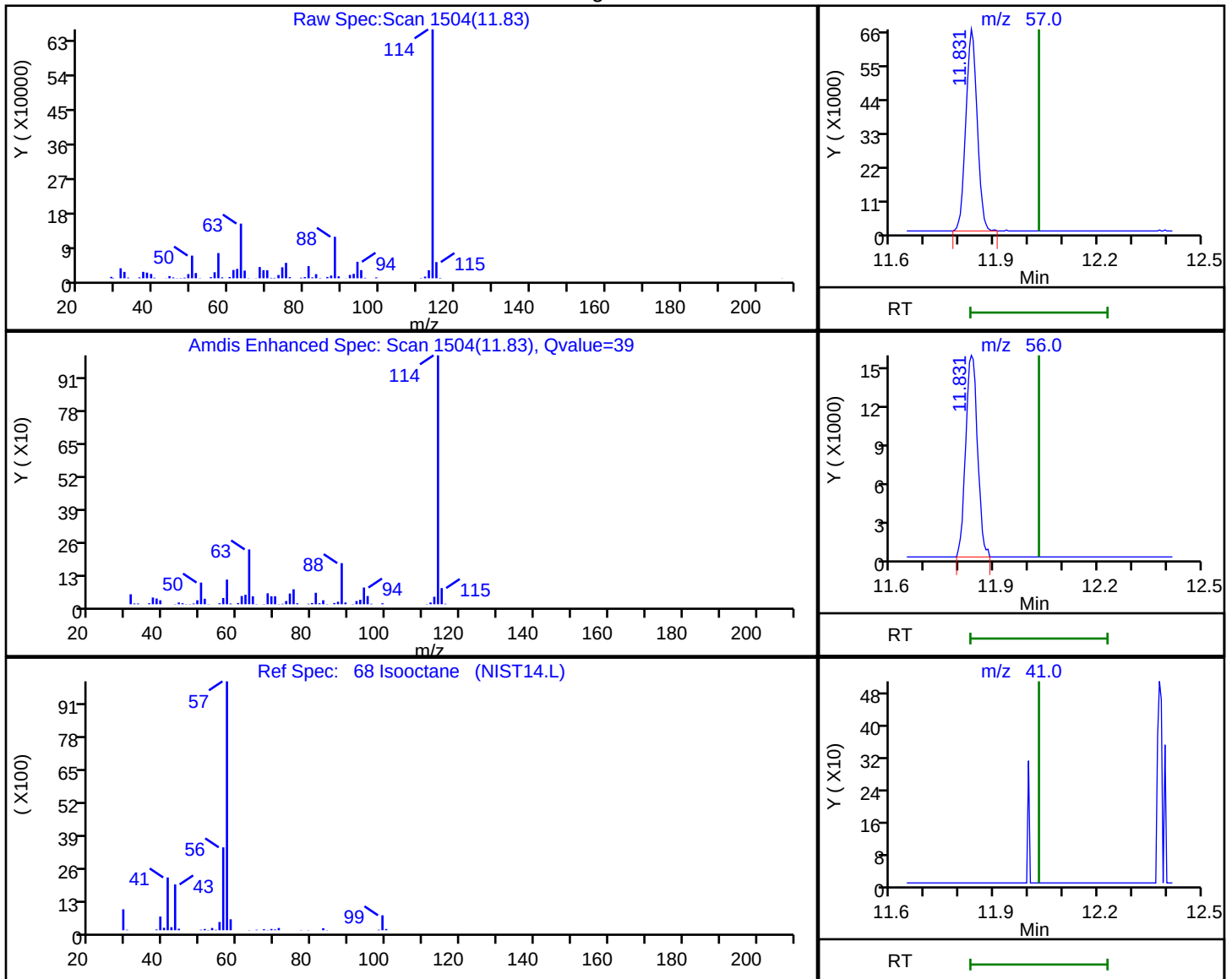
Column: RTX-5 (0.32 mm)

Detector

MS SCAN

68 Isooctane, CAS: 540-84-1

Processing Results



RT	Mass	Response	Amount
11.83	57.00	152175	0.306435
11.83	56.00	37991	
12.03	41.00	0	

Reviewer: tajh, 03-Sep-2019 13:55:47

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Knoxville

Data File: \\chromna\Knoxville\ChromData\MJ\20190830-12909.b\I03L16490.D

Injection Date: 03-Sep-2019 13:14:30

Instrument ID: MJ

Lims ID: 140-16490-A-4

Lab Sample ID: 140-16490-4

Client ID: 12011

Operator ID: 007126

ALS Bottle#:

3

Worklist Smp#: 6

Purge Vol: 500.000 mL

Dil. Factor: 1.0000

Method: MJ_TO15

Limit Group: MSA TO14A_15 Routine ICAL

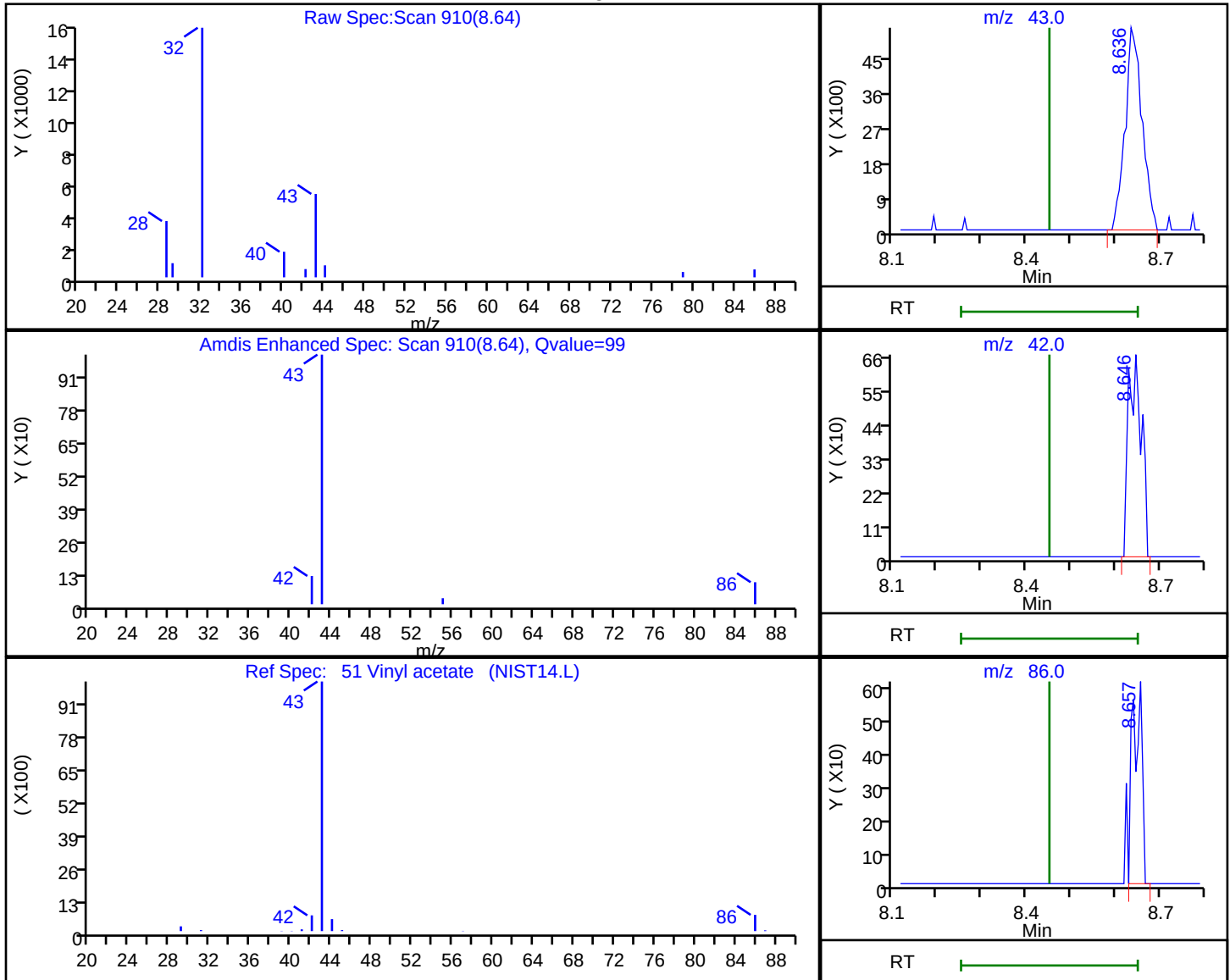
Column: RTX-5 (0.32 mm)

Detector

MS SCAN

51 Vinyl acetate, CAS: 108-05-4

Processing Results



RT	Mass	Response	Amount
8.64	43.00	14129	0.055097
8.65	42.00	1362	
8.66	86.00	893	

Reviewer: tajh, 03-Sep-2019 13:55:55

Audit Action: Marked Compound Undetected

Audit Reason: Invalid Compound ID

Shipping and Receiving Documents



140-16882 Chain of Custody

Canister Samples Chain of Custody Record

Eurofins TestAmerica, Knoxville

5815 Middlebrook Pike
Knoxville, TN 37921
Phone 865-291-3000
Fax 865-584-4315

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

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information		Client Project Manager: Maurice Moore		Samples Collected By: Peter Caffran		COC No: _____ of _____ COCs	
Company Name: GES		Phone: _____		Email: _____		For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____	
Address: 415 Lawrence Bell Drive		Site Contact: Tom Palmer		Site Contact: TRAC@GESonline.com		Job / SDG No.: _____ (See below for Add'l Items)	
City/State/Zip: Williamsville NY		Tel/Fax: _____		Analysis Turnaround Time: 10 Day			
Project Name: 0901685-05-210		Standard (Specific): _____		Rush (Specify): _____			
Site/Location: Frewsburg		Sample Identification		Sample Specific Notes:			
P O #		Sample Start Date		Time Start		Time Stop	
		Canister Vacuum Field, "Hg (Start)		Canister Vacuum Field, "Hg (Stop)		Flow Controller ID	
		Canister ID		Canister ID		Canister ID	
		TO-14/15 (Standard / Low Level)		EPA 3C		EPA 25C	
		ASTM D-1946		EPA 15/16		Other (Please specify in notes section)	
		Sample Type		Indoor Air/Ambient Air		Sub-Slab	
		Soil Gas		Soil Vapor Extraction (SVE)		Landfill Gas	
		Other (Please specify in notes section)		Other (Please specify in notes section)			
		SS-01		09/26		1048	
		SS-02		09/26		1052	
		SS-03		09/26		1056	
		SS-04		09/26		11:00	
		SS-05		09/26		11:07	
		SS-06		09/26		11:08	
		AA-01		09/26		1052	
		AA-02		09/26		11:09	
		DUP0926		09/26		1056	
		Temperature (Fahrenheit)		Start Interior		Stop Interior	
		Ambient		72		57	
		Pressure (inches of Hg)		Start Interior		Stop Interior	
		Ambient		5.729.8		29.96	
Special Instructions/QC Requirements & Comments:		Received @ ambient, 2 boxes #4276 0721 2017 No custody seal, FedEx Po KW10/2/19					
Samples Shipped by:		Date / Time:		Samples Received by:		Date / Time:	
Samples Relinquished by:		Date / Time: 9/27/19 1615		Received by: 9 can		Date / Time: 10-1-19 - 15:00	
Relinquished by:		Date / Time: 10/1/19 75:40		Received by: 9 flow, 9cc, IT		Date / Time: 10/2/19 0900	
Lab Use Only		Shipper Name:		Condition:		Opened by:	

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	/			☐ Containers, Broken	
2. Were ambient air containers received intact?			/	☒ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?			/	☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6°C, VOST: 10°C) Thermometer ID : _____ Correction factor: _____			/	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	/			☐ Containers, Broken	
6. Were samples received in appropriate containers?	/			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	/			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	/			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	/			☐ COC; No Date/Time; Client Contacted	Labeling Verified by: _____ Date: _____
10. Was the sampler identified on the COC?	/			☐ Sampler Not Listed on COC	pH test strip lot number: _____
11. Is the client and project name/# identified?	/			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	/			☐ COC No tests on COC	
13. Is the matrix of the samples noted?	/			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	/			☐ COC Incorrect/Incomplete	Box 16A: pH Preservation Box 18A: Residual Chlorine
15. Were samples received within holding time?	/			☐ Holding Time - Receipt	Preservative: _____
16. Were samples received with correct chemical preservative (excluding Encore)?			/	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative	Lot Number: _____
17. Were VOA samples received without headspace?			/	☐ Headspace (VOA only)	Exp Date: _____
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number: _____			/	☐ Residual Chlorine	Analyst: _____
19. For 1613B water samples is pH<9?			/		Date: _____
20. For rad samples was sample activity info. Provided?			/	☐ If no, notify lab to adjust ☐ Project missing info	Time: _____
Project #: 1400504 PM Instructions: _____					

Sample Receiving Associate: KenDate: 1/22/19

QA026R32.doc, 062719

Gauge ID: G5
Date: 10/2/2019

MS038 r14, 6/19/15
10/15/2019



Appendix B – NYSDOH Soil Vapor/Indoor Air Matrix Guidance

Soil Vapor/Indoor Air Matrix A

May 2017

Analytes Assigned:

Trichloroethene (TCE), *cis*-1,2-Dichloroethene (c12-DCE), 1,1-Dichloroethene (11-DCE), Carbon Tetrachloride

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

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX A

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix B

May 2017

Analytes Assigned:

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

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

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX B

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 1 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.

Soil Vapor/Indoor Air Matrix C

May 2017

Analytes Assigned:

Vinyl Chloride

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

No further action: No additional actions are recommended to address human exposures.

Identify Source(s) and Resample or Mitigate: We recommend that reasonable and practical actions be taken to identify the source(s) affecting the indoor air quality and that actions be implemented to reduce indoor air concentrations to within background ranges. For example, if an indoor or outdoor air source is identified, we recommend the appropriate party implement actions to reduce the levels. In the event that indoor or outdoor sources are not readily identified or confirmed, resampling (which might include additional sub-slab vapor and indoor air sampling locations) is recommended to demonstrate that SVI mitigation actions are not needed. Based on the information available, mitigation might also be recommended when soil vapor intrusion cannot be ruled out.

Monitor: We recommend monitoring (sampling on a recurring basis), including but not necessarily limited to sub-slab vapor, basement air and outdoor air sampling, to determine whether concentrations in the indoor air or sub-slab vapor have changed and/or to evaluate temporal influences. Monitoring might also be recommended to determine whether existing building conditions (e.g., positive pressure heating, ventilation and air-conditioning systems) are maintaining the desired mitigation endpoint and to determine whether changes are needed. The type and frequency of monitoring is determined based on site-, building- and analyte-specific information, taking into account applicable environmental data and building operating conditions. Monitoring is an interim measure required to evaluate exposures related to soil vapor intrusion until contaminated environmental media are remediated.

Mitigate: We recommend mitigation to minimize current or potential exposures associated with soil vapor intrusion. The most common mitigation methods are sealing preferential pathways in conjunction with installing a sub-slab depressurization system and changing the pressurization of the building in conjunction with monitoring. The type, or combination of types, of mitigation is determined on a building-specific basis, taking into account building construction and operating conditions. Mitigation is considered a temporary measure implemented to address exposures related to soil vapor intrusion until contaminated environmental media are remediated.

These general recommendations are made with consideration being given to the additional notes on page 2.

ADDITIONAL NOTES FOR MATRIX C

This matrix summarizes actions recommended to address current and potential exposures related to soil vapor intrusion. To use the matrix appropriately as a tool in the decision-making process, the following should be noted:

- [1] The matrix is generic. As such, it may be appropriate to modify a recommended action to accommodate analyte-specific, building-specific conditions (e.g., dirt floor in basement, crawl spaces, thick slabs, current occupancy, etc.), and/or factors provided in Section 3.2 of the guidance (e.g., current land use, environmental conditions, etc.). For example, collection of additional samples may be recommended when the matrix indicates "no further action" for a particular building, but the results of adjacent buildings (especially sub-slab vapor results) indicate a need to take actions to address exposures related to soil vapor intrusion. Mitigation might be recommended when the results of multiple contaminants indicate monitoring is recommended. Proactive actions may be proposed at any time. For example, the party implementing the actions may decide to install sub-slab depressurization systems on buildings where the matrix indicates "no further action" or "monitoring." Such an action might be undertaken for reasons other than public health (e.g., seeking community acceptance, reducing costs, etc.). However, actions implemented *in lieu* of sampling will typically be expected to be captured in the final engineering report and site management plan, and might not rule out the need for post-implementation sampling (e.g., to document effectiveness or to support terminating the action).
- [2] Actions provided in the matrix are specific to addressing human exposures. Implementation of these actions does not preclude investigating possible sources of soil vapor contamination, nor does it preclude remediating contaminated soil vapor or the source of soil vapor contamination.
- [3] Appropriate care should be taken during all aspects of sample collection to ensure that high quality data are obtained. Since the data are being used in the decision-making process, the laboratory analyzing the environmental samples must have current Environmental Laboratory Approval Program (ELAP) certification for the appropriate analyte and environmental matrix combinations. Furthermore, samples should be analyzed by methods that can achieve a minimum reporting limit of 0.20 microgram per cubic meter for indoor and outdoor air samples. For sub-slab vapor samples and dirt floor soil vapor samples, a minimum reporting limit of 1 microgram per cubic meter is recommended.
- [4] Sub-slab vapor and indoor air samples are typically collected when the likelihood of soil vapor intrusion is considered to be the greatest (i.e., worst-case conditions). If samples are collected at other times (typically, samples collected outside of the heating season), then resampling during worst-case conditions might be appropriate to verify that actions taken to address exposures related to soil vapor intrusion are protective of human health.
- [5] When current exposures are attributed to sources other than soil vapor intrusion, the agencies should be given documentation (e.g., applicable environmental data, completed indoor air sampling questionnaire, digital photographs, etc.) to support a proposed action other than that provided in the matrix box and to support agency assessment and follow-up.
- [6] The party responsible for implementing the recommended actions will differ depending upon several factors, including but not limited to the following: the identified source of the volatile chemicals, the environmental remediation program, and analyte-specific, site-specific and building-specific factors.